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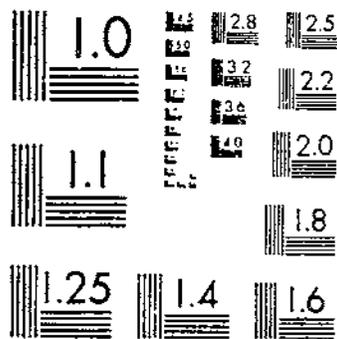
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THE NOCTUID TYPE MATERIAL OF JOHN B. SMITH (LEPIDOPTERA)

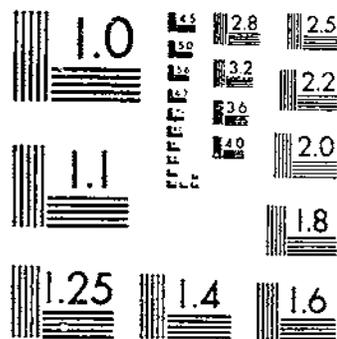
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MICROCOPY RESOLUTION TEST CHART
NATIONAL BUREAU OF STANDARDS 1963-A



MICROCOPY RESOLUTION TEST CHART
NATIONAL BUREAU OF STANDARDS 1963-A

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The Noctuid Type Material of John B. Smith (Lepidoptera)

By E. L. Todd

Abstract

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The type material for nearly 1,000 species of North American cutworm moths described by John B. Smith between 1882 and 1913 is reviewed and evaluated. The present location of the specimens, their condition, and

the label data are given. Lectotypes for approximately 650 species are selected and designated. The nomenclatural actions taken permit the proper application of names to the taxa described and are necessary for future stability of the nomenclature.

KEYWORDS: Cutworm moths, John B. Smith type material, Lepidoptera, Noctuidae, taxonomy.

Acknowledgments

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as well as sending requested information on some syntypes from the Wolley Dod collection in their institution. For these considerations the author is most grateful.

Special gratitude is extended to John G. Franclemont, Cornell University, Ithaca, N.Y., for his cooperation in resolving various problems relating to the selection of lectotypes for several taxa in this work. To Robert Poole, Systematic Entomology Laboratory, U.S. Department of Agriculture, thanks are owed for his help with some corrections and additions that were required in the final stages of this study. Without his help completion of this work would have had to be delayed. Finally the author expresses his gratitude to other lepidopterists at the U.S. National Museum for their encouragement and help and to his colleague, Curtis Sabrosky, at this museum for his assistance with various nomenclatural problems connected with this study.

The Noctuid Type Material of John B. Smith (Lepidoptera)

by E. L. Todd¹

In 1955, Frederick H. Rindge published a paper titled "The Type Material in the J. B. Smith and G. D. Hulst Collections of Lepidoptera in the American Museum of Natural History" (Amer. Mus. Nat. Hist. Bul. 106(2): 95-172). He listed the type material in these important collections, which were donated to this museum by the Department of Entomology at Rutgers University, New Brunswick, N.J. Rindge indicated that certain practices of early workers, including Smith and Hulst, created problems in the recognition of type-specimens, type localities, and syntypes of the species they described. He stated that one of the primary purposes of his paper was to make available to other workers the information about localities, sex, and number of specimens in the type material of the J. B. Smith collection from Rutgers University. Except for three species of Geometridae, Rindge did not designate lectotypes. That paper, because of certain comments therein, tends to imply that the bulk of the type material of the noctuid species described by J. B. Smith was in the Rutgers University collection. Although an important part of the type material is in this collection, a large amount is also in other collections. The objective of this bulletin is to treat as much of the type material as possible and to select lectotypes where necessary.

John Bernhardt Smith began his professional entomological career in 1884 as a special agent under C. V. Riley in the U.S. Department of Agriculture. In 1886, he transferred to the U.S. National Museum as an assistant curator of insects. He remained in that position for 3 years and then accepted a professorship at Rutgers College in 1889. From 1882 to 1911, he described as new or proposed new names for at least 995 species of Noctuidae. The manuscript description of one species, *Mamestra gertana* Smith, was discovered on his desk after his death in 1912 and was published the following year. He was the author of many other papers on economic entomology, morphology, and classification. He was a prolific writer and was considered by some of his contemporaries to be the leading authority on the family Noctuidae. That opinion was not held by others of his period and certainly not by some present workers. Smith frequently engaged in controversy in print, especially with Augustus Radcliffe Grote and also with H. G. Dyar and others. Investigation of those problems, other than differences of pure opinion, shows Smith was usually wrong.

This study of the type material has been a difficult, tiresome chore. Some of the difficulties have been created by the scattered type material and poor condition of some of the specimens because of wear and

tear, deterioration from verdigris formation, and damage by museum pests. Other difficulties have been caused by problems Smith created through lack of certain actions, through errors and inconsistencies, and through preparation techniques, which resulted in mutilated genitalia and unassociated slides and specimens.

In the introduction of his paper, Rindge stated that Smith labeled his type-series "male type," "female type," and "cotypes"; the only exceptions were in Smith's very early work, where every specimen in the series was labeled "type." The statement is incorrect. Smith was inconsistent in labeling specimens of the type-series, but generally prior to 1898, he usually labeled all specimens "type" or "Type." Examples of exceptions are *Carneades edictalis* Smith (1893, Ent. News 4(3): 99), in which the three males were all labeled "Type ♂," *Agrotiphila incognita* Smith (1893, Ent. News 4(3): 101), in which the two males were both marked "♂ type," and *Copicucullia astigma* Smith (1894, Amer. Ent. Soc. Trans. 21: 85), in which a male was marked "Type" and a female "♀ type." In other instances, he labeled all specimens "Type," but added sex signs before or after "Type" for all or part of the type-series.

In some papers in 1895 he used "Type 1," "Type 2," and so forth, and also "Type" and "Duplicate Type." After 1897, Smith usually labeled specimens "type," "♀ type," and "cotype," the last with or without sex signs in the descriptions based on more than three specimens and in which both sexes were believed to be present. However, even as late as 1909 (see *Xylina atara* Smith, N.Y. Ent. Soc. Jour. 17: 62), he labeled part of the type-series "type" and others "♂ type" and "♀ type." In some descriptions in 1911 he substituted the term "Paratype" for "cotype," but he still used "♂ type" and "♀ type."

Smith never had a holotype concept. In 1893, he (U.S. Natl. Mus. Bul. 44, p. 11) explained his type concept: "Mr. Grote's practice seems to have been to mark all specimens before him when writing his original description, as 'type,' and I think Mr. Grote is right. It is the sum of the characters of the specimens before the describer that makes the species, and though neither may be the type of *all* the characters, yet all are types of the species." It is clear he modified his opinion slightly during his career as judged from the labels found on the various series. Even in his last described species, he was still labeling a male and a female as "♂ type" and "♀ type." Smith never indicated that one sex in his descriptions should be type [holotype]. Those workers who have treated the "♂ type" as equivalent to holotype were in error.

Furthermore, Smith's descriptions based on more than one specimen, with only a few exceptions, do not meet the provisions of Article 73(b) of the International Code of Zoological Nomenclature for specified type [holotype]. Accordingly, the specimens of the various type-series of those multiple specimen descriptions must, according to Article 73(c), be considered syntypes and of equal value in nomenclature. The few exceptions mentioned here relate to those descriptions in which a USNM type number was cited, and only one specimen in the U.S. National Museum bears that type number.

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Some workers would consider that specimen a holotype, others would not. To insure that such specimens be considered the type-specimens, I have selected them as lectotypes in this bulletin.

For the remainder of the multiple specimen descriptions, lectotypes need to be selected where such action has not already been taken. In this bulletin, other things being equal, either the "♂ type" or "♀ type" labeled by Smith has been selected and designated when possible. As the male genitalia for most noctuids offer better characters than those of the female, I have chosen the male as the lectotype in most instances. Some species of *Euxoa* have been exceptions.

Smith's type material is scattered in many collections, but the bulk of the material is in the American Museum of Natural History (AMNH) and the U.S. National Museum (USNM). The amount of this material in these two collections has been increased by the acquisition of other collections. In addition to the Rutgers University collection, the AMNH also contains Smith's type material from the Henry Edwards and other collections.

The holdings of Smith's type material in the USNM have accumulated from several sources, but much of it was from Smith himself. His early collection formed prior to his departure to Rutgers College was purchased by the USNM. Smith (U.S. Natl. Mus. Bul. 44, p. 13) explained this in 1893 and commented on page 14: "Of the species more recently described by myself, the museum contains a large proportion of the types. It has been my effort to place, so far as I could do so, the types of all my species in this museum, and to make it, for the future American students, as nearly typical and complete as possible." In later papers he expressed the same idea or stated that the types were to be placed in the U.S. National Museum. He continued to send type material to this collection for at least 12 more years until 1905. After that, apparently because of arguments with H. G. Dyar, he stopped sending it to this museum unless the specimens already belonged there. Type material of species described after 1905 may still be in the USNM. Such specimens are additions from other collections subsequently acquired by the USNM, i.e., the Neumoegen collection (Brooklyn Museum) and the Barnes collection.

I have studied the syntypic material in the AMNH and USNM plus other material in the collections of Michigan State University, University of Kansas, Canadian National Collection, and the British Museum (Natural History). Only a small amount of the Smith type material in the British Museum was studied because in most instances there are other syntypes in American institutions, and I believe that so far as possible lectotypes of American species should be selected from candidates in American institutions. In the case of Smith's type material, such action is proper (see Recommendation 74D, International Code of Zoological Nomenclature).

Recognition of type material in entirety for some of Smith's names is difficult or even impossible. Several factors are responsible for this state of affairs. Smith did not always apply name labels to all the specimens, especially when he had numerous examples. In some instances, he had only a sample from other collections

that contained other similarly labeled specimens, and in those cases, in the absence of name labels, it is not possible to determine which ones he had studied. In addition, he very commonly was in error as to the sex and the locality of the material studied. Finally, his various comments on location of type material do not always agree, although this may be explained, in part, by the fact that he did send type material to other institutions and collections after the species descriptions were published. This sometimes resulted in subsequent references to location of type material being different than the statement in the original description.

In this bulletin, only those specimens bearing Smith name labels, marked as part of type-series in Smith's handwriting, have normally been utilized except when no such specimens could be located or in rare instances where there was other strong evidence that the specimen was a syntype.

Certain taxonomic and nomenclatural problems bearing on the selection of lectotypes and questions relating to previous type restrictions need to be mentioned. Most are discussed in the species treatment the first time the problem occurs. One kind of restriction will be considered here. It is the inclusion in the original description of a USNM type number. An example is *Polia acera* Smith (1900, U.S. Natl. Mus. Proc. 22(1203): 472), containing the statement "Type.—Cat. No. 4826, U.S.N.M." Smith also indicated that he had only one pair of specimens and that they were from Pullman and Seattle, Wash. He did not indicate which specimen was from which locality, but he stated that the male was in better condition than the female.

During his career, Smith described 87 species with a statement about type and USNM type number in the original description. Of these 87 descriptions, 34 were based on 1 sex only with 1 specimen labeled "type." Some of these are uniques and therefore are holotypes. The remaining 34 descriptions were based on multiple specimens, but only 1 specimen is labeled "type," and usually it is the only one to have the USNM type number label. In a few instances, "cotypes" also bear the type number. Of the 53 descriptions based on both sexes (male and female types with or without cotypes), both "types" may be in the U.S. National Museum. Both or only one bears the type number, or only one "type" may be in that collection and bear the type number label, or both "types" may be in other collections and the type number label is only on "cotypes" in the USNM. In several instances, the type number cited in the description has not been located on any specimen.

The practice of recording types and assigning type numbers for insect types at the U.S. National Museum began on March 10, 1896. The first 15 species and most of the first 500 species recorded were moths described by Smith. Smith was very inconsistent in the use of type numbers in descriptions. The bulk of the type number citations appeared in the Proceedings of the U.S. National Museum beginning with volume 21, 1899, but he also used type numbers in papers in the Canadian Entomologist and the Proceedings of the Washington Academy of Sciences. In other papers published after 1898, Smith did not use type numbers in the de-

scriptions, even though many of the "types" were deposited in the U.S. National Museum. Even in a single paper, Smith did not consistently cite type and use type numbers. For example, in the Proceedings of the U.S. National Museum, 1900, he described 100 new species and stated (p. 413): "With few exceptions, the types of the species are now or will be deposited in the U.S. National Museum." In that paper, type numbers may be found in the descriptions of 57 species. These were undoubtedly the numbers assigned to the "types" that already were in the museum. A considerable number of the "types" of the other species described in that paper were eventually deposited in the museum and received type numbers, but those numbers were not cited in the original descriptions.

Masner and Muesebeck (1968, U.S. Natl. Mus. Bul. 270, p. 2) stated: "Where an author, in connection with his original description of a species, mentioned a National Museum type number and only one specimen bearing this number is marked 'Type,' he is considered to have designated a holotype, even though he did not expressly say so in his description." I am inclined to agree with this opinion; however, others may not agree that the inclusion of the word "Type" and a USNM type number satisfies the requirements of Article 73(b) of the 1961 International Code of Zoological Nomenclature.

In the case of the species described by Smith, considering his type concept, one probably should question whether his use of "Type" preceding the type number was intended to refer to *the* type or to *a* type. Accordingly, it seems that the only reasonable action in these cases is to select and designate as the lectotype for each species the specimen labeled "type" and bearing the type number or in some instances the "cotypes" that may bear the number when the "♂ type" or "♀ type" is in other collections. When more than one specimen bears a USNM type number, I believe that ethically the lectotype should be chosen from one of those specimens if the type number was given in the original description. In the case of *acera*, the "♂ type" from Pullman, Wash., is in the American Museum of Natural History via the Rutgers collection, whereas the "♀ type" from Seattle, Wash., is in the U.S. National Museum and bears the label "USNM type no. 4826." I consider that the latter should be the holotype because of the type number label, but there are some other considerations as follows:

First, the "♂ type" was figured by Hampson (1909, Catalogue of the Phalaenae in the Collection of the British Museum, v. 8, p. 208, pl. 128, fig. 4). He stated: "This species is unknown to me; figured from a drawing from type in Coll. J. B. Smith." In addition, Barnes and McDunnough (1912, Contrib. Nat. Hist. Lepidoptera N. Amer. 1(4): 5, pl. 1, fig. 2) illustrated a specimen they had compared with the "type," and they stated: "The type locality is Pullman, Washington." The addition of subsection (a)(ii) to Article 74 by the XVII^e Congrès International de Zoologie, 1972, would therefore be effective in the case with the present designation of the "♀ type" as lectotype. That subsection stated: "(ii) The first published designation of a lectotype supersedes all previous restrictions of the use of the name of the

species." "Example.—The type-locality becomes the geographical place of origin of the lectotype, despite any previous restriction of the type-locality."

Rindge (loc. cit., p. 97) stated that 767 genitalic and anatomical slides prepared by Smith were received from Rutgers University and that they apparently included all the dissections used by Smith in his numerous papers. There are 1,410 such slides from Smith in the collection of the U.S. National Museum! The slides are extremely difficult to associate with specimens. Usually they bear only the specific name with no indication on the specimen label that slides had been prepared. Except for the holotypes and a few other instances, no real effort has been made to associate slides with specimens, because, where possible, other syntypes have often been selected as lectotypes.

In addition to the difficulty of associating slides with specimens, there are other reasons for the selection of other syntypes as lectotypes. First, most of the slides are in very poor condition, largely because Smith apparently attempted to dissect the valves from dry male specimens. That technique resulted in many valves breaking distad of the base, often in critical areas of the valve. In addition, the parts mounted were sometimes crushed on the slide under the cover slips or were so covered with scales, broken pieces, dried muscle tissue, and so forth, that they are of little value in recognizing the species.

When complete syntypes of the same sex are in the type-series, I have often selected one of those as the lectotype if the genitalia agree with those illustrated by Smith. There is also some evidence that Smith sometimes had other specimens than those mentioned in the original description. It is possible that slides were prepared from such specimens and the rest of the specimen was discarded, lost, or presently not recognized. Furthermore, some of the slides might have been made at a time subsequent to the description and could have been taken from any specimen of the species subsequently available to Smith.

Several factors affected my decision to undertake this work. Under normal circumstances I would have preferred to have the lectotypes selected by subsequent revisers of the species groups, subgenera, genera, subfamilies, and so forth. However, it seemed that in the case of the type material of J. B. Smith, another course of action would be better. Smith's descriptions appeared between 68 and 98 years ago, yet the type-specimen has been determined for only a very few species. The total number of species involved is very large and the type material is widely scattered in collections. Much of the material is in only fair condition and a considerable amount in poor condition. Many of the specimens are on brass pins and have already been or are being broken apart by the formation of verdigris.

Considering the condition of the material, the slow rate of revisionary papers, and the implication of Rindge's paper that the type material was mainly in the American Museum of Natural History (a factor I thought might cause some selections to be made without study of all the material), I decided the best course was to

forego waiting for revisers and to proceed to select lectotypes when required. By doing so, I realize that I am handicapped in that in many groups I do not know, as a reviser should, what sex should best be chosen as lectotype, and I do not always know whether the specimen selected as lectotype represents the same species as the others in the series or whether it represents the species most often associated with the name by other workers. Admittedly it would be desirable to have the answers to these matters before lectotype selection, but I do not consider that the additional time required would be worth the effort.

If, in fact, subsequent genitalic studies reveal mixtures or that the specimens as identified by other workers have been incorrectly identified, the situation would be no different than had Smith actually indicated holotypes in his descriptions. Overall, I believe the advantages in selecting lectotypes now rather than awaiting future revisions for lectotype selection are far greater than the disadvantages connected with present selection. My main regret is that Smith's work was necessary and that the incompleteness of his noctuid descriptions and his taxonomic procedures required the expenditure of so much time on my part and of others, time that might otherwise have been spent on taxonomic investigations of our own choosing.

In this bulletin, the species are treated in alphabetical order by trivial names to simplify usage. For each name, the following information is presented: (1) Original combination, (2) reference to original description, (3) pertinent comments from the original description bearing on the number, sex, locality and collection, and source of the syntypes, and (4) subsequent pertinent references, comments, and actions. Also included are the number of syntypes examined in this study, present location, label data, sex if not otherwise indicated or incorrect, and condition of the specimen. The abbreviations AMNH, BMNH, CNC, KU, MSU, and USNM are used, respectively, for the American Museum of Natural History, New York, N.Y.; British Museum (Natural History), London, England; the Canadian National Collection, Agriculture Canada, Ottawa; University of Kansas, Lawrence; Michigan State University, East Lansing; and U.S. National Museum, Washington, D.C.

Crambodes abalas Smith, 1905, N.Y. Ent. Soc. Jour. 13(4): 205.

Habitat.—Cochise County, Arizona, in July. "One male and five females, in fair condition only, from Mr. George Franck."

Syntypes examined: 6 (AMNH)

- (1) "Crambodes abalas Smith ♂ type"; "Cochise Co., Ariz., VII"; "J. B. Smith Collection Rutgers" [Condition poor, rubbed, maculation only partially visible, but with complete genitalia]
- (2) "Crambodes abalas Smith ♀ type" and 4 "♀ cotypes"; same data as "♂ type"

Discussion.—The specimen labeled "♂ type" in the American Museum of Natural History has been selected, labeled, and is presently designated as lectotype. Four other syntypes are also in this museum. The

labeled data of those specimens were listed by Rindge in 1955.

Aplectoides abbea Smith, 1908, N.Y. Ent. Soc. Jour. 16: 85.

Habitat.—Westminster, B.C. "Three females in good condition from Dr. Barnes."

Syntypes examined: 3 (1 AMNH and 2 USNM)

- (1) "Aplectoides abbea Smith ♀ type"; "Westminster, B.C."; "J. B. Smith Collection Rutgers" [AMNH]
- (2) "Aplectoides abbea Smith ♀ cotype"; "Westminster, B.C."; "Barnes Collection" [Pale specimen] [USNM]
- (3) "Aplectoides abbea Smith ♀ cotype"; "Westminster, B.C."; "Barnes Collection" [Dark specimen] [USNM]

Discussion.—I have selected, labeled, and now designate the specimen in the American Museum of Natural History marked "♀ type" as the lectotype of this species.

Agrotis abnormis Smith, 1890, Amer. Ent. Soc. Trans. 17: 41.

Habitat.—Sierra Nevada, Cal. (McGlashan). "Several specimens; types with Mr. Edwards and in the college collection."

Smith (1890, U.S. Natl. Mus. Bul. 38, p. 104) presented same information, but figured on plate 5, figure 64, the kind of harpe [valve] this species and others of the same complex possess.

Smith (1893, U.S. Natl. Mus. Bul. 44, p. 79) stated: "The types are in the National Museum and in the Henry Edwards collection."

Syntypes examined: 2 (USNM and AMNH)

- (1) "Agrotis abnormis Smith Type"; "Sierra Nevada, Calif."; "Type No. 93 USNM"; "♂ genitalia on slide 2335 E. L. Todd" [This slide prepared from ♂ abdomen attached to pin of this specimen; apical half or more of each valve is missing] [USNM]
- (2) "Agrotis abnormis Smith Type"; "Sierra Nev., Cal."; "Collection J. B. Smith" [A ♀, in very good condition] [AMNH]

Discussion.—Hampson (1903, Catalogue of the Lepidoptera Phalaenae in the Collection of the British Museum 4, pp. 323–324, and pl. 67, fig. 13) treated and illustrated the species. He stated: "This species is unknown to me; figured from a photograph from type in U.S. Nat. Mus." The specimen figured is stated to be a male from California. Recommendation 74B of the 1961 International Code of Zoological Nomenclature states: "A zoologist should choose as lectotype a syntype of which a figure has been published, if such exists." Normally this recommended action would seem a desirable procedure, but in those cases where the figure for various reasons does not assure a positive identification, no advantage is to be gained by selecting the syntype figured as the lectotype.

In the case of *Agrotis abnormis* Smith, the illustration of the male syntype by Hampson is not very accurate and there are other species with very similar

maculation. Furthermore, there will always be a question as to the authenticity of the abdomen attached to the pin of the male syntype, and the damaged genitalia might prevent absolute identification of the specimen. The damage may have been the result of an accident or it may have occurred through the action of Smith's study of the genitalia of this species (he often broke off parts of the valves to make his genitalic study). Unfortunately Smith stated he had several specimens, so he could have possessed other males from which his genitalic study was made. In view of these facts, I have selected, labeled, and now designate the female syntype in the collection of the American Museum of Natural History as the lectotype of this species.

Noctua acarne Smith, 1905, N.Y. Ent. Soc. Jour. 13(4): 194.

"*Habitat*.—Banff, Alberta; N. B. Sanson, "Museum, July 11, 1902." "One good male, received through the courtesy of Dr. James Fletcher."

Holotype.—In the collection of the American Museum of Natural History. In addition to the locality label cited here, the specimen is labeled "Noctua acarne Smith ♂ type" and "J. B. Smith Collection Rutgers."

Schinia accessa Smith, 1906, N.Y. Ent. Soc. Jour. 14: 25.

"*Habitat*.—Kerrville, Texas." "I have two female specimens, one well preserved though papered, the other without locality and somewhat rubbed, from Dr. Barnes, but almost certainly from Kerrville also, though by a different collector."

Syntypes examined: 2 (AMNH and USNM)

- (1) "Schinia accessa Smith ♀ type"; "Kerrville, Texas"; "J. B. Smith Collection Rutgers" [Fair condition, midlegs, hindlegs, and left antenna missing] [AMNH]
- (2) "Schinia accessa Smith cotype"; "via Barnes coll." [A ♀, with glued-on abdomen] [USNM]

Discussion.—The "♀ type" in the collection of the American Museum of Natural History has been selected, labeled, and is presently designated the lectotype of this species.

Polia acera Smith, 1900, U.S. Natl. Mus. Proc. 22(1203): 472.

"*Habitat*.—Pullman, Washington (C. V. Piper); Seattle, Washington." "One pair only, the male in good condition save that it lacks antennae; the female, which is much older, somewhat defective." "Type.—Cat. No. 4826, U.S.N.M."

Syntypes examined: 2 (USNM and AMNH)

- (1) "Polia acera Smith ♀ type"; "Seattle, Wash."; "Type No. 4826 USNM"; "36311"; "♀ genitalia on slide 1630 J.F.G.C." [J. F. G. Clarke] [USNM]
- (2) "Polia acera Smith ♂ type"; "Pullman, Wash."; "Collector C. V. Piper"; "J. B. Smith Collection Rutgers" [Fair condition except tip of right forewing broken and antennae missing] [AMNH]

Discussion.—Selection of a type-specimen for this species is a difficult matter that probably cannot be satisfactorily resolved until the International Commission on Zoological Nomenclature has been petitioned to clarify parts of Articles 73 and 74 and/or until that body presents opinions relating to the status or interpretation to be tendered to certain actions in this case or in similar cases. A detailed discussion of the case of *Polia acera* Smith may be found in the introductory part of this bulletin (p. 2) and need not be repeated here. For the present, I consider that the female specimen in the U.S. National Museum is the holotype as a result of the restrictive statement, "Type.—Cat. No. 4826, U.S.N.M." in the original description. In the case of *Polia acera* Smith, the two specimens of the type-series represent the two sexes of a single species and it is, therefore, zoologically unimportant as to which specimen is the type-specimen, but the principles on which the selection is made are very important as they will permit reasonable type-specimen designations in other complicated cases involving type-series representing two or more species.

Buckett (1966, Pan-Pacific Ent. 42(4): 283–286) discussed the syntypes and referred to Smith's "♀ type" as the type and to the "♂ type" as the cotype male!

I have stated that, although I consider that a holotype exists in cases like this, it would seem appropriate to select that specimen as lectotype in order to insure that it is considered to be the type-specimen by all. Accordingly, I now select, label, and designate the "♀ type" in the U.S. National Museum as the lectotype.

Carneades acornis Smith, 1895, Ent. News 6: 335, pl. 15, fig. 6.

"*Hab*.—Edge Calgary, Aug. 23, 1894, at light." "The specimen is a male, and seems to be a unique." "There is the barest possibility that it may be the female of the species just previously described, that is *C. vulpina*, but I do not consider it in the least likely."

Holotype.—In the collection of the U.S. National Museum. In addition to the locality label, the specimen is labeled "Carneades acornis Smith Type"; "Type No. 1 USNM"; and "♂ genitalia on slide 2225 E. L. Todd."

Orthosia acta Smith, 1907, Amer. Ent. Soc. Trans. 33: 133.

"*Hab*.—Corvallis, Oregon, September 27th and November 3rd; Pullman, Washington, October 20th; Corfield, Vancouver, September 9th; Livingston, Vancouver, September 5th." "Five ♂ and one ♀, all in fair or good condition."

Smith (1907, Amer. Ent. Soc. Trans. 33: 356, pl. 10, fig. 3) transferred the species to *Amathes* and illustrated the male genitalia.

Syntypes examined: 3 (2 AMNH and 1 USNM)

- (1) "Orthosia acta Smith ♂ type"; "Corvallis, Or., 9.17.98"; "Collection J. B. Smith" [This specimen originally in good condition, but now broken into pieces by formation of verdigris on pin] [AMNH]
- (2) "Orthosia acta Smith ♀ type"; "Pullman,

Wash."; "10/20.96"; "Wash. Exp. Sta. No. 635"; "J. B. Smith Collection Rutgers" [Fair condition, complete] [AMNH]

- (3) "Orthosia acta Smith δ cotype"; "Corvallis, Or."; "9-27-98"; "Coll. J. B. Smith"; "At light" [Good condition except parts of valves of genitalia missing] [USNM]

Discussion.—Three male syntypes have not been located. Two males in the collection of the American Museum of Natural History were identified as this species but not marked as " δ cotypes" by Smith. They may be syntypes, but I do not know how that could be proved based on present evidence. One of the two specimens is in very poor condition and lacks the abdomen and most of the legs. There is a slide prepared by Smith in that collection of this species on which three legs, one antenna, part of one valve, and the abdominal hair pencils are mounted. The slide may have been prepared from the specimen lacking the abdomen, legs, etc., but this also cannot be definitely established. The illustration of the male valve (pl. 10, fig. 3) of the second paper of 1907 is not stated to have been prepared from one of the male syntypes, and it is unlikely that the slide can be associated with any specimen with certainty. In consideration of the damaged condition of the two known male syntypes, I have selected, labeled, and now designate the " δ type" in the collection of the American Museum of Natural History as the lectotype. The specimen marked " δ type" bears the label "9.17.98," a date not cited in the original description.

Rhizagrotis actona Smith, 1910, N.Y. Ent. Soc. Jour. 18: 87.

Habitat.—Stockton, Utah, IV, VI, VII, IX, Mr. Spalding." "Two males and seven females in good or fair condition."

Syntypes examined: 7 (5 AMNH and 2 USNM)

- (1) "Rhizagrotis actona Smith δ type"; "Stockton, Ut., VI-16-3, Tom Spalding"; "J. B. Smith Collection Rutgers" [Condition fairly good, complete] [AMNH]
- (2) "Rhizagrotis actona Smith δ type"; same data as " δ type" except "VI-23-3" [AMNH]
- (3) "Rhizagrotis actona Smith cotype"; same data except "IV-14-3" [A δ] [AMNH]
- (4) "Rhizagrotis actona Smith cotype"; same data except "VI-20-3" [A δ] [AMNH]
- (5) "Rhizagrotis actona Smith cotype"; same data except "VII-7-3" [A δ] [AMNH]
- (6) "Rhizagrotis actona Smith cotype"; "Stockton, Ut., VI-28-4"; "Barnes collection" [A δ] [USNM]
- (7) "Rhizagrotis actona Smith cotype"; "Stockton, Ut., VI-23-3, Tom Spalding"; "Barnes Collection" [A δ , abdomen missing, an abdomen attached to pin] [USNM]

Discussion.—The specimen marked " δ type" in the collection of the American Museum of Natural History has been selected, labeled, and is presently designated as the lectotype.

Pseudanarta actura Smith, 1908, N.Y. Ent. Soc. Jour. 16: 91.

Habitat.—Deming, New Mexico, September; Wilgus, Cochise County, Arizona." "Two males and four females; all in good or fair condition and all from Dr. Barnes."

Syntypes examined: 3 (2 AMNH and 1 USNM)

- (1) "Pseudanarta actura Smith δ type"; "Wilgus, Ariz., Cochise Co."; "J. B. Smith Collection Rutgers" [Good condition, complete] [AMNH]
- (2) "Pseudanarta actura Smith δ type"; same data as " δ type" [Fair condition] [AMNH]
- (3) "Pseudanarta actura Smith δ cotype"; "Wilgus, Ariz., Cochise Co."; "B" [USNM]

Discussion.—Three syntypes, one male and two females, have not been located. In the collection of the U.S. National Museum are one female from Deming, N. Mex., and two females from Wilgus, Ariz., via the Barnes collection in the series of *actura*. They may be the missing syntypes, but that cannot be definitely established as they do not bear "type" labels or even identification labels, and there are specimens with identical locality labels in the series of the extremely similar *Pseudanarta caeca* Dod. I have selected, labeled, and now designate the " δ type" in the collection of the American Museum of Natural History as the lectotype.

Stretchia acutangula Smith, 1911, N.Y. Ent. Soc. Jour. 19(3): 147.

"There are 6 δ and 11 δ from Witch Creek, San Diego, Monterey and Pasadena, California, in November, February and March."

Syntypes examined: 8 (7 AMNH and 1 USNM)

- (1) "Stretchia acutangula Smith δ type"; "San Diego, Calif., XI"; "J. B. Smith Collection Rutgers" [Good condition, complete] [AMNH]
- (2) "Stretchia acutangula Smith δ type"; "Witch Creek, Calif., II-5"; "J. B. Smith Collection Rutgers" [AMNH]
- (3) "Stretchia acutangula Smith, Paratype"; "San Diego, Calif. XI"; "J. B. Smith Collection Rutgers" [A δ] [AMNH]
- (4) "Stretchia acutangula Smith Paratype"; "Witch Creek, Calif., II-2"; "J. B. Smith Collection Rutgers" [A δ] [AMNH]
- (5) "Stretchia acutangula Smith Paratype"; "Witch Creek, Calif., I-30"; "J. B. Smith Collection Rutgers" [A δ] [AMNH]
- (6) "Stretchia acutangula Smith Paratype"; "Witch Creek, Calif., II-14"; "J. B. Smith Collection Rutgers" [A δ] [AMNH]
- (7) "Stretchia acutangula Smith Paratype"; "Pasadena, California, March 31"; "J. B. Smith Collection Rutgers" [A δ] [AMNH]
- (8) "Stretchia acutangula Smith Paratype"; "Witch Creek, Calif., Feb. 14, 1906"; "via Barnes coll." [A δ] [USNM]

Discussion.—The " δ type" in the American Museum of Natural History has been selected, labeled, and is now designated the lectotype.

Mamestra acutermis Smith, 1904, Canad. Ent. 36(6): 153.

"*Habitat*.—Calgary, Alberta, July 9, head of Pine Creek, Mr. Dod; Cartwright, Manitoba, Mr. Heath; Wellington, Brit. Col., July 17, August 24, Mr. Bryant; Volga, South Dakota, Mr. Truman." "Five males and two females."

Syntypes examined: 6 (5 AMNH and 1 USNM)

- (1) "Mamestra acutermis Smith ♂ type"; "Wellington, B.C."; "17.7.02"; "Collection J. B. Smith" [Very good, complete] [AMNH]
- (2) "Mamestra acutermis Smith ♀ type"; "Volga, So. Dak."; "Collection J. B. Smith" [Poor condition, holes in right wings, complete] [AMNH]
- (3) "Mamestra acutermis Smith ♀ cotype"; "Volga, So. Dak."; "Collection J. B. Smith" [Fair condition, complete] [AMNH]
- (4) "Mamestra acutermis Smith cotype"; "Cartwright, Manitoba"; "Collection J. B. Smith" [A ♂, fair condition, complete] [AMNH]
- (5) "Mamestra acutermis Smith cotype"; "Wellington, Brit. Col."; "24.8.02" [A ♂, fair condition, complete] [AMNH]
- (6) "Mamestra acutermis Smith cotype"; "Cartwright, Manitoba"; "coll. J. B. Smith"; "Barnes collection" [A ♂] [USNM]

Other syntypes: 1 (CNC)

"Mamestra acutermis Smith cotype"; "Calgary, Alta., 9-VII-1899, F. H. Wolley Dod"; "Head of Pine Creek" [A ♀]

Discussion.—The "♂ type" in the American Museum of Natural History has been selected, labeled, and is now designated the lectotype.

Carneades acutifrons Smith, 1900, U.S. Natl. Mus. Proc. 22(1203): 458.

"*Habitat*.—California; Oregon." "One male and one female for which I have no more definitive locality than given above." "*Type*.—Cat. No. 4794, U.S.N.M."

Syntypes examined: 2 (USNM and AMNH)

- (1) "Carneades acutifrons Smith ♂ type"; "Cal."; "Type No. 4794 U.S.N.M."; "36311"; "♂ genitalia on slide 2284, Apr. 1966, E. L. Todd" [USNM]
- (2) "Carneades acutifrons Smith ♀ type"; "Oregon"; "36"; "Collection J. B. Smith" [Good condition] [AMNH]

Discussion.—The "♂ type" is probably the holotype as it is the only specimen to bear the type number mentioned in the original description. In order to insure that it is recognized by all as the type-specimen, it has been selected and labeled and it is now designated as the lectotype.

Conochoares acutus Smith, 1905, N.Y. Ent. Soc. Jour. 13(4): 207.

"*Habitat*.—Santa Catalina Mts., April 8–15; southern Arizona, May 15." "Two males from Dr. Barnes, one female from Mr. Poling; one of the males defective, yet representative in maculation."

Syntypes examined: 3 (1 USNM and 2 AMNH)

(1) "Conochoares acutus Smith ♂ type"; "Santa Catalina Mts., Pinal Co., Ariz."; "Apr. 8–15"; "♂ genitalia on slide 970, July, 1959, E. L. Todd" [USNM]

(2) "Conochoares acutus Smith ♀ type"; "So. Arizona, Poling"; "May 15–30"; "Collection J. B. Smith" [AMNH]

(3) "Conochoares acutus Smith ♂ cotype"; same data as "♂ type" [AMNH]

Discussion.—The specimen in the U.S. National Museum marked "♂ type" by Smith has been selected and labeled and is now designated as the lectotype.

Taeniocampa addenda Smith, 1890, Ent. Amer. 6(7): 122. "*Hab*.—California." "Both sexes from Mr. Neumoegen's collection are before me."

Smith (1893, U.S. Natl. Mus. Bul. 44, p. 204) stated: "The type is with Mr. Neumoegen."

Syntypes examined: 3 (USNM)

- (1) "Taeniocampa addenda Smith ♂ type"; "Typicum specimen"; "Cal."; "Col. B. Neumoegen"; "Type No. 33843, U.S.N.M." [A ♂, abdomen slightly damaged by dermestids]
- (2) "Taeniocampa addenda Smith ♀ type"; "Cal."; "Col. B. Neumoegen"
- (3) "Taeniocampa addenda Smith ♂ type"; "Cal."; "36511"; "Type No. 5100, U.S.N.M." [A ♂, 1 valve of genitalia missing]

Discussion.—A study of Smith's entire taxonomic work indicates that Smith did not have a holotype concept, yet his comment in 1893 referring to this species would appear to apply to a single specimen. In addition, the label "Typicum specimen" on the "♂ type" from the Neumoegen collection and the absence of such a label associated with the other specimens could be evidence of a holotype concept. Unfortunately we do not know that Smith applied the label to the specimen, and he did label both males as "♂ type." Furthermore, he gave the other male to the U.S. National Museum as the type of the species, and it was so entered in the type book on May 18, 1900. In consideration of the existing evidence, I have selected, labeled, and presently designate the male bearing the label, "Typicum specimen," as the lectotype.

Oxycnemis adustus Smith, 1907, Amer. Ent. Soc. Trans. 33: 139.

"*Hab*.—San Antonio, Texas." "One rather defective male which would not have been described at this time but for its obvious relationship to *O. yuma*."

Holotype.—In the collection of the American Museum of Natural History. In addition to the locality label, the specimen bears the following labels: "Oxycnemis adustus Smith ♂ type" and "Collection J. B. Smith."

Calymnia aequilinea Smith, 1883, Brooklyn Ent. Soc. Bul. 5: 67.

"1 specimen, Colorado, my collection."

Holotype.—In the collection of the U.S. National Museum. The specimen is a female and is labeled "Calymnia aequilinea Smith Type"; "Col."; "Coll. J. B. Smith." The type label differs from the sort used by

Smith for most of his type-series. It is a piece of plain, white, linen paper.

Orthosia aggressa Smith, 1907, Amer. Ent. Soc. Trans. 33: 135.

"*Hab.*—Colorado, Denver, July 8th; Gunnison, July 9th; Chimney Gulch, July 16th; Clear Creek Canon, August 24th; Cartwright, Manitoba." "Five ♂ and one ♀, mostly poor."

Smith (1907, Amer. Ent. Soc. Trans. 33: 358) stated he had the species from "Cartwright, Manitoba, without date, taken by Mr. Heath; from Chimney Gulch near Denver, Colorado, in July, taken by Mr. Oslar, and from Clear Creek Canon, Colorado, . . . in male genitalia on plate 10, figure 8."

Barnes and McDunnough (1923, Contrib. Nat. Hist. Lepidoptera N. Amer. 2(1): 16, pl. 7, fig. 9) illustrated "♂ co-type, Denver, Colo."

Syntypes examined: 3 (2 AMNH and 1 USNM)

- (1) "Orthosia aggressa Smith ♂ type"; "Gunnison, Colo., VII-9"; "Collection J. B. Smith" [Poor condition, rubbed and torn, but complete] [AMNH]
- (2) "Orthosia aggressa Smith ♀ type"; "Denver, Colo."; "July 8-15"; "Collection J. B. Smith" [Fair condition, left hindwing torn, complete] [AMNH]
- (3) "Orthosia aggressa Smith cotype"; "Chimney Gulch, Denver, Colo."; "July 16-23"; "Photograph Pl. 7, No. 9"; "♂ genitalia on slide 1456, J. F. G. Clarke" [USNM]

Discussion.—Three of the original type-series have not been located. At least two of the missing syntypes should be from Clear Creek Canon, Colo., and Cartwright, Manitoba. A slide prepared by Smith containing an antenna, three legs, and parts of valvae of the male genitalia was located in the collection of the American Museum of Natural History, but no specimen was located with which the slide could be associated. There is a male specimen in the collection of the U.S. National Museum labeled "Clear Creek Canon, Colo."; "Aug. 24-30"; "Collection J. B. Smith." The specimen is missing one antenna, the abdomen, and three legs. It probably is a syntype, and it may be the specimen from which the slide in the American Museum of Natural History was prepared, but it does not have a Smith type or name label affixed. The "cotype" in the U.S. National Museum has been selected, labeled, and is now designated as the lectotype of this species. It is in good condition, it was figured by Barnes and McDunnough, and the genitalia agree with the figure of the valve illustrated in Smith's second paper on the species.

Mamestra agnata Smith, 1905, N.Y. Ent. Soc. Jour. 13(4): 200.

"*Habitat.*—Redington, Arizona." "Three males and two females from Dr. Barnes, all in good condition and all without date."

Syntypes examined: 5 (2 AMNH and 3 USNM)

- (1) "Mamestra agnata Smith ♂ type"; "Redington, Arizona"; "J. B. Smith Collection Rutgers" [Condition very good, complete] [AMNH]

- (2) "Mamestra agnata Smith ♀ type"; same data as "♂ type" [AMNH]
- (3) "Mamestra agnata Smith cotype"; "Redington, Arizona"; "Barnes collection" [A ♂] [USNM]
- (4) "Mamestra agnata Smith cotype"; same data as "cotype" [A ♂] [USNM]
- (5) "Mamestra agnata Smith cotype"; same data as "cotype" [A ♀] [USNM]

Discussion.—The specimen labeled "♂ type" in the American Museum of Natural History has been selected, labeled, and is presently designated as the lectotype.

Nonagria alameda Smith, 1903, Wash. Ent. Soc. Proc. 5(4): 318, pl. 5, figs. 11-13.

"*Habitat.*—Alameda County, California, July and August; red No. 231, (A. Koebele)." "*Type.*—No. 6807, U.S. National Museum." "A series of eight examples, equally divided as to sex, is under examination, . . ."

Syntypes examined: 6 (4 USNM and 2 AMNH)

- (1) "Nonagria alameda Smith ♂ type"; "Alameda Co., Cal."; "July"; "Through C. V. Riley"; "Type No. 6807 U.S.N.M." [USNM]
- (2) "Nonagria alameda Smith cotype"; "Alameda Co., Cal."; "Aug."; "231"; "Type No. 6807 U.S.N.M." [A ♂, abdomen missing] [USNM]
- (3) "Nonagria alameda Smith cotype"; "Alameda Co., Cal."; "Aug."; "231"; "Type No. 6807 U.S.N.M." [A ♀] [USNM]
- (4) "Nonagria alameda Smith cotype"; same data as "♂ type" except no USNM type number label [A ♂] [USNM]
- (5) "Nonagria alameda Smith ♀ type"; "Alameda Co., Cal."; "July"; "Through C. V. Riley"; "J. B. Smith Collection, Rutgers" [AMNH]
- (6) "Nonagria alameda Smith cotype"; same data as "♀ type" [A ♂] [AMNH]

Discussion.—Two syntypes, apparently females if Smith was correct in his determination of the sex of the specimens of the type-series, have not been located. There are in the collection of the U.S. National Museum 10 specimens with locality and date labels identical with those of the female cotype in the same collection. They also bear the number "231" written in red ink. All are complete except one female, which is lacking an abdomen. Of the six specimens identified herein as syntypes, four are males and only one is incomplete, lacking an abdomen.

A slide of the male genitalia was among those received by the American Museum of Natural History from Rutgers University as part of the collection formed by John B. Smith while he was at the latter institution. If Smith was correct as to the sex of the specimens of the type-series, then this genitalia slide must have been made from the male cotype in the U.S. National Museum, as the other three males are complete. Early in the study it was assumed that the slide must have been prepared from the male lacking the abdomen, and the slide was sent to the U.S. National Museum by F. H.

Rindge. It is obviously the basis for figure 13 (a valve), but the absence of two syntypes and the knowledge that Smith commonly misjudged the sex of many other species create some uncertainty about the association of the slide with the male cotype lacking the abdomen.

Figures 11 and 12 are of lateral and dorsal views of the frontal process of the head. This process is very large and characteristically shaped, but even so it is normally concealed in the dense scaling of the front of the head. None of the syntypes nor any of the other specimens in the U.S. National Museum bearing the red number "231" have had the head denuded so that the frontal process could have been illustrated. In consideration of these facts, the syntype in the U.S. National Museum labeled "♂ type" and bearing the label "Type No. 6807 U.S.N.M." has been selected, labeled, and is presently designated as the lectotype.

Acontia alata Smith, 1905, N.Y. Ent. Soc. Jour. 13(4): 210.

"*Habitat*.—Baboquavaria Mts., Pima County, Arizona, July 15–30; O. C. Poling." "Three males and one female, all in good condition; one ♂ from Dr. Barnes, whose label reads 'Babaquivera,' the others from Mr. Poling direct."

Hampson (1910, Catalogue of the Lepidoptera Phaenae in the Collection of the British Museum, v. 10, p. 698) listed a male and a female from the Baboquavaria Mountains, Ariz. (Poling), one as a cotype. The cotype, a male, was figured on plate CLXX, figure 8.

Syntypes examined: 3 (2 AMNH and 1 USNM)

- (1) "Acontia alata Smith ♂ type"; "Baboquavaria Mts., Pima County, Arizona, July 15–30, 1903, O. C. Poling"; "J. B. Smith Collection, Rutgers"; "♂ genitalia 10,324, FHR [F. H. Rindge]" [AMNH]
- (2) "Acontia alata Smith ♀ type"; same data as "♂ type" except no genitalia preparation label [AMNH]
- (3) "Acontia alata Smith cotype"; "Babaquivera Mts., Pima Co., Ariz." [A ♂] [USNM]

Discussion.—The illustration of the male cotype in the collection of the British Museum (Natural History) provided by Hampson is poor. The fine, white terminal line is scarcely observable in the illustration, and the hindwings and thorax are much too dark. Even so, the maculation of this species is so distinctive that there is no question as to the species illustrated. The usual procedure following Recommendation 74B of the International Code of Zoological Nomenclature would be to select the syntype illustrated as the lectotype. However, in this instance, it seems more desirable to select a syntype marked as type by Smith and one located in an American institution. Accordingly, I have selected, labeled, and now designate the specimen labeled "♂ type" in the collection of the American Museum of Natural History as the lectotype for this species.

Schinia alfafascia Smith, 1883, Amer. Ent. Soc. Trans. 10: 231, pl. 7, fig. 20 (tibia), pl. 8, fig. 31 (wing).

"*Habitat*.—Utah." "The type is a ♂ in my collection."

Smith (1893, U.S. Natl. Mus. Bul. 44, p. 279) stated: "The type is in the U.S. National Museum."

Holotype: In the U.S. National Museum. The specimen is labeled "Schinia alfafascia Smith Type"; "Murdock, Utah, 1882"; "Collection J. B. Smith"; "Type No. 292 USNM"; "♂ genitalia on slide 879 J.F.G.C." [J. F. G. Clarke]. The two right wings and the apical half of the left valve of the genitalia are missing.

Hadena (Xylophasia) alberta Smith, 1903, N.Y. Ent. Soc. Jour. 11(1): 8.

"*Habitat*.—Calgary, Alberta, June 24 to July 7."

"Three male and two female examples, of which two male and one female were received from Mr. F. H. Wolley Dod under the number 33 (head of Fish Creek) and one male and one female are from Dr. Wm. Barnes."

Hampson (1908, Catalogue of the Lepidoptera Phaenae in the Collection of the British Museum, v. 7, p. 199) listed this as a junior synonym of *Trachea commoda* (Walker) and stated there are two males and one female from Calgary, Alberta, Canada, one a cotype in that collection. On plate CXIII, figure 12, Hampson illustrated a male from Alberta, but it is not known to have been from the specimen marked as a cotype.

Syntypes examined: 5 (2 AMNH and 3 USNM)

- (1) "Hadena alberta Smith ♂ type"; "Calgary, F. H. W. Dod, 2.VII.96"; "Head of Pine Creek"; "J. B. Smith Collection, Rutgers" [Fairly good condition, complete] [AMNH]
- (2) "Hadena alberta Smith ♀ type"; same labels as "♂ type" [Abdomen damaged ventrally by dermestids] [AMNH]
- (3) "Hadena alberta Smith ♀ cotype"; "Calgary, Alberta"; "June 24–30"; "Barnes collection"; "♀ genitalia on slide 136, J.F.G.C." [USNM]
- (4) "Hadena alberta Smith ♂ cotype"; "Calgary, Alberta"; "July 1–7"; "Barnes collection"; "♂ genitalia on slide 135, J.F.G.C." [USNM]
- (5) "Hadena alberta Smith ♂ cotype"; "Calgary, Alta., F. H. Wolley Dod, 26–VI–96"; "Head of Pine Creek"; "Barnes collection"; "♂ genitalia on slide 1804, J.F.G.C." [USNM]

Discussion.—The specimens in this list would seem to account for all the syntype material if Smith's comment in the original description as to the number of specimens before him was accurate. If so, the specimen marked as a cotype in the British Museum (Natural History) or one of the cotypes from the U.S. National Museum must be a pseudotype. The discrepancy in the specific locality "Head of Pine Creek" on the label and "(head of Fish Creek)" in the original description is undoubtedly due to a lapsus on the part of Smith. Dod supplied a great deal of material from both localities of many species to Smith and others. Smith obviously cited Fish Creek in error. The specimen marked "♂ type" in the collection of the American Museum of Natural History has been selected, labeled, and is presently designated as the lectotype.

Yrius albiciliatus Smith, 1903, Amer. Ent. Soc. Trans. 29(3): 215.

"*Hab.*—Yuma County, Arizona (Hutson)." "A beautiful little species, represented by one very good female specimen."

Holotype.—In the American Museum of Natural History. In addition to the locality label, the specimen is labeled "Yrias albiciliatus Smith ♀ type"; "♀ gen. 10, 389, FHR" [F. H. Rindge]; "J. B. Smith Collection Rutgers."

Rancora albicincta Smith, 1903, *Canad. Ent.* 35(5): 137, pl. 4, fig. 13.

"*Habitat*.—Calgary, Alberta, April 24, at shallows, head of Pine Creek, No. 34 (Mr. Dod); Rounthwaite and Boucher, Manitoba, end of April." "Three male specimens, of which those from Manitoba came to me from Dr. Fletcher." "March and April are the dates for such as have any attached."

Syntypes examined: 3 (2 AMNH and 1 USNM)

- (1) "Rancora albicincta Smith ♂ type"; "Calgary, 28-IV-95, Head Pine Creek (Sallows), F. H. W. Dod"; "J. B. Smith Collection, Rutgers" [Good condition except valves of genitalia missing] [AMNH]
- (2) "Rancora albicincta Smith cotype"; "Boucher, Saska., End 4-97"; "Collection J. B. Smith" [A ♂, in good condition except missing both valves of genitalia] [AMNH]
- (3) "Rancora albicincta Smith ♂ cotype"; "Rounthwaite"; "Barnes collection" [Abdomen missing] [USNM]

Discussion.—Figure 13 of plate 4 is a drawing of part of a valve of the male genitalia. In the collection of the American Museum of Natural History there is a Smith slide on which are mounted the parts of four badly preserved and broken valves. Only one valve still has the process of the interface intact. It undoubtedly is the valve from which Smith's drawing was made. Smith's drawing, as in other Smith illustrations, appears to be a reversal. Since both syntypes in the American Museum of Natural History are lacking valves and since the entire abdomen of the syntype in the U.S. National Museum is missing, it is not possible to state from which specimen the valve used for illustration was taken.

The carelessness with which Smith cited collecting data is easily demonstrated from this description. The specimen from Calgary was collected April 28, not 24 as Smith stated. Boucher is stated to be in Manitoba, not Saskatchewan as indicated on the label. After indicating that the specimens bearing collecting date labels were collected in April, he stated: "March and April are the dates for such as have any attached."

The specimen labeled "♂ type" in the collection of the American Museum of Natural History has been selected, labeled, and is presently designated as the lectotype. The species fortunately should be easily identified by the pattern of maculation of the forewings.

Agrotis albicosta Smith, 1888, *U.S. Natl. Mus. Proc.* 10: 454.

"*Habitat*.—Arizona." "A male specimen from Mr. Neumoegen furnished the type; others, ♂ and

♀ from various collections, in single specimens, have been since seen, and agree with the type specimen."

Smith (1893, *U.S. Natl. Mus. Bul.* 44, p. 80) stated: "The types are with Mr. Neumoegen and Mr. Graef. Others are in the National Museum."

Holotype.—In the U.S. National Museum. Smith indicated a male from the collection of Neumoegen was the type. It is labeled "Agrotis albicosta Smith Type"; "S.W. Arizona"; "Col. B. Neumoegen"; "Type No. 33767 USNM"; "♂ genitalia on slide 1670 JGF" [J. G. Franclemont]. In spite of Smith's statement of 1893, no other specimens labeled "Type" have been located.

Cucullia albida Smith, 1894, *Amer. Ent. Soc. Trans.* 21: 84, pt. 4, fig. 9 (adult).

"*Hab.*—Colorado; Bruce, No. 538." "A single male specimen, somewhat rubbed."

Holotype.—In the U.S. National Museum. The specimen is labeled "Cucullia albida n. sp. Type"; "Colo. Bruce"; "538"; "Type No. 271 USNM"; "♂ gen. on slide 1904 JGF." Smith (1903, *Canad. Ent.* 35(5): pl. 4, fig. 14) figured a male valve under the name "Rancora albida," and there is a slide in the American Museum of Natural History of a male valve, but it was not from the holotype. The genitalia prepared from the holotype by Franclemont are complete.

Hydroecia albilunata Smith, 1899, *Amer. Ent. Soc. Trans.* 26: 14.

Discussion.—This is a new name for *Hydroecia lunata* (Smith). Smith described the species originally in the genus *Apamea*. The type is ipso facto the type-specimen of *lunata*.

Scotogramma albinuda Smith, 1903, *N.Y. Ent. Soc. Jour.* 11(1): 19.

"*Habitat*: Rama, Labrador, 1900, A. Stecker, J. D. Sornborger." "Three females in fair condition from the Museum of Comparative Zoology, through the courtesy of Mr. Henshaw."

Syntypes examined: 1 (AMNH)

- (1) "Scotogramma albinuda Smith cotype"; "Rama, Labrador, 1899, A. Stecker, J. D. Sornborger"; "Collection J. B. Smith"; "♀ Genitalia mounted on slide F.H.R. no. 15, 547" [Fair condition, antennae missing]

Discussion.—I have not attempted to examine the other two syntypes that I presume are in the Museum of Comparative Zoology, Cambridge, Mass. One of the specimens, if there, is probably labeled "♀ type." I have indicated elsewhere that all things being equal I normally would try to select as lectotype either the "♂ type" or "♀ type." In this case, I have selected, labeled, and now designate the "cotype" in the American Museum of Natural History as the lectotype. This action is taken so that the lectotype will be located in an institution containing a large number of Smith holotypes and lectotypes and is in line with the conditions of Recommendation 74D of the International Code of Zoological Nomenclature. The Museum of Comparative Zoology contains very little Smith material, and the

comments in the original description indicate that the other two specimens of this species could not be expected to be in better condition or a different sex.

Platysenta albipuncta Smith, 1902, N.Y. Ent. Soc. Jour. 10: 46.

"*Habitat*.—Harris Co., Texas (Franck); Colorado Springs, VIII, 5, Colorado (Osler)." "Nine examples all males, and all save one from Texas. The specimen from Colorado Springs has been in collection for some time and was associated with *videns*." Hampson (1909, Catalogue of the Lepidoptera Phalaenae in the Collection of the British Museum, v. 8, p. 450) listed a male cotype from Harris County, Tex., and figured the same on plate CXXXIII, figure 29.

Syntypes examined: 3 (2 AMNH and 1 USNM)

- (1) "Platysenta albipuncta Smith ♂ type"; "Harris Co., Tex."; "Collection J. B. Smith" [AMNH]
- (2) "Platysenta albipuncta Smith cotype"; "Colorado Springs, Colorado, VIII-5"; "J. B. Smith Collection, Rutgers" [A ♂] [AMNH]
- (3) "Platysenta albipuncta Smith cotype"; "Harris Co., Tex."; "Col. B. Neumögen"; "Type No. 33941, U.S.N.M." [A ♂, base of abdomen with dermestid damage, valves broken, uncus missing] [USNM]

Discussion.—Another syntype is in the British Museum (Natural History) and was illustrated by Hampson as indicated here. Five syntypes have not been located. In the selection of a lectotype for this species, I am following the same general reasoning as for *Acontia alata* Smith and I am not selecting an illustrated specimen. The specimen selected, labeled, and now designated the lectotype is the one in the American Museum of Natural History marked "♂ type." The abdomen of that specimen is nearly broken off, and it should be removed and a genitalia slide prepared as soon as possible.

Hadena (Xylophasia) albiserrata Smith, 1903, N.Y. Ent. Soc. Jour. 11(1): 8.

"*Habitat*: Pullman, Washington, Sept. 19; Exper. Sta. No. 639; C. V. Piper." "One, somewhat ragged male, and one good female, from Professor Piper."

Syntypes examined: 2 (AMNH)

- (1) "Hadena albiserrata Smith ♂ type"; "Pullman, Wash."; "9/19 '96"; "Collector C. V. Piper"; "Wash. Exp. Sta. No. 639"; "J. B. Smith Collection, Rutgers" [Left wings torn or split, antennae mostly missing, but otherwise complete, maculation still discernible]
- (2) "Hadena albiserrata Smith ♀ type"; same data as "♂ type" [Good condition except forewings rubbed toward inner margins]

Discussion.—The syntype marked "♂ type" has been selected, labeled, and is presently designated as the lectotype. The lectotype is in the American Museum of Natural History.

Simplicia albisinuata Smith, 1905, Canad. Ent. 37: 71.

"*HABITAT*: Cochise County, Arizona, July and August." "Three males and three females from Mr. Franck, all received in papers and in more or less defective condition."

Syntypes examined: 5 (2 AMNH, 2 USNM, and 1 KU)

- (1) "Palthis albisinuatus Smith ♂ type"; "Cochise Co., Ariz."; "J. B. Smith Collection, Rutgers" [Fairly good condition, complete] [AMNH]
- (2) "Palthis albisinuatus Smith ♀ type"; same data as "♂ type" except "July 11 04" on locality label [Rather poor condition, complete] [AMNH]
- (3) "Palthis albisinuatus Smith cotype ♀"; "Collection Brklyn Mus." [Abdomen missing] [USNM]
- (4) "Palthis albisinuatus Smith cotype"; "Cochise Co., July"; "Oberthus collection" [A ♀] [USNM]
- (5) "Palthis albisinuatus Smith ♀ cotype"; "Cochise Co., July 4, 1904"; "Univ. Kan. Lot 905" [Very poor condition, legs missing, wings rubbed, left hindwing broken at base] [KU]

Discussion.—The scientific name on the labels differs from the name published both as to generic assignment and as to termination of the trivial name. The differences obviously represent a change of mind on the part of Smith as to the proper generic placement of the species. Judging from the sexes of the syntypes, Smith must have been in error as to the sex of one specimen. One syntype has not been located. There is a male specimen in the series of the species in the U.S. National Museum labeled "Cochise Co., Ar., 12, July"; "Acc. No. 10142"; "Collection Brklyn Mus."; "Type No. 34152 U.S.N.M.," but it bears the name label "Bomolocha heuloa Smith ♀ cotype"! It is entered in the type book as a male of *heuloa*. The specimen does not look remotely like *heuloa*, and the presence of the name label on the specimen obviously represents an error. Smith's citation of "August" as one of the dates of collection is unexplained. Two of the syntypes do not bear a date of collection, but it is quite possible that the missing syntype was collected in that month. The "♂ type" in the American Museum of Natural History, the only male syntype located, has been selected, labeled, and is presently designated the lectotype.

Tristyla alboplagiata Smith, 1893, Insect Life 5(5): 332, fig. 46: 6.

"*Habitat*.—Argus Mountains, April, 1891." "I have three specimens, representing both sexes."

Syntypes examined: 3 (2 USNM and 1 AMNH)

- (1) "Tristyla alboplagiata Smith Type"; "Argus Mts., April 91 K."; "Through C. V. Riley"; "Type No. 299, U.S.N.M." [A ♂, antennae broken, but otherwise in good condition and well prepared] [USNM]
- (2) "Tristyla alboplagiata Smith Type"; "Argus Mts., April 91 K."; "Through C. V. Riley";

"Type No. 299, U.S.N.M." [A ♂, rubbed, with wings bent downward] [USNM]

- (3) "Tristyla albopagiata Smith Type"; "Argus Mts., April '91 K."; "Through C. V. Riley"; "J. B. Smith Collection, Rutgers" [A ♀, in fair condition] [AMNH]

Discussion.—The male in the U.S. National Museum with the broken antennae and in good condition appears to be the specimen illustrated in the original paper. When photographed, the antennae were not broken, but the maculation of the hindwings and general preparation identify it as the specimen utilized. Accordingly, I have selected, labeled, and now designate that male as the lectotype for this species.

Rhynchagrotis alcandola Smith, 1908, *Canad. Ent.* 40: 288.

Habitat.—Yavapai Co., Arizona, Oct. 4, Mr. Hutson. "One female, in fair condition only. Prof. F. H. Snow has other examples, and I sent him the MSS, name some time since, expecting to get additional material for the description. It is to validate the name sent out that I base the species on a single defective example, knowing that there are other and better ones in collections."

Bucket (1968, *Calif. Dept. Agr. Bur. Ent. Occas. Papers* No. 14, p. 10) stated: "Holotype female, Minnehaha, Yavapai County, Arizona, 4 October (AMNH)."

Holotype.—The specimen referred to by Smith is in the American Museum of Natural History. It is labeled "Rhynchagrotis alcandola Smith ♀ type"; "Minnehaha"; "Yavapai Co., Ariz. x-4"; "J. B. Smith Collection, Rutgers." It is in very good condition and not defective as Smith indicated. This discrepancy makes one wonder if it is really the original specimen or whether it represents another specimen to which the name label was subsequently affixed! Since Smith did not indicate in what manner the specimen he described was defective and in the absence of any other conclusive evidence indicating label switching, it seems best for the present to follow Bucket and treat the specimen as the holotype.

Euxoa alcesta Smith, 1905, *N.Y. Ent. Soc. Jour.* 13(4): 196.

Habitat.—Stockton, Utah, Sept. 5–26. "Ten males and six females from Mr. Spalding, all in fair condition."

Syntypes examined: 10 (7 AMNH and 3 USNM)

- (1) "Euxoa alcesta Smith ♂ type"; "Stockton, Ut., IX-5-4, Tom Spalding"; "J. B. Smith Collection, Rutgers" [AMNH]
- (2) "Euxoa alcesta Smith ♀ type"; "Stockton, Ut."; "IX-9-4"; "J. B. Smith Collection, Rutgers"; "♀ gen. 9156, FHR" [AMNH]
- (3) "Euxoa alcesta Smith cotype"; same data "♂ type" except "IX-4-4" [A ♂] [AMNH]
- (4) "Euxoa alcesta Smith cotype"; same data "♂ type" except "IX-9-4" [A ♀] [AMNH]
- (5) "Euxoa alcesta Smith cotype"; same data "♂ type" except "IX-18-4" [A ♂] [AMNH]

(6) "Euxoa alcesta Smith cotype"; same data "♂ type" except "IX-23-3" [A ♀] [AMNH]

(7) "Euxoa alcesta Smith cotype 39720"; "Stockton, Ut., IX-10-3, Tom Spalding"; "Collection Dr. H. G. Dyar"; "Type No. 9760 U.S.N.M." [A ♂] [USNM]

(8) "Euxoa alcesta Smith cotype"; "Stockton, Ut., IX-23-3, Tom Spalding"; "Type No. 33742 U.S.N.M."; "Acc. no. 10255" [A ♂] [USNM]

(9) "Euxoa alcesta Smith cotype"; "Stockton, Ut."; "IX-5-4"; "slide 44c"; "Barnes collection" [A ♂] [USNM]

(10) "Euxoa alcesta Smith cotype"; "Stockton, Ut."; "IX.14.4"; "22344"; "Cotype No. ____ A.M.N.H." [A ♂] [AMNH]

Discussion.—Six syntypes have not been located. Following the practice established of selecting female lectotypes in this genus when possible, I (1968, *Ent. Soc. Wash. Proc.* 70(3): 264) have selected, labeled, and presently designate the specimen marked "♀ type" in the collection of the American Museum of Natural History as the lectotype. Since the publication of my paper on the lectotypes of some species of the genus *Euxoa* Hübner in 1968, D. F. Hardwick indicated to me in conversation that selection of males in this genus would have been as satisfactory. Consequently, for some of the remaining species of the genus, males will be selected with the concurrence of or at the suggestion of Hardwick.

Faronta aleada Smith, 1908, *N.Y. Acad. Sci. Ann.* 18(2): 107.

Habitat: Brazos, Tex. "One male and three females, all in good condition; from the collection of the Brooklyn Institute of Arts and Sciences."

Syntypes examined: 4 (3 USNM and 1 AMNH)

- (1) "Faronta aleada Smith ♂ type"; "Brazos Isl."; "Type No. 33853 U.S.N.M."; "♂ genitalia on slide 3912 JFGC" [USNM]
- (2) "Faronta aleada Smith ♀ type"; "Brazos Isl." [A ♂, right valve broken!] [USNM]
- (3) "Faronta aleada Smith ♀ cotype"; "Brazos Isl."; "Barnes collection"; "♀ genitalia on slide 3913 JFGC" [USNM]
- (4) "Faronta aleada Smith ♀ cotype"; "J. B. Smith Collection, Rutgers" [AMNH]

Discussion.—The specimen labeled "♂ type" in the U.S. National Museum has been selected, labeled, and is now designated as the lectotype.

Schinia alensa Smith, 1906, *N.Y. Ent. Soc. Jour.* 14: 26.

Habitat.—Southern Arizona, August 1–15, Poling; Wilgus, Cochise Co., Ariz., no date. "Two males and two females in fair condition, a pair from each locality, through Dr. Barnes."

Syntypes examined: 4 (2 AMNH and 2 USNM)

- (1) "Schinia alensa Smith ♂ type"; "So. Arizona, Poling"; "Aug. 1–15"; "J. B. Smith Collection, Rutgers" [Good condition, complete, except left antenna] [AMNH]
- (2) "Schinia alensa Smith ♀ type"; "So. Ari-

zona, Poling"; "Aug. 1-15"; "J. B. Smith Collection, Rutgers" [Good condition, complete] [AMNH]

- (3) "Schinia ainsa Smith δ cotype"; "Wilgus, Cochise Co., Ariz."; "Barnes collection" [USNM]
- (4) "Schinia ainsa Smith φ cotype"; "Wilgus, Cochise Co., Ariz."; "Barnes collection" [USNM]

Discussion.—The specimen labeled " δ type" in the collection of the American Museum of Natural History has been selected, labeled, and is now designated as the lectotype. The two syntypes in the collection of the U.S. National Museum are placed in the series of *Schinia obliqua* Smith.

Acontia alessandra Smith, 1903, Amer. Ent. Soc. Trans. 29(3): 212.

"*Hab.*—Stockton, Utah, in October (Franck); Huachuca Mts., Arizona (Barnes); Shovel Mt., April and July, Kerrville, and Black Jack Springs, Texas (Coll. div.)." "Six specimens representing both sexes in good or fair condition."

Syntypes examined: 3 (2 AMNH and 1 USNM)

- (1) "Acontia alessandra Smith δ type"; "Stockton, Utah, X"; "Collection of J. B. Smith"; " δ gen. 10,342 FHR" [Very good condition] [AMNH]
- (2) "Acontia alessandra Smith δ cotype"; "Huachuca Mts., Ariz." [AMNH]
- (3) "Acontia alessandra Smith cotype"; "Shovel Mt., Texas"; "April 24-30" [A δ] [USNM]

Discussion.—Three syntypes have not been located. They should be from Kerrville, Black Jack Springs, and Shovel Mt. (July), Tex. The specimen labeled " δ type" in the collection of the American Museum of Natural History has been selected, labeled, and is now designated as the lectotype.

Stretchia algula Smith, 1911, N.Y. Ent. Soc. Jour. 19(3): 148.

"*Habitat*.—Arrowhead, Lake, British Columbia." "Two δ and 4 φ , all from the Barnes collection."

Syntypes examined: 6 (3 AMNH and 3 USNM)

- (1) "Stretchia algula Smith δ type"; "Arrowhead Lake, B.C."; "J. B. Smith Collection, Rutgers" [Very good condition] [AMNH]
- (2) "Stretchia algula Smith Paratype"; "Arrowhead Lake, B.C."; "J. B. Smith Collection, Rutgers" [A φ] [AMNH]
- (3) "Stretchia algula Smith Paratype"; "Arrowhead Lake, B.C."; "J. B. Smith Collection, Rutgers" [A φ] [AMNH]
- (4) "Stretchia algula Smith φ type"; "Arrowhead Lake, B.C."; "Barnes collection" [USNM]
- (5) "Stretchia algula Smith Paratype"; "Arrowhead Lake, B.C."; "Barnes collection" [A δ] [USNM]
- (6) "Stretchia algula Smith Paratype"; "Arrowhead Lake, B.C."; "Barnes collection" [A φ] [USNM]

Discussion.—The specimen marked " δ type" in the collection of the American Museum of Natural History has been selected, labeled, and is now designated as the lectotype.

Hadena allecto Smith, 1899, Canad. Ent. 31: 260.

"*Habitat*.—Calgary, Sept. 17 (Dod); Brandon, Manitoba (Hanham); Volga, So. Dakota (Truman)." "Six specimens, representing both sexes, are before me. . . ."

Smith (1903, Canad. Ent. 35(5): pl. 4, fig. 10) illustrated the valve of the male genitalia.

Syntypes examined: 5 (3 USNM and 2 AMNH)

- (1) "Hadena allecto Smith δ type"; "Brandon, Manitoba"; "Type No. 4365 U.S.N.M."; " δ genitalia on slide, March 23, 1936, J.F.G.C. #41" [USNM]
- (2) "Hadena allecto Smith φ type"; "Brandon, Manitoba"; "Type No. 4365 U.S.N.M."; " φ genitalia on slide, March 23, 1936, J.F.G.C. #42" [USNM]
- (3) "Hadena allecto Smith φ cotype"; "Brandon, Manitoba"; "Type No. 4365 U.S.N.M." [USNM]
- (4) "Hadena allecto Smith δ cotype"; "Brandon, Manitoba"; "J. B. Smith Collection, Rutgers" [AMNH]
- (5) "Hadena allecto Smith δ cotype"; "South Dakota"; "J. B. Smith Collection, Rutgers" [Volga, S. Dak., from Truman according to original description] [AMNH]

Discussion.—One syntype from Calgary, Manitoba, September 17, has not been located. The specimen in the U.S. National Museum labeled " δ type" has been selected, labeled, and is now designated the lectotype.

Tornacontia altera Smith, 1903, Amer. Ent. Soc. Trans. 29(3): 209.

"*Hab.*—Southern Arizona (Poling); Hot Springs, New Mexico, 7000 ft. alt. (Hulst)." "One male and one female, both in fair condition."

Syntypes examined: 2 (AMNH)

- (1) "Tornacontia altera Smith δ type"; "Hot Spring, N. Mex., 7000 ft. alt."; "Collection J. B. Sm."; " δ gen. 10, 334, FHR"
- (2) "Tornacontia altera Smith φ type"; "southern Arizona, Poling"; "J. B. Smith Collection, Rutgers"

Discussion.—The " δ type" has been selected, labeled, and is now designated as the lectotype.

Agrotis alticola Smith, 1890, Amer. Ent. Soc. Trans. 17: 51.

"*Habitat*.—Sierra Nevada, Cal. (McGlashan)." "A large series of this interesting species is before me showing what I hope is the entire range of variation of the species which is a difficult one to place in a table by reason of its variability." "Types in the Rutgers College collection; coll. Hy. Edwards and coll. U.S. National Museum." Smith (1890, U.S. Natl. Mus. Bul. 38, p. 186) stated: "Types are with Messrs. Edwards and Neumoegen,

and in the U.S. National Museum collection." Smith (1893, U.S. Natl. Mus. Bul. 44, p. 101) stated: "Types are in the National Museum and in the Edwards collection."

Syntypes examined: 7 (5 AMNH and 2 USNM)

- (1) "Agrotis alticola Smith Type"; "Sier. Nev., Cal."; "Collection J. B. Smith" [A ♂] [AMNH]
- (2) "Agrotis alticola Smith Type"; "Sier. Nev., Cal."; "Hy. Edw. 9751" [A ♂, in very good condition] [AMNH]
- (3) "Agrotis alticola Smith Type"; "Sier. Nev., Cal."; "Hy. Edw. 9747" [A ♂, in very good condition] [AMNH]
- (4) "Agrotis alticola Smith Type"; "Sier. Nev., Cal."; "Hy. Edw. 9749" [A ♀, right forewing missing] [AMNH]
- (5) "Agrotis alticola Smith Type"; "Sier. Nev., Cal."; "J. B. Smith Collection, Rutgers" [A ♀, torn right hindwing, but very well marked individual] [AMNH]
- (6) "Agrotis alticola Smith Type"; "Sier. Nev., Cal."; "Type No. 125 U.S.N.M." [A ♂, abdomen glued on, upside down] [USNM]
- (7) "Agrotis alticola Smith Type"; "Sier. Nev., Cal."; "Type No. 125 U.S.N.M." [A ♀, abdomen broken from specimen, in capsule attached to pin] [USNM]

Discussion.—Smith made three different statements concerning the distribution of the type material of this species. In the original description the first institution mentioned was Rutgers College. That collection is not mentioned in the last two statements he made about the location of his types. From that fact it might be assumed that he had transferred those specimens elsewhere, but there were two specimens marked "Type" included in the material transferred to the American Museum of Natural History from Rutgers and reported by Rindge. The female received from Rutgers by the American Museum of Natural History and marked "J. B. Smith Collection, Rutgers" has been selected, labeled, and is now designated as the lectotype.

Xylophasia alticola Smith, 1891, U.S. Natl. Mus. Proc.

13(839): 423, pl. 36, fig. 15.

HABITAT.—Gibson Mountains, Colorado, 12,500 feet. "A single male specimen collected by Mr. Bruce is before me."

Smith (1893, U.S. Natl. Mus. Bul. 44, p. 136) stated: "The type is in the National Museum."

Holotype.—In the U.S. National Museum. The specimen is labeled "Xylophasia alticola Smith Type"; "80, Gibson Mts., Colo., 12500 ft. D. Bruce"; "Type No. 169 USNM." It is a male with part of one of the genitalia valves missing.

Mamestra altua Smith, 1901, Amer. Ent. Soc. Trans.

27: 233, pl. 10, fig. 7.

I have treated the name as if it had been described as a distinct species, but, in fact, Smith vacillated as to its status as can be seen here, and some workers may

consider that it would be best to list the name as *Mamestra olivacea altua* Smith.

"The third series consists of four males and thirteen females, reversing the proportions of the sexes found in the previous series. With two exceptions these are all from Glenwood Springs, Colorado; the exceptions being one female from South Dakota—probably Volga, and one female from Hot Springs, New Mexico, elevation 7000 feet." "The name *altua* may be used for this form or race." "A modification of this series occurs in five males and two females labelled 'Utah' from the Henry Edwards' collection. These are all more sharply marked, with a paler basal line and a more obviously geminate t. a. line. The gray seems to have a peculiar dead tinge, so while there is plenty of contrast it is not a live or bright relief. I consider this a form or variation of *altua*, and the exact locality is probably Salt Lake City."

On page 236 Smith stated: "*Lucina, altua* and *megarena* may be races of *olivacea*, or the first and second may be one species differing from either *olivacea* or *megarena*." Further down under the subheading "*Mamestra altua* n. sp." he stated: "I have marked this new species; it is only a race—a geographical race—an incipient species. The name may be considered a little premature, and I am quite content to let it be placed in a subordinate position. It is not a variety." On page 239 under the subheading "*Mamestra altua* Smith" he stated: "A geographical race occupying the elevated plateau approaching the Rocky Mountains and extending southward along this chain into New Mexico."

Syntypes examined: 6 (4 USNM and 2 AMNH)

- (1) "*Mamestra altua* Smith ♀ type"; "Durango, Colo."; "July 16-23"; "Type No. 5760 U.S.N.M." [USNM]
- (2) "*Mamestra altua* Smith cotype ♂"; "Glenwood Springs, Col., 1894 - 7/19, Col. W. Barnes"; "Type No. 5760 U.S.N.M."; "♂ genitalia #4, 5 Dec. 1930, CH." [USNM]
- (3) "*Mamestra altua* Smith cotype ♂"; "Glenwood Springs, Col., 1894 - 10, Col. W. Barnes" [USNM]
- (4) "*Mamestra altua* Smith cotype ♀"; "Glenwood Spgs., Col."; "Aug. 1-7"; "Barnes collection" [USNM]
- (5) "*Mamestra altua* Smith ♂ type"; "Glenwood Spgs., Col."; "Collection J. B. Smith" [Fair condition except genitalia missing] [AMNH]
- (6) "*Mamestra altua* Smith cotype ♀"; "Glenwood Spgs., Col."; "July" [AMNH]

Discussion.—Eleven syntypes have not been located. Of these, two females should be from South Dakota and Hot Springs, N. Mex. The other nine should all be from Glenwood Springs, Colo., and should consist of one male and eight females if Smith was correct in sexing the type material. There are in the collection of the U.S. National Museum 22 examples from Glenwood Springs, Colo., all bearing labels like those of the recognized syntypes. Part of them may be syntypes, but in

the absence of type labels there is no way to determine which specimens, if any, were before Smith.

Smith figured an enlarged drawing of the tip of the left valve of this species or what he said was the left valve. The "♂ type" in the American Museum of Natural History has the genitalia missing and it is possible that Smith made the drawing from a slide prepared from that specimen. Two of Smith's slides are in the American Museum of Natural History, one of a left valve, the other of the right valve. They may have been prepared from the "♂ type," but there is no way to determine that this is so. It is not possible to tell from the drawing whether it was made from one of these slides. Smith's drawings are often reversals, so it is impossible in most cases even to know with certainty which valve was actually drawn.

In the case of *Mamestra altua* Smith, there are other complicating factors that raise questions about the source of Smith's figure. In the collection of the U.S. National Museum there are a series of Smith slides of the species described in the same paper as *altua* and they were marked "type" by Smith. There is a slide marked "*Mamestra altua* Sm. type, Glenwood Sps., Colo." It is slide 983 of the Dyar numbering system of the Smith slides in the U.S. National Museum. The drawing could have been made from this slide, but it is not possible to state that this is definitely so. There is one specimen with a handwritten label "Glenwood Sps., Col." and name label "*Mamestra altua* Sm" that lacks an abdomen. But if the slide was prepared from this specimen, it is strange that the specimen does not bear some kind of a Smith type label.

One other specimen has had the genitalia broken out of the abdomen, as was Smith's manner. It was identified as the specimen from which the slide in the U.S. National Museum was prepared by Carl Heinrich in 1930, but on what basis I do not know. It is labeled "Col." and "Collection J. B. Smith." If it was the specimen used for the Smith slide in this museum, it is strange that Smith would label the slide "Glenwood Sps., Colo." It is not impossible that the slide in this museum belongs with the specimen marked "♂ type" and that the slides in the American Museum of Natural History belong with the specimen here. In consideration of these problems it has been decided that it would be better to choose another syntype as the lectotype. Accordingly, I have selected, labeled, and now designate the specimen in the U.S. National Museum labeled "cotype ♂" and "Type No. 5760 U.S.N.M." as the lectotype.

Taeniocampa alurina Smith, 1902, N.Y. Ent. Soc. Jour. 10: 47.

"*Habitat*.—Near Chicago, Illinois, April 27, 28, A. Kwiat." "Three male examples sent in by Mr. Kwiat and representing all his captures. Two of the examples are dated in 1900 and are very much alike; the third is dated in 1901 and. . ."

Syntypes examined: 2 (AMNH and USNM)

- (1) "*Taeniocampa alurina* Smith ♂ type"; "Chicago, Ills., IV-27"; "Collection J. B. Smith" [Right valve of genitalia missing, left valve broken, abdomen loose in box] [AMNH]

- (2) "*Taeniocampa alurina* Smith ♂ cotype"; "Chicago, Ills., IV-28"; "Collection J. B. Smith"; "Barnes collection" [Good condition except right valve missing] [USNM]

Discussion.—One syntype is missing. It may be in the collection of the Field Museum, Chicago, Ill., via the collection of A. K. Wyatt (A. Kwiat). A Smith slide of this species is in the collection of the American Museum of Natural History. It has right valves and part of one left valve. They may be the missing parts of the two known syntypes, but could be from the missing syntype. The genitalia of this group of moths tend to have the two valves symmetrical. Therefore, as the left valve of the specimen in the U.S. National Museum is intact and in good condition, as is the aedeagus and uncus, it has been selected, labeled, and is now designated as the lectotype of this species.

Xylina amanda Smith, 1900, Amer. Ent. Soc. Trans. 27: 24, pl. 1, fig. 10, pl. 3, fig. 16.

"*Hab.*—Franconia, New Hampshire; Calgary, Canada; Winnipeg, Manitoba; Vancouver, British Columbia; Pullman, Washington; California." "Four males and two females are under examination."

Syntypes examined: 4 (USNM)

- (1) "*Xylina amanda* Smith ♂ type"; "Pullman, Wash., 19 April 90"; "Wash. Exp. Sta. 190"; "Type No. 5375 U.S.N.M."; "36511" [Rubbed and faded, antennae missing, left valve of genitalia missing, considerable verdigris developing on pin above thorax]
- (2) "*Xylina amanda* Smith ♀ type"; "27/iv/95"; "type No. 5375 U.S.N.M."; "36511" [Fair condition]
- (3) "*Xylina amanda* Smith ♂ cotype"; "Corfield, Vancouver"; "Acc. 12578" [Genitalia and part of abdomen destroyed by dermesids]
- (4) "*Xylina amanda* Smith ♂ cotype"; "Corfield, Vancouver"; "Acc. 12578"; "Type No. 33875 U.S.N.M." [Good condition, complete]

Discussion.—It would appear that two syntypes have not been located, but, in fact, there may be three missing syntypes, perhaps even more. Smith stated that he had six specimens and cited six localities, presumably one specimen from each locality. Yet two of the syntypes located are from the same locality, and the specimen marked "♀ type" does not bear a locality label! The "♀ type" is the specimen figured by Smith on plate 3, figure 16. The other figure presented by Smith is a drawing of a left valve of the male genitalia.

I have located one Smith slide in the U.S. National Museum (Dyar's No. 506) that is labeled "*Xylina amanda* ♂." It contains both a left and a right valve, and it does not appear that the drawing was made from either of the valves. They are badly mashed and distorted. It is possible that the drawing might represent a composite sketch. It is also possible that there might be another unlocated Smith slide prepared from the specimen marked "♂ type" with the left valve missing. In my opinion, the poor or damaged condition of the "♂ type" and one "♂ cotype" and the absence of a known locality for the "♀ type" make each of these a poor choice for lec-

totype. Therefore, I have selected, labeled, and now designate the "♂ cotype" bearing the "Type No. 33875 U.S.N.M." label as the lectotype.

Heliophana amaryllis Smith, 1891, Amer. Ent. Soc. Trans. 18: 130.

"*Hab.*—Colton, Cal." "I have seen but a single specimen of this curious insect, received from Mr. W. N. Tallant, Columbus, Ohio, marked collected by G. R. Pilate."

Smith (1893, U.S. Natl. Mus. Bul. 44, p. 290) stated: "The type is in the National Museum."

Holotype.—In the U.S. National Museum. The specimen is labeled "Heliophana amaryllis Smith Type"; "3-20, 6-88"; "Colton, Cal., Coll. by G. R. Pilate"; "36511"; "Type No. 5108 USNM"; "Collection W. N. Tallant"; "Slide 2896.1 ♂." Hardwick (1958, Canad. Ent. 90, Sup. 6, p. 63) stated that the type was collected on March 20. He apparently utilized only the first two numbers from those representing the date on the label. I believe that they should be interpreted as meaning June 3 to 20, 1888.

Neuronina americana Smith, 1894, Amer. Ent. Soc. Trans. 21: 59, pl. 3, fig. 3.

"*Hab.*—Boulder, Mont." "Male and female are in the collection of Mr. A. Schoenborn, at Washington, received from Mr. Titus Ulke."

Smith (1895, Ent. News 6: pl. 15, fig. 12, and 7(1): 31) illustrated and discussed a female collected August 28, 1894, at Calgary, Canada, numbered 61. It is not a syntype.

Syntypes examined: 1 (USNM)

- (1) "Neuronina americana Smith Type"; "Boulder, Mont., Titus Ulke, 92"; "Type No. 176 U.S.N.M." [A ♂]

Discussion.—The female syntype has not been located. If the specimen was returned to A. Schoenborn, it should now be in the collection of the U.S. National Museum, but it does not appear to be present. There are two other male specimens bearing locality labels identical to the syntype male in this museum via the Schoenborn collection, but no females. The male syntype is the specimen that was figured on plate 3, figure 3, by Smith. This specimen is now designated as the lectotype and it has been so labeled.

Acronycta amicora Smith, 1911, Ent. News 22: 312.

"*Habitat*.—Senator, Arizona." "One female, an old specimen and perhaps a little discolored." "There is nothing on the specimen to indicate the source from which I originally received it."

Holotype.—In the collection of the U.S. National Museum. The specimen is labeled "Acronycta amicora Smith Type" and "Senator, Ariz." It is a female as indicated by Smith.

Euxoa anacosta Smith, 1905, N.Y. Ent. Soc. Jour. 13(4): 196.

"*Habitat*.—Stockton, Utah, Sept. 20-25." "Eleven males and about eighty females, collected by Mr. Tom Spalding."

Syntypes examined: 10 (4 AMNH, 5 USNM, and 1 KU)

- (1) "Euxoa anacosta Smith ♂ type"; "Stockton, Ut."; "IX-9-4"; "J. B. Smith Collection, Rutgers" [AMNH]
- (2) "Euxoa anacosta Smith ♀ type"; "Stockton, Ut."; "IX-22-4"; "J. B. Smith Collection, Rutgers" [AMNH]
- (3) "Euxoa anacosta Smith cotype"; "Stockton, Ut."; "IX-21-4"; "Type No. 9762 U.S.N.M."; "Collection Dr. H. G. Dyar" [A ♂] [USNM]
- (4) "Euxoa anacosta Smith cotype"; "Stockton, Ut."; "Acc. no. 10255"; "Type No. 33733 U.S.N.M." [A ♀] [USNM]
- (5) "Euxoa anacosta Smith cotype"; "Stockton, Ut."; "39827" [A ♀] [USNM]
- (6) "Euxoa anacosta Smith cotype"; "Stockton, Ut."; "IX-22-4"; "Barnes collection" [A ♀, abdomen missing] [USNM]
- (7) "Euxoa anacosta Smith cotype"; "Stockton, Ut."; "IX-8-4"; "Barnes collection" [A ♂] [USNM]
- (8) "Euxoa anacosta Smith cotype"; "Stockton, Ut."; "IX-18-4"; "J. B. Smith Collection, Rutgers" [A ♂] [AMNH]
- (9) "Euxoa anacosta Smith cotype"; "Stockton, Ut."; "X-2-4"; "J. B. Smith Collection, Rutgers" [A ♀] [AMNH]
- (10) "Euxoa anacosta Smith cotype"; "Stockton, Ut."; "IX-24-4"; "Univ. of Kan., Lot 905" [A ♀] [KU]

Discussion.—The syntype labeled "♀ type" in the American Museum of Natural History has been selected, labeled, and is now designated as the lectotype. This is in keeping with my stated practice for lectotype selection in the genus *Euxoa*.

Xylina ancilla Smith, 1904, Psyche 11(2): 57.

"*Habitat*.—Calgary, Alberta, Head of Pine Creek, September 18, Mr. Dod; Cartwright, Manitoba, October 6, Mr. Heath; Wellington, British Columbia, September 7, Mr. Bryant." "One male and two females, in good condition."

Syntypes examined: 2 (AMNH)

- (1) "Xylina ancilla Smith ♂ type"; "Cartwright, Brit. Col."; "6-X.01"; "J. B. Smith Collection, Rutgers" [Good condition, complete]
- (2) "Xylina ancilla Smith ♀ type"; "Wellington, B. Col., IV-11" [Fair condition]

Other syntypes: 1 (CNC)

- (1) "Xylina ancilla Smith ♀ cotype"; "Calgary, Alta., 18-VIII-99, F. H. Wolley Dod"; "Head of Pine Creek"

Discussion.—The syntype labeled "♂ type" in the collection of the American Museum of Natural History has been selected, labeled, and is now designated the lectotype. Smith apparently did not cite the locality of this specimen as it appeared on the label, and he must have erred in citing the date for the female from Wellington, British Columbia.

Euxoa andera Smith, 1910, N.Y. Ent. Soc. Jour. 18: 89.
"Habitat.—Stockton, Utah, September, October (Tom Spalding); Glenwood, Springs, Colorado (Barnes); Pullman, Washington (Piper); Readington [sic] and Santa Catalina Mts., Pima Co., Arizona, September (Barnes)." "A dozen specimens, male and female, are now before me and I have had many more. This is the species that I have had for years as *hollemani* Grt., and have distributed under that name in all directions."

Syntypes examined: 8 (6 AMNH and 2 USNM)

- (1) "Euxoa andera Smith ♀ type"; "Readington, Arizona"; "J. B. Smith Collection, Rutgers" [Very good condition] [AMNH]
- (2) "Euxoa andera Smith ♂ type"; "Santa Catalina Mts., Pinal Co., Arizona, Sept."; "J. B. Smith Collection, Rutgers" [Excellent condition] [AMNH]
- (3-6) "Euxoa andera Smith cotype"; "Stockton, Ut."; "IX-24-3"; "IX-26-3"; "X-2-24"; "J. B. Smith Collection, Rutgers" [2 ♂♂; 2 ♀♀] [AMNH]
- (7) "Euxoa andera Smith cotype"; "X-5-4" [A ♂] [USNM]
- (8) "Euxoa andera Smith cotype"; "Stockton, Ut." [A ♀, very different species, probably represents error in labeling] [USNM]

Discussion.—As for lectotypes of some of the other Smith species of *Euxoa*, the syntype labeled "♀ type" has been selected, labeled, and is now designated as the lectotype. The lectotype is in the collection of the American Museum of Natural History.

Perigea andrena Smith, 1911, N.Y. Ent. Soc. Jour. 19(3): 135.

"Habitat.—San Diego, California, VII, 31, VIII, 1, XI, 2: George H. Field." "Four examples, all males, in fair condition."

Syntypes examined: 3 (1 AMNH and 2 USNM)

- (1) "Perigea andrena Smith Type"; "San Diego, Cal., 11-2-08, Geo. H. Field"; "J. B. Smith Collection, Rutgers" [A ♂, forewings slightly rubbed, specimen complete] [AMNH]
- (2) "Perigea andrena Smith Paratype"; "San Diego, Cal., 8-1-10, Geo. H. Field"; "♂ genitalia on slide 698, J.F.G.C." [USNM]
- (3) "Perigea andrena Smith Paratype"; "San Diego, Cal., 7-31-10, Geo. H. Field" [A ♂] [USNM]

Discussion.—The syntypes are labeled as "Type" and "Paratypes," but Smith did not indicate this in the original description and he did not indicate which specimen he had selected as his type. Therefore, the specimen marked "Type" has been selected, labeled, and is now designated as the lectotype. The lectotype is in the collection of the American Museum of Natural History. One syntype is missing. It either lacked a date or had the same date as one of the other known syntypes.

Copibryophila angelica Smith, 1900, U.S. Natl. Mus.

Proc. 22(1203): 416.

"Habitat.—Los Angeles, California, in October."

"Seven examples collected by Mr. Coquillett are under examination." "Type.—Cat. No. 4813, U.S.N.M."

Hampson (1909, Catalogue of the Lepidoptera Phalaenae in the British Museum, v. 8, p. 226, fig. 51) presumably illustrated a cotype female in the collection of J. B. Smith.

Syntypes examined: 6 (3 USNM and 3 AMNH)

- (1) "Copibryophila angelica Smith ♂ type"; "136"; "Cal."; "Coquillett collector"; "Thro C. V. Riley 1888"; "Type No. 4813 U.S.N.M." [USNM]
- (2) "Copibryophila angelica Smith ♀ type"; "Coquillett, Ls. Angls., Cal."; "Type No. 4813 U.S.N.M." [USNM]
- (3) "Copibryophila angelica Smith cotype"; "Cal."; "Thro C. V. Riley 1888"; "Coquillett collector" [A ♂] [USNM]
- (4) "Copibryophila angelica Smith cotype"; "Los Angeles Co., Cal."; "Oct."; "J. B. Smith Collection, Rutgers" [A ♂] [AMNH]
- (5) "Copibryophila angelica Smith cotype"; "Cal."; "J. B. Smith Collection, Rutgers" [A ♂] [AMNH]
- (6) "Copibryophila angelica Smith cotype"; "Cal."; "J. B. Smith Collection, Rutgers" [A ♀] [AMNH]

Discussion.—I believe that the inclusion of the USNM type number in the original description is restrictive and limits selection of a lectotype ethically to the candidate or candidates bearing the given type number. For that reason, I have selected, labeled, and now designate the syntype marked "♂ type" and "Type No. 4813 U.S.N.M." as the lectotype of this species.

The International Code of Zoological Nomenclature, 1961, Recommendation 74B, states that a zoologist should choose as lectotype a syntype of which a figure has been published, if such exists. In the case of *Copibryophila angelica* Smith, it is not possible to state with certainty whether the figure provided by Hampson was made from the female cotype from the Rutgers College collection now in the American Museum of Natural History or from the missing cotype. Even if it were possible to determine the specimen from which an illustration was prepared, I believe that the publication of a type number in the original description accompanied by the labeling of specimens with that type number should essentially eliminate other specimens from consideration in lectotype selection.

Heliodes angelica Smith, 1900, U.S. Natl. Mus. Proc. 22(1203): 484.

"Habitat.—Los Angeles County, California, in May." "Three males and three females, all from the U.S. National Museum collection." "Type.—Cat. No. 4818, U.S.N.M."

Syntypes examined: 6 (4 USNM and 2 AMNH)

- (1) "Heliodes angelica Smith ♂ type"; "Los Angeles Co., Cal."; "May"; "Type No. 4818 U.S.N.M." [USNM]
- (2) "Heliodes angelica Smith ♀ type"; "Los Angeles Co., Cal."; "May"; "Type No. 4818

U.S.N.M." [USNM]

- (3) "Heliodes angelica Smith ♂ cotype"; "Los Angeles Co., Cal."; "Type No. 4818 U.S.N.M." [USNM]
- (4) "Heliodes angelica Smith ♂ cotype"; "Los Angeles Co., Cal."; "May" [A ♀!] [USNM]
- (5) "Heliodes angelica Smith ♀ cotype"; "Los Angeles Co., Cal."; "May"; "J. B. Smith Collection, Rutgers" [AMNH]
- (6) "Heliodes angelica Smith ♀ cotype"; "Los Angeles Co., Cal."; "May"; "J. B. Smith Collection, Rutgers" [AMNH]

Discussion.—The syntype in the U.S. National Museum labeled "♂ type" and "Type No. 4818 U.S.N.M." has been selected, labeled, and is presently designated as the lectotype.

Hydroecia angelica Smith, 1899, Amer. Ent. Soc. Trans. 26: 40, pl. 2, fig. 28 (♂ genitalia).

Hab.—Los Angeles Co., Calif., collected by Mr. Coquillett and numbered 421. "The specimen is a male from the U.S. National Museum and is in good condition, save that the abdomen is a little greasy."

Holotype.—In the U.S. National Museum. The specimen is labeled "Hydroecia angelica Smith Type"; "Los Angeles Co., Cal."; "Coquillett"; "Type No. 4142 USNM." It is a male as indicated by Smith.

Cobalos angelicus Smith, 1899, N.Y. Ent. Soc. Jour. 7(4): 223.

Habitat: Los Angeles, California. "Three examples, 1 ♂, 2 ♀♀; the ♂ from Mr. Coquillett (Coll. U.S.N.M.), the others of uncertain source."

Syntypes examined: 3 (2 USNM and 1 AMNH)

- (1) "Cobalos angelicus Smith ♂ type"; "Calif."; "Type No. 4835 U.S.N.M."; "36511" [USNM]
- (2) "Cobalos angelicus Smith ♀ type"; "Coquillett, Ls. Angls., Cal."; "Type No. 4835 U.S.N.M." [USNM]
- (3) "Cobalos angelicus Smith cotype"; "Ls. Angls., Cal."; "J. B. Smith Collection, Rutgers" [A ♀] [AMNH]

Discussion.—Smith stated that the male was from Coquillett, but it is the "♀ type" that now bears the label indicating that Coquillett was the collector. It is not known whether this is just another mistake by Smith or whether somehow the labels were accidentally switched subsequently. The "♀ type" has the more detailed locality label. It has the wings in better condition and the pattern of maculation is better preserved. But the original pin has been corroded completely through below the specimen by verdigris, and the specimen has been mounted upside down on a secondary mount. In spite of the poorer condition and lack of precise locality, I have selected the male marked "♂ type" in the collection of the U.S. National Museum as the lectotype. It has been so labeled and is now designated. Selection of the male will permit comparison with the similar species *Cobalos franciscus* Smith, the type of which is also a male.

Perigonica angulata Smith, 1890, Amer. Ent. 6(7): 124. "Hab.—Sierra Nevada, Cal." "Both sexes from Mr. Henry Edwards."

Smith (1891, Amer. Ent. Soc. Trans. 18: 118, pl. 2, fig. 11) illustrated the harpe and clasper of the male genitalia.

Smith (1893, U.S. Natl. Mus. Bul. 44, p. 209) stated: "Types are in the Edwards collection and in the National Museum."

Syntypes examined: 3 (AMNH)

- (1) "Perigonica angulata Smith Type"; "Sierra Nev., Cal."; "Hy. Edw. No. 10,912"; "Type AMNH" [A ♂]
- (2) "Perigonica angulata Smith Type"; "Sierra Nev., Cal."; "5/30"; "Hy. Edw. No. 10,912"; "Type, AMNH" [A ♀]
- (3) "Perigonica angulata Smith Type"; "Sierra Nev., Cal."; "Collection J. B. Smith" [A ♂]

Discussion.—There is a specimen in the collection of the U.S. National Museum labeled "Perigonica angulata Smith Type"; "Placer Co., Cal."; "June"; "277"; "Through C. V. Riley"; "Type No. 248 U.S.N.M." It is a female. The specimen was returned to this museum as a type by Smith, and it is without doubt the specimen on which he made his statement in 1893 to the effect that there was a type in the U.S. National Museum. I believe that it must be considered as a spurious type and that it is unlikely that it was before him at the time of his original description. If the specimen had been studied in 1890, it would seem likely that some of the label data would have been mentioned. Smith stated in 1893 that he would never mark a specimen as type that was not before him at the time of preparing the original description. It would seem that he did so in this case. There are other species in which he must also have subsequently marked specimens as types.

The two male syntypes are both complete, so Smith's illustration of the harpe and clasper of the male genitalia was prepared from some other specimen. That specimen may not have been a syntype. The male syntype labeled "Collection J. B. Smith" probably originated from Henry Edwards, but there is no positive evidence available. In consideration of these facts, the male syntype labeled "Hy. Edw. No. 10,912" has been selected, labeled, and is now designated as the lectotype.

Plusia angulidens Smith, 1891, Amer. Ent. Soc. Trans. 18: 111.

Hab.—Colorado (Bruce). "Several specimens were taken by Mr. Bruce, who has also taken *P. snowi* in some numbers."

Smith (1893, U.S. Natl. Mus. Bul. 44, p. 255) stated: "Types are in the National Museum, the Neomoegeen collection, and in the Rutgers College collection."

Lectotype.—In the U.S. National Museum. Designated by E. L. Todd (1972, Wash. Biol. Soc. Proc. 85(31): 386).

Euxoa angulirena Smith, 1910, Amer. Ent. Soc. Trans. 36(3): 257.

"*Hab.*—Colorado (Bruce)." "A single good female specimen from the Bruce collection."

Holotype.—In the American Museum of Natural History. The specimen is labeled "Euxoa angulirena Smith Type"; "Colo., Bruce"; "J. B. Smith Collection Rutgers." It is a female.

***Acontia aniluna* Smith, 1905, N.Y. Ent. Soc. Jour. 13(4): 209.**

Habitat.—Baboquavaria Mts., Pima County, Arizona, July 15–30; O. C. Poling; Yuma County, Arizona, Hutson." "Eight examples, mostly in good condition and all females. Two specimens came through Dr. Barnes; the others are from Mr. Poling directly, or from Mr. Hutson."

Hampson (1910, Catalogue of the Lepidoptera Phaenae in the Collection of the British Museum, v. 10, p. 770) listed a single female cotype from the Baboquavaria Mountains, Ariz., (Poling), and figures it on plate 173, figure 5.

Barnes and McDunnough (1913, Contrib. Nat. Hist. Lepidoptera N. Amer. 2(1): 44, pl. 21, fig. 2) illustrated a "♀ Co-type" from the Babaquivera Mountains, Ariz.

Syntypes examined: 6 (3 USNM and 3 AMNH)

- (1) "*Acontia aniluna* Smith cotype"; "Baboquivera Mts., Ariz., Pima Co."; "Photograph pl. 21, No. 2" [A ♀] [USNM]
- (2) "*Acontia aniluna* Smith cotype"; "So. Arizona. Poling"; "July 15–30" [A ♀] [USNM]
- (3) "*Acontia aniluna* Smith cotype"; "Yuma Co., Ariz."; "Colorado Desert"; "Collection J. B. Smith" [A ♀] [USNM]
- (4) "*Acontia aniluna* Smith ♀ type"; "Baboquavaria Mountains, Pima County, Arizona, July 15–30, 1903, O. C. Poling"; "J. B. Smith Collection, Rutgers"; "♀ genitalia 10,379 FHR." [Excellent condition] [AMNH]
- (5) "*Acontia aniluna* Smith cotype"; "Baboquavaria Mountains, Pima County, Arizona, July 15–30, 1903, O. C. Poling"; "J. B. Smith Collection, Rutgers" [A ♀] [AMNH]
- (6) "*Acontia aniluna* Smith cotype"; "Baboquavaria Mountains, Pima County, Arizona, July 15–30, 1903, O. C. Poling"; "J. B. Smith Collection, Rutgers" [A ♀] [AMNH]

Discussion.—Three syntypes, the two illustrated by Hampson and by Barnes and McDunnough and the one labeled "♀ type" by Smith, rate above the other syntypes as lectotype candidates. The female syntype, illustrated by Barnes and McDunnough, now in the collection of the U.S. National Museum, has been selected, labeled, and is now designated lectotype following Recommendation 74B of the 1961 International Code of Zoological Nomenclature. It was selected over the specimen figured by Hampson, primarily because the selection would result in the type-specimen of an American species being in an American institution and thereby more readily available to American entomologists who are more apt to be interested in studying such a specimen.

***Taeniocampa annulimacula* Smith, 1891, Amer. Ent. Soc. Trans. 18: 117, pl. 2, fig. 6.**

"*Hab.*—Texas, February 17th, 19th and 25th (Bel-frage)." "Five good specimens are in the National Museum collection (coll. C. V. R.)."

"Smith (1893, U.S. Natl. Mus. Bul. 44, p. 204) stated: "The types are in the National Museum."

Syntypes examined: 5 (4 USNM and 1 AMNH)

- (1) "*Taeniocampa annulimacula* Smith Type"; "17/2"; "Type No. 241 U.S.N.M."; "♂ genitalia on slide 1981, J. G. Franclemont" [Wings greasy, right hindwing torn] [USNM]
- (2) "*Taeniocampa annulimacula* Smith Type"; "19/2"; "Type No. 241 U.S.N.M." [A ♂, valves and antennae missing, greasy] [USNM]
- (3) "*Taeniocampa annulimacula* Smith Type"; "19/2"; "Type No. 241 U.S.N.M." [A ♂, good condition, complete] [USNM]
- (4) "*Taeniocampa annulimacula* Smith Type"; "25/2"; "696"; "Type No. 241 U.S.N.M." [A ♀, fair condition] [USNM]
- (5) "*Taeniocampa annulimacula* Smith Type"; "17/2"; "Collection J. B. Smith" [A ♂, fair condition, faded] [AMNH]

Discussion.—It would appear that all the syntypes have been located and that the valve illustrated by Smith on plate 2, figure 6, was from the specimen in the U.S. National Museum. I have been unable to locate the Smith slide and cannot, therefore, comment on the accuracy of the illustration or the condition of the valve. The male syntype in the U.S. National Museum from which the genitalic preparation of J. G. Franclemont originated has been selected, labeled, and is now designated as the lectotype. It will need to be degreased. None of the syntypes bear a locality or collector label, but there is no doubt they are from Belfrage and were collected in Texas, possibly near Kerrville. The dates are written like those of other Belfrage material that bear the label "Texas."

***Agrotis annulipes* Smith, 1890, Amer. Ent. Soc. Trans. 17: 48.**

"*Habitat*.—Oregon." "A very distinct species of which I have only one ♀ specimen in good condition."

Smith (1890, U.S. Natl. Mus. Bul. 38, p. 174) stated: "The type I have deposited in the U.S. National Museum."

Smith (1893, U.S. Natl. Mus. Bul. 44, p. 98) stated: "The type is in the National Museum."

Holotype.—In the collection of the U.S. National Museum. The specimen is labeled "*Agrotis annulipes* Smith Type"; "21"; "6"; "Type No. 121 USNM." It is a female, but it now has a glued-on male abdomen!

***Orthosia antapica* Smith, 1907, Amer. Ent. Soc. Trans. 33: 134.**

"*Hab.*—Corvallis, Oregon, October 6th, 8th, and November 3rd, 11th; Corfield, Vancouver." "Three ♂ and three ♀."

Smith (1907, Amer. Ent. Soc. Trans. 33: 357, pl. 10, fig. 6) added the locality, Pullman, Wash., and illustrated the male genitalia, but he did not indicate whether the specimen figured was a syntype or a subsequent specimen.

Syntypes examined: 3 (2 AMNH and 1 USNM)

- (1) "Orthosia antapica Smith ♂ type"; "Corvallis, Or., 11/3/99"; "Collection J. B. Smith" [Broken from pin by verdigris, loose in box] [AMNH]
- (2) "Orthosia antapica Smith ♀ type"; "Corfield, Vancouver"; "Collection J. B. Smith" [Better condition than "♂ type", complete] [AMNH]
- (3) "Orthosia antapica Smith ♀ cotype"; "Corvallis, Or., 1900"; "Oct. 8"; "Collection J. B. Smith"; "Type No. 10451 U.S.N.M."; "45" [USNM]

Discussion.—Because of the broken condition of the "♂ type," the syntype labeled "♀ type" has been selected, labeled, and is now designated the lectotype. There are other specimens in the American Museum of Natural History and in the U.S. National Museum that bear collecting data agreeing with information given in the original description, but since they are not labeled as types by Smith, it is not possible to determine whether some are syntypes, and, if so, which ones.

***Meleneta antennata* Smith, 1908, N.Y. Acad. Sci. Ann. 18(2): 93.**

Habitat: Huachuca Mountains, Arizona, VII, 30: Palmerly Cochise County, Arizona, VIII." "Two males, in good condition; one of them a purchased specimen, the collector unknown; the other from the collection of the Brooklyn Institute, taken by Mr. Carl Schaeffer."

Barnes and Benjamin (1924, Contrib. Nat. Hist. Lepidoptera N. Amer. 5(3): 175) stated: "Examination of the type of *antennata* in the Smith Collection and . . ."

Syntypes examined: 2 (AMNH and USNM)

- (1) "Meleneta antennata Smith ♂ type"; "Huachuca Mts., Ariz., VII - 30"; "J. B. Smith Collection, Rutgers" [AMNH]
- (2) "Meleneta antennata Smith ♂ cotype"; "Palmerly, Cochise Co., Ariz., VIII"; "X"; "Type No. 34153 U.S.N.M."; "Collection Brklyn. Mus."; "♂ genitalia on slide 3797, JFGC." [USNM]

Discussion.—The syntype in the collection of the American Museum of Natural History has been selected, labeled, and is presently designated as the lectotype. This is the same specimen referred to by Barnes and Benjamin, 1924, as "the type of *antennata* in the Smith Collection . . ."

***Xylophasia antennata* Smith, 1891, U.S. Natl. Mus.**

Proc. 13(839): 439, pl. 37, fig. 26 (part of left valve of ♂ genitalia).

"HABITAT.—California." "A single ♂ specimen in collection of U.S. National Museum, from the Riley Collection."

Smith (1893, U.S. Natl. Mus. Bul. 44, p. 140) stated: "The type is in the National Museum."

Holotype.—In the U.S. National Museum. The specimen is labeled "Hadena n. sp. antennata Smith"; "Cal."; "178"; "Pl. XVII, f. 11"; "Type No. 170 USNM"; "♂ genitalia slide 453, JFGC." The apical half of the left valve of the genitalia is missing.

***Leucania anteroclara* Smith, 1902, U.S. Natl. Mus. Proc. 25(1283): 200.**

Habitat.—Calgary, Alberta, June 25, July 10, August 13 (Dod); Yellowstone Park, Wyoming, August, (Barnes); Corvallis, Oregon, July 6 (Cordley); Glenwood Springs, Colorado, June 10 (Barnes)."

"Twenty-one specimens are under examination; all the females a little darker and more streaky than the males." "Type.—No. 6250, U.S.N.M."

Barnes and McDunnough (1913, Contrib. Nat. Hist. Lepidoptera N. Amer. 2(1): 16, pl. 7, fig. 8) figured a specimen labeled "♀ cotype, Calgary, Alta."

Syntypes examined: 13 (6 USNM and 7 AMNH)

- (1) "Leucania anteroclara Smith ♂ type"; "Calgary, Alta., 5-VII-96, F. H. Wolley Dod"; "Head of Pine Creek"; "Type No. 6250 U.S.N.M."; "♂ genitalia on slide 563, JGF." [USNM]
- (2) "Leucania anteroclara Smith cotype"; "Calgary, Alberta"; "June 24-30"; "Barnes"; "Barnes collection" [A ♂] [USNM]
- (3) "Leucania anteroclara Smith cotype"; "Yellowstone Park, Wyo."; "Aug."; "Barnes"; "Barnes collection" [A ♂] [USNM]
- (4) "Leucania anteroclara Smith cotype"; "Calgary, Alberta"; "Photograph Pl. 7, No. 8"; "Barnes collection"; "♀ genitalia on slide 564, JGF." [USNM]
- (5) "Leucania anteroclara Smith cotype"; "Glenwood Spgs., Col."; "June 8-15"; "Barnes"; "Barnes collection" [A ♀] [USNM]
- (6) "Leucania anteroclara Smith ♀ cotype"; "Calgary, Alta., 30-VII-94, F. H. Wolley Dod"; "Mouth of Fish Creek"; "Type No. 6250 U.S.N.M." [USNM]
- (7) "Leucania anteroclara Smith ♀ type"; "Calgary, Alta., 11-VIII-92, F. H. Wolley Dod"; "Mouth of Fish Creek"; "J. B. Smith Collection, Rutgers" [Very good condition] [AMNH]
- (8) "Leucania anteroclara Smith cotype"; "Livingston, Vancouver, 7-5-1896"; "J. B. Smith Collection, Rutgers" [A ♂] [AMNH]
- (9-13) "Leucania anteroclara Smith cotype"; "Calgary, Alta., 25-VI-96 [and 5-VII-96, 3-VIII-97]; "J. B. Smith Collection, Rutgers" [4 ♂♂ and 1 ♀, data lumped as I did not note which specimens and how many there were for different dates] [AMNH]

Other syntypes: 1 (CNC)

- (1) "Leucania anteroclara Smith Cotype"; "Calgary, Alta., 30-VII-94, F. H. Wolley Dod" [A ♀]

Discussion.—The only specimen figured is a female. In this genus it is very difficult to separate some of the species based on maculation, so the figure is not so important. Only two specimens bear the USNM type number that was cited in the description. I have selected, labeled, and now designate the "♂ type" as the lectotype. It was chosen because it bears the USNM type number, because it was marked "♂ type" by Smith, and because it is a male.

Trichoclea antica Smith, 1891, Amer. Ent. Soc. Trans. 18: 116, pl. 2, fig. 4.

Hab.—Los Angeles County, Cal., April 10th; good specimens are in the National Museum collection (through C. V. Riley)."

Smith (1893, U.S. Natl. Mus. Bul. 44, p. 209) stated: "The types are in the National Museum."

Syntypes examined: 4 (3 USNM and 1 AMNH)

- (1) "Trichoclea antica Smith Type"; "Los Angeles Co., Cal."; "Apr."; "Through C. V. Riley"; "Type No. 252 U.S.N.M."; "36511" [A ♂, good condition, complete] [USNM]
- (2) "Trichoclea antica Smith Type"; "Type No. 252 U.S.N.M."; "Los Angeles Co., Cal."; "Through C. V. Riley"; "36511"; "Apr." [A ♂, badly broken by verdigris, both valves missing] [USNM]
- (3) "Trichoclea antica Smith Type"; "Los Angeles Co., Cal."; "Apr."; "Through C. V. Riley"; "Type No. 252 U.S.N.M."; "36511" [A ♀, in fair condition] [USNM]
- (4) "Trichoclea antica Smith Type"; "Los Angeles Co., Cal."; "Apr."; "Through C. V. Riley"; "J. B. Smith Collection, Rutgers" [A ♀, verdigris forming, wings stained] [AMNH]

Discussion.—The specimen with the valves missing is probably the one from which Smith obtained the valve that he illustrated with the original description. I have not located the slide, and the specimen is in very poor condition. The male that is complete in the collection of the U.S. National Museum has been selected, labeled, and is now designated the lectotype for this species.

Melicleptra antonio Smith, 1906, N.Y. Ent. Soc. Jour. 14: 16.

Habitat.—San Antonio, Tex., in April." "A single male specimen in very fair condition from Dr. Barnes."

Holotype.—In the U.S. National Museum. The specimen is labeled "Melicleptra antonio Smith ♂ type"; "San Antonio, Texas"; "April 8-15"; "♂ genitalia on slide 740, FHB" [F. H. Benjamin]. The left forewing is missing.

Stylopoda anxia Smith, 1908, N.Y. Ent. Soc. Jour. 16: 96.

Habitat.—Fort Wingate, New Mexico, VII, 21, 31; VIII, 3: collector unknown." "Two males and one female, all flown specimen [sic], not in the best of condition; . . ."

Syntypes examined: 3 (2 AMNH and 1 USNM)

- (1) "Stylopoda anxia Smith ♂ type"; "Ft. Wingate, N.M., VII-21"; "J. B. Smith Collection, Rutgers" [Worn, but complete] [AMNH]
- (2) "Stylopoda anxia Smith ♀ type"; "Ft. Wingate, N.M., VIII-5"; "J. B. Smith Collection, Rutgers" [Worn, but complete] [AMNH]
- (3) "Stylopoda anxia Smith ♂ cotype"; "Ft. Wingate, N.M., VII-31"; "♂ genitalia on slide 1850, JGF" [USNM]

Discussion.—The "♀ type" is in slightly better condition than the male in the American Museum of Natural History, but because the male genitalia generally provide better diagnostic characters, the "♂ type" has been selected, labeled, and is now designated as the lectotype. Smith was in error in citing the collecting date of the "♀ type."

Eucalyptra apicalis Smith, 1903, Amer. Ent. Soc. Trans. 29(3): 221.

Hab.—Hastings, Florida, June 8th to 20th (Barnes); September 21st to October 6th (Kearfott). "Six ♂ and four ♀ examples, . . ."

Syntypes examined: 9 (7 AMNH and 2 USNM)

- (1) "Eucalyptra apicalis Smith ♂ type"; "Hastings, Florida"; "June 24-30"; "J. B. Smith Collection, Rutgers" [Fairly good condition, complete] [AMNH]
- (2) "Eucalyptra apicalis Smith ♀ type"; "Hastings, Fla., Sept. 22"; "Collection of W. D. Kearfott"; "J. B. Smith Collection, Rutgers" [Fair condition, complete] [AMNH]
- (3) "Eucalyptra apicalis Smith ♀ cotype"; "Hastings, Fla., Oct. 6"; "Collection of W. D. Kearfott"; "J. B. Smith Collection, Rutgers" [Fair condition, complete] [AMNH]
- (4) "Eucalyptra apicalis Smith cotype"; "Hastings, Fla., Sept. 24"; "Collection of W. D. Kearfott"; "J. B. Smith Collection, Rutgers" [A ♀, poor condition, complete] [AMNH]
- (5) "Eucalyptra apicalis Smith cotype"; "Hastings, Fla., Oct. 6"; "Collection of W. D. Kearfott"; "J. B. Smith Collection, Rutgers" [A ♀, fair condition, complete] [AMNH]
- (6) "Eucalyptra apicalis Smith cotype"; "Hastings, Fla., Oct. 6"; "Collection of W. D. Kearfott"; "J. B. Smith Collection, Rutgers" [A ♀, fair condition, complete] [AMNH]
- (7) "Eucalyptra apicalis Smith cotype"; "Hastings, Fla., Sept. 21"; "Collection of W. D. Kearfott"; "J. B. Smith Collection, Rutgers" [A ♂, fair condition, complete] [AMNH]
- (8) "Eucalyptra apicalis Smith ♂ cotype"; "Hastings"; "Florida"; "Barnes"; "Slide # 18-606, J. D. McD." [USNM]
- (9) "Eucalyptra apicalis Smith cotype"; "Hastings, Florida, June 8-15"; "Barnes" [A ♂] [USNM]

Discussion.—One specimen with identical data except September 29 was determined by Smith as this species but not marked cotype. It is in the American Museum of Natural History. The specimen marked "♂ type" has been selected, labeled, and is now designated the lectotype.

***Stretchia apicata* Smith, 1911, N.Y. Ent. Soc. Jour. 19(3): 147.**

"The male is labelled San Diego in February, the female Pasadena, IV, 30. There are only two examples, and there may be more variation than I suspect, when more material comes to hand."

Syntypes examined: 1 (AMNH)

- (1) "*Stretchia apicata* Smith ♂ type"; "San Diego, Calif., II"; "J. B. Smith Collection, Rutgers" [Very fine condition]

Discussion.—Only one syntype, the "♂ type," in the collection of the American Museum of Natural History has been located. It has been selected, labeled, and is now designated the lectotype. The female from Pasadena, IV, 30, has not been located. There are two specimens from the locality in the U.S. National Museum, one with the correct date, but that specimen does not bear a Smith label.

***Pleroma apposita* Smith, 1892, Ent. News 3(10): 252, pl. 10, row 2, fig. 1.**

Hab.—Victoria, B.C. Mr. Neumoegen, one ♂ only." Smith (1894, Amer. Ent. Soc. Trans. 21: 81, pl. 1, row 2, fig. 1) again described this as new, using the same plate, he stated: "The unique male type is with Mr. Neumoegen."

Holotype.—In the U.S. National Museum. The specimen is labeled "*Pleroma apposita* Smith Type"; "Victoria, B.C."; "6"; "Col. B. Neumoegen"; "Type No. 33884 USNM." It is a male.

***Xylomiges argus* Smith, 1909, N.Y. Ent. Soc. Jour. 17: 66.**

Habitat.—California: Witch Creek II, Argus Mts., V." "One male and four females in good condition; the Witch Creek examples through Mr. R. F. Pearsall, the Argus Mts. examples from Mr. T. Kemp."

Syntypes examined: 4 (3 AMNH and 1 USNM)

- (1) "*Xylomiges argus* Smith ♂ type"; "Witch Cr., Cal., II-14"; "J. B. Smith Collection, Rutgers" [Poor condition, veridgrils formation extensive] [AMNH]
- (2) "*Xylomiges argus* Smith ♀ type"; "Argus Mts., April '91, K."; "J. B. Smith Collection, Rutgers" [Very good condition] [AMNH]
- (3) "*Xylomiges argus* Smith cotype"; "Argus Mts., May '91, K."; "J. B. Smith Collection, Rutgers" [A ♀] [AMNH]
- (4) "*Xylomiges argus* Smith cotype"; "Argus Mts., April 91, K."; "Barnes collection" [A ♀] [USNM]

Discussion.—One syntype has not been located. Smith stated that he received the specimens from the Argus Mountains from T. Kemp, but it seems more likely that they came from C. V. Riley. One thing is certain,

the "K." on the locality labels is an abbreviation for Koebele, the collector (see *Acontia arida* Smith). Smith also did not give the collecting date for the "♀ type" and at least one of the cotypes. I am not at all certain that the "♂ type" and "♀ type" represent the two sexes of a single species. In consideration of this possible mixture, the difference in condition of the two syntypes, and the fact that Smith chose *argus* as the specific name, the "♀ type" in the American Museum of Natural History has been selected, labeled, and is presently designated as the lectotype.

***Acontia arida* Smith, 1900, Amer. Ent. Soc. Trans. 27: 73.**

Hab.—Glenwood Springs, Colorado, June and July (Barnes); Catalina Springs, Arizona, April 7th and 15th (Schwarz); Argus Mountains, Arizona, April (Koebele). "Ten males and two females, mostly in good condition."

Syntypes examined: 11 (7 USNM and 4 AMNH)

- (1) "*Acontia arida* Smith ♂ type"; "Catal. Spgs., Ar., Apr. 12, 98"; "E. A. Schwarz Collector"; "Type No. 5388 U.S.N.M."; "36511" [USNM]
- (2) "*Acontia arida* Smith ♀ type"; "Argus Mts., K., April, 91"; "Through C. V. Riley"; "Type No. 5388 U.S.N.M."; "36511" [A ♂] [USNM]
- (3) "*Acontia arida* Smith ♂ cotype"; "Catal. Spgs., Ar., 15 Apr. 98"; "E. A. Schwarz collection" [USNM]
- (4) "*Acontia arida* Smith ♂ cotype"; "Glenwood Springs, Col., 1895-7, W. Barnes" [USNM]
- (5) "*Acontia arida* Smith ♂ cotype"; "Argus Mts., K., April, 91"; "Through C. V. Riley" [USNM]
- (6-7) "*Acontia arida* Smith ♂ cotype"; same data as (5) [USNM]
- (8-10) "*Acontia arida* Smith ♂ cotype"; same data as (5) [AMNH]
- (11) "*Acontia arida* Smith ♀ cotype"; same data as (5) [AMNH]

Discussion.—The syntype labeled "♂ type" in the collection of the U.S. National Museum has been selected, labeled, and is now designated as the lectotype. One syntype is missing, presumably a male from Glenwood Springs, Colo., collected in June. Smith apparently was in error in citing the collecting date of the specimen marked "♂ type" as "April 7th"; it is actually dated "April 12, 98."

***Cucullia arizona* Smith, 1905, N.Y. Ent. Soc. Jour. 13(4): 207.**

Habitat.—Cochise County, Arizona, in July." "One female specimen in good condition except for the compressed thorax due to papering; from Mr. George Franck."

Holotype.—In the American Museum of Natural History. The specimen is labeled "*Cucullia arizona* Smith ♀ type"; "Cochise Co., Ariz. VII"; "J. B. Smith Collection Rutgers."

Mamestra artesta Smith, 1903, Amer. Ent. Soc. Trans. 29(3): 197.

"*Hab.*—Glenwood Springs, Colorado, in August (Dr. Barnes); Douglas County, Kansas, at electric light, May (Prof. Snow)." "Two males and three females in good condition are before me and I have seen other examples mostly from Colorado. I have an example marked 'Pennsylvania,' and another marked 'Illinois,' but I doubt the correctness of the labels, though I cannot disprove them and the species may really range east."

Syntypes examined: 3 (USNM, AMNH, and KU)

- (1) "Mamestra artesta Smith ♂ type"; "Glenwood Springs, Col., 189-, W. Barnes"; "Barnes collection" [Very good condition] [USNM]
- (2) "Mamestra artesta Smith ♀ type"; "Glenwood Springs, Col., 1894 8/1, W. Barnes"; "J. B. Smith Collection, Rutgers" [A ♂, good condition!] [AMNH]
- (3) "Mamestra artesta Smith cotype"; "Taken at Electric Light, Douglas Co., Kas."; "May" [A ♀] [KU]

Discussion.—Two syntypes have not been located. The syntype in the U.S. National Museum labeled "♂ type" has been selected, labeled, and is now designated the lectotype.

Aplectoides arufa Smith, 1905, N.Y. Ent. Soc. Jour. 13(4): 192.

"*Habitat.*—Yellowstone Park, Wyoming, in August." "One good male."

Holotype.—In the U.S. National Museum. The specimen is labeled "Aplectoides arufa Smith ♂ type"; "Yellowstone Park, Wyo."; "Aug."; "Barnes collection."

Mamestra ascula Smith, 1905, Canad. Ent. 37: 257.

"*Habitat.*—Stockton, Utah, in September; Mr. Thomas Spalding." "There are about 200 specimens before me, nearly evenly divided as to sex, and most of them in very good condition."

Syntypes examined: 13 (3 AMNH, 9 USNM, and 1 KU)

- (1) "Mamestra ascula Smith ♂ type"; "IX-14-4"; "J. B. Smith Collection, Rutgers" [Very good condition except extreme apex of right valve broken] [AMNH]
- (2) "Mamestra ascula Smith ♀ type"; "IX-6-4"; "J. B. Smith Collection, Rutgers" [AMNH]
- (3) "Mamestra ascula Smith cotype"; "Stockton, Ut."; "IX-9-4"; "J. B. Smith Collection, Rutgers" [A ♀] [AMNH]
- (4) "Mamestra ascula Smith ♂ cotype"; "IX-14-4"; "Barnes collection" [USNM]
- (5) "Mamestra ascula Smith ♀ cotype"; "IX-11-4"; "Barnes collection" [USNM]
- (6) "Mamestra ascula Smith cotype"; "39807"; "Barnes collection" [A ♀] [USNM]
- (7) "Mamestra ascula Smith cotype"; "39811"; "Barnes collection" [A ♂] [USNM]
- (8) "Mamestra ascula Smith cotype";

"IX-4-4"; "Acc. No. 10088, U.S.N.M." [A ♂] [USNM]

- (9) "Mamestra ascula Smith cotype"; "Stockton, Ut."; "IX-8-4"; "Acc. No. 10142 U.S.N.M." [A ♂] [USNM]
- (10) "Mamestra ascula Smith cotype"; "Stockton, Ut."; "IX-9-4"; "Collection Dr. H. G. Dyar"; "Type No. 9759 U.S.N.M."; "39719" [A ♀] [USNM]
- (11) "Mamestra ascula Smith cotype"; "IX-8-4"; "Collection Dr. H. G. Dyar"; "Type No. 9759 U.S.N.M."; "39725" [A ♂] [USNM]
- (12) "Mamestra ascula Smith cotype"; "Stockton, Utah"; "VIII-10"; "Barnes collection"; "♂ genitalia on slide 160, F.H.B." [USNM]
- (13) "Mamestra ascula Smith cotype"; "Stockton, Utah, IX-26-3, Tom Spalding"; "Univ. of Kan., Lot 905" [A ♀] [KU]

Discussion.—Smith obviously labeled only a small part of the series before him as types. Many specimens are in collections with the characteristic data (locality and/or date) of the recognized syntypes, but in the absence of Smith's name and type labels they cannot be identified with certainty as syntypes even though most of them probably are syntypes. The specimen labeled "♂ type" in the collection of the American Museum of Natural History has been selected, labeled, and is now designated as the lectotype.

Copicucullia astigma Smith, 1894, Amer. Ent. Soc. Trans. 21: 85, pl. 4, fig. 8.

"*Hab.*—Colorado, Bruce." "In this species the ordinary spots and all the transverse maculation are wanting, and the black streak over the anal angle is the only prominent feature in the wing. The antennae of the male are entirely simple, while the front has a distinct truncated protuberance." "Expands 40-41 mm., . . ."

Syntypes examined: 2 (USNM and AMNH)

- (1) "Copicucullia astigma Smith ♀ type"; "Colo. Bruce"; "Type No. 273 U.S.N.M."; "♀ genitalia on slide 2613, JFGC." [USNM]
- (2) "Copicucullia astigma Smith Type"; "Colo. Bruce"; "Collection J. B. Smith" [A ♂, in fair condition, complete, left hindwing split] [AMNH]

Discussion.—It is not possible to determine from the original description how many specimens Smith had before him. He gave a range of wing expanse and mentioned the male sex in a discussion of the antennae. There may have been a specimen marked ♂ type by Smith, or the reference to the male may have been based on the recognized syntype that he labeled "Type." The year 1894 was part of a period of transition in Smith's method of marking the types as noted in the introduction. The specimen marked "♀ type" in the U.S. National Museum is the one illustrated by Smith. It has been selected, labeled, and is now designated as the lectotype.

Xylina atara Smith, 1909, N.Y. Ent. Soc. Jour. 17: 62.

"*Habitat*.—Redington, Arizona (Dr. Barnes)." "One male and six females in good condition."

Syntypes examined: 6 (3 USNM and 3 AMNH)

- (1) "Xylina atara Smith δ type"; "Redington, Arizona"; " δ genitalia on slide 1788, JFGC." [USNM]
- (2) "Xylina atara Smith φ type"; "Redington, Arizona"; " φ genitalia on slide 1789, JFGC." [USNM]
- (3) "Xylina atara Smith type"; "Redington, Arizona" [A φ] [USNM]
- (4) "Xylina atara Smith type"; "Redington, Arizona" [A φ] [AMNH]
- (5) "Xylina atara Smith type"; "Redington, Arizona" [A φ] [AMNH]
- (6) "Xylina atara Smith type"; "Redington, Arizona" [A φ] [AMNH]

Discussion.—The syntype labeled " δ type" in the U.S. National Museum has been selected, labeled, and is now designated the lectotype.

Xylina atincta Smith, 1905, N.Y. Ent. Soc. Jour. 13(4): 206.

"*Habitat*.—Cartwright, Manitoba in September." "Three males and six females all from Mr. Geo. J. Keller, of Newark, who received them from a correspondent unknown to me."

Hampson (1906, Catalogue of the Lepidoptera Phalaenae in the Collection of the British Museum, v. 6, p. 267, pl. 102, fig. 23) listed and illustrated a female cotype.

Barnes and McDunnough (1913, Contrib. Nat. Hist. Lepidoptera N. Amer. 2(1): 26, pl. 12, fig. 4) listed and illustrated a male cotype.

Syntypes examined: 5 (3 AMNH and 2 USNM)

- (1) "Xylina atincta Smith δ type"; "Cartwright, Manitoba, X-16-04"; "J. B. Smith Collection, Rutgers" [Good condition, complete] [AMNH]
- (2) "Xylina atincta Smith φ type"; "Cartwright, Manitoba, IX-27-04"; "J. B. Smith Collection, Rutgers" [AMNH]
- (3) "Xylina atincta Smith cotype"; "Cartwright, Manitoba, IX-26-04"; "J. B. Smith Collection, Rutgers" [A φ] [AMNH]
- (4) "Xylina atincta Smith cotype"; "Cartwright, Manitoba, Can., IX-17-04"; "Photograph Pl. 12, No. 4" [A δ] [USNM]
- (5) "Xylina atincta Smith cotype"; "Cartwright, Manitoba, Can., IV-4-04" [A φ] [USNM]

Discussion.—All things being equal, I would normally prefer to select for lectotype a syntype marked " δ type" or " φ type" by Smith, but in this species another specimen is selected. Some of the syntypes do not bear dates that agree with those given by Smith. Furthermore, two of the syntypes have been illustrated by other workers. In order to have a male as type-specimen, one that bears a collecting date agreeing with that in the original description, and one in an American institution, I have selected, labeled, and now designate the syntype in the U.S. National Museum la-

beled "Photograph, Pl. 12, No. 4" as the lectotype of *Xylina atincta* Smith.

Hydroecia atlantica Smith, 1899, Amer. Ent. Soc. Trans. 26: 18, pl. 1, fig. 5.

"*Hab*.—Nova Scotia, Hudson's Bay Territory, southward to Virginia, West to Colorado. Dates in New York range from early in July to late in August. In Illinois from middle of July to beginning of September."

Syntypes examined: 7 (6 USNM and 1 AMNH)

- (1) "Hydroecia atlantica Smith φ type"; "Ithaca, N.Y., 8 July 82"; "Electric Light"; "Type No. 4141 U.S.N.M."; "U.S.N.M. Acc. no. 24638" [A δ , good condition, complete!] [USNM]
- (2) "Hydroecia atlantica Smith δ cotype"; "Evans Center, N.Y., July, 1877, A. R. Grote Coll."; "Type No. 4141 U.S.N.M." [USNM]
- (3) "Hydroecia atlantica Smith δ cotype"; "Col. B. Neumögen"; "Collection Brklyn. Mus." [Right valve missing] [USNM]
- (4) "Hydroecia atlantica Smith φ cotype"; "29-7-75, Sharon"; "Collection O. Meske"; "Type No. 4141 U.S.N.M." [USNM]
- (5) "Hydroecia atlantica Smith cotype"; "Newton Highlands, Mass. 18" [A δ] [USNM]
- (6) "Hydroecia atlantica Smith cotype" [A φ , no other labels, cotype label different from other type labels] [USNM]
- (7) "Hydroecia atlantica Smith δ type"; "Collection J. B. Smith" [Good condition, complete] [AMNH]

Discussion.—Smith did not indicate any specific localities and he did not state how many specimens were studied. The syntype marked " δ type" and the one from which the illustration of the right valve may have been prepared lack locality data. The male in the U.S. National Museum labeled " φ type" has, therefore, been selected, labeled, and is now designated as the lectotype.

Semiophora atoma Smith, 1907, Amer. Ent. Soc. Trans. 33: 126.

"*Hab*.—Lakehurst, N.J., September 27th." "One male and nine females, mostly in fair condition." "The specimens were taken at sugar by Mr. J. A. Grossbeck."

Syntypes examined: 4 (2 AMNH and 2 USNM)

- (1) "Semiophora atoma Smith φ type"; "Lakehurst, N.J., IX-27"; "J. B. Smith Collection, Rutgers" [Good condition] [AMNH]
- (2) "Semiophora atoma Smith φ cotype"; same data as " φ type" [AMNH]
- (3) "Semiophora atoma Smith φ cotype"; "Lakehurst, N.J., IX-27"; "Barnes collection" [USNM]
- (4) "Semiophora atoma Smith φ cotype"; "Lakehurst, N.J., IX-27"; "Barnes collection" [USNM]

Discussion.—Several specimens may be some of

the missing syntypes in the American Museum of Natural History via the Rutgers College collection. One is a rather rubbed male. These specimens were determined by Smith as this species, but they were not marked type or cotype. All missing syntypes are presumably from the same locality and collected on September 27. The syntype in the American Museum of Natural History labeled "♀ type" has been selected, labeled, and is presently designated as the lectotype.

Bomolocha atomaria Smith, 1903, Amer. Ent. Soc. Trans. 29(3): 216.

Hab.—Volga, South Dakota." "Four male examples in good or fair condition, from the late Judge P. C. Truman."

Syntypes examined: 4 (2 AMNH and 2 USNM)

- (1) "Bomolocha atomaria Smith ♂ type"; "Volga, So. Dak."; "Collection J. B. Smith" [Fair condition, complete] [AMNH]
- (2) "Bomolocha atomaria Smith cotype"; "South Dakota"; "Collection J. B. Smith" [A ♂] [AMNH]
- (3) "Bomolocha atomaria Smith ♂ cotype"; "Volga, So. Dak."; "Collection J. B. Smith" [USNM]
- (4) "Bomolocha atomaria Smith cotype"; "Volga, So. Dak."; "Collection J. B. Smith" [A ♂] [USNM]

Discussion.—The syntype marked "♂ type" in the collection of the American Museum of Natural History has been selected, labeled, and is now designated as the lectotype.

Agrotis atomaris Smith, 1890, Amer. Ent. Soc. Trans. 17: 47.

Habitat.—California (Neumoegen)." "Three males are before me, all very much alike."

Smith (1890, U.S. Natl. Mus. Bul. 38, p. 154) stated: "HABITAT.—California (Neumoegen. Collection U.S. National Museum)." "A large series in the Museum collection is all referable to this species." Smith (1893, U.S. Natl. Mus. Bul. 44, p. 92) stated: "Types are in the National Museum and in the Neumoegen collection."

Lectotype.—In the U.S. National Museum. Selected by E. L. Todd (Oct. 4, 1968, Wash. Ent. Soc. Proc. 70(3): 267).

Noctua atricincta Smith, 1895, Ent. News 6: 333, pl. 15, fig. 3.

Hab.—Calgary, In July." "I have a specimen from Volga, S. Dak, which is, I think, the same; but it is somewhat better marked and rather darker, and may possibly represent a distinct species. It seems to be not uncommon, judging from the number of specimens sent me."

Syntypes examined: 3 (1 USNM and 2 AMNH)

- (1) "Noctua atricincta Smith Type 1"; "Edge Calgary, 8/vii/93"; "Type No. 6 U.S.N.M." [A ♂, abdomen damaged by dermestids, genitalia missing] [USNM]

- (2) "Noctua atricincta Smith Type 2"; "Edge Calgary, 9/vii/93" [A ♂, head, most of thorax, and abdomen damaged by dermestids] [AMNH]

- (3) "Noctua atricincta Smith Type 3"; "Edge Calgary, 8/vii/93" [Sex ? I was unable to observe frenulum of either wing, and because of condition, head and part of abdomen missing, damaged by dermestids, I made no further attempt to examine by wetting] [AMNH]

Discussion.—All the syntypes appear to have suffered dermestid damage. The specimen marked "Type 1" in the U.S. National Museum was figured by Smith. It is in very good condition except the damaged abdomen, and it has been selected, labeled, and is presently designated as the lectotype.

Scolecocampa atriluna Smith, 1903, Amer. Ent. Soc. Trans. 29(3): 217.

Hab.—Huachuca Mts., Arizona." "A single female from Dr. Barnes."

Holotype.—In the American Museum of Natural History. The specimen is labeled "Scolecocampa atriluna Smith Type"; "Huachuca Mts., Ariz."; "Barnes"; "J. B. Smith Collection Rutgers." It is a female as Smith indicated.

Renia atrimacula Smith, 1910, Ent. News 21: 122.

Habitat.—Hampton, N.H., VII, 26(S. A. Shaw); Cohasset, Mass., VII, 21 (W. T. Bryant); Sussex Co., New Jersey, VIII, 13 (S. T. Kemp)." "Two males and one female; one ♂ in good condition, the others passable only."

Syntypes examined: 2 (AMNH)

- (1) "Renia atrimacula Smith ♂ type"; "Hampton, N.H."; "VII-26-1908"; "J. B. Smith Collection, Rutgers" [Good condition, complete]
- (2) "Renia atrimacula Smith ♀ type"; "Sussex Co., N.J. 8-93"; "J. B. Smith Collection, Rutgers" [Complete, but worn]

Discussion.—The specimen from Cohasset, Mass., has not been located. The syntype marked "♂ type" in the collection of the American Museum of Natural History has been selected, labeled, and is now designated as the lectotype.

Agrotis atristrigata Smith, 1890, Amer. Ent. 6(4): 76.

Hab.—N.W. British Columbia." "The specimen is a poor one and badly rubbed, and would not have been described but that it was a ♂, and the affinities were so distinct as to render its recognition certain, should other specimens be turned up." Smith (1890, U.S. Natl. Mus. Bul. 38, p. 150) again described this as new. The comments in the two papers are nearly identical. In this description the species is placed in *Carneades* Grote.

Smith (1893, U.S. Natl. Mus. Bul. 44, p. 91) stated: "The type is with Mr. Neumoegen."

Holotype.—In the U.S. National Museum. The specimen is labeled "Agrotis atristrigata Smith, Type";

"N.W. Brit. Cola"; "Col. B. Neumögen"; "Type No. 33739 USNM"; "♂ genitalia on slide 2182 ELT."

Anytus atristrigatus Smith, 1900, U.S. Natl. Mus. Proc. 22(1203): 460.

"Habitat.—Texas." "Two males and one female, the latter greasy and a little defective." "Type.—Cat. No. 4812, U.S.N.M."

Lectotype.—in the U.S. National Museum. Selected by E. L. Todd (April 1958, Kans. Ent. Soc. Jour. 31(2): 155).

Carneades atrofusca Smith, 1900, U.S. Natl. Mus. Proc. 22(1203): 447.

"Habitat.—Glenwood Springs, Colorado, August, September, October (Barnes); Colorado (Bruce); Pullman, Washington, July (Piper)." "Six males and four females are at hand." "Type.—Cat. No. 4798, U.S.N.M."

McDunnough (1952, Amer. Mus. Novitates No. 1550, p. 3) stated: "Atofusca Smith (1900, Proc. U.S. Natl. Mus., vol. 22, p. 447), based most probably on a mixed series but with a Glenwood Springs, Colorado, specimen marked as type, has been listed as a race of *stigmatalis* Smith (1900, *ibid.*, vol. 22, p. 425). It is, however, now known, from a comparison of slides of the genitalia of the male holotypes in the United States National Museum, that the two names refer to distinct species."

Syntypes examined: 6 (4 USNM and 2 AMNH)

- (1) "Carneades atrofusca Smith ♂ type"; "Glenwood Springs, Col., Sept. 1892, W. Barnes"; "Type No. 4798 U.S.N.M."; "36311"; "♂ gen. Sept. 22, 1919, A.B." [USNM]
- (2) "Carneades atrofusca Smith ♀ type"; "Glenwood Springs, Col., Sept. 1892, W. Barnes"; "Type No. 4798 U.S.N.M."; "36311" [USNM]
- (3) "Carneades atrofusca Smith cotype"; "Glenwood Spgs., Colo."; "Aug. 1-7" [A ♀, head missing] [USNM]
- (4) "Carneades atrofusca Smith cotype"; "Glenwood Spgs., Colo."; "Oct. 1-7" [A ♀] [USNM]
- (5) "Carneades atrofusca Smith cotype"; "Pullman, Washington, July 19, 1898"; "Washington Experiment Station No. 446"; "J. B. Smith Collection, Rutgers" [A ♂] [AMNH]
- (6) "Carneades atrofusca Smith cotype"; "Glenwood Springs, Col., Aug. 1892"; "J. B. Smith Collection, Rutgers" [A ♀] [AMNH]

Discussion.—Of the six type candidates examined, only two are marked "type" and bear the USNM type number. McDunnough referred to the "♂ type" in the U.S. National Museum as the "holotype," so that specimen has been selected, labeled, and is presently designated as the lectotype.

Carneades atropulverea Smith, 1900, U.S. Natl. Mus. Proc. 22(1203): 428.

"Habitat.—Denver, Colorado, October 10; Fort Collins, Colorado (Gillette)." "Three females, one of them rubbed and otherwise imperfect."

McDunnough (1940, Canad. Ent. 72: 195) stated: "Benjamin (1935, Bull. S. Calif. Acad. Sci., XXIV, 200) first noted that the female type in the United States National Museum strongly suggested a dark example of *scotogrammoides* McD."

Syntypes examined: 2 (USNM and AMNH)

- (1) "Carneades atropulverea Smith ♀ type"; "Colo. 1973"; "Type No. 5144 U.S.N.M."; "36511"; "♀ genitalia on slide 2260, ELT." [USNM]
- (2) "Carneades atropulverea Smith cotype"; "Denver, Col., X-18"; "J. B. Smith Collection, Rutgers" [A ♀] [AMNH]

Discussion.—One syntype is missing. It presumably is the specimen Smith referred to as being rubbed and otherwise imperfect, but the locality of capture is unknown. The specimen marked "♀ type" may be the specimen on which Smith based the "Fort Collins, Colorado (Gillette)" record. The number "1973" on the locality label may have been a field or collecting number of Gillette's. The "cotype" in the American Museum of Natural History may be the specimen reported from Denver, Colo., but, if so, Smith erred on the date it was collected. Since Benjamin and McDunnough had based their recognition of the species on the "♀ type" in the U.S. National Museum, it has been selected, labeled, and now designated as the lectotype.

Carneades audentis Smith, 1894, Amer. Ent. Soc. Trans. 21: 51, pl. 3, fig. 9.

"Hab.—Colorado, Bruce, Nos. 56, 360." Both sexes are mentioned in the description.

Hampson (1903, Catalogue of the Lepidoptera Phalaenae in the Collection of the British Museum, v. 4, p. 237) stated: "Pl. LXIII, fig. 18" and "This species is unknown to me; figured from Prof. Smith's figure." On the explanation for plate 63, Hampson gave the sex as male.

Syntypes examined: 2 (USNM and AMNH)

- (1) "Carneades audentis Smith ♂ type"; "Colo. Bruce"; "56"; "Type No. 139 U.S.N.M."; "♂ genitalia on slide 2333, ELT." [USNM]
- (2) "Carneades audentis Smith ♀ type"; "Colo. Bruce"; "360"; "Collection J. B. Smith" [AMNH]

Discussion.—The specimen marked "♂ type" in the collection of the U.S. National Museum is the specimen figured by Smith. It is selected, labeled, and designated as the lectotype of this species.

Agrotis aurulenta Smith, 1890, U.S. Natl. Mus. Bul. 38, p. 215.

"HABITAT.—Colorado, Nebraska, Arizona." "Four specimens, three males and one female, all from the collection U.S. National Museum, are before me. Three of these are from Mr. Bruce, collected, one ♂ 'foothills near Denver,' and this is the smallest and almost immaculate specimen, the venular marks of t. p. line only being distinctly traceable;

one ♀, 'Platte Cañon, 6,500 feet,' and this is the largest, the transverse maculation obsolete, the dusky markings of the veins most distinct; the third specimen is also a ♂, 'Omaha, Nebr., June,' and this has a distinct reddish shade to the t. p. line, all the maculation very well defined. The fourth specimen without marked locality is a ♂, which was given to me years ago by Mr. George Frank, who had several others in his collection, I think, from Arizona."

Smith (1893, U.S. Natl. Mus. Bul. 44, p. 66) stated: "The types are in the National Museum collection."

Type-specimen.—A male in the U.S. National Museum. It is labeled "Agrotis aurulenta Smith Type"; "49"; "foothills near Denver, Colo., Bruce"; "Type No. 81 USNM"; "Lectotype and 6 × 7" [on back of label]. McDunnough (1950, p. 371) stated: "It would seem well to designate as lectotype a male specimen, very pale, taken in the 'foothills near Denver, Colo. Bruce.'" Also: "Types: *Aurulenta*, holotype, male, Denver, Colorado (USNM); . . ." Those actions seem indefinite to me. Accordingly, to insure that the specimen be considered the type-specimen, I selected it as the lectotype (Wash. Ent. Soc. Proc. 70(3): 266-267, Oct. 4, 1968).

Bryophila avirida Smith, 1906, N.Y. Ent. Soc. Jour. 14: 10.

Habitat.—Fort Collins, Color., in June; Cartwright, Man., in June." "In the four examples before me . . ."

Syntypes examined: 4 (2 AMNH and 2 USNM)

- (1) "Bryophila avirida Smith ♂ type"; "Fort Collins, Colo."; "J. B. Smith Collection, Rutgers" [A ♀, as indicated by Rindge (1955, p. 102), complete] [AMNH]
- (2) "Bryophila avirida Smith ♀ type"; "Cartwright, Manitoba"; "June 24-30"; "J. B. Smith Collection, Rutgers" [Very good condition, complete] [AMNH]
- (3) "Bryophila avirida Smith cotype"; "Colo, 1168"; "Collection J. B. Smith" [A ♂, head missing] [USNM]
- (4) "Bryophila avirida Smith cotype"; "Cartwright, Manitoba"; "June 24-30" [A ♀] [USNM]

Discussion.—The only male of the type-series, a cotype in the U.S. National Museum, lacks a head and is labeled simply "Colo." Accordingly, it has been decided to select one of the other syntypes. The specimen marked "♀ type" in the collection of the American Museum of Natural History is in very good condition and is complete. It has been selected, labeled, and is now designated as the lectotype.

Oxycnemis baboquavaria Smith, 1907, Amer. Ent. Soc. Trans. 33 (2 and 3): 137.

Hab.—Baboquavaria Mts., Pima County, Arizona, July 15th to 30th, 1903, O. C. Poling." "Two males and two females, in good condition."

Syntypes examined: 3 (2 AMNH and 1 USNM)

- (1) "Oxycnemis baboquavaria Smith ♂ type"; "Baboquavaria Mts., Pima Co., Arizona, July

15 to 30, 1903, Coll. O. C. Poling"; "J. B. Smith Collection, Rutgers" [AMNH]

(2) "Oxycnemis baboquavaria Smith ♀ type"; same data as "♂ type" [AMNH]

(3) "Oxycnemis baboquavaria Smith ♀ cotype"; same data as "♂ type" [USNM]

Discussion.—The other syntype, a male, is in the collection of the British Museum (Natural History). Hampson (1909, p. 217) listed two males from the type locality and stated one was a cotype. He figured the species on plate 128, figure 3, but it is not known that the illustration is of the cotype. The "♂ type" in the collection of the American Museum of Natural History has been selected, labeled, and is now designated as the lectotype.

Noctua bairdii Smith, 1908, N.Y. Ent. Soc. Jour. 16: 84.

Habitat.—High River, Alberta, Canada." "One female example in fair condition received from Mr. Baird who collected it and after whom I have named it, through Dr. Fletcher."

Holotype.—In the collection of the American Museum of Natural History. The specimen is labeled "Noctua bairdii Smith Type"; "High River, Alta. (Baird)"; "J. B. Smith Collection Rutgers"; "36."

Oncocnemis balteata Smith, 1902, N.Y. Ent. Soc. Jour. 10: 43.

Habitat.—Poncha Springs, Colorado, August 14th, Oslar." "One male in good condition."

Holotype.—In the American Museum of Natural History. The specimen is labeled "Oncocnemis balteata Smith ♂ type"; "Poncha Sps, Colo., VII.4"; "Collection J. B. Smith."

Tripudia balteata Smith, 1900, U.S. Natl. Mus. Proc. 22(1203): 489.

Habitat.—Santa Rita Mountains, Arizona, May 29 and June 16, Mr. E. A. Schwarz." "Two females in good condition." "Type.—Cat. No. 4780, U.S.N.M." "Syntypes examined: 2 (USNM and AMNH)

- (1) "Tripudia balteata Smith ♀ type"; "S. Rita Mts., Ar., May 29, 98"; "E. A. Schwarz, Collector"; "Type No. 4780 U.S.N.M." [A ♂!, head missing] [USNM]
- (2) "Tripudia balteata Smith cotype"; "S. Rita Mts., Ar., June 16, 95"; "E. A. Schwarz, Collector"; "J. B. Smith Collection, Rutgers" [A ♀] [AMNH]

Discussion.—The male in the U.S. National Museum labeled "♀ type" and bearing the USNM type number cited in the original description has been selected, labeled, and is now designated as the lectotype. The head is missing, but the facts that the USNM type number given in the original description is found only on this specimen and that it is the only male prompted its selection. The species is now placed in the genus *Cobubatha* Walker, species of which may be very easily separated by characters of the male genitalia.

Acronycta barnesii Smith, 1897, Ent. News 8(6): 153 (in key).

Smith (1898, U.S. Natl. Mus. Proc. 21(1140): 162, pl. 13, fig. 10 (male adult), pl. 22, fig. 15 (male genitalia)) formally described this as new and stated: "*Habitat*.—Colorado; Denver; Garfield County, 7,000 feet; Glenwood Springs, June and July." "All the specimens before me were collected by Mr. David Bruce or by Dr. William Barnes. There are six males and three females, the latter being the larger throughout. Types are in the U.S. National Museum, Rutgers College, and with Dr. Barnes and Mr. E. L. Graef."

Syntypes examined: 8 (6 USNM and 2 AMNH)

- (1) "Acronycta barnesii Smith ♂ type"; "Colo. Bruce"; "6-10-88"; "Type No. 3671 U.S.N.M." [Very good condition] [USNM]
- (2) "Acronycta barnesii Smith ♀ type"; "Colo. Bruce"; "Type No. 3671 U.S.N.M." [Very rubbed, but complete] [USNM]
- (3) "Acronycta barnesii Smith ♂ cotype"; "Type No. 33911 U.S.N.M."; "Col. E. L. Graef" [Good condition, complete] [USNM]
- (4) "Acronycta barnesii Smith ♂ cotype"; "830, Garfield Co., Colo., 7000 ft., Bruce"; "Type No. 3671 U.S.N.M."; "36511" [Fair condition, small] [USNM]
- (5) "Acronycta barnesii Smith ♂ cotype"; "Glenwood Spgs., Col."; "June 8-15"; "1" [USNM]
- (6) "Acronycta barnesii Smith ♀ cotype"; "Glenwood Spgs., Col."; "July 16-23"; "2" [USNM]
- (7) "Acronycta barnesii Smith ♂ cotype"; "Denver, Colo. Bruce"; "J. B. Smith Collection, Rutgers" [AMNH]
- (8) "Acronycta barnesii Smith ♀ cotype"; "Colo. Bruce"; "J. B. Smith Collection, Rutgers" [AMNH]

Discussion.—The syntype marked "♂ type" in the collection of the U.S. National Museum has been selected, labeled, and is now designated the lectotype. It is the specimen figured by Smith on plate 13, figure 10.

***Hadena (Xylophasia) barnesii* Smith, 1899, Canad. Ent. 31: 258.**

Habitat.—South Dakota (Truman); Glenwood Springs, Colorado, in September; Yellowstone Park, Wyoming (Dr. Barnes). "A series of seven specimens has been compared with a similar number of *auranticolor* before the species was decided to be distinct."

Barnes and McDunnough (1913, Contrib. Nat. Hist. Lepidoptera N. Amer. 2(1): 36, pl. 17, fig. 2) illustrated a cotype female from Yellowstone Park, Wyo.

Barnes and McDunnough (1914, Contrib. Nat. Hist. Lepidoptera N. Amer. 2(5): 199) stated: "*Auranticolor* is very close to *barnesi* Sm., the markings being practically identical and it is even possible that the original series included some *auranticolor*. In view of this fact we would restrict the name *barnesi* to those specimens from Yellowstone Park, Wyo., which are characterized by their general

yellow-brown appearance; two co-types from this locality are in Coll. Barnes and one was figured in 'Contributions' Vol. II, No. I, Pl. 17, fig. 2."

Syntypes examined: 7 (4 USNM and 3 AMNH)

- (1) "Hadena barnesii Smith ♂ type"; "Yellowstone Park, Wyo."; "Type No. 4367 U.S.N.M."; "♂ genitalia on slide 70, JFGC." [USNM]
- (2) "Hadena barnesii Smith ♀ type"; "Glenwood Springs, Col., 1895-9, W. Barnes"; "Type No. 4367 U.S.N.M."; "36511" [Abdomen missing] [USNM]
- (3) "Hadena barnesii Smith cotype"; "Yellowstone Park, Wyo."; "Photograph Pl. 17, No. 2"; "♀ genitalia on slide 814, JGF." [USNM]
- (4) "Hadena barnesii Smith cotype"; "Yellowstone Park, Wyo." [A ♀] [USNM]
- (5) "Hadena barnesii Smith cotype"; "Glenwood Springs, Col., 1895-9, W. Barnes"; "J. B. Smith Collection, Rutgers" [A ♂] [AMNH]
- (6) "Hadena barnesii Smith cotype"; "South Dakota"; "J. B. Smith Collection, Rutgers" [A ♂] [AMNH]
- (7) "Hadena barnesii Smith cotype"; "Yellowstone Park, Wyo."; "J. B. Smith Collection, Rutgers" [A ♀] [AMNH]

Discussion.—Barnes and McDunnough (1914, p. 199) indicated that this name should be restricted to the specimens from Yellowstone Park, Wyo., and they figured a female cotype from that locality. However, they also indicated that *barnesii* and *auranticolor* were practically identical in markings and that there was even the possibility that both species were represented in the type-series. This being so, there is little advantage in selecting the specimen illustrated, and, in fact, a male would seem to be a better choice. Therefore, I have selected the syntype labeled "♂ type" in the collection of the U.S. National Museum as the lectotype. It has been so labeled and is presently so designated.

***Oncocnemis barnesii* Smith, 1899, N.Y. Ent. Soc. Jour. 7: 37.**

Habitat: Yellowstone Park, Wyo., in August; Dr. Barnes. "A single female example of this very strongly marked species is at hand."

Hampson (1906, Catalogue of the Lepidoptera Phalaenae in the Collection of the British Museum, v. 6, p. 173, and pl. 100, fig. 16) stated: "This species is unknown to me; figured from a drawing from type in Coll. J. B. Smith." On the explanation of figure 16, plate 100, he stated: "♀, Wyoming."

Holotype.—In the U.S. National Museum. The specimen is labeled "Oncocnemis barnesii Smith ♀ type"; "Yellowstone Park, Wyo."; "Aug." in the absence of a USNM type number or a Barnes collection label, it is not known by what route the specimen came to be in the collection in Washington. It is possible that Smith had the specimen at the time the drawing made for Hampson was prepared, but it is also possible that Hampson made an error in citing the location of the type.

Agrotis basiflava Smith, 1890, Amer. Ent. Soc. Trans. 17: 52.

"*Habitat*.—N.W. British Columbia (Neumoegen)."
"Two specimens, ♂ and ♀ are before me, differing very decidedly in appearance."

Smith (1890, U.S. Natl. Mus. Bul. 38, p. 187) placed the species in *Carneades* Grote but made no comment about the type of the species.

Smith (1893, U.S. Natl. Mus. Bul. 44, p. 101) stated: "Types are in the National Museum and in the Neumoegen collection."

Syntypes examined: 2 (USNM)

- (1) "Agrotis basiflava Smith Type"; "N.W. Brit. Cola."; "Col. B. Neumögen"; "Type No. 33749 U.S.N.M."; "♂ genitalia on slide 522, FHB."; "Barnes collection" ("Barnes collection" label is an error; specimen came to U.S. National Museum via Brooklyn Museum collection)
- (2) "Agrotis basiflava Smith type"; "50"; "N.W. Brit. Cola."; "Type No. 127 U.S.N.M."; "♀ genitalia on slide 2211, ELT."

Discussion.—The male syntype has been selected, labeled, and is now designated as the lectotype. The two name labels each bear a sex sign in the upper right of the label. This has not been cited in quoting the label here. It is not known whether the sign was placed there by Smith or by some subsequent person. It is known that in other instances where Smith sexed the specimens, he placed the sex sign before or after the words type or cotype.

Charadra basiflava Smith, 1908, N.Y. Ent. Soc. Jour. 16: 80.

"*Trisuloides patens* Druce, is a *Charadra* which I had named *basiflava* before Dr. Barnes called my attention to the figure in the *Biologia* (II, 509, p. 96). It has been taken at Palmerlee, Cochise Co., Arizona, and is no doubt a member of our fauna."

Syntypes examined: 1 (USNM)

- (1) "Charadra basiflava Smith Type"; "Palmerlee, Cochise Co., VII, Ariz."; "B. Neumögen"; "Type No. 34104 U.S.N.M." [A ♀]

Discussion.—There is a question as to the meaning of the words "... which I had named *basiflava*..." If Smith meant by "named" the act of description, I have been unable to locate the reference. It seems more likely that he meant he had selected a name for what he presumed was an undescribed species. This is a case of validation in the synonymy of another name. Smith referred to the trivial name of Druce twice as "*patens*," and it is not known whether he was attempting to emend *pata* of Druce or whether he was guilty of a lapsus. The name "*pata*" apparently is not based on an adjective and should not be modified. The specimen found in the U.S. National Museum labeled "Charadra basiflava Smith Type" may be a holotype, but because Smith did not indicate the number of specimens on which the name was based, it seems best to select it as the lectotype to insure that it is considered to be the type-specimen. Accordingly, I have so labeled the specimen and presently designate it the lectotype.

Mamestra basiplaga Smith, 1905, N.Y. Ent. Soc. Jour. 13(4): 201.

"*Habitat*.—Huachuca Mts., and Southern Arizona, Poling." "Three males and six females, all from Dr. Barnes."

Syntypes examined: 8 (3 AMNH and 5 USNM)

- (1) "Mamestra basiplaga Smith ♂ type"; "Huachuca Mts., Ariz."; "Collection J. B. Smith" [Very good condition, complete] [AMNH]
- (2) "Mamestra basiplaga Smith ♀ type"; "Huachuca Mts., Ariz."; "Collection J. B. Smith" [AMNH]
- (3) "Mamestra basiplaga Smith cotype"; "Huachuca Mts., Ariz."; "Collection J. B. Smith" [A ♀] [AMNH]
- (4) "Mamestra basiplaga Smith cotype"; "Huachuca Mts., Ariz."; "Barnes Collection" [A ♂] [USNM]
- (5) "Mamestra basiplaga Smith cotype"; "Huachuca Mts., Ariz."; "Barnes Collection" [A ♂] [USNM]
- (6) "Mamestra basiplaga Smith cotype"; "So. Arizona, Poling"; "Barnes Collection" [A ♀, abdomen damaged by dermestids] [USNM]
- (7) "Mamestra basiplaga Smith cotype"; "So. Arizona, Poling"; "Barnes Collection" [A ♀] [USNM]
- (8) "Mamestra basiplaga Smith cotype"; "Chiricahua Mts., Ariz."; "Barnes Collection" [A ♀] [USNM]

Discussion.—One syntype, presumably a female, has not been located. The locality of one syntype in the collection of the U.S. National Museum, a cotype female from the Chiricahua Mountains, Ariz., is not given in the original description. The specimen marked "♂ type" in the American Museum of Natural History has been selected, labeled, and is presently designated as the lectotype.

Acontia behrii Smith, 1900, Amer. Ent. Soc. Trans. 27: 77.

"*Hab.*—California." "A single male example given me by Dr. Behr who had others. I do not recollect, if I was told, from what especial region this came."

Holotype.—In the U.S. National Museum. The specimen is labeled "Acontia behrii Smith ♀ type"; "Behr, Calif."; "Type No. 5391 U.S.N.M."; "36511." [A ♂] Smith was correct in stating the specimen was a male. He apparently made a mistake as to the sex when he prepared the name label.

Rhynchagrotis befragei Smith, 1890, U.S. Natl. Mus. Bul. 38, p. 20, pl. 2, fig. 6 (part of valve from male genitalia).

In a discussion of various forms of *Abagrotis placida* (Grote) Smith stated: "Mr. Grote did not have all the variations, apparently, and was in error in considering the Texas specimens as referable here." [Grote is quoted: "A larger form from Texas expands 40 mm. It has been reared from the larva by Befrage (No. 674). It is more red, more unicolorous, the markings less obtrusive."] "It constitutes

a very distinct species, nearer to *alternata*, and as such I have separated it in the collection of the U. S. National Museum, which contains several of the Belfrage specimens. It may be called *belfragei*, and the above comparative features will easily separate it. I believe it the only one of this group in Texas."

Smith (1893, U.S. Natl. Mus. Bul. 44, p. 53) stated: "Texas, March to June." "The type is in collections U.S. National Museum."

Smith (1908, Canad. Ent. 40: 286) stated: "Only 2 ♂'s are at hand, from Texas, and they are from the original type lot taken at Belfrage."

Rindge (1955, Amer. Mus. Nat. Hist. Bul. 106(2): 103) stated: "A male labeled 'type,' from Texas, 4/6. As the type is in the United States National Museum (Smith, 1893, Bull. U. S. Natl. Mus., vol. 44, p. 53), this specimen may be a cotype."

Syntypes examined: 6 (5 USNM and 1 AMNH)

- (1) "Rhynchagrotis belfragei Smith Type"; "Texas"; "18/5"; "Collection Belfrage"; "Collection C. V. Riley"; "Type No. 72 U.S.N.M." [A ♂] [USNM]
- (2) "Rhynchagrotis belfragei Smith Type"; "Texas, Belfrage"; "13/6"; "Collection Belfrage"; "Collection C. V. Riley"; "Type No. 72 U.S.N.M." [A ♀] [USNM]
- (3) "Rhynchagrotis belfragei Smith Type"; "Texas, Belfrage"; "5/3"; "Collection C. V. Riley"; "Type No. 72 U.S.N.M." [A ♀] [USNM]
- (4) "Rhynchagrotis belfragei Smith Type"; "Texas"; "340"; "Collection O. Meske"; "Type No. 72 U.S.N.M." [A ♀] [USNM]
- (5) "Rhynchagrotis belfragei Smith Type"; "Texas, Belfrage"; "3/6"; "Collection C. V. Riley" [A ♀, abdomen damaged by dermestids] [USNM]
- (6) "Rhynchagrotis belfragei Smith Type"; "Texas"; "4/6"; "J. B. Smith Collection Rutgers" [A ♂] [AMNH]

Discussion.—There is a Smith slide (Dyar number 4) in the U.S. National Museum labeled "placida var." It could be the slide from which Smith prepared the illustration on plate 2, figure 6, but, if so, the drawing in question is not very accurate. I have not located the specimen from which the slide may have been prepared. Smith and Rindge, following Smith, have stated that the type is in the U.S. National Museum, but none of the syntypes in that collection were specifically restricted. Accordingly, I have selected, labeled, and now designate the male syntype in the collection of the U.S. National Museum as the lectotype.

Phaeocyma bethunei Smith, 1908, U.S. Natl. Mus.

Proc. 35(1645): 260, pl. 33, fig. 1 (♂ genitalia), pl. 35, fig. 6 (♀ genitalia).

"*Habitat*.—Washington, District of Columbia, June and August; Tryon, North Carolina, August, Fiske collection; Maine." "*Types*.—U.S.N.M., Coll. No. 12027; also Rutgers College collection." "Two

males and 6 females. The specimens from District of Columbia and North Carolina are from the U.S. National Museum, and one male bears a label 'Larva found feeding on Pine, Imago iss. June 19, 82.'" McDunnough (1943, Canad. Ent. 75: 155) stated: "The name was based on eight specimens (2♂, 6♀, according to Smith) from Washington, D.C., Tryon, N.C. (Fiske), and Maine. The holotype is a male in the Rutgers College Coll. from Tryon, N.C., with abdomen intact; it is clear, therefore, that Smith's male genitalic drawing was not based on this specimen. In the U.S. National Museum, according to information furnished by Mr. C. Heinrich, are two males 'cotypes' from Washington, D.C., without abdomens; it is likely that one of these furnished the male genitalic slide, which, however, is not in the National Museum Collection. Besides these cotypes the Washington Collection contains the female "Type" and two female 'cotypes' from Tryon, N.C., (one of these has since been generously donated to the Canadian National Collection) and a female 'cotype' from Maine (ex. Coll. Brooklyn Museum) all with intact abdomens. This information would indicate that Smith must have had three males in his type series and not two as stated, and that a single female (on which the drawing must have been based) has not been located."

Syntypes examined: 6 (1 AMNH and 5 USNM)

- (1) "Phaeocyma bethunei Smith ♂ type"; "Tryon, N.C., at light"; "W. F. Fiske Collector"; "J. B. Smith Collection Rutgers" [Rather poor condition, but complete] [AMNH]
- (2) "Phaeocyma bethunei Smith ♀ type"; "Fiske Colr., 8-14-04, Tryon, N.C."; "Barnes collection" [A ♀, complete] [USNM]
- (3) "Phaeocyma bethunei Smith ♂ cotype"; "Larvae found feeding on Pine, Imago in June 19 '82, D.C."; "Collection C. V. Riley" [A ♂, abdomen missing] [USNM]
- (4) "Phaeocyma bethunei Smith cotype"; "Maine"; "Collection Brklyn. Mus."; "Type No. 34096 U.S.N.M." [A ♀, complete] [USNM]
- (5) "Phaeocyma bethunei Smith cotype"; "Washington, D.C., 12-8-82, Coll. A. Koebele" [A ♀, abdomen missing] [USNM]
- (6) "Phaeocyma bethunei Smith cotype"; "Fiske Colr., 8-11-04, Tryon, N.C." [A ♀, complete] [USNM]

Other syntypes: 1 (CNC)

- (1) According to McDunnough (1943, p. 155), this was a female from Tryon, N.C., labeled "cotype" with intact abdomen. It was originally in the U.S. National Museum but donated to the Canadian National Collection.

Discussion.—Selection of a type-specimen for this name is complicated. One syntype, presumably a female if Smith correctly sexed the specimen, has not been located. None of the syntypes located bear the USNM Type number 12027 (called "Coll. No. 12027" in

original description). A type was recorded in the USNM type book on August 8, 1908, under number 12027. Heinrich misinformed McDunnough as to the sex of one of the syntypes from Washington, D.C. It is a female, not a male. Smith figured the genitalia of both sexes in the original description.

In the genus *Zale* many of the species possess distinctive characters in both male and female genitalia, but in the group of species to which *bethunei* belongs the genitalia are much less distinct; in fact, in the females of some species they are exceedingly similar. By 1908, Smith's technique with genitalic preparations had improved. In the case of *Phaeocyma* (= *Zale* Hübner), he dissected the entire male genitalia, mounted them caudal face down on the slide, and illustrated them from that aspect. A Smith slide of the male genitalia of *bethunei* was located in the American Museum of Natural History. Since it obviously was prepared from the specimen labeled "♂ cotype" in the U.S. National Museum, the slide was transferred to this museum by Rindge. The female genitalic illustration may have been prepared from the genitalia of the female syntype in the U.S. National Museum that lacks an abdomen, but since one female syntype has not been located, that possibility cannot be verified.

McDunnough's reference to the male in the Rutgers College collection (now in AMNH) as the "holotype" is yet another complication. The specimen is certainly not a holotype, but the use of the term "holotype" may be construed by some workers as lectotype selection. In 1968, I (Wash. Ent. Soc. Proc. 70(3): 264) discussed similar actions by McDunnough for three species of *Euxoa* Hübner. At that time I questioned whether McDunnough's actions were selection of lectotypes, but I decided to select as lectotypes the same specimens listed as "holotypes" by McDunnough to assure that the type-specimen would be the same regardless. Since that time I have found instances in which it is very clear that McDunnough designated "holotypes" in the exact sense of lectotypes. McDunnough based his identification of the species in 1943 on the genitalia of the female cotype in the Canadian National Collection and on the drawing of the female genitalia accompanying Smith's original description. McDunnough pointed out that Smith in several instances confused more than one species in this very difficult species complex of *Zale*. It is my opinion that either the male or the female specimens that were used to illustrate the genitalia in the original paper should have been selected as lectotype, but in view of McDunnough's reference to the "♂ type" as "holotype," I see no recourse except to select that same specimen as lectotype. Accordingly, I have labeled it as lectotype and so designate it.

***Fishia betsia* Smith, 1905, N.Y. Ent. Soc. Jour. 13(4): 199.**

"*Habitat*.—Stockton, Utah, October 4, 1904, Spalding." "One male in good condition."

Holotype.—In the American Museum of Natural History. The specimen is labeled "Fishia betsia Smith

♂ type"; "Stockton, Ut."; "X-4-4"; "J. B. Smith Collection Rutgers."

***Euxoa bialba* Smith, 1905, N.Y. Ent. Soc. Jour. 13(4): 197.**

"*Habitat*.—Stockton, Utah, September 9 to October 2; Volga, South Dakota, without date." "Seven males and ten females; most of them more or less defective, from Mr. Tom Spalding and Mr. P. C. Truman."

Syntypes examined: 6 (5 AMNH and 1 USNM)

- (1) "Euxoa bialba Smith ♂ type"; "Volga, So Dak."; "Collection J. B. Smith" [Excellent condition] [AMNH]
- (2) "Euxoa bialba Smith ♀ type"; "Stockton, Ut."; "X-3-4"; "J. B. Smith Collection Rutgers" [Good condition] [AMNH]
- (3) "Euxoa bialba Smith cotype"; "Volga, So Dak."; "Collection J. B. Smith" [A ♂] [AMNH]
- (4) "Euxoa bialba Smith cotype"; "Stockton, Ut."; "X-2-4"; "J. B. Smith Collection Rutgers" [A ♀] [AMNH]
- (5) "Euxoa bialba Smith cotype"; "Stockton, Ut."; "IX-15-4"; "J. B. Smith Collection Rutgers" [A ♀] [AMNH]
- (6) "Euxoa bialba Smith cotype"; "Stockton, Ut."; "IX-9-4"; "Slide 127a" [Barnes and McDunnough ?] [USNM]

Discussion.—In line with my previous stated policy, I have selected the specimen labeled "♀ type" as the lectotype. It has been so labeled and is now designated the lectotype. The specimen was apparently overlooked by Rindge when he listed the type material received from Rutgers.

***Schinia bicuspidata* Smith, 1891, Amer. Ent. Soc. Trans. 18: 127.**

"*Hab*.—Southern Texas." "A single specimen from Mr. Neumoegen's collection is before me." Smith (1893, U.S. Natl. Mus. Bul. 44, p. 282) stated: "The type is with Mr. Neumoegen."

Holotype.—In the U.S. National Museum. The specimen is labeled "Schinia bicuspidata Smith Type"; "Houston, Texas"; "Col. B. Neumoegen"; "Type No. 33712 USNM"; "♂ genitalia on slide 909 JFGC."

***Agrotis bifasciata* Smith, 1888, U.S. Natl. Mus. Proc. 10: 460.**

"*Habitat*.—Arizona." "A single ♂ specimen in collection U.S. Nat. Mus."

Smith (1890, U.S. Natl. Mus. Bul. 38, p. 168) stated: "A single ♂ specimen from Mr. Doll."

Smith (1893, U.S. Natl. Mus. Bul. 44, p. 95) stated: "The type is in the National Museum."

Holotype.—In the collection of the U.S. National Museum. The specimen is labeled "Agrotis bifasciata Smith Type"; "Holl."; "Type No. 115 USNM"; "♂ genitalia on slide 732 FHB"; "Barnes collection." It is not clear whether Smith misread the "Holl." label [It is

machine printed.] as "Doll" and how he determined that the specimen was from Arizona.

Schinia biforma Smith, 1906, N.Y. Ent. Soc. Jour. 14: 21. "Habitat.—Kerrville, Texas." "One male and two females, the former in poor, the latter in good condition."

Barnes and McDunnough (1913, Contrib. Nat. Hist. Lepidoptera N. Amer. 2(1): 10, pl. 4, fig. 4) illustrated a specimen and stated: "4. *Schinia biforma* Sm. Kerrville, Tex. ♀ Co-type."

Syntypes examined: 2 (USNM)

- (1) "*Schinia biforma* ♂ type"; "Kerrville, Texas"; "Barnes collection"
- (2) "*Schinia biforma* ♀ type"; "Kerrville, Texas"; "Barnes collection"; "Photograph Pl. 4, fig. 4"

Discussion.—One female syntype has not been located. The two syntypes in the U.S. National Museum are both in fair condition. The coloration and pattern of maculation of the wings are the same for both sexes and are distinctive for the species. The specimen marked "♀ type" is the one illustrated by Barnes and McDunnough without question. Their reference to the specimen figured as "♀ Co-type" was either an error or they were using cotype in the sense of syntype. Because the "♀ type" was illustrated, it has been selected, labeled, and is now designated as the lectotype.

Euxoa biformata Smith, 1910, Amer. Ent. Soc. Trans. 36(3): 261.

"Hab.—Sierra Nevada, California." "One male, the smaller, and one female, both in excellent condition. The specimens contain no data as to their point of origin or date; but the labels are identical, and despite the difference in appearance obviously belong together."

Syntypes examined: 2 (AMNH)

- (1) "*Euxoa biformata* Smith ♂ type"; "Sier. Nev., Cal."; "Collection J. B. Smith"
- (2) "*Euxoa biformata* Smith ♀ type"; "Sier. Nev., Cal."; "Collection J. B. Smith"

Discussion.—The specimen labeled "♂ type" has been selected, labeled, and is now designated as the lectotype. This action does not agree with the policy of selecting females as the lectotypes in this genus. The males of the species of the group to which this species belongs have distinctive genitalia. D. F. Hardwick, who has studied the genus, concurs in the selection of the male.

Homopyralis bigallis Smith, 1908, N.Y. Acad. Sci. Ann. 18(2): 125.

"Habitat.—Hot Springs, New Mexico, 7000 ft., September; Yavapai County, Arizona, Aug. 8; Huachuca Mountains, Arizona, July 30; Palmerly, Arizona, without date." "Four males and two females, in fair condition."

Syntypes examined: 5 (4 AMNH and 1 USNM)

- (1) "*Homopyralis bigallis* Smith ♂ type"; "Huachuca Mts., Ariz., VII-30"; "J. B. Smith Collection Rutgers" [AMNH]

- (2) "*Homopyralis bigallis* Smith ♀ type"; "Huachuca Mts., Ariz., VII-30"; "J. B. Smith Collection Rutgers" [AMNH]

- (3) "*Homopyralis bigallis* Smith ♂ cotype"; "Hot Springs, N. Mex., 7000 ft. alt."; "Collection J. B. Smith" [AMNH]

- (4) "*Homopyralis bigallis* Smith ♀ cotype"; "Yavapai Co., Ariz., VIII-8"; "J. B. Smith Collection Rutgers" [AMNH]

- (5) "*Homopyralis bigallis* Smith ♂ cotype"; "Palmerlee, Ariz." [USNM]

Discussion.—The specimen marked "♂ type" in the American Museum of Natural History has been selected, labeled, and is now designated the lectotype for this species.

Campometra bilineata Smith, 1899, U.S. Natl. Mus. Proc. 22(184): 102.

"Type.—No. 4316, U.S.N.M." "Habitat.—Brownsville, Texas; June 10; Townsend, No. 544." "A single female specimen from the U.S. National Museum."

Holotype.—In the U.S. National Museum. The specimen is labeled "*Campometra bilineata* Smith ♀ type"; "Brnsville, Tex., 544, Twnsend, 10 June 95"; "Type No. 4316 USNM"; "♀ genitalia on slide 610, J.F.G.C."

Agrotis binominalis Smith, 1888, U.S. Natl. Mus. Proc. 10: 451.

"Habitat.—California, Washington Territory." "This is the *exsertistigma* of the Edwards collection, and like one specimen so labeled in Mr. Tepper's collection."

Smith (1890, U.S. Natl. Mus. Bul. 38, p. 34) added nothing more, but he figured the harpe and clasper (pl. 2, fig. 7).

Smith (1893, U.S. Natl. Mus. Bul. 44, p. 56) stated: "The wings are, however, sufficiently characteristic to make it certain that it is the species I have called *binominalis*, specimens of which are in the U.S. National Museum, the type in the Tepper collection."

Barnes and Benjamin (1924, Contrib. Nat. Hist. Lepidoptera N. Amer. 5(3): 117) stated: ". . . and a prior comparison with the ♂ type (*nec* ♀) of *binominalis* (Tepper Collection) by Dr. McDunnough; . . ."

Syntypes examined: 1 (AMNH)

- (1) "*Agr. exsertistigma* Morr."; "Sier. Nev., Cal."; "No. 9846, Collection Hy. Edwards" [A ♂, little rubbed, left part of genitalia missing]

Discussion.—Smith apparently labeled no specimens of this name and only referred to examples in other collections. In the Tepper collection at Michigan State University, I found three specimens marked as types by Tepper [a rhomboidal label of yellow paper with word "Type"]. One is a female in good condition labeled "So. Cal." The others are both males in very poor condition, one with glued-on abdomen, the other perhaps with glued-on abdomen and broken by veridigris. None bear a label determining the specimen as *exsertistigma* as mentioned by Smith. One of the

males, both labeled "W. T.," was probably the specimen that the comparison note of McDunnough was based upon, but which one? In the absence of the *exsertistigma* determination label and considering the very poor condition, it seems best not to recognize any of the three as a syntype. The specimen in the American Museum of Natural History from the Henry Edwards collection I consider a syntype and a valid lectotype candidate. It has been selected, labeled, and is now designated the lectotype.

Anepischetos bipartita Smith, 1900, U.S. Natl. Mus. Proc. 22(1203): 482.

"Habitat.—Key West, Florida." "Four males are before me and I have seen others." "Type.—Cat. No. 4815, U.S.N.M."

Syntypes examined: 4 (2 USNM and 2 AMNH)

- (1) "Anepischetos bipartita Smith δ type"; "Key West"; "Type No. 4815, U.S.N.M." [Badly damaged by dermestids, whole venter of abdomen and genitalia missing] [USNM]
- (2) "Anepischetos bipartita Smith δ cotype"; "Key West"; "Type No. 4815, U.S.N.M."; "36511" [Good condition except abdomen slightly damaged, genitalia intact] [USNM]
- (3-4) "Anepischetos bipartita Smith δ cotype"; "Key West"; "J. B. Smith Collection, Rutgers" [2 $\delta\delta$] [AMNH]

Discussion.—Of the two syntypes bearing the USNM type number mentioned in the original description, the " δ type" is too poor for lectotype consideration. Accordingly, the " δ cotype" in the U.S. National Museum has been selected, labeled, and is now designated the lectotype.

Hadena birnata Smith, 1908, N.Y. Acad. Sci. Ann. 18(2): 113.

"Habitat: Newfoundland." "Three male examples, one of them almost perfect, a second fair, and a third more or less oily, yet with maculation in good condition." "A defective example from St. John, N.B., will probably prove referable here."

Syntypes examined: 1 (AMNH)

- (1) "Hadena birnata Smith δ type"; "N. F."; "J. B. Smith Collection Rutgers" [Fair condition except entire specimen greasy]

Discussion.—Only one syntype has been located. It is apparently the one that Smith mentioned as being oily, although the greasing could have occurred in the years since the description. The " δ type" in the American Museum of Natural History has been selected, labeled, and is now designated the lectotype.

Cucullia bistriga Smith, 1892, U.S. Natl. Mus. Proc. 15: 48, pl. 2, fig. 9.

"HABITAT: Colorado (Bruce)." "Two males, both taken by Mr. Bruce, one of them from Mr. Neumoegen's collection, are before me."

Smith (1893, U.S. Natl. Mus. Bul. 44, p. 238) stated: "Types are in the Neumoegen collection and in the

National Museum."

Hampson (1906, Catalogue of the Lepidoptera Phalaenae in the Collection of the British Museum, v. 6, p. 68, pl. 98, fig. 20) stated: "This species is unknown to me; figured from a drawing from type in U.S. Nat. Mus." " δ Colorado."

Syntypes examined: 2 (USNM)

- (1) "Cucullia bistriga Smith Type"; "Colo. Bruce"; "Col. B. Neumoegen"; "Type No. 33854 U.S.N.M."; " δ genitalia on slide 2609, JFGC" [Excellent condition, genitalia on slide complete]
- (2) "Cucullia bistriga Smith Type"; "Colo. Bruce"; "103"; "Type No. 269 U.S.N.M."; " δ genitalia on slide 2610, JFGC" [Fair condition, antennae missing, head damaged, genitalia with valves missing]

Discussion.—The two specimens bear different name labels. The label on the specimen marked "Type No. 269 U.S.N.M." is larger and the paper whiter than on the other specimen. Also, I am uncertain that the label is in Smith's handwriting. It is likely, however, that it is the specimen that provided the left valve that was illustrated by Smith, and it is certainly the specimen from which the very poor illustration of the adult figured by Hampson was prepared. Nevertheless, I have selected, labeled, and now designate as the lectotype the other specimen that came to the U.S. National Museum via the Neumoegen collection and the Brooklyn Museum. There is no doubt in my mind that the two specimens represent the same species, and the specimen chosen as lectotype is in much better condition and the genitalia are complete.

Schinia biundulata Smith, 1891, Amer. Ent. Soc. Trans. 18: 129.

"Hab.—Colorado (Bruce)." "The single specimen before me is from Mr. Neumoegen's collection, and I do not remember having had others."

Smith (1893, U.S. Natl. Mus. Bul. 44, p. 275) stated: "The type is in Mr. Neumoegen's collection."

Hampson (1903, Catalogue of the Lepidoptera Phalaenae in the Collection of the British Museum, v. 4, p. 81, pl. LXIX, fig. 4) stated: "This species is unknown to me, figured from drawing from type in Brooklyn Inst. Arts & Sci." On the explanation of figure 4, plate 69, he stated: " δ Colorado."

Holotype.—Location uncertain, either in the U.S. National Museum or lost. There is a specimen in this museum labeled as follows: "Schinia biundulata Smith Type"; "Houston, Texas"; "Col. B. Neumoegen"; "Type No. 33715 USNM." The specimen is a female with a glued-on abdomen. It was entered in the type book April 22, 1929, with other *Schinia* types received from the Brooklyn Institute of Arts and Sciences, and the locality was given as "Houston, Texas."

The discrepancy in the locality given by Smith and Hampson and the data on the specimen are difficult to understand. Hampson's indication that the type was a male also causes one to question whether the specimen in the U.S. National Museum is, in fact, the type. Another curious fact would seem to raise a question as

to the authenticity of the "Houston, Texas" locality label on the specimen and the type locality "Colorado" cited in the original description. The specimens in the collection of the U.S. National Museum are from the desert regions of Oregon, California, Nevada, and Arizona. One specimen from the Barnes collection is labeled "Colorado [machine printed], desert [in longhand]." This label may refer to a desert in Colorado, but I am inclined to believe that it refers to the Colorado desert of southeastern California. Perhaps Smith had a similarly labeled specimen before him at the time of the original description. Fortunately the pattern of maculation is very characteristic, and Smith's description and the illustration provided by Hampson are sufficient to determine the species.

Mamestra bolteri Smith, 1900, U.S. Natl. Mus. Proc. 22(1203): 463.

Habitat.—Las Vegas, New Mexico (A. Bolter). "A single female, in excellent condition as to wings, but thorax compressed and vestiture disarranged."

Holotype.—In the U.S. National Museum. The specimen is labeled "Mamestra bolteri Smith ♀ type"; "Las Vegas, N.M."; "13"; "Type No. 5114 USNM"; "36511."

Noctua bolteri Smith, 1898, N.Y. Ent. Soc. Jour. 6: 104.

Habitat.—Las Vegas, New Mexico, July 11th. "A single female specimen was received from Mr. A. Bolter, after whom I have named this most remarkable insect."

Holotype.—In the U.S. National Museum. The specimen is labeled "Noctua bolteri Smith ♀ type"; "Las Vegas, N. M., 11/7"; "Type No. 4974 USNM"; "36511."

Eutolype bombyciformis Smith, 1892, U.S. Natl. Mus. Proc. 15: 59.

"HABITAT: Ohio; Illinois; Missouri." "Four specimens are in the Museum collection (collections of C. V. R., J. B. S., and Acc. 20395), one of them marked No. 490, March 11, 1874, from the Riley collection."

Smith (1893, U.S. Natl. Mus. Bul. 44, p. 112) stated: "The type is in the U.S. National Museum."

Syntypes examined: 4 (USNM)

- (1) "Eutolype bombyciformis Smith Type"; "O."; "Type No. 144 U.S.N.M." [A ♂, valves of genitalia missing]
- (2) "Eutolype bombyciformis Smith Type"; "O."; "Type No. 144 U.S.N.M." [A ♀, abdomen missing]
- (3) "Eutolype bombyciformis Smith Type"; "Ill."; "Type No. 144 U.S.N.M." [A ♀]
- (4) "Eutolype bombyciformis Smith Type"; "490, March 11/74"; "Prob. N. Gen., Gr. 174" [A ♂]

Discussion.—The last listed specimen is the one from the Riley collection as mentioned in the original description, and by elimination it must be the one from Missouri even if not so labeled. I cannot explain why the other specimens bear a USNM type number and that one does not. Because the Riley specimen from

Missouri is the only complete male specimen and bears a date of capture, it has been selected, labeled, and is now designated the lectotype.

Pleroma bonuscula Smith, 1898, Canad. Ent. 30: 325.

Habitat.—Glenwood Springs, Colo., in March; Dr. Barnes. "Three male specimens are under examination and they agree closely; one of them quite perfect, and were taken at the electric lights." Smith (1903, Amer. Ent. Soc. Trans. 29(3): pl. 3, fig. 9) figured what he stated was the male valve of this species.

Syntypes examined: 3 (2 USNM and 1 AMNH)

- (1) "Pleroma bonuscula Smith ♂ type"; "Glenwood Springs, Col., 1895-3, W. Barnes"; "Type No. 4164, U.S.N.M."; "Acc. 4638" [Good condition except valves of genitalia missing] [USNM]
- (2) "Pleroma bonuscula Smith cotype"; same data except no accession number [A ♂, fair condition, bases of wings rubbed, abdomen greasy, complete] [USNM]
- (3) "Pleroma bonuscula Smith cotype"; "Glenwood Springs, Col., 1895-3, W. Barnes"; "J. B. Smith Collection, Rutgers" [A ♂] [AMNH]

Discussion.—Rindge (1955, p. 103) listed two "cotypes," both males that were received from the Rutgers College collection. One of these must be considered a spurious type as the date "April 16-23" is not cited by Smith and because the entire type-series has been accounted for by the three syntypes listed here. The "cotype" in the U.S. National Museum has been selected, labeled, and is now designated the lectotype. The genitalia of this syntype are complete if a detailed examination of those structures should be necessary in the future.

Asteroscopus borealis Smith, 1899, Canad. Ent. 31: 25.

Habitat: Cartwright, Manitoba. "A single male specimen, donated by Mr. Heath to the U.S. National Museum, where it is marked Type 4107!"

Holotype.—In the collection of the U.S. National Museum. The specimen is labeled "Asteroscopus borealis Smith ♂ type"; "147"; "184"; "Type No. 4107 USNM"; "♂ genitalia on slide 1378 J.G.F."

Copipanolis borealis Smith, 1892, U.S. Natl. Mus. Proc. 15: 62.

"HABITAT: Minnesota (St. Anthony Park), April 7, 1889." "Of this remarkable species, a single male specimen from Mr. Schoenborn's collection, taken by Mr. O. Luger, is before me."

Smith (1893, U.S. Natl. Mus. Bul. 44, p. 112) stated: "The type is in the collection of Mr. H. Schoenborn, of Washington, D.C." Horn and Kahle (1936, Ent. Beihefte aus Berlin-Dahlem 3: 248) stated: "Schoenborn, Henry F. (1833-1896), Lepidopt. an Nation. Mus., Washington."

Holotype.—Location unknown. The Schoenborn collection was received by the U.S. National Museum

(accession 96486, May 6, 1927), but this was 31 years after Schoenborn's death. I am unable to find the holotype in this museum, and I do not know whether it was included in the accession or if it was otherwise disposed of or possibly destroyed prior to 1927.

***Helia borealis* Smith, 1884, Brooklyn Ent. Soc. Bul. 7: 5.**
"Hab. Maine, N.Y., D.C." "A rather common species, . . ."

Smith (1893, U.S. Natl. Mus. Bul. 44, p. 378) stated: "The Walker type is in the British Museum and is the same as my *borealis*, the type of which is in the National Museum." Smith considered *borealis* to be a synonym of *Epizeuxis rotundalis* (Walker). Smith (1895, U.S. Natl. Mus. Bul. 48, p. 20) made no comment about types, but placed *borealis* and *Pseudaglossa forbesii* French as junior synonyms of *rotundalis* of Walker.

Syntypes examined: No specimens with a Smith name and type label have been located.

Discussion.—Smith said this was a common species and listed three localities, so the type-series should have contained at least three but probably more specimens. None of the specimens in the U.S. National Museum under the name "*Epizeuxis rotundalis* (Walker)" are old enough to be types of *borealis*. There are two specimens in the series of *E. forbesii* (French), now considered a distinct species, that might be from the type-series of *borealis*. They are labeled "Washington, D.C."; "20/8 '84"; "A. Koebele, Collector"; "♀ genitalia no. 7, 21 Dec. '29, C. H."; "Washington, D.C."; "28/8 '84"; "C. V. Riley Collection"; "♀ genitalia no. 2, 22 Jan. 30, C. H." The next reviser of the genus will have to decide whether the original description was based on specimens of *rotundalis*, *forbesii*, or both if definite syntype material is not subsequently located.

***Chorizagrotis boretha* Smith, 1908, N.Y. Ent. Soc. Jour. 16: 86.**

"Habitat.—Kaslo, B.C., August and September, Mr. Cockle." "Three males and one female, none of them very good, . . ."

Lectotype.—The specimen in the U.S. National Museum labeled "♀ type" was selected as the lectotype by Todd (1968, Wash. Ent. Soc. Proc. 70(3): 268).

***Taeniocampa bostura* Smith, 1908, N.Y. Acad. Sci. Ann. 18(2): 103.**

"Habitat: Kaslo, B.C." "One male, in good condition; from Dr. James Fletcher." "It is Dr. Fletcher's No. 168."

Holotype.—In the American Museum of Natural History. The specimen is labeled "*Taeniocampa bostura* Smith ♂ type"; "Kaslo, B.C. (Cockle)"; "J. B. Smith Collection Rutgers."

***Agrotis brevipennis* Smith, 1888, U.S. Natl. Mus. Proc. 10: 455.**

"Habitat.—California, Colorado, Nevada." "Types ♂ and ♀ in collections A. W. P. Cramer and B. Neumoegen."

Smith (1890, U.S. Natl. Mus. Bul. 38, p. 140) added:

"There are several specimens in the collection of the U.S. National Museum, taken by Mr. Bruce in Colorado."

Smith (1893, U.S. Natl. Mus. Bul. 44, p. 89) stated: "Types are in the National Museum collection and with Mr. Neumoegen."

Syntypes examined: 3 (USNM)

- (1) "*Agrotis brevipennis* Smith type"; "Col. B. Neumoegen"; "Type No. 33734 U.S.N.M."; "Nevada"; "♂ genitalia on slide 2165, ELT" [Genitalia mutilated, left valve, uncus, juxta, and part of right sacculus missing, apex of aedeagus damaged; condition of specimen only fair, wings somewhat rubbed and faded]
- (2) "*Agrotis brevipennis* Smith Type"; "Colo. Bruce"; "Col. Jacob Doll"; "Barnes collection"; "♂ genitalia on slide 2166, ELT" [Good condition, genitalia complete]
- (3) "*brevipennis* Sm."; "Havilah, California"; "Edwards"; "Collection J. B. Smith"; "Type No. 105 U.S.N.M."; "♂ genitalia on slide 2167, ELT" [Good condition, genitalia complete]

Discussion.—The information available from publications about this species and from data labels on the syntypes is very confusing. The number of specimens in the type-series is unknown, but Smith indicated that he had both sexes. If he was correct, then at least one female syntype has not been located. In the original description Smith stated that types were in the collections of A. W. P. Cramer and B. Neumoegen. This statement requires several comments.

First, if interpreted strictly, one would assume that the type material was to be placed in the collections of A. W. P. Cramer and B. Neumoegen. It may be that Smith actually deposited the type material in the two named collections, but it is also possible that his original intention was not fulfilled during the long period on which work on the genus proceeded (see comments in the introduction of Smith's 1890 paper, pp. 7 and 8). In 1890, Smith eliminated the statement about types being in the Cramer and Neumoegen collections and added the comment that there was a series of specimens from Colorado collected by Bruce in the U.S. National Museum. In 1893, he stated that types were in the U.S. National Museum and the Neumoegen collection! Cramer is mentioned again by Smith in the 1888 paper on page 466 in the description of *Mamestra vau-media* Smith: "The type is with Mr. Cramer, and was collected by Mr. Bruce." The unique specimen was from Colorado. Accordingly, it seems likely that the Cramer specimen or specimens may have been also from that locality. It, therefore, seems likely that the syntype of *brevipennis* from Colorado may have been one from Cramer. It is possible that Cramer received the specimens from Doll originally. The syntype does bear the label "Col. Jacob Doll."

The type of *vau-media* may have also been so labeled because Smith in 1893 said of that type, "The type is with Mr. J. Doll." I have been unable to learn much about Cramer's collection, but a specimen identified as

vau-media in the U.S. National Museum from Calgary, Canada, bears a note: "Doll never heard of *vau-media*, but Smith said: type with Cramer so it ought to be in the Barnes coll." This would appear to explain the "Barnes collection" label on the syntype of *brevipennis* and support the belief that Cramer may have received the specimen from Doll prior to sending it to Smith for study.

The third specimen listed as a syntype here is not labeled as a type, but it is listed in the type book of the U.S. National Museum as having been received from Smith as a type of *brevipennis*. It was entered in the book on June 18, 1896, the first year types were so recorded, but there is no indication when the specimen was received from Smith. It could have been placed there as early as 1887. Smith explained in the introduction of the 1890 paper that his collection formed to the mid-1880's was deposited in the U.S. National Museum. That action must have preceded the completion of the manuscript of the 1888 paper (published January 6, 1888) that Smith refers to as 1887. In that paper, material of three descriptions based on material from his collection is indicated to be in the U.S. National Museum. An example is *Taeniocampa utahensis* Smith, page 473, "A single ♂ specimen from the late Capt. D. H. Murdock, U.S. Army, in my collection. (Coll. U.S.N.M.)" In 1890, Smith (Amer. Ent. Soc. Trans. 17: 58) stated: "Since the mss. of the above descriptions was handed in, I have deposited a series of types in the collection U.S. National Museum, . . ." This was his second in a series of four groups of new species described as a result of his studies on *Agrotis* and its relatives. He continued to send type material of his various noctuid descriptions to the U.S. National Museum until about 1905 so the syntype of *brevipennis* from California could have been received even up to January 17, 1896.

I believe that the syntypes from Nevada and Colorado represent the same species, but I suspect that the specimen from California may be another species. The wings are shorter and the male genitalia do not seem to be the same. I have selected the male from Colorado as the lectotype and it has been so labeled. It is in much better condition than the syntype from Nevada and the genitalia are complete.

***Euxoa brevistriga* Smith, 1910, Amer. Ent. Soc. Trans. 36(3): 257.**

Hab.—Colorado, probably near Denver. "I have two males, in good condition, collected years ago by Mr. David Bruce."

Syntypes examined: 2 (AMNH)

- (1) "*Euxoa brevistriga* Smith ♂ type"; "65 Colo."; "Colo., Bruce"; "J. B. Smith Collection, Rutgers"
- (2) "*Euxoa brevistriga* Smith Paratype"; "Col."; "J. B. Smith Collection, Rutgers" [A ♂]

Discussion.—The "♂ type" has been selected, labeled, and is now designated the lectotype.

***Calocampa brucei* Smith, 1892, Ent. News 3(10): 252, pl. 10, row 2, fig. 2.**

Hab.—Colorado, Bruce, ♂ and ♀."

Smith (1893, U.S. Natl. Mus. Bul. 44, p. 236) stated: "The types are in the National Museum and in the Rutgers College collection."

Smith (1894, Amer. Ent. Soc. Trans. 21:82, pl. 10, row 2, fig. 2) again described this as new and using the same plate. He stated: "Mr. Bruce has, however, taken a number of specimens at high elevations, all of them alike, and has convinced me that we have to do with a good species, which I take great pleasure in dedicating to him."

Syntypes examined: 2 (USNM and AMNH)

- (1) "*Calocampa brucei* Smith Type"; "Colo. Bruce"; "112"; "Type No. 264, U.S.N.M." [A ♀, good condition] [USNM]
- (2) "*Calocampa brucei* Smith Type"; "Colo., Bruce"; "Collection J. B. Smith" [A ♂, abdomen glued on, valve of genitalia broken] [AMNH]

Discussion.—It is not clear from the comment in the original description whether Smith meant that he had only one pair of specimens or whether he had specimens of both sexes. Only one pair of syntypes has been located, but in the second description Smith indicated that Bruce had taken a number of specimens. Furthermore, neither of the two syntypes examined appears to be the specimen illustrated by Smith on the original plate. The male syntype in the American Museum of Natural History is not as good a specimen as the female syntype in the U.S. National Museum. Therefore, the latter syntype has been selected, labeled, and is now designated the lectotype.

***Rancora brucei* Smith, 1903, Canad. Ent. 35(5): 136, pl. 4, fig. 15 (♂ valve).**

Habitat.—Garfield County, Colorado, 6,000 feet; David Bruce. "One good male received some years ago."

Holotype.—In the American Museum of Natural History. The specimen is labeled "*Rancora brucei* Smith ♂ type"; "Garfield Co., Colo., 6000 ft., Bruce"; "Colo. Bruce"; "Collection J. B. Smith."

***Schinia brucei* Smith, 1891, Amer. Ent. Soc. Trans. 18: 125.**

Hab.—Colorado (Bruce). "I have seen quite a number of this species, and four good specimens are in the Museum collection."

Smith (1893, U.S. Natl. Mus. Bul. 44: 278) stated: "Types are in the National Museum and in the Rutgers College collection."

Syntypes examined: 5 (USNM)

- (1) "*Schinia brucei* Smith Type"; "Colo. Bruce"; "242"; "Collection J. B. Smith"; "Type No. 289 U.S.N.M." [A ♂]
- (2) "*Schinia brucei* Smith Type"; "Colo. Bruce"; "Type No. 289 U.S.N.M."; "♂ genitalia on slide 1387, JFGC"
- (3) "*Schinia brucei* Smith Type"; "Colo. Bruce"; "Type No. 289 U.S.N.M."; "36511" [A ♀]
- (4) "*Schinia brucei* Smith Type"; "Colo."

Bruce"; "Type No. 289 U.S.N.M."; "♀ genitalia on slide 1390, JFGC"

- (5) "*Schinia brucei* Smith Type"; "Colo. Bruce"; "type No. 289 U.S.N.M." [A ♀]

Discussion.—Smith did not indicate exactly how many specimens he studied, but only five labeled as types have been located. All are in the U.S. National Museum and that collection also has other specimens from Colorado collected by Bruce. In the original description Smith indicated there were four good specimens in the museum [U.S. National Museum] and later, 1893, stated that types were in that institution and in the Rutgers College collection. Rindge, 1955, did not list any specimens of this species received from Rutgers College. It may be that Smith intended to retain one of the five now in the U.S. National Museum for the Rutgers collection, but neglected to do so. If so, I do not know which specimen. One specimen differs from the others in that the pin bears the label "Collection J. B. Smith" and another specimen bears the label "36511," an accession number, not found on the other specimens. I have selected, labeled, and now designate the male syntype from which genitalia slide 1387, JFGC, was prepared as the lectotype.

***Taeniocampa brucei* Smith, 1910, Canad. Ent. 42(10): 319, pl. 8, fig. 2.**

"An intensification of this type [*instabilis* Fitch] occurs in Colorado, and may be known as *Brucei*." "Only two examples of this form are at hand: The male from Denver, Colorado, IV, 20; the female from Garfield Co., Colorado, 6,000 feet (David Bruce)." On page 323 Smith listed this as a distinct species "*T. Brucei* Smith."

Syntypes examined: 2 (AMNH and USNM)

- (1) "*Taeniocampa brucei* Smith ♂ type"; "Denver, Col., IV, 20"; "Collection J. B. Smith"; "♂ Genitalia mounted on slide by Smith" [Rindge label] [A ♂, abdomen gone] [AMNH]
(2) "*Taeniocampa brucei* Smith ♀ type"; "Colo. Bruce"; "Garfield Co., Colo., 6000 ft."; "Barnes collection" [USNM]

Discussion.—The genitalia slide in the American Museum of Natural History made from the male syntype is better prepared than most of Smith's slides, and the mount is of the complete male genitalia. It obviously was used to prepare the illustration of the genitalia in the original paper; therefore, the "♂ type" has been selected, labeled, and is now designated the lectotype.

***Hyppa brunneicrista* Smith, 1902, Canad. Ent. 34(2): 31.**

Habitat.—Calgary, Alberta, Head of Pine Creek, June 19, 22, July 2; F. H. Wolley Dod. "One male and two females are now before me, and Mr. Dod has as many more."

Syntypes examined: 2 (AMNH)

- (1) "*Hyppa brunneicrista* Smith ♂ type"; "Calgary, Alta., 22.vi.98, F. H. Wolley Dod"; "Head of Pine Creek"; "J. B. Smith Collection, Rutgers" [Left valve of genitalia missing]

- (2) "*Hyppa brunneicrista* Smith ♀ type"; same data as "♂ type" except date "2.vii.99"

Other syntypes: 1 (CNC)

- (1) "*Hyppa brunneicrista* Smith ♀ cotype"; "Calgary, Alta., 19.vi.98, F. H. Wolley Dod"; "Head of Pine Creek"; "#978"

Discussion.—There is a Smith slide in the American Museum of Natural History of the left valve of the male genitalia. The "♂ type" has been selected, labeled, and is now designated the lectotype.

***Hadena bultata* Smith, 1906, Canad. Ent. 38(7): 228.**

Habitat.—Glenwood Springs, Colorado, end of June and early July. Dr. Barnes. "Two males and two females in fair condition."

Syntypes examined: 4 (2 AMNH and 2 USNM)

- (1) "*Hadena bultata* Smith ♂ type"; "Glenwood Spgs., Colo."; "July 16-23"; "J. B. Smith Collection, Rutgers" [AMNH]
(2) "*Hadena bultata* Smith ♀ type"; "Glenwood Spgs., Colo."; "July 16-23"; "J. B. Smith Collection, Rutgers" [AMNH]
(3) "*Hadena bultata* Smith ♂ cotype"; "Glenwood Spgs., Colo."; "♂ genitalia on slide 141, JFGC"; "Barnes collection" [USNM]
(4) "*Hadena bultata* Smith ♀ cotype"; "Glenwood Spgs., Colo."; "June 24-30"; "♀ genitalia on slide 142, JFGC" [USNM]

Discussion.—The specimen in the American Museum of Natural History labeled "♂ type" has been selected, labeled, and is now designated the lectotype.

***Schinia buta* Smith, 1907, Amer. Ent. Soc. Trans. 33: 131.**

Hab.—Los Angeles County, California. "One good male."

Holotype.—In the American Museum of Natural History. The specimen is labeled "*Schinia buta* Smith ♂ type"; "Los Angeles Co., Cal."; "J. B. Smith Collection Rutgers."

***Acontia cacola* Smith, 1907, Amer. Ent. Soc. Trans. 33: 141.**

Hab.—Southern Arizona, August 15th, Poling; New Mexico, Hot Springs, alt. 7000 feet, August, Hulst; New Mexico, No. 800, Cockerell. "Five male specimens, all in fair or good condition."

Syntypes examined: 4 (3 AMNH and 1 USNM)

- (1) "*Acontia cacola* Smith ♂ type"; "So. Ariz., VIII-15"; "J. B. Smith Collection, Rutgers"; "♂ Genitalia mounted on slide no. 10,344, FHR." [Good condition] [AMNH]
(2) "*Acontia cacola* Smith cotype"; "Ck11. 800."; "Collection J. B. Smith" [A ♂, fair condition, complete] [AMNH]
(3) "*Acontia cacola* Smith ♂ cotype"; "So. Arizona, Poling"; "J. B. Smith Collection, Rutgers" [Fair condition, complete] [AMNH]
(4) "*Acontia cacola* Smith cotype"; "Hot Springs, N. Mex., 7000 ft. alt."; "Collection G. D. Hulst" [A ♂, abdomen missing] [USNM]

Discussion.—One syntype has not been located. The "♂ type" in the American Museum of Natural History has been selected, labeled, and is now designated the lectotype.

Acronycta caesarea Smith, 1905, N.Y. Ent. Soc. Jour. 13(4): 191.

"*Habitat.*—Essex County Park, N.J., May 20." "One good male from Mr. W. D. Kearfott."

Holotype.—In the American Museum of Natural History. The specimen is labeled "Acronycta caesarea Smith ♂ type"; "Essex County Park, N.J., May 20, W. D. Kearfott"; "J. B. Smith Collection Rutgers."

Carneades caesius Smith, 1900, U.S. Natl. Mus. Proc. 22(1203): 457.

"*Habitat.*—Middle California (Dr. Barnes)." "A single female of this bright little species."

Holotype.—In the U.S. National Museum. The specimen is labeled "Carneades caesius Smith ♀ type"; "Middle Cal."; "Type No. 5150 USNM"; "36511"; "170."

Leucania calgariana Smith, 1902, U.S. Natl. Mus. Proc. 25(1283): 201, pl. 6, fig. 23.

"*Habitat.*—Calgary, Alberta, June 20 to July 28 (F. H. Wolley Dod)." "Ten examples, all from Mr. Dod and all in good condition." "*Type.*—No. 6243, U.S.N.M."

Syntypes examined: 6 (4 USNM and 2 AMNH)

- (1) "Leucania calgariana Smith ♂ type"; "Calgary, Can."; "Type No. 6243, U.S.N.M."; "8/VII/96"; "♂ Genitalia slide: USNM 566. J. G. Franclemont" [Good condition except left valve of genitalia missing] [USNM]
- (2) "Leucania calgariana Smith ♀ type"; "Calgary, Can."; "Type No. 6243, U.S.N.M."; "12/VII/97"; "♀ Genitalia slide: USNM 575, J. G. Franclemont" [USNM]
- (3) "Leucania calgariana Smith cotype"; "Head of Pine Creek"; "Calgary, 22/VII/98, F. H. W. Dod"; "Photograph Pl. 7, No. 1"; "Barnes collection" [A ♀] [USNM]
- (4) "Leucania calgariana Smith cotype"; "Head of Pine Creek"; "3/VII/96, Calgary, Alta., F. H. Wolley Dod"; "Barnes collection" [A ♂] [USNM]
- (5) "Leucania calgariana Smith cotype"; "Head of Pine Creek, Calgary, Alta., 25/VII/97, F. H. Wolley Dod"; "J. B. Smith Collection, Rutgers" [A ♂] [AMNH]
- (6) "Leucania calgariana Smith cotype"; same except "15/VII/96" [A ♀] [AMNH]

Other syntypes: 2 (CNC)

- (1) "Leucania calgariana Smith cotype"; "Calgary, Alta., 1-VII-97, F. H. Wolley Dod"; "head of Pine Creek" [A ♀]
- (2) "Leucania calgariana Smith cotype"; "Calgary, Alta., 18-VII-96, F. H. Wolley Dod"; "Head of Pine Creek"; "#947" [A ♀]

Discussion.—Only two syntypes in the U.S. National Museum bear the USNM type number 6243 listed in the original description. They are the "♂ type" and

"♀ type." The genitalia slide of the "♂ type" has the left valve missing, and it must be the valve illustrated by Smith on plate 6, figure 23. Accordingly, the "♂ type" in the U.S. National Museum has been selected, labeled, and is now designated the lectotype.

Noctua calgary Smith, 1898, N.Y. Ent. Soc. Jour. 6: 101, pl. 7, fig. 5.

"At various times Mr. F. H. Wolley Dod has been sending me examples which I have not been satisfied to place with either *rubifera* or *rosaria*, but named *rosaria*, I think." "The recent receipt of specimens bringing the number up to three males and one female—a much better series was unfortunately ruined in sending—makes it possible for me to decide that we have a new species to deal with." "The dates given are in June and July and one specimen is marked bred from larva beaten from sallows at night." Smith did not give a locality, but because the material was from Dod and named *calgary*, it is assumed the specimens were from Calgary, Canada.

Syntypes examined: 3 (2 USNM and 1 AMNH)

- (1) "Noctua calgary Smith ♂ type"; "Calgary, Bred 7/vi/94, Larva beaten from Sallows at night, 9"; "Type No. 4166 U.S.N.M."; "Accession no. 34638" [Left valve of genitalia broken] [USNM]
- (2) "Noctua calgary Smith ♀ type"; "Calgary, Can., 2/vii/95"; "Type No. 4166 U.S.N.M."; "36511" [Abdomen missing] [USNM]
- (3) "Noctua calgary Smith ♂ type"; "Calgary"; "26.6.95"; "Collection J. B. Smith" [Both valves of genitalia missing] [AMNH]

Discussion.—Smith illustrated a valve of the male genitalia, but it is not known from which specimen the drawing was made. It appears to be the left valve that is illustrated, but the drawing may be a reversal as other illustrations of Smith are known to be. There is a genitalia slide of Smith's in the American Museum of Natural History. It contains the broken pieces of a right valve. The syntype in that institution lacks both valves, so the slide could have been prepared from that specimen. It also might have been prepared from the missing syntype or even one of the specimens Smith reported as being ruined in shipment, or it may have been prepared subsequently from some other specimen. We do not, in fact, know that the valve from which Smith made the drawing was even mounted on a permanent slide. In view of such considerations, I have selected, labeled, and now designate the "♂ type" in the U.S. National Museum as the lectotype. It still has the right valve intact and I believe that it is the specimen that Smith intended to be marked "♂ type."

It is clear from studying other species described in the same paper that all the names applying to more than a single specimen have specimens marked as cotypes indicating that the "♂ type" label on one of the two in this species must be an error. I believe the erroneous label is the one on the specimen in the American Museum of Natural History based on the following facts: The specimens marked "♂ type" and/or "♀ type"

of the other species described by Smith in the same paper—*Noctua inopinatus* Smith, *N. exuberans* Smith, *N. bolteri* Smith, *N. plebeia* Smith, and *Setagrotis elata* Smith—are all in the U.S. National Museum. The "♂ types" of *exuberans*, *plebeia*, and *elata* were entered in the type book at the same time as the "♂ type" of *calgary* on February 3, 1899, and accessioned on the following day under number 34638. There was type material of 24 other species of Smith in this accession. The "♂ type" of *inopinatus* and the "♀ types" of all six species were received later and accessioned on May 9, 1900, under accession number 36511.

Orrhodia californica Smith, 1891, Amer. Ent. Soc. Trans. 18: 112.

"*Hab.*—Sierra Nevada, Cal." "a single male from Mr. Edwards' collection with 'brush-like' antennae." Smith (1893, U.S. Natl. Mus. Bul. 44, p. 223) stated: "The type is in the National Museum."

Holotype.—In the U.S. National Museum. The specimen is labeled "Orrhodia californica Smith Type"; "Sier. Nev., Cal."; "Edw."; "Acc. 25975 USNM"; "Type No. 255 USNM." It is a male.

Leucania calpota Smith, 1908, N.Y. Ent. Soc. Jour. 16: 95.

"*Habitat*.—Harris County, Texas, no date; collector unknown." "Fifteen males and three females mostly in at least fair condition."

Barnes and McDunnough (1913, Contrib. Nat. Hist. Lepidoptera N. Amer. 2(1): 16, pl. 7, fig. 5) illustrated "♂ Cotype, Harris Co., Tex."

Syntypes examined: 13 (9 AMNH and 4 USNM)

- (1) "Leucania calpota Smith ♂ type"; "Harris Co., Tex."; "J. B. Smith Collection, Rutgers" [Fairly good, complete] [AMNH]
- (2) "Leucania calpota Smith ♀ type"; same data [AMNH]
- (3-8) "Leucania calpota Smith ♂ cotype"; same data [6 ♂♂] [AMNH]
- (9) "Leucania calpota Smith ♀ cotype"; same data [AMNH]
- (10) "Leucania calpota Smith cotype ♂"; "Harris Co., Tex."; "Photograph Pl. 7, No. 5"; "Barnes Collection"; "♂ genitalia on slide #613, Sept. 21, 1936, J.F.G.C." [Good condition] [USNM]
- (11) "Leucania calpota Smith ♀ cotype"; "Harris Co., Tex."; "♀ genitalia on slide #614, Sept. 21, 1936, J.F.G.C."; "Barnes Collection" [USNM]
- (12-13) "Leucania calpota Smith cotype ♂"; "Harris Co., Tex."; "Barnes Collection" [2 ♂♂] [USNM]

Discussion.—Five male syntypes have not been located. In most of the species of this genus the pattern of maculation of the wings is not of great value in the recognition of species. For that reason the "♂ cotype" photographed by Barnes and McDunnough has not been given special consideration as a lectotype candidate. The "♂ type" in the American Museum of Natural

History has been selected, labeled, and is now designated the lectotype.

Eupanychis camina Smith, 1906, N.Y. Ent. Soc. Jour. 14: 28.

"*Habitat*.—Hampton, New Hampshire, Weed and Fiske, No. 2164." "One female specimen in fair condition."

Holotype.—In the American Museum of Natural History. The specimen is labeled "Eupanychis camina Smith ♀ type"; "Hampton, N.H., 2164, W & F"; "J. B. Smith Collection Rutgers."

Platyperigea camina Smith, 1894, Amer. Ent. Soc. Trans. 21: 60, pl. 6, fig. 9.

"*Hab.*—Colorado; Bruce, Nos. 27, 204." "Both sexes are represented in the three specimens that are now before me, and both sexes are also in other collections in which I have given the MS name here used."

Syntypes examined: 3 (2 USNM and 1 AMNH)

- (1) "Platyperigea camina Smith Type"; "Colo., Bruce"; "36511"; "Type No. 178 U.S.N.M." [A ♂] [USNM]
- (2) "Platyperigea camina Smith ♂ type"; "Colo., Bruce"; "204"; "Type No. 178 U.S.N.M." [A ♂] [USNM]
- (3) "Platyperigea camina Smith ♂ type"; "Colo. Bruce"; "Collection J. B. Smith" [A ♂, abdomen missing] [AMNH]

Discussion.—The two syntypes from the U.S. National Museum are authentic; the one marked "Type" is the specimen figured by Smith and the other bears the Bruce No. 204. The specimen in the American Museum of Natural History may not be one of the three mentioned by Smith in the original description. If authentic, Smith erred in stating he had both sexes; in addition, the label bearing the Bruce No. 27 is missing. There is one other specimen in the U.S. National Museum with the "Colo. Bruce" label, and it has a label "Platyperigea camina Smith" in Smith's handwriting. It could be one of the specimens labeled by Smith before the description, but the determination may have been made subsequent to it as well. The specimen marked "Type" has the name label bordered with black lines, and the specimens marked "♂ type" have labels bordered with red lines. Because of these differences, I believe that Smith probably received the latter at a later date than the one marked "Type." The specimen marked "Type" that was figured by Smith has been selected, labeled, and is now designated the lectotype.

Hypenua caminalis Smith, 1905, Canad. Ent. 37: 70.

"*HABITAT*: Cochise County, Arizona, June and July." "Two males and seven females; all in rather poor condition, from Mr. George Franck."

Syntypes examined: 8 (2 AMNH, 5 USNM, and 1 KU)

- (1) "Hypenua caminalis Smith ♂ type"; "Cochise Co., Ariz., VII"; "J. B. Smith Collection, Rutgers" [Abdomen missing, very poor condition] [AMNH]
- (2) "Hypenua caminalis Smith ♀ type"; "Co-

chise Co., Ariz., VII"; "J. B. Smith Collection, Rutgers" [Fair condition, complete] [AMNH]

- (3) "Hypenula caminalis Smith ♀ cotype"; "Acc. 10142"; "Coll. Brklyn. Mus." [A ♂, in series of *Bomolocha vega* Smith, a different species than rest of *caminalis* syntypes!] [USNM]
- (4) "Hypenula caminalis Smith ♂ cotype"; "Acc. 10142"; "Cochise Co., Ariz, July"; "Collection Brklyn Mus."; "Type No. 34151 U.S.N.M." [A ♀!] [USNM]
- (5) "Hypenula caminalis Smith ♀ cotype"; "Collection Dr. H. G. Dyar"; "Type No. 9764 U.S.N.M."; "Cochise Co., Ariz, July" [USNM]
- (6) "Hypenula caminalis Smith ♀ cotype"; "Cochise Co., Ariz, July" [Abdomen in capsule on pin] [USNM]
- (7) "Hypenula caminalis Smith ♀ cotype"; "Cochise Co., Ariz., July"; "Oberthur Collection" [USNM]
- (8) "Hypenula caminalis Smith ♀ cotype"; "Cochise Co., June 2, 1904" [Very poor condition] [KU]

Discussion.—One syntype, presumably a female, has not been located. The two male syntypes are very poor candidates for lectotype selection. The syntype marked "♂ type" lacks an abdomen and is in very poor condition. The other male is a different species than the other syntypes and bears a "♀ cotype" label. Smith either misjudged the sex of the two specimens or placed the wrong labels on two specimens; or there has been some subsequent mixup of labels. In the absence of a good male candidate for lectotype, the specimen marked "♀ type" in the American Museum of Natural History has been selected, labeled, and is now designated the lectotype.

***Phurys campanilis* Smith, 1905, Canad. Ent. 37: 68.**

"HABITAT: Chokaloskee, Florida." "One male, in good condition, from Mr. George Franck."

Holotype.—In the American Museum of Natural History. The specimen is labeled "Phurys campanilis Smith ♂ type"; "Chokal., Fla."; "J. B. Smith Collection Rutgers."

***Acronycta insita* var. *canadensis* Smith, 1898, U.S. Natl. Mus. Proc. 21(1140): 57.**

"I have two other specimens which may belong to this species, but differ very decidedly in ground color by being very much darker and having the secondaries more powdery. The maculation is the same, however, and as both my specimens are females, I do not feel justified in giving the form a name. One of the specimens is from 'Murray Bay, Province of Quebec, July or August, E. Corning, jr.' The other is from Calgary, Canada, June 25. In case further material proves this form a distinct one, I would propose the term *canadensis*, which may be applied for the present as a varietal term."

Syntypes examined: 1 (USNM)

- (1) "*Acronycta insita* var. *canadensis* Smith ♀ type"; "122"; "Calgary, 25/vii/95, Treacle"; "Type No. 4969 U.S.N.M."; "36511"

Other syntypes: 1 (N.Y. State Museum, Albany)

- (1) "*Ainsita* ♀ var. *canadensis* cotype Smith"; "Murray Bay, Prov. of Quebec"; "July or Aug. 1878"; "E. Corning, jr. Coll." [♀ worn, split hindwing, but whole]

Discussion.—The "♀ type" in the U.S. National Museum has been selected, labeled, and is now designated the lectotype.

***Mamestra canadensis* Smith, 1888, U.S. Natl. Mus.**

Proc. 10: 464.

Habitat.—New Brunswick." "A single specimen, not perfect, from Mr. Thaxter, marked July 27, 1871."

Smith (1892, U.S. Natl. Mus. Proc. 14: 222, pl. 8, fig. 21) figured the "harpe" and "clasper" of the male genitalia.

Smith (1893, U.S. Natl. Mus. Bul. 44, p. 118) stated: "The type is with Mr. Thaxter."

Holotype.—Presumably in the collection of the Museum of Comparative Zoology, Harvard College, Cambridge, Mass. Thaxter's collection was deposited in that institution.

***Carneades candida* Smith, 1894, Amer. Ent. Soc. Trans.**

21: 49, pl. 3, fig. 4.

Hab.—Boulder, Mont." "Mr. Schoenborn has both sexes, taken by Mr. Titus Ulke."

Syntypes examined: 1 (USNM)

- (1) "*Carneades candida* Smith Type"; "Mont."; "Boulder, Mont., Titus Ulke, '92"; "Type No. 138 U.S.N.M."; "♂ genitalia on slide 2195, ELT" [This is specimen figured by Smith]

Discussion.—It seems likely that this specimen is the only one that Smith had. He stated that Schoenborn had both sexes, but he did not state that he had studied them, and it is possible that the one male was given to him for study and naming and that Schoenborn informed him that he had others. If the ones in the Schoenborn collection were examined and labeled by Smith, I have not found them. The Schoenborn collection that survived came to the U.S. National Museum many years later. Smith did not return the known syntype to Schoenborn and deposited it in this museum shortly after the description. It was entered in the type book early in 1896. The specimen in the U.S. National Museum is the one illustrated by Smith, and it may be a holotype, but to insure that it is the type-specimen, I have labeled it and now designate it as the lectotype.

***Homohadena candida* Smith, 1900, U.S. Natl. Mus.**

Proc. 22(1203): 478.

Habitat.—Beeville, Texas, May 13 (E. A. Schwarz.).

"A single female, which . . ." "Type.—Cat. No. 4814, U.S.N.M."

Holotype.—In the U.S. National Museum. The specimen is labeled "*Homohadena candida* Smith ♀ type"; "Beeville, Tex., 5/13"; "E. A. Schwarz"; "Type No. 4814 USNM."

Xylomiges candida Smith, 1894, Amer. Ent. Soc. Trans. 21: 79, pl. 5, fig. 1.

"*Hab.*—Vancouver." "A single perfect male, from Mr. Neumoegen's collection."

Holotype.—In the U.S. National Museum. The specimen is labeled "Xylomiges candida Smith ♂ type"; "Victoria, B.C."; "Col. B. Neumoegen"; "Type No. 33840 USNM."

Pseudacontia cansa Smith, 1908, N.Y. Acad. Sci. Ann. 18(2): 119.

"*Habitat*.—Hamilton County, Kansas, 3500 feet (Professor F. H. Snow)." "One male and two females, in fair condition."

Hampson (1910, Catalogue of the Lepidoptera Phalaenae in the Collection of the British Museum, v. 9, p. 491, pl. 148, fig. 28) stated: "This species is unknown to me, figured from a drawing from type in Coll. J. B. Smith." The explanation for figure 28, plate 148, reads: "28. *Pseudacontia cansa* ♂ Vol. IX, p. 491 Kansas."

Syntypes examined: 3 (2 AMNH and 1 USNM)

- (1) "*Pseudacontia cansa* Smith ♂ type"; "Hamilton Co., Ks., 3350 ft. F. H. Snow"; "J. B. Smith Collection, Rutgers" [AMNH]
- (2) "*Pseudacontia cansa* Smith ♀ type"; "Hamilton Co., Ks., 3350 ft."; "J. B. Smith Collection, Rutgers" [AMNH]
- (3) "*Pseudacontia cansa* Smith ♀ cotype"; "Hamilton Co., Kans., 3350 ft., F. H. Snow" [Abdomen missing] [USNM]

Discussion.—The specimen marked "♂ type" in the American Museum of Natural History, the only male and the specimen from which the drawing illustrated by Hampton was prepared, has been selected, labeled, and is now designated the lectotype.

Euxoa capota Smith, 1908, N.Y. Acad. Sci. Ann. 18(2): 98.

"*Habitat*: Palmerly, Cochise County, Arizona, July and August." "Eight examples, mostly in good condition, all very much alike and all females."

Syntypes examined: 8 (6 USNM and 2 AMNH)

- (1) "*Euxoa capota* Smith ♀ type"; "Palmerly, Cochise Co., Ariz."; "Type No. 33770 U.S.N.M."; "♀ genitalia on slide 1668, JGF" [USNM]
- (2) "*Euxoa capota* Smith ♀ cotype"; "Palmerly, Cochise Co., Ariz."; "Type No. 33770 U.S.N.M."; "VIII"; "Barnes collection" [USNM]
- (3) "*Euxoa capota* Smith cotype"; "Palmerly, Cochise Co., Ariz."; "♀ genitalia on slide 1669, JGF"; "Collection Brooklyn Mus." [USNM]
- (4) "*Euxoa capota* Smith cotype"; "Palmerly, Cochise Co., Ariz."; "Collection Brooklyn Mus." [A ♀] [USNM]
- (5) "*Euxoa capota* Smith cotype"; "Palmerly, Cochise Co., Ariz."; "Collection Brooklyn Mus."; "VIII" [A ♀] [USNM]
- (6) "*Euxoa capota* Smith cotype"; "Palmerly,

Cochise Co., Ariz."; "Collection Brooklyn Mus."; "VIII" [A ♀] [USNM]

(7) "*Euxoa capota* Smith cotype"; "Palmerly, Cochise Co., Ariz."; "VII"; "J. B. Smith Collection, Rutgers" [A ♀] [AMNH]

(8) "*Euxoa capota* Smith cotype"; "Palmerly, Cochise Co., Ariz."; "VII"; "J. B. Smith Collection, Rutgers" [A ♀] [AMNH]

Discussion.—The syntype marked "♀ type" has been selected, labeled, and is now designated the lectotype.

Carneades cariosus Smith, 1900, U.S. Natl. Mus. Proc. 22(1203): 449.

"*Habitat*.—Pullman, Washington, July 18 to 24 (Piper)." "Two males and one female; the latter the largest and with a grayish shading." "*Type*.—Cat. No. 4801, U.S.N.M."

Syntypes examined: 3 (2 USNM and 1 AMNH)

- (1) "*Carneades cariosus* Smith ♂ type"; "Pullman, Wash."; "Type No. 4801 U.S.N.M."; "36311 [sic]"; "♂ genitalia on slide 2281, ELT" [USNM]
- (2) "*Carneades cariosus* Smith ♀ type"; "Pullman, Wash., 18 July 98"; "36511"; "Type No. 4801 U.S.N.M." [USNM]
- (3) "*Carneades cariosus* Smith ♂ cotype"; "Pullman, Wash., 24 July 98"; "J. B. Smith Collection, Rutgers" [AMNH]

Discussion.—The two syntypes in the U.S. National Museum have the USNM type label 4801 mentioned in the original description. D. F. Hardwick has suggested that the male be selected as lectotype rather than the female for this species. The specimen marked "♂ type" has been selected, labeled, and is now designated the lectotype.

Taeniocampa carminata Smith, 1890, Amer. Ent. 6(7): 121.

"*Hab.*—Colorado (Bruce)." "Both sexes are before me and other specimens are in collections, all from Mr. Bruce, to whose kindness I owe a number of fine species."

Smith (1893, U.S. Natl. Mus. Bul. 44, p. 202) stated: "The type is in the National Museum."

Syntypes examined: 3 (2 USNM and 1 AMNH)

- (1) "*Taeniocampa carminata* Smith ♂ type"; "Colo. Bruce"; "Collection Wm. Schaus"; "Type No. 235 U.S.N.M." [A ♂, in good condition, complete] [USNM]
- (2) "*Taeniocampa carminata* Smith Type"; "Acc. 25975"; "Type No. 235 U.S.N.M." [A ♀, in fair condition] [USNM]
- (3) "*Taeniocampa carminata* Smith Type"; "Colo. Bruce"; "Collection J. B. Smith" [A ♂, in good condition except genitalia broken] [AMNH]

Discussion.—The two syntypes in the U.S. National Museum have different kinds of name labels. The syntype marked "♂ type" has a red-bordered label and the one marked "Type" a black-bordered label. In the latter, the word "Type" seems to have been added after the name was written. It appears to have been written with

a different pen, but I think it is in Smith's handwriting. In 1893, Smith indicated *the* type was in this collection, but I have no indication as to which specimen he was referring. Accordingly, I have selected, labeled, and now designate the "♂ type" in the U.S. National Museum as the lectotype.

***Pseudotamila carminatra* Smith, 1903, Amer. Ent. Soc. Trans. 29(3): 207.**

"*Hab.*—Colorado, 6000 feet." "Two males and two females in good condition. The specimens came to me several years ago from Mr. David Bruce, but were, I think, collected by Mr. Mason."

Lectotype.—The four syntypes are all in the American Museum of Natural History. Hardwick (1958, *Canad. Ent. 90, Sup. VI, p. 85*) selected the syntype marked "♂ type" as the lectotype.

***Telesilla carneola* Smith, 1891, Amer. Ent. Soc. Trans. 18: 110.**

"*Hab.*—Las Vegas, N. Mex. (H. Meeske)." "A single specimen from Mr. Neumoegen's collection, taken by Mr. Meeske in 1889."

Smith (1893, *U.S. Natl. Mus. Bul. 44, p. 246*) stated: "The type is in the Neumoegen collection."

Holotype.—In the U.S. National Museum. The specimen is labeled "Telesilla carneola Smith Type"; "Las Vegas, N.M., H. Meeske, '89."; "Type No. 33936 USNM." It is a female with a glued-on abdomen.

Phurys carolina* Smith, 1905, *Canad. Ent. 37: 68.

"*HABITAT.*—North Carolina, in August." "One male and one female; the former in very fair, the latter in defective condition." "I have no recollection as to the source of the specimens and no indication as to more exact locality."

Syntypes examined: 2 (AMNH)

- (1) "*Phurys carolina* Smith ♂ type"; "*Nth Car., August*"; "Coll. J. B. Smith" [Fairly good, complete]
- (2) "*Phurys carolina* Smith ♀ type"; "*N. Carolina, August*"; "Collection J. B. Smith" [Fair condition, but abdomen missing]

Discussion.—The abdomen of the "♀ type" could have been missing in Smith's time and may be the reason he referred to the specimen as defective. I have selected, labeled, and now designate the syntype marked "♂ type" as the lectotype.

Hadena catalina* Smith, 1899, *Canad. Ent. 31: 261.

"*Habitat.*—Catalina Springs, Arizona, April 8–12." "Five specimens from the U.S. National Museum, collected by Mr. E. A. Schwarz." Smith indicated in a note that Catalina Springs, Ariz., is 15 to 16 miles northwest of Tucson and 2,900 feet at the foot of the Santa Catalina Mountains.

Syntypes examined: 5 (3 USNM and 2 AMNH)

- (1) "*Hadena catalina* Smith ♂ type"; "*Catal. Spgs., Ar., 11 Apr. 98*"; "Type No. 4782 U.S.N.M."; "E. A. Schwarz, collector."; "♂ genitalia on slide 98, JFGC" [USNM]

- (2) "*Hadena catalina* Smith ♀ type"; "*Catal. Spgs., Ar., 10 Apr. 98*"; "E. A. Schwarz, collector."; "Type No. 4782 U.S.N.M."; "♀ genitalia on slide 99, JFGC" [USNM]

- (3) "*Hadena catalina* Smith cotype"; "*Catal. Spgs., Ar., 9 Apr. 98*"; "E. A. Schwarz, collector."; "Type No. 4782 U.S.N.M." [A ♂, apex of left forewing broken] [USNM]

- (4) "*Hadena catalina* Smith ♀ type"; "*Catal. Spgs., Ar., 10 Apr. 98*"; "E. A. Schwarz Collector"; "J. B. Smith Collection, Rutgers" [Good condition except antennae missing] [AMNH]

- (5) "*Hadena catalina* Smith cotype"; "*Catal. Spgs., Ar., 8–4*"; "Hubbard and Schwarz"; "J. B. Smith Collection, Rutgers" [A ♂] [AMNH]

Discussion.—Smith labeled two of the syntypes as "♀ type," and he indicated that the material on which the species was based was from the U.S. National Museum. The specimen marked "♂ type" has been selected, labeled, and is now designated the lectotype.

Thalpochores catalina* Smith, 1906, *N.Y. Ent. Soc. Jour. 14: 29.

"*Habitat.*—Yuma Co., Ariz., April 19, Hutson; Babaquivera Mts., Pima Co., Ariz., July 16–23, Dr. Barnes; Tucson, Ariz., May 13–14 and Catalina Springs, Ariz., July 5, Mr. E. A. Schwarz." "Three males and three females, half of them in rather ragged condition, yet all characteristic."

Syntypes examined: 4 (2 AMNH and 2 USNM)

- (1) "*Thalpochores catalina* Smith ♂ type"; "Yuma Co., Arizona, Hutson"; "4/19"; "J. B. Smith Collection, Rutgers"; "♂ gen. 10,328, FHRindge" [AMNH]
- (2) "*Thalpochores catalina* Smith ♀ type"; "Tucson, Arizona, May 13–14, 1898"; "J. B. Smith Collection, Rutgers" [AMNH]
- (3) "*Thalpochores catalina* Smith Cotype"; "Babaquivera Mts., Ariz., Pima Co."; "July 16–23"; "♂ genitalia on slide 971, ELT" [USNM]
- (4) "*Thalpochores catalina* Smith Cotype"; "Babaquivera Mts., Ariz., Pima Co." [A ♀] [USNM]

Discussion.—Two syntypes, male and female, at least one, perhaps both from Catalina Springs, Ariz., have not been located. The specimen or specimens from that locality, collected by E. A. Schwarz, probably came from the U.S. National Museum collection, but if so, and if returned, I have been unable to locate them. It is unfortunate that the specific name obviously was taken from the name of the locality. The "♀ type" in the American Museum of Natural History may not be conspecific with the other syntypes. A more detailed study of that specimen and the series of *catalina* and related species will be required to resolve that problem. The syntype marked "♂ type" in the American Museum of Natural History has been selected, labeled, and is now designated the lectotype.

Porosagrotis catenuloides Smith, 1910, N.Y. Ent. Soc. Jour. 18: 88.

"This name is proposed for the species that I have everywhere determined as *catenula* Grt. in collections. This species, allied to the *vetusta* (*muraenula*) of the East, is com. non throughout the Rocky Mountain region and westward, and I found it named *catenula* Grt. in all collections accessible to me over twenty-five years ago—some of the determinations by Mr. Grote himself. I never questioned the species and, in 1900, described as *Carneades contagionis* a species which then came into my hands for the first time. Recently I sent specimens of my species to Sir George F. Hampson and he informs me that *contagionis* is identical with the type of *catenula*. A reference to the original description of that species puts the matter beyond doubt, and *contagionis* must sink as a duplication of *catenula*. But that leaves the species now universally labelled *catenula* in American collections without a name, and for that I propose the term *catenuloides*."

Syntypes examined: 3 (USNM)

- (1) "Porosagrotis catenula Grt., Colo., Bruce, id. Smith"; "muraenula Grote, Comp. B. Nu."; "Collection Wm Schaus" [A ♂, valves of genitalia missing]
- (2) "Agrotis catenula Grt."; "Colo. Bruce" [A ♂, in good condition, except venter of abdomen slightly damaged by dermestids, complete]
- (3) "Agrotis catenula Grt."; "Col. Jacob Doll."; "Colo. Bruce" [A ♂, in good condition except 1 antenna glued on, complete]

Discussion.—At the time of the description, Smith apparently did not label and did not otherwise mark any of the material to which he would have the name apply. According to the description, the syntypic series would be all those specimens of the *Agrotis vetusta* complex identified by Smith and others as "*catenula*" in the collections he studied in 1884–85. Those collections are listed in the introductory part of this paper in 1890 (U.S. Natl. Mus. Bul. 38, pp. 7 and 8). I have not attempted to locate syntypes of this species in all these other collections. Many of the specimens so identified may not have been labeled with determination labels and those that were usually do not have a date on the determination label. Having located three specimens in the U.S. National Museum that probably are syntypes, I am content to select one as a lectotype and to consider that action sufficient. The syntype in this museum labeled "Col. Jacob Doll." has been selected, labeled, and is now designated the lectotype.

Xylophasia centralis Smith, 1891, U.S. Natl. Mus. Proc. 13(839): 441, pl. 37, fig. 28.

"HABITAT.—Sierra Nevada, California." "Several specimens of both sexes sent me by Mr. Hy. Edwards." Smith (1893, U.S. Natl. Mus. Bul. 44, p. 140) stated: "Types are in the National Museum and in the Edwards collection."

Syntypes examined: 7 (3 USNM and 4 AMNH)

- (1) "Xylophasia centralis Smith Type"; "Sier. Nev., Cal."; "U.S.N.M. Acc. 23933"; "Type No. 171 U.S.N.M."; "♂ genitalia on slide 83, JFGC" [Generally poor condition, rubbed, apices of forewings broken, both valves of male genitalia missing] [USNM]
- (2) "Xylophasia centralis Smith Type"; "Sier. Nev., Cal."; "Type No. 171 U.S.N.M."; "36511"; "♀ genitalia on slide 84, JFGC" [Good condition] [USNM]
- (3) "Xylophasia centralis Smith Type"; "Sier. Nev., Cal."; "Type No. 171 U.S.N.M."; "U.S.N.M. Acc. 23933" [A ♀, fair condition, complete] [USNM]
- (4) "Xylophasia centralis Smith Type"; "Sier. Nev., Cal."; "Collection J. B. Smith" [A ♂, good condition, pale] [AMNH]
- (5) "Xylophasia centralis Smith Type"; "Sier. Nev., Cal."; "J. B. Smith Collection, Rutgers" [A ♂, good condition, complete] [AMNH]
- (6) "Xylophasia centralis Smith Type"; "Sier. Nev., Cal."; "No. 10125 Collection Hy. Edwards"; "AMNH Type No. ____" [A ♂, good condition, complete] [AMNH]
- (7) "Xylophasia centralis Smith Type"; "Sier. Nev., Cal."; "No. 10124 Collection Hy. Edwards" [A ♂, good condition, complete] [AMNH]

Discussion.—Of the syntypes listed here, (1) and (4) have red-bordered and the remainder heavy black-bordered type labels. This indicates that they were labeled at different times. Since two of the specimens came to the American Museum of Natural History via the Rutgers College collection, it is strange that Smith did not indicate specimens retained in this collection in his statement as to the location of types in 1893. The male syntype in the U.S. National Museum probably is the specimen from which the valves were illustrated in the original description. I have not located the slide used for the illustration. The male from the Hy. Edwards collection "No. 10125" is in good condition and complete. It has been selected, labeled, and is now designated the lectotype.

Stylopoda cephalica Smith, 1891, Amer. Ent. Soc.

Trans. 18: 131.

"*Hab.*—California." "Two specimens (♀) are in the National Museum, one from my old collection, the other 'through C. V. Riley, 1888,' collected by Coquillett." "There is a single male specimen from my collection in the Museum, also from California, which is congeneric, but which is almost too poor to serve as a type."

Smith (1893, U.S. Natl. Mus. Bul. 44, p. 286) stated: "The type is in the National Museum."

Syntypes examined: 2 (USNM)

- (1) "Stylopoda cephalica Smith Type"; "Cal."; "Collection J. B. Smith"; "Type No. 296 U.S.N.M." [A ♀, fair condition]
- (2) "Stylopoda cephalica Smith Type"; "Cal.;"

"Coquillet Collector"; "Thro C. V. Riley, 1738"; "Type No. 296 U.S.N.M."; "♀ genitalia on slide 1847, JGF" [Very good]

Discussion.—The second syntype marked "Coquillet Collector" is in much better condition and the genitalia have already been prepared. It has been selected, labeled, and is now designated the lectotype.

***Hadena cerivana* Smith, 1900, Canad. Ent. 32(8): 220, pl. 5, fig. 10.**

"*Habitat*: Calgary, Canada, in June (F. H. Wolley Dod)." "Four males and four females, the latter on the whole a little more reddish shaded." In the explanation of plate 5, Smith stated: "All the photographs were made from actual type specimens except 11 and 12."

Smith (1903, Canad. Ent. 35(5): 134) added a figure of a male valve (pl. 4, fig. 6) under the name

Hadena (Xylophasia) cerivana, Sm.

Syntypes examined: 8 (5 USNM and 3 AMNH)

- (1) "*Hadena cerivana* Smith, ♂ type"; "Calgary, 22-VI-98, F. H. W. Dod"; "15"; "Type No. 4159 U.S.N.M."; "36311 [sic]"; "♂ genitalia on slide 102, JFGC" [USNM]
- (2) "*Hadena cerivana* Smith ♀ type"; "Calgary, 20-VI-96, F. H. W. Dod"; "Type No. 4159 U.S.N.M."; "36311 [sic]"; "♀ genitalia on slide 103, JFGC" [USNM]
- (3) "*Hadena cerivana* Smith ♂ cotype"; "Calgary, 21-VI-98, F. H. W. Dod"; "Type No. 4159 U.S.N.M."; "36511" [USNM]
- (4) "*Hadena cerivana* Smith ♀ cotype"; "Calgary, 25-VI-96, F. H. W. Dod"; "Barnes Collection" [USNM]
- (5) "*Hadena cerivana* Smith ♀ cotype"; "Calgary, Can."; "Calgary, 24-VI-96"; "Barnes Collection" [USNM]
- (6) "*Hadena cerivana* Smith ♂ cotype"; "Calgary, 21-VI-95, F. H. W. Dod"; "J. B. Smith Collection, Rutgers" [AMNH]
- (7) "*Hadena cerivana* Smith ♀ cotype"; "Calgary, Can., 23-VI-97" [AMNH]
- (8) "*Hadena cerivana* Smith ♀ cotype"; "20-VI-97"; "J. B. Smith Collection, Rutgers" [AMNH]

Discussion.—The "♀ cotype" in the U.S. National Museum collected on "24-VI-96" may be the specimen used for the illustration (pl. 5, fig. 10), but I cannot be positive; the illustration is very poor and faded. The male genitalia in this group are specifically distinct and I have, therefore, selected, labeled, and now designate the "♂ type" in the U.S. National Museum as the lectotype. Three of the syntypes in this museum bear the label "Type No. 4159 U.S.N.M.," but that number does not apply to this species. The labels are the result of an error that will be explained in the discussion of the next species. Two of the syntypes bear accession numbers that are also incorrect. These labels are typed numbers "36311" instead of "36511." Accession 36511 was for a large amount of noctuid material received from J. B. Smith on May 9, 1900. Individual accession number

labels were typed rather than printed, and the typist apparently typed a considerable number as 36311 instead of 36511 in error. These erroneous numbers occur in several places because the labels were cut up and placed at random on the specimens.

***Mamestra cervina* Smith, 1898, Ent. News 9: 247.**

"*Hab.*—Winnipeg, Manitoba." "Two males and one female from Mr. A. W. Hanham, numbered 297, 298, 299."

Smith (1903, N.Y. Ent. Soc. Jour. 11(1): pl. 1, fig. 13) figured a male valve.

Syntypes examined: 3 (2 USNM and 1 AMNH)

- (1) "*Mamestra cervina* Smith ♂ type"; "W. Man."; "Winnipeg, Man."; "298"; "Type No. 4159, U.S.N.M."; "Acc. No. 34638, U.S.N.M." [Good condition except left valve missing] [USNM]
- (2) "*Mamestra cervina* Smith ♀ type"; "W. Man."; "Winnipeg, Man."; "297"; "Type No. 4159, U.S.N.M."; "36511" [USNM]
- (3) "*Mamestra cervina* Smith ♂ cotype"; "W. Man."; "Winnipeg, Man."; "299"; "Collection J. B. Smith" [Very worn, vertigris forming, complete] [AMNH]

Discussion.—The "♂ type" in the U.S. National Museum has been selected, labeled, and is now designated the lectotype. The two examples in this museum each bear the type number 4159, but as they were received at different times and as only the "♂ type" "298" is listed in the type book, the application of the label to the "♀ type" was an error. The same number is also found on syntypes of *Hadena cerivana* Smith. That was also an error. It is likely that those specimens and the "♀ type" of *cervina* were received together and that whoever applied the labels did not differentiate between the two similar names.

***Perigea cervina* Smith, 1900, U.S. Natl. Mus. Proc. 22(1203): 475.**

"*Habitat*.—Florida; Mrs. Slosson." "I have only one good female example."

Holotype.—In the American Museum of Natural History. The specimen is labeled "*Perigea cervina* Smith ♀ type"; "Florida"; "Collection J. B. Smith."

***Euxoa cervinea* Smith, 1910, Amer. Ent. Soc. Trans. 36(3): 262.**

"*Hab.*—Bozeman, Montana, Aug. 7-31; Vancouver, B.C., July 16; Banff, B.C., Aug. 10; Calgary, Alta., Aug. 30." "Five males, one female, in good to fair condition. This is a species which I had confused with the Californian *rena*, and which is probably the species referred to under that name in Mr. Dod's Calgary list." "Mr. Dod was good enough to call my attention to the fact that the Calgary species was not identical with the Californian. I have only one Calgary example before me, and that looks as though there might be yet another species involved."

Syntypes examined: 4 (AMNH)

- (1) "Euxoa cervinea Smith ♂ type"; "Bozeman, Mont., Aug. 31, 1907"; "J. B. Smith Collection, Rutgers"
- (2) "Euxoa cervinea Smith ♀ type"; "Vancouver, B.C., 16.8.06"; "A. H. Bush"; "J. B. Smith Collection, Rutgers" [Legs missing, costal edge and apical area of right forewing broken]
- (3) "Euxoa cervinea Smith Paratype"; "Bozeman, Mont., Aug. 8, 1908"; "J. B. Smith Collection, Rutgers" [A ♂]
- (4) "Euxoa cervinea Smith Paratype"; "Banff, British Columbia, Aug. 10, 1906"; "J. B. Smith Collection, Rutgers" [A ♂]

Discussion.—The "♂ type" in the American Museum of Natural History has been selected, labeled, and is now designated the lectotype.

Mamestra chunka Smith, 1910, Amer. Ent. Soc. Trans. 36(3): 265.

"*Hab.*—Aweme, Manitoba, V, 13, 22; V, 20, Mr. Criddle." "Three good males, one of them belonging to Mr. Dod."

Syntypes examined: 3 (2 AMNH and 1 USNM)

- (1) "Mamestra chunka Smith ♂ type"; "Aweme, Man., 13.V.06, Criddle"; "J. B. Smith Collection, Rutgers" [AMNH]
- (2) "Mamestra chunka Smith ♂ type"; "Criddle, Aweme, Man., 20. V.05"; "Mamestra fernami"; "J. B. Smith Collection, Rutgers"; "♂ Genitalia mounted on slide no. 15,230, F.H.R." [Fairly good] [AMNH]
- (3) "Mamestra chunka Smith ♂ type"; "Criddle, Aweme, Man., 22. V.05"; "Barnes collection"; "♂ genitalia on slide 100, E. L. Todd" [USNM]

Discussion.—The "♂ type" in the American Museum of Natural History has been selected, labeled, and is now designated the lectotype.

Oncocnemis ciliata Smith, 1900, U.S. Natl. Mus. Proc. 22(1203): 478.

"*Habitat.*—Colorado desert." "Two females, neither of them in good condition, but. . ."

Syntypes examined: 2 (USNM and AMNH)

- (1) "Oncocnemis ciliata Smith ♀ type"; "Colorado desert"; "Type No. 5124, U.S.N.M."; "36511" [A ♀, abdomen missing] [USNM]
- (2) "Oncocnemis ciliata Smith ♀ type"; "Colorado desert"; "Edwards"; "Collection J. B. Smith" [A ♀, wings and antenna of right side missing, left side in good condition] [AMNH]

Discussion.—The "♀ type" in the U.S. National Museum has been selected, labeled, and is now designated the lectotype. The pattern of maculation is distinctive. Another complete female is in this museum bearing the identical locality label.

Schinia ciliata Smith, 1900, U.S. Natl. Mus. Proc. 22(1203): 488.

"*Habitat.*—Hot Springs, New Mexico, 7,000 feet altitude, August. Collection of George Hulst." "One female in excellent condition."

Holotype.—In the U.S. National Museum. The specimen is labeled "Schinia ciliata Smith ♀ type"; "Hot Springs, N. Mex., 7000 ft. alt."; "Aug."; "Collection G. D. Hulst"; "Type No. 5129 USNM"; "36511."

Kakopoda cincta Smith, 1900, N.Y. Ent. Soc. Jour. 8(3): 176.

"*Habitat:* Biscayne Bay, Florida (Mrs. Slosson)." "A single male only, in good condition."

Holotype.—In the American Museum of Natural History. The specimen is labeled "Kakopoda cincta Smith ♂ type"; "Bisc. Bay, Fla."; "Collection J. B. Smith."

Campometra cinctipalpis Smith, 1899, U.S. Natl. Mus. Proc. 22(1184): 103.

"*Habitat.*—Cocoanut Grove, Florida; E. A. Schwarz." "A single defective female from the U.S. National Museum." "Type.—No. 4315, U.S.N.M."

Holotype.—In the collection of the U.S. National Museum. The specimen is labeled "Campometra cinctipalpis Smith ♀ type"; "Cocoanut Grove, Fla."; "E. A. Schwarz, collector"; "Type No. 4315 USNM."

Homopyralis cinctus Smith, 1905, Canad. Ent. 37: 260.

"*Habitat:* Bill Williams Fort, Arizona, in August." "One female specimen in good condition from Prof. F. H. Snow."

Holotype.—In the Francis Huntington Snow Entomological Collection, University of Kansas. The specimen is labeled "Homopyralis cinctus Smith ♀ type"; "Bill Wms. Fork, Ariz., Aug., F. H. Snow"; "det. J. B. Smith"; "133." It is a female. The abdomen has been damaged by dermestids. The type locality was misspelled "Fort" in the description.

Acronycta cinderella Smith, 1897, Ent. News 8(6): 149 (key).

One of 16 new species of *Acronycta* described in a key to the species of the genus.

Smith (1898, U.S. Natl. Mus. Proc. 21(1140): 64, pl. 11, fig. 11, pl. 20, fig. 1) described and illustrated the species as new and stated: "*Habitat.*—Colorado, without date or definite locality; Miles City, Montana, June 3." "Five males and two females are at hand for comparison."

Syntypes examined: 5 (4 USNM and 1 AMNH)

- (1) "Acronycta cinderella Smith ♂ type"; "Miles City Mon., 6.3"; "Type No. 3661, U.S.N.M."; "36511" [USNM]
- (2) "Acronycta cinderella Smith ♀ type"; "Colo., Bruce"; "1517"; "Cornell U. Lot 101, Sub. 195"; "Type No. 3661, U.S.N.M." [USNM]
- (3) "Acronycta cinderella Smith ♂ type"; "Col. E. L. Graef"; "Type No. 33908" [USNM]

(4) "Acronycta cinderella Smith ♂ cotype"; "Colorado" [USNM]

(5) "Acronycta cinderella Smith ♀ cotype"; "J. B. Smith Collection Rutgers" [AMNH]

Discussion.—Two male syntypes have not been located. I am uncertain what specimen was used to illustrate the species. The explanation of the illustration states: "from the male type," but it does not look like that specimen. The male from "Col. E. L. Graef" looks most like the illustration, yet differs in some points. Accordingly, I have selected, labeled, and now designate the "♂ type" as the lectotype.

Cucullia cinderella Smith, 1892, U.S. Natl. Mus. Proc. 15: 49, pl. 2, fig. 11.

"HABITAT: Colorado (Bruce)." "I have only a single male for examination."

Smith (1893, U.S. Natl. Mus. Bul. 44, p. 238) stated: "The type is in the National Museum."

Holotype.—In the U.S. National Museum. The specimen is labeled "Cucullia cinderella Smith Type"; "Colo., Bruce"; "104"; "Type No. 270 USNM."

Raphia cinderella Smith, 1903, Amer. Ent. Soc. Trans. 29(3): 193.

"Hab.—Los Angeles County, California, in May."

"Three male examples are now before me, two taken by myself and one by Mr. Coquillett. The latter is from National Museum material in which the species is represented by additional specimens."

Syntypes examined: 3 (2 AMNH and 1 USNM)

(1) "Raphia cinderella Smith ♂ type"; "Los Angeles Co., Cal."; "Collection Coquillett";

"J. B. Smith Collection, Rutgers" [Very good condition, but pin corroding] [AMNH]

(2) "Raphia cinderella Smith cotype"; "Cal."; "20"; "May"; "J. B. Smith Collection, Rutgers" [A ♂, faded, complete] [AMNH]

(3) "Raphia cinderella Smith cotype"; "Los Ang., Cal." [A ♂, abdomen missing] [USNM]

Discussion.—Smith indicated in the original description that the specimen labeled "Collection Coquillett" was from the U.S. National Museum, but he kept the specimen labeling it "♂ type" and returned one of his specimens to this museum. The specimen labeled "♂ type" in the American Museum of Natural History has been selected, labeled, and is now designated the lectotype.

Pachnobia cinerascens Smith, 1891, Amer. Ent. Soc. Trans. 18: 103, pl. 2, fig. 1.

"Hab.—Alameda County, Cal., September and October." "Four male specimens are in the museum collection (through C. V. Riley) bearing the red number 339."

Smith (1893, U.S. Natl. Mus. Bul. 44, p. 64) stated:

"The types are in the collections of the U.S. National Museum."

Syntypes examined: 4 (USNM)

(1) "Pachnobia cinerascens Smith Type"; "Alameda Co., Calif."; "Oct."; "339"; "through

C. V. Riley"; "Type No. 78 U.S.N.M." [A ♂, good condition, complete]

(2) "Pachnobia cinerascens Smith Type"; "Alameda Co., Calif."; "Sept."; "339"; "Through C. V. Riley"; "Type No. 78 U.S.N.M." [A ♂, good condition except abdomen glued on]

(3) "Pachnobia cinerascens Smith Type"; "Alameda Co., Calif."; "Oct."; "339"; "Through C. V. Riley" [A ♂, end of abdomen missing]

(4) "Pachnobia cinerascens Smith Type"; "Alameda Co., Calif."; "Oct."; "339"; "Through C. V. Riley" [A ♂, specimen moldy]

Discussion.—The figure provided by Smith with the original description was of a valve of the genitalia. I have not located the slide, but even so it would not be possible to state whether it was from the specimen with the tip of the abdomen missing or the one onto which an abdomen has been glued. Accordingly, I have selected, labeled, and now designate the syntype bearing labels "Oct." and "Type No. 78 U.S.N.M." as the lectotype. It is in good condition and complete.

Epidemas cinerea Smith, 1894, Amer. Ent. Soc. Trans. 21: 41, pl. 4, figs. 10 ♂ and 12 ♀.

"Hab.—Glenwood Springs, Colo., September and October, Barnes; ten specimens."

Barnes and McDunnough (1913, Contrib. Nat. Hist. Lepidoptera N. Amer. 2(1): 24, pl. 11, fig. 19) figured the "♂ Type, Glenwood Springs, Colo."

Syntypes examined: 5 (3 USNM and 2 AMNH)

(1) "Epidemas cinerea Smith Type ♂"; "Glenwood Spgs., Col."; "Sept. 8-15"; "Photograph Pl. 11, No. 19" [Fair] [USNM]

(2) "Epidemas cinerea Smith ♂ type"; "Glenwood Spgs., Col., 9-1892, W. Barnes"; "Type No. 68, U.S.N.M." [Fair, repinned, abdomen possibly glued on] [USNM]

(3) "Epidemas cinerea Smith ♀ type"; "Glenwood Spgs., Col., Oct. 1892, W. Barnes"; "Type No. 69, U.S.N.M." [Rubbed, complete] [USNM]

(4) "Epidemas cinerea Smith ♂ type"; "Glenwood Springs, Col., Oct. 1892, W. Barnes"; "J. B. Smith Collection, Rutgers" [Fair condition, complete] [AMNH]

(5) "Epidemas cinerea Smith ♀ type"; "Glenwood Springs, Col., Oct. 1892, W. Barnes"; "J. B. Smith Collection, Rutgers" [Rubbed, complete] [AMNH]

Discussion.—Smith labeled one specimen "Type ♂" and the remainder either "♂ type" or "♀ type." The significance, if any, is not known. The species apparently was described during a period when Smith was changing from labeling all specimens "Type" to his later procedures, and the different labels in this case may simply reflect inconsistency by Smith. Three syntypes have been illustrated, two by Smith with the original description and one by Barnes and McDunnough in 1913. The "♂ type" in the American Museum of Natural History is the specimen figured by Smith (pl. 4, fig. 10). The "♀ type" in the U.S. National Museum was figured

by Smith (pl. 4, fig. 12). That specimen is marked "Type No. 69, U.S.N.M." I believe that was an error and that the number should be 68 as that number was assigned to the "♂ type" in the same collection. The "♂ type" figured by Smith in the American Museum of Natural History has been selected, labeled, and is now designated the lectotype.

Pteroma cinerea Smith, 1904, *Psyche* 11(2): 56.

"Habitat.—Corvallis, Oregon, at light, Sept. 11; Washburn." "One male, in fair condition."

Holotype.—In the American Museum of Natural History. The specimen is labeled "Pteroma cinerea Smith ♂ type"; "Corvallis, Or., 10-11-98"; "At light"; "68"; "Collection J. B. Smith."

Selicanis cinereola Smith, 1900, U.S. Natl. Mus. Proc. 22(1203): 481.

"Habitat.—Denver, Colorado, October 12 (Osler); Glenwood Springs, Colorado, October (Dr. Barnes)." "Three males and three females in fair condition." "Type.—Cat. No. 4831, U.S.N.M."

Syntypes examined: 6 (4 USNM and 2 AMNH)

- (1) "Selicanis cinereola Smith ♂ type"; "Denver, Col., X.12"; "type No. 4831, U.S.N.M."; "36311"; "♂ genitalia no. 1133, JGF." [Good condition, very large] [USNM]
- (2) "Selicanis cinereola Smith ♀ type"; "Denver, Col., X.12"; "Type No. 4831, U.S.N.M."; "36311" [Specimen broken by pin corrosion] [USNM]
- (3) "Selicanis cinereola Smith ♂ cotype"; "Glenwood Spgs., Colo."; "Oct. 8-15"; "Photograph, Pl. 7, No. 11" [USNM]
- (4) "Selicanis cinereola Smith ♀ cotype"; "Glenwood Spgs., Colo."; "Oct. 8-15" [USNM]
- (5) "Selicanis cinereola Smith ♂ cotype"; "Glenwood Spgs., Colo., Oct. 1892, W. Barnes"; "J. B. Smith Collection, Rutgers" [AMNH]
- (6) "Selicanis cinereola Smith ♀ cotype"; "Denver, Col., X.12"; "J. B. Smith Collection, Rutgers" [AMNH]

Discussion.—Only two specimens, the "♂ type" and "♀ type" bear the USNM type number cited in the original description. A male cotype now in the U.S. National Museum was figured by Barnes and McDunough. I believe that the lectotype should be chosen from those specimens bearing the USNM type number label. Selection of a male is preferred over the female and especially so in this case as the female is broken. The "♂ type" in the U.S. National Museum has been selected, labeled, and is now designated the lectotype.

Carneades cinereopallidus Smith, 1903, *Canad. Ent.* 35(1): 10.

"Habitat: Stockton, Utah, in October." "Four examples, two of each sex, and none of them good, are at hand from Mr. George Franck."

Syntypes examined: 3 (2 AMNH and 1 USNM)

- (1) "Carneades cinereopallidus Smith ♂ type"; "Stockton, Utah - X"; "Collection J. B. Smith" [A ♂, abdomen greasy, suspicious, may be glued on] [AMNH]
- (2) "Carneades cinereopallidus Smith ♀ type"; "Stockton, Utah - X"; "Collection J. B. Smith" [A ♀, rather poor condition, especially hindwings, complete] [AMNH]
- (3) "Carneades cinereopallidus Smith ♂ cotype"; "Stockton, Utah, Oct."; "Slide 18b"; "Barnes collection" [A ♂, greasy, abdomen and wings of right side broken off specimen] [USNM]

Discussion.—None of the syntypes are in very good condition. One is missing. A specimen in the American Museum of Natural History labeled as this species but not marked type by Smith may be the missing syntype. In line with previous selection of females for species of *Euxoa* and in consideration of the greasy or the dubious validity of the abdomen of the "♂ type," the syntype marked "♀ type" in the American Museum of Natural History has been selected, labeled, and is now designated the lectotype.

Mamestra circumcincta Smith, 1891, U.S. Natl. Mus. Proc. 14(851): 253, pl. 10, fig. 52.

"HABITAT.—Sierra Nevada, California." "Both sexes are from Mr. Edwards collection." Smith (1893, U.S. Natl. Mus. Bul. 44, p. 125) stated: "The type is in the Edwards collection." Smith (1907, N.Y. Ent. Soc. Jour. 15: 155) stated: "The type is in my own collection; . . ." ". . . as I described from a single pair out of the Edwards collection, retaining the male and returning the female, the other type should be in the American Museum of Natural History." Smith (1910, Ent. Soc. Amer. Ann. 3(2): 158, pl. 23, fig. 9) added: "*Mamestra circumcincta* Smith was described from two Californian examples representing the two sexes, which I placed with *stricta* on genitalic characters, while comparing it with *olivacea* in fascies. The ♂ type is in my collection, and another ♂ example recently received from San Francisco, California, makes reexamination possible, as well as a new figure of the ♂ genitalia available."

Syntypes examined: 5 ? (3 AMNH and 2 USNM)

- (1) "Mamestra circumcincta Smith, Type"; "Sier. Nev., Cal."; "Collection J. B. Smith" [A ♂, part of left valve missing] [AMNH]
- (2) "Mamestra circumcincta Smith, Type"; "Sier. Nev., Cal."; "No. 10320 Collection Hy. Edwards" [A ♀] [AMNH]
- (3) "Mamestra circumcincta Smith, Type"; "Sier. Nev., Cal."; "No. 10321 Collection Hy. Edwards" [A ♀] [AMNH]
- (4) "Mamestra circumcincta Smith, Type"; "Sier. Nev., Cal."; "Acc. no. 25975 U.S.N.M."; "Type No. 155 U.S.N.M." [A ♀] [USNM]
- (5) "Mamestra circumcincta Smith, Type";

"Sier. Nev., Cal.," "No. 10322 Collection Hy. Edwards" [A ♂, complete, very good condition] [USNM]

Discussion.—Smith made several conflicting and confusing statements about the type-series and the location of specimens of this species. In the original description he stated he had both sexes from the Edwards collection, but it is not clear that he meant a single pair. Two years after the description he stated that the type was in the Edwards collection. On June 18, 1896, a female specimen labeled as a type by Smith and given to the U.S. National Museum was entered in the type book under Type No. 155. Eleven years later he stated that he described the species from a single pair from the Edwards collection. He stated he retained the male, which he referred to as "the type," and returned the female, "the other type," to the Edwards collection. He said that the female should then be in the American Museum of Natural History. Three years later in 1910 he again said he described the species from a single pair and that the "♂ type" was in his collection.

If his last two statements are correct as to the number of specimens before him at the time of the original description, he must have labeled the other three specimens as "Type" subsequent to the description. If he did return the female to the Edwards collection, then it must be one of the two females labeled "Type" in the American Museum of Natural History. But which one? I believe it is likely that he described the species from a single pair and that he retained the male and sent the female to the U.S. National Museum in 1896. The male was the specimen from which the illustration, plate 10, figure 52, of the original publication was prepared. The slide is in the American Museum of Natural History. Since the male in the American Museum of Natural History is the only certain syntype, it has been selected, labeled, and is now designated the lectotype.

Hydroecia circumlucens Smith, 1899, Amer. Ent. Soc. Trans. 26: 43, pl. 2, fig. 31.

"Hab.—Newark, N.J.; Long Island, N.Y.; Pennsylvania; Champaign, Ill.; Nebraska." "Altogether ten examples have been under examination from various collections."

Syntypes examined: 6 (5 USNM and 1 AMNH)

- (1) "Hydroecia circumlucens Smith ♂ type"; "Long Island"; "*Gortyna rutila* Guenee"; "Collection O. Meske"; "Type No. 4143, U.S.N.M."; "♂ Genitalia Slide: USNM 1121, J. G. Franclemont" [USNM]
- (2) "Hydroecia circumlucens Smith ♀ type"; "N. Jersey"; "Type No. 4143, U.S.N.M." [A ♂, abdomen glued on!] [USNM]
- (3) "Hydroecia circumlucens Smith cotype"; "Penna."; "♂ Genitalia Slide: USNM 1123, J. G. Franclemont" [USNM]
- (4) "Hydroecia circumlucens Smith cotype"; "Graef"; "Type No. 33946, U.S.N.M."; "♂ Genitalia Slide: USNM 1124, J. G. Franclemont" [USNM]
- (5) "Hydroecia circumlucens Smith cotype";

no data; "♂ Genitalia Slide: USNM 1122, J. G. Franclemont" [USNM]
(6) "Hydroecia circumlucens Smith cotype"; no data [A ♂] [AMNH]

Discussion.—The "♂ type" in the U.S. National Museum has been selected, labeled, and is now designated the lectotype.

Mamestra circumvadis Smith, 1902, N.Y. Ent. Soc. Jour. 10: 42.

"*Habitat.*—Head of Pine Creek, Calgary, Alberta, July 21, 1900, Mr. Dod (No. 31)." "This striking species was first sent me by Mr. Dod in December, 1900, and was returned to him as probably new. It was again sent me in 1901, still unique, and is now described from the female only—a fine, almost perfect example."

Holotype.—In the American Museum of Natural History. The specimen is labeled "Mamestra circumvadis Smith, ♀ type"; "Calgary, 21.VII.00, F. H. W. Dod"; "Head of Pine Creek"; "J. B. Smith Collection Rutgers."

Neleucania citronella Smith, 1902, U.S. Natl. Mus. Proc. 25(1283): 206.

"*Habitat.*—Denver, Colorado, July 15 (Bruce, Oslar); Glenwood Springs, Colorado, July 16—August 16." "Six examples all very much alike above and no two alike beneath." "Type.—No. 6253, U.S.N.M." *Syntypes examined:* 6 (4 USNM and 2 AMNH)

- (1) "Neleucania citronella Smith ♀ type"; "Colo., Bruce"; "type No. 6253, U.S.N.M."; "♀ genitalia no. 648, JGF." [Fairly good condition] [USNM]
- (2) "Neleucania citronella Smith Cotype"; "Glenwood Springs, Colo., 7–1895, W. Barnes"; "Type No. 6253, U.S.N.M." [A ♀, abdomen and hindwings glued on] [USNM]
- (3) "Neleucania citronella Smith ♀ cotype"; "Glenwood Spgs., Colo."; "July 24–30"; "Barnes collection" [USNM]
- (4) "Neleucania citronella Smith cotype"; "Glenwood Spgs., Colo."; "July 16–23"; "Barnes collection"; "Photograph Pl. 7, No. 3" [A ♀] [USNM]
- (5) "Neleucania citronella Smith ♂ type"; "Glenwood Spgs., Col."; "Aug. 16–23"; "Collection J. B. Smith" [Fairly good condition, right valve missing?] [AMNH]
- (6) "Neleucania citronella Smith ♀ cotype"; "Denver, Col., VII-13"; "Collection J. B. Smith" [AMNH]

Discussion.—Barnes and McDunnough (1913, p. 16, pl. 7, fig. 3) figured a female cotype, but that specimen does not bear the USNM type number cited in the original description. Two syntypes in the U.S. National Museum do bear that type number. One of those, the "♀ type," has been selected, labeled, and is now designated the lectotype.

Euxoa claromonta Smith, 1906, N.Y. Ent. Soc. Jour. 14: 11.

"*Habitat.*—Claremont, Calif., Mr. Carl Baker."

"Three males and three females, no two alike."

Syntypes examined: 5 (3 AMNH and 2 USNM)

- (1) "Euxoa claromonta Smith ♂ type"; "Claremont, Cal., Baker"; "J. B. Smith Collection, Rutgers" [AMNH]
- (2) "Euxoa claromonta Smith ♀ type"; "Claremont, Cal., Baker"; "J. B. Smith Collection, Rutgers" [AMNH]
- (3) "Euxoa claromonta Smith cotype"; "Claremont, Cal."; "J. B. Smith Collection, Rutgers" [A ♂] [AMNH]
- (4) "Euxoa claromonta Smith cotype"; "Claremont, Cal., Baker"; "3077"; "Slide 59a"; "Barnes Collection" [A ♂] [USNM]
- (5) "Euxoa claromonta Smith cotype"; "Claremont, Cal., Baker"; "Barnes Collection" [A ♀] [USNM]

Discussion.—The "♀ type" in the American Museum of Natural History has been selected, labeled, and is now designated the lectotype. This is in line with the general practice for species of the genus *Euxoa* treated in this study.

Agrotis clemens Smith, 1890, Amer. Ent. Soc. Trans. 17: 44.

Habitat.—California (Neumoegen). "The specimens before me are all females . . ."
Smith (1890, U.S. Natl. Mus. Bul. 38, p. 93) added nothing.

Smith (1893, U.S. Natl. Mus. Bul. 44, p. 75) stated: "The types of this species are in the National Museum and in Mr. Neumoegen's collection."

Syntypes examined: 3 (2 USNM and 1 AMNH)

- (1) "Agrotis clemens Smith Type"; "Cal."; "Col. B. Neumoegen"; "Type No. 33776 U.S.N.M." [A ♂, with ♀ abdomen glued on!] [USNM]
- (2) "Agrotis clemens Smith Type"; "Cal."; "Col. B. Neumoegen" [A ♀, abdomen discolored, but complete] [USNM]
- (3) "Agrotis clemens Smith Type"; "Cal."; "J. B. Smith Collection, Rutgers" [A ♀, good condition except verdigris forming above and below thorax, abdomen suspicious] [AMNH]

Discussion.—There is another specimen in the U.S. National Museum that bears the following labels: "clemens Smith"; "Placer Co., Cal."; "June"; "Type No. 87 U.S.N.M."; "through C. V. Riley." The identification label is in Smith's handwriting, but there is no generic name and it is not marked type by Smith. It was entered in the type book in 1896 along with many of the syntypes of other Smith species and is stated in that book to be a type of Smith's name, but that it was received from the U.S. Department of Agriculture. It is probably the reason that Smith stated in 1893 that a type was in the U.S. National Museum.

I think it is a spurious specimen. If Smith had studied this specimen at the time of the description, it is strange that he did not mention the locality, Placer County, since the other specimens are just marked "Cal." In addition, there is no mention that the speci-

men came from Riley, a point that Smith usually emphasized. In view of the statement of 1893 regarding the location of types, a specimen marked "Type" in his collection (Rutgers College) is unexplained. The specimen in the U.S. National Museum from the Neumoegen collection, but lacking a USNM type number, has been selected, labeled, and is now designated the lectotype.

Epizeuxis cobeta Smith, 1910, Pomona College Jour. 2(3): 276.

"*E. cobeta* Barnes, is a somewhat smaller, rather broader-winged, decidedly more mottled species. The darker tints are chocolate brown, and the pale shadings over the transverse lines are yellow. The type of maculation is identical for all the species. The locality given is Southern California, and I have only two examples from Dr. Barnes from that region; but the species extends also into Arizona, and I have several samples from that State." Barnes and McDunnough [unpublished manuscript catalog note] stated: "Our specimen is the type—Smith thought we had described it and credits us with the name. This is the unique specimen we had described but not published—'Loc. Southern Calif.' 'Types Barnes.'"

Syntypes examined: 1 (USNM)

- (1) "Epizeuxis cobeta Barnes, x'd type"; "St. Cruz Mts. [small longhand], S. Cal. [machine printed]" [A ♀, female abdomen glued on in unnatural position]

Discussion.—Smith thought Barnes had described this, so he did not mark any specimens as his type series. He stated that he had two from Barnes from southern California and others from Arizona. But because the specimen in the U.S. National Museum is the only one with the Barnes name label, it is selected, labeled, and now designated the lectotype.

Euxoa cocklei Smith, 1908, N.Y. Acad. Sci. Ann. 18(2): 96.

Habitat: Kaslo, B.C., July 27. "Two males and five females; from Dr. James Fletcher, collected by Mr. J. W. Cockle, after whom the species is named."

Syntypes examined: 2 (AMNH)

- (1) "Euxoa cocklei Smith ♂ type"; "Kaslo, B.C., J. W. Cockle"; "J. B. Smith Collection, Rutgers" [Good condition]
- (2) "Euxoa cocklei Smith ♀ type"; "Kaslo, B.C. (Cockle)"; "J. B. Smith Collection, Rutgers" [Excellent condition]

Discussion.—There is another syntype in the American Museum of Natural History, a female cotype, that I overlooked in my survey of the type material there. Rindge (1955, p. 106) said that it was from Victoria, British Columbia, July 19, 1905 (G. W. Taylor). I have selected, labeled, and now designate the "♀ type" as the lectotype. D. F. Hardwick added a red-penciled note in my working notebook approving the selection and indicating that since my examination a slide "5022♀" had been prepared from the specimen. I do not know whether or not F. H. Rindge prepared the slide.

Agrotis cogitans Smith, 1890, Amer. Ent. Soc. Trans. 17: 46.

"*Habitat*.—California (Neumoegen)." "Four specimens ♂ and ♀ are before me, no two of which are alike and which yet vary very slightly."

Smith (1890, U.S. Natl. Mus. Bul. 38, p. 150, pl. 5, fig. 65) added no new information, but he figured the kind of genitalia (harpe and clasper) this species and others are supposed to possess. However, there is no indication as to which species served as the model for figure 65.

Smith (1893, U.S. Natl. Mus. Bul. 44, p. 90) stated: "Types are in the National collection and with Mr. Neumoegen."

Syntypes examined: 4 (USNM)

- (1) "Agrotis cogitans Smith Type"; "Cal."; "36511"; "Type No. 109 U.S.N.M."; "♂ genitalia on slide 2236, ELT" [Left valve missing, rest of genitalia mounted on slide in very good condition]
- (2) "Agrotis cogitans Smith Type"; "Cal."; "Type No. 109 U.S.N.M." [A ♀]
- (3) "Agrotis cogitans Smith Type"; "Cal."; "Col. B. Neumögen"; "Type No. 33751 U.S.N.M." [A ♀]
- (4) "Agrotis cogitans Smith Type"; "Cal."; "Col. B. Neumögen" [A ♂]

Discussion.—D. F. Hardwick has recommended that I select the male syntype from which the genitalia have been prepared on a slide. He has been revising the genus *Euxoa* and has studied the slide. Accordingly, I have selected, labeled, and now designate that specimen as the lectotype.

Xylophasia cogitata Smith, 1891, U.S. Natl. Mus. Proc. 13(839): 421, pl. 36, fig. 12.

"*HABITAT*.—Sierra Nevada California, Colorado."

Smith (1893, U.S. Natl. Mus. Bul. 44, p. 135) stated: "Types are in the National Museum, at Rutgers College and in the Neumoegen collection."

Syntypes examined: 1 (USNM)

- (1) "Hadena cogitata Smith Type"; "Cal."; "USNM Acc. no. 25975"; "Type No. 168, U.S.N.M."; "♂ genitalia no. 23, JFGC." [A ♂, good condition]

Discussion.—In the original description two localities were given, and in 1893 Smith listed three institutions that were supposed to have types. Only one syntype has been located. If a type was in the Rutgers College collection, Rindge (1955, p. 106) did not list it and I did not find the specimen in the American Museum of Natural History. If a specimen was in the Neumoegen collection, it should now be in the U.S. National Museum. I found only the one syntype. There is another specimen in this museum identified as this species by Smith, but it is from "Calgary, Brit. Columbia," a locality not given in the original description. I have selected, labeled, and now designate the "Type" in the U.S. National Museum as the lectotype.

Xylomiges cognata Smith, 1894, Amer. Ent. Soc. Trans. 21: 78, pl. 5, fig. 3.

"*Hab*.—Vancouver (Neumoegen); Oregon (Strecker); Colorado (Bruce, No. 311)." "Three male specimens are before me, and I have seen others."

Barnes and McDunnough (1913, Contrib. Nat. Hist. Lepidoptera N. Amer. 2(1): 16, pl. 7, figs. 13–15) illustrated three males from Victoria, British Columbia, Calgary, Alberta, and southern California.

Barnes and McDunnough (1918, Contrib. Nat. Hist. Lepidoptera N. Amer. 4(2): 97) stated: "...; it was described from three ♂ specimens from Vancouver Is., B.C., Oregon and Colorado (Bruce), this last specimen being in the collection of the National Museum and marked 'Type'; we have seen no other Colorado material besides this type, but specimens from Vancouver Is. which we compared with it agree so that this form may be regarded as typical; Smith's figure also agrees with our figures 13 and 14."

Syntypes examined: 3 (2 USNM and 1 AMNH)

- (1) "Xylomiges cognata Smith ♂ type"; "Colo. Bruce"; "311"; "Type No. 261, U.S.N.M." [Good condition, complete] [USNM]
- (2) "Xylomiges cognata Smith ♂ type"; "Victoria, B.C."; "Col. B. Neumögen"; "Type No. 33841, U.S.N.M." [Good condition, complete, respread?] [USNM]
- (3) "Xylomiges cognata Smith ♂ type"; "Or."; "Collection J. B. Smith" [Fairly good condition, abdomen missing] [AMNH]

Discussion.—All three syntypes marked as "♂ type." I have been unable to determine with certainty which specimen was figured. I believe that it was probably the specimen from "Victoria, B.C.," but that specimen seems to have been respread so I cannot be certain. Barnes and McDunnough (1918, p. 97) compared specimens from Vancouver Island with the syntype from Colorado in the U.S. National Museum and said the form was typical. They said that the Colorado syntype was labeled "Type," but that is incorrect. Even so, in order to prevent confusion, I have selected, labeled, and now designate the syntype from "Colo. Bruce" in the U.S. National Museum as the lectotype.

Carneades collocata Smith, 1894, Amer. Ent. Soc. Trans. 21: 50, pl. 3, fig. 5.

"*Hab*.—Colorado, Bruce, Nos. 321, 481." "Male and female are before me, . . ."

Syntypes examined: 1 (USNM)

- (1) "Carneades collocata Smith ♂ type"; "Colo. Bruce"; "321"; "Type No. 112 U.S.N.M."

Discussion.—Rindge (1955, Amer. Mus. Nat. Hist. Bul. 106(2): 106) indicated a "Type female" received from Rutgers. The specimen is labeled "Carneades collocata Smith ♀ type"; "Glenwood Springs, Col. 1894-8, W. Barnes"; "J. B. Smith Collection, Rutgers"; "x'd ♂ type U.S.N.M. V 1910 found identical." I believe this is a pseudotype. I have not located a female from "Colo. Bruce, No. 481" and I am unable to determine whether it might have been destroyed and the label placed on the Glenwood Springs specimen or whether Smith labeled the latter subsequent to the description.

The "♂ type" in the U.S. National Museum has been selected, labeled, and is now designated the lectotype.

Arsilonche colorada Smith, 1900, U.S. Natl. Mus. Proc. 22(1203): 414.

"*Habitat*.—Glenwood Springs, Colorado; September, Dr. Barnes" "Two females, who have for some years been awaiting a mate."

Dod (1913, Ent. News 24: 253) stated: "This was described in 1900 from two females from Glenwood Springs, Colorado. One of these is in the Washington Museum and has been labeled 'type' in Smith's own handwriting." "It is to be assumed that the other specimen referred to in his description is either a type or co-type, and probably in the Rutgers College collection. If it is there I overlooked it." In a footnote, "I find that Smith wrote me later that the species was not in his collection. (F. H. W. D.)"

Syntypes examined: 2 (USNM)

- (1) "Arsilonche colorada Smith ♀ type"; "Glenwood Springs, Col., Sept. 1892, W. Barnes"; "Type No. 5120 U.S.N.M."; "36511"; "Barnes collection"
- (2) "Arsilonche colorada Smith ♀ cotype"; "Glenwood Spgs., Colo."; "Sept. 1-7"; "Barnes collection"

Discussion.—The "Barnes collection" on the "♀ type" in a strict sense is incorrect. Smith did receive the specimen from Barnes and then sent it to the U.S. National Museum on May 9, 1900. The other specimen was returned to Barnes and received here much later with the regular Barnes collection. The "♀ type" has been selected, labeled, and is now designated the lectotype.

Agrotiphila colorado Smith, 1891, Amer. Ent. Soc. Trans. 18: 133.

"*Hab*.—Colorado, Bruce." "Both sexes of this species are before me from Mr. Bruce's collections." "The species is in Mr. Neumoegen's collection, and I have seen others from Mr. Bruce. A good pair in the National Museum collection among others."

Smith (1893, U.S. Natl. Mus. Bul. 44, p. 110) stated: "South Park, Colorado." "Types are in the National Museum and in the Neumoegen collection."

Syntypes examined: 2 (USNM)

- (1) "Agrotiphila colorado Smith Type"; "Colo. Bruce"; "Type No. 142 U.S.N.M."; "36511" [A ♂, good condition, complete]
- (2) "Agrotiphila colorado Smith Type"; "Colo. Bruce"; "Col. B. Neumögen"; "Type No. 33728 U.S.N.M." [A ♂, good condition, complete]

Discussion.—Only two specimens marked as types by Smith have been located. The syntype with USNM type number 142 has been selected, labeled, and is now designated the lectotype.

Oncocnemis colorado Smith, 1893, Ent. News 4(3): 100, pl. 6, fig. 5.

"*Hab*.—Park County, Col. Bruce." "Types are in the United States National Museum, in Mr. Neumoegen's collection and in the Rutgers College collection."

Smith (1893, U.S. Natl. Mus. Bul. 44, p. 161) stated: "Central and western Colorado, July, August, and October." "The type is in the National Museum."

[As *O. colorada*!]

Smith (1894, Amer. Ent. Soc. Trans. 21:66, pl. 2, fig. 5) again described this as new, using the same plate, he stated: "Several specimens are in collections, type [sic] in coll. U.S. National Museum, Rutgers College and Neumoegen."

Syntypes examined: 2 (USNM and AMNH)

- (1) "Oncocnemis colorado Smith Type"; "Col."; "Acc. No. 25975 U.S.N.M."; "Type No. 187 U.S.N.M." [A ♀] [USNM]
- (2) "Oncocnemis colorado Smith Type"; "Park Co, Colo."; "Collection J. B. Smith" [A ♂, good condition except right valve of genitalia missing] [AMNH]

Discussion.—In the original description Smith said types were in three collections. In the second paper he indicated a type in only the U.S. National Museum. In the third paper he once more mentioned three collections, but used the singular "type" rather than types. I have concluded that this was a lapsus, but it is possible that he may have been trying to indicate that the specimen in the U.S. National Museum was considered the type. The syntype in the American Museum of Natural History is a male and it is the specimen figured by Smith. The locality agrees precisely with the information in the description. There is a slide of the right valve of the genitalia in the collection of this museum. In consideration of these facts, I have selected, labeled, and now designate the syntype in the American Museum of Natural History as the lectotype.

Phaeocyma colorado Smith, 1908, U.S. Natl. Mus. Proc. 35(1645): 263, pl. 33, fig. 3, pl. 35, fig. 8.

"*Habitat*.—Colorado, May and June, Manitoba, Denver, Glenwood Springs; Arizona in June, Palmerlee and Williams; Texas in March; probably all collected by Belfrage." "Types.—U.S.N.M., Coll. No. 12028; Rutgers College Collection; cotypes, Coll. Barnes, Ottolengui, Brooklyn Institute." "A series of 23 males and 9 females is at hand for comparison and . . ."

Syntypes examined: 15 (4 AMNH and 11 USNM)

- (1) "Homoptera colorado Smith ♂ type"; "Glenwood Spgs., Colo."; "May 1-7"; "J. B. Smith Collection, Rutgers" [Good condition, complete] [AMNH]
- (2) "Homoptera colorado Smith ♀ type"; "Glenwood Spgs., Colo."; "May"; "J. B. Smith Collection, Rutgers" [Good condition, complete] [AMNH]
- (3) "Homoptera colorado Smith ♂ cotype"; "H. G. Dyar, No. 5694"; "J. B. Smith Collection, Rutgers" [Good condition, complete] [AMNH]

- (4) "Homoptera colorado Smith ♀ cotype"; "Texas"; "J. B. Smith Collection, Rutgers" [Good condition, complete] [AMNH]
- (5) "Homoptera colorado Smith cotype"; "Texas"; "24/3"; "732"; "Through C. V. Riley"; "♂ Gen. #1131 FHB." [USNM]
- (6) "Homoptera colorado Smith cotype"; "Texas"; "26/3"; "Through C. V. Riley" [A ♂, complete] [USNM]
- (7) "Homoptera colorado Smith cotype"; "Texas" [A ♂, complete] [USNM]
- (8) "Homoptera colorado Smith cotype"; "Glenwood Spgs., Col."; "May 16-23"; "Barnes collection"; "♂ Gen. #1133, FHB." [USNM]
- (9) "Homoptera colorado Smith cotype"; "Palmerlee, Cochise Co., Ariz."; "Acc. 12578"; "Collection Brklyn Mus."; "♂ Gen. #1134, FHB." [USNM]
- (10) "Homoptera colorado Smith cotype"; "Glenwood Spgs, Colo."; "May 1-7"; "Barnes collection" [A ♂, complete] [USNM]
- (11) "Homoptera colorado Smith cotype"; "Glenwood Spgs, Colo."; "May 8-15"; "Barnes collection" [A ♀] [USNM]
- (12) "Homoptera colorado Smith cotype"; "Glenwood Spgs, Colo."; "June 8-15"; "Barnes collection" [A ♀] [USNM]
- (13) "Homoptera colorado Smith cotype"; "H. G. Dyar, No. 5954"; "♀ Gen. #1138, FHB." [USNM]
- (14) "Homoptera colorado Smith cotype"; "Glenwood Spgs, Colo."; "May 1-7"; "Barnes collection" [A ♀] [USNM]
- (15) "Homoptera colorado Smith cotype"; "Glenwood Spgs, Colo."; "May 1-7"; "Barnes collection"; "♂ Gen. #1198, FHB." [USNM]

Discussion.—About 17 syntypes have not been located. In the American Museum of Natural History two genitalia slides, male and female, have been located. The slide of the male genitalia is without doubt the source of the illustration of the male genitalia (pl. 33, fig. 3). Because of the missing syntypes there is no way to determine which specimen the genitalia came from. The series is a mixture of species as revealed by genitalia prepared from specimens in the U.S. National Museum. The cotype listed here as number 8, which has the genitalia mounted on slide 1133 of F. H. Benjamin, has been selected, labeled, and is now designated the lectotype. The genitalia agree with those illustrated by Smith on plate 33, figure 3, and the locality agrees with that of the "♂ type." The lectotype is in the U.S. National Museum.

In the original description Smith referred to specimens in this museum and Rutgers College collection as types and to specimens from other sources as cotypes. He also cited U.S. National Museum specimens as being "Coll. No. 12028," but none of the syntypes located are so marked. The syntypes now in the

U.S. National Museum, not originally from the Barnes collection, were from C. V. Riley and came from Texas. It is not possible to know with certainty which specimens were intended by Smith to bear the USNM type number 12028. In the case of other species sent to bear USNM type numbers, the material did not always originate from the same institution.

Scopelosoma colorado Smith, 1903, N.Y. Ent. Soc. Jour. 11(1): 21.

Habitat.—Glenwood Springs, Colorado, April and October. "Three examples, all males, from Dr. Barnes, who has others. The specimens were captured in 1893, 1894, 1895, . . ."

Smith (1903, *Canad. Ent.* 35(5), pl. 4, fig. 4) figured a male valve.

Hampson (1906, *Catalogue of the Lepidoptera Phaenae in the Collection of the British Museum*, v. 6, pp. 464-465) stated: "Pl. CVI, fig. 24" and "This species is unknown to me, figured from a drawing from type in Coll. J. B. Smith." On the explanation of the plate he stated: "♂ Colorado."

Syntypes examined: 3 (2 AMNH and 1 USNM)

- (1) "Scopelosoma colorado Smith ♂ type"; "Glenwood Springs, Col., 10/1 1895, W. Barnes"; "J. B. Smith Collection, Rutgers"; "♂ Genitalia mounted on slide by Smith [Rindge]" [Fair condition, right forewing slightly rubbed, abdomen missing] [AMNH]
- (2) "Scopelosoma colorado Smith ♂ cotype"; "Glenwood Springs, Col., 4/20 1894, W. Barnes"; "J. B. Smith Collection, Rutgers" [A ♀, very good condition] [AMNH]
- (3) "Scopelosoma colorado Smith ♂ cotype"; "Glenwood Springs, Col., 4/3 1892, W. Barnes"; "♀ gen. 1111, FHB." [USNM]

Discussion.—The date on the syntype in the U.S. National Museum does not agree in the year with the information in the original description. Also two of the syntypes are females contrary to the original description. There are other specimens from the Barnes collection, now in this museum that agree with the original description in the dates, and at least one is a male. The specimen marked "♂ type" lacks an abdomen, and there is a slide in the American Museum of Natural History consisting of two broken valves and the uncus that may have been prepared from the specimen. The "♂ type" is the one that was illustrated by Hampson. That specimen, in spite of the defective condition, has been selected, labeled, and is now designated the lectotype.

Taeniocampa columbia Smith, 1888, U.S. Natl. Mus. Proc. 10: 472.

Habitat.—Northwest British Columbia. "This species is one of those collected by Captain Geddes in 1884, and the types, ♂ and ♀, are in Mr. Neumoegen's collection."

Smith (1890, U.S. Natl. Mus. Proc. 12: 479) presented the same information, but figured the harpe and clasper (pl. 23, fig. 5).

Smith (1893, U.S. Natl. Mus. Bul. 44, p. 202) stated: "The types are in the National Museum and Neumoegen collection."

Smith (1903, Amer. Ent. Soc. Trans. 29(3): 199) stated: "This species was described out of the Neumoegen collection from specimens taken by Capt. Geddes in 1884. The material was somewhat unsatisfactory, and the generic reference was doubtfully made. In the revision of *Taeniocampid* genera, Proc. U.S. Nat. Mus., xii, 1889 [sic], the relationship of the species to *Mamestra* was recognized, but the balance of characters seemed then to point to *Taeniocampa*. Recently, Mr. Dod sent me from Calgary a series of specimens collected in July, whose relationship to *Mamestra meditata* was at once apparent, but the species was marked as distinct. In looking over the collection of the U.S. Nat. Mus., I recognized in the typical example of *T. columbia* the species sent me by Mr. Dod."

Syntypes examined: 2 (USNM)

- (1) "*Taeniocampa columbia* Smith Type"; "Ft. Calgary, N.W. Brit. Columbia"; "Neum."; "Collection J. B. Smith"; "Type No. 236 U.S.N.M." [A ♂, genitalia broken, fair condition; name label black bordered, ♂ sex symbol in upper right corner]
- (2) "*Taeniocampa columbia* Smith Type"; "Ft. Calgary, N.W. Brit. Columbia"; "Col. B. Neumoegen"; "Type No. 33802 U.S.N.M." [A ♂, good condition, complete; red-bordered label]

Discussion.—The last listed syntype with USNM type No. 33802 has been selected, labeled, and is now designated the lectotype. It is in better condition than the other example and has the genitalia complete. Contrary to the original description it is a male.

***Feralia columbiana* Smith, 1903, Canad. Ent. 35: 9.**

"Habitat: New Westminster, British Columbia, 1896 (Fletcher); Northwest Territory (Ottolengui)." "Two males in good condition, very much alike, yet different."

Hampson (1906, Catalogue of the Lepidoptera Phalaenae in the Collection of the British Museum, v. 6, p. 197) stated: "Pl. Cl, fig. 13" and "This species is unknown to me; figured from drawing from type in U.S. Nat. Mus." On the explanation of the plate he stated: "♂ Br. Columbia."

McDunnough (1920, Canad. Ent. 52(6/7): 162) stated: "This species was described (1903, Can. Ent., XXXV, 9) from two males, one from New Westminster, B.C. (Fletcher), the other labelled North West Territories from Dr. R. Ottolengui. The first mentioned specimen, which is in the Collection of the U.S. National Museum, must be considered to be the type."

Syntypes examined: 2 (AMNH and USNM)

- (1) "*Feralia columbiana* Smith ♂ type"; "New Westminster, B.C., 1896"; "J. B. Smith Collection, Rutgers" [Good condition, complete except antennae broken] [AMNH]

- (2) "*Feralia columbiana* Smith ♂ cotype"; "Calgary, N.W. Ter." [A ♂, very good condition = *deceptiva* McD.] [USNM]

Discussion.—The two syntypes probably do not represent the same species. The "♂ type" in the American Museum of Natural History has been selected, labeled, and is now designated the lectotype. Both Hampson and McDunnough were in error in stating the specimen from British Columbia was in the U.S. National Museum.

***Carneades compressipennis* Smith, 1900, U.S. Natl. Mus. Proc. 22(1203): 429.**

"*Habitat*.—Yosemite, California, male, Dr. Dyar, No. 9617; female, special locality and source not marked." "One male and one female only, very much alike and in fair condition."

Hampson (1903, Catalogue of the Lepidoptera Phalaenae in the Collection of the British Museum, v. 4, p. 291) stated: "Pl. LXVI, fig. 6" and "This species is unknown to me; figured from a photograph from type in U.S. Nat. Mus." On the explanation of the plate he stated: "♂ California."

Syntypes examined: 1 (USNM)

- (1) "*Carneades compressipennis* Smith ♂ type"; "Yosemite, Calif."; "Type No. 5148 U.S.N.M."; "36511"; "♂ genitalia, Oct. 3, 1919, A.B. [Busck]"; "Barnes Collection"

Discussion.—I have been unable to locate the female syntype. It is likely that Smith did not label the specimen. It apparently was unlabeled. The label indicating the specimen located was from the Barnes collection is obviously an error. The "♂ type" in the U.S. National Museum has been labeled and is now designated the lectotype.

***Schinia concinna* Smith, 1891, Amer. Ent. Soc. Trans. 18: 128.**

"*Hab.*—Southern Texas." "A single specimen from Mr. Neumoegen."

Smith (1893, U.S. Natl. Mus. Bul. 44, p. 284) stated: "The type is in the Neumoegen collection."

Holotype.—In the U.S. National Museum. The specimen is labeled "*Schinia concinna* Smith Type"; "Houston, Tex."; "Col. B. Neumoegen"; "Type No. 33711 USNM"; "♂ genitalia on slide 1359 JFGC"; "Abdomen from which gen. slide was made is false & not = ♀ moth, JFGC."

***Carneades messoria* var. *contracta* Smith, 1890, U.S. Natl. Mus. Bul. 38, p. 170.**

"One form, paler than the typical specimens, and with a reddish tint, has been named var. *contracta* by Mr. Morrison in Mr. Tepper's collection. I can not find, however, that the name was ever published."

Smith (1893, U.S. Natl. Mus. Bul. 44, p. 97) stated: "Mr. Morrison's is in the Tepper collection."

McDunnough (1950, Amer. Mus. Nat. Hist. Bul. 95(6): 377) stated: "The name *contracta* was validated by Smith, who mentions a manuscript name."

of Morrison's attached to a specimen in the Tepper collection. Judging by Smith's remarks it was taken in Colorado and showed relationship to *balanitis* Grote, at the time erroneously considered by Smith as a *messoria* synonym; an examination of the specimen, if it still exists, in the Michigan State College of Agriculture and Applied Science at East Lansing will be necessary to decide the point." On page 378, he stated: "Types . . . *confracta*, holotype (? Michigan State College of Agriculture and Applied Science, East Lansing); . . ."

Holotype.—In the Michigan State University collection. The specimen, a female in fair condition, is not marked "Type," but it is labeled in red ink "Agrotis Messoria var. *Confracta* Morr. U.S."

Agrotis confusa Smith, 1888, U.S. Natl. Mus. Proc. 10: 452.

"*Habitat*.—Washington Territory." "Four specimens of ♂ and ♀ from Messrs. Graef, Tepper, and Neumoegen examined."

Smith (1890, U.S. Natl. Mus. Bul. 38, pp. 37–38) repeated the comment about number of specimens and their source. In the discussion of *Rhynchagrotis crenulata* (Smith), he stated that the genitalia of *crenulata* and *confusa* were alike. He figured a valve on plate 2, figure 9, and in the explanation (p. 230) he stated: "9 Harpe and clasper of *R. crenulata* and *confusa*." He cited the locality as "HABITAT.—Washington."

Smith (1893, U.S. Natl. Mus. Bul. 44, p. 57) stated: "Types of this species are in the Tepper collection."

Syntypes examined: 4? (2? USNM and 2? MSU)

- (1) "A *confusa* Smith"; "Was. T."; "Col. E. L. Graef"; "Collection Brklyn Mus" [A ♀?, abdomen and hindwings of female glued to remainder of specimen, forewings in fair condition, head and thorax rather poor] [USNM]
- (2) "A *confusa* Smith"; "Was. T."; "Col. E. L. Graef"; "Collection Brklyn Mus" [A ♀, good condition except dermestid damage at base of abdomen] [USNM]
- (3) "Agrotis *confusa* Sm."; "Type [Rhomboidal label]"; "W. T. [Red ink]" [Fair condition, a ♀] [MSU]
- (4) "Agrotis *confusa* Sm."; "Type [Rhomboidal label]"; "W. T. [Black ink]" [A ♀, poor condition, broken from pin by verdigris] [MSU]

Discussion.—In the original description Smith stated that he had examined four specimens, including both sexes, and that the specimens were from Graef, Tepper, and Neumoegen. I have been unable to locate a male and no specimen traceable to Neumoegen has been found. There is a slide in the U.S. National Museum of two pieces of a valve of the male genitalia labeled "confusa." It is numbered 16 by Dyar and placed with slides of other *Agrotis* species studied by Smith. I do not see much resemblance to the illustration (1890, pl. 2, fig. 9) that Smith stated was the kind of valve possessed by this species and *crenulata*. Since Smith in-

dicated four specimens and only three sources, it follows that one of the sources must have provided two specimens, but which one is unknown. The statement in 1893 that types were in the Tepper collection could indicate that two specimens he examined were from Tepper as the plural word "Types" was used by Smith. On the other hand, the existence of two specimens with Smith name labels in his handwriting could be interpreted to indicate that two specimens were from Graef. It is possible, in fact it is likely, that the specimens now labeled as from the Graef collection were simply labeled "Was. T." at the time Smith described the species. If so, Smith might have had one each from Graef and Neumoegen and returned both to Graef.

The labels on the specimens in the Michigan State University collection that read "Type" must have been placed on the specimens by Tepper or some other person, not Smith. Specimens of other species described by other authors have the same label in this collection. For at least 45 years the name has been treated as a subspecies of *Rhynchagrotis insularis* (Grote). The two examples from the Graef collection agree with the other specimens of the series so placed as this concept in the collection of the U.S. National Museum. Unfortunately I did not indicate in my notes at the time I examined the specimens in the Michigan State University collection whether they matched other specimens so identified. Accordingly, I have selected, labeled, and now designate the syntype in the U.S. National Museum that has had some dermestid damage to the abdomen as the lectotype. The other specimen in this museum has a glued-on abdomen and hindwings. It is even possible that the rest of the specimen represents the surviving parts of the missing male syntype.

Agrotis congrua Smith, 1890, Amer. Ent. Soc. Trans. 17: 43.

"*Habitat*.—Oregon." "A single male in good condition is before me."

Smith (1890, U.S. Natl. Mus. Bul. 38, p. 60, pl. 3, fig. 23) illustrated what he stated is the "harpe" and "clasper" of this species.

Smith (1893, U.S. Natl. Mus. Bul. 44, p. 65) stated: "The type is in the National Museum collection."

Holotype.—In the U.S. National Museum. The specimen is labeled "Agrotis congrua Smith Type"; "29"; "4"; "Type No. 79 USNM"; "♂ genitalia on slide 884 FHB"; "Barnes collection." The genitalia on the slide prepared by Benjamin are complete and they do not agree with the illustration by Smith! The "Barnes collection" label is obviously an error. The specimen was received at the U.S. National Museum on June 17, 1896, from J. B. Smith, and the locality was given as Oregon.

Scotogramma conjugata Smith, 1899, N.Y. Ent. Soc. Jour. 7: 41.

"*Habitat*: Garfield County, Colo., 6,000 feet. (Bruce)." "I have two female specimens under examination and believe I have seen others."

Syntypes examined: 2 (USNM)

- (1) "Scotogramma conjugata Smith ♀ type"; "Colo. Bruce"; "607 Garfield Co., Colo."

6000 ft. Bruce"; "Type No. 4151 U.S.N.M."
[Fairly good condition]

- (2) "Scotogramma conjugata Smith ♀ cotype";
"Colo. Bruce"; "245"; "Type No. 4151
U.S.N.M."; "Mamestra n. sp. want ♂." [Very
rubbed, hindwings ragged]

Discussion.—The "♀ type" is in the best condition,
and it has been selected, labeled, and now designated
the lectotype.

Carneades conjuncta Smith, 1890, U.S. Natl. Mus. Bul.
38, p. 221.

"HABITAT.—Las Vegas, New Mexico." "A some-
what rubbed male, and a good female in Mr. Neu-
moegen's collection, taken by Mr. Meeske in 1889."
Smith (1893, U.S. Natl. Mus. Bul. 44, p. 98) stated:
"The type is in Mr. Neumoegen's collection."

Syntypes examined: 2 (USNM)

- (1) "Carneades conjuncta Smith Type"; "Las
Vegas, N.M., H. Meeske, '89"; "Col. B. Neu-
mogen"; "Type No. 33747 U.S.N.M." [A ♂,
abdomen missing]
- (2) "Carneades conjuncta Smith Type"; "Las
Vegas, N.M., H. Meeske, '89"; "Type No.
119, U.S.N.M."; "USNM Acc. no. 25975
[sic]"; "♀ genitalia on slide no. 2203, E.L.T."

Discussion.—Smith labeled both specimens
"Type" as was his practice at the time of the descrip-
tion. Even in 1893 he stated that he considered all the
specimens of the type-series typical. He said: "It is the
sum of the characters of the specimens before the de-
scriber that makes the species, and though neither may
be the type of *all* the characters, yet all are types of the
species." He sent the female specimen to the U.S. Na-
tional Museum in 1892 after July 27. The accession
number on the specimen is incorrect, because 25975
referred to some coins received from the Scott Stamp
and Coin Company. Smith sent a lot of noctuid moths
to the museum after that date and accessioned under
number 25977! Those moths were entered in the USNM
type book June 18, 1896. Smith's statement in 1893
about the type of this species being in the Neumoegen's
collection is peculiar. In other similar instances,
where the type material was divided between two or
more institutions, he normally stated: A type in
Neumoegen's collection, another in the National Mu-
seum, or some similar statement. We now know that
the specimen in the Neumoegen collection was the
male. It has lost its abdomen. Because of this I do not
consider that Smith's 1893 statement, especially in view
of his type concept, should be restrictive. I have se-
lected, labeled, and now designate the female syntype
as the lectotype. D. F. Hardwick, a reviser of the genus
Euxoa, has studied the specimens and concurs in this
selection.

Chytonix connecta Smith, 1894, Amer. Ent. Soc. Trans.
21: 42, pl. 4, fig. 2.

"Hab.—Texas, Graef." "A single female specimen
only."

Holotype.—In the U.S. National Museum. The spec-
imen is labeled "Chytonix connecta Smith Type";

"Tex."; "Type No. 33894 USNM." It is a female as Smith
indicated.

Polla connecta Smith, 1894, Amer. Ent. Soc. Trans. 21:
72, pl. 3, fig. 2.

"Hab.—Glenwood Springs, Colo., September; Dr.
Wm. Barnes, No. 41." "A single male specimen
only, which . . ."

Holotype.—In the U.S. National Museum. The spec-
imen is labeled "Polla connecta Smith Type"; "Glen-
wood Springs, Col., 9-1892, W. Barnes"; "41"; "Type
No. 198"; "♂ genitalia on slide 1386 FHB."

Perigea consors Smith, 1900, U.S. Natl. Mus. Proc.
22(1203): 477.

"Habitat.—Phoenix, Arizona (Dr. Barnes)." "Two
males and one female, all of them poor and . . ."
Barnes and Benjamin (1923, Contrib. Nat. Hist.
Lepidoptera N. Amer. 5(2): 83) stated: "Types in: Na-
tional Museum, 'Type ♂; Rutgers College, 'Type ♀';
Barnes Collection, 1 ♂ 'cotype.'"

Syntypes examined: 3 (2 USNM and 1 AMNH)

- (1) "Perigea consors Smith ♂ type"; "Phoenix,
Ariz. (189-), W. Barnes"; "Type No. 5123,
U.S.N.M."; "36511"; "♂ genitalia on slide
no. 777, E.L.T." [USNM]
- (2) "Perigea consors Smith ♂ cotype"; "Phoe-
nix, Ariz. (189-), W. Barnes"; "107" [USNM]
- (3) "Perigea consors Smith ♀ type"; "Phoenix,
Ariz, 189-, W. Barnes"; "J. B. Smith Collec-
tion, Rutgers" [Poor condition, right hind-
wing missing] [AMNH]

Discussion.—The "♂ type" in the U.S. National
Museum has been selected, labeled, and is now desig-
nated the lectotype.

Drasteria conspicua Smith, 1900, Canad. Ent. 32(8):
224, pl. 5, figs. 13-14.

"Habitat: Calgary, Canada, May and June." "Seven
examples, four males and three females, all in
good condition, from Mr. F. H. Wolley Dod, who
sent it as separate from *distincta*, which also oc-
curs there." In a note under plate 5 Smith stated:
"All the photographs were made from actual type
specimens, except 11 and 12."

Syntypes examined: 7 (5 USNM and 2 AMNH)

- (1) "Drasteria conspicua Smith ♂ type"; "Cal-
gary, 16-VI-98, F. H. W. Dod"; "Type No.
4825, U.S.N.M."; "36311" [Excellent condi-
tion, complete; it is specimen figured on
pl. 5, fig. 13] [USNM]
- (2) "Drasteria conspicua Smith ♀ type"; same
data labels as "♂ type" [USNM]
- (3) "Drasteria conspicua Smith ♂ cotype";
same data labels as "♂ type" [USNM]
- (4) "Drasteria conspicua Smith ♀ cotype";
same data labels as "♂ type" except
"36511" instead of "36311" [USNM]
- (5) "Drasteria conspicua Smith ♂ cotype";
"Calgary, 6-V-95, F. H. W. Dod"; "40";
"Barnes collection" [USNM]
- (6) "Drasteria conspicua Smith ♂ cotype";

- "Calgary, 16-VI-98, F. H. W. Dod"; "J. B. Smith Collection, Rutgers" [AMNH]
(7) "Drasteria conspicua Smith ♀ cotype";
"Calgary, Alberta, 29-V-98, F. H. W. Dod";
"J. B. Smith Collection, Rutgers" [AMNH]

Discussion.—The "♂ type" in the U.S. National Museum has been selected, labeled, and is now designated the lectotype.

Polia contadina Smith, 1894, Amer. Ent. Soc. Trans.

21: 71, pl. 3, fig. 1.

Hab.—Victoria, British Columbia. "The type is a single ♂, in good condition, from Mr. Neumoegen's collection, taken by Mr. W. H. Danby, of Victoria."

Holotype.—In the U.S. National Museum. The specimen is labeled "Polia contadina Smith Type"; "Victoria, B.C."; "Col. B. Neumoegen"; "70"; "Type No. 33883 USNM." It is a male with the right valve of the genitalia missing and with glued-on antennae.

Carneades contagionis Smith, 1900, U.S. Natl. Mus.

Proc. 22(1203): 421.

Habitat.—Glenwood Springs, Colorado, August 7, September 10, October 21 (Dr. Barnes); Garfield County, Colorado, 6,000 feet (Mr. Bruce); Verdi, Nevada. "Twelve specimens are under examination and they resemble each other strongly."

Type.—Cat. No. 4146, U.S.N.M."

Syntypes examined: 8 (6 USNM and 2 AMNH)

- (1) "Carneades contagionis Smith ♂ type"; "Colo. Bruce"; "832, Garfield Co., Colo., 7000', Bruce"; "Type No. 4146, U.S.N.M."; "♂ [sic] genitalia no. 1413, JFGC." [Specimen is a ♀; genitalia slide No. 1413 JFGC is of female genitalia, not of a male!]
[USNM]
- (2) "Carneades contagionis Smith cotype"; "Glenwood Springs, Col., 8/7 1893, W. Barnes"; "36511"; "♂ genitalia no. 1414, JFGC."; "Type No. 4163, U.S.N.M." [USNM]
- (3) "Carneades contagionis Smith cotype"; "Glenwood Springs, Col., 9/23, 1893, W. Barnes"; "Barnes Collection" [A ♂] [USNM]
- (4) "Carneades contagionis Smith cotype"; "Glenwood Spgs, Colo."; "Sept. 8-15"; "Barnes Collection" [A ♂] [USNM]
- (5) "Carneades contagionis Smith cotype"; "Colo., 2758"; "68"; "Type No. 4163, U.S.N.M."; "USNM Acc. no. 34638"; "♀ genitalia no. 1415, JFGC." [USNM]
- (6) "Carneades contagionis Smith cotype"; "Glenwood Spgs., Colo."; "Sept. 8-15"; "Barnes Collection" [A ♀] [USNM]
- (7) "Carneades contagionis Smith ♀ type"; "Glenwood Spgs., Col., 1893 8/7, W. Barnes"; "J. B. Smith Collection, Rutgers"; "♀ genitalia mounted on slide no. 8,816, FHR." [Right hindwing torn] [AMNH]
- (8) "Carneades contagionis Smith cotype"; "Colo., 2763"; "J. B. Smith Collection, Rutgers" [A ♀] [AMNH]

Discussion.—The syntype labeled "♂ type," a female in the U.S. National Museum is the only specimen bearing the USNM type number 4146, which was cited in the original description. Therefore, it is selected, labeled, and is now designated the lectotype.

Xylophasia contradicta Smith, 1895 [Nov. 30], Ent. News

6: 340, pl. 15, fig. 13.

Smith illustrated 17 new species on plate 15, but he only had descriptions for 10 species in this paper. However, the names for all 17 are given on page 340 under "Explanation of Plate XV." In the introductory paragraph, page 332, he stated: "The plate contains figures of the species here described, and the specimens were all collected by Mr. F. H. Wolley Dod, Calgary, Canada."

Smith (1895 [Jan. 1896 issue, mailed Dec. 18, 1895], Ent. News 7(1): 28) described this species formally referring to plate 15 and stated: "*Hab.*—Calgary, June 22, 'Treacle.'" "Mr. Dod says this is a unique, . . ."

Holotype.—In the U.S. National Museum. The specimen is labeled "Xylophasia contradicta Smith Type"; "Calgary, 22/VI/94, Treacle"; "12"; "Type No. 12 USNM"; "♂ genitalia on slide 856 JFGC." The left forewing is missing.

Acontia coquillettii Smith, 1900, Amer. Ent. Soc. Trans.

27: 74.

Hab.—Los Angeles Co., California (Coquillett)."

"A single female example only, lacking part of the abdomen."

Holotype.—In the U.S. National Museum. The specimen is labeled "Acontia coquillettii Smith ♀ type"; "Los Angeles Co., Cal."; "Type No. 5389 USNM"; "36511." The entire abdomen except part of the basal segment is missing.

Noctua corrodera Smith, 1910, N.Y. Ent. Soc. Jour.

18: 85.

Habitat.—Pullman, Washington (Piper); Reno, Nevada; Fort Collins, Colorado, April 12 and July 8 (Doll). "Two males and two females in good or fair condition."

Syntypes examined: 3 (2 AMNH and 1 USNM)

- (1) "Noctua corrodera Smith ♂ type"; "Pullman, Wash."; "Collector C. V. Piper"; "J. B. Smith Collection, Rutgers" [Good condition, complete] [AMNH]
- (2) "Noctua corrodera Smith cotype"; "Reno, Nev."; "J. B. Smith Collection, Rutgers" [A ♀] [AMNH]
- (3) "Noctua corrodera Smith cotype"; "Fort Collins, Colo., 4/12, '05"; "Col. Jacob Doll"; "Barnes Collection" [A ♂, 1 antenna glued on] [USNM]

Discussion.—The "♀ type" presumably from Fort Collins, Colo., July 8 (Doll) has not been located. The "♂ type" in the American Museum of Natural History has been selected, labeled, and is now designated the lectotype.

Oncocnemis corusca Smith, 1899, N.Y. Ent. Soc. Jour. 7: 40.

"*Habitat*: Los Angeles, California; Yosemite, California." "I have two male specimens of this species, one of them received from Mr. H. G. Dyar and numbered 9040, taken by Lember in the Yosemite Valley, the other taken by myself."

Hampson (1906, Catalogue of the Lepidoptera Phalaenae in the Collection of the British Museum, v. 6, p. 151) stated: "Pl. CIV, fig. 2" and "This species is unknown to me, figured from a drawing from type in U.S. Nat. Mus." In the explanation of plate 104 he stated: "♂, California."

Barnes and Benjamin (1924, Contrib. Nat. Hist. Lepidoptera N. Amer. 5(3): 136) stated: "The types [referring to *O. corusca* Sm. and *O. ate* Dyar] are in the National Museum and are practically identical." *Syntypes examined*: 1 (USNM)

- (1) "Oncocnemis corusca Smith ♂ type"; "Los Ang., Cal."; "Type No. 5126, U.S.N.M."; "36511" [1 antenna missing]

Discussion.—I have been unable to locate the specimen from H. G. Dyar numbered 9040. It should be in the U.S. National Museum unless Smith retained it. He sent the specimen he collected to this museum. If it was in the material received by the American Museum of Natural History from Rutgers, it was not listed by Rindge (1955, p. 107). I have selected, labeled, and now designate the "♂ type" in the U.S. National Museum as the lectotype.

Caradrina costiplaga Smith, 1908, N.Y. Ent. Soc. Jour. 16: 92.

"*Habitat*.—Yuma and Yavapai Cos., Arizona in June; Yavapai Co., in August; Baboquavaria Mts., Pima Co., July 15–30; Southern Arizona, Sept. 15–30." "Three males and three females, all more or less flown. Three examples were taken by Mr. Hutson, each at a different time and date; the others are from Mr. O. C. Poling, two of them through Mr. F. A. Merrick."

Hampson (1910, Catalogue of the Lepidoptera Phalaenae in the Collection of the British Museum, v. 9, p. 524) listed a female cotype from Yavapai County, Ariz., in the British Museum (Natural History).

Syntypes examined: 5 (2 AMNH and 3 USNM)

- (1) "Caradrina costiplaga Smith ♂ type"; "Minnehaha"; "Yavapai Co., Ariz., VIII-27"; "J. B. Smith Collection, Rutgers" [AMNH]
- (2) "Caradrina costiplaga Smith ♀ type"; "Yuma Co., Ariz."; "Colorado Desert"; "Collection J. B. Smith" [AMNH]
- (3) "Caradrina costiplaga Smith cotype"; "Baboquavaria Mts., Pima Co., Arizona, July 15 to 30, 1903, Coll. O. C. Poling"; "819"; "1102" [A ♂] [USNM]
- (4) "Caradrina costiplaga Smith cotype"; "So. Arizona, Poling"; "Sept. 15–30" [A ♂] [USNM]

- (5) "Caradrina costiplaga Smith cotype"; "Baboquavaria Mts., Pima Co., Arizona, July 15 to 30, 1903, Coll. O. C. Poling" [A ♀] [USNM]

Discussion.—The sixth syntype is in the collection of the British Museum (Natural History), a female cotype from Yavapai County, Ariz. The "♂ type" in the American Museum of Natural History has been selected, labeled, and is now designated the lectotype.

Podagra crassipes Smith, 1902, N.Y. Ent. Soc. Jour. 10: 48.

"*Habitat*.—Quartzsite, Yuma County, Arizona, in March; Walters Station, Colorado Desert, California, April 20 (George S. Hutson)." "Three males and four females in good condition and very much alike."

Barnes and McDunnough (1913, Contrib. Nat. Hist. Lepidoptera N. Amer. 2(1): 10, pl. 4, fig. 9) figured a female cotype from Yuma County, Ariz.

Syntypes examined: 6 (3 USNM and 3 AMNH)

- (1) "Podagra crassipes Smith ♂ type"; "Yuma Co., Ariz., March"; "Type No. 175, U.S.N.M." [Good condition, complete] [USNM]
- (2) "Podagra crassipes Smith ♀ cotype"; same data as "♂ type" [USNM]
- (3) "Podagra crassipes Smith ♀ cotype"; "Yuma Co., Ariz., March"; "Type No. 175, U.S.N.M."; "Photograph, Pl. 4, No. 9"; "Barnes collection" [USNM]
- (4) "Podagra crassipes Smith ♀ type"; "Yuma Co., Ariz., March"; "Collection J. B. Smith" [Good condition, complete] [AMNH]
- (5) "Podagra crassipes Smith ♂ cotype"; same data as "♀ type" [AMNH]
- (6) "Podagra crassipes Smith ♂ cotype"; "Walters Sta., Calif., April"; "J. B. Smith Collection, Rutgers" [AMNH]

Discussion.—One syntype has not been located, a female. The "♂ type" and the "♀ cotype" that were figured, both in the U.S. National Museum, are the best lectotype candidates. The species is readily recognized by its pattern of maculation, but even so I prefer to have a male as the lectotype. Accordingly, I have selected, labeled, and now designate the "♂ type" as the lectotype.

Schinia crenilinea Smith, 1891, Amer. Ent. Soc. Trans. 18: 129.

"*Hab.*—Southern Texas."

Smith (1893, U.S. Natl. Mus. Bul. 44, p. 281) stated: "The types are in the Neumoegen collection."

Syntypes examined: 1 (USNM)

- (1) "Schinia crenilinea Smith Type"; "Houston, Tex."; "Col. B. Neumoegen"; "231"; "Type No. 33723, U.S.N.M."; "Barnes collection"; "♂ genitalia no. 1389, JFGC."

Discussion.—Smith did not indicate how many specimens he had in the original description. The fact that he referred to "The types . . ." in the paper of 1893

is our only evidence that he had more than a single specimen. On the other hand, only one syntype has been located, and it is possible that the statement in 1893 is an error and that the specimen is a holotype. Whatever the true situation, I have selected, labeled, and now designate the "Type" in the U.S. National Museum as the lectotype. This will insure that it is considered to be the type-specimen. The "Barnes collection" label is obviously an error.

Agrotis crenulata Smith, 1888, U.S. Natl. Mus. Proc. 10: 451.

"*Habitat*.—California." "A single ♂ specimen only in Mr. Neumoegen's collection."

Smith (1890, U.S. Natl. Mus. Bul. 38, p. 37, pl. 2, fig. 9) stated that more specimens had become available and figured "harpe" and "clasper" of *crenulata* and *confusa*, which he believed agreed with one another.

Smith (1893, U.S. Natl. Mus. Bul. 44, p. 56) stated: "Types of this species are in the U.S. National Museum, and in Mr. Neumoegen's collection."

Holotype.—In the U.S. National Museum. The specimen is labeled "Agrotis crenulata Smith Type"; "Cal."; "Type No. 33792 USNM." It is a male. It was received from the Brooklyn Institute of Arts and Science on April 23, 1929, and undoubtedly is from Neumoegen's collection even if not so marked. There are other specimens in the U.S. National Museum labeled as this species by Smith but without his "Type" on the label. One specimen, a female, is marked "Type No. 74 USNM." It is undoubtedly the specimen he referred to in 1893, but it cannot be the type.

Melicleptra cresina Smith, 1906, N.Y. Ent. Soc. Jour. 14: 17.

"*Habitat*.—Los Angeles County, Calif., in April." "Two females in good condition collected by Mr. Koebele."

Syntypes examined: 1 (AMNH)

- (1) "Melicleptra cresina Smith ♀ type"; "Los Angeles Co., Cal."; "Apr."; "J. B. Smith Collection, Rutgers" [Very good condition, complete]

Discussion.—One syntype has not been located. There are examples in the U.S. National Museum labeled like the "♀ type," but none are marked as a type by Smith. The "♀ type" in the American Museum of Natural History has been selected, labeled, and is now designated the lectotype.

Acronycta cretata Smith, 1897, Ent. News 8(6): 148 (in key).

Smith (1898, U.S. Natl. Mus. Proc. 21(1140): 58, pl. 11, figs. 3-4, pl. 17, fig. 15, pl. 19, fig. 18) described the species as new and stated: "*Habitat*.—Garfield County, Colorado; 7,000 feet." "Three specimens collected by Mr. Bruce are types in the collection of U.S. National Museum and Rutgers College. The male is numbered 833, the females 827, 828." Hampson (1909, Catalogue of the Lepidoptera Phalaenae in the Collection of the British Museum,

v. 8, p. 161) listed a female cotype in the British Museum (Natural History) from Garfield County, Colo., and figured the specimen on plate CXXVII, figure 8.

Syntypes examined: 2 (USNM)

- (1) "Acronycta cretata Smith ♂ type"; "Colo. Bruce"; "833, Garfield Co., Colo., 7000 ft. Bruce"; "Type No. 3660, U.S.N.M."; "36511"; "♂ Gen. # 310, FHB."
- (2) "Acronycta cretata Smith ♀ type"; "Colo. Bruce"; "828 Garfield Co., Colo., 7000 ft. Bruce"; "Paratype No. 44328, U.S.N.M."; "A. leporina cretatoides Benj. Paratype ♂" [A ♀!]

Discussion.—The other syntype that Smith said was in the Rutgers College collection in 1898 was apparently sent to Hampson by Smith between 1898 and 1909. There is another specimen labeled as cotype in the U.S. National Museum! It is from a locality not mentioned in the original description, Glenwood Springs, Colo. It was labeled as "A. leporina cretatoides Benj. Allotype ♀" by Benjamin. I cannot explain why it was labeled as a cotype of *cretata* and I do not consider it a syntype. Hampson figured the cotype in the British Museum, but Smith figured the "♂ type" (pl. 11, fig. 3) and the "♀ type" (pl. 11, fig. 4). Smith also illustrated the right valve of the male genitalia. The remainder of the genitalia was mounted on a slide by Benjamin. In consideration of these facts, the "♂ type" in the U.S. National Museum has been selected, labeled, and is now designated the lectotype.

Euxoa criddlei Smith, 1908, N.Y. Acad. Sci. Ann. 18(2): 97.

"*Habitat*: Aweme, Manitoba, Aug. 24, 25, Sept. 4." "One male and two females, in good condition; from Dr. James Fletcher, collected by Mr. Criddle, after whom the species is named."

Lectotype.—In the American Museum of Natural History. Selected by Todd (1968, Wash. Ent. Soc. Proc. 70(3): 268).

Phaeocyma curema Smith, 1908, U.S. Natl. Mus. Proc. 35(1645): 250, pl. 32, fig. 9, pl. 34, fig. 12.

"*Habitat*.—Center, New York in May; Pennsylvania; Kirkwood, Missouri March 25; Raleigh, North Carolina, in May, and Tryon, North Carolina, June 4; Seven Oaks, Florida, in September, Palm Beach, Florida, in March." "*Types*.—Coll. U.S.N.M., Type No. 12026; also in collections of Barnes and Rutgers College." "Two of the Floridian examples diverge . . ."

McDunnough (1943, Canad. Ent. 75: 157) stated: "The holotype is a male from Center, N.Y., with intact abdomen in the Rutgers College Coll., which also contains the female 'Type' from Pennsylvania. Most of the remaining 'Cotypes' are in the U.S. National Museum including probably the specimens from which slides and drawings were made. Smith's genitalic drawings are easily recognizable and he does not seem to have mixed up his series as he did with *metata*."

Syntypes examined: 8 (2 AMNH and 6 USNM)

- (1) "Homoptera curema Smith ♂ type"; "Centre, N.Y., May 14, 1877, Dr. J. S. Bailey Collector"; "Collection J. B. Smith" [Poor condition, worn, right forewing torn, apparently complete, but abdomen may be glued on] [AMNH]
- (2) "Homoptera curema Smith ♀ type"; "Pa."; "J. B. Smith Collection, Rutgers" [Good condition, complete] [AMNH]
- (3) "Homoptera curema Smith cotype"; "15-577 Center"; "Collection O. Meske"; "♂ genitalia no. 1291, JGF." [USNM]
- (4) "Homoptera curema Smith cotype"; "Pa."; "Collection Brklyn. Mus."; "Type No. 34098, U.S.N.M."; "♂ genitalia no. 1294, JGF." [Right forewing missing] [USNM]
- (5) "Homoptera curema Smith cotype"; "Raleigh, N.C., May 19/07"; "34" [A ♀] [USNM]
- (6) "Homoptera curema Smith cotype"; "New York"; "May 8-15"; "1556♀"; "Barnes collection" [A ♀] [USNM]
- (7) "Homoptera curema Smith cotype"; "Seven Oaks, Fla., Sept."; "Barnes collection" [A ♀, currently placed in *buchholzi* McD.] [USNM]
- (8) "Homoptera curema Smith cotype"; "Seven Oaks, Fla., Sept."; "Barnes collection" [A ♂, currently placed in *buchholzi* McD.] [USNM]

Discussion.—McDunnough's statement (1943, p. 157) that Smith did not mix up this series as he did *metata*, does not seem very accurate. Two of the cotypes from Florida are placed with *buchholzi* McD., and other specimens labeled as *curema* but not marked "cotype" from Kirkwood, Mo., and Tryon, N.C., are standing as *metata* in the U.S. National Museum. McDunnough's reference to the "♂ type" as the holotype is incorrect, but some people may construe that statement to constitute lectotype selection. In other such instances, I have selected the same specimen and designated it lectotype in order to insure that it is the type-specimen. I do so again for this species, but I do so reluctantly. The "♂ type" is in poor condition and it may have a false abdomen glued on. The two genitalia slides used by Smith are in the American Museum of Natural History. I have not located the specimens from which they were prepared. If the abdomen on the "♂ type" is false, it might be that that specimen was the source of the male genitalia slide. Were it not for McDunnough's statement about the "♂ type" being the holotype, I would have preferred to have selected another specimen as lectotype. The "Type No. 12026, U.S.N.M." is not found on any specimen. In fact, the type numbers 12023 through 12030 were assigned in the USNM type book on August 8, 1908, to the species of *Phaeocyma* described by Smith in 1908, but labels apparently were not placed on any of the specimens. All Smith name labels for this species and the others he described in 1908 have *Homoptera* as the generic name. Smith apparently decided to use *Phaeocyma* after having labeled the material.

Copimamestra curialis Smith, 1888, U.S. Natl. Mus. Proc. 10: 470.

"*Habitat*.—Kittery Point, Maine." "The type is a perfect ♂ in Mr. Thaxter's collection."

Smith (1893, U.S. Natl. Mus. Bul. 44, p. 113) stated:

"The type is with Dr. Thaxter."

Holotype.—Presumably in the Museum of Comparative Zoology, Harvard College, Cambridge, Mass.

Taeniocampa curtica Smith, 1890, Amer. Ent. 6(7): 122.

"*Hab.*—Sierra Nevada, Cal." "A considerable number of specimens has been before me from Messrs. Edwards and Neumoegen, all agreeing save in distinctness of maculation."

Smith (1893, U.S. Natl. Mus. Bul. 44, p. 203) stated:

"Types are in the National Museum and in the Edwards collection."

Syntypes examined: 4 (AMNH)

- (1) "Taeniocampa curtica Smith Type"; "Sier. Nev., Cal."; "Collection J. B. Smith" [A ♂, right valve missing]
- (2) "Taeniocampa curtica Smith Type"; "Sier. Nev., Cal."; "J. B. Smith Collection, Rutgers" [A ♀]
- (3) "Taeniocampa curtica Smith Type"; "Sier. Nev., Cal."; "No. 10880 Collection Hy. Edwards"; "AMNH Type No. ____" [A ♂, an aberration, dark marks from subterminal line to reniform and to base in fold]
- (4) "Taeniocampa curtica Smith Type"; "Sier. Nev., Cal."; "No. 10880 Collection Hy. Edwards" [A ♀]

Discussion.—There is a specimen in the U.S. National Museum that was received from Smith (returned?) that bears a USNM type number but no Smith type label. It was one of those sent as types of Smith species and entered in the type book under number 238 on June 24, 1896. It may be the reason that Smith said in 1893 that types were in the National Museum and the Edwards collection. It is more likely, however, that Smith intended to send the two specimens discovered in the Rutgers College collection by Rindge, but he just never did do so. Had he intended to keep them in that collection, one would have thought he would have mentioned that institution in the 1893 paper. There is a slide of the right valve in the American Museum of Natural History. The specimen labeled "Collection J. B. Smith" must have been the one that provided the valve. The specimen is in very good condition and I have selected, labeled, and now designate it as the lectotype.

Dryobota curvifascia Smith, 1891, Amer. Ent. Soc.

Trans. 18: 109.

"*Hab.*—Sierra Nevada, Cal. (Edwards), September; Placer County, Cal., through C. V. Riley." "The Placer County specimen in the United States National Museum is the smallest of the three . . ."

Smith (1893, U.S. Natl. Mus. Bul. 44, p. 215) stated:

"Types are in the National Museum and in the Edwards collection."

Syntypes examined: 3 (2 AMNH and 1 USNM)

- (1) "Dryobota curvifascia Smith Type"; "Sier.

- Nev., Cal.;" "Collection J. B. Smith" [A ♂, good condition, complete] [AMNH]
 (2) "Dryobota curvifascia Smith Type"; "Sier. Nev., Cal.;" "J. B. Smith Collection, Rutgers" [A ♀, ragged condition] [AMNH]
 (3) "Dryobota curvifascia Smith Type"; "Placer Co., Cal.;" "Sept.;" "Through C. V. Riley"; "Type No. 197, U.S.N.M." [A ♂, abdomen missing] [USNM]

Discussion.—Smith obtained two of the specimens from Hy. Edwards, and in 1893 he stated that they were in that collection, but he never returned them and they finally were sent to the American Museum of Natural History with the material from the Rutgers College collection. The male "Type" in the American Museum of Natural History has been selected, labeled, and is now designated the lectotype.

Acontia cuta Smith, 1905, N.Y. Ent. Soc. Jour. 13(4): 211.

Habitat.—Santa Rita Mts., Pima County, Arizona, Dr. Barnes." "Three female specimens in fair condition."

Syntypes examined: 3 (1 USNM and 2 AMNH)

- (1) "Acontia cuta Smith cotype"; "Santa Rita Mts., Pima Co., Ariz." [A ♀, fair condition, complete] [USNM]
- (2) "Acontia cuta Smith cotype"; "Baboquavaria Mts., Pima Co., Arizona, July 15-31, 1903, Coll. O. C. Poling"; "J. B. Smith Collection, Rutgers" [A ♀, fair condition] [AMNH]
- (3) "Acontia cuta Smith ♀ type"; "Baboquavaria Mts., Pima Co., Arizona, July 15-31, 1903, Coll. O. C. Poling"; "J. B. Smith Collection, Rutgers"; "♀ genitalia mounted on slide no. 10, 377, FHR." [AMNH]

Discussion.—I have no doubt the syntypes listed here are the specimens Smith studied, but the last two are from a locality not mentioned by him. This was probably just an oversight, but in other species specimens from localities not listed in the original description have been eliminated from consideration for lectotype selection. In the case of this species, the three are all females and all in only fair condition. The maculation is very characteristic, so that each of the syntypes would be satisfactory as the lectotype from that standpoint. Accordingly, I have selected, labeled, and now designate the "cotype" in the collection of the U.S. National Museum as the lectotype because it is from the locality given in the original description.

Noctua cynica Smith, 1898, N.Y. Ent. Soc. Jour. 6: 101, pl. 7, fig. 3.

"My examples are from the vicinity of Albany N.Y." "It is this form that I dissected to illustrate *rubifera* in pl. IV, f. 37 of Bulletin 44, . . ."
 Hampson (1903, Catalogue of the Lepidoptera Phalaenae in the Collection of the British Museum, v. 4, p. 428) stated: "Pl. LXXI, fig. 6" and "This species is unknown to me; figured from a photograph from type in U.S. Nat. Mus." On the explanation of the plate he stated: "♂, New York."

Syntypes examined: 1 (USNM)

- (1) "Noctua cynica Smith ♂ type"; "Bailey"; "83"; "Type No. 4973, U.S.N.M."; "Acc. # 36511" [Both valves missing]

Discussion.—Smith stated his examples (plural) came from the vicinity of Albany, N.Y., but only one syntype has been located. I have selected, labeled, and now designate it as the lectotype.

Porosagrotis daedalus Smith, 1890, U.S. Natl. Mus. Bul. 38, p. 217.

HABITAT.—Colorado." "Four specimens, ♂ and ♀, are before me, all of them collected by Mr. Bruce—one of them from Mr. Angelman, the others from the collection U.S. National Museum."

Smith (1893, U.S. Natl. Mus. Bul. 44, p. 87) stated: "Types are in the National Museum."

Syntypes examined: 4 (USNM)

- (1) "Porosagrotis daedalus Smith Type"; "Colo., Bruce"; "Type No. 101, U.S.N.M." [A ♂]
- (2) "Porosagrotis daedalus Smith Type"; "Colo., Bruce"; "Type No. 101, U.S.N.M."; "Collection J. B. Smith" [A ♂]
- (3) "Porosagrotis daedalus Smith Type"; "77, Platte Canon, Colo., 6500 ft., D. Bruce"; "Type No. 101, U.S.N.M." [A ♂]
- (4) "Porosagrotis daedalus Smith Type"; "Col."; "Through C. V. Riley"; "Type No. 101, U.S.N.M." [A ♀]

Discussion.—The first syntype listed here is in the best condition of the four, and it has been selected, labeled, and is now designated the lectotype. It is one of two males labeled "Colo., Bruce," but it lacks the label "Collection J. B. Smith" found on the second syntype.

Carneades dakota Smith, 1900, U.S. Natl. Mus. Proc. 22(1203): 442.

Habitat.—Dakota: No definite locality." "Two males, neither in first-class condition."

Type.—Cat. No. 4790, U.S.N.M."

Syntypes examined: 2 (USNM and AMNH)

- (1) "Carneades dakota Smith ♂ type"; "Dak."; "Type No. 4790, U.S.N.M."; "♂ genitalia no. 2585, JFGC." [USNM]
- (2) "Carneades dakota Smith cotype"; "Dak."; "J. B. Smith Collection, Rutgers" [A ♂] [AMNH]

Discussion.—The syntype bearing USNM type number 4790 and labeled "♂ type" has been selected, labeled, and is now designated the lectotype.

Mamestra davena Smith, 1901, Amer. Ent. Soc. Trans. 27: 234, pl. 10, fig. 12.

"The fifth series is composed of five male and seven female examples from Sierra Nevada, California, which came originally from Mr. Henry Edwards." "This is a good species, and I have applied to it the name *davena*." On page 237 Smith gave a detailed description under the name *Mamestra davena* n. sp. On page 238 he stated: "*Hab.*—Sierra Nevada, California." "Five males and seven

females in my collection and in the collection American Museum Natural History." "All the specimens came originally from the Henry Edwards' collection, and the description was made from the males." "One ♀ example only, marked Siskiyou, California, is much darker and also much smaller (25 mm.), and narrower winged than any other. It seems to fit this series in all other respects, and I have included it as a cripple, without considering it in giving either size or general locality." On page 240 under *Mamestra davena* Smith he stated: "A good species without doubt, thus far received from Sierra Nevada, California, only. I would expect it to extend along the entire range, but it may not get into the Cascades, or, if it does, not north of the Columbia River."

McDunnough (1943, *Canad. Ent.* 75: 46) stated: "I believe that *davena* must be considered a good species on the strength of the male holotype in the United States National Museum and Smith's figure of the genitalia (1901, *Trans. Amer. Ent. Soc.*, XXVII, Pl. X, fig. 12)."

Syntypes examined: 12 (2 USNM and 10 AMNH)

- (1) "Mamestra davena Smith, ♂ type"; "Sier. Nev., Cal."; "Type No. 5759 U.S.N.M."; "♂ gen. 974, JBSm."; "♂ genitalia on slide no. 5, 5Dec.1930, CH" [Good condition] [USNM]
- (2) "Mamestra davena Smith, ♀ cotype"; "Sier. Nev., Cal."; "No. 10294 Collection Hy. Edwards"; "Barnes collection" [USNM]
- (3) "Mamestra davena Smith, ♀ type"; "Sier. Nev., Cal."; "No. 10294 Collection Hy. Edwards" [Very good condition] [AMNH]
- (4) "Mamestra davena Smith, ♂ cotype"; "Sier. Nev., Cal."; "No. 10294 Collection Hy. Edwards" [Very good condition, complete] [AMNH]
- (5) "Mamestra davena Smith, ♂ cotype"; "Sier. Nev., Cal."; "No. 10294 Collection Hy. Edwards" [Fair, complete] [AMNH]
- (6) "Mamestra davena Smith, ♂ cotype"; "Sier. Nev., Cal."; "J. B. Smith Collection Rutgers" [Good condition, complete] [AMNH]
- (7) "Mamestra davena Smith, ♂ cotype"; "Sier. Nev., Cal."; "Collection J. B. Smith" [Fair, complete] [AMNH]
- (8) "Mamestra davena Smith, ♀ cotype"; "Siskiyou, Sept. 2"; "No. 10300 Collection Hy. Edwards"; "J. B. Smith Collection Rutgers" [AMNH]
- (9) "Mamestra davena Smith, ♀ cotype"; "Sier. Nev., Cal."; "No. 10294 Collection Hy. Edwards"; "AMNH cotype no. ____" [AMNH]
- (10) "Mamestra davena Smith, ♀ cotype"; "Sier. Nev., Cal."; "No. 10294 Collection Hy. Edwards"; "J. B. Smith Collection Rutgers" [AMNH]
- (11) "Mamestra davena Smith, ♀ cotype"; "Sier. Nev., Cal."; "No. 10294 Collection Hy. Edwards" [AMNH]

- (12) "Mamestra davena Smith, ♀ cotype"; "Siskiyou, Sept. 25"; "No. 10292 Collection Hy. Edwards"; "AMNH cotype no. ____" [AMNH]

Discussion.—The male syntype in the U.S. National Museum has been selected, labeled, and is presently designated as the lectotype. It is the specimen referred to by McDunnough as the "holotype," and it is the specimen from which the illustration of a valve was prepared by Smith. All the other male syntypes are complete.

Hypena decorata Smith, 1884, *Brooklyn Ent. Soc. Bul.* 7: 4.

"*Hab.* Cal. Vanc." "Both sexes are in Mr. Edward's collection."

Smith (1893, *U.S. Natl. Mus. Bul.* 44, p. 394) stated: "Types are in the National Museum and in the Edwards collection."

Smith (1895, *U.S. Natl. Mus. Bul.* 48, p. 116, pl. 9, fig. 16) stated: "HABITAT.—California; Vancouver." "This species was collected by Mr. Hy. Edwards, and I have seen no specimens other than those from which I originally described. Only the female is before me at present, but the male differs only in the more even color of the primaries, the contrasts being less marked." On page 123 he refers to the specimen figured as a "male," but that must be an error; the specimen is a female.

Syntypes examined: 1? (USNM)

- (1) "H. decorata Smith"; "Vancouver Island"; "Collection J. B. Smith"; "9109 or 6016?"; "Type No. 326, U.S.N.M." [A ♀, abdomen missing, but otherwise in good condition]

Discussion.—No specimens marked type by Smith have been located. The specimen listed here is probably the female that he had before him in 1895. Smith sent the specimen to the U.S. National Museum as a type and it was entered in the type book under number 326 on June 25, 1896. It probably was the basis for Smith's statement in 1893 concerning the location of types. I was unable to locate the male in the American Museum of Natural History either with the Hy. Edwards material or the material received from Rutgers. I believe that it must be lost and has been since Smith wrote in 1895. In view of these facts, I have selected, labeled, and now designate the female in the U.S. National Museum as the lectotype.

Porosagrotis delorata Smith, 1908, *N.Y. Ent. Soc. Jour.* 16: 87.

"*Habitat*.—High River, Alberta, Canada." "A single good male collected by Mr. Baird and sent in by Dr. Fletcher."

Holotype.—In the American Museum of Natural History. The specimen is labeled "Porosagrotis delorata Smith Type"; "High River, Baird"; "J. B. Smith Collection Rutgers." It is a male in excellent condition.

Peridroma demutabilis Smith, 1893, *Insect Life* 5: 328, fig. 46: 1.

"*Habitat*.—Granite Springs, San Bernardino County, California, April 6." "Three specimens, 1 male

and 2 females, are before me, no two exactly alike, and yet resembling each other closely."

Syntypes examined: 3 (2 USNM and 1 AMNH)

- (1) "Peridroma demutabilis Smith Type"; "S. Bernadino [sic] Co., Cal."; "Granite Springs, April 6-91, K."; "Type No. 85, U.S.N.M."; "Through C. V. Riley" [A ♂, fair condition, complete] [USNM]
- (2) "Peridroma demutabilis Smith Type"; same data [A ♀, very good condition except abdomen missing, specimen figured 46: 1] [USNM]
- (3) "Peridroma demutabilis Smith Type"; "S. Bernadino [sic] Co., Cal."; "Granite Springs, April 6-91"; "Collection J. B. Smith" [A ♀, tear in right hindwing] [AMNH]

Discussion.—The female in the U.S. National Museum was the specimen figured, but it is incomplete; the abdomen is missing. Because of this and because of the sex, the male "Type" in the U.S. National Museum has been selected, labeled, and is now designated the lectotype.

Scotogramma densa Smith, 1893, Insect Life 5: 329.

Habitat.—Argus Mountains, April, 1891. "Four specimens, three of them males, are under consideration, and others not differing are in the National Museum."

Smith (1903, N.Y. Ent. Soc. Jour. 11(1): pl. 1, fig. 15) figured a valve of the male genitalia.

Syntypes examined: 4 (USNM)

- (1) "Scotogramma densa Smith Type"; "Argus Mts., Apr. 91, K."; "Through C. V. Riley"; "Type No. 161, U.S.N.M." [A ♂]
- (2) "Scotogramma densa Smith Type"; "Argus Mts., Apr. 91, K."; "Through C. V. Riley"; "Type No. 161, U.S.N.M." [A ♀]
- (3) "Scotogramma densa Smith Type"; "Argus Mts., Apr. 91, K."; "Through C. V. Riley"; "Type No. 161, U.S.N.M."; "Barnes collection"; "♀ genitalia no. 1514, JFGC."
- (4) "Scotogramma densa Smith Type"; "Argus Mts., Apr. 91, K."; "Through C. V. Riley"; "Type No. 161, U.S.N.M."; "36511" [A ♂]

Discussion.—Smith thought one of the two females was a male, but I do not know which one. Except for the one female from which a genitalia slide has been prepared, all syntypes are complete and all are in only fair condition. The last listed male bearing the label "36511" is probably the best, and it has been selected, labeled, and is now designated the lectotype.

Trileuca dentalis Smith, 1891, Amer. Ent. Soc. Trans. 18: 123.

Hab.—Southern Texas. "A single specimen from Mr. Neumoegen's collection is before me."

Smith (1893, U.S. Natl. Mus. Bul. 44, p. 213) stated: "The type is in Mr. Neumoegen's collection."

Holotype.—In the U.S. National Museum. The specimen is labeled "Trileuca dentalis Smith Type"; "Texas"; "Col. B. Neumoegen"; "Collection Brklyn.

Mus."; "Type No. 34319 USNM"; "♂ genitalia on slide 479 ELT." Hampson (1912, Catalogue of the Lepidoptera Phalaenae in the Collection of the British Museum, v. 11, p. 655) stated: "The type of *dentalis* probably came from the Philippines, not Texas."

Agrotis volubilis form *dentilinea* Smith, 1890, Amer.

Ent. Soc. Trans. 17: 45.

"S. volubilis Harv." "A number of specimens of this species were in the collection, so different from the general run of specimens that I applied the name *dentilinea* to the form." "It may be that this form, which is also narrower winged than type form of *volubilis*, will eventually prove distinct, but I have no specimens at hand sufficient to determine this at present; . . ."

Barnes and Benjamin (1924, Contrib. Nat. Hist. Lepidoptera N. Amer. 5(3): 114) stated: "No specimens were found labeled type in either the National Museum or Smith Collections and apparently the types were either not labeled by Smith or have been lost. No locality is given by Smith in the original description and the name appears to have been overlooked by him (1893, Bull. U.S.N.M., XLIV), by Dyar (1903, Bull. U.S.N.M., LII), and by Hampson (1903, Cat. Lep. Phal. B. M.)."

Lectotype.—In the American Museum of Natural History. A specimen labeled "Agrotis volubilis form dentilinea Smith Type"; "Sier. Nev., Cal."; "No. 9888 Collection Hy. Edw."; "Photo"; "Lectotype, J. McD. 1948" was selected lectotype by McDunnough (1949, Amer. Mus. Novitates 1394, p. 11).

Xylina dentilinea Smith, 1899, N.Y. Ent. Soc. Jour. 7(4): 229.

Habitat: Senator, Arizona, Dr. Kunze, Denver, Colo., at light, Mr. Bruce, Garfield Co., Colo., Mr. Bruce, Fort Collins, Professor Gillette. "Six specimens representing both sexes are before me."

Syntypes examined: 3 (AMNH)

- (1) "Xylina dentilinea Smith ♀ type"; "506"; "80"; "Collection J. B. Smith"
- (2) "Xylina dentilinea Smith cotype"; "Denver, Colo., at Light"; "Collection J. B. Smith" [A ♀, fair condition, complete]
- (3) "Xylina dentilinea Smith cotype"; "601, Garfield Co., Colo., 6000 ft., D. Bruce"; "Collection J. B. Smith" [A ♀, abdomen glued on]

Discussion.—There are four specimens in the U.S. National Museum from Denver, Colo., Senator, Ariz., and Garfield County, Colo., and one female from Senator in the American Museum of Natural History that may have been part of the original series. None are even labeled as the species and not marked types. One female in this museum labeled "Colo."; "2693," and "Collection J. B. Smith" was determined by Smith as the species. Of the three specimens marked as types by Smith, the "♀ type" does not have a locality indicated, although it is probably a specimen from Colorado collected by Bruce, and one "cotype" has the ab-

domen glued on. For those reasons the "cotype" from Denver has been selected, labeled, and is now designated the lectotype.

Acronycta dactylina n. var. denvera Smith, 1905, N.Y. Ent. Soc. Jour. 13(4): 189.

"Closely allied to and probably a variety of *dactylina*." "All the specimens, 2 males and 4 females, are from Denver, Colorado, and dated July, where they have any date at all."

Hampson (1909, Catalogue of the Lepidoptera Phalaenae in the Collection of the British Museum, v. 8, p. 155) listed a male cotype in the British Museum from Denver, Colo.

Syntypes examined: 5 (2 AMNH and 3 USNM)

- (1) "Acronycta denvera Smith ♂ type"; "Denver, Colo."; "J. B. Smith Collection, Rutgers" [AMNH]
- (2) "Acronycta denvera Smith ♀ type"; "Denver, Colo."; "July 1-7"; "J. B. Smith Collection, Rutgers" [AMNH]
- (3) "Acronycta denvera Smith ♂ cotype"; no other labels [genitalia partially destroyed by dermestid damage] [USNM]
- (4) "Acronycta denvera Smith cotype"; "Denver, Col." [A ♂] [USNM]
- (5) "Acronycta denvera Smith ♀ cotype"; "1524"; no other labels [USNM]

Discussion.—The sixth syntype is a male in the British Museum (Natural History) according to Hampson. The syntype labeled "♀ type" is actually the only syntype belonging to *dactylina* Grote. The others are pale examples of *americana* (Harris) and equal to the subspecies *Acronycta americana eldora* Smith. Selection of one of those would cause some possible confusion as to whether the subspecies should be known as *eldora* or *denvera*. Accordingly, the "♀ type" in the American Museum of Natural History has been selected, labeled, and is now designated the lectotype.

Setagrotis dernarius Smith, 1907, Amer. Ent. Soc. Trans. 33: 128.

"*Hab.*—California, W. D. Urban, 1906, 106; Easton, Washington." "One male, the smaller example from California, was sent by Sir George F. Hampson for identification, and is somewhat defective and rubbed; one female, the larger example from Washington was probably from Prof. Piper's lot, although not dated and without his label; but it is an almost perfect specimen, and from it the description was chiefly made."

Syntypes examined: 1 (AMNH)

- (1) "Setagrotis dernarius Smith ♀ type"; "Easton, Wash. K."; "Collection J. B. Smith" [A ♀, abdomen missing]

Discussion.—Smith said that the description was based primarily on the female and that the male was defective and rubbed. I presume the male is now in the British Museum (Natural History). The "♀ type" now lacks an abdomen, but as the description was based on wing maculation of the female, that syntype has been selected, labeled, and is now designated the lectotype.

Homohadena deserta Smith, 1891, U.S. Natl. Mus. Proc. 13(838): 402.

"*HABITAT*.—Colorado desert." "A single male specimen from Mr. Edwards' collection."

Smith (1893, U.S. Natl. Mus. Bul. 44, p. 157) stated: "The type is in the Edwards collection."

Barnes and McDunnough (1916, Contrib. Nat. Hist. Lepidoptera N. Amer. 3(3): 163) stated: "An examination of the type of this species in the Hy. Edwards Collection . . ."

Holotype.—In the American Museum of Natural History. The specimen is labeled "Homohadena deserta Smith Type"; "Colorado desert"; "Type No. AMNH"; "No. 10,615 Collection Hy. Edwards." It is a male in fair condition except the right valve of the genitalia is missing.

Mamestra desperata Smith, 1892, U.S. Natl. Mus. Proc. 14: 221, pl. 8, fig. 22.

"*HABITAT*.—New Hampshire, Maine, Sierra Nevada, California." "Three specimens are in the Museum collection: Maine (J. B. S.); Nevada County, California, red number 341 (through C. V. R.). Mr. Edwards has the species from Sierra Nevada."

Smith had previously determined this as *dimmocki* in several collections, hence some of the localities recorded may have come from those specimens. Smith (1893, U.S. Natl. Mus. Bul. 44, p. 118) stated: "I had had the species as *dimmocki*, and had so named it in the National Museum and elsewhere." He treated this as a synonym of *radix* (Walker)

Syntypes examined: 3 (USNM)

- (1) "Mamestra dimmocki Gr."; "Nevada Co., Cal."; "341"; "Through C. V. Riley" [A ♀, fair condition, abdomen missing]
- (2) "Mamestra dimmocki Gr. [machine printed]"; "Collection J. B. Smith"; "♀" [A ♀, fair condition, complete]
- (3) "Nevada Co., Cal."; "341"; "Through C. V. Riley" [A ♂, valves missing, fair condition]

Discussion.—There is another male in the U.S. National Museum labeled "Mamestra dimmocki"; "Cal."; "Col. B. Neumögen"; "Collection Brklyn. Mus." It is complete and in good condition, but it is not known to be a syntype and is omitted from consideration because, as will be shown, there is evidence that Smith so labeled specimens after the description. There are two specimens in the American Museum of Natural History labeled "*M. dimmockii* Sm. and *Mam. dimmockii*" from Calgary, Alberta (F. H. Wolley Dod) via the Rutgers collection that were collected "22.VI.98" and "22.VI.97"! Those dates are 5 and 6 years after the description of *desperata*! The three specimens I have listed seem to be definitely the three Smith stated were in the Museum (USNM). Two bear the number (red) 341 and the other "Collection J. B. Smith." It is true that the locality, Maine, does not appear on the labels, but most of the material of other species that he described from that State, especially material received from Thaxter, often also lack a locality label. Smith illustrated a valve (pl. 8, fig. 22), but I have not located a slide. It is possible that the male bearing the number 341 may

have been the specimen from which the slide was prepared. There is one specimen in the U.S. National Museum that is labeled "*M. desperata* Sm.," but it is not marked type. It is from "Colo., Bruce," a locality not mentioned in the description. Accordingly, I have selected, labeled, and now designate the male in the U.S. National Museum bearing the red number 341 as the lectotype.

***Mamestra determinata* Smith, 1891, U.S. Natl. Mus.**

Proc. 14(851): 209, pl. 8, fig. 8.

"HABITAT.—Foothills, Colorado (Bruce)." "A single male specimen in good condition . . ."

Smith (1893, U.S. Natl. Mus. Bul. 44, p. 115) stated: "The type is in the National Museum."

Holotype.—In the U.S. National Museum. The specimen is labeled "*Mamestra determinata* Smith Type"; "Foothills, Colo, D. Bruce, 60"; "Type No. 148 USNM"; "36511." It is a male with part of both valves missing. There is another specimen with the "Type No. 148 USNM." It is also a male from Colorado and collected by Bruce. In addition, it bears the Bruce number "536." I do not consider that it is a type.

***Carneades detesta* Smith, 1893, U.S. Natl. Mus. Bul. 44, p. 93.**

"HABITAT.—Colorado." "I have mistaken Dr. Harvey's species, as appears by the type in the British Museum, and I propose the name *detesta* for the species I have described in my revision under the term *choris*." [See Smith, 1890, U.S. Natl. Mus. Bul. 38, p. 158, pl. 5, fig. 68, in part.] Barnes and McDunnough (1912, Contrib. Nat. Hist. Lepidoptera N. Amer. 1(4): 37, pl. 17, figs. 4 and 11) figured what they considered to be this species (male and female from Eureka, Utah) and stated: "It is a name [*detesta*] proposed for the species wrongly identified by Smith in his Revision as *choris* Harv. and is without a type. We have a specimen from Arizona labelled *detesta* by Smith which agrees well with the specimen [4] figured, with the exception of the central shading being more ochreous in the Arizona specimen."

Discussion.—I have been unable to locate any specimens labeled as *choris* by Smith. In the U.S. National Museum there are three specimens labeled "*Carneades detesta* Smith" by Smith. One of these was definitely labeled after the time of the description and I expect that all were. They are from Stockton, Utah, and Phoenix, Ariz., so do not agree with the locality given in the original description. I believe that a neotype will need to be selected. It should be a specimen from Colorado with the light median area of the forewing, but I leave that task to a reviser of the genus.

***Hadena didonea* Smith, 1894, Amer. Ent. Soc. Trans. 21: 58, pl. 6, fig. 7.**

"Habitat.—Colorado; Bruce, Nos. 260 and 485; Glenwood Springs, Colorado, in August; Barnes Nos. 363 and 364." "Two males and two females before me . . ."

Syntypes examined: 4 (3 USNM and 1 AMNH)

- (1) "*Hadena didonea* Smith ♂ type"; "Colo., Bruce"; "269"; "Type No. 173, U.S.N.M." [USNM]
- (2) "*Hadena didonea* Smith ♀ type"; "Colo., Bruce"; "Type No. 173, U.S.N.M." [USNM]
- (3) "*Hadena didonea* Smith Type"; "Glenwood Spgs., Col."; "Aug. 8-15"; "363" [A ♂] [USNM]
- (4) "*Hadena didonea* Smith ♀ type"; "Glenwood Springs, Col., 8. 1892, W. Barnes"; "J. B. Smith Collection, Rutgers" [A ♀, wings good, but abdomen extending from thorax on piece of verdigris] [AMNH]

Discussion.—One specimen is labeled "Type" and the others "♂ type" or "♀ type." It is not known whether this has any significance. Smith apparently miscited the number on one syntype "260" instead of "269." I have selected, labeled, and now designate the "Type" from Glenwood Springs, Colo., in the U.S. National Museum as the lectotype.

***Carneades difformis* Smith, 1900, U.S. Natl. Mus. Proc. 22(1203): 441.**

"Habitat.—Oregon (Schaus)." "Two males and one female, all different. The female is best marked and the main points in the description are from that specimen. One of the males is similar but much more obscure, all the black being changed to smoky brown, and in neither of these is the median shade anything more than a vague suggestion. The second male is intermediate in distinctness of maculation save that the shadings to the subterminal line are obscured by a universal dusky shading, and here the median shade is present without doubt and darkens the space between the ordinary spots."

Hampson (1903, Catalogue of the Lepidoptera Phalaenae in the Collection of the British Museum, v. 4, p. 239) stated: "Pl. LVIII, fig. 21" and "This species is unknown to me; figured from a photograph from type in U.S. Nat. Mus." On the explanation of plate he indicates specimen figured was a male.

Syntypes examined: 2 (USNM)

- (1) "*Carneades difformis* Smith ♂ type"; "Oregon"; "Type No. 5141, U.S.N.M."; "36511" [Left valve broken]
- (2) "*Carneades difformis* Smith ♀ type"; "Oregon"; "Barnes collection"; "♀ genitalia on slide 2256, ELT."

Discussion.—One male syntype has not been located. The description was based mainly on the "♀ type" according to Smith and that syntype has been selected, labeled, and is now designated the lectotype.

***Schinia diffusa* Smith, 1891, Amer. Ent. Soc. Trans. 18: 125.**

"Hab.—Colorado (Bruce)." "Three specimens, male and female, from the collection U.S. Nat. Museum, others in Mr. Neumoegen's collection." Smith (1893, U.S. Natl. Mus. Bul. 44, p. 279) stated:

"The types are in the National Museum."

Hampson (1903, Catalogue of the Lepidoptera Phaenae in the Collection of the British Museum, v. 4, p. 79) stated: "Pl. LIX, fig. 11" and "This species is unknown to me; figured from a photograph from type." In explanation of plate LIX he stated: "11. *Schinia diffusa*, ♂ from Colorado."

Syntypes examined: 3 (2 USNM and 1 AMNH)

- (1) "*Schinia diffusa* Smith Type"; "Colo., Bruce"; "Type No. 290, U.S.N.M."; "♂ genitalia no. 1394, JFGC" [USNM]
- (2) "*Schinia diffusa* Smith Type"; "Colo., Bruce"; "Type No. 290, U.S.N.M."; "♀ genitalia no. 1395, JFGC" [USNM]
- (3) "*Schinia diffusa* Smith Type"; "Colo., Bruce"; "Collection J. B. Smith" [A ♂, very pale, complete] [AMNH]

Discussion.—Smith mentioned that the material was from the U.S. National Museum and in 1893 indicated that the types were in that institution. Therefore, I have selected, labeled, and now designate the male "Type" in the U.S. National Museum as the lectotype.

***Schinia digitalis* Smith**, 1891, Amer. Ent. Soc. Trans. 18: 128.

Hab.—Dallas, Texas." "A single specimen only at hand, . . ."

Smith (1893, U.S. Natl. Mus. Bul. 44, p. 283) stated: "The type is in the National Museum."

Holotype.—In the American Museum of Natural History. The specimen is labeled "*Schinia digitalis* Smith Type"; "Dallas, Texas"; "Collection J. B. Smith." It is a male. The abdomen is greasy and may be glued on. Smith apparently intended to put the type in the U.S. National Museum, but obviously he did not do so.

***Mamestra dilatata* Smith**, 1900, U.S. Natl. Mus. Proc. 22(1203): 464.

Habitat.—New Mexico." "One female from the collection of the United States National Museum."

Type.—Cat. No. 4827, U.S.N.M."

Holotype.—In the U.S. National Museum. The specimen is labeled "*Mamestra dilatata* Smith ♀ type"; "N. Mex."; "Collection J. B. Smith"; "Type No. 4287 USNM." The discrepancy in the "Type No." between the label and the original description is due to an error in writing the type number on the label. The type catalog indicates that 4827 is the correct number. The catalog also reveals that this particular specimen was purchased from Smith. Most of the other Smith types that were sent to the U.S. National Museum from Smith are noted as gifts. If it was purchased, it is strange that Smith indicated in the description that the specimen was from the collection of the U.S. National Museum. Perhaps he sold it to the museum before he described it!

***Xylina dilatocula* Smith**, 1900, Amer. Ent. Soc. Trans. 27: 42, pl. 2, fig. 30, pl. 5, fig. 38.

Hab.—Seattle, Washington; Sierra Nevada, California." "Two males and one female before me and I have seen others."

Syntypes examined: 3 (USNM)

- (1) "*Xylina dilatocula* Smith ♂ type"; "Cal."; "Acc. # 12578"; "Type No. 33878, U.S.N.M."; "♂ genitalia no. 1558, JFGC"
- (2) "*Xylina dilatocula* Smith ♀ type"; "Seattle, Was. T."; "Type No. 5378, U.S.N.M."; "3651 [sic]" [Abdomen broken from specimen by corrosion of pin and glued on again]
- (3) "*Xylina dilatocula* Smith ♂ cotype"; "Sier. Nev., Cal."; "5/30"

Discussion.—The syntype labeled "♂ type" has been selected, labeled, and is now designated the lectotype. It is the specimen that was illustrated by Smith (pl. 5, fig. 38).

***Acontia dimidata* Smith**, 1905, N.Y. Ent. Soc. Jour. 13(4): 208.

Habitat.—Redington, Arizona." "One male and one female from Dr. Barnes; both in good condition."

Barnes and McDunnough (1913, Contrib. Nat. Hist. Lepidoptera N. Amer. 2(1): 44, pl. 21, fig. 18) figured a male from southern Arizona and stated: "Agrees with ♀ type in our possession."

Syntypes examined: 2 (AMNH and USNM)

- (1) "*Acontia dimidata* Smith ♂ type"; "Redington, Ariz."; "J. B. Smith, Rutgers"; "♂ genitalia mounted on slide 10,298, FHR." [AMNH]
- (2) "*Acontia dimidata* Smith ♀ type"; "Redington, Arizona" [USNM]

Discussion.—Smith retained the male and returned the female to Barnes. The "♂ type" in the American Museum of Natural History has been selected, labeled, and is now designated the lectotype.

***Homohadena dinaida* Smith**, 1908, N.Y. Ent. Soc. Jour. 16: 94.

Habitat.—Winnipeg, Manitoba, July 19; Sandy Lake, Newfoundland, August 15." "One male in good condition, one female somewhat rubbed and broken."

Syntypes examined: 2 (AMNH and USNM)

- (1) "*Homohadena dinaida* Smith ♂ type"; "W., 19/7/97"; "Collection J. B. Smith"; "44" [Very good condition] [AMNH]
- (2) "*Homohadena dinaida* Smith ♀ type"; "Sandy Lake, N.F., VIII-15" [Left forewing broken near apex] [USNM]

Discussion.—Smith stated that the female was rubbed and broken. The "♂ type" is apparently from Winnipeg, Manitoba; at least that is the locality given by Smith. The specimen is marked "W., 19/7/97." The date is correct. The "♂ type" in the American Museum of Natural History has been selected, labeled, and is now designated the lectotype.

***Hadena dionea* Smith**, 1899, Canad. Ent. 31: 258.

Habitat.—Volga, South Dakota (Truman)." "The present name is based on four males in rather bad shape, received from Mr. P. C. Truman; but I have seen others sufficient to indicate that there is very

little variation."

Syntypes examined: 4 (2 USNM and 2 AMNH)

- (1) "Hadena dionea Smith δ type"; "Volga, So. Dak."; "Type No. 4839, U.S.N.M."; "36311" [Abdomen and left hindwing missing, pin badly corroded] [USNM]
- (2) "Hadena dionea Smith δ cotype"; "Volga, So. Dak."; "Type No. 4839, U.S.N.M."; "36511"; " δ genitalia slide # 450, JFGC." [USNM]
- (3) "Hadena dionea Smith cotype"; "Volga, So. Dak."; "J. B. Smith Collection, Rutgers" [A δ] [AMNH]
- (4) "Hadena dionea Smith cotype"; "South Dakota"; "J. B. Smith Collection, Rutgers" [A δ] [AMNH]

Discussion.—The " δ cotype" in the U.S. National Museum has been selected, labeled, and is now designated the lectotype. The genitalic preparation 450 by J. F. G. Clarke is very good.

Lythrodus discistriga Smith, 1903, Amer. Ent. Soc.

Trans. 29(3): 207.

"*Hab.*—Walter's Station, California, in April; Southern Arizona, April 1–15." "Two male examples; the California example, taken by Mr. Hutson, is nearly perfect and is the smaller; the Arizona specimen is from Mr. Poling and is somewhat defective."

Syntypes examined: 2 (AMNH)

- (1) "Lythrodus discistriga Smith δ type"; "Walters Sta., Calif., April"; "Collection J. B. Smith" [Fairly good, complete]
- (2) "Lythrodus discistriga Smith type"; "So. Arizona, Poling"; "Apr. 1–15"; "Collection J. B. Smith" [A δ , badly rubbed, complete]

Discussion.—The syntype labeled " δ type" is by far the best specimen and has been selected, labeled, and is now designated the lectotype.

Platyperigea discistriga Smith, 1894, Amer. Ent. Soc.

Trans. 21: 61, pl. 6, fig. 10.

"*Hab.*—Colorado; Bruce, No. 456; Glenwood, Colorado, August, Barnes, No. 291." "Both sexes are represented in the specimens before me, and I have seen others in collections from the same State."

Syntypes examined: 2 (USNM and AMNH)

- (1) "Platyperigea discistriga Smith δ type"; "Colo. Bruce"; "67088X"; "Type No. 177, U.S.N.M." [USNM]
- (2) "Platyperigea discistriga Smith δ type"; "Glenwood Springs, Col, 8 1892, W. Barnes"; "291"; "J. B. Smith Collection, Rutgers" [A δ , good condition, complete!] [AMNH]

Discussion.—The " δ type" in the U.S. National Museum must be the specimen illustrated by Smith. It has been selected, labeled, and is now designated the lectotype.

Aplectoides discolor Smith, 1905, N.Y. Ent. Soc. Jour.

13(4): 193.

"*Habitat*.—British Columbia; Inverness, July 16;

Mouth of Skeene River, June 29." "Two females received from Dr. James Fletcher, both somewhat defective and illustrating extremes in ornamentation."

Syntypes examined: 2 (AMNH and USNM)

- (1) "Aplectoides discolor Smith Type"; "Inverness, B. Col., VII.16"; "J. B. Smith Collection, Rutgers" [A δ , good condition] [AMNH]
- (2) "Aplectoides discolor Smith Cotype"; "Mouth of Skeene River, B.C., June 29"; "Barnes collection" [Very poor, abdomen glued on, badly damaged by dermestids, right hindwing partially missing] [USNM]

Discussion.—The "Type" in the American Museum of Natural History has been selected, labeled, and is now designated the lectotype.

Cleoceris discolor Smith, 1904, Psyche 36(6): 55.

"*Habitat*.—Taos, New Mexico, August 20." "One female, in good condition."

Holotype.—In the American Museum of Natural History. The specimen is labeled "Cleoceris discolor Smith δ type"; "Taos, N.M., 8.20"; "Collection J. B. Smith."

Scotogramma discolor Smith, 1899, N.Y. Ent. Soc.

Jour. 7: 42.

"*Habitat*: Park County, Colorado, 13,000 feet (Bruce)." "A single male specimen from the U.S. National Museum is the type."

Smith (1903, N.Y. Ent. Soc. Jour. pl. 1, fig. 20) figured the male valve.

Holotype.—In the U.S. National Museum. The specimen is labeled "Scotogramma discolor Smith δ type"; "Colo. Bruce"; "661, Park Co., Colo., 13000 ft., Bruce"; "Type No. 4990 USNM"; "36511." The left valve of the male genitalia is broken and the apical part is missing.

Acontia disconnecta Smith, 1903, Amer. Ent. Soc.

Trans. 29(3): 212.

"*Hab.*—Huachuca Mts., Arizona (Dr. Barnes)."

"Four males in good condition."

Hampson (1910, Catalogue of the Lepidoptera Phalaenae in the Collection of the British Museum, v. 10, p. 734) listed a male cotype and figured specimen (pl. CLXXI, fig. 14).

Barnes and McDunnough (1913, Contrib. Nat. Hist. Lepidoptera N. Amer. 2(1): 44, pl. 21, fig. 6) illustrated a male cotype from the Huachuca Mountains, Ariz., as "Tarache disconnecta Sm."

Syntypes examined: 3 (1 AMNH and 2 USNM)

- (1) "Acontia disconnecta Smith δ type"; "Huachuca Mts., Ariz."; "Collection J. B. Smith"; " δ genitalia mounted on slide no. 10, 340, FHR." [Very good condition] [AMNH]
- (2) "Acontia disconnecta Smith δ cotype"; "Huachuca Mts., Ariz." [A δ , right forewing missing] [USNM]
- (3) "Acontia disconnecta Smith cotype"; "Huachuca Mts. Ariz."; "Photograph, Pl. 2, No. 6" [A δ , good condition except venter of thorax missing] [USNM]

Discussion.—The fourth male is in the British Museum (Natural History) and was illustrated by Hampson. Another cotype was illustrated by Barnes and McDunnough. Smith had a mixture of species in this short series. The species involved have rather similar patterns of maculation and it is difficult, if even possible, to separate the species on that basis. Genitalia need to be examined. For that reason and in consideration of the mixup, I have selected, labeled, and now designate the "♂ type" in the American Museum of Natural History as the lectotype.

Noctua dislocata Smith, 1904, *Canad. Ent.* 36(6): 149.

"*Habitat.*—Calgary, head of Pine Creek, in July, F. H. Wolley Dod." "Four ♂ and two ♀ examples are at hand."

Dod (1911, *Canad. Ent.* 43: 330) stated: "But Prof. Smith's ♀ type happens to be *calgary*, as I supposed, the male alone holding good."

Syntypes examined: 4 (AMNH)

- (1) "Noctua dislocata Smith ♂ type"; "15-VII-99, Calgary, F. H. W. Dod"; "Head of Pine Creek"; "J. B. Smith Collection, Rutgers" [Very good condition, complete]
- (2) "Noctua dislocata Smith ♀ type"; "8-VII-99, Calgary, F. H. W. Dod"; "Collection J. B. Smith" [Very good condition, but abdomen glued on]
- (3) "Noctua dislocata Smith ♂ cotype"; "Calgary, Alta., 21-VII-03, F. H. Wolley Dod"; "J. B. Smith Collection, Rutgers" [Fairly good condition, abdomen missing]
- (4) "Noctua dislocata Smith cotype"; "Calgary, 14.VII.99, F. H. W. Dod"; "J. B. Smith Collection, Rutgers" [A ♂, good condition, complete]

Other syntypes: 2 (CNC)

- (1) "Noctua dislocata Smith ♀ cotype"; "Calgary, Alta., 8-VII-99, F. H. W. Dod"
- (2) "Noctua dislocata Smith ♂ cotype"; "Calgary, Alta., 9-VII-03, F. H. Wolley Dod"

Discussion.—Dod said that the "♀ type" was a different species from the male (presumably meaning the "♂ type") and restricted the name to the male. This may be considered lectotype selection by some, but in order to insure that the "♂ type" is considered the type-specimen, it has been labeled and is now designated the lectotype.

Polia dispar Smith, 1900, *U.S. Natl. Mus. Proc.* 22(1203): 473.

"*Habitat.*—Glenwood Springs, Colorado, October 1-10 (Dr. Barnes)." "One pair, both fairly good examples."

Hampson (1909, *Catalogue of the Lepidoptera Phaenae in the Collection of the British Museum*, v. 8, p. 203) stated: "Pl. CXXVIII, fig. 1" and "This species is unknown to me; figured from a drawing from type in U.S. Nat. Mus." On the explanation of plate CXXVIII he indicated the specimen figured was a male from Colorado.

Syntypes examined: 2 (USNM)

(1) "Polia dispar Smith ♂ type"; "Glenwood Springs, Col., 1894-10, W. Barnes" [Right hindwing missing]

(2) "Polia dispar Smith ♀ type"; "Glenwood Spgs., Colo."; "Oct. 1-7"; "Type No. 5132, U.S.N.M."; "36511" [Abdomen missing]

Discussion.—Both syntypes are defective, but the "♂ type" was figured by Hampson and the genitalia are reliable for species identification in this group. Therefore, the "♂ type" in the U.S. National Museum has been selected, labeled, and is now designated the lectotype.

Rhynchagrotis distracta Smith, 1890, *U.S. Natl. Mus.*

Bul. 38, p. 36, pl. 2, fig. 8.

"*HABITAT.*—Washington, Oregon, California."

"This is one of the forms which was marked *observabilis* by Mr. Grote, and which I so referred as above cited." [1887, Smith, *U.S. Natl. Mus. Proc.* 10, 454]

Smith (1893, *U.S. Natl. Mus. Bul.* 44, p. 56) did not indicate the location of the type or types.

Syntypes examined: None located labeled as types by Smith.

Discussion.—It seems likely that Smith failed to label any specimens as types. I leave the selection of a specimen to some subsequent reviser of the genus. The various collections, including Grote's own collection in the British Museum (Natural History), will have to be searched for specimens marked as *observabilis* by Grote. Then they will need to be compared to the Smith description before a selection can be made. There is a very mutilated specimen in the U.S. National Museum labeled "A. *observabilis* Gr."; "Seattle, Wash., VII, 12"; "Slide 22.688"; "Col. Jacob Doll." Benjamin thought this might be Smith's type.

Homoglaea dives Smith, 1907, *Amer. Ent. Soc. Trans.* 33: 135.

"*Hab.*—Corvallis, Oregon, March 11th (Cordley); Wellington, British Columbia, April 14th (Bryant)." "Two good females, . . ."

Syntypes examined: 2 (AMNH and USNM)

- (1) "Homoglaea dives Smith, ♀ type"; "Wellington, B. Col., IV-14"; "J. B. Smith Collection, Rutgers" [Fairly good condition] [AMNH]
- (2) "Homoglaea dives Smith ♀ cotype"; "Corvallis, Or., 11/3/99"; "86"; "Collection J. B. Smith" [Fair condition] [USNM]

Discussion.—The "♀ type" in the American Museum of Natural History has been selected, labeled, and is now designated the lectotype.

Melicieptria dobla Smith, 1906, *N.Y. Ent. Soc. Jour.* 14: 19.

"*Habitat.*—Doble, Calif., April 5." "One good female collected by Mr. George S. Hutson."

Holotype.—In the American Museum of Natural History. The specimen is labeled "Melicieptria dobla Smith ♀ type"; "Doble, Cal."; "4/3"; "J. B. Smith Collection Rutgers." Smith evidently read the 3 in the date

label as a 5. Hardwick (1958, *Canad. Ent.* 90 (Sup. 6): 66) stated that the type was taken on April 4. That is also incorrect. I believe that the label "4/3" means April 3. The date on the "♂ type" of *Behrensia hutsonii* Smith is given as "3/23."

Mamestra dodii Smith, 1904, *Canad. Ent.* 36(6): 152.

"*Habitat*.—Calgary, Alberta, head of Pine Creek, June 21, 22, 27, July 4 and 7; mouth of Fish Creek, July 7, Mr. Dod; Bullion Park, Colorado, July 27." "Seven males and one female are at hand, no two alike, yet obviously one species." Barnes and McDunnough (1913, *Contrib. Nat. Hist. Lepidoptera N. Amer.* 2(1): 14, pl. 6, fig. 2) illustrated a male cotype from Calgary. They misspelled the name "*Polia dodei* Sm."

Syntypes examined: 5 (4 AMNH and 1 USNM)

- (1) "Mamestra dodii Smith ♂ type"; "Calgary, Alta, 8.VII.02, F. H. Wolley Dod"; "Head of Pine Creek"; "J. B. Smith Collection, Rutgers" [Very good condition, complete] [AMNH]
- (2) "Mamestra dodii Smith ♀ type"; "Calgary, Alta, 4.VII.96, F. H. Wolley Dod"; "Head of Pine Creek"; "J. B. Smith Collection, Rutgers" [Good condition] [AMNH]
- (3) "Mamestra dodii Smith ♂ cotype"; "27 VI.96, Calgary, Alta., F. H. Wolley Dod"; "Head of Pine Creek"; "J. B. Smith Collection, Rutgers" [Fair, margins of hindwings frayed, antennae missing] [AMNH]
- (4) "Mamestra dodii Smith ♂ cotype"; "Calgary, Alta., 22.VI.98, F. H. Wolley Dod"; "Head of Pine Creek"; "J. B. Smith Collection, Rutgers" [Good condition, complete] [AMNH]
- (5) "Mamestra dodii Smith ♂ cotype"; "Mouth of Fish Creek"; "Calgary, Alta., 7-VII-94, F. H. Wolley Dod"; "Photograph, Pl. 6, No. 2"; "Barnes collection" [USNM]

Other syntypes: 2 (CNC)

- (1) "Mamestra dodii Smith ♂ cotype"; "Head of Pine Creek"; "Calgary, Alta., 7-VII-96, F. H. Wolley Dod"
- (2) "Mamestra dodii Smith ♂ cotype"; "Calgary, Alta., 21-VI-96, F. H. Wolley Dod"; "#931"

Discussion.—One male syntype from Bullion Park, Colo., July 27, has not been located. Because Smith indicated none of the syntypes were alike, "no two alike," there could be a mixture. For that reason, the "♂ cotype" in the U.S. National Museum illustrated by Barnes and McDunnough in 1913 has been selected, labeled, and is now designated the lectotype.

Setagrotis dolens Smith, 1906, *Canad. Ent.* 38(7): 226.

"*Habitat*.—Arrowhead Lake, British Columbia, June 8-15; Beulah, Manitoba, Aug. 28." "One male and two females in good condition in Dr. Barnes's and my own collection."

McDunnough (1950, *Amer. Mus. Nat. Hist. Bul.* 95(6): 370) stated: "*Types*: . . . ; *dolens*, holotype,

male, Beulah, Manitoba (location unknown); not at Rutgers University, New Brunswick, New Jersey); . . ." "Paratype female, Arrowhead Lake, British Columbia (U.S.N.M.); . . ."

Lectotype.—In the American Museum of Natural History. Selected by Todd (Oct. 4, 1968, *Wash. Ent. Soc. Proc.* 70(3): 269).

Plagiomimicus dollii Smith, 1908, *N.Y. Acad. Sci. Ann.* 18(2): 118.

"*Habitat*: Palmerly, Cochise County, Arizona, August." "Two male and two female examples, all in good condition; from the collection of the Brooklyn Institute."

Hampson (1910, *Catalogue of the Lepidoptera Phalaenae in the Collection of the British Museum*, v. 9, p. 252) listed a female cotype from Palmerly, Cochise County, Ariz., in the British Museum and figured the specimen (pl. CXLII, fig. 20).

Syntypes examined: 3 (2 USNM and 1 AMNH)

- (1) "Plagiomimicus dollii Smith ♂ type"; "Palmerly, Cochise Co., Ariz., VIII"; "Type No. 33947, U.S.N.M." [Fair condition, complete] [USNM]
- (2) "Plagiomimicus dollii Smith ♀ cotype"; "Palmerly, Cochise Co., Ariz., VIII" [Abdomen missing] [USNM]
- (3) "Plagiomimicus dollii Smith ♂ cotype"; "Palmerly, Cochise Co., Ariz., VIII"; "J. B. Smith Collection, Rutgers" [AMNH]

Discussion.—Unless the specimen in the British Museum (Natural History) is labeled differently than indicated by Hampson, Smith must have marked both females "♀ cotype" and failed to mark one as "♀ type." The "♂ type" has been selected, labeled, and is now designated the lectotype. This action was taken primarily because of its sex and because it was labeled "type" by Smith. The fact that the lectotype of this American species is in an American institution was also a factor in its selection and designation.

Cucullia dorsalis Smith, 1892, *U.S. Natl. Mus. Proc.* 15: 47.

"*HABITAT*: Colorado (Bruce)." "Two females are before me, . . ."

Smith (1893, *U.S. Natl. Mus. Bul.* 44, p. 238) stated: "The type is in the National Museum."

Syntypes examined: 2 (USNM)

- (1) "Cucullia dorsalis Smith Type"; "Colo. Bruce"; "126"; "Type No. 268, U.S.N.M."
- (2) "Cucullia dorsalis Smith Type"; "Colo. Bruce"; "125"; "Type No. 268, U.S.N.M."

Discussion.—Both syntypes are in relatively good condition, but both have some formation of verdigris. The specimen with "125" is slightly better than the one with "126." Accordingly, the syntype with "125" has been selected, labeled, and is now designated the lectotype.

Caradrina drasteroides Smith, 1903, *Canad. Ent.* 35: 13.

"*Habitat*: Southern California; Arizona. Two male examples; one in good the other in fair condition."

"The smaller specimen is from Arizona, and comes from the collection of Dr. Ottolengui. The larger specimen is from Southern California, and has been in my collection nearly or quite ten years awaiting a mate."

Hampson (1909, Catalogue of the Lepidoptera Phalaenae in the Collection of the British Museum, v. 8, p. 365) stated: "Pl. CXXXI, fig. 4" and "This species is unknown to me, figured from a drawing from type in Coll. J. B. Smith." On the explanation of plate CXXXI he stated: "♂, Ariz."!! This is the wrong locality for the specimen that was in the Smith collection.

Syntypes examined: 2 (AMNH and USNM)

- (1) "Caradrina drasteroides Smith ♂ type"; "S. Cal."; "Collection J. B. Smith" [Good except right hindwing greasy, complete] [AMNH]
- (2) "Caradrina drasteroides Smith ♂ cotype"; "Arizona"; "Barnes collection" [Good condition, complete] [USNM]

Discussion.—Hampson's illustration was either of the "♂ cotype," the illustration made before the specimen was returned to Barnes who obtained the Ottolengui collection, or Hampson was wrong about the locality. The cotype is a little better than the "♂ type," but the latter has been selected, labeled, and is now designated the lectotype.

Rhynchagrotis duanca Smith, 1908, *Canad. Ent.* 40(7): 228.

"Habitat.—Stockton, Utah, IX, X; California." "Two ♂'s and 3 ♀'s in rather unsatisfactory condition, but obviously different from anything else in this series." "I have a pair of specimens from Montana which are probably the same, but there is enough question about it to prevent my placing them in the type series."

Lectotype.—Buckett (1969, *Calif. Dept. Agr. Bur. Ent. Occas. Papers* No. 17, p. 4) stated: "... lectotype is ♀, Stockton, Utah, October 2, 1904, J. B. Smith coll. Rutgers, ♀ genitalia slide No. 12,104 F. H. Rindge." Prior to the designation of the lectotype, Buckett had visited the U.S. National Museum and studied my notes on the species. He left a signed note on the worksheet for *Rhynchagrotis duanca* Smith indicating that he would designate the "♂ type" as the lectotype. It was a surprise, therefore, to discover that he designated the female and listed a female genitalia slide. The date cited, however, is of the "♂ type." The collection date for the "♀ type" is "IX-29-4." Correspondence on the matter with Rindge and Eric Quinter at the American Museum of Natural History has revealed that Buckett did label the "♂ type" as lectotype and that the genitalia slide No. 12,104 was prepared by Rindge from that specimen. It appears, therefore, that the wrong sex sign was used in Buckett's paper. It is not known whether the error was typographical or due to some other mistake, but in any event the lectotype is the "♂ type," not the "♀ type," as implied by the erroneous sex symbols in Buckett's paper.

Setagrotis ducalis Smith, 1907, *Amer. Ent. Soc. Trans.* 33: 128.

"*Hab.*—Stockton, Utah." "One female in excellent condition, except for the vestiture of thoracic disc, and probably directly or indirectly from Mr. Tom Spalding."

Holotype.—in the U.S. National Museum. The specimen is labeled "Setagrotis ducalis Smith ♀ type"; "Stockton, Utah"; "Barnes Collection" and is a female with dermestid damage to venter of thorax and dorsally to base of abdomen.

Pseudanarta dupla Smith, 1908, *N.Y. Ent. Soc. Jour.* 16: 89.

"*Habitat*.—Stockton, Utah, September 18; South Park, Colorado." "Two males in fair condition; the Utah example from Mr. Tom Spalding, the other from Mr. David Bruce."

Dod (1913, *Ent. News* 24: 249) stated: "Smith made his description from two males, one from Stockton, Utah (Spalding), and the other from South Park, Colo. (Bruce). The type at Rutgers College is from the latter locality, and I have a Stockton male compared with it. The Stockton co-type was sent to the British Museum, and found to agree with Grote's type of *flava*, a male from British Columbia, collected by J. R. Crotch, according to the description."

Syntypes examined: 1 (AMNH)

- (1) "Pseudanarta dupla Smith ♂ type"; "South park, Colo."; "Collection J. B. Smith"

Discussion.—Dod indicated that the other syntype was in the British Museum (Natural History). It is unclear whether his referral to the specimen in the Rutgers College collection as "the type" was intended to restrict the name to that specimen; if so, it is extremely vague in my opinion. To insure that the "♂ type" is considered to be the type-specimen, I have selected, labeled, and now designate it the lectotype. It is located in the American Museum of Natural History.

Cirrhophanes duplicatus Smith, 1891, *Amer. Ent. Soc. Trans.* 18: 112.

"*Hab.*—Platte Canon, Col., 6500 feet." "This species, collected by Mr. Bruce, is before me in one female specimen only." "The specimen is in the United States National Museum."

Smith (1893, *U.S. Natl. Mus. Bul.* 44, p. 261) stated: "The type is in the National Museum."

Holotype.—In the collection of the U.S. National Museum. The specimen is labeled "Cirrhophanes duplicatus Smith Type"; "Platte Canon, Colo., 6500 ft., D. Bruce"; "Type No. 277 USNM." It is a female. Smith misspelled the generic name *Cirrhophanes* Grote both in the original description and on the specimen label.

Orthosia dusca Smith, 1907 [1908], *N.Y. Acad. Sci. Ann.* 18(2): 117.

"*Habitat*: Cartwright, Miniota and Winnipeg, Manitoba, August and September; Kaslo, B.C."; "... and a series of over forty specimens from various points in Manitoba and British Columbia, ..." Smith (1907 [1908], *Amer. Ent. Soc. Trans.* 33:

350-351 and 360, pl. 10, fig. 10) again described this as new but used the name *Amathes duscata* Smith. This paper apparently was published late in February 1908, as copies were received by Cornell University library on February 28, 1908, and the Library of Congress on February 29, 1908. The publication date for the N.Y. Academy of Science Annals (18(2) was January 22, 1908. In the second paper Smith stated: "I have quite a series of specimens from various localities in Manitoba—Brandon, Miniota, Winnipeg, Cartwright—and there are many more in other collections under the name *euroa*." "Dates of capture are June, August, September, and October, . . ." In these statements Smith cited one new locality, Brandon, Manitoba, but failed to list Kaslo, British Columbia. He also added June and October to the collection dates.

Syntypes examined: 12 (10 AMNH and 2 USNM)

- (1) "Orthosia dusca Smith ♂ type"; "Brandon, Manitoba"; "Collection J. B. Smith" [Good condition, complete] [AMNH]
- (2) "Orthosia dusca Smith ♀ type"; "Miniota, Man."; "J. B. Smith Collection, Rutgers" [Fair condition, complete] [AMNH]
- (3) "Orthosia dusca Smith cotype"; "Winnipeg, Man."; "23. 8.00"; "J. B. Smith Collection, Rutgers" [A ♀] [AMNH]
- (4) "Orthosia dusca Smith cotype"; "Miniota, Man."; "J. B. Smith Collection, Rutgers" [A ♂, complete] [AMNH]
- (5) "Orthosia dusca Smith cotype"; "Miniota, Man."; "IX.12"; "J. B. Smith Collection, Rutgers" [A ♂, complete] [AMNH]
- (6) "Orthosia dusca Smith cotype"; "Miniota, Man."; "IX.24"; "J. B. Smith Collection, Rutgers" [A ♀] [AMNH]
- (7) "Orthosia dusca Smith ♀ cotype"; "Miniota, Man."; "VIII.4"; "J. B. Smith Collection, Rutgers" [A ♀, abdomen missing] [AMNH]
- (8-10) "Orthosia dusca Smith cotype"; "Manitoba, Can." [3 ♀♀] [AMNH]
- (11) "Orthosia dusca Smith ♂ cotype"; "Brandon, Manitoba"; "Collection J. B. Smith" [A ♂, complete] [USNM]
- (12) "Orthosia dusca Smith cotype"; "Manitoba, Can." [A ♀] [USNM]

Discussion.—Smith apparently labeled only part of his original series and apparently none from Cartwright, Manitoba, or from Kaslo, British Columbia. The "♂ type" in the American Museum of Natural History has been selected, labeled, and is now designated the lectotype. The locality, Brandon, Manitoba, was not cited in the original description, but the fact that the specimen and the "♂ cotype" in the U.S. National Museum bear the name labels "Orthosia dusca Smith" indicates that the specimens were undoubtedly in the original series. A female from Cartwright, Manitoba, figured by Barnes and McDunnough (1913, Contrib. Nat.

Hist. Lepidoptera N. Amer. 2(1): 24, pl. 11, fig. 3) (as *Amathes (Orthosia) dusca* Smith) may have been a syntype, but it was not so marked by Smith. The two authors did compare it with a male syntype.

Euclidia dyari Smith, 1903, Amer. Ent. Soc. Trans. 29(3): 214.

"This is a new name to designate the species which Dr. Dyar mistook for *intercalaris* Grt., when in 1898, he determined that there were two allied species. Mr. Grote's description is peculiarly indefinite and applies with almost equal force to two forms with practically the same pattern of maculation. I had never seen the two together and may have put the same name on both at different times." "Apparently Dr. Dyar accepted the specimen labelled *intercalaris* in the U.S. National Museum as the true species, and described as *diagonalis* the form differing from it. Prof. F. H. Snow recently sent me, among other material for determination, a specimen of the supposed *intercalaris*, and, as he collected the material for the original species, I returned the example unnamed, with the request that he compare it with his type material. This he did, and was good enough to send me one of the two typical specimens from the Museum of the University of Kansas. This proves to be *diagonalis* Dyar, which is therefore a synonym of *intercalaris* Grt., and leaves an unnamed form. *Dyari* is that form of *Euclidia* in which a broad pale band curves upward from the hind angle to connect with the equally pale reniform. *E. intercalaris* is that form in which the bar from the hind angle is oblique and reaches the median vein well beyond the reniform. . . ." "The synonymy stands."

Syntypes examined: None

Discussion.—Smith obviously did not mark any specimens as types. He was proposing a name for the species that Dyar treated as the species *Euclidia intercalaris* Grote, 1882, when describing *Euclidia diagonalis* Dyar, 1898. A neotype needs to be selected for *Euclidia dyari* Smith, 1903, from the specimens in the U.S. National Museum that Dyar considered to be *intercalaris*. I leave that action and other actions necessary for the application of the names of the North American species of the genus, now known as *Callistege* Hübner [1823], to some future reviser. Grote's original series was apparently mixed.

There are two specimens labeled "type," one in the Francis Huntington Snow Entomological Collection at the University of Kansas and the other in the British Museum (Natural History). The syntypes apparently represent the two species. The syntype in the Kansas collection is a large form with pale hindwings and with the reniform spot of the forewings out of alignment with the oblique bar from the tornus. There is one other specimen there that agrees with the syntype and three smaller, darker specimens with the oblique bar aligned with the reniform spot that are identified as *dyari* Smith. In contrast to Smith, Hampson (1913, Catalogue

of the Lepidoptera Phalaenae in the Collection of the British Museum, v. 13, p. 70) placed *dyari* as a synonym of *intercalaris* based on the syntype in that institution. A lectotype needs to be designated.

J. G. Franclemont has informed me that based on the genitalia there are three distinct North American species in the genus. Furthermore, he has good series of each and stated that there is considerable variation in size and maculation of each, perhaps according to broods as well as individuals. Accordingly, it appears that it will be necessary to examine the genitalia of the types of the three available names when the type-specimens are fixed in order to properly apply the names to the species.

Mamestra ectrapela Smith, 1898, Ent. News 9: 249.

"*Hab.*—Agnes Lake, B.C., 6800 feet, August 21st, Mr. Bean. Garfield County, Colorado, 6000 feet, Mr. Bruce." "The Colorado specimen is a male the other a female, and the male is the larger of the two, as well as by all odds the most brightly marked."

Syntypes examined: 2? (AMNH and ? USNM)

- (1) "Mamestra ectrapela Smith ♀ type"; "Agnes Lake, B.C., 8–21, 6800 ft."; "Collection J. B. Smith"; "466" [Good condition] [AMNH]
- (2) "Mamestra ectrapela Smith"; "Colo., Bruce"; "613, Garfield Co., Colo., 6000 ft." [Fair condition, left valve missing, right valve broken] [USNM]

Discussion.—The specimen in the U.S. National Museum is not labeled "♂ type," and therefore I am not certain that it is, in fact, a syntype. The name label is a Smith label and the data agree with the information in the original description. However, because of the doubt and the broken condition of the genitalia of this male, the "♀ type" in the American Museum of Natural History has been selected, labeled, and is presently designated the lectotype.

Feltia edentata Smith, 1902, N.Y. Ent. Soc. Jour. 10: 38.

"*Habitat*.—Pullman, Washington, August 13." "A single male, . . ."

Holotype.—In the American Museum of Natural History. The specimen is labeled "Feltia edentata Smith ♂ type"; "Pullman, Wash., 13 Aug 98"; "Collection J. B. Smith"; "♂ genitalia 7385 FHR."

Carnaades edictalis Smith, 1893, Ent. News 4(3): 99, pl. 6, fig. 3.

"*Hab.*—Colorado. Bruce. Nos. 70, 207, 326." "Three males are at hand, the antennae pectinated." Smith (1894, Amer. Ent. Soc. Trans. 21: 46, pl. 2, fig. 3) again described this as new, using the same plate. He added: "Mr. Bruce has sent me three specimens, all of them males, and all much alike. One of them is labeled 'Salida, 4, 18, 88,' the others are more recent captures."

Lectotype.—In the U.S. National Museum. Selected by Todd (Oct. 4, 1968, Wash. Ent. Soc. Proc. 70(3): 269).

Homopyralis edilis Smith, 1906, Canad. Ent. 38(7): 237.

"*Habitat*.—Yavapai Co., Arizona, June 23, 27, Aug. 2, 3, 8, 24. Mr. Hutson." "Five males and one female in fair to good condition. The August captures are labeled Minnehaha."

Syntypes examined: 6 (5 AMNH and 1 USNM)

- (1) "Homopyralis edilis Smith ♂ type"; "Minnehaha"; "Yavapai Co., Ariz. VIII–24"; "J. B. Smith Collection, Rutgers" [Fairly good condition, complete] [AMNH]
- (2) "Homopyralis edilis Smith ♀ type"; "Yavapai Co., Ariz., VIII–8"; "J. B. Smith Collection, Rutgers" [Fair condition, complete] [AMNH]
- (3) "Homopyralis edilis Smith ♂ cotype"; "Minnehaha"; "Yavapai Co., Ariz., VIII–23"; "J. B. Smith Collection, Rutgers" [Fair condition, complete] [AMNH]
- (4) "Homopyralis edilis Smith ♂ cotype"; "Yavapai Co., Ariz., VI–23"; "J. B. Smith Collection, Rutgers" [Fair condition, complete] [AMNH]
- (5) "Homopyralis edilis Smith ♂ cotype"; "Yavapai Co., Ariz., VI–27"; "J. B. Smith Collection, Rutgers" [Fair condition, complete] [AMNH]
- (6) "Homopyralis edilis Smith cotype"; "Yavapai Co., Ariz., V–VIII–2" [A ♂] [USNM]

Discussion.—All the syntypes are listed. Smith was wrong about the date August 3; it should have been August 23. The "♂ type" in the American Museum of Natural History has been selected, labeled, and is now designated the lectotype.

Melicieptria edwardsi Smith, 1906, N.Y. Ent. Soc. Jour. 14: 19.

"*Habitat*.—Yellowstone Park, Wyo., in July; Burrison, collector." "One female in good condition, save that the antennae are wanting; received through Mr. W. D. Kearfott."

Holotype.—In the American Museum of Natural History. The specimen is labeled "Melicieptria edwardsii Smith ♀ type"; "Yell' stne Pk., Wym., July 1900, Burrison Coll."; "Collection W. D. Kearfott"; "J. B. Smith Collection Rutgers."

Trichoclea edwardsii Smith, 1888, U.S. Natl. Mus. Proc. 10: 478.

"*Habitat*.—California." "The unique ♂ type is in the collection of Mr. Hy. Edwards, to whom I take pleasure in dedicating this pretty species. [Others have since been taken agreeing with the type, and several are in the Museum collection]"

Smith (1893, U.S. Natl. Mus. Bul. 44, p. 209) stated: "The type is in the Edwards collection; exact duplicates are in the National Museum."

Holotype.—In the American Museum of Natural History. The specimen is labeled "Trichoclea edwardsii Smith Type"; "California"; "No. 10902 Collection, Hy. Edw."; "Type No. A.M.N.H." Part of the right valve is missing.

Adipsophanes egestis Smith, 1894, Amer. Ent. Soc. Trans. 21: 77, pl. 5, fig. 14.

"*Hab.*—Prescott, Ariz., Neumoegen." "A single female specimen in fair condition in Mr. Neumoegen's collection is marked 'Adipsophanes egestis Grote Type.' I know of no description and hence offer the above, under Mr. Grote's name, to supplement what Mr. Grote may have published elsewhere."

Holotype.—In the U.S. National Museum. The specimen is labeled "Adipsophanes egestis Smith ♀ type"; "Prescott, Arizona"; "Type No. 33942 USNM"; "Col. B. Neumoegen."

Setagrotis elata Smith, 1898, N.Y. Ent. Soc. Jour. 6: 106.

"*Habitat*: Colorado." "I have three specimens, two males and one female, received from Professor C. P. Gillette, and numbered 565, 2610 and 2732." Hampson (1903, Catalogue of the Lepidoptera Phalaenae in the Collection of the British Museum, v. 4, p. 530) stated: "Pl. LXXIV, fig. 10" and "This species is unknown to me; figured from a photograph from type in U.S. Nat. Mus." He stated that the specimen illustrated was a "♂, from Colorado." McDunnough (1950, Amer. Mus. Nat. Hist. Bul. 95(6): 369) stated: "Types: . . . ; *elata*, holotype, male, allotype, female, Colorado (C. P. Gillette), presumably Fort Collins (U.S.N.M.) . . ."

Lectotype.—In the U.S. National Museum.

Selected by Todd (Oct. 4, 1968, Wash. Ent. Soc. Proc. 70(3): 270).

Raphia elbea Smith, 1908, N.Y. Ent. Soc. Jour. 16: 83.

"*Habitat*.—Deming, New Mexico, July 8–15."

"Three males and three females, all in good condition, from Dr. Barnes."

Syntypes examined: 6 (4 AMNH and 2 USNM)

- (1) "Raphia elbea Smith ♂ type"; "Deming, N. Mex."; "J. B. Smith Collection, Rutgers" [Good condition except abdomen slightly greasy] [AMNH]
- (2) "Raphia elbea Smith ♀ type"; "Deming, N. Mex."; "July 8–15"; "J. B. Smith Collection, Rutgers" [AMNH]
- (3) "Raphia elbea Smith ♂ cotype"; "Deming, N. Mex."; "J. B. Smith Collection Rutgers" [Greasy but complete] [AMNH]
- (4) "Raphia elbea Smith ♀ cotype"; "Deming, N. Mex."; "July"; "J. B. Smith Collection, Rutgers" [Fair condition, complete] [AMNH]
- (5) "Raphia elbea Smith ♂ cotype"; "Deming, N. Mex."; "♂ genitalia no. 949, JFGC." [USNM]
- (6) "Raphia elbea Smith ♀ cotype"; "Deming, N. Mex."; "♀ genitalia no. 950, JFGC." [USNM]

Discussion.—The "♂ type" in the American Museum of Natural History has been selected, labeled, and is now designated the lectotype.

Perigonica eldana Smith, 1911, N.Y. Ent. Soc. Jour. 19(3): 143.

"*Habitat*.—Glenwood Springs, Colorado, in May (Barnes); So. Arizona, April and May (Poling)."

"Three male and three females, mostly in good condition."

Syntypes examined: 5 (4 AMNH and 1 USNM)

- (1) "Perigonica eldana Smith ♂ type"; "So. Arizona, Poling"; "Apr. 15–30"; "J. B. Smith Collection, Rutgers" [Very good condition, complete] [AMNH]
- (2) "Perigonica eldana Smith Paratype"; "So. Arizona, Poling"; "Apr. 15–30"; "J. B. Smith Collection, Rutgers" [A ♀] [AMNH]
- (3) "Perigonica eldana Smith Paratype"; "So. Arizona, Poling"; "Apr. 15–30"; "J. B. Smith Collection, Rutgers" [A ♀] [AMNH]
- (4) "Perigonica eldana Smith Paratype"; "Gila Co., Ariz., May 15–30, O. Poling"; "J. B. Smith Collection, Rutgers" [A ♀] [AMNH]
- (5) "Perigonica eldana Smith Paratype"; "Glenwood Springs, Col., May 10, 1894, W. Barnes"; "Barnes Collection" [A ♂, abdomen about to break off] [USNM]

Discussion.—The "♂ type" in the American Museum of Natural History has been selected, labeled, and is now designated the lectotype.

Acronycta eldora Smith, 1905, N.Y. Ent. Soc. Jour. 13(4): 189.

"*Habitat*: Denver, Colorado, in July; Glenwood Springs, Colorado, July and August." "Eight examples in good condition and evenly divided as to sex. One pair is from Denver and were received years ago, probably from Mr. Bruce; the others are from Dr. Barnes."

Hampson (1909, Catalogue of the Lepidoptera Phalaenae in the Collection of the British Museum, v. 8, p. 119) listed a female cotype and one other female from Denver, Colo. He figured a specimen from that locality (pl. CXXV, fig. 24), but it is not known which of the two was used for the illustration.

Syntypes examined: 7 (3 AMNH and 4 USNM)

- (1) "Acronycta eldora Smith ♂ type"; "Glenwood Spgs., Col."; "Aug. 1–7"; "J. B. Smith Collection, Rutgers" [Good condition] [AMNH]
- (2) "Acronycta eldora Smith ♀ type"; "Glenwood Spgs., Col."; "Aug. 1–7"; "J. B. Smith Collection, Rutgers" [AMNH]
- (3) "Acronycta eldora Smith cotype"; "Denver, Col., VI.20"; "Collection J. B. Smith" [A ♀, fair condition, complete] [AMNH]
- (4) "Acronycta eldora Smith ♂ cotype"; "Glenwood Spgs., Col."; "July 24–30" [USNM]
- (5) "Acronycta eldora Smith cotype"; "Glenwood Spgs., Col."; "July 16–23" [A ♂] [USNM]
- (6) "Acronycta eldora Smith ♀ cotype"; "Glenwood Springs, Col."; "8–20–1898"; "W. Barnes" [USNM]

- (7) "*Acronycta eldora* Smith cotype"; "Glenwood Springs, Col."; "7-1895"; "W. Barnes" [A ♀] [USNM]

Discussion.—The "♂ type" in the collection of the American Museum of Natural History has been selected, labeled, and is now designated the lectotype.

***Demas electa* Smith**, 1911, N.Y. Ent. Soc. Jour. 19(3): 134.

Habitat.—Winnipeg, Manitoba, May 31, 1909, Mr. J. B. Wallis. "Two very fine females, through Mr. Arthur Gibson of the Central Experimental Farm." McDunnough (1942, *Canad. Ent.* 74: 93) stated: "...; *electa* Sm., based on two females from Winnipeg, Man., one of which is in the Canadian National Collection, seems pure and simple *flavicornis* and the name is scarcely worth retaining even in a doubtful racial sense."

Syntypes examined: 1 (AMNH)

- (1) "*Demas electa* Smith Type"; "Winnipeg, Man., 31.V.09, J. B. Wallis"

Discussion.—The syntype was sent to the American Museum of Natural History via the Rutgers College collection according to Rindge (1955, p. 109). The other specimen in the Canadian National Collection mentioned by McDunnough in 1942 should bear an identical locality label. For the other species described by Smith in the same paper, he appeared to label one as "♂ type" and the others as paratypes, and in two specimens where both sexes were present, he failed to mark a female "♀ type." In this species he labeled the one "Type," but I do not know how the specimen in the Canadian National Collection was labeled. I have selected, labeled, and now designate the "Type" in the American Museum of Natural History as the lectotype.

***Ufeus electra* Smith**, 1908, N.Y. Acad. Sci. Ann. 18(2): 99.

Habitat: Oregon. "Two female examples, without date or name of sender."

Syntypes examined: 2 (AMNH and USNM)

- (1) "*Ufeus electra* Smith ♀ type"; "Or."; "Collection J. B. Smith" [Somewhat rubbed, right forewing slightly slit, antennae missing] [AMNH]
(2) "*Ufeus electra* Smith ♀ cotype"; "Or."; "Collection J. B. Smith"; "1519"; "Barnes Collection" [Wings very worn and ragged] [USNM]

Discussion.—The "♀ type" although poor is in better condition than the other syntype. It has been selected, labeled, and is now designated the lectotype.

***Pachnobia elevata* Smith**, 1891, Amer. Ent. Soc. Trans. 18: 104, pl. 2, fig. 2.

Hab.—Colorado (Bruce). "A single good male from Mr. Neumoegen's collection."

Smith (1893, U.S. Natl. Mus. Bul. 44, p. 64) stated: "The type is in Mr. Neumoegen's collection."

Holotype.—in the U.S. National Museum. The specimen is labeled "*Pachnobia elevata* Smith Type";

"Colo., Bruce"; "Col. B. Neumoegen"; "Type No. 33778 USNM." Both valves of the male genitalia are missing.

***Manruta elingua* Smith**, 1903, Amer. Ent. Soc. Trans. 29(3): 205.

Hab.—Phoenix, Arizona, November 10th and 19th. "Two male specimens collected by the late Dr. Griffiths. Both examples have been papered and are somewhat flattened; one is a little torn in addition; but the other is in very fair condition."

Syntypes examined: 2 (AMNH and USNM)

- (1) "*Manruta elingua* Smith ♂ type"; "Phoenix, Ariz., XI.19"; "Collection J. B. Smith" [Rather ragged, complete] [AMNH]
(2) "*Manruta elingua* Smith cotype"; "Phoenix, Ariz."; "Barnes collection" [A ♂, abdomen and 1 wing glued on] [USNM]

Discussion.—The "♂ type" in the American Museum of Natural History has been selected, labeled, and is now designated the lectotype.

***Acronycta elisabeta* Smith**, 1907, Amer. Ent. Soc. Trans. 33: 125.

Hab.—North Elizabeth, New Jersey, in August. "One good male from Mr. H. H. Brehme taken on a maple tree." "Specimens are also in the collections of Messrs. Buchholz of Elizabeth, and Keller of Newark."

Syntypes examined: (3 AMNH and 1 USNM)

- (1) "*Acronycta elisabeta* Smith ♂ type"; "No. Eliz., Aug. 1906, H. H. Brehme"; "J. B. Smith Collection, Rutgers" [AMNH]
(2) "*Acronycta elisabeta* Smith cotype"; "Elizabeth, N.J., V. 30"; "O. Buchholz Collection" [A ♂, good condition, complete] [AMNH]
(3) "*Acronycta elisabeta* Smith, cotype"; "Elizabeth, N.J., VI-10"; "O. Buchholz Collection" [A ♂, good condition, complete] [AMNH]
(4) "*Acronycta elisabeta* Smith cotype"; "Elizabeth, N.J., V-27" [A ♀] [USNM]

Discussion.—From the information in the original description, apparently only the "♂ type" was before Smith at the time of the description. If so, that specimen would be the holotype, but the fact that Smith labeled specimens as cotypes may indicate that he did have other specimens and that the wording of the original description is merely ambiguous. It is also possible that Smith labeled the "cotypes" at another time. In any event, I have selected, labeled, and now designate the "♂ type" as the lectotype. This action will insure that the specimen is the type-specimen whether it be considered a holotype or lectotype.

***Acronycta emaculata* Smith**, 1898, U.S. Natl. Mus. Proc. 21(1140): 158, pl. 13, fig. 2, pl. 22, fig. 9.

Habitat.—Calgary, Canada; Easton, Washington. "I have only two specimens of this species. The male, a very good specimen from Calgary, received from Mr. Dod; the female, evidently an electric-light

capture, because one secondary is scorched, taken by Mr. Koebele and belonging to the U.S. National Museum, and these are the types."

Syntypes examined: 2 (AMNH and USNM)

- (1) "Acronycta emaculata Smith δ type"; "Calgary, 1394 [1894?] A. H."; "J. B. Smith Collection, Rutgers" [A δ , left valve missing, specimen figured] [AMNH]
- (2) "Acronycta emaculata Smith ϕ type"; "Easton, Wash., K."; "Type No. 3670, U.S.N.M."; " ϕ genitalia no. 2685, JFGC." [Left hindwing damaged, burned] [USNM]

Discussion.—The " δ type," the specimen figured by Smith, in the American Museum of Natural History, has been selected, labeled, and is now designated the lectotype.

Xylina emarginata Smith, 1900, Amer. Ent. Soc. Trans. 27: 28, pl. 1, fig. 14, pl. 4, fig. 22.

Hab.—Colorado Springs and Glenwood Springs, Colorado, April, August, October. "Two males and two females, very much alike and . . ."

Barnes and McDunnough (1913, Contrib. Nat. Hist. Lepidoptera N. Amer. 2(1): 26, pl. 12, figs. 8 and 10) illustrated the female and male cotypes from Glenwood Springs, Colo.

Syntypes examined: 5 (4 USNM and 1 AMNH)

- (1) "Xylina emarginata Smith δ type"; "Glenwood Spgs., Col."; "April 24–30"; "36511"; "Type No. 5376, U.S.N.M."; "Type repinned and repaired 24–VIII–39, all parts ok, J.F.G.C." [Specimen greasy, right hindwing missing] [USNM]
- (2) "Xylina emarginata Smith ϕ type"; "Colo. Spgs., 8/5/98"; "Type No. 5376, U.S.N.M."; "36511" [Abdomen missing] [USNM]
- (3) "Xylina emarginata Smith δ cotype"; "Glenwood Spgs., Col."; "April 1–7"; "Photograph Pl. 12, No. 10" [Very good condition, repinned, both valves broken] [USNM]
- (4) "Xylina emarginata Smith ϕ cotype"; "Glenwood Spgs., Col."; "April 16–23"; "Photograph Pl. 12, No. 8" [Good condition but greasy] [USNM]
- (5) "Xylina emarginata Smith δ cotype"; "Glenwood Spgs., Col."; "October 1–7"; "J. B. Smith Collection, Rutgers" [AMNH]

Discussion.—One more syntype than indicated by Smith has been located. Either Smith erred in counting his series or one of the two " δ cotypes" would appear to be a pseudotype. I would think that either was possible. None of the specimens are in really good condition, but the " δ type" has the genitalia intact. Those structures are very important in determining the species in this genus. Accordingly, the " δ type" in the U.S. National Museum has been selected, labeled, and is now designated the lectotype.

Tricholita endiva Smith, 1911, N.Y. Ent. Soc. Jour. 19(3): 141.

Habitat.—Yavapai County, Arizona, in September (Mr. Otto Buchholz); Santa Catalina Mts., Arizona,

in September (Dr. Barnes); Ft. Wingate, New Mexico, August 28. "Four males and four females in good or fair condition—five of them from Mr. Buchholz who has others."

Syntypes examined: 8 (4 AMNH and 4 USNM)

- (1) "Tricholita endiva Smith δ type"; "Santa Catalina Mts., Ariz."; "J. B. Smith Collection, Rutgers"; "Sept." [AMNH]
- (2) "Tricholita endiva Smith ϕ type"; "a. IX-13"; "Yavapai Co., Ariz., O. Buchholz"; "J. B. Smith Collection, Rutgers" [Left wings rubbed, complete] [AMNH]
- (3) "Tricholita endiva Smith Paratype"; "a. IX-14"; "Yavapai Co., Ariz., O. Buchholz"; "J. B. Smith Collection, Rutgers" [A δ , rubbed, complete] [AMNH]
- (4) "Tricholita endiva Smith Paratype"; "Ft. Wingate"; "J. B. Smith Collection, Rutgers" [A ϕ , poor condition, complete] [AMNH]
- (5) "Tricholita endiva Smith Paratype"; "Santa Catalina Mts., Ariz."; "Sept."; "Barnes Collection" [A ϕ] [USNM]
- (6) "Tricholita endiva Smith Paratype"; "Yavapai Co., Ariz., O. Buchholz"; "a-IX-14"; "Barnes Collection" [A ϕ , rubbed, left forewing split] [USNM]
- (7) "Tricholita endiva Smith Paratype"; "Yavapai Co., Ariz., O. Buchholz"; "a-IX-14"; "Barnes Collection" [A δ , right hindwing split] [USNM]
- (8) "Tricholita endiva Smith Paratype"; "Yavapai Co., Ariz., O. Buchholz"; "a-IX-14"; "Barnes Collection" [A δ] [USNM]

Discussion.—The " δ type" is in better condition than the other syntypes and is a male. It has been selected, labeled, and is now designated the lectotype. The specimen is in the collection of the American Museum of Natural History.

Xylophasia enigma Smith, 1904, Psyche 11(2): 54.

Habitat.—Calgary, Alberta, Head of Pine Creek, July 3 and 7; F. H. Wolley Dod. "Three good males."

Hampson (1908, Catalogue of the Lepidoptera Phalaenae in the Collection of the British Museum, v. 7, p. 200) stated he had seen a male cotype from the collection of J. B. Smith. Since he listed no other specimens, this must have been the specimen figured on plate CXIII, figure 13.

Syntypes examined: 2 (AMNH and USNM)

- (1) "Xylophasia enigma Smith δ type"; "Calgary, Alta, 3.VII.03, F. H. Wolley Dod"; "Head of Pine Creek"; "J. B. Smith Collection, Rutgers" [Good condition, complete] [AMNH]
- (2) "Xylophasia enigma Smith cotype"; "Calgary, Alta., 3-VII-03, F. H. Wolley Dod"; "Barnes Collection"; " δ genitalia no. 139, JFGC." [Poor condition] [USNM]

Discussion.—The third syntype may be in the British Museum (Natural History). It is not clear whether

the specimen was sent to the institution as an exchange or gift by Smith as were other "cotypes" of other species. The "♂ type" in the American Museum of Natural History has been selected, labeled, and is now designated the lectotype.

Carneades enteridis Smith, 1900, U.S. Natl. Mus. Proc. 22(1203): 427.

"*Habitat*.—Pullman, Washington (Piper)." "One male in fair condition."

"*Holotype*.—In the U.S. National Museum. The specimen is labeled "Carneades enteridis Smith ♂ type"; "Pullman, Wash. T."; "Type No. 5152 USNM"; "36511."

Euxoa epictata Smith, 1907, Amer. Ent. Soc. Trans. 33: 130.

"*Hab*.—Southern Arizona, April 15th to 30th, Poling." "Two ♂ and six ♀, all in fair condition."

Syntypes examined: 8 (7 AMNH and 1 USNM)

- (1) "Euxoa epictata Smith ♂ type"; "So. Arizona, Poling"; "Apr. 15-30"; "J. B. Smith Collection, Rutgers" [Fair condition, complete] [AMNH]
- (2) "Euxoa epictata Smith ♀ type"; "So. Arizona, Poling"; "Apr. 15-30"; "J. B. Smith Collection, Rutgers" [Good condition, complete] [AMNH]
- (3) "Euxoa epictata Smith ♂ cotype"; "So. Arizona, Poling"; "Apr. 15-30"; "J. B. Smith Collection, Rutgers" [AMNH]
- (4) "Euxoa epictata Smith ♀ cotype"; "So. Arizona, Poling"; "Apr. 15-30"; "J. B. Smith Collection, Rutgers" [AMNH]
- (5) "Euxoa epictata Smith ♀ cotype"; "So. Arizona, Poling"; "Apr. 15-30"; "J. B. Smith Collection, Rutgers" [AMNH]
- (6) "Euxoa epictata Smith ♂ cotype"; "So. Arizona, Poling"; "July 1-15"; "J. B. Smith Collection, Rutgers" [AMNH]
- (7) "Euxoa epictata Smith ♀ cotype"; "So. Arizona, Poling"; "J. B. Smith Collection, Rutgers" [AMNH]
- (8) "Euxoa epictata Smith ♀ cotype"; "So. Arizona, Poling"; "Apr. 15-30"; "Barnes collection" [USNM]

Discussion.—In line with other lectotype selections in the genus *Euxoa*, I have selected, labeled, and now designate the "♀ type" in the American Museum of Natural History as the lectotype.

Tricholita erebus Smith, 1911, N.Y. Ent. Soc. Jour. 19(3): 142.

"*Habitat*.—Chiricahua Mts., Arizona." "One male and three female examples in fair condition only. The specimens had evidently been papered and are somewhat flattened; but the wings and their vestiture are practically intact. No date is on the label and no indication of the source from which they were received."

Syntypes examined: 4 (2 AMNH and 2 USNM)

- (1) "Tricholita erebus Smith ♂ type"; "Chir-

cahua Mts., Ariz."; "J. B. Smith Collection, Rutgers" [Very good condition] [AMNH]

- (2) "Tricholita erebus Smith ♀ type"; "Chiricahua Mts., Ariz."; "Barnes Collection" [USNM]
- (3) "Tricholita erebus Smith Paratype"; "Chiricahua Mts., Ariz."; "J. B. Smith Collection, Rutgers" [A ♀, fair condition, complete] [AMNH]
- (4) "Tricholita erebus Smith Paratype"; "Chiricahua Mts., Ariz."; "Barnes Collection" [A ♀, abdomen broken off, in capsule] [USNM]

Discussion.—The "♂ type" is the best specimen. It has been selected, labeled, and is now designated the lectotype.

Hadena erica Smith, 1905, Canad. Ent. 37: 258.

"*Habitat*: Stockton, Utah, June and July." "Nine males and eleven females, most of them in good condition, from Mr. Tom Spalding."

Hampson (1908, Catalogue of the Lepidoptera Phalaenae in the Collection of the British Museum, v. 7, p. 191) stated: "Pl. CXII, fig. 31" and "This species is unknown to me; figured from a drawing from type in U.S. Nat. Mus." On the explanation of plate CXII, figure 31, he stated: "♂, Utah."

Syntypes examined: 15 (8 AMNH, 6 USNM, and 1 KU)

- (1) "Hadena erica Smith ♂ type"; "VI.15.4"; "J. B. Smith Collection, Rutgers" [Fair condition, complete] [AMNH]
- (2) "Hadena erica Smith ♀ type"; "Stockton, Ut., VII.27.3"; "J. B. Smith Collection, Rutgers" [Somewhat rubbed, complete] [AMNH]
- (3) "Hadena erica Smith cotype"; "VII.1.4"; "J. B. Smith Collection, Rutgers" [A ♂] [AMNH]
- (4) "Hadena erica Smith cotype"; "VII.2.4"; "J. B. Smith Collection, Rutgers" [A ♀] [AMNH]
- (5) "Hadena erica Smith cotype"; "VII.8.4"; "J. B. Smith Collection, Rutgers" [A ♀] [AMNH]
- (6-7) "Hadena erica Smith cotype"; "Stockton, Ut., VI-23-3, Tom Spalding"; "J. B. Smith Collection, Rutgers" [2 ♂♂] [AMNH]
- (8) "Hadena erica Smith cotype"; "Stockton, Ut., VI-30-3, Tom Spalding"; "J. B. Smith Collection, Rutgers" [A ♀] [AMNH]
- (9) "Hadena erica Smith ♂ cotype"; "VI-28-4"; "Barnes collection" [USNM]
- (10) "Hadena erica Smith cotype"; "VIII-8-4"; "Barnes collection" [A ♀] [USNM]
- (11) "Hadena erica Smith cotype"; "Stockton, Ut., VI-22-3, Tom Spalding"; "Acc. No. 10142"; "Type No. 33893, U.S.N.M."; "♂ genitalia slide #100, March 27, 1936, J.F.G.C." [USNM]
- (12) "Hadena erica Smith cotype"; "Stockton,

Ut., VI-23-3, Tom Spalding"; "Acc. No. 10142"; "♀ genitalia slide #101, March 27, 1936, J.F.G.C." [USNM]

- (13) "Hadena erica Smith cotype"; "Stockton, Ut., VI-23-3, Tom Spalding"; "Acc. No. 10142"; "Type No. 9758, U.S.N.M."; "Collection Dr. H. G. Dyar"; [A ♂] [USNM]
- (14) "Hadena erica Smith cotype"; "Stockton, Ut."; "39831" [A ♀] [USNM]
- (15) "Hadena erica Smith cotype"; "Stockton, Utah, VI-30-3, Tom Spalding" [A ♀] [KU]

Discussion.—Smith probably did not label the missing syntypes, which should be two males and three females. The comment by Hampson that the specimen he illustrated was a "type" in the U.S. National Museum is puzzling. If from one of the syntypes in that institution, it would have had to have been the one labeled as being from the collection of H. G. Dyar, as it was undoubtedly the only male in the U.S. National Museum at that time. Since it also bears a USNM type number, it is possible that Dyar could have referred to it as "type." On the other hand, it would seem more likely that Hampson simply cited the wrong source of the specimen illustrated. The "♂ type" in the American Museum of Natural History has been selected, labeled, and is now designated the lectotype.

***Schinia ernesta* Smith, 1907, Amer. Ent. Soc. Trans. 33: 131.**

"*Hab.*—Garfield Co., Colorado, 5000 feet." "One good male from Mr. David Bruce."

Holotype.—In the American Museum of Natural History. The specimen is labeled "Schinia ernesta Smith ♂ type"; "Colo., Bruce"; "Garfield Co., Colo., 6000 ft."; "J. B. Smith Collection Rutgers."

***Schinia erosa* Smith, 1906, N.Y. Ent. Soc. Jour. 14: 23.**

"*Habitat.*—Utah; Phoenix, Ariz., Sept. 16 and 24."

"Three examples, one of them a female, are at hand. The Utah example is old and its source is not known as it has only one of the old State labels. Of the Phoenix examples one belongs to Dr. Barnes and bears his number 123; the other was given me by Mr. Wm. H. Broadwell and is the best specimen of the three."

Syntypes examined: 3 (2 AMNH and 1 USNM)

- (1) "Schinia erosa Smith ♂ type"; "Utah"; "J. B. Smith Collection, Rutgers" [Good condition, complete] [AMNH]
- (2) "Schinia erosa Smith ♀ type"; "Phoenix, Ariz., IX.24"; "J. B. Smith Collection, Rutgers" [Slightly brighter than "♂ type"] [AMNH]
- (3) "Schinia erosa Smith ♂ cotype"; "Phoenix, Ariz."; "Sept. 16-23"; "Barnes collection" [USNM]

Discussion.—The female in the American Museum of Natural History is slightly better than the male in that institution, but I have selected, labeled, and now designate the "♂ type" as the lectotype because of the sex.

***Schinia errans* Smith, 1883, Amer. Ent. Soc. Trans. 10: 235, pl. 7, fig. 34, pl. 8, fig. 44.**

"*Habitat.*—Arizona."

Smith (1893, U.S. Natl. Mus. Bul. 44, p. 284) stated: "The type is in the National Museum."

Hampson (1903, Catalogue of the Lepidoptera Phalaenae in the Collection of the British Museum, v. 4, p. 64) stated: "This species is unknown to me; figured from Prof. Smith's figure." It is illustrated on plate LIX, figure 7.

Holotype.—Location uncertain. Smith indicated in 1893 that the type was in the U.S. National Museum. If he marked a specimen type, it has not been located. Possibly he did not mark a specimen, because he stated in the description: "This species is the one usually labelled *nobilis* in collections, and I have seen the species so labelled in Mr. Grote's handwriting." In other species described from specimens that had been misidentified as other species in collections, he usually did not label specimens as types. It may be that if a specimen labeled as *nobilis* by Grote can be located that is not *nobilis*, perhaps the problem of a type can be resolved. It would probably be desirable to restrict the search for the type to the collection of the U.S. National Museum considering Smith's statement in 1893 that the type was in that collection. Furthermore, there is a specimen in the U.S. National Museum that was entered in the type book in 1896 as the type of *Schinia errans* Smith. It was entered immediately after other types of *Schinia* species described by Smith. It is labeled as follows: "Flew to light, May 20, 70"; "Type No. 293, U.S.N.M."; "Collection C. V. Riley"; "*Melicieptria* 174 bet. *spinosa* & *lynx* also a little like *tuberculum* - left one with Grote to describe it"; "*S. errans*, Gr."; "♂ genitalia slide #1654, 1 Mar. 1938, J.F.G.C."

D. F. Hardwick has recently examined this specimen and does not believe that it is the type. He has indicated to me that the specimen does not agree with the illustration of the forewing with Smith (pl. 8, fig. 44), that the size does not agree with that given by Smith, and that it is not the species usually identified as *errans* in collections. Possibly it may be desirable to select the Smith figure as the type. I leave that action to Hardwick if he should choose such a course in his subsequent treatment of the species.

***Agrotis erratica* Smith, 1890, Amer. Ent. Soc. Trans. 17: 41.**

"*Habitat.*—Sierra Nevada, Cal. (McGiashan), Calif. (Neumoegen)." "Types are in the collection Rutgers College, coll. Hy. Edwards, and coll. B. Neumoegen."

Smith (1890, U.S. Natl. Mus. Bul. 38, p. 50) stated: "Types of this species are with Messrs. Edwards and Neumoegen, and also in the collection of the U.S. National Museum." He figured the harpe and clasper of male genitalia on plate 2, figure 17.

Smith (1893, U.S. Natl. Mus. Bul. 44, p. 60) stated: "Types of this species are in the collection U.S. National Museum, and in those of Messrs. Edwards and Neumoegen."

Lectotype.—In the U.S. National Museum.

Selected by Buckett (1968, Calif. Dept. Agr. Bur. Ent., Occas. Papers No. 14, p. 5). The lectotype is labeled "Agrotis erratica Smith Type"; "Sier. Nev., Cal."; "Type No. 75 U.S.N.M."; "♂ genitalia on slide 1800, ELT"; "Lectotype, Agrotis erratica Sm., By J. S. Buckett."

Schinia espea Smith, 1908, N.Y. Acad. Sci. Ann. 18(2): 119.

"*Habitat*: Miaco [sic], Florida, September." "One rather poor female out of a purchased lot, collector unknown."

Holotype.—In the American Museum of Natural History. The specimen is labeled "Schinia espea Smith Type ♀ [sex sign at middle right of label]"; "Marco, Fla. IX"; "J. B. Smith Collection Rutgers." Smith misspelled the locality. There is also a question as to the authenticity of the locality label. Klots (1951, p. 283) and Kimball (1965, p. 9) have discussed the material purchased through dealers and labeled Chokoloskee and Marco, Fla.

Euxoa esta Smith, 1906, Canad. Ent. 38(7): 227.

"*Habitat*.—Wellington, British Columbia, July 30, Aug. 14 and Sept. 13. Theodore Bryant." "One male and three females, all in good condition, two of them from Dr. Barnes's collection, two from my own."

Lectotype.—In the American Museum of Natural History. Selected by Todd (Oct. 4, 1968, Wash. Ent. Soc. Proc. 70(3): 270). The lectotype is labeled "Euxoa esta Smith ♀ type"; "Wellington, B.C."; "13.IX.02"; "Collection J. B. Smith"; "Lectotype, Euxoa esta Sm., By E. L. Todd."

Anarta etacta Smith, 1900, in Dyar, Wash. Acad. Sci. Proc. 2: 493.

"*Habitat*.—Kukak Bay, Alaska, July 4, 1899." "One female without antennae, but otherwise in fair condition." "*Type*.—Cat. no. 4845, U.S. National Museum."

Holotype.—In the U.S. National Museum. The specimen is labeled "Anarta etacta Smith ♀ type"; "Kukak Bay, Alaska, July 4, '99"; "Harriman Expedition '99, T. Kincaid, Collector"; "Type No. 4845 USNM"; "♀ genitalia on slide 4, July 24, 1935, CH."

Hadena ethnica Smith, 1899, Canad. Ent. 31: 263.

"*Habitat*: Yosemite, California; emerged July 23rd, 1891, from a larva on Manzanita." "The male genitalia are very simple; . . ."

Holotype.—In the U.S. National Museum. The specimen is labeled "Hadena ethnica Smith ♂ type"; "Dyar, Calif."; "Type No. 4993 USNM"; "1 BB264"; "36511"; "♂ genitalia on slide 92 JFGC."

Acontia eudryada Smith, 1905, N.Y. Ent. Soc. Jour. 13(4): 210.

"*Habitat*.—Southern Arizona, August 15–30, Mr. O. C. Poling." "One female specimen, almost perfect."

Holotype.—In the American Museum of Natural History. The specimen is labeled "Acontia eudryada Smith Type"; "So. Arizona, Poling"; "Aug. 15–30"; "♀ genitalia 10,385 FHR."

Oncocnemis euta Smith, 1903, N.Y. Ent. Soc. Jour. 11(1): 11.

"*Habitat*: Utah." "Two female specimens in good condition save that the thoracic vestiture is disarranged and partly lost."

Syntypes examined: 1 (AMNH)

(1) "Oncocnemis euta Smith Type"; "U. T."; "Collection J. B. Smith" [A ♀, fair condition]

Discussion.—I have been unable to locate the other syntype. There is a specimen in the U.S. National Museum from the Barnes collection that is labeled "Utah," but it is not marked type or determined by Smith, and it is a male! In the absence of the second syntype, the "Type," a female, in the American Museum of Natural History has been labeled and is now designated the lectotype.

Carneades excogita Smith, 1900, U.S. Natl. Mus. Proc. 22(1203): 423.

"*Habitat*.—Glenwood Springs, Colorado, July 3–29 (Dr. Barnes)." "Ten examples, evenly divided as to sex, varying only in tint and in the relative distinctness of the markings." "*Type*.—Cat. No. 4799, U.S.N.M."

Syntypes examined: 6 (4 USNM and 2 AMNH)

- (1) "Carneades excogita Smith ♂ type"; "Glenwood Springs, Col., 6/25/1894, W. Barnes"; "Type No. 4799, U.S.N.M."; "36311"; "♂ genitalia on slide 2217, ELT" [USNM]
- (2) "Carneades excogita Smith ♀ type"; "Glenwood Springs, Col., 7/10 1894"; "Type No. 4799, U.S.N.M."; "36311" [Specimen breaking apart from corrosion of pin] [USNM]
- (3) "Carneades excogita Smith cotype"; "Glenwood Spgs, Colo."; "July 1–7"; "Barnes collection" [A ♀] [USNM]
- (4) "Carneades excogita Smith cotype"; "Glenwood Spgs, Colo."; "July 1–7"; "Barnes collection"; "Slide 74a" [A ♂] [USNM]
- (5) "Carneades excogita Smith cotype"; "Glenwood Springs, Col., 7/3 1894, W. Barnes"; "J. B. Smith Collection, Rutgers" [A ♂] [AMNH]
- (6) "Carneades excogita Smith cotype"; "Glenwood Springs, Col., 8 1892, W. Barnes"; "J. B. Smith Collection, Rutgers" [A ♀] [AMNH]

Discussion.—Four syntypes have not been located. Those specimens were probably not marked type by Smith. One such specimen with a Smith determination label is in the U.S. National Museum. The female marked "♀ type" in this museum is in such bad condition that D. F. Hardwick recommended that the

" δ type" be selected. Accordingly, I have selected, labeled, and now designate the " δ type" in the U.S. National Museum as the lectotype of this species.

***Carneades exculta* Smith, 1900, U.S. Natl. Mus. Proc. 22(1203): 424.**

Habitat.—Northwest British Columbia. "A single male, received from Mr. B. Neumoegen some years ago and never satisfactorily placed."

Holotype.—In the collection of the U.S. National Museum. The specimen is labeled "Carneades exculta Smith δ type"; "N. W. Brit. Cola"; "Type No. 5151 USNM"; "36511"; " δ genitalia on slide 2332 ELT."

***Oncocnemis exemplaris* Smith, 1894, Amer. Ent. Soc. Trans. 21: 64, pl. 6, fig. 8.**

Hab.—Yosemite, Cal. "A single male specimen only is before me, not in the best condition; but with all the markings distinct."

Holotype.—In the U.S. National Museum. The specimen is labeled "Oncocnemis exemplaris Smith Type"; "Yosemite"; "Type No. 189 USNM." It is a male with both antennae missing.

***Hadena exhausta* Smith, 1903, Amer. Ent. Soc. Trans. 29(3): 194.**

Hab.—New Windsor, N.Y., July 9, 29 (Miss Emily L. Morton); Schenectady, N.Y. (Lintner). "My original specimen came to me years ago in such a way that I believed the determination had been made by Mr. Grote, and a hasty reading of the original description [of *hausta*] which compared the species to *modica* did not raise any doubts as to the correctness of the name. More recently Mr. Merrick sent me from New Brighton, Pa., specimens that seemed closely allied and familiar in appearance; but I could not then recognize the form and sent it back unnamed. In the U.S. Nat. Mus., I again saw the two forms associated in such a way as to bring out the contrasts between them and to make it certain that two species were at hand." Hampson (1908, Catalogue of the Lepidoptera Phaenae in the Collection of the British Museum, v. 7, p. 384) stated: "Pl. CXII, fig. 30" and listed a female cotype from New Windsor, N.Y. The specimen illustrated is that specimen.

Syntypes examined: 2 (AMNH)

(1) "*Hadena exhausta* Smith δ type"; "Schenectady [sic], N.Y., Lintner"; "Collection J. B. Smith" [Rather worn, but maculation discernible and complete]

(2) "*Hadena exhausta* Smith δ type"; "New Windsor, New York, 29.9.93"; "Collection J. B. Smith" [Fair condition]

Discussion.—Hampson (1908, p. 384) reported a female cotype in the British Museum (Natural History). I do not know how it came to be there, but I presume that it came from Smith. The series that Smith saw in the U.S. National Museum that convinced him this was a distinct undescribed species and not *Hadena hausta* Grote undoubtedly was a series of specimens from New Windsor, N.Y. There are four specimens presently in that collection dated July 7, 1893, July 1, 1894, June 7,

1893, and June 29, 1895. The two syntypes marked " δ type" and "cotype" were probably originally also in that series. I believe that Smith took those two with him and labeled only those and the original specimen he had when he finally described the species. He must have sent the "cotype" to the British Museum (Natural History) at a later date. Had he labeled the specimen in the U.S. National Museum, it would hardly have been sent to the British Museum as none of the other specimens were labeled by Smith. The series in the U.S. National Museum may also have contained some of the specimens from New Brighton, Pa., that Smith mentioned. There are specimens from that locality in this museum but I have no data as to when they came into this collection. The date Smith gave for his specimen was obviously an error. I do not know the date on the specimen cited as "cotype" by Hampson; however, neither of the two syntypes or the specimens in this museum bear either a July 9 or July 29 date. I believe it may be that both numbers given as days may have come from the label on the " δ type," "29.9.93." Perhaps the July date came from the fact that two of the U.S. National Museum specimens were collected in that month. The " δ type" in the American Museum of Natural History has been selected, labeled, and is now designated the lectotype.

***Fishia exhilarata* Smith, 1903, Amer. Ent. Soc. Trans. 29(3): 202, pl. 3, fig. 7.**

"My series consists of three males and four females; Glenwood Springs, Colorado, late September and early October (Dr. Barnes); Pullman, Washington, October 10th to 15th (Prof. Piper)."

Syntypes examined: 5 (AMNH)

(1) "*Fishia exhilarata* Smith δ type"; "Pullman, Wash."; "10/10"; "Collection J. B. Smith" [Fairly good, valves missing]

(2) "*Fishia exhilarata* Smith δ type"; "Pullman, Wash."; "10/15"; "Collection J. B. Smith" [Fair condition, complete]

(3) "*Fishia exhilarata* Smith δ cotype"; "Glenwood Springs, Colo."; "Sept. 16-23"; "J. B. Smith Collection, Rutgers" [Good condition, antennae missing]

(4) "*Fishia exhilarata* Smith δ cotype"; "Glenwood Spgs., Col., 8 1894, W. Barnes"; "J. B. Smith Collection, Rutgers" [Pale]

(5) "*Fishia exhilarata* Smith δ cotype"; "Pullman, Wash."; "10/10"; "J. B. Smith Collection, Rutgers" [Fair condition, complete]

Discussion.—There is a female specimen in the U.S. National Museum labeled as the species by Smith. It is probably one of the two missing syntypes. A male syntype has not been located. The female in this museum is from Pullman, Wash., and there are three males and two females from Glenwood Springs, but none marked as this species by Smith. There is a slide in the American Museum of Natural History of two valves. It may belong to the " δ type" since that specimen lacks the valves and the only male cotype is complete. The Colorado specimens are paler than the ones from Washington and may be different. Since Smith used ex-

amples from Pullman, Wash., as his "♂ type" and "♀ type," I believe that one of those should be selected. The genitalia slide has a good left valve, the one illustrated, and I believe we should assume it came from the "♂ type." Accordingly, I have selected, labeled, and now designate that specimen and the slide in the American Museum of Natural History as the lectotype.

***Renia exserta* Smith, 1909, N.Y. Ent. Soc. Jour. 17: 70.**

"*Habitat*.—Trenton, Ontario, VIII, 11, John D. Evans; London, Ontario, without date." "C. ie male and female, in good condition. The female, from London, has been in my collection for years and I . . ." "Recently I received a nice male from Mr. Evans, and . . ."

Syntypes examined: 2 (AMNH and USNM)

- (1) "*Renia exserta* Smith ♂ type"; "Trenton, Ont., Can., 11.VIII.07, Evans"; "J. B. Smith Collection, Rutgers" [Fair condition, complete] [AMNH]
- (2) "*Renia exserta* Smith ♀ type"; "London, Ont." [USNM]

Discussion.—The male in the collection of the American Museum of Natural History has been selected, labeled, and is now designated the lectotype.

***Luperina extensa* Smith, 1905, N.Y. Ent. Soc. Jour. 13(4): 203.**

"*Habitat*.—Regina, July 28, at light; T. N. Willing." "One male, in fair condition, secured through the kindness of Dr. James Fletcher."

Holotype.—In the American Museum of Natural History. The specimen is labeled "*Luperina extensa* Smith ♂ type"; "Regina, 28.7.02, at light"; "T. N. Willing"; "J. B. Smith Collection Rutgers."

***Polia extincta* Smith, 1900, U.S. Natl. Mus. Proc. 22(1203): 471.**

"*Habitat*.—Twin Mountain, New Hampshire, August 3 (Edward W. Cross)." "One female in good condition."

Holotype.—In the U.S. National Museum. The specimen is labeled "*Polia extincta* Smith ♀ type"; "Twin Mt., N.H., 8-3-96, Edw. W. Cross"; "Type No. 5133 USNM"; "36511."

***Agrotis extranea* Smith, 1888, U.S. Natl. Mus. Proc. 10: 459.**

"*Habitat*.—Montana." "A single ♀ specimen from Mr. Tepper."

Smith (1890, U.S. Natl. Mus. Bul. 38, p. 167) stated: "A single ♀ specimen only in Mr. Tepper's collection."

Smith (1893, U.S. Natl. Mus. Bul. 44, p. 95) stated: "The type is in the Tepper collection."

Holotype.—In the collection of Michigan State University. The specimen is labeled "Type" [on a rhomboidal piece of yellow paper]; "Mt. Hood." It is a female in excellent condition. The discrepancy in the locality probably represents an error on the part of Smith. Smith had other species from Tepper that he described in the same paper that were from Montana.

***Oncocnemis extranea* Smith, 1892, Ent. News 3(10): 251, pl. 10, fig. 4, row 2.**

"*Hab.*—Colorado. Bruce, one ♂ (No. 180)."

Smith (1894, Amer. Ent. Soc. Trans. 21: 68, pl. 1, fig. 4, row 2) again described this as new, using the same plate, he stated: "A single good male specimen is before me."

Holotype.—In the U.S. National Museum. The specimen is labeled "*Oncocnemis extranea* Smith Type"; "Colo., Bruce"; "180"; "Type No. 192 USNM." It is a male. There is a pseudotype in the collection of the American Museum of Natural History. It is labeled by Smith as "*Oncocnemis extranea* Smith Type," but obviously subsequent to the description. It is from "Colo., Bruce," but it is not labeled "180," and it is not the specimen figured by Smith.

***Oncocnemis extremis* Smith, 1890, Ent. Amer. 6: 30.**

"*Habitat*.—N.W. British Columbia." "A single specimen (♀) of this strongly marked species is before me."

Smith (1893, U.S. Natl. Mus. Bul. 44, p. 160) stated: "The type is with Mr. Neumoegen."

Holotype.—In the U.S. National Museum. The specimen is labeled "*Oncocnemis extremis* Smith Type"; "N.W. Brit. Cola."; "Col. B. Neumoegen"; "Type No. 33860 USNM." It is a female as indicated by Smith.

***Noctua exuberans* Smith, 1898, N.Y. Ent. Soc. Jour. 6: 103, pl. 7, fig. 10.**

"*Habitat*: Glenwood Springs, Colorado, in July; Dr. Barnes." "Three male specimens are before me, . . ."

Syntypes examined: 3 (2 USNM and 1 AMNH)

- (1) "*Noctua exuberans* Smith ♂ type"; "Glenwood Springs, Col., 1895-7, W. Barnes"; "Type No. 4162, U.S.N.M."; "USNM Acc. #34638"; "♂ genitalia no. 1550, JGF." [Excellent condition] [USNM]
- (2) "*Noctua exuberans* Smith ♂ cotype"; "Glenwood Springs, Col., 1895-7, W. Barnes"; "Barnes Collection" [Very good condition, complete] [USNM]
- (3) "*Noctua exuberans* Smith ♂ cotype"; "Glenwood Springs, Col., 1895 7, W. Barnes"; "J. B. Smith Collection, Rutgers" [Good condition, complete] [AMNH]

Discussion.—The "♂ type" in the U.S. National Museum has been selected, labeled, and is now designated the lectotype.

***Carneades factoris* Smith, 1900, U.S. Natl. Mus. Proc. 22(1203): 456.**

"*Habitat*.—Glenwood Springs, Colorado, June, July, and August (Dr. Barnes)." "Five females in fair condition only." "Type.—Cat. No. 4795, U.S.N.M."

Lectotype.—In the U.S. National Museum, selected by Todd (Oct. 4, 1968, Wash. Ent. Soc. Proc 70(3): 271). The lectotype is labeled "*Carneades factoris* Smith ♀ type"; "Glenwood Springs, Col., 1894-7/19"; "Type

No. 4795 U.S.N.M."; "36311"; "Lectotype, *Carneades factoris* Sm., by E. L. Todd."

***Carneades falerina* Smith, 1900, U.S. Natl. Mus. Proc. 22(1203): 429.**

"*Habitat*.—Glenwood Springs, Colorado, August and October (Dr. Barnes); Nevada (Mrs. Herring)." "Two males and one female, all different, yet I believe representing one species only. In the male type the smoky powdering is quite evenly distributed, except in the subterminal space, and all the maculation is obscure. The male cotype is less powdery and all the markings are in consequence better defined. The female type while less powdery is quite as obscurely marked as the first-mentioned male." "*Type*.—Cat. No. 4785, U.S.N.M."

Hampson (1903, Catalogue of the Lepidoptera Phalaenae in the Collection of the British Museum, v. 4, p. 262) stated: "Pl. LXIV, fig. 18" and "This species is unknown to me; figured from a photograph from type in U.S. Nat. Mus." On explanation of plate LXIV, he stated: "♂, from Colorado."

Syntypes examined: 3 (2 USNM and 1 AMNH)

- (1) "*Carneades falerina* Smith ♀ type"; "Nevada"; "Type No. 4785, U.S.N.M."; "36311"; "♀ genitalia slide 2201, ELT." [USNM]
- (2) "*Carneades falerina* Smith ♂ type"; "Glenwood Spgs., Col., 1894-8"; "Collection J. B. Smith" [Excellent condition] [AMNH]
- (3) "*Carneades falerina* Smith ♂ cotype"; "Glenwood Spgs., Colo."; "Oct. 8-15"; "Barnes Collection" [Abdomen missing] [USNM]

Discussion.—The "♀ type" in the U.S. National Museum has been selected, labeled, and is now designated the lectotype. I believe it should be considered the holotype because it is the only specimen bearing the USNM type number 4785 cited in the original description. However, as explained elsewhere, I take this action to insure that it is considered the type-specimen. In addition, it is a female, the sex I have usually selected as lectotype in other species of the genus described by Smith.

***Aplectoides fales* Smith, 1905, N.Y. Ent. Soc. Jour. 13(4): 192.**

"*Habitat*.—Calgary, Alberta, July 2, '96." "Probably received from Mr. Dod though the specimen does not bear his label." "I have hesitated long before describing it and do so now only because this may be really the male of the following species—*discolor*—despite the differences in wing form and maculation."

Holotype.—In the American Museum of Natural History. The specimen is labeled "*Aplectoides fales* Smith Type"; "Calgary, Can"; "Collection J. B. Smith"; "2/VII/96." It is a male in excellent condition. Rindge (1955, p. 111) misspelled the specific name "*fales*."

***Cerma fascia* Smith, 1903, N.Y. Ent. Soc. Jour. 11: 190.**
"*Habitat*: Doble, California, in early August." "Two

good females, collected by Mr. George S. Hutson in the Colorado desert."

Syntypes examined: 2 (AMNH and USNM)

- (1) "*Cerma fascia* Smith Type"; "Doble, Cal., VIII.1"; "Collection J. B. Smith" [A ♀, fair condition, complete] [AMNH]
- (2) "*Cerma fascia* Smith cotype"; "Doble, Cal., VIII.1"; "Collection J. B. Smith" [A ♀] [USNM]

Discussion.—The "Type" in the American Museum of Natural History has been selected, labeled, and is now designated the lectotype.

***Antiblemma fasciata* Smith, 1900, U.S. Natl. Mus. Proc. 22(1203): 494.**

"*Habitat*.—Arizona; Hulst collection." "The type, belonging to the Rutgers College collection, is a male in rather poor condition, but so obviously distinct that description seems warranted."

Holotype.—In the U.S. National Museum. The specimen is labeled "*Antiblemma fasciata* Smith ♂ type"; "Ariz."; "Collection G. D. Hulst"; "Type No. 5122 USNM"; "36511." In the introduction of the paper Smith stated: "With few exceptions, the types of the species are now or will be deposited in the U.S. National Museum. The exceptions are principally of specimens belonging to other institutions, or where I could not dispose of the specimens according to my own inclinations." The notation in the type book of the U.S. National Museum for type 5122 is that the specimen was received from G. D. Hulst. The date of entry is May 19, 1900. Smith's paper did not appear until July 14, 1900.

***Copipanolis fasciata* Smith, 1892, U.S. Natl. Mus. Proc. 15: 62.**

"*HABITAT*: Missouri (C. V. R.), April; Texas, Bel-
frage, January and February." "Ten specimens are in the U.S. National Museum."

Smith (1893, U.S. Natl. Mus. Bul. 44, p. 113) stated: "Types are in the National Museum."

Syntypes examined: 3 (2 AMNH and 1 USNM)

- (1) "*Copipanolis fasciata* Smith Type"; "Tex."; "Collection J. B. Smith" [A ♂, good condition] [AMNH]
- (2) "*Copipanolis fasciata* Smith Type"; "Collection J. B. Smith" [A ♂, very poor condition, wings broken] [AMNH]
- (3) "*Copipanolis cubilis*"; "Mo."; "Captured 4/8. 83"; "Type No. 145, U.S.N.M." [A ♂, left forewing rubbed and broken] [USNM]

Discussion.—The syntype in the U.S. National Museum is not labeled as a type nor does it bear a Smith determination label. It was, however, entered in the U.S. National Museum as the type and it was from C. V. Riley. In addition, there are 10 specimens from Texas collected in January and February in this collection. None of those are listed as they are not labeled by Smith, and because if Smith's statement in the description meant that there were originally 10 specimens from that locality and if he kept 2 as indicated by the specimens in the American Museum of Natural History, then

only 8 now in this collection could be true syntypes. Since the syntype labeled "Tex." in the American Museum of Natural History is in better condition than the other syntypes, it has been selected, labeled, and is now designated the lectotype. Selection of this syntype is contrary to the statements of Smith concerning the location of the types of the species, but it is likely that Smith originally intended to send the two he marked as types back to the U.S. National Museum and just never did so. Also the type of *Copipanolis stigma* Smith is in the American Museum, and this selection will make it possible for a worker to study the two together.

***Uloionche fasciata* Smith, 1888, U.S. Natl. Mus. Proc. 10: 471.**

"*Habitat*.—New Mexico. Prof. F. H. Snow, No. 51."
"A single ♂ of this very well marked little species examined."
Smith (1893, U.S. Natl. Mus. Bul. 44, p. 130) stated:
"The type is in the National Museum."

Holotype.—In the U.S. National Museum. The specimen is labeled "*Uloionche fasciata* Smith Type"; "New Mexico, F. H. Snow"; "Coll. J. B. Smith"; "Type No. 167 USNM." It is a male with both valves and the tegumen of the genitalia missing. Smith (1890, p. 12, pl. 22, fig. 15) figured the "harpe" and "clasper" of the genitalia.

***Oncocnemis fasciatus* Smith, 1888, Insect Life 1: 18.**

"*Habitat*. Nevada County, California. (Sept.)" "A single ♀ in the Coll. U.S. N. Mus. (from Dept. Agric., Koebele, collector)."

Smith (1893, U.S. Natl. Mus. Bul. 44, p. 159) stated:
"The type is in the National Museum."

Holotype.—In the U.S. National Museum. The specimen is labeled "*Oncocnemis fasciatus* Smith Type"; "Nevada Co., Cal."; "Sept."; "Dept. Agric., Koebele"; "Pl 1 llo, f. 12"; "Type No. 183 USNM." The specimen is a female.

***Baptarma felicitata* Smith, 1904, Psyche 11(2): 59.**

"*Habitat*: Yuma County, Arizona, in April; Mr. Hutson." "One male and one female in good condition and one somewhat defective additional female."

Syntypes examined: 3 (AMNH)

- (1) "*Baptarma felicitata* Smith ♂ type"; "Yuma Co., Ariz."; "4/14"; "Collection J. B. Smith" [Fair condition, complete]
- (2) "*Baptarma felicitata* Smith ♀ type"; "Yuma Co., Ariz."; "4/14"; "Collection J. B. Smith" [Good condition, complete]
- (3) "*Baptarma felicitata* Smith ♀ Cotype"; "4/14"; "Yuma Co., Ariz."; "Collection J. B. Smith" [Venter of abdomen and contents eaten away by dermestids]

Discussion.—The "♂ type" has been selected, labeled, and is now designated the lectotype.

***Alaria felicitata* Smith, 1894, Amer. Ent. Soc. Trans.**

21: 86, pl. 6, fig. 1.

"*Hab.*—Southwestern Utah, Weidt; collection Neumoegen." "A single female specimen only is before me at the present time; but at least one other is in

the U.S. National Museum, also from Utah, if I recollect aright."

Holotype.—In the U.S. National Museum. The specimen is labeled "*Alaria felicitata* Smith Type"; "S.W. Utah, Weidt."; "Col. B. Neumoegen"; "♂ genitalia on slide 2831 JFGC." It is a male, not a female as stated by Smith.

***Xylophasia ferens* Smith, 1903, Canad. Ent. 35(5): 134, pl. 4, fig. 9.**

"*Habitat*.—Calgary VII., 11 and 12, head of Pine Creek, Alberta." "Two good males from Mr. Dod, who has others."

Syntypes examined: 2 (AMNH and USNM)

- (1) "*Xylophasia ferens* Smith Type"; "Calgary, Alta., 20.VII.02, F. H. Wolley Dod"; "Head of Pine Creek"; "J. B. Smith Collection, Rutgers" [A ♂, fair condition, verdigris forming, right valve missing] [AMNH]
- (2) "*Xylophasia ferens* Smith Cotype"; "Calgary, 11.VII.99, F. H. W. Dod"; "Collection J. B. Smith"; "Barnes Collection"; "♂ genitalia no. 146, JFGC." [Very good condition] [USNM]

Discussion.—There is a Smith slide of a very broken right valve in the American Museum of Natural History. It probably came from the syntype labeled "Type." That specimen has a date different from that stated by Smith in the original description, but that probably is just another Smith error on dates. The "Cotype" in the U.S. National Museum is a much better specimen, the genitalia are not broken, and it bears the correct data as given in the description. For those reasons it has been selected, labeled, and is now designated the lectotype.

***Hadena ferida* Smith, 1908, N.Y. Acad. Sci. Ann. 18(2): 115.**

"*Habitat*: Newfoundland." "Four female examples, in good to fair condition except for legs and antennae."

Hampson (1910, Catalogue of the Lepidoptera Phalaenae in the Collection of the British Museum, v. 9, p. 502) listed a female cotype from Newfoundland and illustrated the specimen on plate CXLVII, figure 23.

Syntypes examined: 3 (1 AMNH and 2 USNM)

- (1) "*Hadena ferida* Smith ♀ type"; "N. F."; "J. B. Smith Collection, Rutgers" [Fairly good, antennae missing, but otherwise complete] [AMNH]
- (2) "*Hadena ferida* Smith ♀ cotype"; "N. F." [USNM]
- (3) "*Hadena ferida* Smith cotype"; "N. F."; "♀ genitalia no. 67, JFGC." [USNM]

Discussion.—The fourth syntype is listed in the British Museum (Natural History) by Hampson (1910, IX: 502) and was figured on plate 147, figure 23. The "♀ type" in the American Museum of Natural History has been selected, labeled, and is now designated the lectotype.

Perigonica fermata Smith, 1911, N.Y. Ent. Soc. Jour. 19(3): 144.

"*Habitat*.—San Diego, California, in early March."
"Six males and one female in fair condition only, received through Mr. H. H. Brehme."

Syntypes examined: 5 (4 AMNH and 1 USNM)

- (1) "Perigonica fermata Smith Type ♂"; "San Diego, Calif. III"; "J. B. Smith Collection, Rutgers" [Good condition, complete] [AMNH]
- (2) "Perigonica fermata Smith Type ♀"; "San Diego, Calif. III"; "J. B. Smith Collection, Rutgers" [Poor, worn, complete] [AMNH]
- (3) "Perigonica fermata Smith Paratype"; "San Diego, Calif. III"; "J. B. Smith Collection, Rutgers" [A ♂] [AMNH]
- (4) "Perigonica fermata Smith Paratype"; "San Diego, Calif. III"; "J. B. Smith Collection, Rutgers" [A ♂] [AMNH]
- (5) "Perigonica fermata Smith Paratype"; "San Diego, Calif. III"; "Barnes collection" [A ♂] [USNM]

Discussion.—Two male syntypes have not been located. The "Type ♂" in the American Museum of Natural History has been selected, labeled, and is now designated the lectotype.

Schinia ferricasta Smith, 1906, N.Y. Ent. Soc. Jour. 14: 22.

"*Habitat*.—Palmerly, Cochise Co., Ariz., August, Collection Brooklyn Institute; Baboquivaria Mts., Pima Co., Ariz., July 20; Mr. O. C. Poling; Huachuca Mts., August 1–7; Santa Catalina Mts.; Pinal Co., August 24, Dr. Barnes." "Five male specimens, the one from the Brooklyn Institute in perfect condition, the others somewhat defective."

Syntypes examined: 5 (3 USNM and 2 AMNH)

- (1) "Schinia ferricasta Smith ♂ type"; "Palmerly, Cochise Co., Ariz., VIII"; "Type No. 33722, U.S.N.M." [Abdomen greasy, glued on?] [USNM]
- (2) "Schinia ferricasta Smith cotype"; "Huachuca Mts., Ariz."; "Aug. 1–7"; "Barnes Collection" [A ♂, abdomen greasy] [USNM]
- (3) "Schinia ferricasta Smith cotype"; "Santa Catalina Mts., Ariz., Pinal Co."; "Aug. 24–30"; "Barnes collection" [A ♂, good condition except abdomen slightly greasy] [USNM]
- (4) "Schinia ferricasta Smith cotype"; "Baboquivaria Mts., Pima Co., Arizona, July 15–30, 1903, Coll. O. C. Poling"; "J. B. Smith Collection, Rutgers" [A ♂, very faded, abdomen missing] [AMNH]
- (5) "Schinia ferricasta Smith cotype"; "Huachuca Mts., Ariz."; "J. B. Smith Collection, Rutgers" [A ♂, dark specimen, good condition, but abdomen missing] [AMNH]

Discussion.—Smith stated that the specimen from Palmerly, Cochise County, Ariz., was perfect. It is in good condition, but the abdomen may be false; it appears that it may be glued on. In my opinion the syn-

type from the Santa Catalina Mountains, Pinal County, Ariz., in the U.S. National Museum is a better lectotype candidate. Accordingly, I have selected, labeled, and now designate it as the lectotype.

Leucania ferricola Smith, 1905, N.Y. Ent. Soc. Jour. 13(4): 203.

"*Habitat*.—Cochise County, Arizona, in July." "One male in very good condition except for the crushed thorax, from Mr. George Franck."

Holotype.—In the American Museum of Natural History. The specimen is labeled "Leucania ferricola Smith ♂ type"; "Cochise Co., Ariz., July"; "J. B. Smith Collection Rutgers."

Taeniocampa ferrigera Smith, 1894, Amer. Ent. Soc. Trans. 21: 78, pl. 5, fig. 6.

"*Hab.*—Vancouver, Neumoegen; Oregon, Dyar." "Three specimens, one ♂ and two ♀ are before me; one ♀ from Mr. Neumoegen is in very good condition. The Oregon specimens were taken at light, and the ♂ is fair, the ♀ ragged."

Barnes and Benjamin (1924, Contrib. Nat. Hist. Lepidoptera N. Amer. 5(3): 130) stated: "The authors have examined the types of *ferrigera* and *puncticostata* at the National Museum, . . ."

Syntypes examined: 2 (USNM)

- (1) "Taeniocampa ferrigera Smith ♂ type"; "Or."; "Type No. 243, U.S.N.M." [Good condition except abdomen greasy]
- (2) "Taeniocampa ferrigera Smith ♀ type"; "Victoria, B.C."; "Col. B. Neumoegen"; "Type No. 33845, U.S.N.M." [Excellent condition]

Discussion.—The ragged female from Oregon has not been located. The "♀ type" was the specimen illustrated by Smith. It has been selected, labeled, and is now designated the lectotype.

Anticarsia ferruginea Smith, 1900, N.Y. Ent. Soc. Jour. 8(3): 174.

"*Habitat*.—Florida, Mrs. Slosson." "The type and only specimen before me is a female in good condition, obviously different from the described species in our own fauna and, I believe, from other described forms as well."

Holotype.—In the American Museum of Natural History. The specimen is labeled "Anticarsia ferruginea Smith ♀ type"; "Florida"; "Collection J. B. Smith."

Pachnobia ferruginoides Smith, 1890, U.S. Natl. Mus. Bul. 38, p. 56.

"*HABITAT*.—Montana," "Black Hills." Smith (1893, U.S. Natl. Mus. Bul. 44, p. 63) stated: "The National Museum specimen is labeled by me as type, and a 'type' is also in the Tepper collection."

Syntypes examined: 3 (1 USNM and 2 MSU)

- (1) "Pachnobia ferruginoides Smith Type"; "Blk. H."; "70"; "Collection J. B. Smith"; "Type No. 77, U.S.N.M." [A ♀, fairly good condition] [USNM]
- (2) "Type [Rhomboidal label]"; "Montana" [A ♂, good condition] [MSU]

(3) "Type [Rhomboidal label]"; "Montana" [A ♀, good condition] [MSU]

Discussion.—The number of specimens before Smith at the time of the description is unknown. In his statement of 1893, it would appear that there were only two specimens and that if there were really two in the Tepper collection, Smith would have said "and others in the Tepper collection," or some other such statement. Smith did not mark the specimens in the Michigan State University collection as types. Those labels must have been applied by Tepper or others. The "Type" in the U.S. National Museum from the Black Hills (Blk H.) has been selected, labeled, and is now designated the lectotype.

Egrylon filaria Smith, 1900, N.Y. Ent. Soc. Jour. 8(3): 177.

"*Habitat*: Biscayne Bay, Florida (Mr. Slosson)."
"One female only, in good condition."

Holotype.—In the American Museum of Natural History. The specimen is labeled "Egrylon filaria Smith ♀ type"; "Bisc. Bay, Fla."; "Collection J. B. Smith." It is presumed that Smith erred in citing the specimen as being from Mr. rather than Mrs. Slosson.

Setagrotis filii Smith, 1907, Amer. Ent. Soc. Trans. 33: 127.

"*Hab.*—Pullman, Washington, August 21, 1897."
"One male, in good condition, from Prof. C. V. Piper."

Holotype.—In the American Museum of Natural History. The specimen is labeled "Setagrotis filii Smith ♂ type"; "Pullman, Wash. 21, Aug 97"; "Collector C. V. Piper"; "J. B. Smith Collection Rutgers."

Agrotis finis Smith, 1888, U.S. Natl. Mus. Proc. 10: 457.

"*Habitat*.—Montana," "Black Hills." "Two specimens from collection U.S. Nat. Mus. and George D. Hulst."

Smith (1890, U.S. Natl. Mus. Bul. 38, p. 153) illustrated a harpe and clasper (pl. 5, fig. 83) that are supposed to be representative of this species and *medialis*.

Smith (1893, U.S. Natl. Mus. Bul. 44, p. 92) stated: "The type is in the National Museum."

Hampson (1903, Catalogue of the Lepidoptera Phaenae in the Collection of the British Museum, v. 4, p. 219) stated: "Pl. LXII, fig. 14" and "This species is unknown to me, figured from a photograph from type in U.S. Nat. Mus." On the explanation of the plate and figure he stated: "♀, from Montana." *Syntypes examined*: 2? (USNM)

- (1) "Agrotis finis Smith Type"; "Blk. H."; "Collection J. B. Smith"; "Type No. 110, U.S.N.M."; "♂ genitalia slide 2224, ELT."
- (2) "Agrotis finis Smith Type"; "Holl."; "Type No. 110, U.S.N.M." [A ♀, abdomen destroyed]

Discussion.—The second syntype was sent to the U.S. National Museum by Smith and entered in the type book in 1896 with the other syntype, but it does not show that it was from the G. D. Hulst collection and the label "Holl." was not mentioned by Smith. Smith often

made comments in the discussions of the species he was describing that are not to be found on the labels, information he may have had from correspondence, etc., and conversely he did not always indicate in his descriptions some of the information that was actually on the labels. The "Type" labeled "Blk. H." has been selected, labeled, and is now designated as the lectotype.

Pleonectyptera finitima Smith, 1893, Insect Life 5(5): 333.

"*Habitat*.—Argus Mountains, April 1891; Los Angeles, Cal., in October." "Four specimens are before me, but I have seen a number of others. Three of them are from the Argus Mountains." Smith (1907, Amer. Ent. Soc. Trans. 33: 377) stated: "Types of the species are in the U.S. National Museum and in my own collection." Smith (1911, N.Y. Ent. Soc. Jour. 19(3): 150) stated: "In the Pomona College Journal of Entomology, Vol. II, p. 375, Dr. Harrison G. Dyar described *Pleonectyptera cumulalis* and writes in comment: 'This appears to be the species misidentified by Smith as *P. finitima* Smith (Trans. Am. Ent., XXXIII, 377, 1907) which therefore requires a new name. The types of *finitima* are identical with *tonalis* Smith of the paper cited, the name *finitima* having precedence.'"

"Dr. Dyar's description certainly fits the *finitima* of my paper and collection. I am therefore agreed that *cumulalis* Dyar is the same as *finitima* Smith (Trans. Am. Ent. Soc., 1907) and also of the original description." "The original description was based on four examples received among others from Dr. Riley, for a paper to be published in Insect Life. Each of these specimens was labelled 'type' in accordance with the general practice of the time. Two of them were retained by myself and are now before me: two others were returned to the Museum. All of the examples were from the Koebele material and, I believe, specifically identical. My own examples, therefore, are as much 'type' as those at Washington, they formed the basis of both the original description and that of the revision, and the charge that I 'misidentified' the species, is therefore absurd."

"*Pleonectyptera tenalis* (not *tonalis*) was originally described from six examples, all from Arizona desert areas, and three of these, including the male and female types are now before me. Now the types of *tenalis* and *finitima* are so utterly unlike that not the merest tyro would be inclined to associate them, and if the specimens in the U.S. National Museum labelled as *finitima* type are really *tenalis* as Dr. Dyar says, it simply means that there has been a tampering with labels by somebody—a fact that I have been inclined to suspect before as to other species. It is not a matter of two closely allied species, as *finitima* and *serena* may perhaps be said to be; but of forms so utterly different in size, in color, in maculation and even in wing form, that mere error of association is excluded."

Syntypes examined: 4 (2 AMNH and 2 USNM)

- (1) "Pleonectyptera finitima Smith Type"; "Los

- Angeles Co., Cal."; "Oct."; "J. B. Smith Collection, Rutgers" [A ♂, abdomen missing but wings in good condition] [AMNH]
- (2) "Pleonectyptera finitima Smith Type"; "Argus Mts., April '91 K."; "Through C. V. Riley"; "J. B. Smith Collection, Rutgers" [A ♂, genitalia missing or badly broken, wings very rubbed, right forewing scorched and broken along termen] [AMNH]
- (3) "Pleonectyptera finitima Smith Type"; "Argus Mts., April '91 K."; "Through C. V. Riley"; "Type No. 306, U.S.N.M." [A ♀, good condition, complete] [USNM]
- (4) "Pleonectyptera finitima Smith Type"; same data [A ♀, good condition, complete] [USNM]

Discussion.—Because of the controversy between Smith and Dyar as to the identity of the various syntypes, the condition of the examples, and the sexual characters of importance in this genus, selection of a lectotype is a little complicated. In a discussion of the *habitalis* group of the genus *Hemeroplanis*, which includes the Smith and Dyar species, Francemont (1966, Wash. Ent. Soc. Proc. 68(4): 305) stated: "This is a compact group of very closely related species, the genitalia are exceedingly similar in both sexes, and the differences are not of sufficient magnitude to be relied upon as a means for always distinguishing the species. The wing patterns and, especially, the secondary sexual characteristics of the males, the modifications of the tibiae and the various specialized scale tufts on the abdomen and undersides of the wings, offer excellent means for differentiating the species."

Therefore it would appear desirable to select a male syntype. This also would be in line with Smith's comments of 1911 to the effect that he had based the original description and the revision of 1907 on the two syntypes he had retained. Both the male syntypes in the American Museum of Natural History are damaged, but the syntype from Los Angeles County, Calif., has the wings in good shape and the secondary sexual characteristics or the absence of such characteristics should be observable except for such as might be on the missing abdomen. Accordingly, that syntype has been selected, labeled, and is now designated the lectotype.

There are five Smith slides in the American Museum of Natural History that are labeled as being *finitima*. They consist of a male genitalia slide, a slide of male legs, a slide of a head and abdomen minus the genitalia, and two wing slides. It is, therefore, obvious that the five slides were prepared from one example and that it was not a syntype.

Oncocnemis flagrantis Smith, 1893, Insect Life 5(5): 330, fig. 46: 9.

Habitat.—Argus Mountains, April, 1891. "Five specimens are under examination."

Hampson (1906, Catalogue of the Lepidoptera Phalaenae in the Collection of the British Museum, v. 6, p. 165, pl. 100, fig. 2) illustrated the species, but he did not record any specimens in the British

Museum (Natural History). He did indicate that the type is in the U.S. National Museum.

Syntypes examined: 5 (4 USNM and 1 AMNH)

- (1) "Oncocnemis flagrantis Smith Type"; "Argus Mts., April '91 K."; "Through C. V. Riley"; "Type No. 191, U.S.N.M." [A ♂, apical half of left valve of genitalia missing] [USNM]
- (2) "Oncocnemis flagrantis Smith Type"; same data [A ♂, rather faded] [USNM]
- (3) "Oncocnemis flagrantis Smith Type"; same data [A ♂, fair condition] [USNM]
- (4) "Oncocnemis flagrantis Smith Type"; "Argus Mts., April '91 K."; "Through C. V. Riley" [A ♀, faded] [USNM]
- (5) "Oncocnemis flagrantis Smith Type"; "Argus Mts., April '91 K."; "Through C. V. Riley"; "J. B. Smith Collection, Rutgers" [A ♂, abdomen missing] [AMNH]

Discussion.—The syntype in the U.S. National Museum that lacks the apex of the left valve of the genitalia is the specimen that was illustrated by Smith. It has been selected, labeled, and is now designated the lectotype.

Anarta flanda Smith, 1908, N.Y. Acad. Sci. Ann. 18(2): 111.

Habitat: Newfoundland (Mr. Owen Bryant). "Over fifty examples, taken at light, and sent unpinned in layer of cotton."

Barnes and McDunnough (1913, Contrib. Nat. Hist. Lepidoptera N. Amer. 2(1): 10, pl. 4, fig. 12) illustrated a male cotype from Newfoundland.

Syntypes examined: 16 (12 AMNH and 4 USNM)

- (1) "Anarta flanda Smith ♂ type"; "N.F."; "J. B. Smith Collection, Rutgers" [Fair condition except right forewing torn along inner margin, complete] [AMNH]
- (2) "Anarta flanda Smith ♀ type"; same data [AMNH]
- (3-12) "Anarta flanda Smith cotype"; same data [5 ♂♂ and 5 ♀♀] [AMNH]
- (13) "Anarta flanda Smith cotype"; "N.F."; "Photograph Pl. 4, No. 12"; "Barnes Collection" [A ♂] [USNM]
- (14) "Anarta flanda Smith cotype"; "N.F."; "Type No. 33801, U.S.N.M."; "Barnes Collection" [A ♂] [USNM]
- (15-16) "Anarta flanda Smith cotype"; "N.F."; "Barnes Collection" [2 ♀♀] [USNM]

Discussion.—The "♂ type" and the "♂ cotype" illustrated by Barnes and McDunnough are considered the most important of the lectotype candidates. The "♂ type" in the American Museum of Natural History, even though it is slightly damaged, has been selected, labeled, and is now designated the lectotype. This selection will permit the direct comparison of the lectotype of this species with that of *Anarta hampa* Smith, which is in the same institution.

Taeniocampa flaviannula Smith, 1899, N.Y. Ent. Soc. Jour. 7(4): 225.

"Habitat: Glenwood Springs, Colorado, in March and April." "I have four males and one female under examination." "All the males are from Dr. Wm. Barnes, one of them labelled April 20th. The only female was received from Mr. David Bruce and bears his number, 438."

Syntypes examined: 5 (4 USNM and 1 AMNH)

- (1) "Taeniocampa flaviannula Smith ♂ type"; "Glenwood Spgs., Col."; "Type No. 5102, U.S.N.M."; "36511"; "♂ genitalia no. 1979, JGF." [Good condition] [USNM]
- (2) "Taeniocampa flaviannula Smith ♀ type"; "Colo. Bruce"; "438"; "Type No. 5102, U.S.N.M."; "36511" [Fair condition] [USNM]
- (3) "Taeniocampa flaviannula Smith ♂ cotype"; "Glenwood Spgs., Col."; "Barnes collection" [Slightly rubbed] [USNM]
- (4) "Taeniocampa flaviannula Smith ♂ cotype"; "Glenwood Springs, Col., 1895-3, W. Barnes"; "Barnes collection" [Wings frayed, but complete] [USNM]
- (5) "Taeniocampa flaviannula Smith ♂ cotype"; "Glenwood Springs, Colo., 4-20, 1894, W. Barnes" [AMNH]

Discussion.—The "♂ type" in the U.S. National Museum has been selected, labeled, and is now designated the lectotype.

Agrotis flavicollis Smith, 1888, U.S. Natl. Mus. Proc. 10: 456.

"Habitat.—Montana." "One ♀ specimen from Mr. Tepper's collection."

Smith (1893, U.S. Natl. Mus. Bul. 44, p. 90) stated: "The type is in the Tepper collection."

Holotype.—In the collection of Michigan State University. The specimen is labeled "Type" [on a rhomboidal piece of paper]; "Montana"; "Tepper." It is a female as Smith indicated.

Demas flavicornis Smith, 1884, Brooklyn Ent. Soc. Bul. 7: 3.

"Hab. New Jersey." "The type of the present species is in Mr. Graef's collection."

Smith (1893, U.S. Natl. Mus. Bul. 44, p. 32) placed this species as a synonym of *propinquininea* (Grote) and stated: "Mr. Grote's type is in the British Museum, and is, as I have for some time suspected, my *flavicornis*, the type of which is with Mr. Graef."

Holotype.—In the U.S. National Museum. The specimen is labeled "Demas flavicornis Smith Type"; "N.J., Coll. Edw. L. Graef"; "Collection Brklyn Mus."; "Type No. 34103 USNM"; "♂ genitalia on slide 3792 JFGC."

Conacontia flavicosta Smith, 1900, Amer. Ent. Soc. Trans. 27: 58.

"Hab.—Hot Springs, New Mexico, 7000 ft. (Hulst); Colorado (Bruce); Black Hills, Montan (Hulst).""Seven examples, five of them males, are before me."

Syntypes examined: 7 (2 USNM and 5 AMNH)

- (1) "Conacontia flavicosta Smith ♂ type"; "Col."; "Type No. 5382, U.S.N.M."; "36511"

[Good condition, complete] [USNM]

- (2) "Conacontia flavicosta Smith ♀ type"; "Blk. H."; "Type No. 5382, U.S.N.M."; "Collection G. D. Hulst" [Head missing] [USNM]
- (3) "Conacontia flavicosta Smith ♂ cotype"; "Hot Springs, N. Mex., 7000 ft. alt."; "Collection J. B. Smith" [Good condition] [AMNH]
- (4) "Conacontia flavicosta Smith ♂ cotype"; "Colo., Bruce"; "Collection J. B. Smith" [Poor condition, broken by verdigris] [AMNH]
- (5) "Conacontia flavicosta Smith ♂ cotype"; "Mont."; "Collection J. B. Smith" [Abdomen glued on] [AMNH]
- (6) "Conacontia flavicosta Smith ♂ cotype"; "Mont."; "J. B. Smith Collection, Rutgers" [Fairly good, complete] [AMNH]
- (7) "Conacontia flavicosta Smith ♀ cotype"; "Collection G. D. Hulst" [AMNH]

Discussion.—The "♂ type" in the U.S. National Museum has been selected, labeled, and is now designated the lectotype.

Agrotis flavidens Smith, 1888, U.S. Natl. Mus. Proc. 10: 455.

"Habitat.—Arizona, Colorado." "Two ♂ and one ♀ in collection Graef and Neumoegen."

Smith (1893, U.S. Natl. Mus. Bul. 44, p. 143, pl. 5, fig. 65) illustrated the kind of harpe and clasper males of this species and others are supposed to possess. He did not indicate which species was actually used for the figure.

Smith (1893, U.S. Natl. Mus. Bul. 44, p. 90) stated: "Types are in the National Museum, and in the collections of Graef and Neumoegen."

Syntypes examined: 3? (USNM)

- (1) "Agrotis flavidens Smith Type"; "Arizona"; "Col. B. Neumoegen"; "Type No. 33937, U.S.N.M." [A ♀, abdomen glued on]
- (2) "Agrotis flavidens Smith Type"; "Col."; "Col. B. Neumoegen" [A ♀, marked Coll. Edw. L. Graef at bottom of label]
- (3) "Agrotis flavidens Sm. Colo."; "Col."; "Col. E. L. Graef"; "Collection Brklyn. Mus." [A ♂, apex left valve broken]

Discussion.—In addition to the specimens listed here, there are two specimens in the U.S. National Museum labeled as follows: "flavidens Sm."; "Near Hot Springs, Las Vegas, N. Mex., 7000 ft. Aug. '82, F. W. Snow"; "Type No. 107, U.S.N.M.," a female, and "Agrotis flavidens Smith"; "Ariz."; "Neum."; "Collection J. B. Smith," a male. The first of these is from a locality not mentioned by Smith, yet he apparently sent it to the U.S. National Museum as a type and it was entered in the type book in 1896! The second specimen is from Arizona, a listed Smith locality, and it is marked as from the collection of Smith, so it might be the specimen he referred to as in the U.S. National Museum and as a type in 1893. It is a male. Smith said he had two males and one female, so there is a discrepancy if the two specimens marked "Type" are correct because they are

both females. Both are marked "Col. B. Neumögen"! Smith also indicated that three collections contained types, so if he had only three specimens, there should only have been one type in each of the collections. It is possible that only one of the two specimens marked "Type" was intended to bear the label and that the other label should have been placed on the specimen from Graef listed third in the list of syntypes. If that were so and the specimen from Arizona via the Smith collection was the specimen Smith considered the type in the U.S. National Museum, then the proper sex ratio would exist.

The "Type" in the U.S. National Museum from Colorado has been selected, labeled, and is now designated the lectotype. D. F. Hardwick concurred in this selection. After the notes were prepared and during Hardwick's visit, I prepared a genitalia slide, ELT No. 2178, from the lectotype.

Melicleptria flavidentia Smith, 1906, N.Y. Ent. Soc. Jour. 14: 20.

"Habitat.—Utah, July, 1900." "One male from Dr. Barnes, in good condition."

Holotype.—In the American Museum of Natural History. The specimen is labeled "Melicleptria flavidentia Smith ♂ type"; "Utah, July 1900, Barnes"; "J. B. Smith Collection Rutgers."

Carneades flaviscapula Smith, 1900, U.S. Natl. Mus. Proc. 22(1203): 422.

"Habitat.—New Mexico." "Two males from the Hulst collection, in fair condition." "Type.—Cat. No. 4810, U.S.N.M."

Hampson (1903, Catalogue of the Lepidoptera Phalaenae in the Collection of the British Museum, v. 4, p. 216) stated: "Pl. LXII, fig. 6" and "This species is unknown to me; figured from a photograph from type in U.S. Nat. Mus."

Syntypes examined: 2 (USNM and AMNH)

- (1) "Carneades flaviscapula Smith ♂ type"; "N. M."; "Collection G. D. Hulst"; "Type No. 4810, U.S.N.M."; "36311" [Some dermestid damage at base of abdomen, genitalia intact] [USNM]
- (2) "Carneades flaviscapula Smith cotype"; "N. M."; "J. B. Smith Collection, Rutgers" [A ♂] [AMNH]

Discussion.—The "♂ type" is the only syntype bearing the USNM type number cited in the original description. For that reason I believe that it should be considered the holotype, but it is now designated the lectotype in order to insure that it is considered the type-specimen by those who may not consider it the holotype. The male genitalia were prepared during a study visit by D. F. Hardwick; the slide is labeled "♂ genitalia slide 2277, ELT." Rindge (1955, p. 112) listed the species as *Carneades flavoscapula* Smith.

Perigea flavistriga Smith, 1905, N.Y. Ent. Soc. Jour. 13(4): 204.

"Habitat.—Lethbridge, Alberta, July 11; T. N. Will-

ing." "A single female in good condition, from Mr. F. H. Wolley Dod (No. 8)."

Holotype.—In the collection of the American Museum of Natural History. The specimen is labeled "Perigea flavistriga Smith ♀ type"; "Lethbridge, Alta., 11.VII.06, T. N. Willing"; "J. B. Smith Collection Rutgers."

Noctua flavotincta Smith, 1892, Ent. News 3(10): 252, pl. 10, row 1, fig. 2.

"Hab.—Victoria, B.C., collected by Mr. C. J. Weidt; two males, one of them with Mr. Neumoegen." Smith (1894, Amer. Ent. Soc. Trans. 21: 45, pl. 1, row 1, fig. 2) again described this as new, using the same plate.

Syntypes examined: 2? (USNM)

- (1) "Noctua flavotincta Smith Type"; "British Columbia"; "Type No. 86, U.S.N.M." [A ♂]
- (2) "Noctua flavotincta Smith"; "Br. Celsa"; "Col. B. Neumögen"; "Collection Brklyn. Mus." [A ♂]

Discussion.—The specimen labeled "Type" must be the one Smith said was from Victoria, British Columbia, collected by C. J. Weidt even if that information is not on the labels. The second male is not marked type, but it is probably the one Smith said he had from Neumoegen. The specimen marked "Type" is selected, labeled, and now designated the lectotype. The lectotype is the specimen illustrated by Smith.

Xylina fletcheri Smith, 1904, Psyche 11(2): 56.

"Habitat.—Ottawa, Ontario, October 3-7; Dr. J. Fletcher." "One male and four females; all good specimens."

Hampson (1906, Catalogue of the Lepidoptera Phalaenae in the Collection of the British Museum, v. 6, p. 276, pl. CIII, fig. 4) listed two females from Ottawa, Canada, one a female cotype and figured one, but which one is not known.

Syntypes examined: 2 (AMNH)

- (1) "Xylina fletcheri Smith ♂ type"; "Ottawa, Oct. 1903"; "Collection J. B. Smith" [Very good condition, complete]
- (2) "Xylina fletcheri Smith ♀ type"; "Ottawa, 3.X.1903"; "Collection J. B. Smith" [Good condition, some verdigris]

Other syntypes: 1 (CNC)

- (1) "Xylina fletcher ♀ cotype"; "Ottawa, Ont., 7-IX-03"; "J. Fletcher coll."

Discussion.—Hampson listed one female syntype in the collection of the British Museum (Natural History), but one other female syntype has not been located. The "♂ type" in the American Museum of Natural History has been selected, labeled, and is now designated the lectotype.

Euxoa floramina Smith, 1905, Canad. Ent. 37: 202.

"Habitat.—Stockton, Utah, Sept. 14-24; Mr. T. Spaiding." "Twelve ♂ and five ♀, most of them in at least fair condition."

Syntypes examined: 12 (6 AMNH and 6 USNM)

- (1) "Euxoa floramina Sml.h ♀ type"; "Stockton, Ut."; "IX-15-4"; "J. B. Smith Collection, Rutgers" [AMNH]
- (2) "Euxoa floramina Smith ♂ type"; "Stockton, Ut."; "IX-14-4"; "J. B. Smith Collection, Rutgers" [AMNH]
- (3) "Euxoa floramina Smith ♂ cotype"; "Stockton, Ut., IX-18-3, Tom Spalding"; "Collection Dr. H. G. Dyar"; "Type No. 9763, U.S.N.M." [USNM]
- (4) "Euxoa floramina Smith ♂ cotype"; "Stockton, Ut., IX-20-3, Tom Spalding"; "♂ genitalia no. 902, JFGC." [USNM]
- (5) "Euxoa floramina Smith ♂ cotype"; "Stockton, Ut., IX-20-4"; "Acc. No. 10405"; "Type No. 33740, U.S.N.M." [USNM]
- (6) "Euxoa floramina Smith ♂ cotype"; "Stockton, Ut., IX-24-3, Tom Spalding"; "slide 35a" [USNM]
- (7) "Euxoa floramina Smith ♀ cotype"; "Stockton, Ut., IX-21-3, Tom Spalding" [USNM]
- (8) "Euxoa floramina Smith ♀ cotype"; "Stockton, Ut., IX-20-4" [USNM]
- (9-12) "Euxoa floramina Smith 2♂ and 2♀ cotypes"; same data as ♀ type, but dates "IX-24-3," "IX-14-4," and "X-25-4" [AMNH]

Discussion.—In line with my practice of selecting females where possible in the genus *Euxoa*, I have selected, labeled, and now designate the "♀ type" in the American Museum of Natural History as the lectotype. Five syntypes were not located. They should all be males.

***Mamestra florida* Smith, 1900, U.S. Natl. Mus.**

Proc. 22(1203): 465.

Habitat.—Biscayne Bay, Florida (Mrs. Slosson)."

"A single male specimen, in good condition."

Type.—Cat. No. 4837, U.S.N.M."

Holotype.—In the U.S. National Museum. The specimen is labeled "Mamestra florida Smith ♂ type"; "Bisc. Bay, Fla."; "Type No. 4837 USNM"; "36511"; "♂ genitalia on slide 174 ELT."

***Tetanolita floridana* Smith, 1895, U.S. Natl. Mus. Bul.**

48, p. 63, pl. 4, figs. 19-21, pl. 13, figs. 3-4.

"HABITAT.—Florida, Archer, in March and April; Texas, in March." "Both sexes are at hand, and are similar in appearance." "The types are in the collection of the United States National Museum." In the explanation of figures 19-21, plate 4 [p. 122] he stated: "... from the types in the collection of the United States National Museum."

Syntypes examined: 3 (2 USNM and 1 AMNH)

- (1) "Tetanolita floridana Smith Type"; "Im. Apr. 6.82 from pupa rec. March 10. 82, Archer, Fla."; "Collection C. V. Riley"; "Type No. 319, U.S.N.M." [A ♂, good condition, complete] [USNM]
- (2) "Tetanolita floridana Smith Type"; "Archer, Fla. 1/3 82"; "Type A.M.N.H."; "Collection J. B. Smith"; "J. B. Smith Collection, Rut-

gers"; "A. Koebele, Collector" [A ♂, fairly good condition] [AMNH]

- (3) "Texas"; "15/3 82"; "Collection C. V. Riley" [A ♀, good condition, complete] [USNM]

Discussion.—The female in the U.S. National Museum is not marked a type, but the label data agree with the information in the original description, and it is the specimen illustrated by Smith on plate 4, figure 19. The male syntype in the same collection was the specimen used for figure 20, the one in the American Museum of Natural History for figure 21. The "Type" in the U.S. National Museum from Archer, Fla., has been selected, labeled, and is now designated the lectotype.

***Himella flosca* Smith, 1906, Canad. Ent. 33(7): 231.**

Habitat.—Huachuca Mts., Arizona. Dr. Barnes."

"Six males and two females in fair to good condition. An undersized female from Wilgus, Cochise Co., may belong here, but offers some points of difference that make it doubtful."

Syntypes examined: 8? (3 AMNH and 5? USNM)

- (1) "Himella flosca Smith ♂ type"; "Huachuca Mts., Ariz."; "J. B. Smith Collection, Rutgers" [Rubbed, but complete] [AMNH]
- (2) "Himella flosca Smith ♀ type"; "Huachuca Mts., Ariz."; "J. B. Smith Collection, Rutgers" [Poor condition, complete] [AMNH]
- (3) "Himella flosca Smith ♂ cotype"; "Huachuca Mts., Ariz."; "J. B. Smith Collection, Rutgers" [Abdomen greasy] [AMNH]
- (4) "Himella flosca Smith ♂ cotype"; "Huachuca Mts., Ariz."; "Barnes Collection" [USNM]
- (5) "Himella flosca Smith cotype"; "Huachuca Mts., Ariz."; "Barnes Collection"; "♂ genitalia slide 788, ELT." [USNM]
- (6) "Himella flosca Smith cotype"; "Huachuca Mts., Ariz."; "Barnes Collection" [A ♂] [USNM]
- (7) "Himella flosca Smith cotype"; "Huachuca Mts., Ariz."; "Barnes Collection" [A ♂] [USNM]
- (8) "Himella flosca Smith ♀ cotype"; "Redington, Ariz."; "Barnes Collection" [A ♀] [USNM]

Discussion.—The last specimen listed I consider a questionable syntype because the locality was not mentioned by Smith. It is probably just another instance in which Smith failed to properly list all the localities. He apparently did not label the specimen from Wilgus, Cochise County, that he thought might be different. The "♂ type" in the American Museum of Natural History has been selected, labeled, and is now designated the lectotype.

***Euxoa flutea* Smith, 1910, Amer. Ent. Soc. Trans. 36(3): 255.**

Hab.—California, Sierra Nevada." "Two females in good condition. One of them has no definite locality, the other is No. 9926 of the Henry Edwards collection, and belongs to the American Museum of Natural History."

Syntypes examined: 2 (AMNH)

- (1) "Euxoa flutea Smith Type"; "Calif."; "J. B. Smith Collection, Rutgers"; "Eux. oblongistigma of Coll. U.S.N.M., 4-denta, Coll. Neum." [A ♀, good condition]
- (2) "Euxoa flutea Smith Paratype"; "Sier. Nev., Cal." [A ♀]

Discussion.—The "Type" has been selected, labeled, and is now designated the lectotype.

Carneades focinus Smith, 1903, N.Y. Ent. Soc. Jour. 11(1): 7.

Habitat: Calgary, Canada; Pullman, Washington; Glenwood Springs, Colorado; Truckee and Sierra Nevada, California; June, July and August. "This is a common species represented in my collection by good series of both sexes."

Syntypes examined: 7 (5 AMNH and 2 USNM)

- (1) "Carneades focinus Smith ♂ type"; "Glenwood Springs, Col., 1895 8, W. Barnes"; "J. B. Smith Collection, Rutgers" [Very good condition] [AMNH]
- (2) "Carneades focinus Smith ♀ type"; "Pullman, Wash., 12 Aug. 99"; "Collector C. V. Piper"; "J. B. Smith Collection, Rutgers" [Good condition except dermestid damage to left side and internal parts of abdomen] [AMNH]
- (3) "Carneades focinus Smith ♀ cotype"; "Sier. Nev., Cal."; "J. B. Smith Collection, Rutgers" [AMNH]
- (4) "Carneades focinus Smith cotype"; "Pullman, Wash., 24 July 98, Wash. Exp. Sta. No. 383"; "J. B. Smith Collection, Rutgers" [A ♀] [AMNH]
- (5) "Carneades focinus Smith cotype"; "Calgary, Alta., Dod"; "J. B. Smith Collection, Rutgers" [A ♀] [AMNH]
- (6) "Carneades focinus Smith ♂ cotype"; "Calgary, Can."; "5-IV-96" [USNM]
- (7) "Carneades focinus Smith cotype"; "269"; "Truckee, Cal."; "Collection J. B. Smith" [A ♀] [USNM]

Discussion.—The "♀ type" has a damaged abdomen, so the "♂ type" in the American Museum of Natural History has been selected, labeled, and is now designated the lectotype.

Carneades foeminalis Smith, 1900, U.S. Natl. Mus. Proc. 22(1203): 454.

Habitat.—Garfield County, Colorado, 6,000 feet (Bruce). "Two males and two females; one of the latter apparently a little dwarfed and crippled, . . ."

Type.—Cat. No. 4784, U.S.N.M."

Syntypes examined: 4 (3 USNM and 1 AMNH)

- (1) "Carneades foeminalis Smith ♀ type"; "Colo. Bruce"; "6001, Garfield Co., 6000 ft. Bruce"; "Type No. 4784, U.S.N.M."; "♀ genitalia slide 2313, ELT." [USNM]
- (2) "Carneades foeminalis Smith ♂ type"; "Colo., Bruce"; "Type No. 4784, U.S.N.M."; "36311" [A ♀] [USNM]

- (3) "Carneades foeminalis Smith ♀ cotype"; "Colo. Bruce"; "Garfield Co., Colo., 6000 ft. Bruce" [Abdomen and thorax with dermestid damage] [USNM]
- (4) "Carneades foeminalis Smith ♂ cotype"; "Garfield Co., Colo., Bruce"; "Collection J. B. Smith" [AMNH]

Discussion.—The "♀ type" in the U.S. National Museum has been selected, labeled, and is now designated the lectotype. It is the better specimen of the two syntypes bearing USNM type number 4784, which was given in the original description.

Orthosia fornica Smith, 1907, Amer. Ent. Soc. Trans. 33: 134.

Hab.—Southern California. "One male in good condition, save that it lacks antennae and the tips of the primaries are a little broken. I have no data as to the source of the specimen."

Smith (1907, Amer. Ent. Soc. Trans. 33: 358) stated that he had only a single male tagged "S. Cal." He figured the genitalia on plate 10, figure 7.

Holotype.—In the American Museum of Natural History. The specimen is labeled "Orthosia fornica Smith ♂ type"; "S. Cal."; "Collection J. B. Smith." It is a male with the genitalia missing. There is a slide in the American Museum of Natural History labeled *O. fornica* with pieces of genitalia on it that undoubtedly belong to this specimen. Rindge (1955, p. 112) misspelled the specific name as *formica*.

Thalpochares fractilinea Smith, 1908, N.Y. Acad. Sci. Ann. 18(2): 125.

Habitat: New Brighton, Pa., June 12, July 29, Aug. 3, 9, 12, 14, 26. "Five males, one female, and two specimens in which the sex is indeterminable, owing to their defective condition; from Mr. H. D. Merrick."

Syntypes examined: 5 (3 AMNH and 2 USNM)

- (1) "Thalpochares fractilinea Smith ♂ type"; "J. B. Smith Collection, Rutgers" [Good condition, complete] [AMNH]
- (2) "Thalpochares fractilinea Smith ♀ type"; "New Brighton, Pa., 8-14-03, H. D. Merrick"; "J. B. Smith Collection, Rutgers" [Good condition, complete] [AMNH]
- (3) "Thalpochares fractilinea Smith ♂ cotype"; "New Brighton, Pa., VIII-12-04, H. D. Merrick"; "J. B. Smith Collection, Rutgers" [Very good condition, complete] [AMNH]
- (4) "Thalpochares fractilinea Smith cotype"; "New Brighton, Pa., 8-14-03, H. D. Merrick"; "♂ genitalia no. 723, JGF." [USNM]
- (5) "Thalpochares fractilinea Smith cotype"; "New Brighton, Pa., VII.29.05, H. D. Merrick"; "♂ genitalia no. 722, JGF." [USNM]

Discussion.—Smith listed eight specimens, but said two were so poor that he could not determine their sex. Those two probably were not marked as types. He listed seven collecting dates. Among the specimens

located, two were collected on the same day, August 14, 1903. This leaves four dates and three specimens unaccounted for. The specimen labeled "♂ type" has apparently had the locality and date label lost since the description by Smith. All specimens were from New Brighton, but it is not possible to determine the date for that specimen unless the other three specimens are located so that their dates of collection can be determined and the dates eliminated from the four dates left unassociated with specimens. In spite of the present absence of a locality and date label on the "♂ type," we do know where it was collected and the approximate date, so it has been selected, labeled, and is now designated the lectotype.

Taeniocampa fractura Smith, 1906, *Canad. Ent.* 38(7): 232.

"*Habitat*.—Huachuca Mts., Arizona. Dr. Barnes." "Four males and two females in fair condition."

Syntypes examined: 6 (2 AMNH and 4 USNM)

- (1) "Taeniocampa fractura Smith ♂ type"; "Huachuca Mts., Ariz."; "J. B. Smith Collection, Rutgers" [Good condition, complete] [AMNH]
- (2) "Taeniocampa fractura Smith ♀ type"; "Huachuca Mts., Ariz."; "Barnes Collection" [USNM]
- (3) "Taeniocampa fractura Smith ♂ cotype"; "Huachuca Mts., Ariz."; "Barnes Collection"; "♂ Gen. #33. FHB." [USNM]
- (4) "Taeniocampa fractura Smith ♀ cotype"; "Huachuca Mts., Ariz."; "J. B. Smith Collection, Rutgers" [AMNH]
- (5) "Taeniocampa fractura Smith cotype"; "Huachuca Mts., Ariz."; "Barnes Collection" [A ♂] [USNM]
- (6) "Taeniocampa fractura Smith cotype"; "Huachuca Mts., Ariz."; "Barnes Collection" [A ♂] [USNM]

Discussion.—The "♂ type" in the American Museum of Natural History has been selected, labeled, and is now designated the lectotype.

Scotogramma francisca Smith, 1910, *N.Y. Ent. Soc. Jour.* 18: 96.

"*Habitat*.—San Francisco, California, Sept. 21, Oct. 4, Mr. F. X. Williams." "Two males and two females in good condition."

Syntypes examined: 2 (AMNH and USNM)

- (1) "Scotogramma francisco [sic] Smith, ♂ type"; "San Francisco, Cal., 10-4-08, F. X. Williams"; "J. B. Smith Collection Rutgers" [Very good condition] [AMNH]
- (2) "Scotogramma francisco [sic] Smith, ♀ type"; "San Francisco, Cal., 10-4-08, F. X. Williams"; "233"; "Barnes collection" [USNM]

Discussion.—Two syntypes have not been located, at least one with the date September 21. The specimens may have been returned to Williams. The male syntype in the American Museum of Natural History has been selected, labeled, and is now designated the lectotype.

Cobalos franciscanus Smith, 1899, *N.Y. Ent. Soc. Jour.* 7(4): 224.

"*Habitat*: San Francisco County, California, a single ♂ specimen only, with the vestiture a little marred in spreading."

Holotype.—In the U.S. National Museum. The specimen is labeled "Cobalos franciscanus Smith ♂ type"; "S. Francisco Co., Cal."; "Type No. 5118 USNM"; "36511." There is a second specimen in the U.S. National Museum that is labeled "♂ cotype" and bears an identical locality label. It must be considered spurious and presumably labeled "♂ cotype" subsequent to the description.

Campometra fraterna Smith, 1899, *U.S. Natl. Mus. Proc.* 22(1184): 104.

"*Type*.—No. 4313, U.S.N.M." "I have six specimens, five of them females, from Death Valley (April), Oracle (July 7), and Catalina Springs (May 5), Arizona. All are from the U.S. National Museum, collected by Messrs. Koebele or Hubbard and Schwarz."

Syntypes examined: 5 (3 USNM and 2 AMNH)

- (1) "Campometra fraterna Smith ♂ type"; "Death Valley, April '91 K."; "677"; "Type No. 4313, U.S.N.M." [Apex of abdomen missing] [USNM]
- (2) "Campometra fraterna Smith ♀ cotype"; "Death Valley, April '91 K."; "677"; "Type No. 4313, U.S.N.M."; "♀ Genitalia Slide #2034, 21 Sept. 1938, J.F.G.C." [Good condition] [USNM]
- (3) "Campometra fraterna Smith cotype"; "Oracle, Ar., 7.9"; "E. A. Schwarz, Collector"; "Type No. 4313, U.S.N.M."; "♀ Genitalia Slide #2042, 21 Sept. 1938, J.F.G.C." [USNM]
- (4) "Campometra fraterna Smith ♀ type"; "Catal. Spgs., Ar., 5.5"; "E. A. Schwarz, Collector"; "J. B. Smith Collection, Rutgers" [Fair condition, complete] [AMNH]
- (5) "Campometra fraterna Smith cotype"; "Ariz."; "J. B. Smith Collection, Rutgers" [AMNH]

Discussion.—One female syntype has not been located. The genitalia slide of the only male studied by Smith was located in the American Museum of Natural History. That slide was labeled "♂ genitalia Campometra fraterna." The specimen from which the genitalia were prepared is in the U.S. National Museum. Accordingly, F. H. Rindge has recently returned the slide to the latter institution. This slide consists of broken pieces of the apex of the abdomen and genitalia. It is likely that it is from the "♂ type" as that is the only male known to have been examined by Smith. Because the original series came from the U.S. National Museum, because the USNM type number was cited in the original description, because the "♂ type" is damaged, and because the genitalia slide has already been prepared, the "♀ cotype" in the U.S. National Museum has been selected, labeled, and is now designated the lectotype.

Renia fraternalis Smith, 1895, U.S. Natl. Mus. Bul. 48, p. 70, pl. 6, figs. 9-10.

"HABITAT.—Florida, Archer in February, Rock Ledge in April; Savannah, Ga." "Twelve specimens are before me, showing . . ." In the explanation of the figures (9 and 10) he stated on page 122: ". . . from types in the collection of the United States National Museum."

Syntypes examined: 6 (USNM)

- (1) "Renia fraternalis Smith Type"; "Archer, Fla., 3/82"; "16/3-82"; "Collection C. V. Riley"; "Type No. 316, U.S.N.M." [A ♂]
- (2) "Renia fraternalis Smith Type"; "15/3. 82"; "Type No. 316, U.S.N.M."; "36511"; "Collection C. V. Riley" [A ♂, good condition, complete]
- (3) "Renia fraternalis Smith Type"; "Archer, Fla., 3-82"; "Collection C. V. Riley"; "Type No. 316, U.S.N.M." [A ♀]
- (4) "Renia fraternalis Smith Type"; "Archer, Fla., March 17.82, A. Koebele"; "Collection C. V. Riley"; "Type No. 316, U.S.N.M." [A ♀]
- (5) "Renia fraternalis Smith Type"; "Archer, Fla., 3.82"; "16/3. 82"; "Type No. 316, U.S.N.M."; "Collection C. V. Riley"; "36511" [A ♀]
- (6) "Renia fraternalis Smith Type"; "Savanah, Ga., A. Lember"; "Type No. 316, U.S.N.M."; "Collection C. V. Riley" [A ♀, abdomen missing]

Discussion.—Six syntypes have not been located. It is likely that Smith failed to mark them as types. At least one may have the locality, Rock Ledge, Fla., dated April on the label. The two specimens illustrated by Smith appear to be in the syntype series in the U.S. National Museum. The male syntype without a locality label appears to be the specimen illustrated in figure 9 of plate 6, and the female collected at Archer, Fla., on March 17, 1882, was the one illustrated in figure 10. Because of the kind of date label it certainly appears that the specimen illustrated in figure 9 was also from Archer, Fla. That specimen is in good condition and it has been selected, labeled, and is now designated the lectotype.

Acronycta frigida Smith, 1897, Ent. News 8(6): 148 (In key).

Smith (1898, U.S. Natl. Mus. Proc. 21(1140): 54, pl. 11, figs. 6, 10, pl. 20, fig. 4) described species in detail: "Habitat.—Sierra Nevada; Truckee, California." "Four specimens, one male and three females, are before me. Two are from the collection of the United States National Museum, one from the Rutgers College collection, and one from the collection of Prof. George H. French. The male is labeled July, Alameda County, California. One female is marked April, Alameda County, California, larva on willow. The specimen from the college collection is labeled Sierra Nevada, while the specimen from Professor French is marked from Truckee, and is dated May 6. This specimen was

bred by Professor French and was mistaken by him for *felina*, . . ."

Hampson (1909, Catalogue of the Lepidoptera Phaenae in the Collection of the British Museum, v. 8, p. 129) stated: "Pl. CXXVI, fig. 4" and "This species is unknown to me; figured from a drawing from type in U.S. Nat. Mus." On the explanation of the figure he stated "♂, California."

Smith (1911, Pomona Jour. Ent. 3(3): 563) stated: "The type localities are Truckee and Sierra Nevada, California, and the species seems to be rare." Barnes and McDunnough (1916, Contrib. Nat. Hist. Lepidoptera N. Amer. 3(3): 165) stated: "The type is a ♂ in the National Museum labeled Alameda Co., Calif., . . ." They suggested that the specimen from French (Truckee, Calif.) was destroyed by larvae of *Anthrenus*.

Syntypes examined: 3 (2 USNM and 1 AMNH)

- (1) "Acronycta frigida Smith ♂ type"; "Alameda Co., Cal."; "July"; "356"; "Type No. 3658, U.S.N.M." [Fairly good condition except right valve of genitalia missing] [USNM]
- (2) "Acronycta frigida Smith ♀ type"; "Alameda Co., Cal."; "Apr."; "Larva on willow."; "Type No. 3658, U.S.N.M." [Abdomen missing] [USNM]
- (3) "Acronycta frigida Smith ♀ cotype"; "Sier. Nev., Cal."; "J. B. Smith Collection, Rutgers" [AMNH]

Discussion.—It is likely that the fourth syntype was destroyed as indicated by Barnes and McDunnough. There are two other specimens in the U.S. National Museum that bear Smith cotype labels of this name. They are both from Victoria, Vancouver, and must be pseudotypes, and, as such, evidence that Smith did on occasion label specimens as types that were not part of the original type-series. The "♂ type" was referred to as the "type" by Barnes and McDunnough, and to insure that the syntype is considered to be the type-specimen by all subsequent workers, it has been selected, labeled, and is now designated the lectotype.

Hydroecia frigida Smith, 1899, Amer. Ent. Soc. Trans. 26: 39, pl. 2, fig. 26 [♂ genitalia].

"Hab.—Winnipeg, Manitoba, Mr. A. W. Hanham." "The type is a male and the only specimen that I have seen."

Holotype.—In the U.S. National Museum. The specimen is labeled "Hydroecia frigida Smith Type"; "Winnipeg, Man."; "325"; "Type No. 4996 USNM"; "36511"; "♂ genitalia on slide 1306 JGF."

Taeniocampa fringata Smith, 1908, N.Y. Acad. Sci. Ann. 18(2): 104.

"Habitat: Monterey County, California, March; Santa Cruz Mountains, California." "Five males and two females, all save one in good condition." Smith (1911, N.Y. Ent. Soc. Jour. 19(3): 148) stated: "There are 17♂ and 1♀ under examination, all from Monterey Co., California, in March, and all practically alike."

Syntypes examined: 5 (4 AMNH and 1 USNM)

- (1) "Taeniocampa fringata Smith ♂ type"; "Monterey Co., Cal., Mar."; "J. B. Smith Collection, Rutgers" [Good condition, complete] [AMNH]
- (2) "Taeniocampa fringata Smith ♀ type"; "Monterey Co., Cal., Mar."; "J. B. Smith Collection, Rutgers" [Good condition, complete] [AMNH]
- (3) "Taeniocampa fringata Smith cotype"; "Monterey Co., Cal., Mar."; "J. B. Smith Collection, Rutgers" [A ♂] [AMNH]
- (4) "Taeniocampa fringata Smith cotype"; "Monterey Co., Cal., Mar."; "J. B. Smith Collection, Rutgers" [A ♂] [AMNH]
- (5) "Taeniocampa fringata Smith cotype"; "Monterey Co., Cal., Mar."; "Barnes Collection" [A ♂] [USNM]

Discussion.—Two syntypes, a male and female, have not been located. At least one, perhaps both, are from Santa Cruz Mountains, Calif. The "♂ type" in the American Museum of Natural History has been selected, labeled, and is now designated the lectotype.

Tetanolita fulata Smith, 1909, N.Y. Ent. Soc. Jour. 17: 69.

Habitat.—Pennsylvania; New Brighton IX, 19 (Merrick), Highspire VI, 22; Illinois: Quincy IX, 1–15 (Poling). "The types are two males and two females in good or fair condition, and I have had under examination 5 other examples from the Pennsylvania State collection taken at Harrisburg, at electric light, VIII, 22, 28, and Highspire, V, 26, IX, 28. The Highspire example in my collection came to me through a New Jersey correspondent, and I do not know the original collector."

Syntypes examined: 4 (3 AMNH and 1 USNM)

- (1) "Tetanolita fulata Smith ♂ type"; "New Brighton, Pa., 9.19.01, H. D. Merrick"; "J. B. Smith Collection, Rutgers" [Fair condition, abdomen missing] [AMNH]
- (2) "Tetanolita fulata Smith ♀ type"; "Quincy, Ill., Poling"; "Sept. 1–15"; "J. B. Smith Collection, Rutgers" [Rather poor, right wing torn at apex, complete] [AMNH]
- (3) "Tetanolita fulata Smith cotype"; "Highspire, Pa., VI.22"; "J. B. Smith Collection, Rutgers" [A ♂, fairly good, complete] [AMNH]
- (4) "Tetanolita fulata Smith cotype"; "Quincy, Ill."; "Sept. 1–15" [A ♂, fairly good, complete] [USNM]

Discussion.—Smith had five other specimens from Harrisburg and Highspire, Pa., from the Pennsylvania State collection that he clearly excluded from the type-series in the original description. He was obviously incorrect about the sex of one of the cotypes because they are both males, not male and female as indicated in the description. I have not located a slide for this species and I do not know whether one was prepared from the abdomen of the "♂ type" or whether the abdomen was simply lost. The "cotype" in the American

Museum of Natural History from Highspire, Pa., has been selected, labeled, and is now designated the lectotype. It probably represents a different generation than the other syntypes if June 22 is correct. All the other examples were collected in September.

Carneades fulda Smith, 1900, U.S. Natl. Mus. Proc. 22(1203): 437.

Habitat.—Alameda County, California, September. "Two female specimens from the U.S. National Museum, collected by Mr. A. Koebele." "Type.—Cat. No. 4792, U.S.N.M."

Lectotype.—In the U.S. National Museum, selected by Todd (Oct. 4, 1968, Wash. Ent. Soc. Proc. 70(3): 271). The specimen is labeled "Carneades fulda Smith ♀ type"; "Alameda Co., Cal."; "Sept."; "Through C. V. Riley"; "Type No. 4792 U.S.N.M."; "♀ genitalia on slide 2249, E.L.T."; "Lectotype, Carneades fulda Sm., by E. L. Todd."

Chytolita fulicallis Smith, 1907, Amer. Ent. Soc. Trans. 33: 143.

Hab.—Tennessee, August 1st, S. T. Kemp. "A single male in good condition."

Holotype.—In the American Museum of Natural History. The specimen is labeled "Chytolita fulicallis Smith ♂ type"; "Tenn. 8–1"; "Collector S. T. Kemp"; "56"; "J. B. Smith Collection Rutgers."

Stibadium fuliginosa Smith, 1907, Amer. Ent. Soc. Trans. 33: 140.

Hab.—Walters Station, California, April 20th; Phoenix, Arizona, April 1, 1897. "Five males and four females in fair condition as to wings; but the thorax compressed or with defective vestiture in most cases. All except one female were sent in by Mr. Hutson, the latter from the Hulst collection and much paler than any others."

Barnes and McDunnough (1916, Contrib. Nat. Hist. Lepidoptera N. Amer. 3(3): 168) stated: "We cannot separate this [*hutsoni* Sm.] from *fuliginosa* Sm. after a comparison of the types in the Smith Collection."

Syntypes examined: 4 (1 AMNH and 3 USNM)

- (1) "Stibadium fuliginosa Smith ♂ type"; "Walters Sta., Cal., IV-20"; "Collection J. B. Smith" [Fairly good, verdigris starting to form, complete] [AMNH]
- (2) "Stibadium fuliginosa Smith ♀ type"; "Walters Sta., Calif., April" [Left hindwing missing] [USNM]
- (3) "Stibadium fuliginosa Smith ♀ cotype"; "Walters Sta., Calif., IV-20"; "Collection J. B. Smith" [Head and left forewing missing] [USNM]
- (4) "Stibadium fuliginosa Smith ♂ cotype"; "Walters Sta., Calif., April"; "Collection J. B. Smith" [Left forewing missing, greasy] [USNM]

Discussion.—The four syntypes were probably the only ones labeled as types by Smith even though he had other specimens. At least one of the missing

specimens should have been labeled Phoenix, Ariz. The "♂ type" in the American Museum of Natural History has been selected, labeled, and is now designated the lectotype. It is a male and in the best condition of any of the lectotype candidates examined.

Perigonica fulminans Smith, 1890, Ent. Amer. 6(7): 124.
"Hab.—Colorado." "Both sexes, collected by Mr. Bruce, in Mr. Neumoegen's collection and coll. Rutgers College."
Smith (1891, Amer. Ent. Soc. Trans. 18: 118) added no new information, but he figured the harpe and clasper (pl. 2, fig. 10).
Smith (1893, U.S. Natl. Mus. Bul. 44, p. 209) stated: "Types are in the National Museum and in the Rutgers College collection."

Syntypes examined: 3 (2 USNM and 1 AMNH)

- (1) "Perigonica fulminans Smith Type"; "Colo., Bruce"; "559"; "Col. B. Neumoegen"; "Type No. 33846, U.S.N.M." [A ♂, fair condition, verdigris forming, but body still intact] [USNM]
- (2) "Perigonica fulminans Smith Type"; "Colo., Bruce"; "Type No. 249, U.S.N.M."; "36511" [A ♂, antennae missing] [USNM]
- (3) "Perigonica fulminans Smith Type"; "Colo., D. Bruce"; "J. B. Smith Collection, Rutgers" [A ♀, fair to poor condition, complete] [AMNH]

Discussion.—Smith did not indicate how many specimens he had at the time of his description. Since he said "Both sexes" and listed two collections, it is certain that the syntypes from the Neumoegen and the Rutgers collections are authentic specimens. The specimen in the U.S. National Museum bearing type number 249 could have been a subsequent specimen. The fact that the specimen was not mentioned as being in the U.S. National Museum until 1893 makes that a possibility. The male syntype bearing the type label "33846" in the U.S. National Museum seems a better lectotype candidate. Accordingly, that specimen has been selected, labeled, and is now designated the lectotype.

Spragueia fumata Smith, 1905, Canad. Ent. 37: 259.
"Habitat: Verdi, Nevada, June 1–10; A. H. Vachell."
"Twelve examples are before me, almost evenly divided as to sex. Nine of these I owe to Mr. Kearfott, and three are from the collection of Mr. H. D. Merrick."

Syntypes examined: 7 (4 AMNH and 3 USNM)

- (1) "Spragueia fumata Smith ♂ type"; "Verdi, Nev., June 29–30, A. H. Vachell"; "J. B. Smith Collection, Rutgers"; "♂ genitalia mounted on slide 10,348, FHR." [AMNH]
- (2) "Spragueia fumata Smith ♀ type"; "Verdi, Nev., June 1–10, A. H. Vachell"; "J. B. Smith Collection, Rutgers" [AMNH]
- (3) "Spragueia fumata Smith ♂ cotype"; "Verdi, Nev., June 1–10, A. H. Vachell"; "J. B. Smith Collection, Rutgers" [Poor condition] [AMNH]

- (4) "Spragueia fumata Smith cotype"; "Verdi, Nev., June 29–30, A. H. Vachell"; "J. B. Smith Collection, Rutgers" [A ♂, abdomen missing] [AMNH]
- (5) "Spragueia fumata Smith cotype"; "Verdi, Nevada, A. H. Vachell, June 1 to 10" [A ♂, abdomen missing] [USNM]
- (6) "Spragueia fumata Smith cotype"; "Verdi, Nevada, A. H. Vachell, June 1 to 10"; "794" [A ♂, abdomen missing] [USNM]
- (7) "Spragueia fumata Smith cotype"; "Verdi, Nevada, A. H. Vachell, June 1 to 10" [A ♀] [USNM]

Discussion.—Five syntypes have not been located. There are 11 specimens in the U.S. National Museum with identical locality and dates to those listed here. The "♂ type" in the American Museum of Natural History has been selected, labeled, and is now designated the lectotype.

Hydroecia furcata Smith, 1899, Amer. Ent. Soc. Trans. 26: 46, pl. 2, fig. 35.
"Hab.—Long Island, N.Y.; Carlstadt, N.J., Doll; Manchester, N.H., Ottolengui; Urbana, Ill., Forbes."
"Five specimens, all males, are before me."

Syntypes examined: 3 (USNM)

- (1) "Hydroecia furcata Smith ♂ type"; "18941"; "Illinois, Forbes"; "Type No. 4145, U.S.N.M."; "USNM Acc. 34638"
- (2) "Hydroecia furcata Smith cotype"; "Manchester, New Hampshire" [A ♂]
- (3) "Hydroecia furcata Smith cotype"; "N.J."; "Doll" [A ♂]

Discussion.—Two syntypes have not been located. There is a specimen in the American Museum of Natural History received from Rutgers College labeled "Hydroecia furcata Smith ♀ type"; "Volga, So. Dak."; "Collection J. B. Smith." Smith stated he had only males and he did not cite this locality, yet the specimen bears his "♀ type" and collection labels. He said in 1893 that he would never label a specimen "Type" that was not before him at the time of the writing of the description, but it appears that he must have done so. Accordingly, the specimen probably should be considered to be a pseudotype. The "♂ type" in the U.S. National Museum has been selected, labeled, and is now designated the lectotype.

Feralia furtiva Smith, 1909, N.Y. Ent. Soc. Jour. 17: 57.

"Habitat.—Sudbury, Ontario, 1891." "A single female which has been in my collection for many years . . ."

Holotype.—In the American Museum of Natural History. The specimen is labeled "Feralia furtiva Smith Type"; "Sudbury, Ont., 1891"; "J. B. Smith Collection Rutgers."

Agrotis furtivus Smith, 1890, Amer. Ent. Soc. Trans. 17: 56.

"Habitat.—California (Neumoegen)." "Three very

strongly dissimilar specimens, all females." Smith (1890, U.S. Natl. Mus. Bul. 38, p. 198) treated species, but added nothing new. Smith (1893, U.S. Natl. Mus. Bul. 44, p. 105) stated: "Types are in the National Museum and in Mr. Neumögen's collection."

Syntypes examined: 3 (USNM)

- (1) "Agrotis furtivus Smith Type"; "Sierra Nevada"; "Col. B. Neumögen"; "Type No. 33759, U.S.N.M." [A ♀, abdomen damaged by dermestids]
- (2) "Agrotis furtivus Smith Type"; "Cal."; "Col. B. Neumögen"; "♂ genitalia slide 2310, ELT." [A ♂!]
- (3) "Agrotis furtivus Smith Type"; "Cal."; "Type No. 131, U.S.N.M." [A ♀, pin broken, specimen glued to strip of paper, legs mostly missing and also mouth parts]

Discussion.—Smith was wrong about the sex of one specimen, a male not a female. The male "Type" is in better condition than the other two syntypes, and it has been selected, labeled, and is now designated the lectotype.

Mamestra fuscolutea Smith, 1892, Ent. News 3(10): 250, pl. 10, row 1, fig. 3.

"*Hab.*—Colorado, Bruce; two female specimens No. 284, 291."

Smith (1894, Amer. Ent. Soc. Trans. 21: 54, pl. 1, row 1, fig. 3) again described this as new, using the same plate. He had, however, added a male as he stated: "*Hab.*—Colorado, Bruce; Nos. 284, 291, 380." "One male and two female specimens are before me, from the smaller of which the figure was made."

Syntypes examined: 2 (USNM)

- (1) "Mamestra fuscolutea Smith Type"; "Colo., Bruce"; "284"; "Type No. 159, U.S.N.M." [A ♀, rubbed and faded]
- (2) "Mamestra fuscolutea Smith Type"; "Colo., Bruce"; "291"; "Type No. 159, U.S.N.M."; "36511" [A ♀, faded]

Discussion.—The syntype numbered "284" is the one figured by Smith. It is now more damaged than the one numbered "291," and the latter has been selected, labeled, and is now designated the lectotype. There is a male in the U.S. National Museum that also bears the USNM type number 159 and the number "380" cited by Smith in the 1894 paper. It is not a syntype.

Mamestra crotchii var. **fusculenta** Smith, 1891, U.S. Natl. Mus. Proc. 14: 213.

Smith recorded *crotchii* from Colorado, Oregon, and California and stated: "The California specimen from the Museum collection (June, Placer County, red No. 309, through C.V.R.) is darker in shade than the others and has been marked variety *fusculenta* by me."

Holotype.—In the U.S. National Museum. The specimen is labeled "M. crotchii v. fusculenta Smith Type"; "Placer Co., Cal."; "June"; "309"; "Through C. V. Riley"; "Type No. 149 USNM." It is a male.

Carneades fusimacula Smith, 1891, Amer. Ent. Soc. Trans. 18: 105.

"*Hab.*—California." "A single male specimen in good condition."

Smith (1893, U.S. Natl. Mus. Bul. 44, p. 107) gave no reference to the description and stated:

"HABITAT.—New Mexico." "The type is in the Rutgers College collection."

Smith (1902, Canad. Ent. 34: 125) again described this as a new species and stated: "*Habitat.*—California." "The type is a unique male in the collection of the U.S. National Museum, exact locality not known." "The original description for this species was written prior to 1891, but in some way it seems to have escaped publication. My attention was drawn to the matter in 1893, when the species was cited in the catalogue without a reference, but for some reason the omission was not then made good. To entitle the name to recognition in the forthcoming catalogue, it is hereby formally authenticated by description."

Holotype.—In the U.S. National Museum. The specimen is labeled "Carneades fusimacula Smith Type"; "Cal."; "Type No. 4982 USNM"; "36511." The specimen is a male. It was received as a gift from Smith and was entered as type of the species in the type book on May 18, 1900! I have no idea why Smith stated that the type locality was New Mexico in 1893.

Oxycnemis fusimacula Smith, 1902, N.Y. Ent. Soc. Jour. 10: 50.

"*Habitat.*—Quartzsite, Yuma Co., Arizona, in March; Walters Station, California, in April (George S. Hutson)." "One male and seven females in good condition; all desert collections."

Hampson (1909, Catalogue of the Lepidoptera Phalaenae in the Collection of the British Museum, v. 8, p. 216) listed two female specimens from Yuma County, Ariz., one a cotype, and he illustrated a specimen (pl. CXXVIII, fig. 2), but which one is unknown.

Syntypes examined: 6 (3 AMNH and 3 USNM)

- (1) "Oxycnemis fusimacula Smith ♂ type"; "Yuma Co., Ariz., March"; "Collection J. B. Smith" [Good condition, complete] [AMNH]
- (2) "Oxycnemis fusimacula Smith ♀ type"; "Walters Sta., Calif., April"; "Type No. 98, U.S.N.M." [USNM]
- (3) "Oxycnemis fusimacula Smith ♀ cotype"; "Walters Sta., Calif., April"; "J. B. Smith Collection, Rutgers" [AMNH]
- (4) "Oxycnemis fusimacula Smith ♀ cotype"; "Walters Sta., Calif., April"; "J. B. Smith Collection, Rutgers" [AMNH]
- (5) "Oxycnemis fusimacula Smith ♀ cotype"; "Walters Sta., Calif., April" [USNM]
- (6) "Oxycnemis fusimacula Smith ♀ cotype"; "Yuma Co., Ariz., March"; "Collection J. B. Smith" [USNM]

Discussion.—One female syntype has not been located. The "♂ type" in the American Museum of

Natural History has been selected, labeled, and is now designated the lectotype.

Viridemas galena Smith, 1908, N.Y. Acad. Sci. Ann. 18(2): 92.

"Habitat: Huachuca Mountains, Arizona, VII, 30; Palmerly, Cochise County, Arizona, VII." "Two males and one female, in fair condition. The males are purchased specimens from my own collection, the female is from the collection of the Brooklyn Institute."

Syntypes examined: 2 (AMNH and USNM)

- (1) "Viridemas galena Smith δ type"; "Huachuca Mts., Ariz., VII-30"; "J. B. Smith Collection, Rutgers" [Fair condition, complete but greasy] [AMNH]
- (2) "Viridemas galena Smith ϕ type"; "Palmerly, Cochise Co., Ariz., VII"; "X"; "Collection Brklyn. Mus."; " ϕ genitalia no. 2555, JFGC." [USNM]

Discussion.—One male syntype has not been located. The " δ type" in the American Museum of Natural History has been selected, labeled, and is now designated the lectotype.

Mamestra gatei Smith, 1910, N.Y. Ent. Soc. Jour. 18: 95.

"Habitat.—Fort Wingate, New Mexico, IX, 4-10." "Eight males and five females in good condition. A purchased lot, collector unknown."

Syntypes examined: 8 (7 AMNH and 1 USNM)

- (1) "Mamestra gatei Smith Type δ "; "Ft. Wingate, N.M., IX-6"; "J. B. Smith Collection, Rutgers" [Fair condition, abdomen greasy, complete] [AMNH]
- (2) "Mamestra gatei Smith Type ϕ "; "Ft. Wingate, N.M., IX-10"; "J. B. Smith Collection, Rutgers" [Fair condition, complete] [AMNH]
- (3) "Mamestra gatei Smith Cotype δ "; "Ft. Wingate, N.M., IX-6"; "J. B. Smith Collection, Rutgers"; " δ Genitalia mounted on slide F.H.R. no. 14,848" [Good condition] [AMNH]
- (4) "Mamestra gatei Smith cotype"; "Ft. Wingate, N.M., IX-9"; "J. B. Smith Collection, Rutgers" [A δ , fair condition, complete] [AMNH]
- (5) "Mamestra gatei Smith cotype"; "Ft. Wingate, N.M., IX-21"; "J. B. Smith Collection, Rutgers" [A δ , fair condition, complete] [AMNH]
- (6) "Mamestra gatei Smith cotype ϕ "; "Ft. Wingate, N.M., IX-9"; "J. B. Smith Collection, Rutgers"; " ϕ Genitalia mounted on slide F.H.R. no. 14,951" [Good condition] [AMNH]
- (7) "Mamestra gatei Smith cotype"; "Ft. Wingate, N.M., IX-5"; "J. B. Smith Collection, Rutgers" [Rather poor, complete ϕ] [AMNH]
- (8) "Mamestra gatei Smith cotype"; "Ft. Wingate, N.M., IX-21"; "Barnes collection"

[A δ , abdomen on pin] [USNM]

Discussion.—The "Type δ " in the American Museum of Natural History has been selected, labeled, and is now designated the lectotype.

Moma geminata Smith, 1903, N.Y. Ent. Soc. Jour. 11(1): 1.

"Habitat: Cartwright, Manitoba, May 7." "One female, in good condition, from Mr. E. F. Heath."

Holotype.—In the American Museum of Natural History. The specimen is labeled "Moma geminata Smith Type"; "Cartwright, Manitoba"; "5/7/99"; "Collection J. B. Smith."

Oncocnemis gerdis Smith, 1910, N.Y. Ent. Soc. Jour. 18: 90.

"Habitat.—Arizona: Yavapai Co., May 3, Hutson; Baboquavaria Mts., Pima Co." "Two male examples in fair condition."

Syntypes examined: 2 (AMNH and USNM)

- (1) "Oncocnemis gerdis Smith δ type"; "Baboquavaria Mts., Pima Co., Arizona"; "J. B. Smith Collection, Rutgers" [Fair condition, complete except antennae missing] [AMNH]
- (2) "Oncocnemis gerdis Smith δ cotype"; "Yavapai Co., Ariz., V-31" [USNM]

Discussion.—The " δ type" in the American Museum of Natural History has been selected, labeled, and is now designated the lectotype.

Mamestra gertana Smith, 1913, Ent. News 24: 273.

"Habitat.—San Diego, California, in March." "Thirty-three males and seven females are at hand for comparison, received through Mr. H. H. Brehme."

Syntypes examined: 14 (8 AMNH and 6 USNM)

- (1) "Mamestra gertana Smith, δ type"; "San Diego, Cal., III"; "J. B. Smith Collection Rutgers" [Very good, complete] [AMNH]
- (2) "Mamestra gertana Smith, ϕ type"; "San Diego, Cal., III"; "J. B. Smith Collection Rutgers" [AMNH]
- (3) "Mamestra gertana Smith, Paratype"; "San Diego, Cal., III"; "J. B. Smith Collection Rutgers"; "Genitalia mounted on Slide No. 61-25, Lloyd M. Martin" [A δ] [AMNH]
- (4-8) "Mamestra gertana Smith, Paratype"; "San Diego, Cal., III"; "J. B. Smith Collection Rutgers" [3 $\delta\delta$, 2 $\phi\phi$] [AMNH]
- (9-14) "Mamestra gertana Smith, Paratype"; "San Diego, Cal., III"; "Barnes Collection" [5 $\delta\delta$, 1 ϕ] [USNM]

Discussion.—Smith obviously only placed type and paratype labels on part of the series. In the American Museum of Natural History there are 20 specimens with identical locality labels. There are a comparable number of specimens in the U.S. National Museum with the same locality data, but with machine-printed labels. The " δ type" in the American Museum of Natural History

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has been selected, labeled, and is now designated the lectotype.

***Eucalyptera gigantea* Smith, 1905, Canad. Ent. 37: 67.**
"HABITAT: Galveston, Texas, in May." "One male from Prof. F. H. Snow, in good condition, but becoming greasy."

Holotype.—In the Francis Huntington Snow Entomological Collection, University of Kansas. The specimen is labeled "Eucalyptera gigantea Smith ♂ type"; "Galveston, Texas, May, F. H. Snow"; "139"; "det. J. B. Smith." It is a male and it is very greasy.

***Orthodes [sic] gigas* Smith, 1906, Canad. Ent. 38(7): 230.**

"Habitat.—Southern Arizona, Poling; Huachuca, Arizona; Santa Catalina Mts., Pinal Co., Arizona, Aug. 26–30." "Three males and three females in good to fair condition, all from Dr. Barnes."

Syntypes examined: 6 (3 AMNH and 3 USNM)

- (1) "Orthodes gigas Smith ♂ type"; "So. Arizona, Poling"; "J. B. Smith Collection, Rutgers" [Very good, complete] [AMNH]
- (2) "Orthodes gigas Smith ♀ type"; "So. Arizona, Poling"; "J. B. Smith Collection, Rutgers" [Good condition, complete] [AMNH]
- (3) "Orthodes gigas Smith ♂ cotype"; "Huachuca Mts., Ariz."; "J. B. Smith Collection, Rutgers" [AMNH]
- (4) "Orthodes gigas Smith ♂ cotype"; "So. Arizona, Poling"; "Barnes collection" [USNM]
- (5) "Orthodes gigas Smith ♀ cotype"; "So. Arizona, Poling"; "Barnes collection" [USNM]
- (6) "Orthodes gigas Smith ♀ cotype"; "Santa Catalina Mts., Ariz., Pinal Co."; "Barnes Collection" [USNM]

Discussion.—The "♂ type" in the American Museum of Natural History has been selected, labeled, and is now designated the lectotype.

***Epizeuxis gopheri* Smith, 1899, Canad. Ent. 31: 94.**

"Habitat.—in Florida; discovered by the late Mr. H. G. Hubbard, in the burrows of the land tortoise (*Gopherus polyphemus*)." "One pair is before me; both specimens received from Mr. Hubbard."

Syntypes examined: 2 (USNM)

- (1) "Epizeuxis gopheri Smith ♂ type"; "Crescent C., Fla, 1895"; "larva in Gopher hole, March 25th, moth issued May 20th, 1895"; "Type No. 313, U.S.N.M."; "♂ genitalia #49, 17 Feb30, C.H."
- (2) "Epizeuxis gopheri Smith ♀ type"; "20 June 95, H. G. H., Gopher, Geom."; "Type No. 313, U.S.N.M."; "♀ genitalia #63, 19 Feb30, C.H."

Discussion.—The "♂ type" in the U.S. National Museum has been selected, labeled, and is now designated the lectotype.

***Eutolype grandis* Smith, 1898, Canad. Ent. 30: 321.**

"Habitat.—Kansas City, Mo., March 28; F. J. Hall.

Massachusetts." "The type is a fine male received from Mr. Hall, who has others, I believe." "The Massachusetts specimen is in the Strecker collection, and has been in his hands for several years." **Holotype.**—In the U.S. National Museum. The specimen is labeled "Eutolype grandis Smith ♂ type"; "♂";

"Coll. F. J. Hall, in Kansas City, Mo., Date 3–28–1897"; "Type No. 4985 USNM"; "36511." This is one of the very few instances in which Smith selected a specific specimen as type.

***Tetanolita greta* Smith, 1909, N.Y. Ent. Soc. Jour. 17: 68.**

"Habitat.—San Diego, California IX, 23, X, 6." "Two male specimens from Mr. George H. Field: one of them fully clothed . . ."

Syntypes examined: 1 (AMNH)

- (1) "Tetanolita greta Smith ♂ type"; "San Diego, Cal., 9.23.08, Geo. H. Field"; "J. B. Smith Collection, Rutgers" [Fair condition, left forewing with apex broken, complete]

Discussion.—One syntype has not been located. The only known syntype, the "♂ type," in the American Museum of Natural History has been selected, labeled, and is now designated the lectotype.

***Semiophora grisatra* Smith, 1907, Amer. Ent. Soc.**

Trans. 33: 125.

"Hab.—Lakehurst, N.J., September 27th." "One female in good condition." "The specimen was taken at sugar by Mr. J. A. Grossbeck."

Holotype.—In the American Museum of Natural History. The specimen is labeled "Semiophora grisatra Smith ♀ type"; "Lakehurst, N.J., IX–27"; "J. B. Smith Collection Rutgers." It is a female. The abdomen may be glued on.

***Mamestra griseata* Smith, 1900, U.S. Natl. Mus. Proc. 22(1203): 467.**

"Habitat.—Hall Valley, Colorado (Dr. Barnes)." "One male (the larger) and one female, in fair condition."

Hampson (1905, Catalogue of the Lepidoptera Phalaenae in the Collection of the British Museum, v. 5, p. 74) stated: "Pl. LXXXVI, fig. 7" and "This species is unknown to me; figured from a drawing from type in U.S. Nat. Mus." On the explanation of the illustration he stated: "♀, from Colo."

McDunnough (1943, Canad. Ent. 75: 44) stated: ". . . the male type in the Smith Collection will become the holotype of *griseata*, . . ." He also stated that Carl Heinrich informed him that *griseata* was equal to *Lacinipolia naevia*, but that the "♀ type" of *griseata* in the U.S. National Museum may represent another species.

Syntypes examined: 2 (AMNH and USNM)

- (1) "Mamestra griseata Smith, ♂ type"; "Hall Valley, Colo. 1"; "Collection J. B. Smith" [A ♂, apex right forewing missing, genitalia complete] [AMNH]
- (2) "Mamestra griseata Smith, ♀ type"; "Hall Valley, Colo."; "Type No. 5115 U.S.N.M.;"

"36511" [A ♀, abdomen missing] [USNM]

Discussion.—Hampson figured the "♀ type," but because it may be a different species and because it lacks an abdomen, the "♂ type" referred to by McDunnough as the "holotype" has been selected, labeled, and is now designated the lectotype. This action will insure that the "♂ type" will be considered the "type-specimen."

Mamestra gussata Smith, 1895, Ent. News 6: 337, pl. 15, fig. 9.

"Hab.—Calgary, in April." "Mr. Dod writes concerning this species that it is 'not rare at Sallows, end of April.' "Five specimens from [sic] the basis of the above description, . . ."

Smith (1903, N.Y. Ent. Soc. Jour. 11(1): pl. 1, fig. 6) illustrated the male valve.

Syntypes examined: 3 (2 USNM and 1 AMNH)

- (1) "Mamestra gussata Smith Type 1"; "Edge Calgary, 4/19/94 Sallows"; "USNM type #8" [♀, abdomen missing] [USNM]
- (2) "Mamestra gussata Smith, Type 3"; "Calgary, V. 7, Dod"; "USNM type #8" [♂] [USNM]
- (3) "Mamestra gussata Smith, Type 2"; "Calgary, V. 7, Dod"; "JBSCR" [♂, very good, complete] [AMNH]

Discussion.—The male in the American Museum of Natural History has been selected, labeled, and designated the lectotype. Two other syntypes have not been located.

Oxycnemis gustis Smith, 1907, Amer. Ent. Soc. Trans. 33: 138.

"Hab.—Southern Arizona, August 1st to 15th, Poling; one good male."

Holotype.—In the American Museum of Natural History. The specimen is labeled "Oxycnemis gustis Smith ♂ type"; "So. Arizona, Poling"; "Aug. 1-15"; "J. B. Smith Collection Rutgers." It is in excellent condition.

Mamestra hadeniformis Smith, 1894, Amer. Ent. Soc. Trans. 21: 55, pl. 5, fig. 4.

"Hab.—Colorado." "Two specimens ♂ and ♀, both collected by Mr. Bruce, the ♂ from Mr. Neumögen's collection, the ♀ with Mr. Bruce's No. 365." Hampson (1905, Catalogue of the Lepidoptera Phaenae in the Collection of the British Museum, v. 5, p. 30) stated: "Pl. LXXXVI, fig. 3" and "This species is unknown to me; figured from a drawing from type in U.S. Nat. Mus." On the explanation of plate he stated: "♀, from Colorado."

Syntypes examined: 2 (USNM)

- (1) "Mamestra hadeniformis Smith ♂ type"; "Colo., Bruce"; "B. Neumögen"; "Type No. 33797, U.S.N.M." [Fair condition, complete]
- (2) "Mamestra hadeniformis Smith ♀ type"; "Colo., Bruce"; "365"; "Type No. 4987, U.S.N.M."; "36511" [Fair condition]

Discussion.—The "♂ type" is the example illus-

trated by Smith. It has been selected, labeled, and is now designated the lectotype.

Anarta hampa Smith, 1908, N.Y. Acad. Sci. Ann. 18(2): 111.

"*Habitat:* White Mountains, New Hampshire." "Two males and one female, all in good condition. One of the males came originally from Mrs. Slosson; the others have no indication of their source, and none have a date label."

Syntypes examined: 3 (AMNH)

- (1) "Anarta hampa Smith ♂ type"; "N.H."; "Collection J. B. Smith" [Excellent condition, complete]
- (2) "Anarta hampa Smith ♀ type"; no data
- (3) "Anarta hampa Smith ♂ cotype"; "White Mts., Slosson"; "Collection J. B. Smith" [Good condition, complete]

Discussion.—The "♂ type" in the American Museum of Natural History has been selected, labeled, and is now designated the lectotype.

Fishia hanhami Smith, 1909, N.Y. Ent. Soc. Jour. 17: 59.

"*Habitat.*—Victoria, British Columbia, in September." "Two males and one female, from Dr. Barnes' collection, taken by M. A. W. Hanham, to whom I take pleasure in dedicating this species."

Syntypes examined: 3 (2 AMNH and 1 USNM)

- (1) "Fishia hanhami Smith ♂ type"; "Victoria, B.C."; "17.9.02"; "J. B. Smith Collection, Rutgers" [Very good condition, complete] [AMNH]
- (2) "Fishia hanhami Smith ♀ type"; "Victoria, B.C."; "29.9.01"; "J. B. Smith Collection, Rutgers" [Good condition, complete] [AMNH]
- (3) "Fishia hanhami Smith cotype"; "Victoria, B.C."; "23.9.02"; "Barnes Collection"; "37" [A ♂] [USNM]

Discussion.—The "♂ type" in the American Museum of Natural History has been selected, labeled, and is now designated the lectotype. The reference to Mr. Hanham in the original description "M. A. W. Hanham" is a typographical error for Mr. A. W. Hanham.

Philometra hanhami Smith, 1899, Canad. Ent. 31: 207.

"*Habitat.*—Winnipeg, Manitoba; Centre, N.Y., July 4, 1879." "Seven specimens are before me, 1 male and 6 females, all more or less imperfect, having met with hard usage in transit. All but one were collected by Mr. A. W. Hanham, who has others, and does not find the species uncommon. One female was taken by the late W. W. Hill, of Albany, and bears a label in Mr. Grote's handwriting: 'Probably new: too poor to serve as type.' The specimen reached me some years ago for description, but has not until the present time found fellows to which it could be referred."

Syntypes examined: 2 (USNM)

- (1) "Philometra hanhami Smith ♂ type"; "Winnipeg, Manitoba"; "Type No. 5109, U.S.N.M."; "36511" [Only fair condition,

right forewing and left hindwing with tears, complete]

- (2) "Philometra hanhami Smith ♀ type"; same data [Fair condition, apex of left forewing broken]

Discussion.—Five female syntypes have not been located. It is likely that Smith failed to label them because of the poor condition mentioned in the original description. It is even possible that they were not saved. There are two other specimens from Winnipeg in the U.S. National Museum and one in the American Museum of Natural History. The "♂ type" in the U.S. National Museum has been selected, labeled, and is now designated the lectotype.

Phaeocyma helata Smith, 1908, U.S. Natl. Mus. Proc. 35(1645): 252, pl. 32, fig. 10, pl. 35, fig. 1.

Habitat.—New Hampshire, probably Webster; Center, New York, in May; Brooklyn, New York; Amherst, Massachusetts." *Types.*—Rutgers College Collection; also cotype Doctor Ottolengui." "Three males and two females, all very much alike."

McDunnough (1943, *Canad. Ent.* 75: 153) stated: "Helata was described from material (3 ♂, 2 ♀) from New Hampshire, Massachusetts, and New York, and the holotype is a male from New Hampshire, in the Rutgers College Collection, with missing abdomen; it seems reasonable to suppose that the genitalic slide and Smith's drawing were based on this specimen."

Syntypes examined: 5 (3 AMNH and 2 USNM)

- (1) "Homoptera helata Smith ♂ type"; "N.H."; "J. B. Smith Collection, Rutgers"; "♂ Genitalia mounted on slide by Smith [F. H. Rindge label]" [Fair condition] [AMNH]
- (2) "Homoptera helata Smith ♀ type"; "Centre, N.Y., May 28, 77, W. W. Hill ♀"; "2668"; "Collection O. Meske"; "89" [USNM]
- (3) "Homoptera helata Smith cotype"; "New York, 363 D. B."; "♂ Genitalia mounted on slide no. 9087, FHR." [AMNH]
- (4) "Homoptera helata Smith cotype"; "Amherst, Mass."; "Through C. V. Riley"; "J. B. Smith Collection, Rutgers" [AMNH]
- (5) "Homoptera helata Smith cotype"; "Centre, N.Y., May 22, 77, W. W. Hill ♂"; "88"; "2667"; "Collection O. Meske" [A ♂] [USNM]

Discussion.—There is a slide in the American Museum of Natural History that obviously was used for the figure of the male genitalia (pl. 32, fig. 10) by Smith. Because the other two male syntypes have the genitalia intact or on an associated slide, the slide used by Smith must have been from the "♂ type." That specimen was referred to as the holotype by McDunnough. It is not the holotype, but to insure that it is considered the type-specimen, it has been selected, labeled, and is now designated the lectotype. It is in the American Museum of Natural History.

Carneades henrietta Smith, 1900, U.S. Natl. Mus. Proc. 22(1203): 452.

Habitat.—Alameda County, California, September (U.S.N.M.); Santa Cruz Mountains (Ehrhorn); Senator, Arizona, June 25 (Dr. Barnes)." "Five males and two females, no two alike." *Type.*—Cat. No. 4806, U.S.N.M."

Syntypes examined: 5 (2 USNM and 3 AMNH)

- (1) "Carneades henrietta Smith ♂ type"; "Alameda Co., Cal."; "Sept."; "Type No. 4806, U.S.N.M."; "108"; "♂ genitalia on slide #2303, Apr., 1966, E. L. Todd" [USNM]
- (2) "Carneades henrietta Smith ♀ type"; "Alameda Co., Cal."; "Oct."; "Type No. 4806, U.S.N.M."; "301"; "Through C. V. Riley" [USNM]
- (3) "Carneades henrietta Smith ♂ cotype"; "Santa Cruz Mts., Cal."; "J. B. Smith Collection, Rutgers" [AMNH]
- (4) "Carneades henrietta Smith ♂ cotype"; "Alameda Co., Cal."; "Sept."; "J. B. Smith Collection, Rutgers" [AMNH]
- (5) "Carneades henrietta Smith ♀ cotype"; same data [AMNH]

Discussion.—Two male syntypes, at least one from Senator, Ariz., June 25, have not been located. Because of the USNM type number published in the original description, I believe that a syntype bearing that number should be selected as lectotype. Accordingly, I have selected, labeled, and now designate the "♂ type" in the U.S. National Museum as the lectotype. This action was reviewed by D. F. Hardwick, who suggested the selection of the male syntype.

Acronycta hesperida Smith, 1897, *Ent. News* 8(6): 148 (in key).

Smith (1898, U.S. Natl. Mus. Proc. 21(1140): 49, pl. 10, fig. 9, pl. 19, fig. 15) gave a detailed description and stated: "*Habitat.*—California; Seattle, Washington; Tacoma, Washington, August 7; Nanaimo, Vancouver." "Two males and six females are before me, nearly all of them in fair condition. The Californian specimens are probably from the Sierra Nevada Mountains but I have no definite data concerning them. Types are in the U.S. National Museum, the American Museum of Natural History, and in the collections of Messrs. Graef, Dyar, and Doll."

Syntypes examined: 5 (4 USNM and 1 AMNH)

- (1) "Acronycta hesperida Smith ♂ type"; "Seattle, Wash."; "Type No. 3657, U.S.N.M."; "36511" [Right valve of male genitalia missing] [USNM]
- (2) "Acronycta hesperida Smith ♀ type"; "Vancouver, Dyar"; "7709"; "Type No. 3657, U.S.N.M." [Greasy, but complete] [USNM]
- (3) "Acronycta hesperida Smith ♂ cotype"; "Truckee, Cal."; "Col. Jacob Doll" [A ♂, abdomen of ♀ glued on, some dermestid damage to thorax] [USNM]
- (4) "Acronycta hesperida Smith ♀ cotype";

"Col. E. Graef"; "Type No. 33809, U.S.N.M." [USNM]

- (5) "Acronycta hesperida Smith cotype"; "Tacoma, Wash., Aug. 8 '97, G. D. Bradford"; "No. 17619 G. D. Bradford Collection"; "Type No., _____, A.M.N.H." [A ♀, good condition, complete] [AMNH]

Discussion.—Three female syntypes have not been located. The "♂ cotype" with the false abdomen from Truckee, Calif., is the specimen illustrated on plate 10, figure 9. It is stated there to be a female! It is also strange that Smith stated he did not know where the California examples were from and that no specific localities were known. There is a Smith slide in the U.S. National Museum of a right valve. It is simply labeled "Acronycta hesperida." I have no doubt that the illustration (pl. 19, fig. 15) was made from this slide, but the illustration is a reversal. The "♂ type" in the U.S. National Museum has been selected, labeled, and is now designated the lectotype.

Leucania heterodoxa Smith, 1894, Amer. Ent. Soc.

Trans. 21: 75, pl. 5, fig. 7.

Hab.—Sierra Nevada, California, Edwards; Laggan, British Columbia, 5000 feet, July 2, Bean, No. 504; St. Anthony Park, Minn., Lugger." "Four specimens, ♂ and ♀, all in good condition."

Smith (1902 U.S. Natl. Mus. Proc. 25(1283): 192, pl. 5, fig. 16) illustrated the valve of the male genitalia.

Syntypes examined: 3 (1 AMNH and 2 USNM)

- (1) "Leucania heterodoxa Smith ♂ type"; "Laggan Sta., N.W.T., Bean"; "504"; "J. B. Smith Collection, Rutgers" [Fair condition, antennae broken, verdigris well developed] [AMNH]
- (2) "Leucania heterodoxa Smith ♂ type"; "Sier. Nev., Cal."; "Type No. 223, U.S.N.M."; "36511" [Good condition] [USNM]
- (3) "Leucania heterodoxa Smith ♀ type"; "Sier. Nev., Cal."; "Type No. 223, U.S.N.M." [Good condition] [USNM]

Discussion.—A female syntype from "St. Anthony Park, Minn., Lugger" has not been located. It was probably marked "♀ type." The "♂ type" in the American Museum appears to be the specimen illustrated by Smith. It has been selected, labeled, and is now designated the lectotype.

Bomolocha heuloa Smith, 1905, Canad. Ent. 37: 69.

"HABITAT: Cochise County, Arizona, in July." "One male and two females in passable condition, from Mr. George Franck."

Syntypes examined: 2 (AMNH and USNM)

- (1) "Bomolocha heuloa Smith ♂ type"; "Cochise Co., Ariz., July"; "J. B. Smith Collection, Rutgers" [Holes in both left wings, abdomen slit along right side] [AMNH]
- (2) "Bomolocha heuloa Smith ♀ type"; "Cochise Co., Ariz., July" [Very good condition] [USNM]

Discussion.—One female syntype has not been located. There is a label on a specimen of *Simplicia*

albisinuata Smith reading "Bomolocha heuloa Smith ♀ cotype." The specimen is actually a male. Smith did describe both species at the same time and both were from Cochise County, Ariz., so it seems likely that Smith simply mislabeled the specimen. I have not seen a specimen of *heuloa* with an *albisinuata* label.

Because the syntype female in the U.S. National Museum is in much better condition than the one in the American Museum of Natural History, the "♀ type" has been selected, labeled, and is now designated the lectotype.

Carneades holoberba Smith, 1900, U.S. Natl. Mus.

Proc. 22(1203): 443.

Habitat.—Calgary, Canada, July 4 and 6 (Dod)."

"Two female specimens in good condition."

Smith (1900, Canad. Ent. 32(8): pl. 5, fig. 9) illustrated a specimen of this species and stated under the explanation of the plate: "All the photographs were made from actual type specimens, except 11 and 12."

Hampson (1903, Catalogue of the Lepidoptera Phalaenae in the Collection of the British Museum, v. 4, p. 252) stated: "Pl. LXIV, fig. 2" and "This species is unknown to me; figured from a photograph from type in U.S. Nat. Mus."

Syntypes examined: 2 (USNM and AMNH)

- (1) "Carneades holoberba Smith ♀ type"; "4.VII.96"; "20"; "Type No. 5745, U.S.N.M."; "36511"; "♀ genitalia on slide #2213, Apr., 1966, E. L. Todd" [Dermestid damage to left hindwing and base of abdomen] [USNM]
- (2) "Carneades holoberba Smith ♀ cotype"; "Calgary, Alberta, 6.VII.96, F. H. W. Dod"; "J. B. Smith Collection, Rutgers" [AMNH]

Discussion.—I am uncertain as to which of the two syntypes was the specimen illustrated by Smith. The "♀ type" was used for the photography by Hampson to prepare the illustration in his work. The dermestid damage to the abdomen of the "♀ type" also damaged the internal parts of the female genitalia, but the ovipositor lobes are complete. They furnish the best female genitalic characters in the genus *Euxoa*. The "♀ type" in the U.S. National Museum has been selected, labeled, and is now designated the lectotype.

Xylina holocinerea Smith, 1900, Amer. Ent. Soc. Trans.

27: 28, pl. 1, fig. 15, pl. 4, fig. 23.

Hab.—Winnipeg, Manitoba; N.W. British Columbia; Vancouver; Pullman, Washington; Sierra Nevada, California." "Six males and two females, differing from . . ."

Barnes and McDunnough (1913, Contrib. Nat. Hist. Lepidoptera N. Amer. 2(1): 26, pl. 12, fig. 6) illustrated a "♂ Cotype, Pullman, Wash."

Syntypes examined: 5 (USNM)

- (1) "Xylina holocinerea Smith ♂ type"; "Type No. 5377, U.S.N.M."; "36511" [Broken by verdigris, mesothorax and hindwings glued on, abdomen in capsule on pin]
- (2) "Xylina holocinerea Smith ♀ type"; "W.

- Man."; "Winnipeg, Manitoba"; "Type No. 5377, U.S.N.M."; "36511" [Good condition]
- (3) "Xylina holocinerea Smith δ type"; "Pullman, Wash."; "Photograph 12, No. 6" [Body broken by verdigris, wings fair, valves of genitalia missing]
 - (4) "Xylina holocinerea Smith δ cotype"; "N.W. Brit. Cola."; "48"; "Acc. No. 12578"; "Type No. 33876, U.S.N.M." [A δ , φ abdomen glued on!]
 - (5) "Xylina holocinerea Smith φ cotype"; "Corfield, Vancouver" [Very good condition, complete]

Discussion.—Three male syntypes have not been located. The Smith slide of male genitalia that served as the basis for the illustration (pl. 1, fig. 15) has not been found. Because of the missing syntypes and the condition of the male syntypes that have been located, it probably would not be possible to associate the slide with a specimen. The " δ type" illustrated by Barnes and McDunnough was called a " δ cotype" by those authors. It was originally marked " φ type," but has a male sex symbol marked over the female symbol. The " φ cotype" is the specimen illustrated by Smith on plate 4, figure 23. It is in the best condition of the syntypes examined. It has been selected, labeled, and is now designated the lectotype.

Conacontia huachuca Smith, 1903, Amer. Ent. Soc.

Trans. 29(3): 211.

"*Hab.*—Huachuca Mts., Arizona (Dr. Barnes)." "Five specimens, all males."

Hampson (1910, Catalogue of the Lepidoptera Phalaenae in the Collection of the British Museum, v. 10, p. 703) listed only a single specimen, a male cotype from the Huachuca Mountains, Ariz., and illustrated it on plate CLXX, figure 15.

Barnes and McDunnough (1913, Contrib. Nat. Hist. Lepidoptera N. Amer. 2(1): 44, pl. 21, fig. 3) illustrated a " δ Cotype, Huachuca Mts., Ariz."

Syntypes examined: 4 (1 AMNH and 3 USNM)

- (1) "Conacontia huachuca Smith δ type"; "Huachuca Mts., Ariz."; "Collection J. B. Smith" [Excellent condition] [AMNH]
- (2) "Conacontia huachuca Smith cotype"; "Huachuca Mts., Ariz."; "Photograph Pl. 21, No. 3" [A δ , excellent condition] [USNM]
- (3-4) "Conacontia huachuca Smith cotype"; "Huachuca Mts., Ariz." [2 $\delta\delta$, excellent condition] [USNM]

Discussion.—The fifth syntype is in the British Museum (Natural History) and was illustrated by Hampson, 1910. Because three of the five syntypes are in the U.S. National Museum, because all are in excellent condition, and because Barnes and McDunnough, 1913, illustrated one, that specimen has been selected, labeled, and is now designated the lectotype.

Feltia hudsonii Smith, 1903, Canad. Ent. 35(5): 130.

"*Habitat.*—Calgary, Alberta, head of Pine Creek, August, 7, 16, at light: Mr. F. H. Wooley Dod."

"One δ and four $\varphi\varphi$ are at hand, all in very nice condition."

Syntypes examined: 4 (3 AMNH and 1 USNM)

- (1) "Feltia hudsonii Smith δ type"; "Calgary, Alta., 7-VIII-01, (Light), F. H. Wooley Dod"; "Head of Pine Creek"; "43"; "J. B. Smith Collection, Rutgers" [Excellent condition] [AMNH]
- (2) "Feltia hudsonii Smith φ type"; "Calgary, Alta., 15-VIII-01, (Light), F. H. Wooley Dod"; "Head of Pine Creek"; "J. B. Smith Collection, Rutgers" [AMNH]
- (3) "Feltia hudsonii Smith cotype"; "Calgary, Alta., 16-VIII-01, (light), F. H. Wooley Dod"; "Head of Pine Creek"; "J. B. Smith Collection, Rutgers" [A φ , good condition] [AMNH]
- (4) "Feltia hudsonii Smith cotype"; "Calgary, Alta., 16-VIII-01, (light), F. H. Wooley Dod"; "Barnes collection" [A φ] [USNM]

Other syntypes: 1 (CNC)

- (1) A female "cotype" received from Dod collection, from Calgary, Alberta, dated "16-VIII-01"; "CNC # 889."

Discussion.—The " δ type" in the American Museum of Natural History has been selected, labeled, and is now designated the lectotype.

Acontia hulta Smith, 1903, Amer. Ent. Soc. Trans.

29(3): 213.

"*Hab.*—Kerrville, Texas, Huachuca Mts., Arizona, in April (Dr. Barnes); Southern Arizona (Mr. Poling)." "Three males and five females, all in good condition."

Hampson (1910, Catalogue of the Lepidoptera Phalaenae in the Collection of the British Museum, v. 10, p. 697) listed a female cotype from the Huachuca Mountains, Ariz. He figured the specimen on plate CLXX, figure 5.

Barnes and McDunnough (1913, Contrib. Nat. Hist. Lepidoptera N. Amer. 2(1): 44, pl. 21, fig. 14) illustrated a " φ Cotype, S. Ariz."

Syntypes examined: 6 (3 AMNH and 3 USNM)

- (1) "Acontia hulta Smith δ type"; "Huachuca Mts., Ariz."; "Collection J. B. Smith"; " δ Genitalia mounted on slide no. 10,336, FHR." [AMNH]
- (2) "Acontia hulta Smith φ type"; "Aug. 1-7"; "Huachuca Mts., Ariz."; "Collection J. B. Smith" [Good condition] [AMNH]
- (3) "Acontia hulta Smith cotype"; "Huachuca Mts., Ariz."; "Collection J. B. Smith" [A φ , discolored] [AMNH]
- (4) "Acontia hulta Smith δ cotype"; "Kerrville, Tex." [Rubbed] [USNM]
- (5) "Acontia hulta Smith cotype"; "So. Arizona, Poling"; "Photograph Pl. 21, No. 14" [A φ] [USNM]
- (6) "Acontia hulta Smith φ cotype"; "So. Arizona, Poling" [A φ] [USNM]

Discussion.—A female syntype is in the British Museum (Natural History) and was illustrated by Hamp-

son, 1910. The eighth syntype apparently is in the American Museum of Natural History, but as the word "cotype" was mostly cut from the label, possibly by Smith, it has not been included here. It is a male from Kerrville, Tex. It is also possible that the syntype labeled "♂ type" is not the same species as the others. Of the others, two female syntypes have been figured, one by Hampson and one by Barnes and McDunnough, 1913. The latter being a photograph is a better figure of the maculation, and it has been selected, labeled, and is now designated the lectotype.

Ufeus hulstii Smith, 1908, N.Y. Acad. Sci. Ann. 18(2): 99.

"*Habitat*: Black Hills, Wyo.; Stockton, Utah, July 22." "Two male examples. One of them is from the Hulst Collection, without abdomen, but else in good condition; the other is from Mr. Thomas Spalding and in good shape."

Syntypes examined: 2 (AMNH and USNM)

- (1) "Ufeus hulstii Smith ♂ type"; "Stockton, Ut., VII-22-3, Tom Spalding"; "J. B. Smith Collection, Rutgers" [Very good condition] [AMNH]
- (2) "Ufeus hulstii Smith ♂ cotype"; "Blk. H."; "Collection G. D. Hulst"; "Barnes Collection" [Abdomen missing] [USNM]

Discussion.—The "♂ type" in the American Museum of Natural History has been selected, labeled, and is now designated the lectotype.

Eucalyptra humeralis Smith, 1903, Amer. Ent. Soc.

Trans. 29(3): 220.

"*Hab.*—North Carolina, in August; Hastings, Florida, in April, June, September and October." "Thirty males and two females are before me, most of them in good condition. The Hastings specimens come, in part, from Dr. Barnes, in part from Mr. Kearfott, and in part from Mr. Franck."

Syntypes examined: 19 (13 AMNH and 6 USNM)

- (1) "Eucalyptra humeralis Smith ♂ type"; "Hastings, Fla."; "J. B. Smith Collection, Rutgers" [Fair condition] [AMNH]
- (2) "Eucalyptra humeralis Smith ♀ type"; "Hastings, Fla., Sept. 30"; "Collection of W. D. Kearfott"; "J. B. Smith Collection, Rutgers" [Poor condition, right hindwing badly torn] [AMNH]
- (3) "Eucalyptra humeralis Smith ♂ cotype"; "Hastings, Fla., April"; "Collection J. B. Smith" [A ♂, fair condition] [AMNH]
- (4-7) "Eucalyptra humeralis Smith cotype"; "Hastings, Fla., April"; "J. B. Smith Collection, Rutgers" [4 ♂♂, fair condition] [AMNH]
- (8-10) "Eucalyptra humeralis Smith cotype"; "Hastings, Fla."; "J. B. Smith Collection, Rutgers" [3 ♂♂, fair condition] [AMNH]
- (11-12) "Eucalyptra humeralis Smith cotype"; "Hastings, Fla., June 24-30"; "J. B. Smith Collection, Rutgers" [2 ♂♂, fair condition] [AMNH]

(13) "Eucalyptra humeralis Smith cotype"; "N. Carolina, August"; "J. B. Smith Collection, Rutgers" [A ♂, fair condition] [AMNH]

(14) "Eucalyptra humeralis Smith ♂ cotype"; "Hastings, Florida" [USNM]

(15-16) "Eucalyptra humeralis Smith cotype"; "Hastings, Florida" [2 ♂♂, 1 missing abdomen] [USNM]

(17-18) "Eucalyptra humeralis Smith cotype"; "Hastings, Florida"; "June 8-15"; "Barnes Collection" [2 ♂♂, 1 missing abdomen] [USNM]

(19) "Eucalyptra humeralis Smith cotype"; "Hastings, Florida"; "June 8-15"; "Barnes Collection"; "♂ genitalia on slide, AGR" [USNM]

Discussion.—Twelve male and one female syntypes have not been located. They probably were not labeled by Smith. The "♂ type" in the American Museum of Natural History has been selected, labeled, and is now designated the lectotype.

Erastria humerata Smith, 1908, N.Y. Acad. Sci. Ann. 18(2): 123.

"*Habitat*: New Brighton, Pa., July 11-31." "Eight examples, in good to fair condition, all males; from Mr. H. D. Merrick."

Syntypes examined: 8 (5 AMNH and 3 USNM)

- (1) "Erastria humerata Smith ♂ type"; "New Brighton, Pa., VII. 20.05, H. D. Merrick"; "J. B. Smith Collection, Rutgers" [Good condition, complete] [AMNH]
- (2-3) "Erastria humerata Smith cotype"; "New Brighton, Pa., VII. 11.05, H. D. Merrick"; "J. B. Smith Collection, Rutgers" [2 ♂♂, good condition] [AMNH]
- (4) "Erastria humerata Smith cotype"; "New Brighton, Pa., VII. 27.05, H. D. Merrick"; "J. B. Smith Collection, Rutgers" [A ♂, poor condition, abdomen broken] [AMNH]
- (5) "Erastria humerata Smith cotype"; "New Brighton, Pa., VII. 23.05, H. D. Merrick"; "J. B. Smith Collection, Rutgers" [A ♂, fair condition] [AMNH]
- (6) "Erastria humerata Smith cotype"; "New Brighton, Pa., VII. 23.06, H. D. Merrick" [A ♂] [USNM]
- (7-8) "Erastria humerata Smith cotype"; "New Brighton, Pa., VII. 31.05, H. D. Merrick" [2 ♂♂, 1 with abdomen missing] [USNM]

Discussion.—The "♂ type" in the American Museum of Natural History has been selected, labeled, and is now designated the lectotype.

Renia hutsoni Smith, 1906, Canad. Ent. 38(7): 237.

"*Habitat*.—Arizona, Minnehaha, Yavapai Co., Aug. 18 to 21. Mr. Hutson. Southern Arizona, Aug. 1-15. Poling." "Seven males and four females, all in at least fair condition, and all save one taken by Mr. Hutson."

Syntypes examined: 10 (8 AMNH and 2 USNM)

- (1) "Renia hutsoni Smith ♂ type"; "So. Ari-

- zona, Poling"; "J. B. Smith Collection, Rutgers" [Fairly good, complete] [AMNH]
- (2) "Renia hutsoni Smith ♀ type"; "Minnehaha"; "Yavapai Co., Ariz., VIII-20"; "J. B. Smith Collection, Rutgers" [Fair condition] [AMNH]
- (3) "Renia hutsoni Smith cotype"; same data [A ♂] [AMNH]
- (4-6) "Renia hutsoni Smith cotype"; same data except "VIII.26" [2 ♂♂, 1 ♀] [AMNH]
- (7) "Renia hutsoni Smith cotype"; same data except "VIII.19" [A ♀] [AMNH]
- (8) "Renia hutsoni Smith cotype"; same data except "VIII.16" [A ♀] [AMNH]
- (9) "Renia hutsoni Smith ♂ cotype"; same data except "VIII-18" [Rubbed] [USNM]
- (10) "Renia hutsoni Smith ♀ cotype"; same data except "VIII-19" [USNM]

Discussion.—Smith said he had seven males and four females, but the syntypes located are equally divided as to sex. One syntype, presumably a male, has not been located. The "♂ type" in the American Museum of Natural History has been selected, labeled, and is now designated the lectotype.

Stibadium hutsoni Smith, 1907, Amer. Ent. Soc. Trans. 33: 140.

"*Hab.*—Yuma County, Arizona, March 23rd; Walters Station, California, April 20th." "One male and one female in fair condition, both taken by Mr. Hutson in the same kind of desert area, though in different States."

Barnes and McDunnough (1916, Contrib. Nat. Hist. Lepidoptera N. Amer. 3(3): 168) commented: "We cannot separate this from *fuliginosa* Sm. after a comparison of the types in the Smith Collection."

Syntypes examined: 2 (AMNH)

- (1) "Stibadium hutsoni Smith ♂ type"; "Yuma Co., Ariz., 3/23"; "J. B. Smith Collection, Rutgers" [Good condition except dermestid damage at base of abdomen]
- (2) "Stibadium hutsoni Smith ♀ type"; "Walters St., Cal., IV.20"; "Collection J. B. Smith" [Good condition]

Discussion.—The "♂ type" in the American Museum of Natural History has been selected, labeled, and is now designated the lectotype.

Thalpochares hutsoni Smith, 1906, N.Y. Ent. Soc. Jour. 14: 28.

"*Habitat.*—Yuma Co., Ariz., in March, Mr. Hutson." "Six examples, evenly divided as to sex, and all in good condition."

Barnes and McDunnough (1913, Contrib. Nat. Hist. Lepidoptera N. Amer. 2(1): pl. 21, fig. 16) illustrated a "♀ Cotype, Colo. Desert, Yuma Co., Ariz."

Syntypes examined: 6 (4 AMNH and 2 USNM)

- (1) "Thalpochares hutsoni Smith ♂ type"; "Yuma Co., Ariz., March"; "Collection J. B. Smith"; "♂ Genitalia mounted on slide no. 10,330, FHR." [AMNH]
- (2) "Thalpochares hutsoni Smith ♀ type";

"Yuma Co., Ariz., March"; "Collection J. B. Smith" [Good condition] [AMNH]

- (3) "Thalpochares hutsoni Smith cotype"; same data [A ♂, good condition] [AMNH]
- (4) "Thalpochares hutsoni Smith cotype"; "Yuma Co., Ariz."; "Colorado Desert"; "Collection J. B. Smith" [A ♀, fair condition] [AMNH]
- (5) "Thalpochares hutsoni Smith cotype"; "Yuma Co., Ariz."; "Collection J. B. Smith"; "Colorado Desert"; "Photograph Pl. 21, No. 16" [A ♀] [USNM]
- (6) "Thalpochares hutsoni Smith cotype"; "Yuma Co., Ariz."; "Colorado Desert"; "Collection J. B. Smith"; "♂ genitalia slide #978, July 1959, E. L. Todd" [USNM]

Discussion.—The "♂ type" in the American Museum of Natural History has been selected, labeled, and is now designated the lectotype. I considered selecting a male syntype more important than the female illustrated by Barnes and McDunnough, 1913.

Behrensia hutsonii Smith, 1904, Psyche 11(2): 60.

"*Habitat:* Yuma County, Arizona, in March, Mr. Hutson." "One male and one female, both in good condition save that the antennae are gone."

Lectotype.—In the American Museum of Natural History. Designated by E. L. Todd (1972, Wash. Biol. Soc. Proc. 85(31): 386-387). The lectotype is labeled "Behrensia hutsonii Smith ♂ type"; "Yuma Co., Ariz."; "3/23"; "Collection J. B. Smith"; "Lectotype, Behrensia hutsonii Sm., By E. L. Todd."

Acronycta illita Smith, 1897, Ent. News 8(6): 152 (in key).

Smith (1898, U.S. Natl. Mus. Proc. 21(1140): 151, pl. 11, fig. 12, pl. 18, fig. 22, pl. 22, fig. 1) described the species in detail and stated: "*Habitat.*—Denver; Glenwood Springs, Colorado, July." "Four specimens, not in the best of condition, are at hand. Three of them are males, the fourth is a female, with one pair of wings only."

Syntypes examined: 3 (2 USNM and 1 AMNH)

- (1) "Acronycta illita Smith ♂ type"; "Colo., Bruce"; "Type No. 3669, U.S.N.M."; "♂ Genitalia Slide #840, 3 Dec., 1936, J.F.G.C." [Fair condition] [USNM]
- (2) "Acronycta illita Smith ♀ type"; "Glenwood Springs, Col., 7-1895, W. Barnes"; "12" [A ♂, all wings present!] [USNM]
- (3) "Acronycta illita Smith ♂ cotype"; "79, Denver, Colo., at Light"; "J. B. Smith Collection, Rutgers" [Fair condition] [AMNH]

Discussion.—One syntype is missing and it appears to be the female that Smith mentioned having only two wings. The syntype in the U.S. National Museum bearing the "♀ type" label is either a pseudotype or the third male syntype to which the wrong label was affixed. I believe the latter to be the case because the locality and date agree with information published by Smith in 1898. The "♂ type" was the specimen figured by Smith, so his information explaining the figure "from

the female type" is an error. The "♂ type" has been selected, labeled, and is now designated the lectotype.

Schinia illustra Smilh, 1906, N.Y. Ent. Soc. Jour. 14: 26.

"*Habitat*.—Glenwood Springs, Colo., July 20."

"One good female which has been in my hands for years, originally received from Dr. Barnes."

Holotype.—In the American Museum of Natural History. The specimen is labeled "Schinia illustra Smith ♀ type"; "Glenwood Spgs., Col."; "July 16-23"; "J. B. Smith Collection Rutgers."

Xylophasia illustra Smith, 1908, N.Y. Acad. Sci. Ann. 18(2): 114.

"*Habitat*: High River, Alberta." "A single good male, taken by Mr. Thomas Baird and sent me by Dr. Fletcher."

Holotype.—in the American Museum of Natural History. The specimen is labeled "Hadena illustra Smith ♂ type"; "Thos. Baird, High River, sent by him for name"; "J. B. Smith Collection Rutgers." The specimen is rather rubbed, especially the left forewing. It is a male as Smith indicated.

Mamestra imbuna Smith, 1905, N.Y. Ent. Soc. Jour. 13(4): 201.

"*Habitat*.—Lucerne County, Pennsylvania, In April; Hessville, Indiana, August 14." "Four males and 4 females in fair condition are at hand. Seven of the examples were received from Mr. George Franck and the females are uniformly darker and have the primaries broader than the male. The eighth specimen is a female, received from Mr. Kwiat, which . . ."

Syntypes examined: 5 (3 AMNH and 2 USNM)

- (1) "Mamestra imbuna Smith ♂ type"; "Lucerne Co., Pa., April"; "Collection J. B. Smith" [Good condition, complete] [AMNH]
- (2) "Mamestra imbuna Smith, ♀ type"; "Lucerne Co., Pa., April"; "Collection J. B. Smith" [Very good condition, complete] [AMNH]
- (3) "Mamestra imbuna Smith, cotype"; "Lucerne Co., Pa., April"; "Collection J. B. Smith" [A ♂, rather poor, complete] [AMNH]
- (4) "Mamestra imbuna Smith, ♂ cotype"; "Luzerne Co., Pa., April"; "Collection J. B. Smith"; "Photograph Pl. 4, No. 16"; "♂ genitalia on slide no. 144, FHB."; "Barnes Collection" [USNM]
- (5) "Mamestra imbuna Smith, ♀ cotype"; "Luzerne Co., Pa., April"; "Collection J. B. Smith"; "Barnes Collection" [USNM]

Discussion.—Three syntypes, one male and two females, have not been located. The "♂ type" in the American Museum of Natural History has been selected, labeled, and is presently designated as the lectotype.

Erastria immuna Smith, 1908, N.Y. Acad. Sci. Ann. 18(2): 124.

"*Habitat*: New Brighton, Pa., July 21, 28." "Two males, in fair condition; from Mr. H. D. Merrick." *Syntypes examined*: 2 (AMNH and USNM)

- (1) "Erastria immuna Smith ♂ type"; "New Brighton, Pa., VII. 28.06, H. D. Merrick"; "J. B. Smith Collection, Rutgers" [Right forewing nearly separated from thorax, right hindwing loose in box] [AMNH]
- (2) "Erastria immuna Smith cotype"; "New Brighton, Pa., VII. 21.06, H. D. Merrick" [A ♂, fair condition, complete] [USNM]

Discussion.—Because of the broken condition of the syntype in the American Museum of Natural History, the male syntype in the U.S. National Museum has been selected, labeled, and is now designated the lectotype.

Leucania imperfecta Smith, 1894, Amer. Ent. Soc. Trans. 21: 76, pl. 5, fig. 10.

"*Hab*.—Arizona, Neumoegen, one male."

Holotype.—In the U.S. National Museum. The specimen is labeled "Leucania imperfecta Smith ♂ type"; "Arizona"; "Col. B. Neumögen"; "Type No. 33848 USNM"; "♂ genitalia on slide 569 JGF."

Eueretagrotis inattenta Smith, 1903, N.Y. Ent. Soc. Jour. 11(1): 5.

"*Habitat*: Calgary, Alberta, Head of Pine Creek, July 10-14, F. H. Wolley Dod; Pullman, Washington, June 9, Exper. Station No. 320, C. V. Piper." "Four males in good condition are now at hand. Heretofore I have considered this as a form of the eastern *perattenta* and have so named specimens for Mr. Dod." "The receipt of an example from Professor Piper which is yet larger, darker and more even in color, induced me to reexamine the series [*perattenta*] and to dissect out the genitalia." Smith (1903, *Canad. Ent.* 35(5): p. 4, fig. 3) illustrated the valve of the male genitalia.

Syntypes examined: 4 (3 AMNH and 1 USNM)

- (1) "Eueretagrotis inattenta Smith ♂ type"; "Calgary, Alta., F. H. Wolley Dod"; "Head of Pine Creek"; "J. B. Smith Collection, Rutgers" [Both valves of male genitalia missing] [AMNH]
- (2) "Eueretagrotis inattenta Smith ♂ cotype"; "Pullman, Wash., 9 June 98"; "Wash. Exp. Sta. No. 320"; "Collection J. B. Smith" [AMNH]
- (3) "Eueretagrotis inattenta Smith ♂ cotype"; "Calgary, Alta., F. H. Wolley Dod"; "14.VII.99"; "Head of Pine Creek"; "J. B. Smith Collection, Rutgers" [Good condition, complete] [AMNH]
- (4) "Eueretagrotis inattenta Smith ♂ cotype"; "Calgary, Alta., F. H. Wolley Dod"; "Head of Pine Creek"; "11-VII-99"; "Barnes Collection" [USNM]

Discussion.—There is another specimen in the U.S. National Museum marked as a cotype by Smith. It is from "Turtle Mts., N. Dak., A. H. Verrill," a locality not mentioned by Smith in the original description. It must

be a pseudotype as the four syntypes mentioned by Smith are accounted for, but it does show that Smith sometimes labeled specimens as part of type-series after the original description. There is a genitalia slide of Smith with two valves in the American Museum of Natural History. It is probable that the valves are from the "♂ type," but that cannot be determined with certainty. Smith did not illustrate the genitalia with the original description, and the existence of the pseudotype demonstrates the possibility that other examples may have been available for the preparation of a slide. Because the "♂ type" lacks the valves, the "♂ cotype" from Calgary, Alberta, in the American Museum of Natural History has been selected, labeled, and is now designated the lectotype.

***Agrotis incallida* Smith, 1890, Amer. Ent. Soc. Trans. 17: 50.**

"*Habitat*.—Sierra Nevada, Cal." "The structural characters as far as they are ascertainable from the single female before me, are like the *messoria* group."

Smith (1890, U.S. Natl. Mus. Bul. 38, p. 173) stated: "There is but a single female from Mr. Edwards' collection known to me."

Smith (1893, U.S. Natl. Mus. Bul. 44, p. 98) stated: "The type is in the Edwards collection."

McDunnough (1940, Canad. Ent. 72: 196) stated: "... according to the unique female Type in the U.S.N.M.' . . ."

Holotype.—In the U.S. National Museum. The specimen is labeled "*Agrotis incallida* Smith Type"; "Sier. Nev., Cal."; "Type No. 4979 USNM"; "36511"; "Barnes Collection." It is a female. The type label is a piece of scrap paper but in Smith's handwriting. Smith's statement of 1893 as to the location of the type may reflect his intention at the time, but probably it is not a true statement. I do not know what arrangements Smith had with Edwards concerning the disposition of type-specimens. Certainly Smith did return some to the Edwards collection. It seems likely that in this instance the specimen was retained by Smith and in his possession until he gave it to the U.S. National Museum in 1900. The type was recorded in the type book on May 18, 1900, as a gift from Smith. The "Barnes Collection" label is obviously an error.

In the case of *incallida*, the situation is nearly identical to that of *Agrotis quinquelinea* Smith except that in *incallida* the sex of the specimen agrees with the published record and a previous worker had treated it as the holotype.

***Acronycta inclara* Smith, 1900, Canad. Ent. 32: 335.**

"Associated with it [*incretta* Morr.] are three examples of *inclara*—i.e., *hamamelis*, Auct., nec. Guenée." This discussion was of the type material of the genus *Acronycta* in the British Museum, and this name was proposed in the discussion of *A. incretta* Morr.

Hampson (1909, Catalogue of the Lepidoptera Phalaenae in the Collection of the British Museum, v. 8, p. 80, pl. CXXIV, fig. 28) treated and illustrated

the species. In his specific bibliography he stated: "*Acronycta hamamelis*, Smith & Dyar, Pr. U.S. Nat. Mus. xxi. p. 141, pl. ii. ff. 1, 2, 3 & pl. xii. f. 12 (nec. Guen.)."

Smith (1911, Ent. News 22: 315) stated: "*Acronycta inclara* Sm. This name was proposed by me in 1900, Can. Ent. XXXII, 335, for the species theretofore known as *hamamelis* in collections, and it has no type. There is a considerable range of variation in this aggregation, and it may be convenient to fix more definitely the one to be covered by this name. Hampson in his Catalogue Vol. VIII, p. 8 [sic], describes, and on Pl. CXXIV, 28, figures one of the common types, and this may be accepted as the type of the name."

Dod (1916, Canad. Ent. 48: 229) pointed out that Smith made the description and figure published by Hampson and made them the type of *inclara* Smith.

Discussion.—In the explanation of figure 28, plate CXXIV, Hampson stated "28. *Acronycta inclara*, ♂. Vol. VIII, p. 80, New York." On page 80, the only specimens in the British Museum cited from New York are two males and one female from Evans Center (Grote). Since I have not examined the specimens, I leave selection of one of the two males to the future workers of the genus.

***Agrotiphila incognita* Smith, 1893, Ent. News 4(3): 101, pl. 6, fig. 9.**

"*Hab*.—Laggan, British Col., above timber. Bean, Nos. 462, 492."

Smith (1894, Amer. Ent. Soc. Trans. 21: 52, pl. 2, fig. 9) again described this as new, using same plate. He changed the habitat statement as follows:

"*Hab*.—Laggan, British Columbia, above timber, 7000 feet, July 22, 1890; Aug. 10, 1891, Bean Nos. 462, 492." He added: "Two male specimens are before me . . ."

Lectotype.—In the U.S. National Museum. Selected by Todd (Oct. 4, 1968, Wash. Ent. Soc. Proc. 70(3): 272). The lectotype is labeled "*Agrotiphila incognita* Smith ♂ type"; "Laggan, B.C., above timber, 7000 ft., July 24, '89"; "492"; "Type No. 141 U.S.N.M."; "♂ genitalia on slide 363, FHB."; "Lectotype, *Agrotiphila incognita* Sm., By E. L. Todd."

***Scotogramma inconcinna* Smith, 1888, U.S. Natl. Mus. Proc. 10: 470.**

"*Habitat*.—Colorado." "The type from Mr. Hulst is a ♀ in fair condition."

Smith (1890, U.S. Natl. Mus. Proc. 12: 464) gave the same information.

Smith (1893, U.S. Natl. Mus. Bul. 44, p. 130) stated: "The type is in the National Museum."

Barnes and McDunnough (1916, Contrib. Nat. Hist. Lepidoptera N. Amer. 3(3): 161) stated: "According to the type in the National Museum . . ."

McDunnough (1930, Canad. Ent. 62: 183) stated: "... an examination of a slide of the genitalia of the type female in the U.S. National Museum, . . ."

Holotype.—In the U.S. National Museum. The

specimen is labeled "Scotogramma inconcinna Smith Type"; "Col."; "Type No. 162 USNM"; "Barnes collection"; "♀ genitalia on slide 26 Feb. 1930, CH." The Barnes collection label must be an error.

Hadena inconspicua Smith, 1893, U.S. Natl. Mus. Bul. 44, p. 142.

In the discussion of *H. paviae*, Behr made the following comments: "Types [*paviae*] are in Dr. Strecker's collection. In the British Museum are two specimens received from Mr. Hy. Edwards and labeled by him *Dryobota paviae* Behr. They look like an evenly colored *curvata* [A synonym of *paviae*], without contrasts of color. I believe the species to be a good one, and have named it *inconspicua* in the National Museum and in Mr. Edward's collection. The name has not been sanctioned by description; but it appears in my List of Lepidoptera, No. 2034." *Hadena inconspicua* Smith is a nomen nudum in the work "List of Lepidoptera of Boreal America" (1891, Amer. Ent. Soc. Phila., p. 42).

Syntypes examined: 2 (USNM and AMNH)

- (1) "Hadena inconspicua Smith Type"; "California"; "Collection J. B. Smith"; "Pl. XVII, f. 1"; "Type No. 174, U.S.N.M."; "♂ Genitalia Slide #51, Mch. 24, 1936, J.F.G.C." [USNM]
- (2) "Hadena inconspicua Smith Type"; "7175, Cal."; "No. 10465, Collection Hy. Edwards"; "AMNH Type ____" [A ♀, fair condition] [AMNH]

Discussion.—The two specimens in the British Museum (Natural History) mentioned by Smith undoubtedly should also be considered syntypes. The male syntype in the U.S. National Museum has been selected, labeled, and is now designated the lectotype. I have been unable to locate the plate referred to on the specimen label.

Acronycta inclara race inconstans Smith, 1911, Ent. News 22: 316.

"I have had from Mr. Heath [Cartwright, Manitoba], at various times, nearly a dozen examples of what seems to be a local race, at least, and which he is inclined to consider specifically distinct from *inclara*. It is a little smaller than the normal examples, lacks all reddish or mossy suffusions, and has the maculation a clearer, more contrasting white and black or blackish. The secondaries also are decidedly more blackish gray without the distinct yellowish tinge. I cannot, however, draw any line at present and call attention to the matter here for the benefit of those who may be so situated as to work on the relation of the two. As a race it may be called *inconstans*."

Syntypes examined: 1 (AMNH)

- (1) "Acronycta inconstans Smith Type"; "J. B. Smith Collection, Rutgers" [A ♂, excellent condition]

Discussion.—In the absence of other syntypes, this specimen in the American Museum of Natural

History has been selected, labeled, and is now designated the lectotype. When the specimen was received from Rutgers, there was a label on a separate pin by the specimen that read "*Inclara inconstans*, Cartwright, Man."

Copicucullia increta Smith, 1910, N.Y. Ent. Soc. Jour. 18: 97.

Habitat.—Claremont, California. "Two males, two females, in good condition from Mr. C. W. Metz, without dates of capture."

Syntypes examined: 4 (2 AMNH and 2 USNM)

- (1) "Copicucullia increta Smith ♂ type"; "Claremont, Cal., Metz."; "J. B. Smith Collection, Rutgers" [Good condition, complete] [AMNH]
- (2) "Copicucullia increta Smith ♀ type"; same data [Good condition] [AMNH]
- (3) "Copicucullia increta Smith cotype ♀"; "Claremont, Cal., Metz."; "Genitalia Slide: USNM 1883, 14 Apr. 1952, J. G. Franclemont" [USNM]
- (4) "Copicucullia increta Smith cotype ♂"; no other data [USNM]

Discussion.—The "♂ type" in the American Museum of Natural History has been selected, labeled, and is now designated the lectotype.

Carneades incubita Smith, 1900, U.S. Natl. Mus. Proc. 22(1203): 435.

Habitat.—Pullman, Washington, in August (Piper); Santa Cruz Mountains, California (Ehrhorn). "Five males and six females." "Type.—Cat. No. 4803, U.S.N.M."

Syntypes examined: 7 (4 USNM and 3 AMNH)

- (1) "Carneades incubita Smith ♂ type"; "Pullman, Wash., 4 Aug. 98"; "Type No. 4803, U.S.N.M."; "36311"; "♂ genitalia slide #2251, Apr. 24, 1966, E. L. Todd" [USNM]
- (2) "Carneades incubita Smith ♀ type"; "St. Cruz Mts., S. Cal."; "Type No. 4803, U.S.N.M."; "36311" [USNM]
- (3) "Carneades incubita Smith cotype"; "Pullman, Wash., 4 Aug. 98"; "Barnes Collection" [A ♂, antennae missing] [USNM]
- (4) "Carneades incubita Smith cotype"; "Pullman, Wash., 27 Aug. 98"; "Wash. Exp. St. No. 594"; "slide 92b"; "Barnes Collection" [A ♂] [USNM]
- (5) "Carneades incubita Smith cotype"; "Pullman, Wash., 6 Aug. 98"; "J. B. Smith Collection, Rutgers" [A ♂] [AMNH]
- (6-7) "Carneades incubita Smith cotype"; "Pullman, Wash., 21 Aug. 98"; "J. B. Smith Collection, Rutgers" [2 ♀♀] [AMNH]

Discussion.—One male and three female syntypes have not been located. The "♂ type" and the "♀ type" are the only specimens to bear the USNM type number mentioned in the original description. The "♂ type" has

been selected, labeled, and is now designated the lectotype.

Mamestra incurva Smith, 1888, U.S. Natl. Mus. Proc. 10: 466.

"*Habitat*.—Arizona." "A single ♂ specimen from Mr. Neumoegen." "The genitalia, though imperfect, are plainly like those of *laudabilis* and *4-lineata*, and the species is not illy associated with dark forms of the latter."

Smith (1892, U.S. Natl. Mus. Proc. 14: 258, pl. 11, fig. 54) stated: "HABITAT.—Colorado, Arizona, New Mexico." He again stated that the species strongly resembles *anguina*, but with the ordinary spots of a different form and much smaller. But he placed the species with *4-lineata* and relatives in spite of his statement: "The genital structure is that of the group in type, but the harpes have the angle of tip extended as in *leucogramma*, and the clasper is stout, thick, and irregularly twisted, forming two processes from one base." "With this species *leucogramma* would seem to seek its allies if the sexual characters can be used to associate forms." *Leucogramma* belongs to the group containing *anguina*! The illustration of the genitalia (pl. 11, fig. 54) is nothing like that of *leucogramma*. The illustration seems to agree more with *laudabilis*. Smith's figure of the latter species (fig. 57) is not correct.

Smith (1893, U.S. Natl. Mus. Bul. 44, p. 126) stated: "The type is in Mr. Neumoegen's collection."

Hampson (1905, Catalogue of the Lepidoptera Phaenae in the Collection of the British Museum, v. 5, p. 184) stated: "This species is unknown to me; figured from a drawing from type in Brooklyn Inst. Arts & Sci." On the explanation of plate LXXXVI, figure 14, he stated: "♂ New Mexico."

Holotype.—I believe that the type-specimen of this species is lost. There is a specimen in the U.S. National Museum bearing the type label and undoubtedly it is the specimen that was illustrated by Hampson. It is labeled "Mamestra incurva Smith Type"; "Las Vegas, N.M., H. Meeske, '89"; "Col. B. Neumögen"; "Type No. 33813, U.S.N.M."; "♂ genitalia on slide 143 FHB." The type label has 12 pinholes, indicating it has been removed many times. I do not believe the locality label is incorrect for this specimen, but that it was one of the specimens from New Mexico mentioned by Smith in his paper in 1892.

There is a slide prepared by Smith of "M. incurva," "40," and "239" [A Dyar number in red ink on an oval slide label.] There are three badly broken pieces of male valves on the slide. The critical apical parts are missing, and it probably will not be possible to recognize the species they represent. The genitalia of the specimen now bearing the type label are in excellent condition on the Benjamin slide, and they could hardly be those of the original type because Smith said that they were imperfect.

If the locality label is correct, the specimen was collected 2 years after the species was described! There is a specimen from the Neumoegen collection in the U.S. National Museum from Arizona, but it is a

female. I believe that the original type was a male from Arizona as stated by Smith. It seems likely that the holotype has been lost or destroyed and that the type label was either accidentally or intentionally transferred to the present specimen sometime prior to the date Hampson received the drawing he illustrated in 1905.

Assignment of the name to a species will of necessity depend on a careful study of the description and also of the figures in Smith's paper of 1892. There is the possibility that there was a mixup in the figure numbers on the plates involved. The name has been applied because of the illustration of Hampson, 1905, to a species of the genus *Lacinipolia* McDunnough. A neotype will need to be selected, but I leave that action to some future reviser of the genus to which the species is determined to belong.

Agroperina indela Smith, 1910, N.Y. Ent. Soc. Jour. 18(3): 144, pl. 5, fig. 13.

"*Habitat*.—Yellowstone Park, Wyoming, in July; Sheridan, Idaho; Glenwood Springs, Gunnison and Garfield Co., Colorado, July, August, September; Bozeman, Montana, in July; Pullman, Washington, June 24." "A series of 41 males and 16 females—most of them from Dr. Barnes's collection."

Syntypes examined: 9 (6 AMNH and 3 USNM)

- (1) "Agroperina indela Smith ♂ type"; "Yellowstone Park, Wyo."; "Collection J. B. Smith" [Fair condition] [AMNH]
- (2) "Agroperina indela Smith ♀ type"; "Yellowstone Park, Wyo."; "J. B. Smith Collection, Rutgers"; "Barnes Collection" [Fair condition] [AMNH]
- (3) "Agroperina indela Smith Paratype"; "Mont."; "Orthosia #1 Mont."; "J. B. Smith Collection, Rutgers" [A ♂, fair condition, abdomen missing] [AMNH]
- (4) "Agroperina indela Smith Paratype"; "Yellowstone Park, Wyo."; "J. B. Smith Collection, Rutgers" [A ♂] [AMNH]
- (5) "Agroperina indela Smith Paratype"; "Yellowstone Park, Wyo."; "July 8-15"; "J. B. Smith Collection, Rutgers" [A ♂] [AMNH]
- (6) "Agroperina indela Smith Paratype"; "Bozeman, Mont., July 21, 1908"; "J. B. Smith Collection, Rutgers" [A ♀] [AMNH]
- (7) "Agroperina indela Smith Paratype"; "Barnes Collection" [A ♂] [USNM]
- (8) "Agroperina indela Smith Paratype"; "Yellowstone Park, Wyo."; "Barnes Collection" [A ♀] [USNM]
- (9) "Agroperina indela Smith Paratype"; "Yellowstone Park, Wyo."; "Barnes Collection"; "♂ Genitalia Slide #376, 20 July 1936, J.F.G.C." [USNM]

Discussion.—Forty-eight syntypes have not been located. They were probably not labeled by Smith. There are many examples from Yellowstone Park, Wyo., Colorado (Bruce), Glenwood Springs, Colo., and Sheridan, Idaho, that probably were part of the original series. In the American Museum of Natural History there is a genitalia slide labeled "Agroperina indela, Montana, Typical

♂" that probably provided the basis for Smith's illustration (pl. 5, fig. 13) that he stated was from a Montana specimen. It must have come from the "Paratype" in the American Museum of Natural History from that locality, and it lacked the abdomen. That syntype has been selected, labeled, and is now designated the lectotype.

Euxoa indensa Smith, 1910, Amer. Ent. Soc. Trans. 36(3): 263.

"*Hab.*—Voiga, South Dakota (Truman); Cartwright, Manitoba, VIII, 19 (Heath); Brandon, Manitoba, VII, 14 (Hanham)." "One male and three females, all in good condition."

Syntypes examined: 3 (2 AMNH and 1 USNM)

- (1) "Euxoa indensa Smith ♂ type"; "B. Man., 14/8/97"; "J. B. Smith Collection, Rutgers" [Very good condition] [AMNH]
- (2) "Euxoa indensa Smith ♀ type"; "Voiga, S. Dak."; "J. B. Smith Collection, Rutgers" [Very good condition] [AMNH]
- (3) "Euxoa indensa Smith Paratype"; "Cartwright, Brit. Col."; "19.8.01" [A ♀] [USNM]

Discussion.—One female syntype has not been located. The date on the "♂ type" is a different month than cited by Smith, but the difference was probably a printing error. The "♀ type" in the American Museum of Natural History has been selected, labeled, and is now designated the lectotype. This selection is in line with my early practice of selecting lectotypes in this genus.

Heliolonche indiana Smith, 1908, in Kwiat, Ent. News 19: 423.

"*Habitat.*—Hessville, Indiana, May 30th, June 6, 13." "Ten males and nine females, all in good or fair condition from Mr. Alexander Kwiat, at whose request I have prepared the above description."

Lectotype.—In the American Museum of Natural History. Selected by Hardwick (1958, Canad. Ent. 90 (Sup. 6): 59). The lectotype is labeled "Heliolonche indiana Smith ♂ type"; "Hessville, Ind., V-30-08, A. Kwiat"; "J. B. Smith Collection, Rutgers"; "Lectotype, Desig. Hardwick 1958, p. 59."

Cucullia indicta Smith, 1904, Canad. Ent. 36(6): 154.

"*Habitat.*—Calgary, Alberta, South Fork of Sheep Creek, July 12, 29, F. H. Wolley Dod." "One male and one female, the latter much the larger." "I have also a ♀ from Colorado which may be this species, but is not good enough to make the matter certain."

Syntypes examined: 2 (1 CNC and 1 AMNH)

- (1) "Cucullia indicta Smith ♂ type"; "Calgary, Alta., 12-VII-96, F. H. Wolley Dod"; "South Fork of Sheep Creek" [CNC]
- (2) "Cucullia indicta Smith ♀ type"; "Calgary, Alta., 29-VII-96, F. H. Wolley, Dod"; "JBSCR" [AMNH]

Discussion.—Because of the sex and the excellent condition of the male, the syntype in the Canadian National Collection has been selected, labeled, and is now designated the lectotype.

Hyppa indistincta Smith, 1894, Amer. Ent. Soc. Trans. 21: 63, pl. 4, fig. 4.

"*Hab.*—Mount Hood, Graef." "The single male specimen has been considerable of a puzzle to me."

Holotype.—In the U.S. National Museum. The specimen is labeled "Hyppa indistincta Smith Type"; "Mt. H."; "Col. E. L. Graef"; "Type No. 33913 USNM"; "♀ genitalia on slide 2670 JFGC." It is a female, not a male as stated by Smith.

Taeniocampa indra Smith, 1906, Canad. Ent. 38(7): 233.

"*Habitat.*—Arizona: Minnehaha, Yavapai Co., Sept. 26 to Oct. 3; Huachuca Mts., Chiricahua Mts., Wilgus, Cochise Co.; Tonto Basin, Gila Co." "Eighteen males and twenty-four females, of which all save nine were sent in by Mr. Hutson, and the remainder came through Dr. Barnes."

Syntypes examined: 19 (10 AMNH and 9 USNM)

- (1) "Taeniocampa indra Smith ♂ type"; "Minnehaha"; "Yavapai Co., Ariz., IX-10"; "J. B. Smith Collection, Rutgers" [Good condition, complete] [AMNH]
- (2) "Taeniocampa indra Smith ♀ type"; "Minnehaha"; "Yavapai Co., Ariz., X-2"; "J. B. Smith Collection, Rutgers" [Good condition] [AMNH]
- (3-5) "Taeniocampa indra Smith ♂ cotype"; same data except "IX-25" on some [3 ♂♂] [AMNH]
- (6-10) "Taeniocampa indra Smith ♀ cotype"; same data [5 ♀♀] [AMNH]
- (11) "Taeniocampa indra Smith ♂ cotype"; "Wilgus, Cochise Co., Ariz." [USNM]
- (12) "Taeniocampa indra Smith ♂ cotype"; "Huachuca Mts., Ariz."; "Gen. #99, 3 Nov. 31, FHB." [USNM]
- (13) "Taeniocampa indra Smith ♂ cotype"; "Minnehaha"; "Yavapai Co., Ariz., VIII-19"; "Type No. 33823, U.S.N.M." [USNM]
- (14) "Taeniocampa indra Smith ♂ cotype"; "Minnehaha"; "Yavapai Co., Ariz., X-3"; "Barnes Collection" [USNM]
- (15-17) "Taeniocampa indra Smith ♀ cotype"; same data [3 ♀♀] [USNM]
- (18) "Taeniocampa indra Smith ♀ cotype"; "Minnehaha"; "Yavapai Co., Ariz., X-3" [USNM]
- (19) "Taeniocampa indra Smith ♀ cotype"; "Chiricahua Mts., Ariz."; "Barnes Collection" [USNM]

Discussion.—Smith apparently did not label 10 males and 13 females of the original series as cotypes. The "♂ type" in the American Museum of Natural History has been selected, labeled, and is now designated the lectotype.

Xylomiges indurata Smith, 1894, Amer. Ent. Soc. Trans. 21: 80, pl. 4, fig. 7.

"*Hab.*—Colorado, Bruce, Nos. 523, 528, 542." "1

have seen two males and two females, of which three from Mr. Bruce are before me."

Syntypes examined: (3 USNM and 1 AMNH)

- (1) "Xylomiges indurata Smith Type"; "Col."; "528"; "Type No. 262, U.S.N.M." [A ♂, fair condition, complete] [USNM]
- (2) "Xylomiges indurata Smith Type"; "Col., Bruce"; "523" [A ♀, fair condition] [USNM]
- (3) "Xylomiges indurata Smith Type"; "Col."; "542"; "J. B. Smith Collection, Rutgers" [A ♀, fair condition] [AMNH]
- (4) "Xylomiges indurata Smith Type"; "Col."; "Type No. 262, U.S.N.M."; "36511" [A ♂, good condition] [USNM]

Discussion.—It appears from the comment in the original description that only the three syntypes bearing the numbers listed by Smith can be determined as syntypes with certainty. He mentioned having seen another specimen and he also labeled another as "type," but it is not certain that it is the specimen mentioned. The male syntype in the U.S. National Museum bearing the number "528" has been selected, labeled, and is now designated the lectotype.

Agrotis inelegans Smith, 1890, Amer. Ent. Soc. Trans. 17: 43.

Habitat.—Sierra Nevada, Cal. (McGlashan). "A single female in good condition is before me."

Smith (1893, U.S. Natl. Mus. Bul. 44, p. 54) stated: "The type is in the collection of the late Mr. Henry Edwards."

Hampson (1903, Catalogue of the Lepidoptera Phalaenae in the Collection of the British Museum, v. 4, p. 641) stated: "This species is unknown to me; figured from a photograph from type in U.S. Nat. Mus."

Barnes and Benjamin (1924, Contrib. Nat. Hist. Lepidoptera N. Amer. 5(3): 116) stated: "A specimen compared with the type of *inelegans* (National Museum) . . ."

Holotype.—in the U.S. National Museum. The specimen is labeled "Agrotis inelegans Smith Type"; "Sier. Nev., Cal."; "Type No. 4971 USNM"; "36511." It is a female as Smith indicated in the original description. Probably the type-specimen remained in Smith's possession from the time of the original description until it was given to the U.S. National Museum in 1900.

Demas infante Smith, 1911, N.Y. Ent. Soc. Jour. 19(3): 133.

Habitat.—New Brighton, Penna., (V, 29 (Merrick); Pennsylvania, V, 2 (Kemp); Johnson City, Tenn., May." "Two males and one female that have come gradually into my collection during the few years recently past."

Syntypes examined: 3 (2 AMNH and 1 USNM)

- (1) "Demas infante Smith Type"; "Pa., 5-2"; "Collection S. T. Kemp"; "J. B. Smith Collection, Rutgers" [A ♂, excellent condition] [AMNH]
- (2) "Demas infante Smith Paratype"; "Johnson City, Tenn., May"; "J. B. Smith Collection,

Rutgers" [A ♀, very poor condition] [AMNH]
(3) "Demas infante Smith Paratype"; "New Brighton, Pa., April 29, 1900" [A ♂, good condition] [USNM]

Discussion.—The syntype labeled "Type" in the American Museum of Natural History has been selected, labeled, and is now designated the lectotype.

Agrotis infelix Smith, 1890, Amer. Ent. Soc. Trans. 17: 57.

Habitat.—California (Neumoegen). " . . . the two specimens before me showing strong differences, while evidently referring to the same species."

"Since the above was written I have seen a series in the United States National Museum which runs from the form above described to a uniform black the maculation scarcely identifiable. The series is bred, so there is no question as to the identity of the specimens."

Smith (1890, U.S. Natl. Mus. Bul. 38, p. 200, pl. 5, fig. 64) illustrated the kind of genitalia possessed by this species and other closely related species. He did not indicate the actual species illustrated. Smith (1893, U.S. Natl. Mus. Bul. 44, p. 106) treated this as a junior synonym of *A. perexcellens* Grote and stated: "Mr. Grote's type in the British Museum is exactly like my types in Mr. Neumoegen's collection and in the National Museum."

Syntypes examined: 2 (USNM)

- (1) "Agrotis infelix Smith Type"; "Cal."; "Col. B. Neumoegen"; "Type No. 33761, U.S.N.M."; "♂ genitalia slide 2315, May 3, 1966, E. L. Todd" [Right valve of genitalia missing]
- (2) "Agrotis infelix Smith Type"; "Cal."; "Type No. 132, U.S.N.M."; "36511" [A ♀, abdomen loose in box]

Discussion.—After Smith wrote the first description, he received other specimens from the U.S. National Museum. He mentioned the series in the original paper, but he did not include the specimens in the type-series, did not mark the examples as types, and did not mention the exact locality. He did identify one of the specimens and returned it to the U.S. National Museum with the female syntype. It is listed in the type book and labeled with type number 132 as is the syntype. The specimen is a male from Alameda County, Calif. It was from C. V. Riley's material. A genitalia slide was prepared by F. H. Benjamin, number 536, in December 1932, and the slide marked as Type. It is possible that the specimen should be considered a syntype, but I have not treated it as such as it was not so marked by Smith. The male syntype in the U.S. National Museum via the Neumoegen collection has been selected, labeled, and is now designated the lectotype. D. F. Hardwick concurs in the selection of this specimen.

Perigrapha inferior Smith, 1888, U.S. Natl. Mus. Proc. 10: 477.

Habitat.—California. "The unique ♂ type is with Mr. H. Edwards."
Smith (1890, U.S. Natl. Mus. Proc. 12: 492, pl. 22,

fig. 2) added nothing but figured the "harpe" and "clasper."

Smith (1893, U.S. Natl. Mus. Bul. 44, p. 207) stated: "The types are in the National Museum and in the Edwards collection."

Holotype.—In the American Museum of Natural History. The specimen is labeled "Perigrapha inferior Smith Type"; "Havilah, California"; "7380"; "No. 10,916 Collection Hy. Edwards"; "Type No. AMNH"; "Slide No. ST 2 ♂." The ninth segment, aedeagus, and left valve are mounted on the slide. There is a specimen in the U.S. National Museum labeled "Perigrapha inferior Smith Type"; "Havilah, California"; "7380"; "Collection J. B. Smith"; "Type No. 244 USNM"; "♂ genitalia on slide 260 FHB"; "This is a false TYPE. The type is in the Am. Mus. Nat. Hist. from the Hy. Edw. Coll. JGF 7 April 49." McDunnough (1949, pp. 19–23) discussed these two specimens and concluded that the specimen in the American Museum of Natural History was the specimen that should be considered the holotype. I agree with that view. It is unknown whether Smith actually had both specimens at the time of the original description but only mentioned one, or if he received the specimen now in the U.S. National Museum later, and subsequently marked it as type also.

Taeniocampa inflava Smith, 1910, *Canad. Ent.* 42(10): 321, pl. 8, fig. 5.

"First of all is a species that I call *inflava*." "I have only two males and one female from Pullman, Washington, and Vancouver, B.C., all taken in April. The males, which resemble each other closely, although they come from the two extreme localities, differ . . ."

Syntypes examined: 3 (2 AMNH and 1 USNM)

- (1) "Taeniocampa inflava Smith ♂ type"; "Was. T."; "Collection J. B. Smith"; "♂ Genitalia mounted on slide by Smith" [Good condition] [AMNH]
- (2) "Taeniocampa inflava Smith ♀ type"; "Pullman, Wash., 19 April 98"; "Wash. Exp. Sta. No. 69"; "Barnes Collection"; "♀ Genitalia Slide #2480, 28 June 1939, J.F.G.C." [USNM]
- (3) "Taeniocampa inflava Smith Paratype"; "Vancouver, Brit. Colo., Apr. 6, 1903"; "Collection J. B. Smith" [A ♂] [AMNH]

Discussion.—There is a genitalia slide in the American Museum of Natural History labeled "Taen. inflava, Type spec." It apparently was used by Smith for the illustration on plate 8, figure 5, and apparently is from the "♂ type." That specimen bears a locality label not cited by Smith, and it does not have a date label showing it was collected in April. Smith stated all were collected in that month. In spite of these discrepancies that I believe probably were due to Smith's errors, I have selected, labeled, and now designate the "♂ type" as the lectotype.

Carneades infusa Smith, 1902, *Canad. Ent.* 34(2): 30.

Habitat.—Cartwright, Manitoba; Black Hills, Wyoming. "Two indifferent males only are before me

at present; but I have had other and better specimens of both sexes." "It is type 4368 U.S.N.M."

Syntypes examined: 2 (USNM and AMNH)

- (1) "Carneades infusa Smith ♂ type"; "Cartwright, Manitoba"; "Type No. 4368, U.S.N.M."; "36311"; "♂ genitalia on slide 2307, Apr. 30, '66, E. L. Todd" [USNM]
- (2) "Carneades infusa Smith ♂ cotype"; "Blk. H."; "J. B. Smith Collection, Rutgers" [AMNH]

Discussion.—The genitalia of the "♂ type" have the apical half of the left valve missing, but the right valve is complete. In consultation with D. F. Hardwick, the "♂ type" in the U.S. National Museum has been selected, labeled, and is now designated the lectotype. In addition to the fact that it was marked "♂ type" by Smith, it is the only specimen bearing the USNM type number 4368 that was cited in the original description.

Scotogramma infusata Smith, 1899, *N.Y. Ent. Soc. Jour.* 7: 42.

Habitat: Colorado, Park County, 10,000 feet, July 9th; 13,000 feet, July 6th; Gibson Mountain, 12,500 feet. "One male and three females, all collected by Mr. Bruce." "Mr. Bruce's number is 646." Smith (1903, *N.Y. Ent. Soc. Jour.* 11(1): 18, pl. 1, fig. 19) illustrated the valve of the male genitalia, but he did not indicate whether the illustration was prepared from a syntype.

Syntypes examined: 4 (3 USNM and 1 AMNH)

- (1) "Scotogramma infusata Smith ♂ type"; "Colo., Bruce"; "646, Park Co., 10000 ft., July '94, D. Bruce"; "Type No. 4155, U.S.N.M."; "36511" [Left valve and half of right valve of genitalia missing] [USNM]
- (2) "Scotogramma infusata Smith ♀ type"; "81, Colo., Gibson Mt., 12500 ft., D. Bruce"; "Type No. 4155, U.S.N.M."; "Acc. No. 34638, U.S.N.M." [Excellent condition] [USNM]
- (3) "Scotogramma infusata Smith ♀ cotype"; "Colo., Bruce"; "Collection J. B. Smith" [Good condition] [AMNH]
- (4) "Scotogramma infusata Smith ♀ cotype"; "Colo., Bruce"; "Barnes Collection" [USNM]

Discussion.—Because of the damaged condition of the "♂ type" and in the absence of other male syntypes, the "♀ type" in the U.S. National Museum has been selected, labeled, and is now designated the lectotype.

Agrotis ingeniculata Smith, 1890, *U.S. Natl. Mus. Bul.* 38, p. 216.

HABITAT.—Colorado. "A single perfect male from Mr. Angelman's collection, collected by Mr. Bruce."

Smith (1893, *U.S. Natl. Mus. Bul.* 44, p. 67) stated: "The type is with Mr. J. Angelman, Newark. An exact duplicate is in the Coll. U.S. National Museum."

Holotype.—In the U.S. National Museum. The specimen is labeled "Agrotis ingeniculata Smith Type";

"Colo. Bruce"; "Col."; "Angelman"; "Barnes collection." The type label is black bordered. It is a male and badly damaged by dermestids; the abdomen, part of the thorax, and the left hindwing are missing. The exact duplicate mentioned by Smith in 1893 is labeled "Agrotis ingeniculata Smith Type"; "Colo. Bruce"; "USNM Acc. No. 23933"; "Type No. 82 USNM." The type label is red bordered. The specimen is a female, and it is to be considered a pseudotype.

Charadra ingenua Smith, 1906, N.Y. Ent. Soc. Jour. 14: 10.

Habitat.—Glenwood Springs and Durango, Colorado; end of June and beginning of July: Dr. Barnes." "Two males and two females in good or fair condition."

Syntypes examined: 4 (2 AMNH and 2 USNM)

- (1) "Charadra ingenua Smith δ type"; "Durango, Colo."; "June 8-15"; "J. B. Smith Collection, Rutgers" [Excellent condition] [AMNH]
- (2) "Charadra ingenua Smith φ type"; "Glenwood Springs, Colo."; "June 24-30" [USNM]
- (3) "Charadra ingenua Smith cotype"; "Glenwood Springs, Colo."; "July 1-7" [A δ] [USNM]
- (4) "Charadra ingenua Smith cotype"; "Glenwood Springs, Colo."; "July 1-7"; "J. B. Smith Collection, Rutgers" [A φ , faded] [AMNH]

Discussion.—The " δ type" in the American Museum of Natural History has been selected, labeled, and is now designated the lectotype.

Mamestra ingravis Smith, 1895, Ent. News 6: 337, pl. 15, fig. 10.

Hab.—Calgary, in May. "I have a male and female specimen from Mr. Dod, who writes concerning this species, 'not rare last May.'" "One specimen is marked 'light.'" "I have also a specimen which I believe to be this species taken by Mr. Bruce in Garfield County, Colorado, at an elevation of 6000 feet and bearing his number, 739. It is, however, a somewhat faded and partially imperfect specimen, and I would scarcely like to say positively that it is the same species. Of the specimens sent by Mr. Dod, the female, the largest of all the specimens, is very bright and contrastingly colored. The male, which was sent in a paper unmet, is defective, and the coloring is not nearly so contrasting."

Smith (1898, Ent. News 9: 250) commented that several additional specimens had been seen since the original description.

Smith (1903, N.Y. Ent. Soc. Jour. 11(1): pl. 1, fig. 5) illustrated the valve of the male genitalia, but the specimen used is unknown.

Syntypes examined: 1 (USNM)

- (1) "Mamestra ingravis Smith Type"; "Calgary/94, light"; "26"; "Type No. 9, U.S.N.M." [A φ , excellent condition]

Discussion.—The male mentioned by Smith has not been located. The Smith syntypes from the Dod collection, now in the Canadian National Collection, have been checked for me by J. Donald Lafontaine and the missing syntype was not located in that material. It is likely that Smith did not label the specimen as a syntype because of its condition. The "Type" in the U.S. National Museum in the absence of other syntypes has been selected, labeled, and is now designated the lectotype.

Taeniocampa inherita Smith, 1910, Canad. Ent. 42(10): 321, pl. 8, fig. 6.

Inherita might be mistaken at first for a well-marked, robust *malora*. "I have seven males and one female from Corvallis, Oregon, March 31st to April 29th; Olympia, Washington, April 7th; Vancouver, B.C., April 6th."

Syntypes examined: 5 (3 AMNH and 2 USNM)

- (1) "Taeniocampa inherita Smith δ type"; "Vanc., 157, Livingston, 3-20-96"; "J. B. Smith Collection, Rutgers" [Fair condition except right forewing damaged, complete] [AMNH]
- (2) "Taeniocampa inherita Smith φ type"; "Brit. Cola."; "J. B. Smith Collection, Rutgers" [AMNH]
- (3) "Taeniocampa inherita Smith Paratype"; "Corvallis, Or., 1900"; "Mar. 31" [A δ , complete] [AMNH]
- (4) "Taeniocampa inherita Smith Paratype"; "Corvallis, Or., 1900"; "Mar. 31"; "At light"; "41"; "Barnes Collection" [A δ , abdomen missing] [USNM]
- (5) "Taeniocampa inherita Smith Paratype"; "Vancouver, B.C., 6.IV.03" [A δ , abdomen missing] [USNM]

Discussion.—Three male syntypes have not been located, but there are four examples in the American Museum of Natural History that undoubtedly include the missing specimens. They are not labeled "Paratype," but the locality data and dates are as given in the original description. Two are from Corvallis, Oreg., collected on April 29; both are males and one is lacking the abdomen. The other two specimens are from Olympia, Wash., one dated "4-7-93," both males, both complete. In the American Museum of Natural History there are two Smith slides of genitalia, both whole mounts in good condition. The locality and date information on the slides agrees with the two paratype males in the U.S. National Museum, and as they are the only known specimens lacking abdomens that do agree, it is assumed that they are the specimens from which the slides were prepared. The genitalia figured on plate 8, figure 6, are judged to be those from the slide of the Corvallis, Oreg., paratype. That syntype in the U.S. National Museum has been selected, labeled, and is now designated the lectotype.

Xylina innominata Smith, 1893, U.S. Natl. Mus. Bul. 44, p. 227.

"signosa F Grt." "1874. Grt., 6th Rept. Peab. Ac.

Sci., 33 *Lithophane*." "HABITAT.—Northeastern United States; Canada; Colorado." "The new name is intended to apply to that species identified and labeled as *signosa* by Mr. Grote and has no type specimen."

Holotype.—In the British Museum (Natural History).

Franclemont (1942, p. 63) has shown that Smith was wrong in his statement that the species has no type-specimen. The type is the specimen from Quebec (F. X. Bélanger) that was named *Lithophane signosa* (Walker) by Grote and described by him in 1874 in the paper cited by Smith.

Luperina innota Smith, 1908, N.Y. Acad. Sci. Ann. 18(2): 113.

"*Habitat*.—Yellowstone Park, Wyoming, July 8; Arangle, Idaho." "One male and one female in good condition, and two poor males, which are probably the same; from Colorado localities." "A male example is in the British Museum, and I owe acknowledgments to Sir George Hampson for comparing it with the Museum material."

Barnes and McDunnough (1912, Contrib. Nat. Hist. Lepidoptera N. Amer. 1(4): 49) illustrated the "Type ♀" of *Protagrotis obscura* Barnes and McDunnough and stated: "The species is remarkably similar in maculation to *Luperina innota* Sm. of which we possess the ♂ type; . . ."

Syntypes examined: 2 (USNM and AMNH)

- (1) "*Luperina innota* Smith ♂ type"; "Yellowstone Park, Wyo."; "July 8–15"; "♂ Gen. #1086, 20 Feb. 1935, FHB." [USNM]
- (2) "*Luperina innota* Smith ♀ type"; "Arangle, Idaho"; "Collection J. B. Smith" [Rubbed and faded] [AMNH]

Discussion.—The "♂ type" in the U.S. National Museum has been selected, labeled, and is now designated the lectotype.

Noctua inopinatus Smith, 1898, N.Y. Ent. Soc. Jour. 6: 103, pl. 7, fig. 1.

"Among the material received from Mr. A. W. Hanham, Winnipeg, Manitoba, are specimens that I have named *haruspica* with some doubt. Other examples from Corfield, Vancouver and 264 (Gillette) Colorado, have increased that doubt . . ."

Smith (1900, Canad. Ent. 32(8): pl. 5, fig. 8) illustrated a specimen from Brandon, Manitoba, and stated in a note below the explanation of the plate: "All the photographs were made from actual type specimens, except 11 and 12."

Syntypes examined: 2 (USNM)

- (1) "*Noctua inopinatus* Smith ♂ type"; "Winnipeg, Man."; "Type No. 4975, U.S.N.M."; "36511" [Both valves missing]
- (2) "*Noctua inopinatus* Smith ♀ type"; "Corfield, Vancouver"; "Type No. 4975, U.S.N.M."; "36511"

Discussion.—The exact number of specimens before Smith is unknown, but at least four must have been present. There are two examples in the American Museum of Natural History, one from Calgary and the

other from Winnipeg, that were determined as this species by Smith but not marked as types. The example collected by Gillette, number 264, from Colorado has not been located. The illustration of the valve of the male genitalia may have been prepared from a slide of the "♂ type," but this is not possible to ascertain. Smith illustrated a valve (1890, U.S. Natl. Mus. Bul. 38, fig. 42), which he cited as "42. Harpe and clasper of *N. clandestina*, *sierrae* and *haruspica*." In the description of *inopinatus*, Smith stated: "In all other respects, including sexual structure of the male, the agreement is with *haruspica* and the species may be deemed an impressionist one, rather than one based on sharply definable characters. Plate VII, fig. 1, illustrates the sexual pieces, the figure given in my Revision having been made, as now appears, from an imperfect specimen." Smith's "Revision" was the "1890, Bull. 38 U.S.N.M." referred to here. Smith in the introduction of the 1898 paper said it was "Bull. 44," but that is another Smith error, as that paper was published in 1893 and was his "Catalogue of Noctuidae."

There is a Smith genitalia slide in the U.S. National Museum labeled "*haruspica*" that consists of the broken apical halves of the two valves. It is not known whether this slide was utilized in the preparation of figure 42 of 1890, but, if so, Smith must have made a composite drawing as the claspers are missing on the slide. It is also not known whether the valves on that slide are those of the "♂ type" of *inopinatus*. In consideration of these unresolved problems concerning males of *inopinatus*, the "♀ type" in the U.S. National Museum has been selected, labeled, and is now designated the lectotype.

Agrotis insertans Smith, 1890, Amer. Ent. Soc. Trans. 17: 45.

"*Habitat*.—British Columbia, Spencer's Bridge." "The type is a unique male from Mr. Neumögen; . . ."

Smith (1890, U.S. Natl. Mus. Bul. 38, p. 140, pl. 5, fig. 66) illustrated the kind of genitalia he said was found in this species and in *pitychrous* and *velleripennis*.

Smith (1893, U.S. Natl. Mus. Bul. 44, p. 89) concurred with the original description.

Holotype.—In the U.S. National Museum. The specimen is labeled "*Agrotis insertans* Smith Type"; "Brit. Columbia, Spencer Bridge, 25/8"; "Col. B. Neumögen"; "Type No. 33771 USNM." It is peculiar that Smith commented about the kind of genitalia possessed in 1890 because the genitalia are intact and within the abdomen of the holotype. Furthermore, the species does not belong to the same subfamily as the other two species cited!

Orrhodia insinuata Smith, 1905, N.Y. Ent. Soc. Jour. 13(4): 205.

"*Habitat*.—Pullman, Washington, May 8 and 9." "Four examples, all females, in tolerably good condition."

Syntypes examined: 3 (2 AMNH and 1 USNM)

- (1) "*Orrhodia insinuata* Smith ♀ type"; "Pull-

- man, Wash., 9 May 03"; "J. B. Smith Collection, Rutgers" [AMNH]
 (2) "Orrhodia insinuata Smith ♀ cotype"; same data [AMNH]
 (3) "Orrhodia insinuata Smith ♀ cotype"; "Pullman, Wash., 9 May 03" [USNM]

Discussion.—The "♀ type" in the American Museum of Natural History has been selected, labeled, and is now designated the lectotype.

Plusia insolita Smith, 1895, Ent. News 6: 340, pl. 15, fig. 17.

"EXPLANATION OF PLATE XV. 17.—*Plusia insolita*, n. sp." On p. 332 Smith stated: "... the specimens were all collected by Mr. F. H. Wolley Dod, Calgary, Canada."

Smith (1895, Ent. News 7(1): 30) referred to plate 15, figure 17, of the previous issue, provided a written description, and stated: "*Hab.*—Calgary, in 1894." "Two specimens, both females, were sent me by Mr. Dod, who says 'they are rare.'"

Todd (1972, Wash. Biol. Soc. Proc. 65(31): 387) indicated that the specimen illustrated in the original paper was the holotype, but he also designated it as the lectotype to assure that it be considered the type-specimen.

Holotype.—In the U.S. National Museum, labeled "Plusia insolita Smith Type 1"; "Calgary, 1894, (A. H.); "Type No. 15 U.S.N.M." It is a male!

Minofala instans Smith, 1905, Canad. Ent. 37: 65.

"Habitat: Galveston, Texas, in May." One male in good condition, from Prof. F. H. Snow, is the generic and specific type."

Holotype.—In the Francis Huntington Snow Entomological Collection, University of Kansas. The specimen is labeled "Minofala instans Smith ♂ type"; "Galveston, Tex., May. F. H. Snow"; "det. H. C. Fall"; "166." It has the abdomen glued on.

Fishia instruta Smith, 1910, Amer. Ent. Soc. Trans. 36(3): 264.

"*Hab.*—De Clair, Manitoba, Sept. 3–15." "Four males, in good condition, collector unknown."

Syntypes examined: 4 (3 AMNH and 1 USNM)

- (1) "Fishia instruta Smith ♂ type"; "De Clair, Man., IX.3"; "J. B. Smith Collection, Rutgers" [Fair condition, nick in left forewing, complete] [AMNH]
- (2) "Fishia instruta Smith cotype"; same data except "IX.15" [A ♂] [AMNH]
- (3) "Fishia instruta Smith cotype"; same data except "IX.18" [A ♂] [AMNH]
- (4) "Fishia instruta Smith cotype"; "De Clair, Man., IX-6"; "Barnes collection" [A ♂] [USNM]

Discussion.—The "♂ type" in the American Museum of Natural History has been selected, labeled, and is now designated the lectotype.

Phaeocyma insuda Smith, 1908, U.S. Natl. Mus. Proc. 35(1645): 234, pl. 32, fig. 1, pl. 34, fig. 4.

"*Habitat.*—Southern Arizona: Yavapai County, August 11–25 (Hutson); Santa Rita Mountains, 5–8000 feet, July (Snow); Chiricahua Mountains (Barnes); Prescott, July, August (Buchholz)."

"*Type.*—Rutgers College Collection: cotypes U.S.N.M., Type No. 12023, also collection O. Buchholz." "A fine series of 25 males and 23 females collected by Mr. Otto Buchholz gives the greatest range of size and also the longest period of flight, from early July to the middle of August."

Syntypes examined: 23 (9 AMNH and 14 USNM)

- (1) "Homoptera insuda Smith ♂ type"; "Minnehaha"; "Yavapai Co., Ariz., VIII.25"; "J. B. Smith Collection, Rutgers" [Very good condition, complete] [AMNH]
- (2) "Homoptera insuda Smith ♀ type"; same data except "VIII.11" [Very good condition, complete] [AMNH]
- (3) "So. Arizona, Poling"; "July 15–30"; "J. B. Smith Collection, Rutgers"; "♂ Genitalia mounted on slide by Smith" [AMNH]
- (4) "Chiricahua Mts, Ariz."; "Barnes Collection"; "Box 256"; "poling ♀" [Abdomen and legs of right side missing] [USNM]
- (5) "Homoptera insuda Smith ♂ cotype"; "Arizona"; "Collection Brkiyn. Mus."; "♂ Genitalia Slide #2084, 6 Oct. 1938, J.F.G.C." [USNM]
- (6) "Homoptera insuda Smith cotype ♀"; same data except "♀ Genitalia Slide #2085, 6 Oct. 1938, J.F.G.C." [USNM]
- (7) "Homoptera insuda Smith ♂ cotype"; "Arizona"; "Acc. No. 12578"; "Type No. 34094, U.S.N.M." [USNM]
- (8) "Homoptera insuda Smith cotype ♂"; "Yavapai Co., Ariz., O. Buchholz"; "July 16–23"; "Barnes collection" [USNM]
- (9) "Homoptera insuda Smith ♂ cotype"; "So. Arizona"; "Barnes collection" [USNM]
- (10) "Homoptera insuda Smith ♂ cotype"; "Chiricahua Mts, Ariz."; "Barnes collection" [USNM]
- (11) "Homoptera insuda Smith ♂ cotype"; "Prescott, Arizona"; "a VIII.2" [USNM]
- (12) "Homoptera insuda Smith cotype ♀"; "a VII-30"; "Collection Brkiyn. Mus." [USNM]
- (13–14) "Homoptera insuda Smith ♀ cotype"; "So. Arizona, Poling"; "Barnes collection" [2 ♀♀] [USNM]
- (15) "Homoptera insuda Smith ♀ cotype"; "Arizona"; "Col. B. Neumogen"; "Collection Brkiyn. Mus." [A ♂!] [USNM]
- (16) "Homoptera insuda Smith cotype ♀"; "Yavapai Co., Ariz., O. Buchholz"; "July 16–23"; "Barnes collection" [USNM]

- (17) "Homoptera insuda Smith ♀ cotype";
"Prescott, Arizona"; "Ariz. VII-16"
[USNM]
(18-20) "Homoptera insuda Smith cotype ♂";
"Yavapai Co., Ariz."; "July 14-27";
"J. B. Smith Collection, Rutgers"
[3 ♂♂] [AMNH]
(21-23) "Homoptera insuda Smith cotype ♀";
same data [3 ♀♀] [AMNH]

Discussion.—Smith did not indicate how many examples he studied except to mention a series of 25 males and 23 females collected by Otto Buchholz. Judging from the label data of the specimens marked as syntypes, he had many other specimens and also apparently only labeled a small number of the Buchholz specimens as types. Two of the specimens listed here were not marked as types by Smith. Normally they would not have been included as syntypes, but it is fairly certain that they are the specimens from which the genitalia used for the illustrations on plate 32, figure 1, and plate 34, figure 4, were prepared. The male is in the American Museum of Natural History, the female in the U.S. National Museum.

Four slides are in the American Museum of Natural History. The slides are of male genitalia, female genitalia, male legs, and female legs. At my request, Eric Quinter at the American Museum of Natural History, has prepared and examined the male genitalia of the "♂ type" and has found the preparation to agree with the illustration of the male genitalia presented by Smith. Accordingly, the "♂ type" has been selected, labeled, and is now designated the lectotype.

Epizeuxis intensalis Smith, 1908, N.Y. Acad. Sci. Ann. 18(2): 126.

Habitat: Yavapai County, Arizona, July and August (Hutson); Southern Arizona, June 15-30 (Poling); Southern California (Poling). "Six males and one female, in fair or good condition."

Syntypes examined: 7 (6 AMNH and 1 USNM)

- (1) "Epizeuxis intensalis Smith ♂ type"; "Minnehaha"; "Yavapai Co., Ariz., VIII-19"; "J. B. Smith Collection, Rutgers" [Very good condition, complete] [AMNH]
- (2) "Epizeuxis intensalis Smith ♀ type"; "Yavapai Co., Ariz., VII-20"; "J. B. Smith Collection, Rutgers" [Left forewing split near apex] [AMNH]
- (3) "Epizeuxis intensalis Smith ♂ cotype"; "So. Arizona, Poling"; "J. B. Smith Collection, Rutgers" [Good condition, complete] [AMNH]
- (4) "Epizeuxis intensalis Smith ♂ cotype"; "Minnehaha"; "Yavapai Co., Ariz., VIII-14"; "J. B. Smith Collection, Rutgers" [Good condition, complete] [AMNH]
- (5) "Epizeuxis intensalis Smith ♂ cotype"; "Yavapai Co., Ariz., VIII-2"; "J. B. Smith Collection, Rutgers" [Good condition, complete] [AMNH]
- (6) "Epizeuxis intensalis Smith ♂ cotype"; "Cala., Poling"; "J. B. Smith Collection,

Rutgers" [Very good, very large, possibly not same as others] [AMNH]

- (7) "Epizeuxis intensalis Smith ♂ cotype"; "Minnehaha"; "Yavapai Co., Ariz., VIII-20" [USNM]

Discussion.—The "♂ type" in the American Museum of Natural History has been selected, labeled, and is now designated the lectotype.

Mamestra intentata Smith, 1898, Ent. News 9: 245.

Hab.—Estes Park, Colorado, about 8000 feet, No. 2693, Coll. Agl. College. "One male and two females are at hand; the male largest, . . ."

Smith (1903, N.Y. Ent. Soc. Jour. 11(1): pl. 1, fig. 10) illustrated the valve of the male genitalia.

Hampson (1905, Catalogue of the Lepidoptera Phalaenae in the Collection of the British Museum, v. 5, p. 184) stated: "Pl. LXXXVI, fig. 15" and "This species is unknown to me; figured from a drawing from type in U.S. Nat. Mus." On the explanation of plate LXXXVI he stated: "♂, from Colorado."

Syntypes examined: 3 (2 USNM and 1 AMNH)

- (1) "Mamestra intentata Smith ♂ type"; "Colo. 2693"; "36511"; "Type No. 4156, U.S.N.M." [Good condition except abdomen missing] [USNM]
- (2) "Mamestra intentata Smith ♀ type"; "Colo., 2693"; "Type No. 4156, U.S.N.M."; "U.S.N.M. Acc. No. 34628" [Fair condition, complete] [USNM]
- (3) "Mamestra intentata Smith ♀ cotype"; "Colo. 2693"; "Collection J. B. Smith" [Fair condition, but somewhat faded] [AMNH]

Discussion.—Since Smith did illustrate the valve of the male genitalia, the male syntype in the U.S. National Museum has been selected, labeled, and is now designated the lectotype. The Smith slide has been located in the American Museum of Natural History and has been forwarded and deposited in the U.S. National Museum by F. H. Rindge.

Hydroecia interoceanica Smith, 1899, Amer. Ent. Soc. Trans. 26: 17, pl. 1, fig. 4.

Hab.—Winnipeg, Manitoba. "Three specimens, representing both sexes, are at hand from Mr. A. W. Hanham. I have no details regarding the capture of the species and no date."

Syntypes examined: 3 (2 USNM and 1 AMNH)

- (1) "Hydroecia interoceanica Smith ♂ type"; "Winnipeg, Man."; "Type No. 4139, U.S.N.M."; "Acc. No. 24638" [Valves of genitalia missing] [USNM]
- (2) "Hydroecia interoceanica Smith ♀ type"; "Winnipeg, Man."; "Type No. 4139, U.S.N.M."; "Acc. 36511" [USNM]
- (3) "Hydroecia interoceanica Smith ♂ cotype"; "Winnipeg, Man."; "J. B. Smith Collection, Rutgers" [AMNH]

Discussion.—There is a Smith slide of two valves in the U.S. National Museum labeled "Hydroecia interoceanica, Winnipeg, Man." I believe it to be the slide from which the illustration (pl. 1, fig. 4) was prepared

and that it represents the valves of the "♂ type." Accordingly, the "♂ type" in the U.S. National Museum has been selected, labeled, and is now designated the lectotype.

Conochares interruptus Smith, 1905, N.Y. Ent. Soc. Jour. 13(4): 208.

"*Habitat*.—Southern Arizona, April 10, Poling; Phoenix, Arizona, March 12, Griffith; Yuma County, Arizona, in March, Hutson; Argus Mts., California, April, Koebele; Walters Station, California, April, Hutson." "One male and seven females, most of them in rather good condition."

Hampson (1910, Catalogue of the Lepidoptera Phaenae in the Collection of the British Museum, v. 10, p. 686, pl. CLXIX, fig. 16) listed and illustrated a female cotype from the Argus Mountains, Calif. Barnes and McDunnough (1913, Contrib. Nat. Hist. Lepidoptera N. Amer. 2(1): 44, pl. 21, fig. 12) illustrated a female cotype from Walters Station, Calif. They stated: "Probably the same species as *arizonae* Hy. Edw."

Syntypes examined: 7 (6 AMNH and 1 USNM)

- (1) "Conochares interruptus Smith ♂ type"; "So. Arizona, Poling"; "Apr. 1-15"; "Collection J. B. Smith"; "♂ Genitalia mounted on slide 10,308, FHR." [AMNH]
- (2) "Conochares interruptus Smith ♀ type"; "Yuma Co., Ariz., Ill"; "Collection J. B. Smith" [AMNH]
- (3) "Conochares interruptus Smith cotype"; "Walters Sta., Calif., April"; "Collection J. B. Smith"; "Photograph Pl. 21, No. 12" [A ♀] [USNM]
- (4) "Conochares interruptus Smith cotype"; "Argus Mts., April 91, K."; "Collection J. B. Smith" [A ♀, poor condition, greasy] [AMNH]
- (5) "Conochares interruptus Smith cotype"; "Argus Mts., April 91, K."; "Through C. V. Riley"; "J. B. Smith Collection, Rutgers" [A ♀, poor condition] [AMNH]
- (6) "Conochares interruptus Smith cotype"; "Walters Sta., Calif., April"; "Collection J. B. Smith" [A ♀, poor condition, right forewing missing] [AMNH]
- (7) "Conochares interruptus Smith cotype"; "Phoenix, Ariz., Ill. 12" [A ♀, poor condition, greasy] [AMNH]

Discussion.—One female syntype from the Argus Mountains, Calif., is in the British Museum (Natural History) and was illustrated by Hampson. The syntype in the U.S. National Museum was illustrated by Barnes and McDunnough, 1913. The four marked "cotype" in the American Museum of Natural History are not conspecific in my opinion. I believe them to be examples of *Tornacontia altera* Smith. The "♂ type" in the American Museum of Natural History has been selected, labeled, and is now designated the lectotype.

Schinia intrabilis Smith, 1893, Insect Life 5(5): 331, fig. 46: 3.

"*Habitat*.—Death Valley, April, 1891." "Three specimens, representing both sexes, are before me."

Syntypes examined: 3 (2 USNM and 1 AMNH)

- (1) "Schinia intrabilis Smith Type"; "Death Valley, April 91, K."; "Through C. V. Riley"; "Type No. 294, U.S.N.M." [A ♂, abdomen a little greasy, complete] [USNM]
- (2) "Schinia intrabilis Smith Type"; same data [A ♀, abdomen greasy] [USNM]
- (3) "Schinia intrabilis Smith Type"; "Death Valley, April 91, K."; "Through C. V. Riley"; "J. B. Smith Collection, Rutgers" [A ♂, fair condition, abdomen greasy, right valve missing] [AMNH]

Discussion.—The male syntype in the U.S. National Museum has been selected, labeled, and is now designated the lectotype.

Oncocnemis intruda Smith, 1910, N.Y. Ent. Soc. Jour. 18: 90.

"*Habitat*.—Deming, New Mexico, Sept. 1-7." "One male, one female from Dr. Barnes, the female in good, the male in only fair condition. The female is also the best marked of the two and has served as the base for the description."

Syntypes examined: 2 (USNM and AMNH)

- (1) "Oncocnemis intruda Smith ♀ type"; "Deming, N.M."; "Sept. 1-7" [Very good condition] [USNM]
- (2) "Oncocnemis intruda Smith ♂ type"; "Deming, N. Mex."; "Sept. 1-7"; "J. B. Smith Collection, Rutgers" [Fair condition, left forewing apex broken and rubbed] [AMNH]

Discussion.—Because Smith stated that the female syntype served as the basis of the original description, that syntype in the U.S. National Museum has been selected, labeled, and is now designated the lectotype.

Agrotis tessellata form intrusa Smith, 1890, Amer. Ent. Soc. Trans. 17: 54.

"Several specimens were in the lot received from Mr. Edwards, all from the Sierra Nevada, Cal., and these I separated at first under the term *intrusa*." "Specimens of this form labeled *intrusa* m. are in the coll. Rutgers College, coll. Hy. Edwards and coll. U.S. National Museum." Smith (1890, U.S. Natl. Mus. Bul. 38, p. 192) repeated the statements of the original description, but placed the species and form in *Carneades*. Smith (1900, U.S. Natl. Mus. Proc. 22(1203): 446) treated the name as a new species, *Carneades intrusa*, and stated: "In Bulletin No. 38, U.S. National Museum, p. 192, I called attention to what I then considered a variety of *tessellata*, and for which the term *intrusa* was suggested. With the material now at hand I have no hesitation in declaring the form entitled to specific rank." "*Habitat*.—Sierra Nevada, California." "Specimens labeled as above are in the U.S. National Museum collection, the Edwards collection, and the Rutgers College collection." "*Type*.—Cat. No. 4717, U.S.N.M."

Hampson (1903, Catalogue of the Lepidoptera Phaenae in the Collection of the British Museum, v. 4, p. 286) stated: "Pl. LXV, fig. 29" and "This species is unknown to me; figured from a photograph from type in U.S. Nat. Mus." "♂, from California."

Syntypes examined: 2 (USNM)

- (1) "Agrotis tessellata form intrusa Smith Type"; "Sier. Nev. Cal."; "USNM type #4717" [A ♂, but labeled *Agrotis intrusa*]
- (2) "Agrotis tessellata form intrusa Smith ♀ Cotype"; "Sier. Nev., Cal."; "Barnes collection" [abdomen missing]

Discussion.—The specimen listed by Rindge (1955, p. 117) from Sierra Nevada, Calif., is labeled "Carneades intrusa female type." It is a pseudotype because of the use of the combination *Carneades intrusa*; therefore, the specimen was not labeled and dates from a later Smith paper. It was not before Smith at the time of the original description. The male syntype in the U.S. National Museum labeled "Type" was the specimen illustrated by Hampson (1903, 4: 286, pl. LXV, fig. 29) and is the only male. That specimen has been selected, labeled, and is now designated the lectotype.

Mamestra invalida Smith, 1891, U.S. Natl. Mus. Proc. 14(851): 225.

"HABITAT.—Sierra Nevada, California; Placer County, California." "In the Museum collection are three female specimens marked June, Placer County, California (through C. V. R.), red number 308."

"From Mr. Edwards I have specimens marked Sierra Nevada, also all females."

Smith (1893, U.S. Natl. Mus. Bul. 44, p. 119) stated: "Types are in the National Museum and in the Edwards collection."

Syntypes examined: 8 (5 AMNH and 3 USNM)

- (1) "Mamestra invalida Smith Type"; "Sier. Nev., Cal."; "Collection J. B. Smith" [A ♀] [AMNH]
- (2) "Mamestra invalida Smith Type"; "Sier. Nev., Cal."; "No. 10212, Coll. Hy. Edwards" [A ♀] [AMNH]
- (3) "Mamestra invalida Smith Type"; "Sier. Nev., Cal."; "No. 10213, Coll. Hy. Edwards" [A ♀, right forewing broken off] [AMNH]
- (4) "Mamestra invalida Smith Type"; "Sier. Nev., Cal."; "6/1"; "No. 10215, Coll. Hy. Edwards" [A ♀] [AMNH]
- (5) "Mamestra invalida Smith Type"; "Sier. Nev., Cal."; "No. 10214, Coll. Hy. Edwards" [A ♀] [AMNH]
- (6) "Mamestra invalida Smith"; "Placer Co., Cal."; "June"; "308"; "Through C. V. Riley"; "Type No. 151, U.S.N.M." "♀ genitalia on slide #2687, Nov. 24, 1939, J.F.G.C." [USNM]
- (7) "Mamestra invalida Smith"; "Placer Co., Cal."; "308"; "June"; "Through C. V. Riley" [A ♀] [USNM]
- (8) "Nevada Co., Cal."; "308"; "Through C. V. Riley" [A ♀, abdomen glued to thorax] [USNM]

Discussion.—At least two of the three examples in the U.S. National Museum are certainly syntypes although not so labeled by Smith. The third is from a locality not mentioned by Smith, but it does bear the red number "308." It is possible that Smith did not look carefully at the locality label on all three specimens. In 1893 Smith stated that types were in the U.S. National Museum. It is not known whether he was referring to the specimens from Placer County, Calif., or whether he intended to send the one he kept. He did not mention the Rutgers College collection among the institutions where types were deposited. Also the fact that one of the Placer County, Calif., examples bears a USNM type number "151" indicates he sent it as a type even though he did not so label it. The "Type" in the American Museum of Natural History via the Rutgers collection, labeled "Collection J. B. Smith," has been selected, labeled, and is now designated the lectotype. It is in the best condition of the listed syntypes.

Yrias irentis Smith, 1905, Canad. Ent. 37: 259.

"Habitat: Cochise County, Arizona, in July." "Three males and one female, all papered specimens, from Mr. George Franck."

Syntypes examined: 3 (2 AMNH and 1 USNM)

- (1) "Yrias irentis Smith ♂ type"; "Cochise Co., Ariz., July"; "J. B. Smith Collection, Rutgers" [Fair condition, flattened, antennae missing, otherwise complete] [AMNH]
- (2) "Yrias irentis Smith ♀ type"; same data [Fair condition, apex right forewing and antennae broken] [AMNH]
- (3) "Yrias irentis Smith ♀ cotype"; "Cochise Co., Ariz., July"; "Type No. 34148, U.S.N.M."; "Acc. No. 10142"; "Collection Brklyn. Mus." [A ♂, abdomen missing!] [USNM]

Discussion.—One male syntype has not been located. The cotype in the U.S. National Museum was incorrectly sexed on the label by Smith if his statement in the original description as to the number of each sex is correct. The "♂ type" in the American Museum of Natural History has been selected, labeled, and is now designated the lectotype.

Oncocnemis iricolor Smith, 1888, Insect Life 1: 19.

"Habitat, Colorado." "Three specimens, all females, 1 Coll. U.S. National Museum (Smith Coll.), the others Coll. F. Tepper."

Smith (1889, Amer. Ent. Soc. Trans. 16: 334) stated: "Hab.—Colorado." "Three specimens from Mr. Tepper; one ♀ in coll. U.S. N. Mus. (Smith Coll.)."

Smith (1893, U.S. Natl. Mus. Bul. 44, p. 159) stated: "Types are in the National Museum and in the Tepper collection."

Syntypes examined: 3 (2 MSU and 1 USNM)

- (1) "Oncocnemis iricolor Smith"; "Type" [rhomboidal label]; "Col." [A ♀, wings in good condition, base of abdomen with dermestid damage] [MSU]
- (2) "oncocnemis iricolor Smith"; same data [A ♀, darker than first female] [MSU]

- (3) "Col."; "Collection J. B. Smith" [A ♀, fair condition] [USNM]

Discussion.—In the U.S. National Museum there is a male that is labeled "Oncocnemis iricolor Smith Type"; "46, Foothills near Denver, Colo., Bruce"; "Type No. 186, U.S.N.M." Even though Smith labeled the specimen as "Type" and sent it to the U.S. National Museum as a type, it is a pseudotype. There were just three specimens, all females, in the original series. The syntype in the U.S. National Museum has been selected, labeled, and is now designated the lectotype.

Orthodes irrorata Smith, 1888, U.S. Natl. Mus. Proc. 10: 478.

Habitat.—Washington Territory. "The types are with Messrs. Graef (1 ♀) and Hy. Edwards (1 ♂)." Smith (1890, U.S. Natl. Mus. Proc. 12: 473) cited the locality: "HABITAT.—State of Washington." He also figured the harpe and clasper of the male on plate 22, figure 10.

Smith (1893, U.S. Natl. Mus. Bul. 44, p. 200) stated: "Types are in the Graef, Neumoegen, and Edwards collections."

Syntypes examined: 2 (USNM and AMNH)

- (1) "Orthodes irrorata Smith X. Type"; "W. T."; "Graef"; "Collection J. B. Smith"; "Type No. 230, U.S.N.M." [A ♀, wings in good condition, abdomen may be glued to thorax] [USNM]
- (2) "Orthodes irrorata Smith X. Type"; "Washington, Terr."; "No. 10898, Hy. Edw."; "Type No. _____, A.M.N.H." [A ♂, very poor condition, antennae missing, wings rubbed, abdomen hollowed by dermestids, genitalia mostly destroyed] [AMNH]

Discussion.—According to the original description, only two specimens were studied, a male and a female, from Washington territory. In 1893 Smith indicated others by listing types as being in three collections. The additional collection was the Neumoegen collection. There are two specimens from that collection in the U.S. National Museum. One bears a USNM type number 33806, but the specimen was not marked a type by Smith. The other was marked "X. Type" by Smith, but it was not from a locality mentioned by him. The two from the Neumoegen collection are not true types. The syntype in the U.S. National Museum has the wings in better condition than the other syntype and it has been selected, labeled, and is now designated the lectotype.

Xylina itata Smith, 1899, N.Y. Ent. Soc. Jour. 7(4): 231.

Habitat: Colorado, Bruce, Glenwood Springs, Col., April 30th. Dr. Barnes. "There are two female specimens before me at this time; but I have seen others that are like them. The specimen from Mr. Bruce has the markings indicated just sufficiently to enable them to be described. The specimen from Dr. Barnes, though good, is a little flown and only the dusky median shade seems apparent." Smith (1900, Amer. Ent. Soc. Trans. 27: 25, pl. 3, figs. 14 and 15) illustrated both specimens and stated: "14. *itata* Smith—type." and "15. *itata*—suf-

fused." It seems, therefore, that Smith intended the specimen collected by Bruce to be the "type," the specimen from which the description was written.

Hampson (1906, Catalogue of the Lepidoptera Phaenae in the Collection of the British Museum, v. 6, p. 278) stated: "Pl. CIII, fig. 8" and "This species is unknown to me, figured from a drawing from type in Coll. J. B. Smith." "♀, from Colorado." **Syntypes examined:** 2 (USNM and AMNH)

- (1) "Xylina itata Smith ♀ type"; "Colo. Bruce"; "Type No. 5110, U.S.N.M."; "36511"; "♀ Genitalia Slide #1563, 7 Feb. 1938, J.F.G.C." [USNM]
- (2) "Xylina itata Smith ♀ cotype"; "Glenwood Springs, Col., 4.30.1894, W. Barnes"; "J. B. Smith Collection, Rutgers" [AMNH]

Discussion.—The "♀ type" in the U.S. National Museum has been selected, labeled, and is now designated the lectotype.

Carneades itodes Smith, 1900, U.S. Natl. Mus. Proc. 22(1203): 438.

Habitat.—Arizona (Dr. Barnes). "Three good females, with no more definite locality than above given."

Hampson (1903, Catalogue of the Lepidoptera Phaenae in the Collection of the British Museum, v. 4, p. 260) stated: "Pl. LXIV, fig. 15" and "This species is unknown to me; figured from a photograph from type in U.S. Nat. Mus."

Syntypes examined: 2 (USNM)

- (1) "Carneades itodes Smith ♀ type"; "Ariz."; "Type No. 5146, U.S.N.M."; "36511"; "♀ genitalia on slide 2240, Apr. 20, 1966, E. L. Todd"
- (2) "Carneades itodes Smith ♀ cotype"; "Arizona"; "Barnes collection" [Abdomen damaged]

Discussion.—The "♀ type" in the U.S. National Museum has been selected, labeled, and is now designated the lectotype. One syntype has not been located.

Hadena jocasta Smith, 1900, U.S. Natl. Mus. Proc. 22(1203): 470.

Habitat.—South Dakota; Chicago, Illinois. "One female in fair condition is before me from South Dakota, and Dr. Strecker has a duplicate from Chicago, Illinois."

Hampson (1908, Catalogue of the Lepidoptera Phaenae in the Collection of the British Museum, v. 7, p. 190) stated: "Pl. CXII, fig. 30" and "This species is unknown to me; figured from a drawing from type in U.S. Nat. Mus." "♀, from Dakota."

Syntypes examined: 1 (USNM)

- (1) "Hadena jocasta Smith ♀ type"; "S. Dak."; "Type No. 5135, U.S.N.M."; "36511"; "♀ Genitalia Slide #149, April 1, 1936, J.F.G.C."

Discussion.—There is a pencil sketch of a "♀ cotype" in the U.S. National Museum. The sketch is of a

specimen from Illinois from the Strecker collection. I have not examined that syntype. The "♀ type" in the U.S. National Museum has been selected, labeled, and is now designated the lectotype.

Hadena juncimacula Smith, 1883, Brooklyn Ent. Soc. Bul. 5: 67.

"1 specimen, Utah Territory, my collection." "The ♂ antennae . . ." "My type of this species was received from Ft. Thornburgh, and is in perfect condition; . . ."

Smith (1893, U.S. Natl. Mus. Proc. 14: 207) treated this as a variety of *Mamestra purpurissata* (Grt.) and stated: "The variety *juncimacula* has the ordinary spots confluent, else like the type form. How I came to refer the insect to *Hadena*, I can not now understand, since my memoranda show that I knew the eyes were hairy." "The Museum collection has . . ." "Of the variety there are two specimens, the type from Utah, Fort Thornburgh (J. B. S.); another from Morrison, Colorado, July 27 (C. V. R.)."

Smith (1893, U.S. Natl. Mus. Bul. 44, p. 114) stated: "Mr. Grote's type is in the British Museum; mine is in the National Museum."

Smith (1903, N.Y. Ent. Soc. Jour. 11(1): 14, pl. 1, fig. 2) illustrated the valve of the male genitalia and commented: "The figure [pl. 1, fig. 1] representing *purpurissata* is redrawn from an eastern specimen, because Fig. 6 in my revision of *Mamestra*, Proc. U.S. Nat. Mus., XIV, Pl. VIII, really represents *juncimacula* and not *purpurissata* as stated."

Holotype.—In the U.S. National Museum. It is labeled "3"; "Collection J. B. Smith"; "Type No. 146, U.S.N.M." It is not known why the specimen does not bear a Smith name and type label.

Melicieptria kasloa Smith, 1903, Amer. Ent. Soc. Trans. 29(3): 208.

Hab.—Kaslo, British Columbia, June 7th and 26th. "Three females, in good condition, from Mr. J. W. Cockle."

Hardwick (1958, Canad. Ent. 90 (Sup. 6): 70) stated: "Smith's type of *kasloa* taken at Kaslo, B.C., on June 7 is at the American Museum of Natural History. Expanding 25 mm., it is a female in beautiful condition. The two 'cotypes' of *kasloa* are in the United States National Museum."

Syntypes examined: 3 (1 AMNH and 2 USNM)

- (1) "Melicieptria kasloa Smith Type"; "Kaslo, B.C., VI.7.02"; "Collection J. B. Smith" [A ♀, very good condition, complete] [AMNH]
- (2) "Melicieptria kasloa Smith cotype"; "Kaslo, B. C., VI.25.01"; "Type No. 6814, U.S.N.M." [A ♀] [USNM]
- (3) "Melicieptria kasloa Smith cotype"; "Kaslo, Brit. Col., J. W. Cockle"; "213"; "Collection J. B. Smith"; "Barnes collection" [A ♀] [USNM]

Discussion.—The absence of quotation marks leaves a question as to the meaning of Hardwick's reference to Smith's type. To insure that the "Type" in the American Museum of Natural History is considered

to be the type-specimen, it has been selected, labeled, and is now designated the lectotype.

Orthodes keela Smith, 1908, N.Y. Acad. Sci. Ann. 18(2): 106.

Habitat: Palmerly, Cochise County, Arizona, August. "One male and one female, in good condition; from the collection of the Brooklyn Institute of Arts and Sciences."

Syntypes examined: 2 (USNM and AMNH)

- (1) "Orthodes keela Smith ♂ type"; "Palmerly, Cochise Co., Ariz., VIII"; "Col. B. Neumögen"; "Type No. 33831, U.S.N.M."; "♂ Genit. #54, Oct. 2, 1931, FHB." [USNM]
- (2) "Orthodes keela Smith ♀ type"; "Palmerly, Cochise Co., Ariz., VIII"; "J. B. Smith Collection, Rutgers"; "40" [Very good condition] [AMNH]

Discussion.—In order to have a male as type-specimen, the "♂ type" in the U.S. National Museum has been selected, labeled, and is now designated the lectotype.

Carneades kervillei Smith, 1900, U.S. Natl. Mus. Proc. 22(1203): 443.

Habitat.—Kerville, Texas (Dr. Barnes). "A single male, in good condition."

Holotype.—In the U.S. National Museum. The specimen is labeled "Carneades kervillei Smith ♂ type"; "Kerville, Texas"; "Type No. 5149 USNM"; "36511."

Oncocnemis laticollis Smith, 1908, N.Y. Ent. Soc. Jour. 16: 94.

Habitat.—Stockton, Utah, September 4. "The type is a female in good condition from Mr. Tom Spalding and is the only example known to me."

Holotype.—In the American Museum of Natural History. The specimen is labeled "Oncocnemis laticollis Smith ♀ type"; "Stockton, Utah"; "IX-4-4"; "J. B. Smith Collection Rutgers." It lacks antennae. Rindge (1955, p. 117) misspelled the specific name as *laticollis*.

Anarta laerta Smith, 1903, N.Y. Ent. Soc. Jour. 11(1): 20.

Habitat: Silver Lake, Utah, July 13, Dr. Henry Skinner; Mt. Rainer, Washington Exper. Sta. No. 633, Professor C. V. Piper. "Three male and two female examples in good condition. Two of these came from Mr. S. T. Kemp and are marked Utah, July 15; but I believe they are from the same lot as those which I owe to Dr. Skinner."

Syntypes examined: 4 (3 AMNH and 1 USNM)

- (1) "Anarta laerta Smith ♂ type"; "Silver Lake, Ut., 7/13, H. Skinner" [Good condition, complete] [AMNH]
- (2) "Anarta laerta Smith ♀ type"; "Utah, 7.15"; "Collection S. T. Kemp"; "J. B. Smith Collection, Rutgers" [AMNH]
- (3) "Anarta laerta Smith ♂ cotype"; "Utah, 7.15"; "Collection S. T. Kemp"; "J. B. Smith Collection, Rutgers" [AMNH]

- (4) "Anarta laerta Smith δ cotype"; "Silver Lake, Ut., 7/13, H. Skinner"; "Barnes Collection" [USNM]

Discussion.—The " δ type" in the collection of the American Museum of Natural History has been selected, labeled, and is now designated the lectotype. According to Rindge (1955, p. 117), it came there via the Rutgers collection, but apparently it was overlooked when the "J. B. Smith Collection, Rutgers" labels were applied.

Hadena laetabilis Smith, 1899, *Canad. Ent.* 31: 263.

"**Habitat:** Santa Fé, New Mexico, July and August (Cockerell), Nos. 1657, 1827 and 3906." "Three male specimens of this very handsome species are at hand."

Syntypes examined: 3 (2 USNM and 1 AMNH)

- (1) "Hadena laetabilis Smith δ type"; "Sta. Fe, Aug., Ckll. 1827"; "Type No. 4363, U.S.N.M."; " δ genitalia slide no. 1656, ELT." [USNM]
- (2) "Hadena laetabilis Smith δ cotype"; "Sta. Fe, July, Ckll. 3906"; "Type No. 4363, U.S.N.M." [USNM]
- (3) "Hadena laetabilis Smith δ cotype"; "Sta. Fe, July, Ckll. 1657"; "J. B. Smith Collection, Rutgers" [AMNH]

Discussion.—The " δ type" in the U.S. National Museum has been selected, labeled, and is now designated the lectotype.

Acronycta laetifica Smith, 1897, *Ent. News* 8(6): 150 (in key).

"Smith (1898, U.S. Natl. Mus. Proc. 21(1140): 89, pl. 3, fig. 12, pl. 17, fig. 21, pl. 20, fig. 9) formally described the species and stated: "**Habitat.**—New York, New Jersey, Florida. There are no dates on any specimens." "Types are in the collections of the U.S. National Museum, Cornell University, Rutgers College, and Messrs. Graef and Doll." Dod (1913, *Ent. News* 24: 252) stated: "This was described from a number of specimens from New York, New Jersey, and Florida. Types were stated to be in the collections of the U.S. National Museum, Rutgers College, Cornell University, and Messrs. Graef and Doll. Those in the two former collections I have examined. At Rutgers College was a male co-type from New York, and a female from Florida. At Washington I found the male type from Florida, a female and a male co-type without locality label, and another female which my notes say was also marked 'type,' though possibly really only a co-type, from New York." "That is, or was, so far true that I venture to state that the male type in the Washington Museum actually is *occidentalis*, or perhaps I should say, using the prior name, *interrupta*. My notes say: 'The male type from Florida is a well marked *interrupta*, creamier than usual, and has the slightly ochreous-tinted reniform of that species. Specimens standing apparently correctly in the *interrupta* series are just like it.' All the rest I saw marked type or co-type appeared to be distinct from any other described spe-

cies that I know, so that the name will hold after all."

Syntypes examined: 8 (6 USNM, 1 AMNH, and 1 Cornell Univ.)

- (1) "Acronycta laetifica Smith δ type"; "16/6, 80"; "Fla."; "Type No. 3663, U.S.N.M."; "36511" [Right valve missing, abdomen greasy and glue stained at base and apex, abdomen apparently glued to thorax, remainder of genitalia glued into cavity at end of abdomen] [USNM]
- (2) "Acronycta laetifica Smith δ type"; "Type No. 3663, U.S.N.M."; " δ genitalia no. 3855, JFGC."; "Apatela furcifera Guen. [A Grote det. label?]" [Very good condition] [USNM]
- (3) "Acronycta laetifica Smith δ cotype"; "Type No. 3663, U.S.N.M."; "Acr. furcifera Guenée by Tepper" [Fair condition, genitalia missing] [USNM]
- (4) "Acronycta laetifica Smith δ cotype"; "Type No. 3663, U.S.N.M."; "Cornell U. Lot 172, Sub 285, F'iks. Coll."; "NY" [USNM]
- (5) "Acronycta laetifica Smith δ cotype"; "4/6 '80"; "Hogart Land, Fla., VI.24"; "Col. Jacob Doll" [USNM]
- (6) "Acronycta laetifica Smith δ cotype"; "Type No. 33906 U.S. N.M."; "20/6 '80"; "Coll. B. Neumögen"; "Fla." [Fair condition, complete] [USNM]
- (7) "Acronycta laetifica Smith δ cotype"; "Fla."; "Collection J. B. Smith" [Fair condition, complete but abdomen greasy] [AMNH]
- (8) "Acronycta laetifica Smith δ cotype"; "NY"; "74"; "Cornell U. Lot 177, Sub. 285" [A δ , good condition; examined by and label data received from J. G. Franclemont] [Cornell Univ.]

Discussion.—Selection of a lectotype for this species is a difficult chore because of discrepancies, poor condition of some specimens, lack of locality labels on some syntypes, missing syntype, number of entities actually represented by type-series, and possible geographic variation. The illustration in the Proceedings of the U.S. National Museum 21: 89, 1898, was actually a painting. It is uncertain whether any of the located syntypes served as the basis for the figure, but the specimen "male type" appears most likely to have been the specimen figured. For that reason, the "male type" has been selected, labeled, and is now designated the lectotype.

Carneades laetificans Smith, 1894, *Amer. Ent. Soc. Trans.* 21: 48, pl. 4, fig. 3.

"**Hab.**—Glenwood Springs, Colo., September; Barnes, Nos. 128 and 160."

Syntypes examined: 2 (USNM)

- (1) "Carneades laetificans Smith δ type"; "Glenwood Springs, Col., 9. 1892, W. Barnes"; "Type No. 135, U.S.N.M."; " δ genitalia on slide 2179, ELT."
- (2) "Carneades laetificans Smith δ type";

"Glenwood Spgs, Col."; "Sept. 8-15";
"Barnes Collection"

Discussion.—The "♂ type" was the specimen illustrated by Smith. It has been selected, labeled, and is now designated the lectotype.

Hadenella laevigata Smith, 1898, *Canad. Ent.* 30: 321.

Habitat.—Glenwood Springs, Colorado, in August; Dr. Barnes, Garfield County, Colorado; Mr. Bruce."

"I have eight specimens under examination and have seen others, most of them females."

Syntypes examined: 6 (5 USNM and 1 AMNH)

- (1) "Hadenella laevigata Smith ♂ type"; "Glenwood Springs, Col., 8-1892, W. Barnes"; "Type No. 4148, U.S.N.M."; "36311"; "♀ genitalia no. 2088, JFGC." [A ♀!] [USNM]
- (2) "Hadenella laevigata Smith ♂ type"; "Glenwood Springs, Col., 8-1892, W. Barnes"; "♂ genitalia no. 2577, JFGC." [USNM]
- (3) "Hadenella laevigata Smith ♀ type"; "Colo., Bruce"; "813, Garfield Co., Colo., D. Bruce"; "Type No. 4148, U.S.N.M."; "C"; "♀ genitalia no. 2089, JFGC." [USNM]
- (4) "Hadenella laevigata Smith ♂ type"; "Glenwood Springs, Col., 8-1892, W. Barnes"; "♀ genitalia no. 2578, JFGC." [USNM]
- (5) "Hadenella laevigata Smith ♂ type"; "Glenwood Springs, Col., 8-1892, W. Barnes"; "178" [A ♀, poor condition] [USNM]
- (6) "Hadenella laevigata Smith ♂ type"; "Colo., Bruce"; "J. B. Smith Collection, Rutgers" [A ♂] [AMNH]

Discussion.—J. G. Franclemont has segregated the "♀ type" and the two female "cotype" specimens as a species distinct from the first two syntypes listed in the U.S. National Museum. Because the "♂ type" is actually a female, the male "cotype" in the U.S. National Museum, J. F. G. Clarke genitalia slide number 2577, has been selected, labeled, and is now designated the lectotype.

Carneades lagganae Smith, 1900, *U.S. Natl. Mus. Proc.* 22(1203): 439.

Habitat.—Laggan, British Columbia (Bean). "A single perfect male."

Smith (1900, *Canad. Ent.* 32(8), pl. 5, fig. 7) figured this specimen. He stated in explanation of plate 5:

"All the photographs were made from actual type specimens, except 11 and 12."

Holotype.—In the U.S. National Museum. The specimen is labeled "Carneades lagganae Smith ♂ type"; "Brit. Col."; "Type No. 5153 USNM"; "36511."

Carneades laminis Smith, 1900, *U.S. Natl. Mus. Proc.* 22(1203): 460.

Habitat.—Middle California (Dr. Barnes). "A single male in good condition."

Holotype.—In the U.S. National Museum. The specimen is labeled "Carneades laminis Smith ♂ type"; "Middle Cal."; "Type No. 5156 USNM"; "171"; "36511."

Mamestra languida Smith, 1893, *Ent. News* 4(3): 100, pl. 6, fig. 6.

Hab.—Colorado. Bruce, No. 261."

Smith (1894, *Amer. Ent. Soc. Trans.* 21: 54, pl. 2, fig. 6) again described the species using the same plate. He added: "A single male only, . . ."

Holotype.—In the U.S. National Museum. The specimen is labeled "Mamestra languida Smith ♂ type"; "Colo., Bruce"; "Type No. 158 USNM." Its genitalia valves are missing.

Anarta lanuginosa Smith, 1900, *in* Dyar, *Wash. Acad. Sci. Proc.* 2: 493.

Habitat.—Popoff Island, Alaska, July 12, 1899. "A single male in very good condition." *Type.*—Cat. no. 4845, U.S. National Museum."

Holotype.—In the U.S. National Museum. The specimen is labeled "Anarta lanuginosa Smith ♂ type"; "Popoff Island, Alaska, July 12, '99"; "Harriman Expedition '99, T. Kincaid Collector"; "Type No. 4845 USNM"; "♂ genitalia on slide 250 FHB."

Noctua larga Smith, 1908, *N.Y. Acad. Sci. Ann.* 18(2): 95.

Habitat: Palmerly, Cochise County, Arizona, August; Huachuca Mountains, Arizona, June 16."

"Three males and one female, in good condition; from the Museum of the Brooklyn Institute. The specimens were taken by Mr. Carl Schaeffer, . . ."
Syntypes examined: 4 (2 USNM and 2 AMNH)

- (1) "Noctua larga Smith ♂ type"; "Palmerly, Cochise Co., Ariz., VIII"; "Type No. 33774, U.S.N.M." [Excellent condition, complete] [USNM]
- (2) "Noctua larga Smith ♂ cotype"; "Palmerly, Cochise Co., Ariz., VIII"; "Collection Brklyn Mus." [USNM]
- (3) "Noctua larga Smith ♀ type"; "Palmerly, Cochise Co., Ariz., VIII"; "J. B. Smith Collection, Rutgers" [Very good, complete] [AMNH]
- (4) "Noctua larga Smith ♂ cotype"; "Huach. Mts., Ariz., VI.16"; "J. B. Smith Collection, Rutgers" [Good condition, complete] [AMNH]

Discussion.—The syntype marked "♂ type" in the U.S. National Museum has been selected, labeled, and is now designated the lectotype.

Phaeocyma largera Smith, 1908, *U.S. Natl. Mus. Proc.* 35(1645): 257, pl. 35, fig. 4.

Habitat.—Winnipeg, Manitoba; Vancouver Island, May 8, G. W. Taylor." *Types.*—Rutgers College collection and collection Barnes." "One male and 1 female; the former from Doctor Fletcher, the Vancouver example; the latter from Doctor Barnes, the Winnipeg example. The male lacked an abdomen when it reached me, but was otherwise in good condition."

McDunnough (1943, *Canad. Ent.* 75: 153) stated: "The name was based on a single male (without ab-

domen) from Vancouver Is., B.C., and a female from Winnipeg, Man., in the Barnes Coll. (now in the U.S. Nat. Mus.); as the two localities are so widely separated and since the female genitalia are figured by Smith (pl. XXXV, fig. 4) I take the precaution of designating the Winnipeg female as holotype, in case at some later date differences between west-coast and eastern specimens should be detected sufficient to justify racial separation." *Syntypes examined*: 2 (USNM and AMNH)

- (1) "Homoptera largera Smith ♀ type"; "Winnipeg, Manitoba"; "Barnes collection" [Abdomen missing] [USNM]
- (2) "Homoptera largera Smith ♂ type"; "Vancouver Island, 8 May '88, G. W. Taylor"; "88"; "22"; "J. B. Smith Collection, Rutgers" [Good condition, abdomen missing] [AMNH]

Discussion.—The genitalia slide from which Smith illustrated the species was prepared from the "♀ type" and has been located in the American Museum of Natural History. It has been returned to the U.S. National Museum. McDunnough referred to that specimen as the "holotype" in a clear sense of lectotype selection, but to absolutely insure that it is considered the type-specimen, I have selected, labeled, and now designate the "♀ type" as the lectotype.

Mamestra larissa Smith, 1895, Ent. News 6: 339, pl. 15, fig. 11.

"*Hab.*—Calgary, June 2d and 5th." "Mr. Dod sends me, under the number 48, one male and one female, and says that it is 'rare at Treacle, June.'" "The female seems a trifle larger than the male, and is a little broader winged."

Syntypes examined: 2 (USNM and AMNH)

- (1) "Mamestra larissa Smith, Type"; "Calgary, 2/VI/94, Treacle"; "48"; "Type No. 10 U.S.N.M."; "♂ genitalia on slide no 132, FHB" [USNM]
- (2) "Mamestra larissa Sm.", "48" [A ♀, very good condition] [AMNH]

Discussion.—The female was not marked as a type by Smith, but the presence of the label "48" leaves little doubt that it is a syntype. The "Type" in the collection of the U.S. National Museum, a male, has been selected, labeled, and is now designated as the lectotype.

Perigea latens Smith, 1908, N.Y. Ent. Soc. Jour. 16: 92.

"*Habitat*.—San Diego Co., Calif., V, 28: VI, 10, 21; IX, 16; Yuma Co., Arizona in March." "Three males and three females, all save one ♀ collected by Mr. W. S. Wright for Mr. Frank A. Merrick, the odd female from Arizona collected by Mr. Hutson."

Syntypes examined: 2 (USNM)

- (1) "Perigea patens Smith ♂ cotype"; "San Diego, Cal., 6-21-07, W. S. Wright"; "886"; "Barnes collection"
- (2) "Perigea patens Smith ♀ cotype"; "Yuma Co., Ariz., March"; "Collection J. B. Smith"; "Barnes collection"

Discussion.—Rindge (1955, pp. 117 and 126) did not record examples from the Rutgers College collection under either *Perigea latens* Smith or *Perigea patens* Smith. The latter name is apparently the one intended by Smith, but the name published was spelled *latens*. Four syntypes, two males and two females, have not been located. In addition to the two marked as cotypes listed here, there are five other specimens in the collection of the U.S. National Museum that agree in locality and one in date with those given in the original description but are not marked as syntypes. All are labeled *patens* rather than *latens*, but only one appears to be in Smith's handwriting. The "♂ cotype" in the U.S. National Museum has been selected, labeled, and is now designated the lectotype.

Chytonix laticlava Smith, 1903, N.Y. Ent. Soc. Jour. 11: 189.

"*Habitat*: Pullman, Washington, August 14 and 30, 1897." "One pair taken at light and somewhat defective, from Professor C. V. Piper."

Hampson (1908, Catalogue of the Lepidoptera Phalaenae in the Collection of the British Museum, v. 7, p. 611) stated: "Pl. CXXII, fig. 6" and "This species is unknown to me; figured from a drawing from type in Coll. J. B. Smith." "♂, Washington."

Syntypes examined: 2 (AMNH)

- (1) "Chytonix laticlava Smith ♂ type"; "Pullman, Wash., 14 Aug. 97"; "Collector C. V. Piper"; "J. B. Smith Collection, Rutgers" [Very poor, left wings up, right down, broken, badly rubbed, but complete except antennae missing]
- (2) "Chytonix laticlava Smith ♀ type"; "Pullman, Wash., 31 Aug. 97"; "Collector C. V. Piper"; "J. B. Smith Collection, Rutgers" [Very poor, rubbed, right hindwing missing]

Discussion.—The "♂ type" has been selected, labeled, and is now designated the lectotype. It is the specimen from which Hampson's illustration was prepared.

Epizeuxis laurentii Smith, 1893, Ent. News 4(3): 83.

"*Habitat*.—Mitchell County, North Carolina, in July." "One male and one female from Dr. Skinner, who has other specimens from the same locality." Smith (1895, U.S. Natl. Mus. Bul. 48, p. 22, pl. 1, figs. 12 and 13, pl. 10, figs. 8 and 9) figured the male and female and parts of their antennae. He stated in explanation of plate 1: "12. E. laurentii: from the male type." and "13. E. laurentii: from the female type."

Syntypes examined: 2 (USNM)

- (1) "Epizeuxis laurentii Smith ♂ type"; "Mitchell Co., NC, 7-92"; "Type No. 311, U.S.N.M."; "♂ genitalia 47, 7Feb'30, CH."
- (2) "Epizeuxis laurentii Smith ♀ type"; "Mitchell Co., NC 7-92"; "Type No. 311, U.S.N.M."; "♀ genitalia 61, 19 Feb'30, CH."

Discussion.—The "♂ type" in the U.S. National Museum has been selected, labeled, and is now designated the lectotype.

Euxoa lenola Smith, 1910, Amer. Ent. Soc. Trans. 36(3): 260.

"*Hab.*—Glenwood Springs, Colorado, in August (Barnes); Ft. Collins, Colorado (Gillette); Hot Springs, New Mexico, 7000 feet (Hulst)." "Two males and three females in good condition and all very much alike except in size."

Syntypes examined: 5 (AMNH)

- (1) "Euxoa lenola Smith δ type"; "Glenwood Springs, Col., 8-1895, W. Barnes"; "J. B. Smith Collection, Rutgers" [Fair condition, complete]
- (2) "Euxoa lenola Barnes φ type"; "Glenwood Springs, Col., 8-1892, W. Barnes"; "J. B. Smith Collection, Rutgers" [Fair condition, complete]
- (3) "Euxoa lenola Smith Paratype"; "Glenwood Springs, Col., 8-1894, W. Barnes"; "J. B. Smith Collection, Rutgers" [A φ]
- (4) "Euxoa lenola Smith Paratype"; "Colorado, 1743"; "J. B. Smith Collection, Rutgers" [A φ]
- (5) "Euxoa lenola Smith Paratype"; "Hot Springs, N. Mex., 7000 ft."; "J. B. Smith Collection, Rutgers" [A δ]

Discussion.—In line with other species of this genus I continue to select females of this genus where feasible. Accordingly, the " φ type" in the American Museum of Natural History has been selected, labeled, and is now designated the lectotype.

Mamestra leomegra Smith, 1908, N.Y. Acad. Sci. Ann. 18(2): 100.

"*Habitat*: Grand Lake, N.F., Aug. 28." "Three males and one female, of which only one female is in really good condition. The specimens were caught at light by Mr. Owen Bryant, packed dry in cotton, and sent me through Mr. C. W. Johnson of the Boston Society of Natural History."

Syntypes examined: 3 (2 AMNH and 1 USNM)

- (1) "Mamestra leomegra Smith δ type"; "Grand Lake, N.F., VIII-25"; "J. B. Smith Collection, Rutgers" [Fair condition, complete except antennae] [AMNH]
- (2) "Mamestra leomegra Smith φ type"; "Grand Lake, N.F., VIII-28"; "J. B. Smith Collection, Rutgers" [Very badly rubbed, but complete] [AMNH]
- (3) "Mamestra leomegra Smith δ cotype"; "N.F."; "Barnes Collection"; " δ genitalia no. 1096, JGF." [USNM]

Discussion.—The " δ type" in the American Museum of Natural History has been selected, labeled, and is now designated the lectotype. The single female was stated by Smith to be in really good condition, but that appears to be an error judging from the condition of the " φ type." It is likely that Smith meant male rather than female.

Acronycta lepetita Smith, 1908, N.Y. Acad. Sci. Ann. 18(2): 94.

"*Habitat*: Esper Ranch, Brownsville, Tex." "One

male and one female, in good condition; from the collection of the Brooklyn Institute of Arts and Sciences."

Hampson (1909, Catalogue of the Lepidoptera Phalaenae in the Collection of the British Museum, v. 8, p. 67) stated: "Pl. CXXIV, fig. 14" and "This species is unknown to me; figured from a drawing from type in Coll. J. B. Smith." " φ , Texas."

Syntypes examined: 2 (AMNH and USNM)

- (1) "Acronycta lepetita Smith δ type"; "Esper Rch., Brownsville, Tex."; "J. B. Smith Collection, Rutgers" [Good condition, complete] [AMNH]
- (2) "Acronycta lepetita Smith φ type"; "Esper Rch., Brownsville, Tex."; "Type No. 33904, U.S.N.M." [USNM]

Discussion.—The illustration of Hampson does not really agree well with either the " δ type" or the " φ type." Hampson said it was of the female on the explanation of his figure, but that could be an error, especially as he said that it was from the J. B. Smith collection and because Smith retained the male. The female was returned to the Brooklyn Museum and eventually came with that collection to the U.S. National Museum. The dark hindwings look more like those of the female. The illustration is just too poor to be of any significance in the selection of the lectotype. The " δ type" in the American Museum of Natural History has been selected, labeled, and is now designated the lectotype.

Mamestra lepidula Smith, 1888, U.S. Natl. Mus. Proc. 10: 463.

"*Habitat.*—Texas. 1 δ and 1 φ ." "The type is with Mr. Hy. Edwards, a second specimen, collection U.S. Nat. Mus. (Smith coll.)."

Smith (1892, U.S. Natl. Mus. Proc. 14: 209) stated: "The pair from which the species was described is from Mr. Hy. Edwards, to whose kindness I owed one of the specimens, now in the National Museum collection." He also figured the harpe and clasper of the male (pl. 8, fig. 9).

Smith (1893, U.S. Natl. Mus. Bul. 44, p. 115) stated: "The type is in the National Museum; a duplicate is in the Edwards collection."

Syntypes examined: 2 (AMNH and USNM)

- (1) "Mamestra lepidula Smith, φ type"; "Texas"; "AMNH Type No. ____"; "No. 10317 Collection Hy. Edwards" [Good condition, complete] [AMNH]
- (2) "Mamestra lepidula Smith, δ type"; "Texas"; "Collection J. B. Smith"; "Type No. 147, U.S.N.M." [Left valve broken] [USNM]

Discussion.—Smith's lack of a holotype concept has been discussed in the introductory material. In the case of *Mamestra lepidula*, he referred to the two specimens each as "the type" in two different publications. Nevertheless, I believe that the particular wording in the original description will require that the " φ type" in the American Museum of Natural History be considered the holotype. To insure that it is considered the type-

specimen, I also select, label, and designate it as the lectotype.

Caradrina leucorena Smith, 1900, U.S. Natl. Mus. Proc. 22(1203): 477.

"*Habitat*.—Los Angeles County, California, in September (U.S.N.M.); southern California (Barnes); Phoenix, Arizona, March 11 (Dr. Griffiths)." "Eight specimens, seven of them females, are before me, most of them in good condition." "*Type*.—Cat. No. 4832, U.S.N.M."

Hampson (1909, Catalogue of the Lepidoptera Phaenae in the Collection of the British Museum, v. 8, p.556 (as *Namangana leucorena* (Sm.))) stated: "Pl. CXXXVII, fig. 8." The specimen figured is a male cotype from Phoenix, Ariz. Barnes and Benjamin (1924, Contrib. Nat. Hist. Lepidoptera N. Amer. 5(3): 155) stated: "The male type is in the U.S. National Museum, and is labeled 'Los Angeles County, California, Coq. collector'! Besides the male type, seven females were before Dr. Smith when he described the species. One of these is in the British Museum; one, in the Barnes Collection; and three, in the Smith Collection at Rutgers College." "The name should be restricted to the male type to avoid confusion with the 'female type'; as there are two closely allied species most easily separable on the male antennae."

Syntypes examined: 6 (3 USNM and 3 AMNH)

- (1) "Caradrina leucorena Smith δ type"; "Los Angeles Co., Cal."; "Coquillet Collector"; "Type No. 4832, U.S.N.M." [Good condition, complete] [USNM]
- (2) "Caradrina leucorena Smith σ type"; "Coquillet, Ls. Angls., Cal."; "Type No. 4832, U.S.N.M." [Good condition, complete] [USNM]
- (3) "Caradrina leucorena Smith σ cotype"; "Southern Cal." [USNM]
- (4) "Caradrina leucorena Smith σ cotype"; "Los Angeles Co., Cal."; "Sept."; "J. B. Smith Collection, Rutgers" [AMNH]
- (5) "Caradrina leucorena Smith cotype"; "Calif."; "J. B. Smith Collection, Rutgers" [A σ] [AMNH]
- (6) "Caradrina leucorena Smith cotype"; same as preceding [A σ] [AMNH]

Discussion.—The statement of Barnes and Benjamin (see above), an attempt to restrict the name to the " δ type," "The name should be restricted . . ." rather than is restricted seems indefinite to me, a proposed future action. In any event, I have selected, labeled, and now designate as the lectotype the " δ type," the only male and one of two specimens bearing the USNM type number 4832 as in the original description.

Leptina levitans Smith, 1906, N.Y. Ent. Soc. Jour. 14: 9.

"*Habitat*.—Ontario, Canada, A. H. Kilman; Durham, N.H., Weed and Fiske." "One male and one female are now before me, in comparison with three ex-

amples of *L. dormitans* with which I had in the past confused this species."

Syntypes examined: 2 (AMNH)

- (1) "Leptina levitans Smith δ type"; "Durham, NH, 1893, W & F."; "Collection J. B. Smith" [Fair condition]
- (2) "Leptina levitans Smith σ type"; "Ontario, Can., A. H. Kilman"; "J. B. Smith Collection, Rutgers" [Abdomen missing]

Discussion.—The " δ type" in the American Museum of Natural History has been selected, labeled, and is now designated the lectotype.

Acontia libedis Smith, 1900, Amer. Ent. Soc. Trans. 27: 80.

"*Hab*.—Denver, Colorado, August 11th (Oslar); Hot Springs, New Mexico, 7000 ft. (Hulst); Texas in April." "Five males and three females. Of these, one pair from Colorado is fresh and in good condition; the others are flown and more or less imperfect, so that I hesitated at first to consider them identical. There is no reasonable doubt, however, though it may be that Texan examples are on the whole a little paler than those from Colorado. The single New Mexican example is intermediate."

Syntypes examined: 3 (2 USNM and 1 AMNH)

- (1) "Acontia libedis Smith δ type"; "Denver, Col., VIII.11"; "Type No. 5393, U.S.N.M."; "36511"; " δ genitalia on slide no. 1000, ELT." [USNM]
- (2) "Acontia libedis Smith σ type"; "Denver, Col., VIII.11"; "Type No. 5393, U.S.N.M." [USNM]
- (3) "Acontia libedis Smith σ cotype"; "Hot Springs, N. Mex., 7000 ft. alt."; "Collection J. B. Smith" [Right forewing missing] [AMNH]

Discussion.—Five syntypes have not been located. Part of that number are probably the specimens from Texas that Smith discussed. It is probable that Smith did not mark them as types. I have selected, labeled, and now designate the " δ type" in the U.S. National Museum as the lectotype.

Eupolia licentiosa Smith, 1894, Amer. Ent. Soc. Trans. 21: 70, pl. 3, fig. 8.

"*Hab*.—Utah; collection Neumoegen." "One pair in good condition are before me."

Hampson (1909, Catalogue of the Lepidoptera Phaenae in the Collection of the British Museum, v. 8, p. 546) stated: "This species is unknown to me; figured from a drawing from specimen in U.S. Nat. Mus." Figure 152 is of a male.

Syntypes examined: 2 (USNM)

- (1) "Eupolia licentiosa Smith δ type"; "Utah"; "Col. B. Neumoegen"; "Type No. 33929, U.S.N.M." [Good condition, complete]
- (2) "Eupolia licentiosa Smith σ type"; "Utah"; "47"; "Coll. N."; "Type No. 4995, U.S.N.M."; "36511" [Frayed and worn]

Discussion.—The specimen figured by Hampson

was not the type male. The "♀ type" was in the U.S. National Museum at the time, but the "♂ type" was received with the collection of the Brooklyn Museum many years later. I have selected, labeled, and now designate the "♂ type" as the lectotype.

Schinia ligeae Smith, 1893, *Insect Life* 5(5): 331, fig. 46: 2.

"Habitat.—Argus Mountains, April, 1891." "Eight specimens are before me, and others not differing in appearance are in the National Museum."

Syntypes examined: 6 (5 USNM and 1 AMNH)

- (1) "Schinia ligeae Smith Type"; "Argus Mts., April '91 K."; "Through C. V. Riley"; "Type No. 295, U.S.N.M."; "36511" [A ♂, fairly good condition, complete] [USNM]
- (2) "Schinia ligeae Smith Type"; "Argus Mts., April '91 K."; "Through C. V. Riley"; "Type No. 295, U.S.N.M." [A ♂, faded complete] [USNM]
- (3) "Schinia ligeae Smith Type"; "Argus Mts., April '91 K."; "Through C. V. Riley"; "Type No. 295, U.S.N.M." [A ♀, fair condition, complete, specimen figured by Smith] [USNM]
- (4) "Schinia ligeae Smith Type"; "Argus Mts., April '91 K."; "Through C. V. Riley"; "Type No. 295, U.S.N.M." [A ♀, faded, complete] [USNM]
- (5) "Schinia ligeae Smith Type"; "Argus Mts., April '91 K."; "Through C. V. Riley"; "Barnes collection" [A ♀, faded, complete] [USNM]
- (6) "Schinia ligeae Smith Type"; "Argus Mts., April '91 K."; "Through C. V. Riley"; "J. B. Smith Collection, Rutgers" [A ♀, fair condition, complete] [AMNH]

Discussion.—The specimen figured by Smith, a female in the U.S. National Museum, has been selected, labeled, and is now designated the lectotype. It is the third syntype listed here.

Leucania limitata Smith, 1902, *U.S. Natl. Mus. Proc.* 25(1283): 187, pl. 5, fig. 10.

"Habitat.—Texas, in June (Hulst coll.)." "Only a single male in fair condition."

Holotype.—In the American Museum of Natural History. The specimen is labeled "Leucania limitata Smith ♂ type"; "Tex"; "June"; "Collection G. D. Hulst"; "Collection J. B. Smith." It is rather worn and faded and the abdomen is missing. The illustration in the original description is of a valve of the genitalia, but I was unable to locate a slide in the collection of the American Museum of Natural History.

Carneades lineifrons Smith, 1890, *U.S. Natl. Mus. Bul.* 38, p. 219.

"HABITAT.—Colorado." "A single male specimen in good condition from collection U.S. National Museum, taken by Mr. Bruce."

Smith (1893, *U.S. Natl. Mus. Bul.* 44, p. 98) stated: "The type is in the National Museum."

Holotype.—In the U.S. National Museum. The specimen is labeled "Carneades lineifrons Smith Type"; "Colo. Bruce"; "Colo. 17"; "Type No. 123 USNM"; "♂ genitalia on slide 2584 JFGC."

Agroperina lineosa Smith, 1910, *N.Y. Ent. Soc. Jour.* 18(3): 145, pl. 5, figs. 14 and 15.

"Habitat.—Calgary, Alberta, in July; Brandon, Cartwright, Aweme, Miniota and Winnipeg, Manitoba, all in July." "A series of 25 males and 5 females; with an additional male and 2 females from Olds, British Columbia, so poor that determination is uncertain; but which probably belong here."

Syntypes examined: 8 (5 AMNH and 3 USNM)

- (1) "Agroperina lineosa Smith ♂ Type"; "W., M. 7-12"; "Collection J. B. Smith"; "263" [Fairly good condition, antennae missing, abdomen glued on] [AMNH]
- (2) "Agroperina lineosa Smith ♀ type"; "Winnipeg, Manitoba"; "2433"; "J. B. Smith Collection, Rutgers" [Right forewing broken, glued on, abdomen suspicious] [AMNH]
- (3) "Agroperina lineosa Smith ♂ Paratype"; "Calgary, Alta., VII. 4.1894, F. H. Wolley Dod"; "J. B. Smith Collection, Rutgers"; "♂ genitalia mounted on slide No. 6683, F. H. Rindge" [Good condition] [AMNH]
- (4) "Agroperina lineosa Smith Paratype"; "Calgary [sic], Alberta"; "July 16-23"; "J. B. Smith Collection, Rutgers" [A ♂] [AMNH]
- (5) "Agroperina lineosa Smith Paratype"; "Miniota, Man."; "July 27"; "J. B. Smith Collection, Rutgers" [A ♂] [AMNH]
- (6) "Agroperina lineosa Smith Paratype"; "Calgary [sic], Alberta"; "July 24-30"; "Barnes Collection"; "♂ genitalia no. 375, JFGC." [USNM]
- (7) "Agroperina lineosa Smith Paratype"; "Calgary [sic], Alberta"; "July 8-15"; "Barnes Collection"; "♀ genitalia no. 2188, JFGC." [USNM]
- (8) "Agroperina lineosa Smith Paratype"; "Cartwright, Manitoba"; "24 ♂♂, 16.VII.01"; "Barnes Collection"; "♂ genitalia no. 2186, JFGC." [USNM]

Discussion.—Smith apparently only marked about a third of his series as types. He illustrated the male genitalia of two specimens, one from Calgary, Alberta, and the other from Brandon, Manitoba. The slides are in the American Museum of Natural History labeled "lineola" [sic] and "Typical spec." The slides also bear the two localities given by Smith. Judging from the corona of the valves, the slides represent two species. I have been unable to locate the specimens from which the slides were prepared. In the American Museum of Natural History there are two examples that are not marked paratypes that lack abdomens. The specimens are from Calgary and Beulah [not Brandon], Manitoba. If the slides were prepared from those specimens, Smith would have had to have erred on the one locality, and it is strange that he did not mark the specimens type because he marked the slides "Typical spec." The gen-

Italla on the slide prepared by F. H. Rindge from the "♂ Paratype" from Calgary collected July 4 agree with the genitalia on the Smith Calgary slide. Accordingly, I have selected, labeled, and now designate that "♂ Paratype" as the lectotype.

Acronycta liturata Smith, 1897, Ent. News 8(6): 151 (in key).

Smith (1898, U.S. Natl. Mus. Proc. 21(1140): 129, pl. 13, fig. 8, pl. 21, fig. 21) figured the species in detail and stated: "*Habitat*.—Garfield County, Colorado, 7,000 feet; Glenwood Springs, Colorado, in July; Oregon." "Four male and two female specimens form the types, represented in the collection U.S. National Museum, Rutgers College, Dr. William Barnes, and Mr. J. Doll."

Syntypes examined: 6 (4 USNM and 2 AMNH)

- (1) "Acronycta liturata Smith ♂ type"; "Glenwood Springs, Col., 7-1895, W. Barnes"; "Type No. 3667, U.S.N.M." [Very good, complete] [USNM]
- (2) "Acronycta liturata Smith ♀ type"; "Colo. Bruce"; "824, Garfield Co., Colo., 7000 ft. Bruce"; "Type No. 3667, U.S.N.M." [USNM]
- (3) "Acronycta liturata Smith ♀ cotype"; "Or."; "Doll"; "Col. Jacob Doll" [USNM]
- (4) "Acronycta liturata Smith ♀ cotype"; "Glenwood Spgs., Col."; "July 16-23"; "4" [USNM]
- (5) "Acronycta liturata Smith ♂ cotype"; "Colo. Bruce"; "825, Garfield Co., Colo., 7000 ft. Bruce"; "Collection J. B. Smith" [Fair condition, complete except 1 antenna] [AMNH]
- (6) "Acronycta liturata Smith ♂ cotype"; "Colo. Bruce"; "823, Garfield Co., Colo., 7000 ft. D. Bruce"; "Collection J. B. Smith" [Good condition, complete] [AMNH]

Discussion.—Apparently all the syntypes have been located, at least the number agrees with the number stated for the series by Smith. However, Smith stated there were four males and two females, whereas the specimens and the type labels show the sexes to be equally divided. I have been unable to determine which of the three females was illustrated by Smith, and I do not know what specimen could have provided the genitalia that he illustrated on plate 21, figure 21. The three males all appear to be complete! I have selected, labeled, and now designate the "♂ type" in the U.S. National Museum as the lectotype. It is the best specimen of the syntypes, a male, and it was marked "type" by Smith.

Aplectoides livalis Smith, 1910, N.Y. Ent. Soc. Jour. 18: 86.

Habitat.—Newfoundland. "The type is a single male in very good condition without date or specific location. I believe it was included among the material received from Mr. Wm. T. Bryant, of Cohasset, Mass."

Holotype.—In the American Museum of Natural History. The specimen is labeled "Aplectoides livalis Smith ♂ type"; "N.F."; "J. B. Smith Collection Rutgers." The right forewing is broken off the specimen.

Mamestra longiclava Smith, 1891, U.S. Natl. Mus. Proc. 14(851): 265, pl. 10, fig. 64.

"*HABITAT*.—Colorado (Bruce)." "A single male specimen from Mr. Neumoegen's collection." Smith (1893, U.S. Natl. Mus. Bul. 44, p. 128) stated: "The type is with Mr. Neumoegen."

Holotype.—In the U.S. National Museum. The specimen is labeled "Mamestra longiclava Smith Type"; "Colo., Bruce"; "Col. B. Neumoegen"; "Type No. 33810 USNM." It is a male. Both valves of the genitalia are missing.

Feltia longidens Smith, 1890, U.S. Natl. Mus. Bul. 38, p. 217.

"*HABITAT*.—Las Vegas, New Mexico." "Two specimens, a fairly good male and a very poor female, from Mr. Neumoegen's collection, taken by Mr. Meeske."

Smith (1893, U.S. Natl. Mus. Bul. 44, p. 81) stated: "A type is with Mr. Neumoegen; another in the National Museum."

Syntypes examined: 2 (USNM)

- (1) "Feltia longidens Smith Type"; "Las Vegas, N.M., H. Meeske, '89"; "Col. B. Neumoegen"; "Type No. 33731, U.S.N.M." [A ♂, right valve missing]
- (2) "Feltia longidens Smith Type"; "Las Vegas, N.M., H. Meeske, '89"; "USNM Acc. # 23933"; "Type No. 94, U.S.N.M." [A ♀, very poor condition]

Discussion.—The two specimens constitute the entire series. Because of the poor condition of the female specimen, the male (type No. 33731, USNM) has been selected, labeled, and is now designated the lectotype.

Xylina longior Smith, 1899, N.Y. Ent. Soc. Jour. 7(4): 230.

Habitat: Glenwood Springs, Colo., March 10th, 27th, April 10th, October. Dr. Barnes. "There are five specimens under examination, both sexes being represented."

Smith (1900, Amer. Ent. Soc. Trans. 27: 27) stated: "Four males and eight females; all except one from Dr. Barnes." He illustrated the species on plate 1, figure 13, and plate 4, figures 20 and 21.

Hampson (1906, Catalogue of the Lepidoptera Phalaenae in the Collection of the British Museum, v. 6, p. 271) listed and illustrated a female cotype from Glenwood Springs, Colo., (Barnes), on plate CII, figure 28.

Barnes and McDunnough (1913, Contrib. Nat. Hist. Lepidoptera N. Amer. 2(1): 26, pl. 12, fig. 12) illustrated a female cotype from Glenwood Springs, Colo.

Syntypes examined: 3 (USNM)

- (1) "Xylina longior Smith ♂ type"; "Glenwood Springs, Col., 3/27, 1893, W. Barnes"; "Type No. 5111, U.S.N.M."; "36511"; "♂ genitalia no. 1556, JFGC."
- (2) "Xylina longior Smith ♀ type"; "Colo. Bruce"; "Type No. 5111, U.S.N.M."; "36511" [Body badly broken by verdigris]
- (3) "Xylina longior Smith cotype"; "Glenwood Springs, Col., 4.10.1895, W. Barnes [sic]";

"Photograph Pl. 12, No. 12." [A ♀, somewhat greasy]

Discussion.—A female, cotype, is in the British Museum (Natural History). It is from Glenwood Springs, Colo., and was figured by Hampson. Barnes and McDunough also figured another cotype female. The specimens that Smith used to illustrate the species in his second paper have not been recognized. Smith had additional material at the time of that paper. The recommendation to select a syntype that has been illustrated is ignored in this instance because the ones that can be definitely recognized are females and it is preferred to have a male lectotype. For that reason, I have selected, labeled, and now designate the "♂ type" in the U.S. National Museum as the lectotype.

Pseudacontia louisa Smith, 1908, N.Y. Acad. Sci. Ann. 18(2): 120.

Habitat.—Sabine Parish, La. (G. Coverdale). "A single male has been in my collection a long time awaiting a mate, and is now described because there seems no present hope of more material from the same region."

Holotype.—In the American Museum of Natural History. The specimen is labeled "Pseudacontia louisa Smith ♂ type"; "Sabine ph, La., G. Coverdale"; "J. B. Smith Collection Rutgers."

Carneades loya Smith, 1900, U.S. Natl. Mus. Proc. 22(1203): 422.

Habitat.—High Sierras, California (Dr. Dyar). "One female, a little crippled, but so obviously unlike all the known forms that I do not hesitate to describe it. *Loya* is the Indian name for the Sentinel, Dr. Dyar says, and the specimen bears his No. 11278."

Holotype.—In the U.S. National Museum. The specimen is labeled "Carneades loya Smith ♀ type"; "High Sierras, Cal.-Loya name for the Sentinel"; "Cal."; "36511"; "H. G. Dyar No. 11278"; "Type No. 5139 USNM"; "Barnes collection." The abdomen is missing, and I believe that is what Smith meant about the specimen being a little crippled. An old photograph of the specimen shows that the abdomen has been missing for a long time.

Acontia lucasi Smith, 1900, Amer. Ent. Soc. Trans. 27: 68.

Hab.—Cape San Lucas, California. "One male received from Dr. Behr who has others; collected by Xantus de Besey."

Holotype.—In the U.S. National Museum. The specimen is labeled "Acontia lucasi Smith ♂ type"; "Xantus, Cap San Lucas, Cal., Dr. Behr."; "Type No. 5385 USNM"; "36511."

Perigea lucetta Smith, 1900, U.S. Natl. Mus. Proc. 22(1203): 474.

Habitat.—Colorado (Barnes). "A single good male."

Holotype.—In the U.S. National Museum. The specimen is labeled "Perigea lucetta Smith ♂ type"; "Col-

orado"; "Type No. 5121 USNM"; "36511"; "♂ genitalia on slide 1247 JFGC." Barnes and McDunough (1916, p. 165) commented: "This species, which, according to Hampson, is the same as *roxana* Druce from Mexico, we imagine should be excluded from our N. American lists; the locality is given as Colorado (Barnes) but the probability is that the specimen came with other material from a former New York dealer who was very inaccurate in labelling his specimens and had included a Mexican specimen in error."

Mamestra lucina Smith, 1901, Amer. Ent. Soc. Trans. 27: 232, pl. 10, figs. 5 and 6.

"The next series of specimens consists of 16 males and 6 females from Winnipeg, Cartwright and Brandon, Manitoba; and Yellowstone Park, Wyoming." "A geographical race rather than a well-developed species is suggested, and this race—it is not a variety—may be termed *lucina*." On page 236 he stated: "Mamestra lucina, n. sp." "It is not a good species as I take a species now. It is not a variety as that term is usually understood; it is a race or form differentiated to some extent from the parent type." On page 239 he stated: "Mamestra lucina Smith" "a geographical race occupying that part of British America extending from Winnipeg northward and westward to the Rocky Mountains. Probably extends east and south of this into the United States, and should occur in the Yellowstone region."

Syntypes examined: 8 (4 USNM and 4 AMNH)

- (1) "Mamestra lucina Smith, ♂ cotype"; "Winnipeg, Manitoba"; "Barnes Collection" [Excellent condition, complete] [USNM]
- (2) "Mamestra lucina Smith, ♂ cotype"; "Cartwright, Manitoba"; "Type No. 5758, U.S.N.M."; "♂ gen. Smith slide #980" [Abdomen glued on, valves and uncus missing] [USNM]
- (3) "Mamestra lucina Smith, ♀ cotype"; "Cartwright, Manitoba"; "Type No. 5758, U.S.N.M." [USNM]
- (4) "Mamestra lucina Smith, ♀ cotype"; "Winnipeg, Man., VIII-2"; "Barnes Collection" [USNM]
- (5) "Mamestra lucina Smith, ♂ cotype"; "Winnipeg, Manit., 7-26"; "AMNH Cotype No. ____" [Fairly good condition, complete] [AMNH]
- (6) "Mamestra lucina Smith, ♂ cotype"; "Winnipeg, Manit., VII-12"; "AMNH Cotype No. ____"; "Genitalia mounted on slide 61-267, Lloyd M. Martin" [Left forewing missing] [AMNH]
- (7) "Mamestra lucina Smith, ♀ cotype"; "Winnipeg, Manit., VIII-1"; "Collection J. B. Smith" [AMNH]
- (8) "Mamestra lucina Smith, ♀ cotype"; "Winnipeg, Manit., VIII-2"; "AMNH Cotype No. ____" [AMNH]

Other syntypes: 1 male (CNC)

- (1) "♂ cotype"; "Winnipeg, Man., 8-17";
"#937"

Discussion.—One specimen from the American Museum of Natural History labeled "♂ type" from "Brit. Co."; "Collection of J. B. Smith" and two specimens from the U.S. National Museum from "Calgary [sic], Alberta"; "July 8-15"; "Type no. 5758, U.S.N.M." labeled "♀ type" and "♂ cotype" have not been included in the syntypes because the localities were not given in the original description. There are other specimens in both institutions that are probably syntypes, but which were not labeled as types by Smith. Nine such specimens are in the U.S. National Museum; seven are from Cartwright, one from Brandon, Manitoba, and one from Yellowstone Park.

Smith illustrated the male genitalia (pl. 10, figs. 5 and 6). There are indications that he prepared three slides of the species. One slide in the American Museum of Natural History is labeled "Mamestra lucina Sm. Winnipeg [sic], Man." One specimen from Winnipeg in that collection lacks an abdomen, but it cannot be proved that the genitalia were prepared from that specimen and it was not marked a type by Smith. Another slide similarly labeled except the Province Manitoba is spelled out has been located in the U.S. National Museum. It is USNM Smith slide No. 982. There are no specimens from Winnipeg in the U.S. National Museum that lack abdomens or have parts missing. USNM Smith slide No. 980 contains a pair of slightly broken valves. I do not know from which slide or slides the illustrations provided by Smith might have been prepared. In consideration of these facts, I have selected, labeled, and now designate the "♂ cotype" from Winnipeg, Manitoba, in the U.S. National Museum as the lectotype.

Apamea lunata Smith, 1891, Amer. Ent. Soc. Trans. 18: 110.

Hab.—Alameda, Cal., in June; Mt. Shasta District, Cal. (Edwards). "Both sexes are before me." Smith (1893, U.S. Natl. Mus. Bul. 44, p. 173) stated: "Types are in the National Museum and in the Edwards collection."

Smith (1899, Amer. Ent. Soc. Trans. 26: 14, pl. 1, fig. 1) proposed a new name for the species as he stated that *lunata* was preoccupied.

Hampson (1910, Catalogue of the Lepidoptera Phalaenae in the Collection of the British Museum, v. 9, p. 29) stated: "Pl. CXXXVII, fig. 23" and "This species is unknown to me; figured from a drawing from type in U.S. Nat. Mus." "♂, California."

Syntypes examined: 4 (2 USNM and 2 AMNH)

- (1) "Apamea lunata Smith Type"; "Alameda Co., Cal."; "May"; "Through C. V. Riley"; "Type No. 214, U.S.N.M." [A ♂, good condition, complete] [USNM]
- (2) "Apamea lunata Smith Type"; "Alameda Co., Cal."; "June"; "Through C. V. Riley"; "Type No. 214, U.S.N.M." [A ♂, good condition except abdomen and legs in gelatin capsule] [USNM]
- (3) "Apamea lunata Smith Type"; "Alameda

Co., Cal."; "June"; "Collection J. B. Smith" [A ♂, good condition, abdomen missing] [AMNH]

- (4) "Apamea lunata Smith Type"; "Mt. Shasta Dist., California"; "6542"; "Edwards"; "No. 10 708 Collection Hy. Edwards"; "AMNH Type No. ____" [A ♀, fair condition, complete, much smaller than male] [AMNH]

Discussion.—The first syntype listed from the U.S. National Museum, the male with the abdomen intact, has been selected, labeled, and is now designated the lectotype. Smith renamed this *albilunata* in 1899.

Ursogastra lunata Smith, 1906, N.Y. Ent. Soc. Jour. 14: 13.

Habitat.—Huachuca Mts., Ariz., Dr. Barnes; Palmerly, Cochise Co., Ariz., in August, Brooklyn Institute Collection. "Two somewhat defective males only are at hand."

Syntypes examined: 2 (AMNH and USNM)

- (1) "Ursogastra lunata Smith ♂ type"; "Huachuca Mts., Ariz."; "J. B. Smith Collection, Rutgers" [Good condition, complete] [AMNH]
- (2) "Ursogastra lunata Smith cotype ♂"; "Palmerly, Cochise Co., Ariz., VIII"; "Type No. 33838, U.S.N.M." [USNM]

Discussion.—The "♂ type" in the American Museum of Natural History has been selected, labeled, and is now designated the lectotype.

Mamestra lunolacta Smith, 1903, N.Y. Ent. Soc. Jour. 11(1): 17.

Habitat: Idaho; Pullman, Washington, C.V. Piper. "Two females, both somewhat rubbed and with defective thoracic vestiture."

Syntypes examined: 2 (AMNH)

- (1) "Mamestra lunolacta Smith, ♀ type"; "Pullman, Wash."; "Collector C. V. Piper"; "95"; "J. B. Smith Collection Rutgers"; "39" [Fair, inner margins of forewings rubbed]
- (2) "Mamestra lunolacta Smith, ♀ cotype"; "Idaho"; "Collection J. B. Smith" [Poor condition]

Discussion.—The "♀ type" has been selected, labeled, and is now designated the lectotype.

Apamea lusca Smith, 1891, List Lepidoptera Boreal Amer., p. 45.

"The manuscript name *lusca* Harris is listed as a synonym of *H. nictitans* (Linn.).

Smith (1893, U.S. Natl. Mus. Bul. 44, p. 175) referred to this as "*Apamea lusca* Harr." as a synonym of *nictitans* and stated: "The *Apamea lusca* is in the Harris collection in the Boston Society of Natural History."

McDunnough (1938, South. Calif. Acad. Sci. Mem., v. 1, p. 90) listed *lusca* Sm. as a junior synonym of *Apamea americana* (Speyer).

Discussion.—This name is not available and its use here in this discussion is not intended to validate it. The International Code of Zoological Nomenclature

(1961, p. 11, Article 11 (d)) stated: "A name first published as a synonym is not thereby made available."

Bomolocha latalba Smith, 1906, N.Y. Ent. Soc. Jour. 14: 29.

"Habitat.—Cartwright, Man., Mr. E. Firmstone Heath." "Two males and three females are at hand, all of them of Mr. Heath's collecting and three of them very good examples."

Syntypes examined: 2 (AMNH)

- (1) "Bomolocha latalba Smith ♂ type"; "J. B. Smith Collection, Rutgers" [Good condition, complete]
- (2) "Bomolocha latalba Smith ♀ type"; "J. B. Smith Collection, Rutgers" [Good condition, complete]

Discussion.—Neither syntype bears locality or collection data labels. Smith said they were from Cartwright, Manitoba, from E. Firmstone Heath. The "♂ type" has been selected, labeled, and is now designated the lectotype.

Diallagma lutea Smith, 1900, U.S. Natl. Mus. Proc. 22(1203): 483.

"Habitat.—Charlotte Harbor (Mrs. Slosson); Archer, Florida, July 3 (Koebele); September (USNM)."

"Several specimens representing both sexes, are before me, and I have seen others." "Type.—Cat. No. 4834, U.S.N.M."

Syntypes examined: 6 (4 USNM and 2 AMNH)

- (1) "Diallagma lutea Smith ♂ type"; "Fla."; "21/2 82"; "Through C. V. Riley"; "Type No. 4834, U.S.N.M." [Good condition, complete] [USNM]
- (2) "Diallagma lutea Smith ♂ cotype"; "Archer, Fla., 7/3 82"; "A. Koebele Collector"; "Type No. 4834, U.S.N.M."; "36511" [USNM]
- (3) "Diallagma lutea Smith ♀ type"; "Fla."; "21/2 82"; "Type No. 4834, U.S.N.M." [USNM]
- (4) "Diallagma lutea Smith cotype"; "Texas"; "9/2 82"; "Through C. V. Riley"; "Type No. 4834, U.S.N.M."; "*Antispila viticordifolliella*" [A ♂, abdomen missing] [USNM]
- (5) "Diallagma lutea Smith cotype"; "Florida"; "J. B. Smith Collection, Rutgers" [A ♀] [AMNH]
- (6) "Diallagma lutea Smith cotype"; "Fla."; "9/3 82"; "J. B. Smith Collection Rutgers" [A ♀] [AMNH]

Discussion.—Smith did not give Texas in the original description, yet that is the locality on the label of one of the syntypes from the U.S. National Museum. Smith did not give the date that appears on the labels of the "♂ type" and "♀ type," February 21, 1882 (21/2 82). He said the "7/3 82" on the Archer, Fla., specimen means July 3, but in consideration of the other labels it would probably be more correct to use March 7. He also gave the month September. Two of the syntypes are labeled "9/2 82" and "9/3 82." These dates may be September 2 and 3, 1882, but again it seems more likely that the numbers mean February 9 and March 9, 1882.

The "♂ type" in the U.S. National Museum has been selected, labeled, and is now designated the lectotype.

Hadena luteocinerea Smith, 1900, U.S. Natl. Mus. Proc. 22(1203): 468.

"Habitat.—Montana." "A single male in fair condition."

Holotype.—In the U.S. National Museum. The specimen is labeled "Hadena luteocinerea Smith ♂ type"; "Mont."; "Type. No. 5134 USNM"; "36511." The abdomen is missing.

Copicullia luteodisca Smith, 1909, N.Y. Ent. Soc. Jour. 17: 63.

"Habitat.—Deming, New Mexico, September 1-7." "Two females in good condition from Dr. Wm. Barnes."

Barnes and McDunnough (1913, Contrib. Nat. Hist. Lepidoptera N. Amer. 2(1): 22, pl. 10, fig. 6) illustrated a female cotype from Deming, N. Mex.

Syntypes examined: 2 (USNM and AMNH)

- (1) "Copicullia luteodisca Smith cotype"; "Deming, N. Mex."; "Sept. 1-7"; "Photograph Pl. 10, No. 6."; "Barnes Collection"; "♀ genitalia no. 2611, JFGC." [Good condition] [USNM]
- (2) "Copicullia luteodisca Smith ♀ type"; "Deming, N. Mex."; "Sept. 1-7"; "J. B. Smith Collection, Rutgers" [Excellent condition, complete] [AMNH]

Discussion.—The two syntypes are both females with identical locality and collecting date labels. The syntype in the American Museum of Natural History is in the best condition and is labeled "♀ type," but the syntype in the U.S. National Museum was illustrated. Accordingly, in line with the recommendation of the International Code of Zoological Nomenclature, I am in this case selecting the specimen that was illustrated as the lectotype. It has been so labeled and is presently designated the lectotype. I realize that I have not been consistent in following this recommendation in the selection of other lectotypes in this bulletin and especially so where that action would cause a female to be selected over a male and/or the resultant selection would cause the lectotype to be located in a foreign institution. I have on several occasions selected lectotypes from syntypes in other institutions when there were female syntypes in the U.S. National Museum that had been illustrated by Barnes and McDunnough.

Agrotis luteola Smith, 1888, U.S. Natl. Mus. Proc. 10: 457.

"Habitat.—Arizona." "One ♀ specimen in Mr. Neumoegen's collection."

Smith (1893, U.S. Natl. Mus. Bul. 44, p. 94) stated:

"The type is in Mr. Neumoegen's collection."

Holotype.—In the U.S. National Museum. The specimen is labeled "14"; "Luteola Smith [Smith's handwriting]"; "Ariz., Frank." "The specimen is a female. It is not labeled "type." There is another specimen in the U.S. National Museum labeled "14"; "Coll. N."; "Col. B. Neumoegen"; "Collection Brklyn. Mus.";

"Agrotis [Grote's handwriting], luteola Smith [Smith's handwriting]." The last label is an elongate, red-bordered label of the type used by Grote. The specimen is a male, with the right valve of the genitalia missing. The second specimen is the wrong sex, and it is not labeled as being from Arizona although it may actually be from that area. D. F. Hardwick has been studying the taxonomy of the group of noctuids to which this species belongs and has conferred with me regarding the type of this species. He pointed out that the female specimen best agrees with the details of the original description. We agree that it should be construed to be the holotype.

Scotogramma luteola Smith, 1893, Ent. News 4(3): 101, pl. 6, fig. 10.

"Hab.—Laggan, British Col., 6700 to over 7000 feet, July and August. Bean, Nos. 463, 495, 496." Smith (1894, Amer. Ent. Soc. Trans. 21: 57, pl. 2, fig. 10) again described this as new using the same plate.

Syntypes examined: 3 (2 AMNH and 1 USNM)

- (1) "Scotogramma luteola Smith ♂ type"; "Laggan, B.C. above 7000 ft., Jul. 22"; "Collection J. B. Smith" [Fair condition, right valve gone] [AMNH]
- (2) "Scotogramma luteola Smith ♂ type"; "Laggan, B.C., above 7000 ft., Aug. '92"; "J. B. Smith Collection, Rutgers" [Very good, well marked, complete, specimen used for adult illustration by Smith] [AMNH]
- (3) "Scotogramma luteola Smith ♂ type"; "Laggan, B.C., 6800 ft., Aug. 22"; "Type No. 164, U.S.N.M." [USNM]

Discussion.—All three syntypes are marked "♂ type" and all are from the same locality. Two have been illustrated. A slide of a right valve in the American Museum of Natural History was likely the basis for the illustration of the valve appearing in the paper of 1894 and undoubtedly came from the first syntype listed. The other syntype in this museum is the specimen illustrated in the original paper and it is complete. It has been selected, labeled, and is now designated the lectotype because it was illustrated first and because the genitalia when prepared will be complete and not broken.

Aleptina luteoedia Smith, 1907, Amer. Ent. Soc. Trans. 33: 136.

"Hab.—Southern Arizona, Poling, August 1st to 15th; Yavapai County, Arizona, Hutson, May 22nd; Baboquavaria Mts., Arizona, Snow." "Four males and two females, in fair to good condition, and all the males decidedly smaller than either of the females."

Syntypes examined: 6 (2 AMNH, 2 USNM, and 2 KU)

- (1) "Aleptina luteoedia Smith ♂ type"; "So. Arizona, Poling"; "Aug. 1-15"; "Collection J. B. Smith" [Good condition, complete] [AMNH]
- (2) "Aleptina luteoedia Smith ♀ type";

"Yavapai Co., Ariz., V-22"; "Collection J. B. Smith" [Fair condition, antennae missing] [AMNH]

- (3) "Aleptina luteoedia Smith ♂ cotype"; "So. Arizona, Poling"; "Aug. 1-15"; "♂ genitalia no. 1869, JGF." [USNM]
- (4) "Aleptina luteoedia Smith cotype"; "So. Arizona, Poling"; "Aug. 1-15" [A ♂] [USNM]
- (5) "Aleptina luteoedia Smith ♀ cotype"; "Baboquavaria Mts., Ariz., F. H. Snow"; "313" [KU]
- (6) "Aleptina luteoedia Smith cotype"; "Baboquavaria Mts., Ariz., F. H. Snow" [A ♂] [KU]

Discussion.—The "♂ type" in the American Museum of Natural History has been selected, labeled, and is now designated the lectotype.

Leucania luteopallens Smith, 1902, U.S. Natl. Mus. Proc. 25(1283): 180, pl. 5, fig. 4.

"Habitat.—Canada to Florida; Elizabeth, New Jersey, May and June; Anglesea, New Jersey, in April; Archer, Florida, in March." "Twenty or more examples are before me from almost every North and Middle Atlantic State, but only on a few are there dates of capture." "Type.—No. 6244, U.S.N.M."

Hampson (1905, Catalogue of the Lepidoptera Phaenae in the Collection of the British Museum, v. 5, p. 599) listed a male cotype from New Hampshire.

Barnes and McDunnough (1913, Contrib. Nat. Hist. Lepidoptera N. Amer. 2(1): 16, pl. 7, fig. 4) illustrated a male cotype without locality.

Syntypes examined: 4 (3 USNM and 1 AMNH)

- (1) "Leucania luteopallens Smith ♀ type"; "Elizabeth, N.J., 5. 28"; "Type No. 6244, U.S.N.M."; "♀ genitalia no. 631, JGF." [Good condition] [USNM]
- (2) "Leucania luteopallens Smith cotype"; "1491 ♀"; "Barnes Collection" [A ♀] [USNM]
- (3) "Leucania luteopallens Smith cotype"; "1490 ♂"; "Barnes Collection"; "Photograph Pl. 7, No. 4" [Good condition, complete] [USNM]
- (4) "Leucania luteopallens Smith ♂ type"; "L. I."; "Collection G. D. Hulst" [Fairly good condition, abdomen missing] [AMNH]

Discussion.—Smith said the species occurred from Canada to Florida and that he had 20 or more specimens from almost every North and Middle Atlantic State. He listed, however, only three specific localities. I have located only 10 or possibly 11 syntypes. Besides those listed here, there are five, two male and three female cotypes, in the American Museum of Natural History. For some reason I neglected to record the details in my notes. Rindge (1955, p. 119) listed the specimens. The localities Long Island, Torrington, Conn., Webster, N.H., and New Hampshire were not specifically cited by Smith. Another male cotype from New Hampshire is listed by Hampson (1905, p. 599) as being in the British Museum (Natural History).

In choosing a lectotype for this species, three factors were considered. Specimens bearing the USNM type number cited in the original description, specimens illustrated, and specimens marked "type" by Smith. Only two specimens bear the USNM type number 6244. The specimens were entered in the type book on February 26, 1902. One specimen is the "♀ type" and the other, another specimen from Elizabeth, N.J., a male, that was determined as the species but not marked a type by Smith. It is in the U.S. National Museum, and the genitalia have been prepared and are on slide number 630, J. G. Franclemont. It probably should be considered a syntype, but in the absence of a Smith type label I have not considered it so. Smith illustrated a valve of the male genitalia, but I have no idea what specimen furnished the valve shown. There are four genitalia slides containing the entire genitalia of six specimens, two each on two slides, in the American Museum of Natural History. I do not know which one was used for the illustration or what specimen the slides came from. Barnes and McDunnough illustrated the "cotype" male now in the U.S. National Museum, but that specimen does not have a locality label. Of the two specimens marked "type" by Smith, the "♂ type" is from Long Island (L.I.), a locality not specifically listed by Smith, and it lacks an abdomen. The "♀ type" labeled "Type No. 6244, U.S.N.M.," is in good condition and from Elizabeth, N.J., which was specifically listed by Smith. The "♀ type" in the U.S. National Museum has been selected, labeled, and is now designated the lectotype.

Carneades luteositus Smith, 1900, U.S. Natl. Mus. Proc. 22(1203): 433.

"*Habitat*.—Hall Valley, Colorado, July 24 to 30 (Dr. Barnes)." "One male and one female, both in good condition."

Hampson (1903, Catalogue of the Lepidoptera Phalaenae in the Collection of the British Museum, v. 4, p. 242) stated: "Pl. LXIII, fig. 23." and "This species is unknown to me; figured from a photograph from type in U.S. Nat. Mus." "♂, from Colorado."

Lectotype.—in the U.S. National Museum. Selected by Todd (Oct. 4, 1968, Wash. Ent. Soc. Proc. 70(3): 272). The lectotype is labeled "Carneades luteositus Smith ♂ type"; "Hall Valley, Colo."; "Type No. 5138 U.S.N.M."; "36511"; "♂ genitalia on slide 2293, E.L.T."; "Lectotype, Carneades luteositus Sm., By E. L. Todd."

Leucania lutina Smith, 1902, U.S. Natl. Mus. Proc. 25(1283): 176.

A new name for *Leucania velutina* Smith (1900, U.S. Natl. Mus. Proc. 22(1203): 480). The type is ipso facto type of *velutina*.

Agrotis lutulenta Smith, 1890, Amer. Ent. Soc. Trans. 17: 50.

"*Habitat*.—Sierra Nevada, Cal. (McGlashan)."

"Types, a male in the Rutgers College collection; others in collection Hy. Edwards."

Smith (1890, U.S. Natl. Mus. Bul. 38, p. 173) stated: "Types, a male in the Rutgers College collection;

others in collections of Hy. Edwards and U.S. National Museum."

Smith (1893, U.S. Natl. Mus. Bul. 44, p. 98) stated: "Types are in the National Museum; others in collection Edwards and Rutgers College."

Syntypes examined: 5 (3 USNM and 2 AMNH)

- (1) "Agrotis lutulenta Smith Type"; "Sier. Nev., Cal."; "Type No. 120, U.S.N.M."; "36511"; "♂ Gen. #425, FHB."; "Barnes Collection" [USNM]
- (2) "Agrotis lutulenta Smith Type"; "Type No. 120, U.S.N.M." [A ♀, word "Type" in upper corner of label] [USNM]
- (3) "Agrotis lutulenta Smith Type"; "Type No. 120, U.S.N.M." [A ♀, abdomen broken, loose in type box] [USNM]
- (4) "Agrotis lutulenta Smith Type"; "Sier. Nev., Cal."; "No. 9883 Collection Hy. Edwards"; "AMNH Type No. ____"; "Slide No. Eu 324.1 [McD.]" [A ♂, rather poor] [AMNH]
- (5) "Agrotis lutulenta Smith Type"; "Sier. Nev., Cal."; "No. 9882 Collection Hy. Edwards"; "AMNH Type No. ____"; "Slide No. Eu 324.2 [McD.]" [A ♂, a little rubbed] [AMNH]

Discussion.—If a male syntype was in the Rutgers collection as Smith indicated, it was not located by Rindge (1955, p. 119). The three specimens in the U.S. National Museum must have been received prior to Smith's paper of 1890 as he listed this institution as containing the type in that paper. The three were entered in the type book under number 120 on June 18, 1896. During a visit to this museum, D. F. Hardwick penciled a note in my workbook that he recommended selection of the male syntype in the U.S. National Museum. That specimen, genitalia prepared by F. H. Benjamin, has been labeled and is now designated the lectotype.

Tripudia luxuriosa Smith, 1900, U.S. Natl. Mus. Proc. 22(1203): 490.

"*Habitat*.—Arizona; Santa Rita Mountains, Arizona, June 14, 1898, (E. A. Schwarz)." "Two females; one of them, taken by Mr. Schwarz, very fresh, the other, an old example, a little faded and without definite locality. The description is from the fresh example, which is really very handsome and richly colored." "Type.—Cat. No. 4779, U.S.N.M."

Syntypes examined: 2 (USNM and AMNH)

- (1) "Tripudia luxuriosa Smith ♀ type"; "S. Rita Mts., Ar., 14 June 98"; "E. A. Schwarz collector"; "Type No. 4779, U.S.N.M."; "♂ gen. 2 (8Sept1942), C.H." [A ♂, not a ♀] [USNM]
- (2) "Tripudia luxuriosa Smith ♀ cotype"; "Ariz."; "Collection J. B. Smith" [Fair condition, complete] [AMNH]

Discussion.—Only one specimen bears the USNM type number given in the original description. In my opinion it is the holotype, but, as I have indicated elsewhere, others may not agree. For that reason, I have selected, labeled, and now designate the "♀ type," a male, in the U.S. National Museum as the lectotype. This action will insure that it is considered the type-

specimen by all whether it is determined to be a holotype or lectotype.

***Hadena macerata* Smith, 1902, N.Y. Ent. Soc. Jour. 10: 40.**

"*Habitat*.—Cartwright, Manitoba, July 11; Winnipeg, Manitoba, July 7." "Two females from Mr. Heath and Mr. Hanham, respectively."

Hampson (1908, Catalogue of the Lepidoptera Phalaenae in the Collection of the British Museum, v. 7, p. 164) stated: "Pl. CXII. fig. 1" and "This species is unknown to me; figured from a drawing from type in U.S. Nat. Mus." "♀, Manitoba."

Syntypes examined: 2 (USNM and AMNH)

- (1) "*Hadena macerata* Smith ♀ type"; "Winnipeg, Man."; "W. 7/7/97"; "Type No. 5157, U.S.N.M."; "♀ genitalia no. 153, JFGC." [USNM]
- (2) "*Hadena macerata* Smith cotype"; "Cartwright, Manitoba, 11-7-99"; "J. B. Smith Collection, Rutgers" [A ♀] [AMNH]

Discussion.—The syntype in the U.S. National Museum was illustrated by Hampson (1908, p. 112, fig. 1). It is labeled "♀ type" and has been selected, labeled, and presently designated the lectotype.

***Taeniocampa macona* Smith, 1908, N.Y. Acad. Sci. Ann. 18(2): 102.**

"*Habitat*: Witch Creek, Cal., Jan. 30, Feb. 1-14." "Two males and two females, . . ."

Syntypes examined: 4 (2 AMNH and 2 USNM)

- (1) "*Taeniocampa macona* Smith ♂ type"; "Witch Cr., Cal. 1.30"; "J. B. Smith Collection, Rutgers" [Very good, complete] [AMNH]
- (2) "*Taeniocampa macona* Smith ♀ type"; "Witch Cr., Cal., 11-5"; "Barnes collection" [USNM]
- (3) "*Taeniocampa macona* Smith ♂ cotype"; "Witch Cr., Cal., 11-14"; "Barnes collection" [USNM]
- (4) "*Taeniocampa macona* Smith ♀ cotype"; "Witch Cr., Cal., 11.1"; "J. B. Smith Collection, Rutgers" [AMNH]

Discussion.—The "♂ type" in the American Museum of Natural History has been selected, labeled, and is now designated the lectotype.

***Schinia macroptica* Smith, 1906, N.Y. Ent. Soc. Jour. 14: 21.**

"*Habitat*.—Southern Arizona, Poling." "One female without date or definite locality, but probably from Pima County in September."

Holotype.—In the American Museum of Natural History. The specimen is labeled "*Schinia macroptica* Smith ♀ type"; "So. Ariz., Poling"; "J. B. Smith Collection Rutgers."

***Metoponia macula* Smith, 1891, Amer. Ent. Soc. Trans. 18: 132.**

"*Hab*.—Las Vegas, N. Mex." "Specimens taken by Mr. Meeske are in the collections of Neumoegen and Hulst."

Smith (1893, U.S. Natl. Mus. Bul. 44, p. 316) stated: "Types are in the Neumoegen and Hulst Collections."

Syntypes examined: 5 (3 USNM and 2 AMNH)

- (1) "*Metoponia macula* Smith Type"; "Las Vegas, N.M., H. Meeske '89"; "Col. B. Neumoegen"; "Collection Brklyn. Mus."; "Type [Machine-printed]" [A ♂, fairly good condition, a little corrosion at pin] [USNM]
- (2) No Smith label, but machine-printed label "Typicum specimen"; "Las Vegas, N.M., H. Meeske '89"; "Type No. 304, U.S.N.M."; "Collection Wm. Schaus" [A ♂, abdomen missing] [USNM]
- (3) "*Metoponia macula* Smith Type"; "Hot Springs, N. Mex., 7000 ft. alt."; "Collection G. D. Hulst"; "USNM Acc. 25975 [sic 25977]"; "Type No. 304, U.S.N.M." [A ♂, fair] [USNM]
- (4) "*Metoponia macula* Smith Type"; "N. Mex."; "Collection J. B. Smith" [A ♂, unspread, fair, complete] [AMNH]
- (5) "*Metoponia macula* Smith Type"; "Hot Springs, N. Mex., 7000 ft. alt."; "Collection G. D. Hulst"; "Collection J. B. Smith" [A ♂, rubbed, unspread, complete] [AMNH]

Discussion.—Only two of the syntypes listed are from the specific locality given in the description and for that reason are the only ones really considered for lectotype selection. Of the two, one has the abdomen missing and was not labeled type by Smith in the usual manner. It is unknown who placed the label "Typicum specimen" on this specimen. The other example, from the collection of Neumoegen via the Brooklyn Museum, is in fairly good condition, complete, labeled by Smith, and the best candidate. It has been selected, labeled, and is now designated the lectotype. The lectotype is in the collection of the U.S. National Museum.

***Agrotiphila maculata* Smith, 1893, Ent. News 4(3): 100, pl. 6, fig. 7.**

"*Hab*.—Laggan, British Col., above timber, Bean. Nos. 461, 463."

Smith (1894, Amer. Ent. Soc. Trans. 21: 53, pl. 2, fig. 7) again described this as new, under name *maculate* and using the same plate. He stated:

"*Hab*.—Laggan, British Columbia, July 22, 1890, above timber, 7000 feet; Bean, Nos. 461, 493." "Two male specimens in fair condition."

Syntypes examined: 2 (USNM and AMNH)

- (1) "*Agrotiphila maculata* Smith ♂ type"; "493"; "Laggan, 1890, July 22, Above timber, Nearest 'Slate Mt.'"; "Type No. 143 U.S.N.M."; "♂ Gen. #360, FHB." [Very good condition] [USNM]
- (2) "*Agrotiphila maculata* Smith"; "Brit. Col."; "461"; "Collection J. B. Smith" [Fairly good, complete, some corrosion of pin] [AMNH]

Discussion.—Both syntypes were marked "♂ type" by Smith. The syntype in the U.S. National Museum is in very good condition, is from the locality cited in the

original description, and bears a date. The number "493" apparently was erroneously cited as "463" in Smith's first paper but corrected in the second paper. The other syntype in the American Museum of Natural History is not in as good condition and the number "461" is the only label data other than the name that agrees with the comments in the original description. It was, however, the specimen Smith illustrated. Because it is a recommendation that illustrated syntypes be selected over other syntypes, the "♂ type" in the American Museum of Natural History has been selected, labeled, and is now designated the lectotype.

Carneades maimes Smith, 1903, *Canad. Ent.* 35(5): 131.
"Habitat.—Calgary, Alberta, July 27–August 21 (Mr. Dod); Colorado, July 18 (Mr. Kemp); Brandon, Manitoba (Mr. Hanham)." "Five males and seven females in fair or good condition are before me."
Lectotype.—In the American Museum of Natural History. Selected by Todd (Oct. 4, 1968, *Wash. Ent. Soc. Proc.* 70(3): 272).

Acontia major Smith, 1900, *Amer. Ent. Soc. Trans.* 27: 64.

"Hab.—Colorado [sic], without definite locality."
"Two females from Dr. Barnes."

Syntypes examined: 2 (USNM and AMNH)

- (1) "Acontia major Smith ♀ type"; "Colorado"; "Type No. 5383, U.S.N.M."; "36511" [Fairly good, complete] [USNM]
- (2) "Acontia major Smith ♀ cotype"; "Colorado"; "Collection J. B. Smith" [Fairly good, complete] [AMNH]

Discussion.—The "♀ type" in the U.S. National Museum has been selected, labeled, and is now designated the lectotype.

Feralia major Smith, 1890, *Ent. Amer.* 6(2): 26.

"Habitat.—Washington, D.C., Franconia, N.H., and Plattsburgh, N.Y." "Mr. G. H. Hudson, of Plattsburgh, to whose kindness I owe the chance of seeing a good series, has taken seven specimens, all at electric light, as follows: 1887, May 3, 8, 16(2), 19; 1889, April 18, 28. Of these, two are now in the U.S. National Museum. Mrs. Slosson has taken a specimen at Franconia, and Mr. Schoenborn has a very perfect specimen, also taken at light in Washington very early in the year."

Smith (1893, *U.S. Natl. Mus. Bul.* 44, p. 34) stated: "Types are in the National Museum."

Syntypes examined: 3 (2 USNM and 1 AMNH)

- (1) "Feralia major Smith Type"; "Washington, D.C."; "Apr. 11"; "H. F. Schoenborn collection" [A ♀, wings, good condition, abdomen with some dermestid damage at base] [USNM]
- (2) "Feralia major Smith"; "N.Y."; "Type No. 70, U.S.N.M." [A ♂, rather poor condition] [USNM]
- (3) "Feralia major Smith Type"; "Franconia"; "collection Mrs. A. T. Slosson, Ac. 26226"; "Holotype" [A ♂, fair condition, valves broken] [AMNH]

Other syntypes: 4 (2 females, 2 males, N.Y. State Museum, Albany)

- (1) "Feralia major Type Smith [red label]"; "Feralia major Smith TYPE Smith [black bordered label]"; "Plattsburgh, N.Y. E. Light"; "G.H. Hudson Coll."; "April 28, 1888 no. 3345" [A ♀]
- (2) As above except "April 19, 1889 no. 6118" [A ♂]
- (3) As above except "May 16, 1887 no. 1223" [A ♂]
- (4) As above except "May 16, 1887 no. 1232" [A ♀]

Discussion.—I have included a male in the U.S. National Museum as a syntype because it was determined by Smith, sent by him to that institution as a type, and because the Smith statement of 1893 used the plural "Types are in the National Museum." The "type," a female, in the U.S. National Museum has been selected, labeled, and is now designated the lectotype. The information on the syntypes in the collection of the N.Y. State Museum was furnished by Tim McCabe.

Epizeuxis majoralis Smith, 1895, *U.S. Natl. Mus. Bul.* 48, p. 25, pl. 1, figs. 17 and 18.

"HABITAT.—New York (Ithaca); Ohio (Columbus); Illinois (Carbondale)." "I have six specimens of this species before me, all of them females."

Syntypes examined: 4 (USNM)

- (1) "Epizeuxis majoralis Smith Type"; "W.N.T., Coles, O. [W. N. Tallant, Columbus, Ohio]"; "Type No. 312, U.S.N.M."; "♀ gen. 62, 19Feb.30, C.H."; "36511" [Good condition]
- (2) "Epizeuxis majoralis Smith Type"; "Columbus, O."; "Collection W. N. Tallant"; "Type No. 312, U.S.N.M." [A ♀, good condition]
- (3) "Epizeuxis majoralis Smith Type"; "C.U. Lot No. 28"; "Cornell Univ."; "Type No. 312, U.S.N.M." [A ♀, fair condition]
- (4) "Epizeuxis majoralis Smith Type"; "July"; "Type No. 312, U.S.N.M."; "36511" [A ♀, fair condition]

Discussion.—The syntype labeled "Columbus, O." may be the specimen illustrated (pl. 1, fig. 18), but I am not sure. Two syntypes have not been located. The specimen from which Carl Heinrich prepared a genitalia slide is the best one. It has been selected, labeled, and is now designated the lectotype.

Copicucullia mala Smith, 1908, *N.Y. Acad. Sci. Ann.* 18(2): 118.

"Habitat: Witch Creek, Cal., Aug. 12." "A single male, in fair condition."

Holotype.—In the American Museum of Natural History. The specimen is labeled "Copicucullia mala Smith ♂ type"; "Witch Creek, Calif., VIII.12.06"; "J. B. Smith Collection Rutgers."

Carneades malis Smith, 1900, *U.S. Natl. Mus. Proc.* 22(1203): 450.

"Habitat.—Brandon, Manitoba, October 27, 1898 (Hanham)." "A single male only, under No. 426, of this pretty little species . . ."

Holotype.—In the U.S. National Museum. The specimen is labeled "Carneades malis Smith ♂ type"; "Brandon, Manitoba"; "27.8.98"; "426"; "Type No. 5140 USNM"; "36511."

Taenlocampa malora Smith, 1910, *Canad. Ent.* 42(10): 320, pl. 8, fig. 3.

"Under the name *malora*, I have separated out three males and two females from Calgary, IV, 24, and V, 2, which may be described as being *instabilis* with practically all the red eliminated."

Syntypes examined: 4 (3 AMNH and 1 USNM)

- (1) "Taenlocampa malora Smith ♂ type"; "Calgary, Can., IV-24"; "J. B. Smith Collection, Rutgers" [Fair condition, abdomen greasy but complete] [AMNH]
- (2) "Taenlocampa malora Smith ♀ type"; "Calgary, Can., IV-24"; "J. B. Smith Collection, Rutgers" [Fairly good condition, complete] [AMNH]
- (3) "Taenlocampa malora Smith Paratype"; "Calgary, Can., IV-24"; "J. B. Smith Collection, Rutgers" [A ♂] [AMNH]
- (4) "Taenlocampa malora Smith Paratype"; "Calgary, Can., IV-27"; "Barnes Collection" [A ♀] [USNM]

Discussion.—There is a specimen in the American Museum of Natural History that was not identified or marked as a type by Smith from Calgary, Canada, V.2. The hindwings and abdomen are missing. It is a male and undoubtedly the specimen from which a slide also in this museum was prepared. Smith illustrated the genitalia (pl. 8, fig. 3). Since part of the specimen was missing and because there is no Smith label on it, I have eliminated it from consideration as a lectotype candidate. The "♂ type" in the American Museum of Natural History has been selected, labeled, and is now designated the lectotype.

Acronycta manitoba Smith, 1897, *Ent. News* 8(6): 150 (In key).

Smith (1898, U.S. Natl. Mus. Proc. 21(1140): 90, pl. 12, fig. 1, pl. 17, fig. 24, pl. 20, fig. 14) described and illustrated the species in detail and stated: "*Habitat*.—Winnipeg, Manitoba (Hanham); Glenwood Springs, Colorado, July 16 (Barnes)." "I have two males of this species, one of them a perfect specimen, through the kindness of Mr. Hanham; the other an electric-light capture and a little rubbed, from Dr. Barnes."

Syntypes examined: 2 (USNM)

- (1) "Acronycta manitoba Smith ♂ type"; "8"; "N. Man."; "Type No. 3777, U.S.N.M." [Left valve missing]
- (2) "Acronycta manitoba Smith cotype"; "Glenwood Sps., Col."; "July 16-23"; "3" [A ♂]

Discussion.—In the explanation of the figures on plate 12 of the 1898 paper, Smith stated that figure 1 was of a "female type." That is an error as there were no females. The specimen figured was the "♂ type." That specimen has been selected, labeled, and is now designated the lectotype.

Acronycta mansueta Smith, 1897, *Ent. News* 8(6): 151 (In key).

Smith (1898, U.S. Natl. Mus. Proc. 21(1140): 100, pl. 12, fig. 7, pl. 21, fig. 13) described and illustrated the species in detail and stated: "*Habitat*.—Los Angeles, Nevada County, and Sierra Nevada, California; eastern Washington; Garfield County, Colorado, 7,000 feet (Bruce); Glenwood Springs, Colorado, May and September (Barnes)." "I have seen 10 specimens of this species, evenly divided as to sex, and very little difference indeed between them."

Syntypes examined: 7 (5 USNM and 2 AMNH)

- (1) "Acronycta mansueta Smith ♂ type"; "Nevada Co., Cal."; "306"; "Type No. 3666, U.S.N.M." [Both valves missing] [USNM]
- (2) "Acronycta mansueta Smith ♀ type"; "Easton, Wash. K."; "Type No. 3666, U.S.N.M." [Good condition, complete, specimen figured by Smith] [USNM]
- (3) "Acronycta mansueta Smith cotype ♂"; "Glenwood Springs, Col., 1895-5, W. Barnes"; "33" [USNM]
- (4) "Acronycta mansueta Smith cotype ♀"; "Nevada Co., Cal."; "306"; "Type No. 3666, U.S.N.M." [USNM]
- (5) "Acronycta mansueta Smith cotype ♀"; "Cal."; "Col. E. L. Graef"; "Type No. 33903, U.S.N.M." [Abdomen missing] [USNM]
- (6) "Acronycta mansueta Smith cotype ♂"; "Sier. Nev., Cal."; "Collection J. B. Smith" [Fair, complete] [AMNH]
- (7) "Acronycta mansueta Smith cotype ♀"; "Nevada Co., Cal."; "306"; "Collection J. B. Smith" [Fair, complete] [AMNH]

Discussion.—There are two other specimens in the U.S. National Museum determined by Smith as this species, a male from Glenwood Springs, Colo., and a female from Los Angeles, Calif. Smith made two errors in referring to this species. He stated in the explanation of plate 12, figure 7, that a "male type" was illustrated. The specimen figured was the "♀ type." In the statement of habitat, he listed "eastern Washington; . . ." That should have been Easton, Wash. The label is machine printed and easily read. Easton is slightly east of Tacoma and in western or west-central Washington. The "♀ type" is a very good specimen, the one illustrated. It has been selected, labeled, and is now designated the lectotype.

Caradrina mantalini Smith, 1894, *Amer. Ent. Soc. Trans.* 21: 77, pl. 5, fig. 13.

"*Hab.*—Colorado, Bruce, No. 386; Glenwood Springs, Colo., September, Dr. Barnes." "Two female specimens, the larger from Dr. Barnes, neither of them perfect."

Barnes and McDunnough (1912, *Contrib. Nat. Hist. Lepidoptera N. Amer.* 1(4): 5, pl. 1, fig. 12) placed *mantalini* in the synonymy of *Lycophotia nanalis* Grote and stated: "We have the type of *mantalini* Sm. and the tibiae are distinctly spinose, precluding association with *Caradrina*."

Dod (1913, Ent. News 24: 255) stated: "*Mantalini* was described from 'two females' from Colo. (Bruce) and Glenwood Springs, Colo. (Barnes). My notes say that both types are males. Dr. Barnes has the Glenwood Springs type, and the other is in the Washington collection, where are also two females from Nevada Co., Calif., each bearing the museum red 'type' label, though they can't be types on the strength of it."

Syntypes examined: 2 (USNM)

- (1) "Caradrina mantalini Smith Type"; "Glenwood Springs, Col., 9-1892, W. Barnes"; "Barnes collection" [A ♂]
- (2) "Caradrina mantalini Smith ♂ type"; "Colo. Bruce"; "386"; "Type No. 227 U.S.N.M."; "36511"; "♂ genitalia on slide 1796, ELT."

Lectotype.—The lectotype is in the U.S. National Museum. It was selected by Buckett (1968, Calif. Dept. Agr. Bur. Ent. Occas. Papers No. 16, p. 26), but he erred in citing the locality data. The specimen selected is the one that was illustrated by Smith and it was the specimen marked "♂ type." Buckett cited the locality as "Glenwood Springs, Colorado, September," which is the label data of the other specimen. Buckett did correctly cite information from other labels on the "♂ type" as can be determined by examination of his statement and the quoted label data here. I have placed a label "Lectotype, selected by Buckett, 1968" on the correct specimen.

Cerma marina Smith, 1906, Canad. Ent. 38(7): 226.

"*Habitat*.—So. Arizona, Poling; Santa Catalina Mts., Pinal County, Arizona, Dr. Barnes." "One male and one female."

Syntypes examined: 2 (AMNH and USNM)

- (1) "Cerma marina Smith ♂ type"; "So. Arizona, Poling"; "J. B. Smith Collection, Rutgers" [Fair condition, complete] [AMNH]
- (2) "Cerma marina Smith ♀ type"; "Santa Catalina Mts., Pinal Co., Ariz." [USNM]

Discussion.—The "♂ type" in the American Museum of Natural History has been selected, labeled, and is now designated the lectotype.

Acronycta marmorata Smith, 1897, Ent. News 8(6):

151 (in key).

Smith (1898, U.S. Natl. Mus. Proc. 21(1140): 131, pl. 13, fig. 3, pl. 21, fig. 22) described and illustrated the species in detail and stated: "*Habitat*.—Folsom, California, in July; Montana." "I have three males and one female before me. The Californian specimens are from the U.S. National Museum, the other from the collection of Mr. J. Doll."

Hampson (1909, Catalogue of the Lepidoptera Phalaenae in the Collection of the British Museum, v. 8, p. 74) stated: "Pl. CXXIV, fig. 23" and "This species is unknown to me, figured from a drawing from cotype in Coll. J. B. Smith." "♀, California." Smith (1911, Pomona Jour. Ent. 3(3): 565) stated: "The type locality is Folsom, California, and my example is dated May 7, 1885."

Syntypes examined: 4 (3 USNM and 1 AMNH)

- (1) "Acronycta marmorata Smith ♂ type"; "Mont."; "Doll"; "Col. Jacob Doll" [Abdomen glued on] [USNM]
- (2) "Acronycta marmorata Smith ♀ type"; "Mont."; "Type No. 3668, U.S.N.M."; "36511" [Excellent condition, complete] [USNM]
- (3) "Acronycta marmorata Smith cotype ♂"; "Folsom, Cal., 3/18"; "From Dept. Agriculture"; "Type No. 3668, U.S.N.M." [Fair condition, complete] [USNM]
- (4) "Acronycta marmorata Smith cotype ♂"; "Folsom, Cal., 5-1-1885"; "J. B. Smith Collection, Rutgers" [AMNH]

Discussion.—The adult figured by Smith (pl. 13, fig. 3) was the "♂ type." It is in very good condition, but the abdomen is glued on and may not belong to the specimen. Hampson said he figured the species from a drawing from a cotype in the Smith collection, a female from California! Smith's cotype was a male. If Hampson illustrated a female, it has to be the "♀ type" and it was from Montana! In 1911 Smith said the type locality was Folsom, Calif. That statement is not binding.

The additions and corrections of the International Code of Zoological Nomenclature passed at the 17th International Congress of Zoology, 30th September 1972, include the following addition: "Article 74. Lectotypes. (a) (ii):—The first published designation of a lectotype supersedes all previous restrictions of the use of the name of the species." "Example.—The type-locality becomes the geographical place of origin of the lectotype, despite any previous restriction of the type-locality."

Smith stated in the original description that the California specimens were collected in July. The specimens were actually collected March 18 and May 1! Selection of the "♂ type," the specimen figured by Smith, might be the cause of some confusion should the abdomen that is glued on prove to be of another species. The specimen is in good condition and could be used if maculation were really distinctive. Selection of the cotype male illustrated by Hampson would mean a different type locality, and as I am uncertain that the material from the two localities is the same and because the Montana specimens were marked "♂ type" and "♀ type," that selection does not seem correct. Accordingly, I have selected, labeled, and now designate the "♀ type" in the U.S. National Museum as the lectotype. It is an excellent, complete specimen from Montana.

Carneades masculinus Smith, 1903, N.Y. Ent. Soc. Jour. 11(1): 6.

"*Habitat*: Silverbow Co., Montana, 5,800 feet, August 28, R. A. Cooley; Yakima, Washington, C. V. Piper; southern Utah, April 1-15, Poling." "Seven examples, all males, and four of them decidedly ragged."

Syntypes examined: 2 (AMNH and USNM)

- (1) "Carneades masculinus Smith ♂ type"; "Silverbow Co., Mont., Elev. 5800, Coll. R.

A. Cooley, 8/25/1900"; "J. B. Smith Collection, Rutgers" [Good condition, complete, but some verdigris forming] [AMNH]

- (2) "Carneades masculinus Smith δ cotype"; "So. Utah, Poling"; "April 1-15"; "Slide 23a"; "Barnes Collection" [USNM]

Discussion.—Smith probably did not mark the four "decidedly ragged" specimens as types. Of the five missing syntypes, at least one must have been from Yakima, Wash., C. V. Piper. The " δ type" in the American Museum of Natural History has been selected, labeled, and is now designated the lectotype.

Rhododipsa masoni Smith, 1896, Ent. News 7(9): 284.

"*Hab.*—Utah, California and Colorado." "I have no definite locality for the Utah specimens. The California specimens were, I believe, taken in the Yellowstone.[!]" One of the Colorado specimens I have had in my collection for several years, perhaps one of the specimens taken by Mr. Bruce in 1888. Mr. Bruce sent me additional specimens a short time ago, with the information that it was collected in some numbers by Mr. T. J. Mason, on the flowers of *Rudbeckia*."

Syntypes examined: 3 (USNM)

- (1) "Rhododipsa masoni Smith Type 1"; "Denver, Colo., Bruce"; "Type No. 4842, U.S.N.M."; "36511" [A ϕ , very good, complete]
(2) "Rhododipsa masoni Smith Type 3"; "U.T. [Utah Territory]"; "36511"; "Type No. 4842, U.S.N.M." [A δ]
(3) "Rhododipsa masoni Smith Type 4"; "Colo., 1889"; "Type No. 4842, U.S.N.M." [A ϕ]

Discussion.—Smith probably had eight or more specimens. He referred to specimens in the plural from each of three localities and then added that Bruce sent him more specimens from Colorado. I have been unable to locate a specimen labeled "Type 2." This method of numbering the syntypes differs from Smith's usual method of marking types. In the original description he said he had California specimens he thought were from the Yellowstone! Did he mean Yosemite or were the specimens actually from the Yellowstone and he believed that to be in California? This species is easily recognized by the coloration and maculation. The syntype marked "Type 1" is in very good condition, is complete, and will make a good type-specimen. It has been selected, labeled, and is now designated the lectotype.

Taeniocampa mecrona Smith, 1908, N.Y. Ent. Soc.

Jour. 16: 95.

"*Habitat.*—Kaslo, British Columbia, in early July." "A series of 2 $\delta\delta$ and 6 $\phi\phi$ from Mr. J. W. Cockle who called my attention to the fact that it differed from *T. communis* Dyar, with which it may be confused in collections."

Syntypes examined: 5 (3 AMNH and 2 USNM)

- (1) "Taeniocampa mecrona Smith δ type"; "Kaslo, B.C."; "3.VII.05"; "J. B. Smith Collection, Rutgers" [Good condition, ab-

domen in capsule is authentic, it broke off specimen as I was repinning in type box] [AMNH]

- (2) "Taeniocampa mecrona Smith ϕ type"; "Kaslo, B.C."; "1.III.05"; "J. B. Smith Collection, Rutgers" [Right hindwing broken] [AMNH]
(3) "Taeniocampa mecrona Smith ϕ cotype"; "Kaslo"; "3.VII.02"; "Barnes Collection" [USNM]
(4) "Taeniocampa mecrona Smith cotype"; "Kaslo, B.C., 8/14"; "Barnes Collection"; " δ genitalia slide 790, ELT." [USNM]
(5) "Taeniocampa mecrona Smith cotype"; "Kaslo, B.C."; "3.VII.05"; "J. B. Smith Collection, Rutgers" [A ϕ] [AMNH]

Discussion.—Three syntypes have not been located. The " δ type" in the American Museum of Natural History has been selected, labeled, and is now designated the lectotype.

Agrotis medialis Smith, 1888, U.S. Natl. Mus. Proc. 10: 459.

"*Habitat.*—Texas." "Several specimens, δ and ϕ , in collection U.S. Nat. Mus."

Smith (1890, U.S. Natl. Mus. Bul. 38, p. 166, pl. 5, fig. 83) stated: "Seems not uncommon in Texas and is a very distinct species. It was in the Belfrage collection named *muraenula*, but is a very different species." The "harpe and clasper" of the male genitalia were illustrated.

Smith (1893, U.S. Natl. Mus. Bul. 44, p. 95) stated: "The types are in the National Museum."

Syntypes examined: 2 (USNM)

- (1) "Agrotis medialis Smith Type"; "27/10"; "Collection C. V. Riley"; "Type No. 114, U.S.N.M." [A δ , right hindwing missing]
(2) "Agrotis medialis Smith Type"; "14/10"; "Collection C. V. Riley"; "Type No. 114, U.S.N.M." [A ϕ , good condition]

Discussion.—There is a male with the abdomen missing in the U.S. National Museum that is labeled "medialis" [Smith's handwriting?]; "Texas"; "Collection Belfrage"; "Collection C. V. Riley"; "Slide 35b"; "Barnes Collection." There are other specimens from Texas and Belfrage with the similar peculiar, small data labels. It is apparent that the two marked "Type" are Belfrage specimens from Texas, even though they are not so labeled. The female marked "Type" in the U.S. National Museum has been selected, labeled, and is now designated the lectotype. I have prepared the genitalia and they are mounted on female genitalia slide 2243, ELT.

Bleptina medialis Smith, 1895, U.S. Natl. Mus. Bul. 48, p. 60, pl. 5, figs. 6 and 7, pl. 12, fig. 15.

"*HABITAT.*—Semitropical Florida." "Four specimens are before me, equally divided as to sex. One male was collected by Mr. E. A. Schwarz at Coconut Grove, and is from the collection of the United States National Museum; the others were collected by Mr. Palm in the same region, but the exact locality I do not have."

Syntypes examined: 4 (3 USNM and 1 AMNH)

- (1) "Bleptina medialis Smith Type"; "Cocoanut Grove, Fla."; "E. A. Schwarz Collector"; "Type No. 318, U.S.N.M."; "♂ Gen. #212, FHB." [Fairly good condition] [USNM]
- (2) "Bleptina medialis Smith Type"; "Fla."; "Type No. 318, U.S.N.M." [A ♀, left wings missing] [USNM]
- (3) "Bleptina medialis Smith Type"; "Fla."; "Type No. 318, U.S.N.M."; "36511" [A ♀, rather rubbed] [USNM]
- (4) "Bleptina medialis Smith Type"; "Fla."; "Collection J. B. Smith" [A ♀, good condition, complete] [AMNH]

Discussion.—I am uncertain as to which of the four specimens were illustrated by Smith. During the years, antennae, wings, and so forth, have been lost and/or the positions of the structures have changed, so that none of the syntypes appear to agree with the illustrations. There is only one male syntype, and it is the specimen with the specific locality, "Cocoanut Grove, Fla." It has been selected, labeled, and is now designated the lectotype.

Hydroecia medialis Smith, 1892, Ent. News 3(10): 251, pl. 10, row 1, fig. 6 [sic] [actually fig. 5].

"*Hab.*—Colorado. Bruce (No. 138)." "Specimens of this species are in several collections."

Smith (1894, Amer. Ent. Soc. Trans. 21: 74, pl. 1, row 1, fig. 5) again described this as new, using the same plate and stated: "Both sexes are before me, and other specimens are in collections. I believe that Mr. Bruce took a number of specimens some years ago; . . ."

Smith (1899, Amer. Ent. Soc. Trans. 26: 24, pl. 1, fig. 12) illustrated the male genitalia.

Syntypes examined: 2 (AMNH and USNM)

- (1) "Hydroecia medialis Smith Type"; "Colo., Bruce"; "Collection J. B. Smith" [A ♂, good condition except valves missing, specimen figured on pl. 10, row 1, fig. 5] [AMNH]
- (2) "Hydroecia medialis Smith Type"; "Colo., Bruce"; "Type No. 216, U.S.N.M." [A ♀, broken by corrosion of pin, but repaired] [USNM]

Discussion.—The specimen figured is the syntype in the American Museum of Natural History. It has been selected, labeled, and is now designated the lectotype. Smith figured the genitalia of this species in 1899, but it is not known whether the illustration was from the lectotype or some other subsequently received specimen. I have not located a Smith genitalia slide of this species.

Leucania megadla Smith, 1902, U.S. Natl. Mus. Proc. 25(1283): 191, pl. 5, fig. 15.

"*Habitat*.—Calgary, Alberta, June 15 to July 20; Oregon (Koebele); Pullman, Washington, May 25 (Piper); Nevada County, California (Koebele); Yellowstone Park, Wyoming, July 10, Denver, Colorado, June 30; Chiricahua Mountains, Arizona, July 4(?)." "Sixteen examples, varying in distinctness;

the Calgary specimens are probably all from Mr. Dod, the Yellowstone example is from Dr. Barnes. One example from Calgary is almost as even in color as *dia*, but has the black basal streak obvious." "The single example from the Chiricahua Mountains is a female and in such condition that the reference is not positively made." "Type.—No. 6249, U.S.N.M."

Hampson (1905, Catalogue of the Lepidoptera Phalaenae in the Collection of the British Museum, v. 5, p. 522) listed a male cotype from Calgary, Alberta, Canada, in the British Museum.

Syntypes examined: 8 (6 USNM and 2 AMNH)

- (1) "Leucania megadla Smith ♀ type"; "Calgary [sic], Alberta"; "June 9–15"; "Type No. 6249, U.S.N.M." [A ♂, abdomen of female glued on] [USNM]
- (2) "Leucania megadla Smith cotype"; "Oregon, Koebele"; "From Dept. Agriculture"; "Type No. 6249, U.S.N.M." [A ♂, slightly rubbed, complete] [USNM]
- (3) "Leucania megadla Smith ♂ type"; "Calgary [sic], Alberta"; "June 8–15"; "Collection J. B. Smith" [Left hindwing torn, complete] [AMNH]
- (4) "Leucania megadla Smith cotype"; "Calgary [sic], Alberta"; "July 1–7"; "Barnes"; "Photograph Pl. 7, No. 7"; "Barnes collection" [A ♀] [USNM]
- (5) "Leucania megadla Smith cotype"; "Yellowstone Park, Wyo."; "July 8–15"; "Barnes"; "Barnes Collection" [A ♂] [USNM]
- (6) "Leucania megadla Smith cotype"; "Calgary, Can., VII.26"; "Barnes Collection" [A ♂, genitalia missing] [USNM]
- (7) "Leucania megadla Smith cotype"; "Calgary [sic], Alberta"; "June 16–23"; "Barnes"; "Barnes Collection" [A ♀, very good condition, complete] [USNM]
- (8) "Leucania megadla Smith cotype"; "Denver, Colo."; "June 30"; "J. B. Smith Collection, Rutgers" [A ♀] [AMNH]

Discussion.—Hampson listed a male cotype in the British Museum (Natural History) and seven other syntypes have not been located. Of the latter, some should be from Nevada County, Calif., Pullman, Wash., and Chiricahua Mountains, Ariz. Only two syntypes bear the USNM type number mentioned in the original description. One of these, the "♀ type" has a false abdomen. The other such syntype from Oregon in the U.S. National Museum has been selected, labeled, and is now designated the lectotype.

Scotogramma megaera Smith, 1899, N.Y. Ent. Soc. Jour. 7: 44.

"*Habitat*: Glenwood Springs, Colorado in July." "Dr. Barnes has sent me two specimens, male and female."

Smith (1903, N.Y. Ent. Soc. Jour. 11(1): pl. 1, fig. 16) illustrated the valve of the male genitalia. Barnes and McDunnough (1913, Contrib. Nat. Hist.

Lepidoptera N. Amer. 2(1): 14, pl. 6, fig. 8) illustrated the female type from Glenwood Springs, Colo., and stated: "Hampson made this a synonym of *densa* Sm. but we doubt the correctness of this action."

Syntypes examined: 2 (USNM)

- (1) "Scotogramma megaera Smith ♂ type"; "Glenwood Springs, Col., 1895-7, W. Barnes"; "Type No. 4991, U.S.N.M."; "36511" [Very good condition, complete except left valve missing]
- (2) "Scotogramma megaera Smith ♀ type"; "Glenwood Springs, Col., 1895-7, W. Barnes"; "Photograph, Pl. 6, No. 8"; "Barnes collection"

Discussion.—The "♀ type" was illustrated by Barnes and McDunnough, but the pattern of maculation is not very helpful in determining the actual status of the name. The male genitalia on the other hand are rather significant in this genus. For that reason and because of the incomplete condition of the "♀ type," the "♂ type" has been selected, labeled, and is now designated the lectotype. Smith subsequently illustrated a valve of the male genitalia, but I do not know whether the illustration was prepared from the "♂ type."

***Mamestra megarena* Smith, 1901, Amer. Ent. Soc.**

Trans. 27: 234, pl. 10, fig. 8.

"The fourth series consists of six males and seven females from Glenwood Springs, Hall Valley, Veta Pass and Durango, Colorado; and one female from Senator, Arizona." "The dates for these specimens are June, July, and August . . ." "The example from Senator, Arizona, is a female, . . ." ". . . one example being dated August 24-30, . . ." "This particular form may be known as *megarena*." On page 236 he described it further under the name *Mamestra megarena* n. sp. On page 240, under *Mamestra megarena* Smith, he stated: "Probably a good species, inhabiting the same general region as the preceding [*altua*], but the material is too scanty to speak definitely."

Syntypes examined: 11 (6 USNM and 5 AMNH)

- (1) "Mamestra megarena Smith, ♂ type"; "Glenwood Spgs., Col."; "June 8-15"; "Collection J. B. Smith" [Fair condition, genitalia badly broken, valves missing] [AMNH]
- (2) "Mamestra megarena Smith, ♀ type"; "Glenwood Spgs., Colo."; "Type No. 5763, U.S.N.M." [Good condition] [USNM]
- (3) "Mamestra megarena Smith, ♂ cotype"; "Glenwood Spgs., Colo."; "Aug. 8-15"; "Type No. 5763, U.S.N.M."; "♂ gen. #3, 5Dec. 1930, C.H." [Good condition] [USNM]
- (4) "Mamestra megarena Smith, ♂ cotype"; "Durango, Colo."; "July 8-15"; "Barnes Collection" [Good condition except valve missing] [USNM]
- (5) "Mamestra megarena Smith, ♀ cotype";

"Senator, Ariz."; "July 8-15"; "Barnes collection" [USNM]

- (6) "Mamestra megarena Smith, ♀ cotype"; "Glenwood Spgs., Colo."; "July 1-7"; "Barnes collection" [USNM]
- (7) "Mamestra megarena Smith, ♀ cotype"; "Hall Valley, Colo. 1"; "Aug. 8-15"; "Barnes collection" [USNM]
- (8) "Mamestra megarena Smith, ♂ cotype"; "Durango, Colo."; "Collection J. B. Smith" [Body breaking through mesothorax, antennae and left valve broken] [AMNH]
- (9) "Mamestra megarena Smith, ♂ cotype"; "Glenwood Spgs., Col."; "Aug. 24-30"; "♂ genitalia mounted on slide 61-268, Lloyd M. Martin"; "AMNH Cotype No. ____" [AMNH]
- (10) "Mamestra megarena Smith, ♀ cotype"; "Glenwood Spgs., Col."; "Aug."; "AMNH Cotype No. ____" [AMNH]
- (11) "Mamestra megarena Smith, ♀ cotype"; "Glenwood Springs, Col., Aug. 1892, W. Barnes"; "J. B. Smith Collection Rutgers" [AMNH]

Discussion.—Two syntypes, a male and a female, have not been located. They may be in the collection of the British Museum (Natural History). The genitalia of the "♂ type" are badly broken, and I have been unable to locate the Smith slide from which the illustration was prepared. The "♀ type" is in good condition, but I believe it would be better to select a male as the lectotype. Therefore, the "♂ cotype" in the U.S. National Museum bearing the label "Type No. 5763, U.S.N.M." has been selected, labeled, and is now designated as the lectotype.

***Schinia megarena* Smith, 1906, N.Y. Ent. Soc. Jour.**

14: 27.

Habitat.—Kerrville, Tex.; Utah, August 4 to September 6, Poling." "Nine males and four females all from Mr. Poling. Only one male is from Kerrville, the others simply the 'Utah' and date label. All the examples are a little worn or defective."

Syntypes examined: 7 (5 AMNH and 2 USNM)

- (1) "Schinia megarena Smith ♂ type"; "Utah, Poling"; "8-4-02"; "J. B. Smith Collection, Rutgers" [Fair, complete] [AMNH]
- (2) "Schinia megarena Smith ♀ type"; "Utah, Poling"; "8-8-2"; "J. B. Smith Collection, Rutgers" [Fair, left hindwing split] [AMNH]
- (3) "Schinia megarena Smith cotype"; "8-30-06"; "J. B. Smith Collection, Rutgers" [A ♂, worn, complete] [AMNH]
- (4) "Schinia megarena Smith cotype"; "8-4-2"; "Utah, Poling"; "J. B. Smith Collection, Rutgers" [A ♀, worn, complete] [AMNH]
- (5) "Schinia megarena Smith cotype"; "Kerrville, Texas"; "J. B. Smith Collection, Rutgers" [A ♂, faded, complete] [AMNH]
- (6) "Schinia megarena Smith ♂ cotype"; "Utah, Poling"; "8-30-02"; "Barnes collection" [USNM]

- (7) "Schinia megarena Smith ♀ cotype"; "Utah, Poling"; "8-26-02"; "Barnes collection" [USNM]

Discussion.—As Smith indicated, all specimens are worn or defective. Six syntypes have not been definitely located, but at least four specimens in the American Museum of Natural History were identified by Smith as this species and are probably part of the original series. The "♂ type" has been selected, labeled, and is now designated the lectotype.

Carneades megastigma Smith, 1900, U.S. Natl. Mus. Proc. 22(1203): 425.

Habitat.—Edge Calgary, August 24; Calgary, September 15, Canada (Dod). "Two females; one, the smaller, in good condition, the other lacking one primary and an abdomen, lost in the mail, but otherwise good." *Type*.—Cat. No. 4811, U.S.N.M." Hampson (1903, Catalogue of the Lepidoptera Phalaenae in the Collection of the British Museum, v. 4, p. 277) stated: "Pl. LXV, fig. 14" and "This species is unknown to me; figured from a photograph from type in U.S. Nat. Mus."

Syntypes examined: 1 (USNM)

- (1) "Carneades megastigma Smith ♀ type"; "15.IX.95"; "Type No. 4811, U.S.N.M."; "36311"; "♀ genitalia slide 2226, ELT." [Excellent condition]

Discussion.—The broken specimen mentioned by Smith has not been located. As only one specimen bearing USNM type number 4811 has been found, it probably should be considered the holotype, but to insure that it is the type-specimen, I have selected, labeled, and now designate it the lectotype. It is also the specimen from which Hampson illustrated the species.

Tornacontia megocula Smith, 1900, Amer. Ent. Soc. Trans. 27: 58.

Hab.—Southern California (Barnes). "One female, in fair condition only."

Holotype.—In the U.S. National Museum. The specimen is labeled "Tornacontia megocula Smith ♀ type"; "Southern Cala."; "Type No. 5381 USNM"; "36511."

Oncocnemis melalutea Smith, 1899, N.Y. Ent. Soc. Jour. 7: 39.

Habitat: Foothills near Denver, Colorado [sic] (Bruce). "The type is a female which has been in my possession for a long time awaiting the advent of a male."

Holotype.—In the U.S. National Museum. The specimen is labeled "Oncocnemis melalutea Smith ♀ type"; "45, foot hills near Denver, Colo., Bruce"; "Type No. 5128 USNM."

Oncocnemis melantho Smith, 1899, N.Y. Ent. Soc. Jour. 7: 37.

Habitat: Yosemite Valley, California. "A single specimen was received from Dr. H. G. Dyar, and is numbered 9615."

Holotype.—In the U.S. National Museum. The specimen is labeled "Oncocnemis melantho Smith ♀ type";

"Yosemite, Calif."; "9615"; "Type No. 5127 USNM"; "36511." The specimen is a male, not a female as marked by Smith. That fact has been noted by Hampson (1906, p. 153, pl. CIV, fig. 3). He stated: "This species is unknown to me; figured from a drawing from type in U.S. Nat. Mus." In the explanation of figure 3, plate CIV, he stated: "♂, California."

Mamestra meodana Smith, 1910, N.Y. Ent. Soc. Jour. 18: 95.

Habitat.—Calgary, Alberta, VI, 16-VII, 8; Arrowhead Lake, B.C., VII, 8; Pullman, Washington, V, 29, VI, 2; Yellowstone Park, Wyoming, VII, 8-15; Denver, Colorado. "A series of 11 males and 5 females, mostly in good condition."

Syntypes examined: 12 (11 AMNH and 1 USNM)

- (1) "Mamestra meodana Smith ♂ type"; "Calgary [sic], Alberta"; "June 16-23"; "J. B. Smith Collection, Rutgers" [Very good, complete] [AMNH]
(2) "Mamestra meodana Smith ♀ type"; "Calgary [sic], Alberta"; "June 16-23"; "J. B. Smith Collection, Rutgers" [Fair, complete] [AMNH]
(3) "Mamestra meodana Smith ♂ cotype"; "Calgary [sic], Alberta"; "June 16-23"; "J. B. Smith Collection, Rutgers" [Fair, complete] [AMNH]
(4) "Mamestra meodana Smith cotype"; "Pullman, Wash., 29 May 98"; "Collection STKemp"; "J. B. Smith Collection, Rutgers" [A ♂, fair complete] [AMNH]
(5) "Mamestra meodana Smith cotype"; "Calgary [sic], Alberta"; "June 16-23"; "J. B. Smith Collection, Rutgers" [A ♂, good, complete?] [AMNH]
(6) "Mamestra meodana Smith cotype"; "Yellowstone Park, Wyo."; "July 8-15"; "J. B. Smith Collection, Rutgers" [A ♂, fair, complete] [AMNH]
(7) "Mamestra meodana Smith cotype"; "Pullman Wash., 2 June 03"; "J. B. Smith Collection, Rutgers" [A ♂, fair condition, complete] [AMNH]
(8) "Mamestra meodana Smith cotype"; "Arrowhead Lake, B.C."; "July 8-15"; "J. B. Smith Collection, Rutgers" [A ♀, poor condition, complete] [AMNH]
(9) "Mamestra meodana Smith cotype"; "532"; "Collection J. B. Smith" [A ♀, fair condition, antennae missing] [AMNH]
(10) "Mamestra meodana Smith ♀ cotype"; "Calgary [sic], Alberta"; "July 1-7"; "J. B. Smith Collection, Rutgers" [Fair condition, complete] [AMNH]
(11) "Mamestra meodana Smith cotype"; "Yellowstone Park, Wyo."; "July 8-15"; "J. B. Smith Collection, Rutgers" [A ♀, good condition, complete] [AMNH]
(12) "Mamestra meodana Smith Cotype"; "Yellowstone Park, Wyo."; "July 8-15";

"Barnes Collection" [A ♂, good condition] [USNM]

Discussion.—The missing four syntypes should all be males and are probably mostly in the American Museum of Natural History identified by Smith, but not marked types. The "♂ type" has been selected, labeled, and is now designated the lectotype.

Xylina merceda Smith, 1904, *Psyche* 11(2): 58.

"*Habitat:* Cartwright, Manitoba, October 6, November 1; Mr. Heath." "Three female specimens, in fair condition, no two alike."

Hampson (1906, *Catalogue of the Lepidoptera Phalaenae in the Collection of the British Museum*, v. 6, p. 273, pl. CII, fig. 31) listed and illustrated a female cotype from Cartwright, Manitoba, Canada. Barnes and McDunnough (1913, *Contrib. Nat. Hist. Lepidoptera N. Amer.* 2(1): 26, pl. 12, fig. 7) illustrated a female cotype from Cartwright, Manitoba. *Syntypes examined:* 2 (AMNH and USNM)

- (1) "Xylina merceda Smith ♀ type"; "Cartwright, Manitoba"; "1.XI.03"; "Collection J. B. Smith" [Good condition, complete] [AMNH]
- (2) "Xylina merceda Smith ♀ cotype"; "Cartwright, Manitoba"; "LXH, 1.X.03"; "Collection J. B. Smith"; "Photograph, Pl. 12, No. 7" [A ♀, left hindwing and abdomen missing] [USNM]

Discussion.—A third female syntype is in the British Museum (Natural History) and was illustrated by Hampson. The syntype in the U.S. National Museum was also illustrated, but it is in very poor condition. The "♀ type" in the American Museum of Natural History has been selected, labeled, and is now designated the lectotype. This designation places the type-specimen of this American species in an American institution, and it is a good, complete specimen.

Epizeuxis merricki Smith, 1905, *Canad. Ent.* 37: 260.

"*Habitat:* New Brighton, Penna., July 20–Aug. 2 (H. D. Merrick); Chicago, Ills., July 12 (A. Kwiat)." "Eight examples, six of them males, are before me. All were received from Mr. Merrick, and all save one are of his collecting."

Syntypes examined: 7 (2 AMNH and 5 USNM)

- (1) "Epizeuxis merricki Smith ♂ type"; "Chicago, Ill., 7–12–02, A. Kwiat"; "J. B. Smith Collection, Rutgers" [Very good, complete] [AMNH]
- (2) "Epizeuxis merricki Smith ♀ type"; "New Brighton, Pa. VII–25–04, H. D. Merrick"; "J. B. Smith Collection, Rutgers" [AMNH]
- (3) "Epizeuxis merricki Smith ♂ cotype"; "New Brighton, Pa., 7–27–02, H. D. Merrick" [Abdomen missing] [USNM]
- (4) "Epizeuxis merricki Smith ♀ cotype"; "New Brighton, Pa., 8–2–03, H. D. Merrick"; "forbesi Frch., Comp. with type. Ok, Inst: Ill. Nat. S. Surv., FHBenjamin" [Right hindwing missing] [USNM]
- (5) "Epizeuxis merricki Smith cotype"; "New

Brighton, Pa., 7–30–03, H. D. Merrick" [A ♂, rubbed or faded] [USNM]

- (6) "Epizeuxis merricki Smith cotype"; "New Brighton, Pa., VII–24–02, H. D. Merrick" [A ♂, rubbed or faded] [USNM]
- (7) "Epizeuxis merricki Smith cotype"; "New Brighton, Pa., 7–23–02, H. D. Merrick" [A ♂, rubbed or faded] [USNM]

Discussion.—One male syntype from New Brighton, Pa., probably collected on July 20, has not been located. The "♂ type" in the American Museum of Natural History has been selected, labeled, and is now designated the lectotype.

Calocampa mertena Smith, 1909, *N.Y. Ent. Soc. Jour.* 17: 61.

"*Habitat.*—Washington; Seattle, Pullman and Olympia; British Columbia; Rossland and Arrowhead Lake." "Eleven males and one female: all the dates for males in spring and examples somewhat flown; the female without date, from Dr. Barnes' collection, in fresh, perfect condition."

Syntypes examined: 7 (5 AMNH and 2 USNM)

- (1) "Calocampa mertena Smith ♂ type"; "Pullman, Wash., 21 April 03"; "J. B. Smith Collection, Rutgers" [Fair condition, fringes frayed, complete] [AMNH]
- (2) "Calocampa mertena Smith cotype"; "Pullman, Wash., 25 April 03"; "J. B. Smith Collection, Rutgers" [A ♂] [AMNH]
- (3) "Calocampa mertena Smith cotype"; "Pullman, Wash., 9 May 03"; "J. B. Smith Collection, Rutgers" [A ♂] [AMNH]
- (4) "Calocampa mertena Smith cotype"; "Was. T., IV.7.1893"; "J. B. Smith Collection, Rutgers" [A ♂] [AMNH]
- (5) "Calocampa mertena Smith cotype"; "Olympia, Wash.,"; "J. B. Smith Collection, Rutgers" [A ♂] [AMNH]
- (6) "Calocampa mertena Smith cotype"; "Pullman, Wash., 31 April 03" [A ♂] [USNM]
- (7) "Calocampa mertena Smith ♂ cotype"; "Seattle, Wash. T." [A ♂] [USNM]

Discussion.—Five syntypes, including the "♀ type," have not been located. The missing syntypes should include examples from Rossland and Arrowhead Lake, British Columbia. The "♂ type" in the American Museum of Natural History has been selected, labeled, and is now designated the lectotype.

Acontia meskei Smith, 1900, *Amer. Ent. Soc. Trans.* 27: 79.

"*Hab.*—Texas." "Two males from the old Meske collection, probably taken by Boll."

Hampson (1910, *Catalogue of the Lepidoptera Phalaenae in the Collection of the British Museum*, v. 10, p. 740) as *meskei* stated: "Pl. CLXXI, fig. 26" and "This species is unknown to me; figured from a drawing from type in U.S. Nat. Mus."

Syntypes examined: 2 (USNM and AMNH)

- (1) "Acontia meskei Smith ♂ type"; "Tex.," "Collection O. Meske"; "Type No. 5392,

U.S.N.M."; "♂ genitalia slide 962, ELT"
[Good condition] [USNM]

- (2) "Acontia meske: Smith ♂ cotype";
"Texas"; "Collection O. Meske"; "J. B.
Smith Collection, Rutgers" [Good condi-
tion, complete] [AMNH]

Discussion.—The "♂ type" in the U.S. National Museum has been selected, labeled, and is now designated the lectotype. Hampson's illustration was prepared from a drawing of this specimen.

Rhynchagrotis meta Smith, 1903, N.Y. Ent. Soc. Jour. 11(1): 3.

Habitat: San Francisco County, California; Pullman, Washington, June 10, Experiment Station No. 295. "Three females in good condition. The California example has been in my collection for a long time and was looked upon as a suffused form until the specimens received from Prof. C. V. Piper made it certain that there is a good species."

Smith (1908, *Canad. Ent.* 40(7): 226) stated: "Of this neat little species I have only the two typical examples."

Syntypes examined: 3 (2 AMNH and 1 USNM)

- (1) "Rhynchagrotis meta Smith ♀ type"; "Pullman, Wash."; "78"; "Collector C. V. Piper"; "J. B. Smith Collection, Rutgers" [Very good condition, complete] [AMNH]
(2) "Rhynchagrotis meta Smith ♀ cotype"; "S. Francisco Co., Cal."; "Collection J. B. Smith" [Fair condition, complete] [AMNH]
(3) "Rhynchagrotis meta Smith ♀ cotype"; "Pullman, Wash., 10 June 98"; "Wash. Exp. Sta. No. 295"; "Collection J. B. Smith"; "Barnes collection" [USNM]

Discussion.—The "♀ type" in the American Museum of Natural History has been selected, labeled, and is now designated the lectotype.

Phaeocyma metata Smith, 1908, U.S. Natl. Mus. Proc. 35(1645): 248, pl. 32, fig. 8, pl. 34, fig. 11.

Habitat.—Center, New York, in May; Pennsylvania; Washington, District of Columbia; Tryon, North Carolina, in August; Virginia; Florida."

Types.—Coll. U.S.N.M., Type No. 12025; also Rutgers College Collection. "Four males and six females are at hand; . . ."

McDunnough (1943, *Canad. Ent.* 75: 156) stated: "As indicated by Haimbach, the holotype is a male in the Rutgers College Coll. from Florida, without abdomen; . . ." "*Metata* has probably been the most misidentified species in the whole group; this is in large measure due to the mixed nature of Smith's type series which contained at least two and possibly three distinct species; . . ."

Syntypes examined: 9 (4 AMNH and 5 USNM)

- (1) "Homoptera metata Smith ♂ type"; "Fla."; "Collection J. B. Smith"; "♂ Genitalia mounted on slide, Smith [A. F. H. Rindge label.]" [Fair condition, abdomen missing] [AMNH]
(2) "Homoptera metata Smith ♀ type"; "Cor-

nell U. Lot. 172 Sub. F'iks Coll."; "J. B. Smith Collection, Rutgers" [Fair condition, now in *metatoides*] [AMNH]

- (3) "Homoptera metata Smith cotype"; "Cornell U. Lot. 172, Sub. F'iks Coll."; "Va."; "J. B. Smith Collection, Rutgers" [A ♀, apex left forewing broken, now in *buchholzii*] [AMNH]
(4) "Homoptera metata Smith cotype"; "Collection G. H. Huist" [A ♀, poor, dermestid damaged, now in *confusa*] [AMNH]
(5) "Homoptera metata Smith cotype"; "Collection Brkiyn. Mus."; "Type No. 34097, U.S.N.M." [A ♀, with ♂ abdomen glued on] [USNM]
(6) "Homoptera metata Smith cotype"; "New York"; "May 24-30"; "1555 ♂"; "♂ genitalia no. 1297, JGF."; "Barnes collection" [USNM]
(7) "Homoptera metata Smith cotype"; "Washington, D.C." [A ♀, abdomen damaged by dermestids] [USNM]
(8) "Homoptera metata Smith cotype"; "Fiske Coll., 8-8-04, Tryon, N.C."; "Slide Zale M ♂, McD." [Now in *confusa*] [USNM]
(9) "Homoptera metata Smith cotype"; "Fiske Coll., 8-8-04, Tryon, N.C."; "Slide Zale M ♀, McD." [Now in *confusa*] [USNM]

Discussion.—From comments in the original description, it would appear that one male syntype is missing. It may be from Pennsylvania as that locality was given by Smith and none of the syntypes listed here are from that locality, unless it is the one without a locality label. McDunnough stated that Haimbach had indicated the holotype was a male in the Rutgers College collection from Florida without an abdomen. Haimbach (1928, *Amer. Ent. Soc. Trans.* 54: 228) actually said: "The male type of *metata* is from Florida, . . ." In my opinion that could be simply another way of saying the "♂ type" of *metata* is from Florida. Haimbach certainly did not use the term "holotype," but McDunnough did. It is not a holotype, but perhaps McDunnough was using that term in the sense of a lectotype. I do not think so. I believe that for some reason he considered Smith's action of labeling a specimen "♂ type" was the same as our present action of labeling specimens "holotype." In any event I shall designate the same specimen to insure that it is considered the type-specimen and to eliminate any possible confusion. The "♂ type" has been labeled and is now designated the lectotype.

There are genitalia slides of both male and female genitalia in the American Museum of Natural History. The slide of the male genitalia is believed to have come from the "♂ type" and so marked by Rindge. The lectotype does lack an abdomen, but by Smith's statement concerning the number of males and females he studied, one male is missing and therefore the slide might have come from that specimen. Perhaps the missing specimen is a female. Smith could have incorrectly sexed one specimen because a female cotype in the U.S. National Museum has a false male abdomen

attached. It is possible that this was the specimen from which the slide of the female genitalia was made. The other females appear to be complete.

Acronycta metra Smith, 1911, Ent. News 22: 311.

"Habitat—Seattle, Washington: Colorado (Bruce)."

"The ♂ is the smaller, lacks the abdomen, but is otherwise in good condition. The female, from Bruce, is an old specimen that I had kept questionably as *felina* for many years, and is in fair condition."

Syntypes examined: 2 (USNM and AMNH)

- (1) "Acronycta metra Smith Type ♂"; "Seattle, Was. T." [Abdomen missing] [USNM]
- (2) "Acronycta metra Smith Type ♀"; "Colo., Bruce"; "240"; "Collection J. B. Smith" [A ♀, abdomen glued on, hindwings torn] [AMNH]

Discussion.—Smith did not describe the species until he obtained the male. It lacked the abdomen even then, but otherwise was in good condition. The "Type ♀" has a glued-on abdomen that is not known to be authentic, and the specimen is otherwise in poorer condition than the male. For these reasons, the "Type ♂" in the U.S. National Museum has been selected, labeled, and is now designated the lectotype.

Luperina migrata Smith, 1903, N.Y. Ent. Soc. Jour. 11: 188.

"Habitat: Stockton, Utah; New Jersey (I)" "Two female examples in good condition. One of these examples has been in my collection over ten years, bearing a 'N.J.' locality label; but from whom I received it is not recorded. I felt certain that this could not be correct and, as I could not identify it with any exotic form accessible to me, I simply waited until I received the example from Utah through Mr. George Franck. This matches my specimen exactly, save that it is fresher and more intense in its maculation."

Hampson (1910, Catalogue of the Lepidoptera Phalaenae in the Collection of the British Museum, v. 9, p. 497) stated: "Pl. CXLVIII. fig. 30" and "This species is unknown to me; figured from a drawing from type in Coll. J. B. Smith." "♀, Utah."

"Barnes and McDunnough (1916, Contrib. Nat. Hist. Lepidoptera N. Amer. 3(3): 165, pl. 13, fig. 6) stated: "We figure a Cotype of *migrata* from New Jersey."

Syntypes examined: 2 (AMNH and USNM)

- (1) "Luperina migrata Smith Type"; "Stockton, Utah"; "Collection J. B. Smith" [A ♀, good condition, complete] [AMNH]
- (2) "Luperina migrata Smith Cotype"; "N.J."; "Collection J. B. Smith"; "Photograph Pl. 13, No. 6"; "♀ genitalia no. 439, JFGC." [Good condition] [USNM]

Discussion.—Selection and designation of a lectotype for this name is a difficult decision. Both syntypes are females in good condition and both have been illustrated. I believe it is likely that they represent two different species, but I have not studied the genitalia of

the syntype in the American Museum of Natural History marked "Type," so I am unable to state positively that this is the case. Both belong to a complex of closely related entities that we may refer to as the *Crymodes relicina* (Morr.) complex. The number of species involved and their respective ranges and variation in maculation will have to be resolved by a thorough revision. There are several names, mostly older than *migrata*, that apply in addition to *relicina*, and it is therefore probable that the name *Luperina migrata* Smith will fall as a junior synonym of one or the other of those names regardless of which syntype is chosen as the lectotype.

Smith thought that the specimen labeled "N.J." was mislabeled and he did not describe it until he got a specimen from Utah that he thought was the same. He also marked the specimen from Utah the "Type," so he really was applying the name to that population represented by that specimen. We now have other specimens from New Jersey, and it would appear that the "N.J." label on his first specimen is correct. Since he labeled the Utah specimen "Type" and obviously was describing and naming the population from that area, that specimen has been selected, labeled, and is now designated the lectotype. This action will permit any future reviser to study the lectotype of this species and the lectotype of another Smith species of the complex at the same institution, the American Museum of Natural History.

Xylophasia miniota Smith, 1906, N.Y. Acad. Sci. Ann. 18(2): 114.

"Habitat: Manitoba; Miniota, May 5, 11, 22; Cartwright, May 24." "Three males and six females, mostly in fair condition, are under examination, two of them belonging to Mr. Heath, the others received through H. H. Brehme."

Syntypes examined: 5 (2 AMNH and 3 USNM)

- (1) "Xylophasia miniota Smith ♂ type"; "Miniota, Man., VI-22"; "J. B. Smith Collection, Rutgers" [Fair condition, complete] [AMNH]
- (2) "Xylophasia miniota Smith ♀ type"; "Miniota, Man., VI-12"; "J. B. Smith Collection, Rutgers" [Fair condition, complete] [AMNH]
- (3) "Xylophasia miniota Smith ♂ cotype"; "Miniota, Man., VI-5"; "♂ genitalia no. 1343, JGF." [USNM]
- (4) "Xylophasia miniota Smith ♀ cotype"; "Cartwright, Manitoba"; "Collection J. B. Smith"; "♀ genitalia no. 1344, JGF." [USNM]
- (5) "Xylophasia miniota Smith ♀ cotype"; "Calgary, Alberta"; "July 24-30"; "Collection J. B. Smith" [USNM]

Discussion.—Four syntypes have not been located. Of those listed, the fifth is from a locality not mentioned by Smith, yet is labeled as a type by him and has his collection label. He probably just failed to include the locality as he did in the case of other species. The "♂ type" in the American Museum of Natural History

has been selected, labeled, and is now designated the lectotype.

Campometra minor Smith, 1899, U.S. Natl. Mus. Proc. 22(1184): 104.

"Type.—4314, U.S.N.M." "No male of this species has been available. Of the five females four are from the Hulst collection, probably taken near Tucson, Arizona, and one is from Catalina Springs (April 11), taken by Mr. Schwarz."

Syntypes examined: 5 (4 USNM and 1 AMNH)

- (1) "Campometra minor Smith ♀ type"; "Ariz."; "Collection J. D. Hulst"; "Type No. 4314, U.S.N.M."; "USNM Acc. # 35005"; "♀ genitalia no. 2035, JFGC." [USNM]
- (2) "Campometra minor Smith cotype"; "Ariz."; "Collection G. D. Hulst"; "Type No. 4314, U.S.N.M."; "36511" [A ♀] [USNM]
- (3) "Campometra minor Smith ♀ cotype"; "Ariz."; "Collection G. D. Hulst"; "Type No. 4314, U.S.N.M."; "USNM Acc. #35005" [USNM]
- (4) "Campometra minor Smith cotype"; "Ariz."; "J. B. Smith Collection, Rutgers" [A ♀] [AMNH]
- (5) "Campometra minor Smith var."; "Catal. Spgs., Ar., 11Apr98"; "E. A. Schwarz Collector" [A ♀] [USNM]

Discussion.—The last specimen listed is not marked as a type, but there is little doubt that it is a syntype as it agrees with the information in the original description. The "♀ type," one of three specimens bearing the USNM type number cited in the original description, has been selected, labeled, and is now designated the lectotype.

Zanclognatha minoralis Smith, 1895, U.S. Natl. Mus. Bul. 48, p. 34, pl. 2, fig. 6, pl. 10, figs. 28 and 29.

"HABITAT.—Long Island, New York (probably)." "I have only two male specimens from the Michigan Agricultural College, without locality label of any kind, but probably from the Tepper Collection." On page 121 in explanation of plate 2 he stated: "... from the type in the collection of the Michigan Agricultural College."

Syntypes examined: 1 (MSU)

- (1) "Megachyta minoralis Smith, Type"; "6" [A ♂, very good condition except 1 palpus missing]

Discussion.—Only one syntype was located. It does not bear a locality label and that undoubtedly explains Smith's statement concerning the locality. Whether the species really came from that area will have to be determined by a study of the specimen and a revision of the complex of species to which it belongs. The "Type" in the collection of Michigan State University has been selected, labeled, and is now designated the lectotype.

Antiblemma minorata Smith, 1900, U.S. Natl. Mus. Proc. 22(1203): 493.

"*Habitat*.—Florida, April and June 13 (Hulst); Glenwood, Florida (Barnes)." "Two males and two females; none of them in good condition and no two alike." "Type.—Cat. No. 4838, U.S.N.M."

Syntypes examined: 4 (3 USNM and 1 AMNH)

- (1) "Antiblemma minorata Smith ♂ type"; "Glenwood, Fla. ____ 189__, W. Barnes"; "Type No. 4838, U.S.N.M."; "36311" [Fairly good, complete] [USNM]
- (2) "Antiblemma minorata Smith ♀ type"; "Glenwood, Fla. ____ 189__, W. Barnes" [Antennae and palpi missing] [USNM]
- (3) "Antiblemma minorata Smith ♀ cotype"; "Fla."; "13.VI.80"; "Type No. 4838, U.S.N.M."; "36511" [A ♂, abdomen missing] [USNM]
- (4) "Antiblemma minorata Smith ♂ cotype"; "Fla."; "April"; "Collection G. D. Hulst" [Fair condition, complete except antennae missing] [AMNH]

Discussion.—The "♂ type," one of two specimens bearing the USNM type number cited by Smith, has been selected, labeled, and is now designated the lectotype.

Eucalyptra minorata Smith, 1903, Amer. Ent. Soc. Trans. 29(3): 221.

"*Hab.*—Hastings, Florida, October 4th." "One male specimen in rather poor condition, from Mr. W. D. Kearfott."

Holotype.—In the American Museum of Natural History. The specimen is labeled "Eucalyptra minorata Smith ♂ type"; "Hastings, Fla., Octo. 4"; "Collection of W. D. Kearfott"; "J. B. Smith Collection Rutgers."

Leucania minorata Smith, 1894, Amer. Ent. Soc. Trans. 21: 75, pl. 5, fig. 11.

"*Hab.*—California; Oregon." "Three male specimens are before me."

Smith (1902, U.S. Natl. Mus. Proc. 25(1283): 181, pl. 5, fig. 5) illustrated the valve of the male genitalia.

Syntypes examined: 3 (2 USNM and 1 AMNH)

- (1) "Leucania minorata Smith ♂ type"; "Cal."; "Type No. 224, U.S.N.M."; "♂ genitalia no. 2696, JFGC." [Specimen figured by Smith] [USNM]
- (2) "Leucania minorata Smith ♂ type"; "Cal."; "Type No. 224, U.S.N.M."; "36511" [Genitalia intact?] [USNM]
- (3) "Leucania minorata Smith ♂ type"; "Or."; "J. B. Smith Collection, Rutgers" [Fair condition, complete] [AMNH]

Discussion.—All three syntypes are marked "♂ type" and all are males. The specimen from which genitalia slide 2696 was prepared by J. F. G. Clarke was the specimen illustrated by Smith. It has been selected, labeled, and is now designated the lectotype.

Mamestra minorata Smith, 1888, U.S. Natl. Mus. Proc. 10: 467.

"*Habitat*.—California (♂), Colorado (♀)." "Two specimens agreeing in essentials; the ♂ from Mr.

Edwards, the ♀ from Mr. Bruce."

Smith (1892, U.S. Natl. Mus. Proc. 14: 240, pl. 9, fig. 37) illustrated the "harpe and clasper" and stated: "Not in the Museum collection."

Smith (1893, U.S. Natl. Mus. Bul. 44, p. 122) stated: "The type is in the Edwards collection."

Syntypes examined: 2? (AMNH and USNM)

- (1) "Mamestra minorata Smith Type"; "Havilah, California"; "No. 10323, Collection Hy. Edwards"; "AMNH Type No. ____" [Good condition except left valve missing] [AMNH]
- (2) "Mamestra minorata Sm. Col."; "58"; "Return to U.S. Nat. Mus., Dr. No. 375." [A ♀] [USNM]

Discussion.—The second specimen listed is not marked as a type, but it seems to fit although it does not have the usual "Col., Bruce" label. The syntype marked "Type" in the American Museum of Natural History has a specific locality not mentioned by Smith, but otherwise agrees. Smith probably just cited States for his distributional statement. It may be significant that Smith stated in 1893: "The Type is in the Edwards collection." And he did not mention any other collection for the other specimen. The "Type" in American Museum of Natural History has been selected, labeled, and is not designated the lectotype.

Annaphila miona Smith, 1908, N.Y. Acad. Sci. Ann. 18(2): 121.

"*Habitat*.—Plumas County, California, June." "Two females, in good condition save for lack of antennae."

Hampson (1910, Catalogue of the Lepidoptera Phalaenae in the Collection of the British Museum, v. 9, p. 481) listed and illustrated a female cotype from Plumas County, Calif. The figure is 11 on plate CXLVII.

Rindge and Smith (1952, Amer. Mus. Natl. Hist. Bul. 98(3): 227) stated: "Type: In Rutgers University Collection." and "Type Locality: Plumas County, California."

Syntypes examined: 1 (AMNH)

- (1) "Annaphila miona Smith ♀ type"; "Plumas Co., Cal., June"; "Collection J. B. Smith"; "♀ genitalia on slide 2308, FHR." [Very good condition]

Discussion.—The other syntype is supposed to be in the British Museum (Natural History) and it was illustrated by Hampson. Nevertheless, the "♀ type" in the American Museum of Natural History has been selected, labeled, and is now designated the lectotype. This action will place the lectotype in one of the two institutions that contain the bulk of the Smith types.

Hadena miseloides miscellus Smith, 1902, N.Y. Ent. Soc. Jour. 10: 40.

"In looking over a long series of specimens of this species [*miseloides*] to determine the range of variation to be represented in the collection, I noticed that certain Texan examples did not seem to fit anywhere satisfactorily, so, by the courtesy of

Dr. Dyar, I secured such as were in the U.S. National Museum from that State; in all six specimens. All are females, . . . "I do not think we have to do with a good species here; but it is a well-marked geographical race which deserves a name that it may receive further attention from collectors. As such I propose the term *Hadena miscellus*. Two examples only have definite localities; Waco, Texas, September 1; Blanco County, Texas, no date; two others are from Belfrage, May 4 and April 20. The others are marked Texas only, without other indication."

Syntypes examined: 4 (1 AMNH and 3 USNM)

- (1) "Hadena miseloides Gn. *race miscella* Smith ♀ type"; "Tex."; "20/9"; "Texas, Belfrage"; "Collection C. V. Riley"; "J. B. Smith Collection, Rutgers" [Fairly good, complete] [AMNH]
- (2) "Hadena miseloides Gn. *race miscella* Smith ♀ cotype"; "Blanco Co., Cent. Tex."; "Collection G. D. Hulst"; "Type No. 4998, U.S.N.M."; "♀ gen. 18, ____?" [USNM]
- (3) "Hadena miseloides Gn. *race miscella* Smith ♀ cotype"; "Tex."; "Collection G. D. Hulst" [USNM]
- (4) "Hadena miseloides Gn. *race miscella* Smith ♀ cotype"; "Texas"; "Collection O. Meske"; "Type No. 4998, U.S.N.M." [USNM]

Discussion.—There are two other specimens in the U.S. National Museum that are without doubt syntypes, but they have not been listed here because they were not marked types by Smith. One is labeled "Texas, Belfrage"; "4/5"; "Collection C. V. Riley." and the other "Waco, Texas, Sept. 1 through C. V. Riley." The "♀ type" in the American Museum of Natural History has been selected, labeled, and is presently designated the lectotype.

Carneades misturata Smith, 1890, U.S. Natl. Mus. Bul. 38, p. 156, pl. 5, fig. 75 (in part).

"*HABITAT*.—Colorado." "I cannot find that Mr. Morrison has ever described this species. It does not seem to be in Mr. Grote's list, and the name in Mr. Tepper's collection, I believe, was probably a MSS. one, overlooked in publishing."

Smith (1893, U.S. Natl. Mus. Bul. 44, p. 92) stated: "The types are in the Tepper and Neumoegen collections."

Syntypes examined: 1 (MSU)

- (1) "Type [Rhomboidal label]"; "Colo." [A ♂, fair condition, right valve missing]

Discussion.—The specimen in the Michigan State University collection does not bear a Smith name or type label, but I neglected to note whether the name label was by Tepper or Morrison. I have been unable to locate the other specimen from the Neumoegen collection, if it was, in fact, from Colorado as Smith indicated. There is one specimen in the U.S. National Museum from Las Vegas, N. Mex., from the Neumoegen collection that bears a Smith determination label with this name. The "Type" in the Michigan State University

collection has been selected, labeled, and is now designated the lectotype.

Carneades mitis Smith, 1894, Amer. Ent. Soc. Trans. 21: 49, pl. 3, fig. 10.

"*Hab.*—Glenwood Springs, Colo., September; Barnes, No. 44, 283, 284." "Two males and one female are before me, all of them in fair condition." Hampson (1903, Catalogue of the Lepidoptera Phaenae in the Collection of the British Museum, v. 4, p. 254) stated: "Pl. LXIV, fig. 6" and "This species is unknown to me; figured from Prof. Smith's plate." "♂, Colorado."

Syntypes examined: 2 (USNM)

(1) "Carneades mitis Smith ♂ type"; "Glenwood Springs, Col., 9 1892, W. Barnes"; "Type No. 137, U.S.N.M."; "♂ genitalia slide 2196, ELT" [Good condition, left antenna broken]

(2) "Carneades mitis Smith ♀ type"; "Glenwood Springs, Col., 9 1892, W. Barnes"; "Type No. 137, U.S.N.M."; "♀ genitalia slide 2197, ELT." [Right forewing broken]

Discussion.—There is a specimen in the American Museum of Natural History labeled "♀ type" from Hot Springs, N. Mex. It is a pseudotype; both the sex and locality differ from the information in the original description. The "♂ type" was illustrated by Smith and by Hampson. It has been selected, labeled, and is now designated the lectotype.

Hypena modesta Smith, 1895, U.S. Natl. Mus. Bul. 48, p. 117, pl. 9, figs. 19, 20, and 21.

"*HABITAT.*—Los Angeles, Cal., April, July, October." "Nine specimens are before me, all of them from the United States National Museum collection, marked 'Through C. V. Riley'; some collected by Mr. Coquillett, others by Mr. Koebele. Of the latter, two bear a red number 194, indicating biological notes in the possession of Dr. Riley." *Syntypes examined*: 9 (7 USNM and 2 AMNH)

- (1) "Hypena modesta Smith Type"; "Cal."; "Coquillett Collector"; "Thro C. V. Riley, 1888"; "Type No. 325, U.S.N.M." [A ♀, abdomen missing, specimen illustrated, fig. 20] [USNM]
- (2) "Hypena modesta Smith Type"; "Los Angeles Co., Cal."; "July"; "194"; "Through C. V. Riley"; "Type No. 325, U.S.N.M." [A ♂, badly rubbed] [USNM]
- (3) "Hypena modesta Smith Type"; "Cal."; "CI"; "Coquillett Collector"; "Thro C. V. Riley, 1888"; "Type No. 325, U.S.N.M." [A ♀, worn, complete] [USNM]
- (4) "Hypena modesta Smith Type"; "Los Ang., Cal."; "Type No. 325, U.S.N.M."; "36511" [A ♂, abdomen missing] [USNM]
- (5) "Hypena modesta Smith Type"; "Los Angeles Co., Cal."; "Apr."; "194"; "Through C. V. Riley"; "Type No. 325, U.S.N.M." [A ♀, fairly good, faded, complete] [Specimen figured No. 19] [USNM]

(6) "Hypena modesta Smith Type"; "Los Angeles Co., Cal."; "Apr."; "Through C. V. Riley"; "Type No. 325, U.S.N.M." [A ♂, fairly good, complete, specimen illustrated, fig. 21] [USNM]

(7) "Hypena modesta Smith Type"; "Los Angeles Co., Cal."; "Oct." [A ♀, fair, complete] [USNM]

(8) "Hypena modesta Smith Type"; "Los Angeles Co., Cal."; "Apr."; "Collection J. B. Smith" [A ♀, fair condition, complete] [AMNH]

(9) "Hypena modesta Smith Type"; "Los Angeles Co., Cal."; "July"; "Through C. V. Riley"; "J. B. Smith Collection, Rutgers" [A ♀, fair condition, but thoracic verdigris forming] [AMNH]

Discussion.—Of the four males, only two are still complete. Of those two, one was illustrated by Smith (fig. 21, pl. 9) and is in better condition than the other. The male "Type" that was illustrated (fig. 21) is in the U.S. National Museum. It has been selected, labeled, and is now designated the lectotype.

Xylophasia inordinata var. *montana* Smith, 1890, U.S. Natl. Mus. Proc. 13: 444.

"In Colorado occurs a form of what I take to be merely a variety of the Eastern form, but which may eventually prove distinct." "These differences seem permanent in the series before me, but I can not convince myself they are specific, and propose the term *montana* for the variety."

Smith (1893, U.S. Natl. Mus. Bul. 44, p. 141) stated: "...; "my type is in the National Museum, and is from Colorado."

Syntypes examined: 1 (USNM)

- (1) "Xylophasia inordinata var. *montana* Smith"; "87, Platte Canon, Colo., D. Bruce"; "Type No. 172, U.S.N.M."; "♂ genitalia no. 32, JFGC."

Discussion.—I have located no specimens labeled as type by Smith. The specimen listed is one sent to the U.S. National Museum by Smith as a type and which was entered in the type book in 1896. Smith mentioned a series, but he indicated nothing about them except they were from Colorado. In discussing types in 1893 he made a statement that sounded as if he were referring to a single specimen, undoubtedly the specimen listed here. Even so, because he mentioned a series, the syntype from Platte Canon, Colo., in the U.S. National Museum has been selected, labeled, and is now designated the lectotype.

Mamestra montara Smith, 1910, N.Y. Ent. Soc. Jour. 18: 94.

"*Habitat.*—Claremont, California, Mr. Chas. W. Metz." "Seven males, in good to fair condition and, on the whole, very much alike."

Syntypes examined: 4 (2 AMNH and 2 USNM)

- (1) "Mamestra montara Smith ♂ type"; "Claremont, Cal., Metz"; "J. B. Smith Collection, Rutgers" [Fair condition, complete] [AMNH]

- (2) "Mamestra montara Smith cotype"; "Claremont, Cal., Metz"; "J. B. Smith Collection, Rutgers" [A ♂, fair, complete] [AMNH]
 (3) "Mamestra montara Smith cotype"; "Claremont, Cal., Metz"; "Barnes Collection" [A ♂] [USNM]
 (4) "Mamestra montara Smith cotype"; "Claremont, Cal., Metz" [A ♂] [USNM]

Discussion.—The "♂ type" in the American Museum of Natural History has been selected, labeled, and is now designated the lectotype.

Noctua monteclara Smith, 1906, N.Y. Ent. Soc. Jour. 14: 10.

"Habitat.—Claremont, Calif., Mr. Carl Baker."
 "Two male examples in very fair condition, neither of them with date of capture."

Syntypes examined: 2 (AMNH and USNM)

- (1) "Noctua monteclara Smith ♂ type"; "Claremont, Cal., Baker"; "J. B. Smith Collection, Rutgers" [Fair condition, complete] [AMNH]
 (2) "Noctua monteclara Smith cotype"; "Claremont, Cal., Baker"; "Slide 57a"; "Barnes Collection" [A ♂] [USNM]

Discussion.—The "♂ type" in the American Museum of Natural History has been selected, labeled, and is now designated the lectotype.

Mamestra morana Smith, 1910, Ent. News 21: 361, pl. 11, fig. 6.

"Habitat.—Colorado: Denver, Glenwood Springs, Fort Collins in June and July; Wyoming: Yellowstone Park in July; Washington: no date or definite locality; British Columbia: Rossland in July."

"A series of ten males and eighteen females at hand. . . ."

Barnes and McDunnough (1913, Contrib. Nat. Hist. Lepidoptera N. Amer. 2(1): 10, pl. 4, fig. 13) illustrated a female paratype from Yellowstone Park, Wyo.

Syntypes examined: 12 (6 AMNH and 6 USNM)

- (1) "Mamestra morana Smith ♂ type"; "Yellowstone Park, Wyo."; "J. B. Smith Collection Rutgers" [Good condition except apices of valves of genitalia broken] [AMNH]
 (2) "Mamestra morana Smith ♀ type"; "Yellowstone Park, Wyo."; "July 8-15"; "J. B. Smith Collection Rutgers" [Good condition, complete] [AMNH]
 (3) "Mamestra morana Smith Paratype"; same data [A ♂] [AMNH]
 (4) "Mamestra morana Smith Paratype"; "Washington"; "J. B. Smith Collection Rutgers" [A ♂] [AMNH]
 (5) "Mamestra morana Smith figured"; "Colo., 7.8"; "J. B. Smith Collection Rutgers" [A ♂, abdomen missing] [AMNH]
 (6) "Mamestra morana Smith Paratype"; same data [A ♀] [AMNH]
 (7) "Mamestra morana Smith Paratype"; "Yellowstone Park, Wyo."; "Barnes collection" [A ♂] [USNM]

(8) "Mamestra morana Smith Paratype"; same data [A ♂] [USNM]

(9) "Mamestra morana Smith Paratype"; same data [A ♂] [USNM]

(10) "Mamestra morana Smith Paratype"; "Yellowstone Park, Wyo."; "July 8-15"; "Barnes collection" [A ♀] [USNM]

(11) "Mamestra morana Smith Paratype"; "Yellowstone Park, Wyo."; "Barnes collection"; "Photograph, Pl. 4, No. 13"; "♀ gen. 2704, JFGC." [USNM]

(12) "Mamestra morana Smith Paratype"; "Yellowstone Park, Wyo."; "Barnes collection"; "Compared with Type ♂ ♀ Coll. Sm.—See Note No. 219" [A ♂, abdomen missing] [USNM]

Discussion.—Sixteen syntypes (2 males and 14 females) have not been located. Missing localities are Denver, Glenwood Springs, and Fort Collins in Colorado as well as Rossland, British Columbia. The illustration of the genitalia in the original publication was prepared from genitalia on a Smith slide of a specimen from Colorado. The slide and the specimen, syntype number 5, are in the American Museum of Natural History. That specimen and slide have been selected, labeled, and are now designated the lectotype. The genitalia of the specimen labeled "male type" have the apices of both valves broken, and it was not selected as the lectotype for this reason.

Perigea morsa Smith, 1907, Amer. Ent. Soc. Trans. 33: 141.

"Hab.—Brownsville, Texas, in June."

"Two males and two females in only moderate condition, from Prof. Snow."

Syntypes examined: 4 (2 AMNH and 2 KU)

- (1) "Perigea morsa Smith ♂ type"; "Brownsville, Texas, June, F. H. Snow"; "JBSCR" [A ♂] [AMNH]
 (2) "Perigea morsa Smith ♀ type"; "Brownsville, Texas, June, F. H. Snow" [A ♀] [AMNH]
 (3) "Perigea morsa Smith ♂ cotype"; "Brownsville, Texas, June, F. H. Snow" [Left hind-wing missing] [KU]
 (4) "Perigea morsa Smith ♀ cotype"; "Brownsville, Texas, June, F. H. Snow"; "208, 3 specimens sent as requested" [Abdomen glued] [KU]

Discussion.—The "♂ type" in the American Museum of Natural History has been selected, labeled, and is now designated the lectotype.

Euxoa moxa Smith, 1907, Amer. Ent. Soc. Trans. 33: 129.

"Hab.—Colorado, Glenwood Springs; Durango, July 8th to 15th." "One ♂ and one ♀ in good condition." McDunnough (1950, Amer. Mus. Nat. Hist. Bul. 95(6): 370) stated: "Types: . . . *moxa*, holotype, female, Durango, Colorado (U.S.N.M.); . . ."

Type-specimen.—In the U.S. National Museum, perhaps fixed by the restrictive action of McDunnough, but definitely designated as lectotype by Todd (Oct. 4, 1968, Wash. Ent. Soc. Proc. 70(3): 273).

Agrotis murdocki Smith, 1890, Amer. Ent. Soc. Trans. 17: 49.

"*Habitat*.—N.W. British Columbia, Utah Territory." "The specimen now before me is from Mr. Neumoegen. I received it some time since from Mr. Edwards, who had it, I think, from Utah. Some years since I received the first specimen from Capt. Murdock, Fort Thornburgh, Utah, and this specimen is now in the United States National Museum."

Smith (1890, U.S. Natl. Mus. Bul. 38, p. 175) added no other information.

Smith (1893, U.S. Natl. Mus. Bul. 44, p. 99) stated: "A type is in the National Museum; another in Mr. Neumoegen's collection."

Syntypes examined: 2 (USNM)

(1) "Agrotis murdocki Smith Type"; "N.W. Brit. Cola."; "Col. B. Neumögen"; "Type No. 33754 USNM"; "♂ genitalia on slide 2272 E. L. Todd"

(2) "Agrotis murdocki Smith Type"; "Ashely Valley, Utah"; "Type No. 124 USNM" [A ♀]

Discussion.—The male syntype has been selected, labeled, and is now designated the lectotype.

Feltia musa Smith, 1910, N.Y. Ent. Soc. Jour. 18: 88.

"*Habitat*.—New Foundland." "One male and one female, both somewhat defective; but fresh and perfect when first papered, so that the colors and maculation are clearly defined." "I am not sure as to just where these specimens were collected but think it was at Grand Ledge, by Mr. Owen Bryant."

Syntypes examined: 2 (AMNH and USNM)

(1) "Feltia musa Smith ♂ type"; "N.F."; "J. B. Smith Collection Rutgers" [Rather worn, antennae missing but genitalia intact] [AMNH]

(2) "Feltia musa Smith ♀ type"; "N.F."; "Barnes collection"; "F. musa Sm., Compared with Type, Coll. Sm., See Note No. 154, Think ok." [Worn, wings with apices frayed] [USNM]

Discussion.—The "compared with type" label on the syntype in the U.S. National Museum indicates that McDunnough (his label) considered the male syntype in the Smith collection (Rutgers College collection) to be the type. "Note No. 154" in the manuscript material from the Barnes collection merely states that the type is in the Smith collection. This information is unpublished and has no status, but to maintain the same concept of the species, the male syntype in the American Museum of Natural History has been selected, labeled, and is now designated the lectotype. This action is in line with the general of practice of selecting male syntypes over female syntypes in this bulletin, all other things being equal.

Hadena mustelina Smith, 1900, U.S. Natl. Mus. Proc. 22(1203): 469.

"*Habitat*.—Santa Cruz Mountains, California."

"One male, evidently bred, numbered, in red, No. 536, by Mr. A. Koebele." "Type.—Cat. No. 4828 U.S.N.M."

Holotype.—In the U.S. National Museum. The specimen is labeled "Hadena mustelina Smith ♂ type"; "Sta Cruz Mts., Cal."; "536"; "Type No. 4828 USNM."

Xylomiges mustelina Smith, 1911, N.Y. Ent. Soc. Jour. 19(3): 141.

"There remains a series of 11 males and 11 females, all from Pullman, Washington, in May, and all very much more uniform in tint [than *rubrica* Harv. and *pulchella* Sm.]." "This form I have labelled *mustelina*, and it forms the beginning of the development of the series which culminates in *pulchella*." In an introductory statement on page 140 referring to the *rubrica* series of species, Smith said: "It turned out that I had 21 ♂ and 20 ♀, and that these separated very nicely into three distinct types." However, the numbers cited under each, i.e., *pulchella*, 2 ♂♂ and 1 ♀; *rubrica*, 8 ♂♂ and 7 ♀♀; *mustelina*, 11 ♂♂ and 11 ♀♀; total only 21 ♂♂ and 19 ♀♀.

Syntypes examined: 8 (4 AMNH and 4 USNM)

(1) "Xylomiges mustelina Smith ♂ type"; "Pullman, Wash., 8 May 03"; "J. B. Smith Collection Rutgers" [Worn, right antenna missing, genitalia intact] [AMNH]

(2) "Xylomiges mustelina Smith ♀ type"; "Pullman, Wash., 03 May 1"; "J. B. Smith Collection Rutgers" [Good condition except antennae missing] [AMNH]

(3) "Xylomiges mustelina Smith Paratype"; same data [A ♂] [AMNH]

(4) "Xylomiges mustelina Smith Paratype"; same data as "♂ type" [A ♀] [AMNH]

(5) "Xylomiges mustelina Smith Paratype"; "Pullman, Wash., 9 May 03"; "Col. Jacob Doll"; "Barnes collection"; "♂ genitalia on slide 1613, Feb. 17, 1938, J.F.G. Clarke" [USNM]

(6) "Xylomiges mustelina Smith Paratype"; "Pullman, Wash., 9 May 03"; "Barnes collection" [A ♂, abdomen greasy, black, probably glued on] [USNM]

(7) "Xylomiges mustelina Smith Paratype"; same data except date, "26 May 03" [A ♀] [USNM]

(8) "Xylomiges mustelina Smith Paratype"; "Pullman, Wash., 9 May 03"; "Barnes collection"; "♀ genitalia on slide 1614, Feb. 17, 1938, J.F.G. Clarke" [USNM]

Discussion.—The "♂ type" in the American Museum of Natural History has been selected, labeled, and is presently designated the lectotype.

Mamestra mutilata Smith, 1898, Ent. News 9: 246.

"*Hab*.—British Columbia." "A single male has been in my collection for some years awaiting a mate, and I have no memorandum of the original source of the specimen."

Smith (1903, N.Y. Ent. Soc. Jour. 11(1): pl. 1, fig. 11) figured the male valve of the genitalia.

Holotype.—In the U.S. National Museum. The specimen is labeled "Mamestra mutilata Smith ♂ type";

"Br. Col."; "Type No. 4989 USNM"; "36511." The uncus and apical halves of the valves of the genitalia are missing.

Mamestra mystica Smith, 1898, Ent. News 9: 242.

"*Hab.*—Winnipeg, Manitoba." "One male and one female from Mr. A. W. Hanham, who has other similar examples."

Smith (1903, N.Y. Ent. Soc. Jour. 11(1): pl. 1, fig. 4) illustrated the valve of the male genitalia.

Syntypes examined: 2 (USNM)

- (1) "Mamestra mystica Smith ♂ type"; "W. Man."; "Winnipeg, Manitoba"; "Type No. 4157 U.S.N.M."; "Acc. No. 34638 U.S.N.M." [Both hindwings and left valve of male genitalia missing]
- (2) "Mamestra mystica Smith ♀ type"; "W. Man."; "Winnipeg, Manitoba"; "36511"; "Type No. 4157 U.S.N.M." [A ♂, abdomen missing, at one time apparently with abdomen glued on!]

Discussion.—The syntype labeled "♂ type" has been selected, labeled, and is now designated the lectotype. Recognition of the taxon will have to be based on the remainder of the genitalia and the maculation of the forewings. There are other examples in the U.S. National Museum from other localities in Manitoba that appear to be excellent matches based on the latter character.

Mamestra naevia Smith, 1898, Ent. News 9: 248.

"*Hab.*—Colorado, Bruce." "A single male specimen in good condition has been in my collection for some time."

Smith (1903, N.Y. Ent. Soc. Jour. 11(1): pl. 1, fig. 12) illustrated the male valve.

Holotype.—In the U.S. National Museum. The specimen is labeled "Mamestra naevia Smith ♂ type"; "Coio., Bruce"; "Type No. 4986 USNM"; "36511." The entire genitalia are missing. Hampson (1905, p. 65) erred in referring to the illustration as being plate LXXX, figure 5. His illustration is prepared from a drawing of the type and is plate LXXXVI, figure 5. Hampson caught his own error and corrected it in "Addenda and Corrigenda," page 603.

Carneades naevulus Smith, 1900, U.S. Natl. Mus. Proc. 22(1203): 424.

"*Habitat.*—Placer County, California, in September." "Nine males and three females from the U.S. National Museum, collected by Mr. A. Koebele." "*Type.*—Cat. No. 4797, U.S.N.M."

Syntypes examined: 7 (3 USNM and 4 AMNH)

- (1) "Carneades naevulus Smith ♂ type"; "Placer Co., Cal."; "Sept."; "Through C. V. Riley"; "Type No. 4797 U.S.N.M."; "♂ genitalia on slide 2231, E. L. Todd" [USNM]
- (2) "Carneades naevulus Smith ♀ type"; "Placer Co., Cal."; "Sept."; "Type No. 4797 U.S.N.M." [USNM]
- (3) "Carneades naevulus Smith cotype";

"Placer Co., Cal."; "Aug."; "Through C. V. Riley"; "Type No. 4797 U.S.N.M."; "201" [A ♂] [USNM]

- (4) "Carneades naevulus Smith cotype"; "Placer Co., Cal."; "Sept."; "J. B. Smith Collection Rutgers" [A ♂] [AMNH]
- (5-7) "Carneades naevulus Smith cotype"; same data [A ♂; 2 ♀♀] [AMNH]

Discussion.—The "♂ type" in the U.S. National Museum has been selected, labeled, and is now designated the lectotype. It was selected because of the sex, the particular Smith type label, and the USNM type number label.

Xylina nasar Smith, 1909, N.Y. Ent. Soc. Jour. 17: 62.

"*Habitat.*—Redington, Arizona (Dr. Barnes)." "Three males and two females in good condition from Dr. William Barnes."

Syntypes examined: 4 (2 USNM and 2 AMNH)

- (1) "Xylina nasar Smith ♂ type"; "Redington, Arizona"; "♂ genitalia on slide 1615 E. L. Todd" [Good condition] [USNM]
- (2) "Xylina nasar Smith ♀ type"; "Redington, Arizona"; "♀ genitalia on slide 1616 E. L. Todd" [Good condition] [USNM]
- (3) "Xylina nasar Smith ♂ cotype"; "Redington, Arizona"; "J. B. Smith Collection Rutgers" [AMNH]
- (4) "Xylina nasar Smith ♀ cotype"; "Arizona"; "J. B. Smith Collection Rutgers" [AMNH]

Discussion.—One male syntype has not been located. It is possible that it was not marked as cotype. There is a specimen from the Barnes collection with a Smith name label, but not marked cotype, in the U.S. National Museum. The syntype marked "♂ type" in the U.S. National Museum has been selected, labeled, and is now designated the lectotype.

Rhynchagrotis nefascia Smith, 1908, Canad. Ent. 40(7): 227.

"There is a large series of both sexes before me from Ft. Wingate, New Mexico, and another, collected by Mr. Buchholz from Yavapai Co., Arizona. Altogether of spread material there are 35 ♂'s and 47 ♀'s showing . . ."

Lectotype.—In the American Museum of Natural History. Selected and designated by Buckett (1968, Calif. Dept. Agr. Bur. Ent. Occas. Papers No. 15, p. 19). Buckett cited the date as "July 21," which is incorrect. The correct date is July 27. The spelling of the trivial name on page 227 is *negascia*! This is a lapsus. The name is spelled *nefascia* on page 222, in the index, and on the labels.

Mamestra negussa Smith, 1900, Canad. Ent. 32(8): 219, pl. 5, fig. 2.

"*Habitat:* Calgary, Canada, mouth of Fish Creek, on Sallows, May 1, 4 and 14 (Mr. F. H. Wolley Dod)." "Two males and two females." Under plate 5 Smith stated: "All the photographs were made from actual type specimens, except 11 and 12."

Syntypes examined: 4 (2 USNM and 2 AMNH)

- (1) "Mamestra negussa Smith ♂ type"; "Calgary, 1.V.95, Mouth of Fish Creek (Sallows), F. H. W. Dod"; "Type No. 4841 U.S.N.M."; "36311" [Good condition, nick in apex left forewing, left valve of genitalia missing] [USNM]
- (2) "Mamestra negussa Smith ♀ type"; "Calgary, 4.V.94, Mouth of Fish Creek (Sallows), F. H. W. Dod"; "17"; "Type No. 4841 U.S.N.M."; "36311" [USNM]
- (3) "Mamestra negussa Smith ♂ cotype"; "Calgary, 1.V.95, Mouth of Fish Creek (Sallows), F. H. W. Dod"; "J. B. Smith Collection Rutgers" [Good condition, complete] [AMNH]
- (4) "Mamestra negussa Smith ♀ cotype"; "Calgary, 14.V.98, Mouth of Fish Creek (Sallows), F. H. W. Dod"; "J. B. Smith Collection Rutgers" [Good condition] [AMNH]

Discussion.—The syntype marked "♂ type" is the specimen illustrated by Smith. It has been selected, labeled, and is now designated the lectotype.

Acontia neocula Smith, 1900, Amer. Ent. Soc. Trans. 27: 75.

Hab.—Hot Springs, New Mexico, 7000 ft. (Hulst); Texas. "Five males and three females, all very much alike."

Syntypes examined: 6 (2 USNM and 4 AMNH)

- (1) "Acontia neocula Smith ♂ type"; "Texas"; "Collection O. Meske"; "Type No. 5390 U.S.N.M."; "36511"; "♂ genitalia on slide 1459, Jan. 13, 1938, J.F.G.C." [Good condition] [USNM]
- (2) "Acontia neocula Smith ♀ type"; "Texas"; "Collection O. Meske"; "Type No. 5390 U.S.N.M."; "36511"; "♀ genitalia on slide 1460, Jan. 13, 1938, J.F.G.C." [USNM]
- (3) "Acontia neocula Smith ♂ cotype"; "Tex."; "Collection J. B. Smith" [Broken by verdigris] [AMNH]
- (4) "Acontia neocula Smith ♀ cotype"; same data [Greasy abdomen] [AMNH]
- (5) "Acontia neocula Smith ♂ cotype"; "Collection G. D. Hulst" [AMNH]
- (6) "Acontia neocula Smith ♂ cotype"; "Hot Springs, N. Mex., 7000 ft. alt."; "Collection J. B. Smith" [Good condition, complete, hindwings folded] [AMNH]

Discussion.—Two syntypes, a male and female, have not been located. The syntype marked "♂ type" in the U.S. National Museum has been selected, labeled, and is now designated the lectotype.

Acontia neomexicana Smith, 1900, Amer. Ent. Soc. Trans. 27: 81.

Hab.—Texas, July 23rd (Belgrave). "A single male only."

Holotype.—In the U.S. National Museum. The specimen is labeled "Acontia neomexicana Smith ♂

type"; "Texas, Belgrave"; "23/7"; "collection C. V. Riley"; "Type No. 5394 USNM"; "36511." It is a male and the abdomen and antennae are missing.

Carneades neomexicana Smith, 1890, U.S. Natl. Mus. Bul. 38, p. 219.

HABITAT.—New Mexico. "Several specimens collected by Mr. Meeske are in the collections of Messrs. Hulst and Neumoegen." Smith (1893, U.S. Natl. Mus. Bul. 44, p. 88) stated: "Types are in the National Museum and the collections of Neumoegen and Hulst, the latter now at Rutgers College."

Syntypes examined: 5 (4 USNM and 1 AMNH)

- (1) "Carneades neomexicana Smith Type"; "Las Vegas, N.M., H. Meeske, '89"; "Acc. No. 23933 U.S.N.M."; "Type No. 103 U.S.N.M."; "♂ genitalia on slide 2168, E. L. Todd" [Fair condition, 1 valve of genitalia missing] [USNM]
- (2) "Carneades neomexicana Smith Type"; "Las Vegas, N.M., H. Meeske, '89"; "Col. B. Neumoegen"; "Type No. 33735 U.S.N.M."; "♂ genitalia on slide 2169, E. L. Todd" [Good condition] [USNM]
- (3) "Carneades neomexicana Smith Type"; "Hot Springs, N. Mex., 7000 ft. alt."; "Collection G. D. Hulst"; "Type No. 103 U.S.N.M."; "36511"; "♀ genitalia on slide 2170, E. L. Todd" [Fair condition] [USNM]
- (4) "Carneades neomexicana Smith Type"; "Las Vegas, N.M., H. Meeske, '89"; "Col. B. Neumoegen"; "♀ genitalia on slide 2171, E. L. Todd" [Very good condition] [USNM]
- (5) "Carneades neomexicana Smith Type"; "Hot Springs, N. Mex., 7000 ft. alt."; "Aug."; "Collection G. D. Hulst" [A ♂, good condition, complete] [AMNH]

Discussion.—The fourth syntype listed here, the female in the U.S. National Museum bearing my genitalia slide number 2171, has been selected, labeled, and is now designated the lectotype. It is more brightly colored and in better condition than the other syntypes.

Carneades neotelis Smith, 1900, U.S. Natl. Mus. Proc. 22(1203): 446.

Habitat.—Pullman, Washington, July (Piper); Colorado Bruce. "Two males and two females, remarkably similar in size and not much different in other respects." *Type.*—Cat. No. 4796, U.S.N.M. Hampson (1903, Catalogue of the Lepidoptera Phalaenae in the Collection of the British Museum, v. 4, p. 288) stated: "Pl. LXV. fig. 32" and "This species is unknown to me; figured from a photograph from type in U.S. Nat. Mus." "♂, Washington."

Syntypes examined: 4 (3 USNM and 1 AMNH)

- (1) "Carneades neotelis Smith ♂ type"; "Pullman, Wash."; "Collector C. V. Piper"; "36311"; "Type No. 4769 U.S.N.M."; "♂ genitalia on slide 2278, E. L. Todd" [USNM]
- (2) "Carneades neotelis Smith ♀ type";

"Pullman, Wash., 27 July 98"; "Type No. 4769 U.S.N.M."; "36511" [Abdomen off, glued to paper strip on pin, damaged by dermestids] [USNM]

- (3) "Carneades neotelis Smith ♀ cotype"; "Colo., Bruce"; "366"; "Type No. 4796 U.S.N.M."; "36311" [Specimen broken by verdigris, parts glued to paper strip on pin] [USNM]
- (4) "Carneades neotelis Smith ♂ cotype"; "Pullman, Wash."; "Collector C. V. Piper"; "J. B. Smith Collection Rutgers" [AMNH]

Discussion.—The "♂ type" and "♀ type" bear the wrong type number, obviously due to a simple error of reversing the final 6 with the 9. The U.S. National Museum type book for insects shows that the number 4796 as given in the description is correct. The entry was made March 31, 1900. It is stated that two specimens were received from J. B. Smith, they were from Pullman, Wash., and Colorado, and marked "♂ type" and "♀ cotype." This is probably correct since the "♀ type" has a different accession number. The USNM type number label on that specimen could have been placed on later and the error in number caused by copying from the incorrect label on the "♂ type." The "♂ type" in the U.S. National Museum has been selected, labeled, and is now designated the lectotype.

Mamestra neoterica Smith, 1898, Ent. News 9: 244.

"*Hab.*—Winnipeg, Manitoba." "One male and two females from Mr. Hanham, all somewhat different in ground color."

Smith (1903, N.Y. Ent. Soc. Jour. 11(1): pl. 1, fig. 14) illustrated the valve of the male genitalia.

Syntypes examined: 3 (2 USNM and 1 AMNH)

- (1) "Mamestra neoterica Smith ♂ type"; "W. Man."; "Winnipeg, Man."; "Type No. 4158 U.S.N.M."; "36511" [Left valve of genitalia missing, inner margin of each forewing rubbed] [USNM]
- (2) "Mamestra neoterica Smith ♀ type"; "Winnipeg, Man."; "Acc. No. 34638 U.S.N.M." [Good condition] [USNM]
- (3) "Mamestra neoterica Smith ♀ type"; "Winnipeg, Man."; "Collection J. B. Smith" [Fair condition, somewhat frayed, dermestid damage to venter of abdomen] [AMNH]

Discussion.—Both female syntypes are labeled "♀ type." The parts of the male genitalia still intact would seem to offer the best characters for recognition of the entity to which the name applies. Accordingly, the "♂ type" in the U.S. National Museum has been selected, labeled, and is now designated the lectotype.

Leucania neptis Smith, 1902, U.S. Natl. Mus. Proc. 25(1283): 188, pl. 5, fig. 12.

"*Habitat.*—Colorado (Neumoegen); Fort Collins, Colorado, August 13 (Kearfott)." "Nine examples are before me, eight of them from badly papered specimens. One perfect example from the Neumoegen collection." "Type.—No. 6248, U.S.N.M."

Syntypes examined: 8 (4 USNM and 4 AMNH)

- (1) "Leucania neptis Smith ♂ type"; "Colorado"; "Col. B. Neumoegen"; "Type No. 33849 U.S.N.M."; "♂ genitalia slide USNM 1221, J. G. Franclemont" [Good condition] [USNM]
- (2) "Leucania neptis Smith ♀ cotype"; "Ft. Collins, Colo., Aug. 13, 1895"; "Collection of W. D. Kearfott"; "Type No. 6248 U.S.N.M."; "5368" [Fair condition] [USNM]
- (3) "Leucania neptis Smith ♀ type"; "Ft. Collins, Colo., Aug. 13, 1895"; "Collection of W. D. Kearfott"; "J. B. Smith Collection Rutgers" [Rather worn] [AMNH]
- (4) "Leucania neptis Smith cotype"; "Ft. Collins, Colo., Aug. 13, 1895"; "Collection of W. D. Kearfott"; "♂ gen., 6 Oct. 32, FHB."; "Barnes collection"; "5261" [USNM]
- (5) "Leucania neptis Smith cotype"; "Ft. Collins, Colo., Aug. 13, 1895"; "Collection of W. D. Kearfott"; "5430"; "Barnes collection" [A ♀] [USNM]
- (6) "Leucania neptis Smith ♂ cotype"; "Ft. Collins, Colo., Aug. 13, 1895"; "Collection of W. D. Kearfott"; "J. B. Smith Collection Rutgers" [AMNH]
- (7) "Leucania neptis Smith cotype"; "Ft. Collins, Colo., Aug. 13, 1895"; "Collection W. D. Kearfott"; "Type No., A.M.N.H." [A ♂] [AMNH]
- (8) "Leucania neptis Smith cotype"; same data as above [A ♂] [AMNH]

Discussion.—The published information and the label data for this taxon certainly illustrate that Smith did not have a holotype concept. Only one syntype bears the USNM type number 6248 as published in the description, but Smith marked it "♀ cotype." I do not consider it to be the holotype. The "♂ type" is by far the best specimen so far as condition is concerned. In addition, because it seems desirable to select a male syntype, I have selected, labeled, and now designate the "♂ type" in the U.S. National Museum as the lectotype.

Omia nesaea Smith, 1893, Insect Life 5(5): 332, fig. 46: 4.

"*Habitat.*—Argus Mountains, April, 1891 (Death Valley Exp.); Western Utah, Weidt." "I have seen 8 specimens, of which the one collected by Mr. Weidt is in the Neumoegen collection, the others from the U.S. National Museum."

Syntypes examined: 5 (4 USNM and 1 AMNH)

- (1) "Omia nesaea Smith Type"; "Argus Mts., April 91 K."; "Through C. V. Riley"; "Type No. 297 U.S.N.M."; "1" [A ♂, fairly good condition, complete, slight verdigris forming on venter] [USNM]
- (2) "Omia nesaea Smith Type"; "Argus Mts., April 91 K."; "Through C. V. Riley"; "Type No. 297 U.S.N.M."; "2" [A ♂, abdomen of some ♀ glued on!] [USNM]
- (3) "Omia nesaea Smith Type"; "Argus Mts., April 91 K."; "Through C. V. Riley"; "Type

No. 297 U.S.N.M."; "3" [A ♂, fair condition, complete, slight verdigris forming on venter] [USNM]

- (4) "Omia nesaea Smith Type"; "S. W. Utah, Weidt"; "Col. B. Neumögen"; "Type No. 33958 U.S.N.M." [A ♀, fair condition] [USNM]
- (5) "Omia nesaea Smith Type"; "Argus Mts., April '91 K."; "Through C. V. Riley"; "J. B. Smith Collection, Rutgers" [A ♀, fair condition, verdigris forming, left hindwing off (in tray)] [AMNH]

Discussion.—Three syntypes have not been located. One was apparently the specimen illustrated, as none located seem to agree with the figure. There are two other specimens in the U.S. National Museum with identical locality and collection labels, but they are not marked as types by Smith. The syntype male from the Argus Mountains in the U.S. National Museum also marked "1" has been selected, labeled, and is now designated the lectotype.

Euxoa nesilens Smith, 1903, N.Y. Ent. Soc. Jour. 11: 192.

"*Habitat*: Brandon, Manitoba; Calgary, Canada, July 5–12 (F. H. Wolley Dod)." "Two males and three females are before me at present; others are in the collection of Mr. Dod. . . ."

Lectotype.—In the American Museum of Natural History. Designated by Todd (Oct. 4, 1968, Wash. Ent. Soc. Proc. 70(3): 274).

Carneades nevada Smith, 1900, U.S. Natl. Mus. Proc. 22(1203): 420.

"*Habitat*.—Nevada." "Three male specimens from Mrs. F. O. Herring, all of them a little rubbed, but very much alike. . . ." "Type.—Cat. No. 4788, U.S.N.M."

Syntypes examined: 3 (1 USNM and 2 AMNH)

- (1) "Carneades nevada Smith ♂ type"; "Nevada"; "Type No. 4788 U.S.N.M."; "36311"; "♂ genitalia on slide 901, JFGC." [USNM]
- (2) "Carneades nevada Smith ♂ cotype"; "Nevada"; "J. B. Smith Collection, Rutgers" [AMNH]
- (3) "Carneades nevada Smith ♂ cotype"; same data [AMNH]

Discussion.—The "♂ type" is the only syntype marked as type and the only one to bear the U.S. National Museum type number listed in the description. That specimen has been selected, labeled, and is now designated the lectotype.

Xylomiges nicalis Smith, 1909, N.Y. Ent. Soc. Jour. 17: 66.

"*Habitat*.—Pullman, Washington, April and May." "Seven males and six females, all in good condition, received from the Experiment Station some years ago and but recently separated out." Barnes and McDunnough (1913, Contrib. Nat. Hist. Lepidoptera N. Amer. 2(1): 26, pl. 12, fig. 1) illustrated a male cotype from Pullman, Wash.

Syntypes examined: 12 (7 AMNH and 5 USNM)

- (1) "Xylomiges nicalis Smith ♂ type"; "Pullman, Wash., 03 April 23"; "J. B. Smith Collection, Rutgers" [Fair condition, complete] [AMNH]
- (2) "Xylomiges nicalis Smith ♀ type"; "Pullman, Wash., 03 May 1"; "J. B. Smith Collection, Rutgers" [Fair condition] [AMNH]
- (3) "Xylomiges nicalis Smith cotype"; "Pullman, Wash., 03 Apr. 23"; "Photograph, Pl. 12, No. 1"; "Barnes Collection" [A ♂, dermestid hole in abdomen and right hindwing] [USNM]
- (4) "Xylomiges nicalis Smith cotype"; "Pullman, Wash., 03 Apr. 24"; "Col. Jacob Doll"; "Barnes collection" [A ♂] [USNM]
- (5) "Xylomiges nicalis Smith cotype"; "Pullman, Wash., 03 April 24"; "Barnes collection" [A ♀] [USNM]
- (6) "Xylomiges nicalis Smith cotype"; "Pullman, Wash., 03 Apr. 23"; "Barnes collection" [A ♂] [USNM]
- (7) "Xylomiges nicalis Smith cotype"; same data [A ♀] [USNM]
- (8–12) "Xylomiges nicalis Smith cotype"; same data as ♂ or ♀ types [3 ♂♂, 2 ♀♀] [AMNH]

Discussion.—Three syntypes rate above the others as lectotype candidates. They are the two marked "♂ type" and "♀ type" by Smith and the "cotype," a male, illustrated by Barnes and McDunnough. The latter has been eliminated because of the dermestid damage. The "♂ type" has been selected over the "♀ type" in order that male genitalia may be utilized in recognizing the taxon. It is now designated lectotype and is so labeled. The lectotype is in the American Museum of Natural History.

Rhynchagrotis niger Smith, 1903, N.Y. Ent. Soc. Jour. 11(1): 3.

"*Habitat*: Pullman, Washington, May 27; Moscow, Idaho, May 14, Prof. C. V. Piper." "Three female specimens in fair condition." Smith (1908, Canad. Ent. 40(7): 226) stated: ". . . but I have only the types—one from Pullman, Washington, the other from Moscow, Idaho, the former in May, the latter in July."

Syntypes examined: 2 (AMNH)

- (1) "Rhynchagrotis niger Smith ♂ type"; "Pullman, Wash., 31 May 97"; "Collector H. W. Doane"; "J. B. Smith Collection, Rutgers" [Fair condition, left hindwing broken and crumpled toward base]
- (2) "Rhynchagrotis niger Smith ♀ type"; "Moscow, Idaho"; "14 July 98"; "Collector C. V. Piper"; "J. B. Smith Collection, Rutgers" [Fair condition]

Discussion.—In the original description Smith indicated there were three syntypes, but in 1908 he referred to only two. Only two have been located, but one is a male marked "♂ type"! That specimen is dated May

31, 1897, not May 27 as indicated in the description. It is possible that Smith thought the year "97" was the day and interpreted it to be 27. In the case of some other specimens described as other species (see *Xylomiges nivalis* Smith) from Pullman, Wash., the dates had the year written before the month and the day last. The date Smith gave for the specimen from Idaho is also wrong in the original description. He gave the correct month in the paper in 1908. Since the sex and date of one syntype do not agree with comments in the original description, the "♀ type" has been selected, labeled, and is now designated the lectotype.

Oncocnemis nigerrima Smith, 1903, N.Y. Ent. Soc. Jour. 11(1): 10.

"*Habitat*: Yuma County, Arizona, in July." "One good male from Mr. Geo. S. Hutson, taken in the desert area."

Holotype.—In the American Museum of Natural History. The specimen is labeled "Oncocnemis nigerrima Smith ♂ type"; "Yuma Co., Ariz."; "Colorado Desert"; "Collection J. B. Smith."

Peridroma nigra Smith, 1892, Ent. News 3(10): 252, pl. 10, middle row, lower figure.

"*Hab.*—Colorado in September. Bruce (No. 462). A single female only."

Smith (1894, Amer. Ent. Soc. Trans. 21: 43, pl. 1, lower center figure) again described this as a new species using the original plate. He stated:

"*Hab.*—Colorado. Bruce (No. 231 and 462); Salt Lake City, Utah. Hy. Edwards." "Two specimens (♀) from Mr. Bruce are before me, one of them marked '9, 2, 88! the other without date. In the Hy. Edwards collection there are also two specimens, which I have compared with them but not labeled."

Holotype.—In the American Museum of Natural History. The specimen is labeled "Peridroma nigra Smith Type"; "Colo., Bruce"; "9-2-88"; "462"; "J. B. Smith Collection Rutgers." There is a specimen from Colorado, collected by Bruce and numbered 231 in the collection of the U.S. National Museum, that Smith marked "Type" at the time of the second description of the species. It is a male and must be considered a pseudotype.

Xylophasia nigrior Smith, 1890, U.S. Natl. Mus. Proc. 13: 437, pl. 37, fig. 23.

"*HABITAT*.—Maine." "The type is a fine specimen from Mr. Thaxter, and I have seen others in his collection and in those of Mrs. Fernald and Mr. Eddy, of Bangor."

Smith (1893, U.S. Natl. Mus. Bul. 44, p. 139) stated: "The type is with Dr. Thaxter."

Holotype.—The specimen should be in the Museum of Comparative Zoology, Harvard College, Cambridge, Mass. I do not know whether the other specimens mentioned by Smith as being in the Thaxter collection were labeled as types by Smith.

Oncocnemis nigrocaput Smith, 1892, Ent. News 3(10): 250, pl. 10, row 1, fig. 4.

"*Hab.*—Colorado. Bruce, one ♂ (No. 296), one ♀ (No. 181)."

Smith (1894, Amer. Ent. Soc. Trans. 21: 67, pl. 1, row 1, fig. 4) again described this as new, using the same plate and stated: "Two specimens, ♂ and ♀ numbered 296 and 181, respectively, collected by Mr. Bruce, are before me, and are the types."

Syntypes examined: 2 (USNM and AMNH)

(1) "Oncocnemis nigrocaput Smith Type"; "Colo., Bruce"; "296"; "Type No. 194 U.S.N.M." [A ♂, fair condition, complete] [USNM]

(2) "Oncocnemis nigrocaput Smith Type"; "Colo. Bruce"; "Collection J. B. Smith" [A ♀, fair condition] [AMNH]

Discussion.—The syntype in the American Museum of Natural History does not bear the number 181 listed in the description. The male syntype in the U.S. National Museum is the specimen illustrated by Smith. It has been selected, labeled, and is now designated the lectotype.

Mamestra nipana Smith, 1910, N.Y. Ent. Soc. Jour. 18: 93.

"*Habitat*.—Arizona: Baboquavaria Mts., Pima Co., VII, 15-13 [sic], and southern Arizona (Poling), Minnehaha, Yavapai Co., VIII, 11 (Hutson)." "Six females, all in good condition."

Syntypes examined: 4 (3 AMNH and 1 USNM)

(1) "Mamestra nipana Smith Type ♀"; "So. Arizona, Poling"; "J. B. Smith Collection, Rutgers" [Good condition, complete] [AMNH]

(2) "Mamestra nipana Smith cotype"; "So. Arizona, Poling"; "July 1-15"; "J. B. Smith Collection, Rutgers" [A ♀, fair condition] [AMNH]

(3) "Mamestra nipana Smith cotype"; "So. Arizona"; "May 15-30"; "Barnes collection" [A ♀] [USNM]

(4) "Mamestra nipana Smith cotype"; "Baboquavaria Mts., Pima Co., Arizona, July 15 to 30, 1903, Coll. O. C. Poling"; "J. B. Smith Collection, Rutgers" [A ♀, fair condition] [AMNH]

Discussion.—Two syntypes have not been located. At least one should be labeled from Minnehaha, Yavapai County, Ariz., August 11, Hutson. There is a specimen in the U.S. National Museum with a Smith name label, but not marked "cotype," that has the same data as the last syntype listed here. The "Type ♀" in the American Museum of Natural History has been selected, labeled, and is now designated the lectotype.

Oncocnemis nita Smith, 1910, N.Y. Ent. Soc. Jour. 18: 91.

"*Habitat*.—San Diego, California, X, 26, XI, 7."

"One male, one female, in fair condition, from Mr. George H. Field, received under the number 71, . . ."

Syntypes examined: 2 (AMNH)

(1) "Oncocnemis nita Smith ♂ type"; "San Diego, Cal., 10-26-08, W. S. Wright"; "J. B.

Smith Collection, Rutgers" [Fair condition, fringes frayed]

- (2) "Oncocnemis nita Smith ♀ type"; "San Diego, Cal., 11-7-08, Geo. H. Field"; "J. B. Smith Collection, Rutgers" [Fair condition, fringes ragged]

Discussion.—The "♂ type" in the American Museum of Natural History has been selected, labeled, and is now designated the lectotype.

Oxycnemis nivalis Smith, 1894, Amer. Ent. Soc. Trans. 21: 87, pl. 6, fig. 5.

"*Hab.*—Texas." "The type is a perfect female from Mr. Neumoegen's collection. I think I have seen another in the National Museum material."

Holotype.—In the U.S. National Museum. The specimen is labeled "Oxycnemis nivalis Smith Type"; "Tex."; "Col. B. Neumögen"; "Type No. 33918 USNM." It is a female.

Eucalyptra nivealis Smith, 1903, Amer. Ent. Soc. Trans. 29(3): 220.

"*Hab.*—Hastings, Florida (Barnes); Iowa City, Iowa, June 23 (Wickham)." "Two good males very similar in appearance, despite the widely separated localities. The Iowa City example came from the Kemp collection, and is dated in 1898."

Syntypes examined: 2 (AMNH and USNM)

- (1) "Eucalyptra nivealis Smith ♂ type"; "Iowa City, VI-23 98, Wickham"; "Collection S. T. Kemp"; "J. B. Smith Collection, Rutgers" [Worn and ragged, but complete, verdigris very developed] [AMNH]
(2) "Eucalyptra nivealis Smith ♂ cotype"; "Hastings"; "Florida"; "♂ gen. 664, FHB." [USNM]

Discussion.—The syntype marked "♂ type" is not in as good condition as the "♂ cotype." Since the series I have examined are from Kansas, Nebraska, and Iowa, it seems best to choose a lectotype from that area. Accordingly, the "♂ type" in the American Museum of Natural History has been selected, labeled, and is now designated the lectotype.

Acontia niveicollis Smith, 1902, N.Y. Ent. Soc. Jour. 10: 51.

"*Habitat.*—Walters Station, California, in March (Geo. S. Hutson)." "A single male, in good condition taken in the Colorado desert."

Holotype.—In the American Museum of Natural History. The specimen is labeled "Acontia niveicollis Smith ♂ type"; "Walters Sta, Calif. Apr."; "Collection J. B. Smith"; "♂ genitalia on slide 10, 356 FHR."

Heliothis niveicosta Smith, 1906, N.Y. Ent. Soc. Jour. 14: 15.

"*Habitat.*—Southern California." "One female in not the best condition, received years ago from Dr. Barnes, numbered 154."

Holotype.—In the U.S. National Museum. The specimen is labeled "Heliothis niveicosta Smith ♀ type"; "Southern Calif."; "Barnes collection."

Neleucania niveicosta Smith, 1902, U.S. Natl. Mus. Proc. 25(1283): 205.

"*Habitat.*—Glenwood Springs, Colorado, June, July, August, and September." "Five examples, all from Dr. William Barnes, and all save one in good condition." "Type.—No. 6252, U.S.N.M."

Barnes and McDunnough (1913, Contrib. Nat. Hist. Lepidoptera N. Amer. 2(1): 16, pl. 7, fig. 6) illustrated a female cotype from Glenwood Springs, Colo., under the name *Meliana niveicosta* Sm.

Syntypes examined: 5 (2 AMNH and 3 USNM)

- (1) "Neleucania niveicosta Smith ♂ type"; "Glenwood Springs, Colo., 8 1892, W. Barnes"; "Collection J. B. Smith" [Right forewing missing, at one time glued on, a ♂, but some ♀ abdomen glued on] [AMNH]
(2) "Neleucania niveicosta Smith ♀ type"; "Glenwood Spgs., Colo."; "July 24-30"; "Type No. 6252 U.S.N.M."; "♀ Genitalia slide USNM 649, J. G. Franclemont" [Fair condition] [USNM]
(3) "Neleucania niveicosta Smith ♀ cotype"; "Glenwood Spgs., Colo."; "June 24-30"; "Barnes collection" [A ♀, fair condition] [USNM]
(4) "Neleucania niveicosta Smith cotype"; "Sept. 1-7"; "Photograph Pl. 7, No. 6"; "Barnes collection" [A ♀] [USNM]
(5) "Neleucania niveicosta Smith ♂ cotype"; "Glenwood Spgs., Colo."; "August 8-15"; "J. B. Smith Collection, Rutgers" [AMNH]

Discussion.—The "♀ type" in the U.S. National Museum may actually be the holotype of this taxon; however, to insure that it is considered the type-specimen, it has been selected, labeled, and is now designated the lectotype. It is the only specimen to bear the USNM type number listed in the original description. It is for that reason it is selected rather than the "cotype," the only specimen illustrated. The "♂ type" in the American Museum of Natural History is broken and has a false abdomen attached.

Carneades noctuiformis Smith, 1900, U.S. Natl. Mus. Proc. 22(1203): 445.

"*Habitat.*—Siskiyou, California, September 11 (Henry Edwards); east Washington (Piper)." "Two males. The type was received from Mr. Edwards several years ago and is in fair condition; the second example, from Washington, is rubbed and imperfect."

Hampson (1903, Catalogue of the Lepidoptera Phalaenae in the Collection of the British Museum, v. 4, p. 279) stated: "Pl. LXV, fig. 18" and "This species is unknown to me; figured from a photograph from type in U.S. Nat. Mus."

Syntypes examined: 1 (USNM)

- (1) "Carneades noctuiformis Smith ♂ type"; "Siskiyou, Sept. 11"; "Type No. 5136 U.S.N.M."; "36511"

Discussion.—The comment in the original description, "The type was received . . .," would seem to indicate that Smith considered one specimen to be a

holotype, but his other work clearly indicates he did not have a holotype concept. In order to assure that this specimen is the type-specimen, it has been labeled and is now designated the lectotype.

Phaeocyma norda Smith, 1908, U.S. Natl. Mus. Proc. 35(1645): 236, pl. 32, fig. 2, pl. 34, fig. 5.

"*Habitat*.—Kaslo, British Columbia, in May and June; Rossland, British Columbia, in early June; Arrowhead Lake, British Columbia, in May; Cartwright, Manitoba, in June." "*Type*.—Rutgers College Collection: cotypes U.S.N.M., Type No. 12024; also Cockle and Barnes collections." "In the fine series of examples before me, 20 males and 18 females, comprising material from Mr. Cockle, from Doctor Barnes, from the U.S. National Museum, and from my own collection, this species stands out from all its allies . . ."

Syntypes examined: 19 (4 AMNH and 15 USNM)

- (1) "Homoptera norda Smith ♂ type"; "Kaslo, B.C."; "V.19"; "J. B. Smith Collection, Rutgers" [Good condition, complete] [AMNH]
- (2) "Homoptera norda Smith ♀ type"; same data [Good condition, complete] [AMNH]
- (3) "Homoptera norda Smith ♂ cotype"; same data except "V.27" [AMNH]
- (4) "Homoptera norda Smith ♀ cotype"; same data except "V.30" [AMNH]
- (5) "Homoptera norda Smith ♂ cotype"; "N.W. Brit. Cola."; "88"; "Collection Brklyn Mus."; "Type No. 34095 U.S.N.M." [USNM]
- (6) "Homoptera norda Smith cotype"; "Cartwright, Manitoba"; "June 24-30"; "Barnes collection"; "♀ genitalia on slide 2083, Oct. 6, 1938, J.F.G. Clarke" [USNM]
- (7) "Homoptera norda Smith ♂ cotype"; "Rossland, B.C., June 2, 1899"; "Accession No. 35350 U.S.N.M." [USNM]
- (8) "Homoptera norda Smith ♂ cotype"; same data [USNM]
- (9) "Homoptera norda Smith ♂ cotype"; "Rossland, B.C., June 3, 1899"; "Accession No. 35350 U.S.N.M." [USNM]
- (10) "Homoptera norda Smith ♂ cotype"; same data [USNM]
- (11) "Homoptera norda Smith ♂ cotype"; "Rossland, B.C., June 8, 1899"; "Accession No. 35350 U.S.N.M." [USNM]
- (12) "Homoptera norda Smith ♂ cotype"; "Kaslo, B.C."; "14-V-06"; "Barnes collection"; "♂ genitalia on slide 2081, Oct. 6, 1938, J. F. G. Clarke" [USNM]
- (13) "Homoptera norda Smith ♀ cotype"; "Kaslo, B.C."; "1-VI-06"; "Barnes collection"; "♀ genitalia on slide 2082, Oct. 6, 1938, J. F. G. Clarke" [USNM]
- (14) "Homoptera norda Smith cotype"; same data [A ♂] [USNM]
- (15) "Homoptera norda Smith ♂ cotype"; "Kaslo, B.C."; "11-V-06"; "Barnes collection" [USNM]

- (16) "Homoptera norda Smith ♀ cotype"; "Kaslo, B.C."; "V-19"; "Collection Brklyn. Mus." [USNM]
- (17) "Homoptera norda Smith ♀ cotype"; same place and date [USNM]
- (18) "Homoptera norda Smith ♀ cotype"; same place; "V-30"; "Collection Brklyn. Mus." [USNM]
- (19) "Homoptera norda Smith ♂ cotype"; "39357"; "H. G. Dyar collector" [USNM]

Discussion.—Smith apparently labeled this series before he decided to use *Phaeocyma* Hübner as the generic name, because the type labels have the generic name *Homoptera*, a Guenée name. Only about half of the original series appears to have been labeled as types. In the American Museum of Natural History there are three male and 3 female genitalia slides that were studied by Smith and some other slides of legs. The illustrations of the female and male genitalia appear to have been prepared from two of the slides marked as made from examples from Manitoba. The examples have not been located. Accordingly, the "♂ type" in the American Museum of Natural History has been selected, labeled, and is now designated the lectotype.

Carneades nordica Smith, 1900, U.S. Natl. Mus. Proc. 22(1203): 455.

"*Habitat*.—Calgary, Canada, July 16, 19, August 3 (Dod); Olds, British Columbia (Fletcher)." "Two males and two females." "*Type*.—Cat. No. 4786, U.S.N.M."

Syntypes examined: 4 (3 USNM and 1 AMNH)

- (1) "Carneades nordica Smith ♂ type"; "Calgary, Can., Dod"; "3 VIII 95"; "Type No. 4786 U.S.N.M."; "36311"; "♂ genitalia on slide 2275, E. L. Todd" [USNM]
- (2) "Carneades nordica Smith ♀ type"; "16/VII/91"; "Type No. 4786 U.S.N.M."; "36311" [USNM]
- (3) "Carneades nordica Smith ♂ cotype"; "19/VII/94"; "Slide 119k" [USNM]
- (4) "Carneades nordica Smith ♀ cotype"; "Olds, B.C."; "J. B. Smith Collection, Rutgers" [AMNH]

Discussion.—The two syntypes in the U.S. National Museum that lack locality labels were from Calgary, Canada, according to the original description. The syntype labeled "♂ type" and bearing the USNM type number 4786 has been selected, labeled, and is presently designated the lectotype.

Agrotis nostra Smith, 1890, Amer. Ent. Soc. Trans. 17: 55.

"*Habitat*.—Sierra Nevada, Cal. (McGlashan)." "The species seems tolerably common judging from the number of specimens sent." "Types in the Rutgers College collection, coll. Hy. Edwards, and coll. U.S. National Museum. Mr. Neumoegen also has specimens in his collection." Smith (1890, U.S. Natl. Mus. Bul. 38, p. 196) presented the same information. Smith (1893, U.S. Natl. Mus. Bul. 44, p. 104) stated:

"Types are in the National Museum; other [sic] in the Edwards and Neumoegen collections."

Syntypes examined: 6 (3 USNM and 3 AMNH)

- (1) "Agrotis nostra Smith Type"; "Sier. Nev., Cal."; "Type No. 130 U.S.N.M."; "♂ genitalia on slide 2237, E. L. Todd" [USNM]
- (2) "Agrotis nostra Smith Type"; same data [A ♀] [USNM]
- (3) "Agrotis nostra Smith Type"; same data plus "Acc. No. 25975 U.S.N.M." [A ♀] [USNM]
- (4) "Agrotis nostra Smith Type"; "Sier. Nev. Cal."; "coll. Hy. Edw., 9857"; "Type, A.M.N.H." [A ♂, good condition] [AMNH]
- (5) "Agrotis nostra Smith Type"; same data except "coll. Hy. Edw. No. 9858" [A ♂] [AMNH]
- (6) "Agrotis nostra Smith Type"; same data except "coll. Hy. Edw., No. 9855" [A ♀, right hindwing slit to base] [AMNH]

Discussion.—Smith did not indicate how many examples he examined. The statement that part of the type-series was in the Rutgers College collection indicates that Smith planned to keep some at the time of writing the manuscript, but his statement as to the location of the type material in 1893 indicates he must have changed his mind or had forgotten his original statement. If he did keep specimens, they were not labeled as types or destroyed before that collection was received by the American Museum of Natural History because the species is not listed by Rindge (1955, p. 123). The genitalic preparation of the male syntype in the U.S. National Museum was prepared during a visit by D. F. Hardwick to study the genus *Euxoa*. He suggested the slide be made and concurs with my action of selecting, labeling, and designating that specimen as the lectotype.

Trichoclea [sic] *nova* Smith, 1903, Amer. Ent. Soc. Trans.

29(3): 198, pl. 3, fig. 2. [Generic name spelled correctly, *Trichoclea*, p. 224 and on labels]

"Hab.—Tucson, Arizona, March 17 (S. T. Kemp); Mesilla Park, New Mexico, Southern Arizona, April 1–15th (Poling)." "Six examples, in fair to good condition, are at hand."

Hampson (1905, Catalogue of the Lepidoptera Phalaenae in the Collection of the British Museum, v. 5, p. 236) listed a female cotype from Tucson, Ariz., in the British Museum (Natural History).

Syntypes examined: 4 (2 AMNH and 2 USNM)

- (1) "Trichoclea nova Smith ♂ type"; "Tucson, Ariz., 3.17"; "Collection S. T. Kemp"; "J. B. Smith Collection, Rutgers"; "♂ Genitalia mounted on slide by Smith" [Fair condition, abdomen missing] [AMNH]
- (2) "Trichoclea nova Smith ♂ cotype"; "Mesilla Park, N. Mex."; "Foarenberry, Mar. 1900"; "Collection J. B. Smith" [Poor condition, very rubbed, but complete] [AMNH]
- (3) "Trichoclea nova Smith ♀ cotype"; "Phoenix, Ariz., XI-10"; "Collection J. B. Smith"; "Barnes collection" [USNM]

- (4) "Trichoclea nova Smith cotype"; "Tucson, Ariz., 3-17"; "Collection S. T. Kemp"; "Type No. 6810 U.S.N.M." [A ♀] [USNM]

Discussion.—A syntype labeled "♀ type" apparently from "Southern Arizona, April 1–15, Poling" has not been located. The syntype in the American Museum labeled "♂ type" is the specimen from which the illustration of the male valve of the genitalia was prepared. There is a slide in the same institution of two valves in fairly good condition from which figure 2 of plate 3 was prepared. The right valve is the one illustrated, but it is obvious that the illustration is a reversal. The "♂ type" in the American Museum of Natural History has been selected, labeled, and is now designated the lectotype.

Taeniocampa nubilata Smith, 1910, Canad. Ent. 42(10): 320, pl. 8, fig. 4.

"An irregularly-mottled form, for which I propose the term *nubilata*, occurs in Colorado." "Unfortunately, in the series of 10 specimens, there are only two males; but these are alike in genital structure and are quite different from any other species." "Localities are: Garfield Co., Colo., 6,000 ft. (Bruce); Glenwood Springs, Colo., May 6 (Barnes); Denver, Colo., IV, 20." On page 323 Smith referred to the insect as "T. nubilata Smith."

Syntypes examined: 5 (3 AMNH and 2 USNM)

- (1) "Taeniocampa nubilata Smith ♂ type"; "Glenwood Springs, Col., 1893 5/12, W. Barnes"; "J. B. Smith Collection, Rutgers"; "♂ Genitalia mounted on slide by Smith" [Abdomen missing] [AMNH]
- (2) "Taeniocampa nubilata Smith ♀ type"; "Glenwood Springs, Col., 1894 5/10, W. Barnes"; "J. B. Smith Collection, Rutgers" [Worn and rubbed, but complete] [AMNH]
- (3) "Taeniocampa nubilata Smith Paratype"; "Garfield Co., Colo., 6000 ft."; "J. B. Smith Collection, Rutgers" [A ♀] [AMNH]
- (4) "Taeniocampa nubilata Smith Paratype"; "Colo. Bruce"; "Garfield Co., Colo., 6000 ft."; "♂ gen. 191, FHB" [USNM]
- (5) "Taeniocampa nubilata Smith Paratype"; "Garfield Co., Colo., 6000 ft."; "Barnes collection" [A ♀, antennae missing] [USNM]

Discussion.—Five syntypes have not been located.

They are apparently all females, but one could be a male. Smith stated that he had two males and that they were alike in genital structure. There is one genitalic slide in the American Museum of Natural History the label of which bears the name and "♂ genitalia, Type spec." in Smith's handwriting. The genitalia of the male syntype in the U.S. National Museum were prepared on the slide by Benjamin on January 30, 1932. If this male is the second one mentioned by Smith, he could only have examined the genitalia and compared with "♂ type" if they were extruded and visible in situ. The genitalia are complete and in perfect condition and thus may indicate a possibility that it may not be the second male referred to by Smith. He could have been in error and have included it as a female. The "♂ type" in the

American Museum of Natural History has been selected, labeled, and is now designated the lectotype.

Mamestra nugatis Smith, 1898, Ent. News 9: 240.

"Hab.—Montana; Nevada." "Two male specimens in somewhat rubbed condition were given me by Mrs. F. O. Herring, of Plainfield, N.J., some time ago."

Smith (1903, N.Y. Ent. Soc. Jour. 11(1): pl. 1, fig. 3) illustrated the valve of the male genitalia.

Syntypes examined: 2 (USNM and AMNH)

- (1) "Mamestra nugatis Smith ♂ type"; "Mont"; "Type No. 4160 U.S.N.M."; "Acc. No. 34638 U.S.N.M." [Right valve of genitalia missing, otherwise in good condition] [USNM]
- (2) "Mamestra nugatis Smith ♂ cotype"; "Nevada"; "Collection J. B. Smith" [Poor condition, but complete except for antennae] [AMNH]

Discussion.—The "♂ type" in the U.S. National Museum, the syntype from which the illustration of the genital valve was prepared in 1903, has been selected, labeled, and is now designated the lectotype.

Acontia nuicola Smith, 1900, Amer. Ent. Soc. Trans.

27: 67.

"Hab.—Texas, without special locality; all from the Hulst collection." "One male and two females; none in good condition."

Syntypes examined: 3 (2 USNM and 1 AMNH)

- (1) "Acontia nuicola Smith ♂ type"; "Tex."; "Collection G. D. Hulst"; "Type No. 5384 U.S.N.M."; "36511" [Good condition, complete] [USNM]
- (2) "Acontia nuicola Smith ♀ type"; "Collection G. D. Hulst"; "Type No. 5384 U.S.N.M."; "36511" [USNM]
- (3) "Acontia nuicola Smith ♂ cotype"; "Tex."; "Collection G. D. Hulst" [Apex of right forewing broken] [AMNH]

Discussion.—Smith's statement as to the number of specimens of each sex is in error. He labeled the specimens two males and one female. The "♂ type" in the U.S. National Museum has been selected, labeled, and is now designated the lectotype.

Agrotis obesula Smith, 1888, U.S. Natl. Mus. Proc. 10: 456.

"Habitat.—Montana." "A single ♂ specimen in good condition from Rev. George D. Hulst. Others since seen agree; 1 specimen in the Museum collection."

Smith (1890, U.S. Natl. Mus. Bul. 38, p. 126) stated: "A single specimen only is thus far known. Received from Rev. George D. Hulst."

Smith (1893, U.S. Natl. Mus. Bul. 44, p. 85) stated: "The type is in the National Museum."

Hampson (1903, Catalogue of the Lepidoptera Phalaenae in the British Museum, v. 4, p. 147, pl. LXI, fig. 2) figured the species, but erred in the explanation of figure 2, plate LXI (figured from a photograph of type) in stating it was from Texas.

Barnes and McDunnough (1916, Contrib. Nat. Hist.

Lepidoptera N. Amer. 3(3): 160) stated: "... examination of the single ♂ type from Montana in the National Museum. . . ."

Holotype.—In the U.S. National Museum. The specimen is labeled "Agrotis obesula type Smith" [on a piece of white paper]; "Hulst"; "Collection J. B. Smith"; "obesula Sm."; "Type No. 99 USNM." The specimen is a male. The abdomen is missing; however, there is a loose abdomen in the type box that may belong to the specimen. The tip of that abdomen is missing. There is a Smith slide in the U.S. National Museum labeled "obesula"; "101" and "103." [The latter is a Dyar number placed on Smith's slide in that collection.] It appears that Smith originally intended to name the species *obesula*. Perhaps he discovered there was already an *Agrotis obesula* Bdv., 1829.

Mamestra obesula Smith, 1904, Canad. Ent. 36(6): 151.

"Habitat.—Calgary, Alberta, head of Pine Creek, July 20, 22, and August 5, F. H. Wolley Dod; Denver, Colorado, July 8." "One ♂ and three ♀♀ are now before me. The specimen from Denver has been doubtfully associated with *Farnhami* for some years; but until I received specimens from Calgary I did not feel safe in determining it as a distinct."

Syntypes examined: 3 (AMNH)

- (1) "Mamestra obesula Smith ♂ type"; "Calgary, Alta., 20-VII-03 (Light), F. H. Wolley Dod"; "Head of Pine Creek"; "26"; "J. B. Smith Collection, Rutgers" [Very good condition, complete]
- (2) "Mamestra obesula Smith ♀ type"; "Denver, Col., VII. 11"; "Collection J. B. Smith" [Fair condition]
- (3) "Mamestra obesula Smith ♀ cotype"; "Head of Pine Creek"; "22 VII 03, Calgary, Alta., F. H. Wolley Dod"; "J. B. Smith Collection, Rutgers"; "♀ Genitalia mounted on slide, F. H. Rindge No. 15, 193" [Good condition]

Other syntypes: 1 (CNC)

- (1) "Mamestra obesula ♀ cotype"; "Calgary, Alta., 5-VIII-03"; "#982"

Discussion.—The "♂ type" in the American Museum of Natural History has been selected, labeled, and is now designated the lectotype.

Carneades objurgata Smith, 1900, U.S. Natl. Mus. Proc. 22(1203): 448.

"Habitat.—Pullman, Washington, July and August (Piper); Dakota." "Ten specimens, equally divided as to sex, are under examination." "Type.—Cat. No. 4804, U.S.N.M."

Syntypes examined: 6 (3 USNM and 3 AMNH)

- (1) "Carneades objurgata Smith ♂ type"; "Pullman, Wash."; "Type No. 4804 U.S.N.M."; "36311"; "♂ genitalia on slide 2280, E. L. Todd" [USNM]
- (2) "Carneades objurgata Smith ♀ type"; "Pullman, Wash."; "Type No. 4804 U.S.N.M."; "36311" [Abdomen missing] [USNM]
- (3) "Carneades objurgata Smith cotype"; "Pull-

- man, Wash., 2 Aug. 98" [A ♀] [USNM]
 (4) "Carneades objurgata Smith cotype"; "Pullman, Wash., 12 July 98, C. V. Piper"; "J. B. Smith Collection, Rutgers" [A ♂] [AMNH]
 (5) "Carneades objurgata Smith cotype"; same data, no date [A ♂] [AMNH]
 (6) "Carneades objurgata Smith cotype"; same data [A ♀] [AMNH]

Discussion.—The "♂ type" in the U.S. National Museum has been selected, labeled, and is now designated the lectotype. In addition to being a male and marked type by Smith, it is one of two syntypes bearing the USNM type number 4804 listed in the description.

Amolita obliqua Smith, 1903, Amer. Ent. Soc. Trans. 29(3): 222.

Hab.—Hastings, Florida, April, September 20th to October 21st. "A series of 16 males and 2 females from Mr. W. D. Kearfott are readily . . ."
 Hampson (1910, Catalogue of the Lepidoptera Phalaenae in the Collection of the British Museum, v. 9, p. 310) listed a male cotype from Hastings, Fla. (Kearfott).

Syntypes examined: 4 (2 AMNH and 2 USNM)

- (1) "Amolita obliqua Smith ♂ type"; "Hastings, Fla., April"; "Collection of W. D. Kearfott"; "J. B. Smith Collection, Rutgers" [Good condition, complete] [AMNH]
- (2) "Amolita obliqua Smith ♀ type"; same data [Worn, right hindwing torn] [AMNH]
- (3) "Amolita obliqua Smith ♂ cotype"; "Hastings, Fla., April"; "Collection of W. D. Kearfott" [USNM]
- (4) "Amolita obliqua Smith cotype"; same data [A ♂] [USNM]

Other syntypes.—There are seven male cotypes in the American Museum of Natural History all from Hastings, Fla., with dates March, April, September 30, and October 15 according to Rindge (1955, p. 124). I did not record the details of the labels because of the good condition of the "♂ type" and time limitations. I do not know whether the specimens were marked "♂ cotype" or just "cotype." Hampson, 1910, listed another male as indicated here.

Discussion.—Five males and one female syntypes have not been located. The "♂ type" in the American Museum of Natural History has been selected, labeled, and is now designated the lectotype.

Fagitana obliqua Smith, 1900, N.Y. Ent. Soc. Jour. 8(3): 174.

Habitat: Florida (Mrs. Slosson), one female. "One example only, in fair condition."

Holotype.—In the American Museum of Natural History. The specimen is labeled "Fagitana obliqua Smith ♀ type"; "Florida"; "Collection J. B. Smith."

Feltia obliqua Smith, 1903, Canad. Ent. 35(5): 129.

Habitat.—Calgary, Alberta, head of Pine Creek, May 31, June 16; mouth of Fish Creek, June 3, at light: Mr. F. Wolley Dod. "Mr. Dod has sent me

two males and two females, no two exactly alike in colour, yet forming a pair of light brown and a pair of dark brown examples."

Syntypes examined: 2 (AMNH)

- (1) "Feltia obliqua Smith ♂ type"; "head of Pine Creek, Calgary, Alta., 31.V.02 (Light), F. H. Wolley Dod"; "J. B. Smith Collection, Rutgers" [Very good condition, complete]
- (2) "Feltia obliqua Smith ♀ cotype"; same data except date "16.VI.98"

Other syntypes: 2 (CNC)

- (1) "Feltia obliqua cotype"; "Calgary, Alta, 31-V-02"; "#890"
- (2) "Feltia obliqua cotype"; "Mouth of Fish Cr., Calgary, Alta., 3-VI-94"; "#890"

Donald LaFontaine in correspondence refers to the two syntypes in the Canadian National Collection as male cotypes. According to the number of specimens listed by Smith, all syntypes should be located. However, Smith indicated two females. If Smith was in error as to the sex of one of the specimens now in the Canadian National Collection, it is possible that it is labeled "♀ type." I am unable to resolve that problem presently.

Discussion.—The "♂ type" in the American Museum of Natural History has been selected, labeled, and is now designated the lectotype.

Schinia obliqua Smith, 1883, Amer. Ent. Soc. Trans. 10: 229, pl. 7, fig. 15, pl. 8, fig. 25.

Habitat.—Arizona. 2 ♂. "To the kindness of Mr. Neumoegen I owe my type. A better preserved specimen is in his collection."

Smith (1893, U.S. Natl. Mus. Bul. 44, p. 276) stated: "Types are in the National Museum and in the Neumoegen collection."

Hampson (1903, Catalogue of the Lepidoptera Phalaenae in the British Museum, v. 4, p. 83) stated: "This species is unknown to me; figured from a photograph from type." He figured the species on plate LIX, figure 8.

Syntypes examined: 2 (USNM)

- (1) "S. obliqua Smith"; "Type No. 288 U.S.N.M."; "♂ genitalia on slide 1382, J. F. G. Clarke" [Fair condition]
- (2) "Schinia obliqua Sm. Type" [not a Smith label]; "Ariz."; "TYPE" [machine printed in red ink]; "Col. B. Neumoegen"; "Type No. 33717 U.S.N.M."; "This is not TYPE but is specimen referred to by Smith in O.D.—Marked type by Neumoegen" [author of label unknown, possibly F. H. Benjamin] [A ♂, fair condition]

Discussion.—Smith described four new species of *Schinia* in his early paper. Two of the species, *S. obliqua* and *S. errans*, were apparently overlooked by Smith so far as type labeling was concerned. In the case of *obliqua*, it is clear that a sentence in the original description has caused some confusion in syntype recognition as evidenced by the note on the syntype from the Neumoegen collection. Smith's statement obviously was intended to indicate merely that a type, not

the type, in his collection came from Neumoegen. That is shown by his statement in 1893 as he referred to both specimens as types. The Smith collection of that date had been given to the U.S. National Museum prior to the publication of his catalog of 1893. The syntype of *obliqua* in that collection bears his name label and was entered in the U.S. National Museum type book in 1896 with other *Schinia* species described by Smith. The syntype discussed bears USNM type number 288. It has been selected, labeled, and is now designated the lectotype.

***Heliophana obliquata* Smith, 1891, Amer. Ent. Soc. Trans. 18: 130.**

"*Hab.*—Texas (Neumoegen)." "I have had several examples of this little species for determination, some of them I think from Colorado, but have not named it anywhere."

Smith (1893, U.S. Natl. Mus. Bul. 44, p. 290) stated: "Mr. Grote's type [*mitis*] is in the British Museum; my type is with Mr. Neumoegen."

Hardwick (1958, Canad. Ent. 90 (Sup. 6), p. 83) stated: "The type of *obliquata* Sm. (Type No. 33705), is in the United States National Museum." He also indicated that the specimen was a male from Texas.

Holotype.—The specimen is in the U.S. National Museum. It is labeled "*Heliophana obliquata* Smith Type"; "Col. B. Neumögen"; "Type No. 33705 U.S.N.M." It does not bear a locality label, so the statement in the description that it was from Texas may have been based on information received from Neumoegen.

***Pleroma obliquata* Smith, 1891, Amer. Ent. Soc. Trans. 18: 114.**

"*Hab.*—Sierra Nevada, Cal.; Colorado." "Both sexes are before me, the California specimen from Mr. Edwards, the others collected by Mr. Bruce. I consider the Colorado specimens represented in the National collection typical of the species and the Californian as a race."

Smith (1893, U.S. Natl. Mus. Bul. 44, p. 235) stated: "The type is in the National Museum; duplicates are in the Edwards and Neumoegen collections."

Smith (1898, Canad. Ent. 30: 326) in a discussion of *P. bonuscula* stated: "There is another undescribed species from California belonging to this genus; but the material is at present insufficient to enable me to characterize it properly. I call attention to this fact at present because the female type of *obliquata* is from California and is not the same species as the male examples which I marked type from Colorado. In other words, what I considered at the time that I described *obliquata* to be sexual differences are really specific. I have since seen male examples from California that agree with my female type, but have no male myself to authorize a description."

Smith (1903, Amer. Ent. Soc. Trans. 29(3): pl. 3, fig. 10) illustrated the valve of the male genitalia.

Syntypes examined: 4 (3 USNM and 1 AMNH)

- (1) "*Pleroma obliquata* Smith Type"; "Colo.";

"6"; "Acc. No. 23933 U.S.N.M."; "Type No. 263 U.S.N.M."; "♀ Genitalia, Slide USNM 1818, J. G. Franclemont" [Good condition] [USNM]

- (2) "*Pleroma obliquata* Smith Type"; "42 Colo."; "Type No. 263 U.S.N.M."; "36511" [A ♀, fair condition] [USNM]
(3) "*Pleroma obliquata* Smith Type"; "Colo., Bruce"; "Col. B. Neumögen"; "Type No. 33872 U.S.N.M." [A ♂, very good condition, complete] [USNM]
(4) "*Pleroma obliquata* Smith Type"; "Sierra Nev., Cal."; "No. 11220 Collection Hy. Edwards"; "Type, A.M.N.H."; "Not *obliquata* but *cinerea* vide Smith, Psyche, XI. 56." [A ♀, good condition, complete] [AMNH]

Discussion.—Smith did not indicate how many examples from Colorado were studied. In addition to the three syntypes located in the U.S. National Museum, two other specimens labeled "Colo., Bruce," both males, one labeled "TYPICUM SPECIMEN," are in that collection. In the original description Smith referred to the female syntype from California as a race. In 1898 he stated it was not conspecific with the male examples from Colorado he had marked types. Accordingly, that syntype has been eliminated from consideration as a lectotype candidate. That specimen may equal *P. cinerea* Smith, but Smith did not make such a comment in the description of the latter as the label on the specimen implies. Two of the syntypes in the U.S. National Museum are females, not males as Smith stated. The male syntype bearing the USNM type number 33872 has been selected, labeled, and is now designated the lectotype.

***Agrotis oblongistigma* Smith, 1888, U.S. Natl. Mus. Proc. 10: 454.**

"*Habitat*.—Montana, Black Hills." "Four ♀ specimens from collections Neumoegen, Graef, and Hulst."

Smith (1890, U.S. Natl. Mus. Bul. 38, p. 141, pl. 5, fig. 68) illustrated a "harpe and clasper" of the kind that this species and others related are supposed to have.

Smith (1893, U.S. Natl. Mus. Bul. 44, p. 83) stated: "Type specimens are in the National Museum, and in the collections of Graef, Neumoegen, and Hulst."

Syntypes examined: 3 (2 USNM and 1 AMNH)

- (1) "*Agrotis oblongistigma* Smith Type"; "Mont."; "Col. B. Neumögen"; "Type No. 33738 U.S.N.M."; "♀ genitalia slide 2184, E. L. Todd" [USNM]
(2) "*Agrotis oblongistigma* Smith Type"; "Blk. H."; "Co. B. Neumögen" [A ♀] [USNM]
(3) "*Agrotis oblongistigma* Smith Type"; "Montana"; "No. 9788, Collection Hy. Edwards"; "Type, AMNH"; "Slide No. Eux 2490 [J. McDunnough]" [A ♂!] [AMNH]

Discussion.—The last syntype listed may be a pseudotype; the sex and the collection are different from what is given in the original description, but Smith erred so often in such matters that it seems best in

view of the Smith type label to assume he made similar errors for this species. A specimen in the U.S. National Museum entered in the type book on June 18, 1896, as type of *oblongistigma* and bearing type number 106 must surely be a pseudotype. It was so labeled in 1923 by F. H. Benjamin and a notation to that effect entered in the type book. The specimen, a female, is labeled "Nevada Co., Cal."; "Sept. 28.85"; "Through C. V. Riley"; "Type No. 106 U.S.N.M."; "Not a type of *oblongistigma*, FHB." The locality is wrong and the specimen is not conspecific with the two syntypes in the U.S. National Museum. A single male from the Graef collection labeled "Mont." is now in the U.S. National Museum collection of the species, but it does not bear a Smith name or type label and it is the wrong sex. The syntype bearing "Type No. 33738 U.S.N.M." has been selected, labeled, and is now designated the lectotype.

***Mamestra obnigra* Smith, 1901, Amer. Ent. Soc. Trans. 27: 234, pl. 10, fig. 9.**

"The sixth series is composed of five females from Livingston, Vancouver (vii, 17); Corfield, Vancouver; Corvallis, Oregon (vi, 19, 21 and viii, 3)." "It is unfortunate that I have no good males; but I have no serious doubt that we have to do with a good species which I call *obnigra*. There is a single male from Nanaimo, Vancouver, that I have associated with the females, but it is so badly rubbed that little can be made of it, save that it is very like *davena* and even more brightly marked." On page 238 under *Mamestra obnigra*, n. sp., he stated: "The three examples from Corvallis are really the typical series, the darkest and freshest example being marked type. A second example is much more flown, . . ." "The third example is an excellent one, much more obscure and powdery in appearance, and looks as if it had been too long in the cyanide, causing the green to change toward that peculiar reddish tinge that it often assumes." On page 240, under the name *Mamestra obnigra* Smith, he stated: "A good species I am convinced, ranging the lower region toward the Pacific Coast, and may not get into the mountains, or at any rate east of the Cascades and the Selkirks."

Syntypes examined: 5 (3 AMNH and 2 USNM)

- (1) "*Mamestra obnigra* Smith, ♀ type"; "Corvallis, Or., 8-5-98"; "At light"; "9"; "Collection J. B. Smith" [Good condition, complete] [AMNH]
- (2) "*Mamestra obnigra* Smith, ♀ cotype"; "Vanc. 372, Livingston, 7.17.96"; "Collection J. B. Smith" [Abdomen and left hindwing missing] [AMNH]
- (3) "*Mamestra obnigra* Smith, ♀ cotype"; "Corvallis, Or., 7-21-93"; "At light"; "4"; "Type No. 5762, U.S.N.M." [USNM]
- (4) "*Mamestra obnigra* Smith, ♀ cotype"; "Corfield, Vancouver"; "1896, 5619"; "Barnes collection" [Abdomen glued on] [USNM]
- (5) "*Mamestra obnigra* Smith?"; "7633"; "Collection H. G. Dyar"; "J. B. Smith Collection

Ruigers" [A ♂, genitalia missing] [AMNH]

Discussion.—One syntype, a female from Corvallis, Oreg., is missing. It probably is in the collection of the British Museum (Natural History). It should be dated July 19, the year unknown. Smith's statement on page 238 appears to restrict the type-series to the specimens from Corvallis and would seem to indicate that Smith had a holotype concept. Later actions by him contradict that idea, but even so, on the merits of that one statement the "♀ type" could be considered the holotype. To insure that it is considered the type-specimen, I designate it the lectotype and it has been so labeled. Smith indicated in the text, on the name label and on a label on the slide of male genitalia that he was not certain the male was the same species as the females. The slide label reads: "*Mamestra obnigra* Smith probably. The spec. is very poor and may not be this sp." This slide is in the American Museum of Natural History.

***Mamestra obscura* Smith, 1888, U.S. Natl. Mus. Proc. 10: 468.**

Habitat.—Arizona." "A unique ♂ in good condition in collection U.S. Nat. Mus. (Riley collection) is the type."

Smith (1892, U.S. Natl. Mus. Proc. 14: 249) stated: "HABITAT.—? Arizona, Wisconsin." "The type is in the Museum collection, presumably from Arizona (coll. J. B. S.), and I have associated with it another specimen from Wisconsin (coll. O. Meske), which differs in the more obvious median lines, but seems similar in all other respects. Both are males, and the sexual characters agree, in main features at least, so far as I could examine them. The locality of the type is uncertain. It came to me with a lot of Arizona material, but from a collection containing much from other localities."

Smith (1893, U.S. Natl. Mus. Bul. 44, p. 124) stated: "The type is in the Tepper Collection."!!

Holotype.—In the U.S. National Museum. The specimen is labeled "*Mamestra obscura* Smith Type"; "Holl."; "Collection J. B. Smith." It is a male with the right valve of the male genitalia missing. On the type label the word "Type" has been marked through with a pencil. Perhaps this action was the result of Smith's comment in 1893 that the specimen was in the Tepper collection. That statement was an error on Smith's part.

***Cucullia obscurior* Smith, 1892, U.S. Natl. Mus. Proc. 15: 41.**

"HABITAT: Colorado (Bruce)." "Two female specimens are before me."

Smith (1893, U.S. Natl. Mus. Bul. 44, p. 237) stated: "The type is in the National Museum."

Syntypes examined: 2 (USNM and AMNH)

- (1) "*Cucullia obscurior* Smith Type"; "Colo., Bruce"; "105"; "Type No. 266 U.S.N.M." [A ♀, excellent condition] [USNM]
- (2) "*Cucullia obscurior* Smith Type"; "Colo., Bruce"; "Collection J. B. Smith" [A ♂, complete, but with bad formation of verdigris] [AMNH]

Discussion.—If the syntype in the American Mu-

seum of Natural History is authentic, Smith must have made yet another mistake in sexing the specimens. His statement in 1893 referring to the location of *the* type is unexplained. It is possible that both specimens were originally from the collection of the U.S. National Museum and that he simply had forgotten how many specimens he had studied. Because the manuscripts must have been prepared at nearly the same time, perhaps he had not yet decided to keep an example. Since the syntype in the U.S. National Museum agrees with the comments in the Smith publications, it has been selected, labeled, and is now designated the lectotype.

Leucania obscurior Smith, 1902, U.S. Natl. Mus. Proc. 25(1283): 185.

"*Habitat*.—Cartwright, Manitoba (Heath)." "Two males and two females only, all very much alike and all more or less imperfect." "*Type*.—No. 6246, U.S.N.M."

Syntypes examined: 3 (2 USNM and 1 AMNH)

- (1) "Leucania obscurior Smith ♀ type"; "Cartwright, Manitoba"; "Heath"; "Type No. 6246 U.S.N.M."; "Barnes collection" [USNM]
- (2) "Leucania obscurior Smith ♀ cotype"; "Cartwright, Manitoba"; "Barnes Collection" [USNM]
- (3) "Leucania obscurior Smith ♂ type"; "Cartwright, Manitoba"; "Collection J. B. Smith" [Good condition, complete] [AMNH]

Discussion.—The "♀ type" in the U.S. National Museum, the only syntype bearing the type number listed in the description, has been selected, labeled, and is now designated the lectotype.

Mamestra olivacea var. obscurior Smith, 1888, U.S. Natl. Mus. Proc. 10: 465.

"From Mrs. Fernald we have received a specimen which can hardly be specifically distinct, but merits a varietal name, the more so as specimens from the White mountains agree with it."

Smith (1892, U.S. Natl. Mus. Proc. 14: 255) stated:

"The variety *obscurior* is from Maine, . . ."

Smith (1893, U.S. Natl. Mus. Bul. 44, p. 125) stated: ". . . ; that of *obscurior* is with Mrs. Fernald."

Syntypes examined: 1 (USNM)

- (1) "M. obscurior Smith, Type"; "Barnes Collection" [A ♀]

Discussion.—The specimen Smith received from Fernald was apparently unlabeled. Smith did not give a locality in the original description nor did he mention the sex of the specimen. In 1892 he stated the specimen was from Maine. He did not state what collection provided the specimens from the White Mountains and he apparently did not label any of those specimens as "Types," at least I have not located such specimens. Accordingly, I have labeled and now designate the "Type" in the U.S. National Museum as the lectotype.

Anytus obscurus Smith, 1900, Canad. Ent. 32(8): 218.

"*Habitat*.—Edge Calgary, VIII, 21 (Dod)." "A single

male, in fair condition."

Smith (1910, Psyche 17(5): 208) stated: "In 1900 I described, in the Canadian Entomologist XXXII, p. 218, *Anytus obscurus* from a single Calgary male sent in by Mr. Dod, . . ." On page 209 he mentioned now having before him five male and four female specimens all from Calgary. He figured the genitalia of two males on plate 11, figures 3 and 4. It is not known whether either of these represents the genitalia of the type.

Holotype.—In the U.S. National Museum. The specimen is labeled "Anytus obscurus Smith ♂ type"; "Edge of Calgary, 21/VIII/93"; "16"; "Type No. 4183 USNM"; "36511." The abdomen is missing.

Epidemas obscurus Smith, 1903, N.Y. Ent. Soc. Jour. 11(1): 2.

"*Habitat*: Pullman, Washington, October 14 and 26." "Three males and one female received from Prof. C. V. Piper, none of them in good condition and the smallest example—the female—probably undersized."

Syntypes examined: 2 (AMNH and USNM)

- (1) "Epidemas obscurus Smith ♂ type"; "Pullman, Wash."; "12/20/96"; "Collector C. V. Piper"; "J. B. Smith Collection, Rutgers" [Fair condition, complete] [AMNH]
- (2) "Epidemas obscurus Smith ♀ xType"; "Pullman, Wash." [Very small female, abdomen missing] [USNM]

Discussion.—The name label and sex sign on the syntype in the U.S. National Museum are in Smith's handwriting, but the "xType" is in darker ink and may have been placed there by someone else. The size would indicate it is the specimen to which Smith referred. There are numerous other specimens from the locality and collector in the U.S. National Museum, but only one male is dated "10/14." Since it does not bear a Smith name or type label, it is not listed as a syntype. The syntype in the American Museum of Natural History does not agree with the dates published, but it is likely that Smith read the figures incorrectly or took the dates from the other syntypes. The "♂ type" in the American Museum of Natural History has been selected, labeled, and is now designated the lectotype.

Zanclognatha obsoleta Smith, 1884, Brooklyn Ent. Soc. Bul. 7: 5.

"*Hab.* Vermont." "A single ♀ specimen taken by Mr. C. H. Roberts at Manchester, Vermt., Aug. 3, 1883."

Smith (1893, U.S. Natl. Mus. Bul. 44, p. 382) stated: "The type is in the National Museum."

Holotype.—In the U.S. National Museum. The specimen is labeled "obsoleta type" [a piece of white paper, written in pencil]; "Manchester, Vt., Aug. 3, 1883, C. H. Roberts, Collector"; "Collection J. B. Smith"; "Type No. 314 USNM." It is a female in very poor condition and with the abdomen missing.

Cucullia obtusa Smith, 1909, N.Y. Ent. Soc. Jour. 17: 63.

"*Habitat*.—Santa Catalina Mts., Arizona; southern

Arizona." "Two males and one female from Dr. Barnes; the southern Arizona example marked as taken by Poling."

Syntypes examined: 3 (2 AMNH and 1 USNM)

- (1) "Cucullia obtusa Smith δ type"; "Santa Catalina Mts., Ariz."; "Sept."; "J. B. Smith Collection, Rutgers" [Very good condition, complete] [AMNH]
- (2) "Cucullia obtusa Smith ϕ type"; "So. Arizona, Poling"; "J. B. Smith Collection, Rutgers" [Worn, but complete] [AMNH]
- (3) "Cucullia obtusa Smith cotype"; "So. Arizona, Poling"; "Barnes collection"; " δ Genitalia slide USNM 1890, J. G. Franclemont" [USNM]

Discussion.—The " δ type" in the American Museum of Natural History is the best lectotype candidate. It has been selected, labeled, and is now designated the lectotype. In the original description Smith implied that there was only one specimen labeled "So. Arizona, Poling," but, in fact, there were two and only one from the Santa Catalina Mountains.

Helotropha obtusa Smith, 1902, N.Y. Ent. Soc. Jour. 10: 45.

Habitat.—Ashleys Ferry, Claremont, N.H., August 17, 1901, September 3, 1900, Mr. Foster." "Three males and one female, the former the smaller examples, none of which are really good." "The specimens were communicated by Mr. F. H. Foster."

Hampson (1908, Catalogue of the Lepidoptera Phaenae in the Collection of the British Museum, v. 7, p. 398) stated: "Pl. CXVIII. fig. 7" and "This species is unknown to me; figured from a drawing from type in Coll. J. B. Smith." " δ , New Hampshire."

Syntypes examined: 3 (2 AMNH and 1 USNM)

- (1) "Helotropha obtusa Smith δ type"; "Ashley's Ferry, Claremont, N.H., 9/3/00"; "Collection J. B. Smith" [Fairly good condition, complete] [AMNH]
- (2) "Helotropha obtusa Smith ϕ type"; "Ashley's Ferry"; "Aug. 17-01, Claremont, N.H."; "Collection J. B. Smith" [Badly worn, but complete] [AMNH]
- (3) "Helotropha obtusa Smith δ cotype"; "Claremont, N.H., Aug. 17.01"; "Ashley's Ferry"; "Collection J. B. Smith"; " ϕ Genitalia slide USNM 1116, J. G. Franclemont" [USNM]

Discussion.—One syntype, a male according to Smith, has not been located. The syntype in the U.S. National Museum is a female, not a male as labeled by Smith. The " δ type" in the American Museum of Natural History has been selected, labeled, and is now designated the lectotype.

Taeniocampa obtusa Smith, 1888, U.S. Natl. Mus. Proc. 10: 474.

Habitat.—Arizona." "Mr. Graef has the unique δ type."

Smith (1890, U.S. Natl. Mus. Proc. 12: 484, pl. 23, fig. 12) added nothing further, but he figured the "harpe" and "clasper."

Smith (1893, U.S. Natl. Mus. Bul. 44, p. 204) stated: "The type is in Mr. Graef's collection."

Holotype.—In the U.S. National Museum. The specimen is labeled "Taeniocampa obtusa Smith Type"; "Ariz."; "Graef"; "Type No. 33835 USNM." It is a male with the valves of genitalia broken and missing.

Helia lubricalis var. *occidentalis* Smith, 1884, Brooklyn Ent. Soc. Bul. 7: 5.

Hab.—Callf. Vanc." "Several specimens are in Mr. Hy. Edward's collection."

Smith (1893, U.S. Natl. Mus. Bul. 44, p. 378) stated: "My types are in the National Museum and in the Edwards collection."

Syntypes examined: 5 (1 USNM and 4 AMNH)

- (1) "V. occidentalis Smith"; "Havilah, California"; "6217"; "collection J. B. Smith"; "USNM type #310"; " ϕ genitalia 58, 19 Feb. 30, C. H." [A ϕ] [USNM]
- (2) "P. occidentalis Smith"; "Havilah, California"; "Henry Edwards Collection no. 12408" [δ , abdomen missing] [AMNH]
- (3-5) "California"; "Henry Edwards collection no. 12408" [1 δ , 2 $\phi\phi$] [AMNH]

Discussion.—Smith apparently failed to label any of the type-series with type labels. Two specimens, however, do bear determination labels in Smith's handwriting. The bulk of located syntypes are in the American Museum of Natural History and as Smith indicated originally came from the Henry Edwards collection. Because of that fact, a specimen from the American Museum of Natural History should be selected as lectotype. The male syntype from "Havilah, California" is missing its abdomen. Accordingly, the male syntype labeled "California" in the American Museum of Natural History has been selected, labeled, and is now designated the lectotype.

Taeniocampa occluna Smith, 1909, N.Y. Ent. Soc. Jour. 17: 64.

Habitat.—Mesilla Park, New Mexico, May 9, 1900 (Cockerell) 1 δ ." "The single example from Prof. Cockerell has been in my collection since 1900 awaiting additional material."

Holotype.—In the American Museum of Natural History. The specimen is labeled "Taeniocampa occluna Smith δ type"; "Mesilla Park, N.M., May 9, 1900 (Ck11.); "J. B. Smith Collection Rutgers."

Cyathissa ochracea Smith, 1906, Canad. Ent. 38(7): 225.

Habitat.—Baboquavaria Mts., Pima Co., Arizona, July 15. O. C. Poling." "One male and three females in good condition."

Hampson (1910, Catalogue of the Lepidoptera Phaenae in the Collection of the British Museum, v. 9, p. 118) listed and illustrated a female cotype from the Baboquavaria Mountains, Ariz. (Poling). The illustration is plate CXL, figure 9.

Syntypes examined: 3 (2 AMNH and 1 USNM)

- (1) "Cyathissa ochracea Smith ♂ type"; "So. Arizona, Poling"; "J. B. Smith Collection, Rutgers" [Fair condition, complete] [AMNH]
- (2) "Cyathissa ochracea Smith ♀ type"; same data [Fair condition, complete] [AMNH]
- (3) "Cyathissa ochracea Smith ♀ cotype"; "Baboquavaria Mts., Pima Co., Arizona, July 15 to 30, 1903, Coll. O. C. Poling" [USNM]

Discussion.—Another "♀ cotype" with the same data as the syntype in the U.S. National Museum is in the British Museum (Natural History). The locality data on the syntypes marked "♂ type" and "♀ type" do not agree with the information in the original description or with the locality data of the two "cotypes." It is likely that Smith did not consider "So. Arizona" sufficiently precise to list. The "♂ type" in the American Museum of Natural History has been selected, labeled, and is now designated the lectotype.

Polia ochracea Smith, 1900, U.S. Natl. Mus. Proc. 22(1203): 474.

"*Habitat*.—Iowa." "A single, rather defective male, received years ago from Henry Edwards."

Holotype.—In the U.S. National Museum. The specimen is labeled "Polia ochracea Smith ♂ type"; "Iowa"; "Type No. 5131 USNM"; "36511"; "♂ genitalia on slide 2569 JFGC."

Schinia ochreifascia Smith, 1891, Amer. Ent. Soc. Trans. 18: 126.

"*Hab.*—July, Kern County, Cal."; "August, Alameda County, Cal. In flowers of *Proximum californicum*."

"Two specimens in the National Museum collection (through C. V. Riley), neither of them in good condition, but together making a very perfect whole." "One specimen has a red ink number 181, which indicates a biological note on the species, in Dr. Riley's possession."

Smith (1893, U.S. Natl. Mus. Bul. 44, p. 274) stated: "Mr. Grote's type [*velaris*] is in the British Museum; my types are in the National Museum."

Syntypes examined: 2 (USNM)

- (1) "Schinia ochreifascia Smith Type"; "Alameda Co., Cal."; "Aug."; "Through C. V. Riley"; "Type No. 284 U.S.N.M."; "In flowers of *Troximum californicum*, 181" [A ♂, genitalia broken]
- (2) "Schinia ochreifascia Smith Type"; "Kern Co., Cal."; "July"; "Through C. V. Riley"; "Type No. 284 U.S.N.M." [A ♂, hindwings malformed]

Discussion.—Because of the better condition of the wings, the syntype from Alameda County, Calif., has been selected, labeled, and is now designated the lectotype.

Schinia oculata Smith, 1900, U.S. Natl. Mus. Proc. 22(1203): 488.

"*Habitat*.—Rio Verde Mountains, Phoenix, Arizona, August, Dr. Barnes." "One defective male and one good female."

Hampson (1903, Catalogue of the Lepidoptera Phalaenae in the Collection of the British Museum, v. 4, p. 75) stated: "Pl. LIX, fig. 9" and "This is unknown to me; figured from a photograph from type." "♀, Arizona."

Syntypes examined: 2 (USNM)

- (1) "Schinia oculata Smith ♂ type"; "Phoenix, Ariz., W. Barnes"; "Barnes collection" [Very rubbed, right forewing missing]
- (2) "Schinia oculata Smith ♀ type"; "Rio Verde Mts., Phoenix, Ariz., August, 1893, W. Barnes"; "Type No. 5130 U.S.N.M."; "36511" [Fair condition]

Discussion.—The "♀ type" is in much better condition than the "♂ type," it is the specimen illustrated by Hampson, and it bears a USNM type number. Accordingly, the "♀ type" has been selected, labeled, and is now designated the lectotype.

Andropolia olga Smith, 1911, N.Y. Ent. Soc. Jour. 19(3): 139.

"*Habitat*.—Sierra Nevada, California." "One male in good condition, which has been in my collection for twenty years or more."

Holotype.—In the American Museum of Natural History. The specimen is labeled "Andropolia olga Smith Type"; "Sier. Nev., Cal."; "Collection J. B. Smith."

Cerma olivacea Smith, 1891, Amer. Ent. Soc. Trans. 18: 103.

"*Hab.*—Colorado; Sierra Nevada, Cal." "I have seen three specimens of this very distinct species, all males. Two are from Mr. Edwards, one of them rather rubbed, the third is from Mr. Bruce's collecting, sent several years ago to Mr. Cramer, now in collection United States National Museum."

Smith (1893, U.S. Natl. Mus. Bul. 44, p. 48) stated: "Types are in the National Museum and in the Edwards collection."

Barnes and McDunnough (1916, Contrib. Nat. Hist. Lepidoptera N. Amer. 3(3): 165) stated: "The type must be restricted to the Colorado ♂ in the National Museum, the California type specimen in the same collection is very worn and not the same species but probably *fascia* Sm. or *cuerva* Barnes."

Syntypes examined: 2 (USNM)

- (1) "Cerma olivacea Smith Type"; "Col."; "Type No. 71 U.S.N.M."; "Acc. No. 23933 U.S.N.M." [A ♂, in fair condition, but abdomen glued on]
- (2) "Cerma olivacea Smith Type"; "Sier. Nev., Cal."; "Type No. 71 U.S.N.M."; "36511" [A ♂, very worn, abdomen missing]

Discussion.—Another syntype should be in the American Museum of Natural History, but I either did not locate the specimen or overlooked it in my studies at that institution. I have no notes on the specimen. Whether the action and wording of Barnes and McDunnough, 1916, are considered equivalent to lectotype selection or not, I have selected, labeled, and now designate the syntype from Colorado in the U.S. Na-

tional Museum as the lectotype. This will assure that the Colorado syntype is considered to be the type-specimen.

Schinia olivacea Smith, 1906, N.Y. Ent. Soc. Jour. 14: 22.

"Habitat.—Beeville, Tex., in October." "One female only, dated in 1895."

Holotype.—In the American Museum of Natural History. The specimen is labeled "Schinia olivacea Smith ♀ type"; "Beeville, Tex., Oct. 95"; "J. B. Smith Collection Rutgers."

Luperina ona Smith, 1909, N.Y. Ent. Soc. Jour. 17: 58.

"Habitat.—Arizona: Santa Catalina Mts., September; Huachuca Mts., August (Barnes); Minnehaha, Yavapai Co., September (Hutson)." "Two males and six females in fair or good condition. The three examples collected by Mr. Hutson are more flown than those from the Barnes collection and therefore seem lighter in color . . ."

Syntypes examined: 5 (2 AMNH and 3 USNM)

- (1) "Luperina ona Smith ♂ type"; "Santa Catalina Mts., Ariz.," "Sept.," "J. B. Smith Collection, Rutgers" [Good condition except rubbed spot base of right forewing, complete] [AMNH]
- (2) "Luperina ona Smith ♀ type"; "So. Arizona, Poling"; "J. B. Smith Collection, Rutgers" [Good condition, needs respreading, complete] [AMNH]
- (3) "Luperina ona Smith cotype"; "Huachuca Mts., Ariz., VIII" [A ♀, apices of forewings worn] [USNM]
- (4) "Luperina ona Smith cotype"; "Santa Catalina Mts., Ariz.," "Sept." [A ♀, good condition] [USNM]
- (5) "Luperina ona Smith cotype"; "Santa Catalina Mts., Pima Co., Ariz." [A ♀, abdomen missing] [USNM]

Discussion.—Three syntypes from Minnehaha, Yavapai County, Ariz., collected by Hutson in September have not been located. Because of their worn condition, Smith may not have marked them as types. The "♂ type" in the American Museum of Natural History has been selected, labeled, and is now designated the lectotype.

Carneades ontario Smith, 1900, U.S. Natl. Proc. 22(1203): 440.

"Habitat.—Sudbury, Ontario." "A single male, source not noted on the specimen."

Hampson (1903, Catalogue of the Lepidoptera Phalaenae in the Collection of the British Museum, v. 4, pp. 259–260, pl. LXIV, fig. 13) stated: "This species is unknown to me; figured from a photograph from type in U.S. Nat. Mus."

McDunnough (1950, Amer. Mus. Nat. Hist. Bul. 95(6), p. 382) stated: "Types: *Ontario*, holotype, male, Sudbury, Ontario (U.S.N.M.); . . ."

Holotype.—In the U.S. National Museum. The specimen is labeled "Carneades ontario Smith ♂ type"; "On-

tario, Sudbury"; "Type No. 5155 USNM"; "36511"; "Barnes collection"; "♂ genitalia on slide 1222 JGF."

Conacontia orba Smith, 1903, Amer. Ent. Soc. Trans. 29(3): 210.

"Hab.—Huachuca Mountains, Arizona." "Three females in fair condition, from Dr. Barnes."

Hampson (1910, Catalogue of the Lepidoptera Phalaenae in the Collection of the British Museum, v. 10, p. 704) stated: "Pl. CLXX, fig. 16" and "This species is unknown to me; figured from a drawing from type in Coll. J. B. Smith."

Syntypes examined: 3 (1 AMNH and 2 USNM)

- (1) "Conacontia orba Smith ♀ type"; "Huachuca Mts., Ariz.," "Collection J. B. Smith"; "♀ Genitalia mounted on slide no. 10,393, F. H. Rindge" [AMNH]
- (2) "Conacontia orba Smith cotype"; "Huachuca Mts., Ariz." [A ♀] [USNM]
- (3) "Conacontia orba Smith cotype"; same data [A ♀, right forewing torn] [USNM]

Discussion.—The syntype in the American Museum of Natural History labeled "♀ type" has been selected, labeled, and is now designated the lectotype. It is the specimen illustrated by Hampson in 1910.

Agrotis orbicularis Smith, 1888, U.S. Natl. Mus. Proc. 10: 460.

"Habitat.—Nevada." "A single ♀ is in Mr. Tepper's collection."

Smith (1893, U.S. Natl. Mus. Bul. 44, p. 99) stated: "The type is in the Tepper collection."

Holotype.—In the collection of Michigan State University. The specimen is labeled "Type" (on a rhomboidal piece of yellow paper); "Nevada." It is a female in good condition.

Mamestra orbiculata Smith, 1891, U.S. Natl. Mus. Proc. 14(851): 266.

"HABITAT.—Colorado (Bruce)." "Two males from Mr. Bruce, one of them in the collection of the U.S. National Museum."

Smith (1893, U.S. Natl. Mus. Bul. 44, p. 131) stated: "The type is in the National Museum."

Syntypes examined: 2 (USNM)

- (1) "Mamestra orbiculata Smith Type"; "Colo., Bruce"; "Type No. 157 U.S.N.M."; "36511" [A ♂, valves of genitalia missing]
- (2) "Mamestra orbiculata Smith Type"; "Colo., B., 1"; "Type No. 157 U.S.N.M."; "Acc. No. 23933 U.S.N.M." [A ♂, very good condition]

Discussion.—Two other specimens collected in Colorado by Bruce have been segregated as type material of this species. I consider them to be pseudotypes. One is labeled "Mamestra orbiculata Smith Type"; "Colo., Bruce"; "Col. B. Neumögen"; "Type No. 33822 U.S.N.M." It is a male. The name label is a different kind than the large, elongate label on the syntypes listed here. It is the kind of label mainly used by Smith for the type-series of species described prior to 1891. The name is definitely in Smith's handwriting, and the word "Type" may or may not be. The ink on that

word appears to be slightly darker and I believe it was added later to the label than the name. If so, and if by Smith, that would be a contradiction to a statement by Smith in 1893, in which he maintained that he would mark a specimen as type after the original description. Another possibility is that Smith erred in the statement concerning the number of specimens he had examined. This seems unlikely because of the different kind of label and the absence of any mention of a specimen from Neumögen.

The other pseudotype in the U.S. National Museum is labeled "*Ulolonche orbicula* Smith." It was not marked type by Smith, but it bears a USNM type number 166. Whoever entered it in the type book must have been confused by the different generic name. Smith apparently had realized that his *Mamestra orbiculata* was really a *Ulolonche* Smith, 1887, prior to 1896, the year the specimen was entered in the type book. The syntype bearing the USNM accession number 23933 is in the best condition of the two syntypes and has complete genitalia. It has been selected, labeled, and is now designated the lectotype.

***Stretchia orbiculata* Smith, 1911, N.Y. Ent. Soc. Jour. 19(3): 147.**

"I re-described the species as *addenda*, from a type showing no marked contrasts, and came near re-describing it again as *orbiculata* from a type in which the orbicular is unusually contrasting." This quotation is found in the discussion of *Stretchia pulchella* (Harvey). It is obvious that Smith decided that the specimen was actually *pulchella*, but the inclusion of the specific name and discussion of its particular kind of maculation constitute a valid description. He did not mention the sex, locality, collection, and so forth, but he had labeled a specimen and it still bears his label.

Holotype.—In the American Museum of Natural History. The specimen is labeled "*Stretchia orbiculata* Smith ♂ type"; "Colo., Bruce"; "Collection J. B. Smith." It is a male with the valves missing. There is a slide in the American Museum of Natural History prepared by Smith. It bears this specific name and consists of two valves of the male genitalia. The slide probably was prepared from the holotype.

***Leucania oregona* Smith, 1902, U.S. Natl. Mus. Proc. 25(1283): 202, pl. 6, fig. 24.**

Habitat.—Corvallis, Oregon, at light, April 11 (Cordley). "One male in very fair condition."

Holotype.—In the American Museum of Natural History. The specimen is labeled "*Leucania oregona* Smith ♂ type"; "Corvallis, Or., 4.11.98"; "At light"; "Collection J. B. Smith"; "9." The abdomen is missing and the pin is badly corroded at the J. B. Smith collection label. The specimen should be repinned and handled with extreme care. The figure is of the valve of the genitalia. I did not find a slide in the collection in New York.

***Mamestra orida* Smith, 1903, Canad. Ent. 35(1): 12.**

Habitat: Stockton, Utah, in October. "Two ♂ and seven ♀ from Mr. George Franck, who has others

which do not materially differ from the series under observation."

Hampson (1905, Catalogue of the Lepidoptera Phalaenae in the Collection of the British Museum, v. 5, p. 33) listed male and female cotypes in the collection of Rothschild.

Syntypes examined: 6 (4 AMNH and 2 USNM)

- (1) "*Mamestra orida* Smith ♂ type"; "Stockton, Utah, X"; "Collection J. B. Smith" [Rubbed, nick in left hindwing, valves of genitalia missing] [AMNH]
- (2) "*Mamestra orida* Smith ♀ type"; same data [Rubbed, apex of left forewing broken] [AMNH]
- (3) "*Mamestra orida* Smith ♀ cotype"; "Stockton, Utah, October" [Poor condition, riddled by dermestids, right hindwing missing] [AMNH]
- (4) "*Mamestra orida* Smith ♀ cotype"; no data [Poor condition, riddled by dermestids] [AMNH]
- (5) "*Mamestra orida* Smith ♀ cotype"; "Stockton Utah"; "Barnes collection" [Good condition except abdomen greasy] [USNM]
- (6) "*Mamestra orida* Smith ♀ cotype"; "Stockton, Utah, X"; "Barnes collection" [Fair condition] [USNM]

Discussion.—The six syntypes listed and the two in the British Museum (Natural History) leave only one female syntype unlocated. In the American Museum of Natural History there is a genitalia slide containing two male valves in fair condition but flattened. It is presumed that they are the valves from the syntype labeled "♂ type." That specimen has been selected, labeled, and is now designated the lectotype.

***Abagrotis ornatus* Smith, 1903, N.Y. Ent. Soc. Jour. 11(1): 4.**

Habitat: Kaslo, British Columbia, J. W. Cockle; Idaho, C. V. Piper. "Three female specimens, one of them in excellent condition, the others somewhat rubbed and broken."

Lectotype.—In the American Museum of Natural History. Designated by Buckett (1968, Calif. Dept. Agr. Bur. Ent. Occas. Papers No. 14, p. 7).

***Mamestra ortruda* Smith, 1910, Amer. Ent. Soc. Trans. 36(3): 266.**

Hab.—Denver and Glenwood Springs, Colorado, April, June, July and August. "Five males and three females in fair to good condition." "This species was first received by me many years ago from Mr. David Bruce, and has since then been sent in by Dr. Barnes, to whom five of the examples under consideration belong."

Barnes and McDunnough (1913, Contrib. Nat. Hist. Lepidoptera N. Amer. 2(1): 10, pl. 4, fig. 8) illustrated a male paratype from Glenwood Springs, Colo.

Syntypes examined: 8 (3 AMNH and 5 USNM)

- (1) "*Mamestra ortruda* Smith ♂ type"; "*Mamestra oregonica* Grt.id. Smith, Colo. Bruce"; "J. B. Smith Collection, Rutgers"

- [Fairly good condition except large formation of verdigris] [AMNH]
- (2) "Mamestra ortruda Smith ♀ type"; "Glenwood Spgs., Colo."; "Aug. 1-7"; "J. B. Smith Collection, Rutgers" [Head missing] [AMNH]
 - (3) "Mamestra ortruda Smith Paratype"; "Glenwood Spgs., Colo."; "Aug. 8-15"; "J. B. Smith Collection, Rutgers"; "oregonica JBS"; "♂ Genitalia mounted on slide by Smith" [Good condition] [AMNH]
 - (4) "Mamestra ortruda Smith Paratype"; "Glenwood Spgs., Colo."; "July 8-15"; "Barnes collection"; "Photograph Pl. 4, No. 8"; "♂ genitalia slide 81, E.L.T." [Very good condition] [USNM]
 - (5) "Mamestra ortruda Smith Paratype"; "Glenwood Spgs., Colo."; "July 1-7"; "Barnes collection" [A ♂] [USNM]
 - (6) "Mamestra ortruda Smith Paratype"; "Glenwood Spgs., Colo."; "Aug. 1-7"; "Barnes collection" [A ♂] [USNM]
 - (7) "Mamestra ortruda Smith Paratype"; "Denver, Colo."; "Apr. 8-15" [A ♂, abdomen missing] [USNM]
 - (8) "Mamestra ortruda Smith Paratype"; "Glenwood Spgs., Colo."; "July 24-30"; "Barnes collection" [A ♀, abdomen and hindlegs missing] [USNM]

Discussion.—The type-series is composed of six males and two females, not five males and three females as stated by Smith. The syntype in the U.S. National Museum, which was illustrated by Barnes and McDunnough, has been selected, labeled, and is now designated the lectotype.

Acronycta othello Smith, 1908, N.Y. Acad. Sci. Ann. 18(2): 94.

Habitat: San Diego, Cal., Sept. 15. "One male and one female, in good condition; from Mr. Frank A. Merrick."

Hampson (1909, Catalogue of the Lepidoptera Phalaenae in the Collection of the British Museum, v. 8, p. 156) stated: "Pl. CXXVI. fig. 5" and "This species is unknown to me; figured from a drawing from type in Coll. J. B. Smith." "♂, Calif."

Smith (1911, Pomona Jour. Ent. 3(3): 566) stated: "The only specimens known to me are from San Diego, California, and were sent in by Mr. George H. Field."

Syntypes examined: 2 (AMNH and USNM)

- (1) "Acronycta othello Smith ♂ type"; "San Diego, Calif."; "182"; "J. B. Smith Collection, Rutgers" [Good condition] [AMNH]
- (2) "Acronycta othello Smith ♀ type"; "San Diego, Calif."; "6"; "9/15/06"; "869" [USNM]

Discussion.—The "♂ type" in the American Museum of Natural History has been selected, labeled, and is now designated the lectotype.

Acronycta pacifica Smith, 1897, Ent. News 8(6): 148 (in key).

Smith (1898, U.S. Natl. Mus. Proc. 21(1140): 56, pl. 11, fig. 5, pl. 20, fig. 2) illustrated and described the species in detail and stated: "*Habitat.*—California." "Three males and one female are before me. All of the specimens are directly or indirectly from the Henry Edwards collection. Two of them are from the American Museum of Natural History, numbered 9615. One is labeled Sierra Nevada, while the solitary female, from the collection U.S. National Museum, is simply labeled California." Hampson (1909, Catalogue of the Lepidoptera Phalaenae in the Collection of the British Museum, v. 8, p. 130) stated: "Pl. CXXVI. fig. 6" and "This species is unknown to me, figured from a drawing from co-type in Coll. J. B. Smith." "♂, California." Smith (1911, Pomona Jour. Ent. 3(3): 563) stated: "The type locality is Sierra Nevada, California and besides the types I know of no other examples at present."

Barnes and McDunnough (1916, Contrib. Nat. Hist. Lepidoptera N. Amer. 3(3): 165) stated: "... the type of *pacifica* Sm. is a ♂ in the Hy. Edwards' Collection labelled 'Calif. No. 9615.'"

Syntypes examined: 4 (3 AMNH and 1 USNM)

- (1) "Acronycta pacifica Smith ♂ type"; "California"; "No. 9615, Collection Hy. Edwards"; "Type No. _____, AMNH" [Abdomen greasy, possibly glued on, genitalia intact] [AMNH]
- (2) "Acronycta pacifica Smith ♀ type"; "72 California"; "Type No. 3659 U.S.N.M." [Abdomen glued to thorax and supporting card] [USNM]
- (3) "Acronycta pacifica Smith ♂ cotype"; "California"; "No. 9615, Collection Hy. Edwards" [Specimen damaged, abdomen possibly glued on] [AMNH]
- (4) "Acronycta pacifica Smith ♂ cotype"; "Sier. Nev., Cal."; "Collection J. B. Smith" [Part of abdomen missing, basal part glued to thorax] [AMNH]

Discussion.—The statement by Barnes and McDunnough does not indicate which of the two specimens bearing the Hy. Edward number 9615 was referred to, but it undoubtedly was the one marked "♂ type." The specimen marked "♂ cotype" from Sierra Nevada, Calif., probably was the specimen Smith used to illustrate the genitalia and probably was the one illustrated by Hampson. The specimen labeled "♂ type" is definitely the one illustrated by Smith (pl. 11, fig. 5). That specimen in the American Museum of Natural History has been selected, labeled, and is now designated the lectotype.

Hydroecia pacifica Smith, 1899, Amer. Ent. Soc. Trans. 26: 19, pl. 1, fig. 6.

"This is the Californian representative of the European *nictitans* . . ." "Examples of this species are in the collections of the U.S. National Museum, Rutgers College and E. L. Graef."

Syntypes examined: 5 (1 AMNH and 4 USNM)

- (1) "Hydroecia pacifica Smith ♂ type"; "Cal.;"

- "Collection G. D. Hulst" [Very good, but valves of genitalia missing] [AMNH]
- (2) "Hydroecia pacifica Smith ♀ type"; "California"; "Collection O. Meske"; "Type No. 4140 U.S.N.M."; "♀ Genitalia Slide: USNM 801, J. G. Franclemont" [USNM]
- (3) "Hydroecia pacifica Smith ♂ cotype"; "California"; "Collection O. Meske"; "Type No. 4140 U.S.N.M."; "♂ Genitalia Slide: 800, J. G. Franclemont" [Good condition] [USNM]
- (4) "Hydroecia pacifica Smith cotype"; "Cal."; "Col. B. Neumögen"; "Type No. 33943 U.S.N.M."; "♀ Genitalia Slide: 803, J. G. Franclemont" [Left wings broken from specimen] [USNM]
- (5) "Hydroecia pacifica Smith cotype"; no other data [A ♂] [USNM]

Discussion.—Smith did not indicate how many specimens were in the type-series. It is possible that the "♂ type" was the specimen from which the valve illustrated by Smith (pl. 1, fig. 6) was obtained. If so, I did not find a slide in the collection of the American Museum of Natural History. Since Smith did not indicate the number of specimens, it is possible that some other specimen was used. The valve illustrated is not complete and the clavus is not shown. It is not known whether the clavus was destroyed in breaking the valve from the specimen or whether it remained on the specimen. In order to have a male lectotype with complete genitalia, the "♂ cotype" in the U.S. National Museum has been selected, labeled, and is now designated the lectotype. The genitalia on slide 800 prepared by J. G. Franclemont are complete.

Hydroecia pallescens Smith, 1899, Amer. Ent. Soc.

Trans. 26: 25, pl. 1, fig. 13.

"*Hab.*—Calgary, August 21st, September 1st. Fort Klamath, Oregon, August 21st."

Syntypes examined: 7 (6 USNM and 1 AMNH)

- (1) "Hydroecia pallescens Smith ♂ type"; "Calgary, 21/VIII/94"; "Type No. 4144 U.S.N.M."; "Acc. No. 34638 U.S.N.M." [Very good condition except valves missing, much smaller and paler than other syntypes] [USNM]
- (2) "Hydroecia pallescens Smith ♀ type"; "Calgary, Alberta"; "Sept. 1-7"; "Type No. 4144 U.S.N.M." [USNM]
- (3) "Hydroecia pallescens Smith ♀ cotype"; "Calgary, Alberta"; "Sept. 1-7" [USNM]
- (4) "Hydroecia pallescens Smith ♀ cotype"; same data [USNM]
- (5) "Hydroecia pallescens Smith ♀ cotype"; no other data [USNM]
- (6) "Hydroecia pallescens Smith cotype"; "Coll. Edw. L. Graef"; "Type No. 33945 U.S.N.M." [A ♂, fair condition, complete] [USNM]
- (7) "Hydroecia pallescens Smith ♂ cotype"; "Calgary, Alberta"; "Aug. 24-30"; "J. B. Smith Collection, Rutgers" [AMNH]

Discussion.—Smith failed to indicate the number of specimens in his type-series. There is a very battered male with head and legs missing from Klamath, Oreg., collected on August 21 in the collection of the U.S. National Museum. It undoubtedly is a syntype. It bears a name label in Smith's handwriting, but it is not marked as a type. It is not known if the lack of a type indication was deliberate or not. Smith did not specifically exclude the specimen in the text of his description, but the condition and different locality may have influenced him not to mark it a type. The syntype labeled "♂ type" has been eliminated from consideration as a lectotype candidate because of its variation from the other syntypes and because of the missing valves of the male genitalia. There is a male slide in the U.S. National Museum prepared by Smith, but it cannot be definitely associated with the "♂ type." The other male syntypes are also eliminated because of a lack of locality or a date not listed by Smith. Accordingly, the "♀ type" has been selected, labeled, and is now designated the lectotype. The date on that specimen and other female syntypes is slightly different from that cited by Smith, but it is apparent that the date label may have been interpreted by Smith to be September 1, 1897, rather than September 1 through 7.

Mamestra pallicauda Smith, 1908, N.Y. Acad. Sci.

Ann. 18(2): 101.

"*Habitat.*—Palmerly, Cochise County, Arizona, July; Huachuca Mountains, Arizona, July 12." "Two female examples, one of them belonging to the Brooklyn Institute, in perfect condition; the other, from my own collection, somewhat rubbed."

Syntypes examined: 2 (USNM and AMNH)

- (1) "Mamestra pallicauda Smith ♀ type"; "Palmerly, Cochise Co., Ariz., VII"; "X"; "Type No. 33817 U.S.N.M." [Good condition] [USNM]
- (2) "Mamestra pallicauda Smith ♀ cotype"; "Huachuca Mts., Ariz., VII.12"; "J. B. Smith Collection, Rutgers" [Somewhat rubbed] [AMNH]

Discussion.—The "♀ type" in the U.S. National Museum has been selected, labeled, and is now designated the lectotype.

Schinia pallicincta Smith, 1906, N.Y. Ent. Soc. Jour.

14:24.

"*Habitat.*—San Diego County, Calif.; Utah." "Two female examples, both somewhat defective."

Syntypes examined: 2 (AMNH and USNM)

- (1) "Schinia pallicincta Smith ♀ type"; "Utah"; "J. B. Smith Collection, Rutgers" [Fair condition, left hindwing torn] [AMNH]
- (2) "Schinia pallicincta Smith cotype"; "San Diego Co., Cal."; "Barnes collection" [A ♀, abdomen missing] [USNM]

Discussion.—Rindge (1955, p. 125) stated the specimen received from Rutgers was "Type male," but that is an error. It is labeled as "♀ type" and it is a female. That specimen has been selected, labeled, and is now designated the lectotype.

Cyathissa pallida Smith, 1902, N.Y. Ent. Soc. Jour. 10: 35.

"*Habitat*.—Walters Station, California, in April (George S. Hutson)." . . . is represented by one good female."

Holotype.—In the American Museum of Natural History. The specimen is labeled "Cyathissa pallida Smith ♀ type"; "Walters Sta., Calif. April"; "Collection J. B. Smith."

Xylomiges pallidior Smith, 1899, N.Y. Ent. Soc. Jour. 7(4): 227.

"*Habitat*.—New Westminster, British Columbia (Fletcher)." "One female only, in fine condition." Smith (1900, *Canad. Ent.* 32(8): pl. 5, fig. 3) figured the type.

Holotype.—In the U.S. National Museum. The specimen is labeled "Xylomiges pallidior Smith ♀ type"; "New Westminster, B.C., 1896"; "Type No. 5103 USNM"; "36511."

Heterogramma palligera Smith, 1884, Brooklyn Ent. Soc. Bul. 7: 6.

"*Hab.*—Cal. Fla." "One Florida specimen bearing the date March 3. Types ♂ and ♀ in my collection, others in Mr. Hy Edward's (California) and Prof. C. V. Riley's (Florida) collection. The latter taken by Mr. Koebele."

Smith (1893, U.S. Natl. Mus. Bul. 44, p. 385) stated: "The types are in the National Museum and Edwards collection." "It is perhaps possible that the Floridian form is not the same as that from California; but the differences have seemed unimportant from the material at command."

Smith (1895, U.S. Natl. Mus. Bul. 48, p. 64) stated: "HABITAT.—California: Napa County; Panamint Valley in April; Knightly Valley." "Five specimens are before me, all of them from the National Museum collection. Others are in the Edwards collection in the American Museum of Natural History." The specimens from Florida that were originally included are now placed in *Tetanolita floridana*, new species, and Smith stated in the comments of that species: "This is the species, a specimen of which I rather doubtfully referred to *T. palligera* when describing the latter species, and whose distinctness is again suggested in Bulletin 44, United States National Museum, 385."

Syntypes examined: 1 (USNM)

- (1) "Heterogramma palligera Smith Type"; "Havilah, California"; "Collection J. B. Smith"; "Type No. 320 U.S.N.M." [A ♀, abdomen missing]

Discussion.—It is not clear how many specimens Smith had before him at the time of the original description, but it is possible that there were only two, one from California and one from Florida. He did refer to other specimens in the Edwards collection and the C. V. Riley collection, but the only clue to the specimens was that the former were from California and the latter from Florida. Eleven years later he placed the Florida examples in a distinct species and cited specific localities for the California species. However, he did

not mark any of the other California specimens as type, and he put a name label on only one specimen from Napa County now in the U.S. National Museum. In the absence of any other recognized type material, the "Type" in the U.S. National Museum is selected, labeled, and designated the lectotype.

Crimona pallimedia Smith, 1902, N.Y. Ent. Soc. Jour. 10: 49.

"*Habitat*.—Walters Station, California, in April (Geo. S. Hutson)." "This is a desert species, represented by one female only."

Holotype.—In the American Museum of Natural History. The specimen is labeled "Crimona pallimedia Smith Type"; "Walters Sta, Calif. April"; "Collection J. B. Smith."

Agrotis pallipennis Smith, 1888, U.S. Natl. Mus. Proc. 10: 461.

"*Habitat*.—Colorado." "Specimens are with Messrs. Hulst, Graef, and Tepper."

Smith (1890, U.S. Natl. Mus. Bul. 38, p. 194, pl. 5, fig. 75) illustrated the kind of "harpe and Clasper" this species and two other related species possess. He mentioned a female specimen from British Columbia received since the original description was written.

Smith (1893, U.S. Natl. Mus. Bul. 44, p. 104) stated: "The types are in the National Museum, and in the collections of Graef and Tepper."

Syntypes examined: 4 (3 USNM and 1 MSU)

- (1) "Agrotis pallipennis Smith Type"; "23"; "43"; "Collection J. B. Smith"; "Type No. 129 U.S.N.M."; "♂ genitalia on slide 2188, E. L. Todd" [One valve of genitalia missing] [USNM]
- (2) "Agrotis pallipennis Smith Type"; "Col."; "Type No. 33741 U.S.N.M."; "Coll. Edw. L. Graef" [A ♂, good condition] [USNM]
- (3) "Agrotis pallipennis Smith Type"; "Coll. E. L. Graef"; "Collection Brklyn Mus."; "W.T." [A ♀, good condition] [USNM]
- (4) "Agrotis pallipennis Smith"; "Type" [yellow rhomboidal label]; "Col."; "Tepper" [A ♂, poor condition, abdomen possibly glued to thorax] [MSU]

Discussion.—Once again Smith failed to indicate the number of specimens in the type-series. We know that there were at least three because three collections were cited. Of the syntypes listed, only two bear Colorado locality labels. The syntype sent to the U.S. National Museum prior to 1893 lacks a locality. It is possible that one of the two labels with numbers may have referred to Colorado and, if so, Smith may have been aware of that. The same specimen likely is the one originally received from Hulst as Smith did not refer to the Hulst collection in 1893. The one female syntype, if authentic, bears a label "W.T." It is believed that this refers to Washington territory. Smith must have overlooked the label, thought the letters represented some person's initials, or labeled the specimen a type subsequent to the original description. A female specimen from British Columbia mentioned in his paper in 1890 is

in the U.S. National Museum. It was marked as a type, but that word has since been marked out. At the suggestion of David Hardwick who was studying the genus *Euxoa*, I have selected, labeled, and now designate the syntype bearing USNM type number 129 in the U.S. National Museum as the lectotype.

Leucania palliseca Smith, 1902, U.S. Natl. Mus. Proc. 25(1283): 203.

"*Habitat*.—Los Angeles County, California, in July (U.S.N.M.); Fresno, California (Schwarz); Denver, Colorado, May and October." "Seven examples are at hand and are about as nearly immaculate as a species in this series can well be. Oddly enough, all the specimens are females," "Type.—No. 6251, U.S.N.M."

Syntypes examined: 5 (3 USNM and 2 AMNH)

- (1) "Leucania palliseca Smith ♀ type"; "Los Angeles Co., Cal."; "Collection Coquillett"; "Type No. 6251 U.S.N.M."; "♀ Genitalia Slide: USNM 568, J. G. Franclemont" [USNM]
- (2) "Leucania palliseca Smith cotype"; "Fresno, Cal."; "E. A. Schwarz"; "Type No. 6251 U.S.N.M."; "♂ Genitalia Slide: USNM 567, J. G. Franclemont" [Good condition] [USNM]
- (3) "Leucania palliseca Smith cotype"; "Los Angeles Co., Cal."; "July"; "Type No. 6251 U.S.N.M."; "185"; "Barnes Collection"; "Through C. V. Riley" [A ♀, abdomen missing, brass pin badly corroded with verdigris, broken at thorax] [USNM]
- (4) "Leucania palliseca Smith cotype"; "Denver, Col., IV-26"; "Collection J. B. Smith" [A ♀] [AMNH]
- (5) "Leucania palliseca Smith cotype"; "Denver, Col., X-5"; "Collection J. B. Smith" [A ♀] [AMNH]

Discussion.—Smith thought he had only females, but at least one was a male. Two syntypes have not been located. The male syntype in the U.S. National Museum, one of three bearing the USNM type number 6251 cited in the description, has been selected, labeled, and is now designated the lectotype.

Erastria panatela Smith, 1904, Psyche 11(2): 60.

"*Habitat*.—Winnipeg, Manitoba, in July; Mr. Hanham: Calgary, Alberta, Head of Pine Creek, July 23, at light; Mr. Dod." "Three males and one female, none of them in very good condition."

Syntypes examined: 3 (2 AMNH and 1 USNM)

- (1) "Erastria panatela Smith ♂ type"; "W. Man., July"; "195"; "Collection J. B. Smith" [Rubbed, apex left forewing broken, head broken from thorax extending on ribbon of verdigris, abdomen complete] [AMNH]
- (2) "Erastria panatela Smith Type lot"; "W. Man., July"; "Collection J. B. Smith" [A ♂] [AMNH]
- (3) "Erastria panatela Smith Type lot"; "W. Man., July"; "194"; "Collection J. B. Smith" [A ♀, fair condition, verdigris forming] [USNM]

Other syntypes: 1 (CNC)

- (1) "Erastria panatela ♂ cotype"; "Head Pine Cr., Calgary, July 23, 1901"; "#1007"

Discussion.—The "♂ type" in the American Museum of Natural History has been selected, labeled, and is now designated the lectotype.

Pleonecyptera parallela Smith, 1907, Amer. Ent. Soc. Trans. 33: 373.

"*Hab.*—Huachuca Mts., Arizona." "Two females, one in excellent condition, the other flown."

Syntypes examined: 1 (AMNH)

- (1) "Pleonecyptera parallela Smith ♀ type"; "Huachuca Mts., Ariz."; "J. B. Smith Collection, Rutgers"

Discussion.—Only the one syntype has been located. It has been labeled and is now designated the lectotype.

Hadena (Xylophasia) parcata Smith, 1903, N.Y. Ent. Soc. Jour. 11(1): 9.

"*Habitat*.—Yellowstone Park, Wyoming." "One male and one female from Dr. William Barnes." Hampson (1908, Catalogue of the Lepidoptera Phalaenae in the Collection of the British Museum, v. 7, p. 198) stated: "Pl. CXIII, fig. 11" and "This species is unknown to me; figured from a drawing from type in Coll. J. B. Smith." "♂, Wyoming."

Syntypes examined: 2 (AMNH and USNM)

- (1) "Hadena parcata Smith ♂ type"; "Yellowstone Park, Wyo."; "Collection J. B. Smith" [Fair condition, complete] [AMNH]
- (2) "Hadena parcata Smith ♀ type"; "Yellowstone Park, Wyo."; "Barnes collection"; "♀ genitalia on slide #77, March 26, 1936, J.F.G.C." [USNM]

Discussion.—Because of the sex and the fact that the illustration in Hampson (1908, pl. CXIII, fig. 11) was prepared from the "♂ type," that specimen has been selected, labeled, and is now designated the lectotype.

Yrias pardalis Smith, 1908, N.Y. Ent. Soc. Jour. 16: 97.

"*Habitat*.—Santa Rita Mts., Arizona, 5,000-8,000 feet, in June; F. H. Snow." "Two males and two females in good condition from Prof. Snow."

Syntypes examined: 3 (AMNH, USNM, and KU)

- (1) "Yrias pardalis Smith ♂ type"; "Santa Rita Mts., Ariz., 5 to 8000 ft., July, F. H. Snow"; "J. B. Smith Collection, Rutgers" [Fair condition, left forewing split, wings up] [AMNH]
- (2) "Yrias pardalis Smith ♀ type"; same locality label [USNM]
- (3) "Yrias pardalis Smith ♂ cotype"; same locality label [KU]

Discussion.—One female syntype has not been located. The "♂ type" in the American Museum of Natural History has been selected, labeled, and is now designated the lectotype. Smith erred in the date on the labels in the text in citing "June." All the syntypes located are dated "July."

Campometra paresa Smith, 1906, *Canad. Ent.* 38(7): 236.

"*Habitat*.—Yavapai Co., Arizona, May 23–31. Hutson. So. Arizona, Poling." "Six males and four females in fair to good condition."

Syntypes examined: 4 (2 AMNH and 2 USNM)

- (1) "Campometra paresa Smith ♂ type"; "Redington, Arizona"; "J. B. Smith Collection, Rutgers" [Good condition, complete] [AMNH]
- (2) "Campometra paresa Smith ♀ type"; "Yavapai Co., Ariz., V-23"; "J. B. Smith Collection, Rutgers" [Fair condition, complete] [AMNH]
- (3) "Campometra paresa Smith ♂ cotype"; "So. Arizona, Poling" [USNM]
- (4) "Campometra paresa Smith ♀ cotype"; "Yavapai Co., Ariz., V-29" [A ♂!] [USNM]

Other syntypes: Rindge (1955, p. 125) listed three male and two female cotypes received from Rutgers. They bear the locality label of the "♀ type" with dates "V-29 or V-30." Because of time limitations and the good condition of the "♂ type," I did not examine that series.

Discussion.—The "♂ type" in the American Museum of Natural History has been selected, labeled, and is now designated the lectotype. The date cited by Rindge (1955, p. 125) for the "♀ type" is different from what I found on the label.

Epizeuxis partialis Smith, 1908, *N.Y. Acad. Sci. Ann.* 18(2): 126.

"*Habitat*.—Yavapai County, Arizona, July 24 (Hutson)." "One male and one female."

Syntypes examined: 2 (AMNH and USNM)

- (1) "Epizeuxis partialis Smith ♂ type"; "Yavapai Co., Ariz., VII-22"; "J. B. Smith Collection, Rutgers" [Fair condition, complete] [AMNH]
- (2) "Epizeuxis partialis Smith ♀ type"; "Yavapai Co., Ariz., VII-24" [USNM]

Discussion.—Smith gave only the date from the "♀ type" in the original description. The "♂ type" in the American Museum of Natural History has been selected, labeled, and is now designated the lectotype.

Chytonix parvimacula Smith, 1903, *N.Y. Ent. Soc. Jour.* 11: 189.

"*Habitat*.—Middle California." "One male example in fair condition, the label giving no indication of its source or the exact locality where collected."

Holotype.—In the American Museum of Natural History. The specimen is labeled "Chytonix parvimacula Smith ♂ type"; "Middle Calif."; "Collection J. B. Smith"; "45."

Noctua patefacta Smith, 1895, *Ent. News* 6: 333, pl. 15, fig. 2.

"*Hab.*—Calgary, June to August." "Mr. Dod sends me six specimens, evenly distributed as to sex under the number 59, and states that the specimens were common at Treacle in '94.'"

Syntypes examined: 3 (2 USNM and 1 AMNH)

- (1) "Noctua patefacta Smith Type 1"; "Calgary, 22/VI/94"; "59"; "Type No. 7 U.S.N.M." [A ♂, excellent condition, complete] [USNM]
- (2) "Noctua patefacta Smith Type 2"; "Calgary, VII 2, Dod"; "J. B. Smith Collection, Rutgers" [A ♀, fair condition] [AMNH]
- (3) "Noctua patefacta Smith Type 3"; "Calgary, VII-2, Dod"; "303:1"; "Type No. 7 U.S.N.M." [A ♂] [USNM]

Discussion.—Three syntypes have not been located. The "♂ type" in the U.S. National Museum is the syntype illustrated by Smith. It also bears the number 59 mentioned by Smith. The "♂ type" has been selected, labeled, and is now designated the lectotype. The numbering of the types by Smith is a departure from his usual practice.

Hadena pausis Smith, 1899, *Canad. Ent.* 31: 262.

"*Habitat*.—Los Angeles County, California, in June (Coquillett); San Francisco, Cal." "In the eight specimens before me there is little variation, . . ." Smith (1903, *Amer. Ent. Soc. Trans.* 29(3): pl. 3, fig. 11) illustrated what he said was the valve of this species.

Hampson (1908, *Catalogue of the Lepidoptera Phalaenae in the Collection of the British Museum*, v. 7, p. 192, pl. CXII, fig. 32) listed and illustrated a male cotype from Los Angeles, Calif.

Syntypes examined: 5 (3 USNM and 2 AMNH)

- (1) "Hadena pausis Smith ♂ type"; "Los Angeles Co., Cal."; "June"; "Coquillett Collector"; "Type No. 4366 U.S.N.M."; "♂ genitalia on slide #54, March 24, 1936, J.F.G.C." [USNM]
- (2) "Hadena pausis Smith ♀ type"; "Los Angeles Co., Cal."; "June"; "Coquillett Collector"; "Type No. 4366 U.S.N.M." [USNM]
- (3) "Hadena pausis Smith ♀ cotype"; "Los Angeles Co., Cal."; "June"; "Type No. 4366 U.S.N.M."; "Coquillett Collector"; "♀ genitalia on slide #55, March 24, 1936, J.F.G.C." [USNM]
- (4) "Hadena pausis Smith ♂ cotype"; "Los Angeles Co., Cal."; "June"; "Coquillett Collector"; "J. B. Smith Collection, Rutgers" [AMNH]
- (5) "Hadena pausis Smith ♂ cotype"; same data [AMNH]

Discussion.—Six syntypes have been located. Two are missing, at least one of which should bear a San Francisco, Calif., label. The "♂ type" in the U.S. National Museum has been selected, labeled, and is now designated the lectotype.

Taeniocampa pectinata Smith, 1888, *U.S. Natl. Mus. Proc.* 10: 475.

"*Habitat*.—California." "The male type is with Mr. Edwards. Another specimen, in poor condition, in my own collection (Coll. U.S.N.M.)." Smith (1890, *U.S. Natl. Mus. Proc.* 12: 484) stated: "Mr. Edwards has the type, which is somewhat bat-

tered but very recognizable. In the Coll. U.S. Nat. Mus. are a number of fine specimens of this species collected by Mr. Kcsbele for Professor Riley, and by him donated to the Museum." Smith figured the "harpe and clasper" on plate 23, figure 14. Smith (1891, Amer. Ent. Soc. Trans. 18: 118) stated: "When I described this species, from scant material, there was a rubbed and faded male specimen in the coll. U.S. Nat. Mus., which I identified with this form, and from which the figure of the sexual characters was made. Since that time new material has been received, and I have described the genus *Perigonica*, to which I find, on renewed study, the supposed *T. pectinata* belongs. A number of fresh, clean specimens of the latter enable me to give a correct figure of the sexual characters, and for comparison I add the figures of *Perigonica angulata* and *P. fulminans*, all from typical specimens. See Pl. II, figs. 7, 10 and 11."

Smith (1893, U.S. Natl. Mus. Bul. 44, p. 204) stated: "The original type, a somewhat broken specimen, is in the Edwards collection. A fine series of good typical specimens is in the National Museum."

Syntypes examined: 2 (AMNH and USNM)

- (1) "Taeniocampa pectinata Smith Type"; "Havilah, California"; "No. 10891, Collection Hy. Edwards"; "Type, A.M.N.H." [A ♂, genitalia complete, verdigris on venter] [AMNH]
- (2) "Taeniocampa pectinata"; "Placer Co., Cal."; "June"; "278"; "Through C. V. Riley"; "Return to U.S. Nat. Mus., Dr. No. 400" [A ♂, genitalia intact!] [USNM]

Discussion.—The specimen in the U.S. National Museum may not be a syntype, but it is included because at one time it must have been marked as "Type" by Smith. The bottom third of the label has been cut off, but the top of the capital "T" and the top of the vertical part of the "p" of the word "Type" can be seen as well as the top part of the "th" in the name "Smith." However, if Smith's statement of 1891 was factual, the specimen could not be a syntype because Smith stated he prepared the figure of the sexual characters from that specimen. The specimen here has the genitalia intact! There is a slide of two valves in the American Museum of Natural History that probably was used to illustrate the genitalia figured in 1890. The genitalia he figures in 1891 are different, and it is possible that they would not agree with those of either of the specimens listed in the syntypes examined. I have not found a specimen or slide from which the last illustration was made. In the original description it would appear that Smith treated the specimen in the Edwards collection as the holotype. Smith did not have a holotype concept. He may have intended to only doubtfully include the specimen in the U.S. National Museum in the species, but his wording is not clear on that point in the original description, and in 1890 he used the specimen to illustrate the genitalia according to his statement of 1891. In 1891 he obviously no longer considered that specimen to be conspecific with the one in the Edwards collection because he referred to the U.S.

National Museum specimen as "the supposed *T. pectinata*" and refigured the genitalia from other specimens, which he stated "enable me to give a correct figure of the sexual characters." The "Type" in the American Museum of Natural History has been selected, labeled, and is now designated the lectotype. This action will assure that the specimen is considered to be the type-specimen whether it is considered to be the holotype or the lectotype.

Nephelodes pectinatus Smith, 1900, Canad. Ent. 32(8): 221, pl. 5, fig. 5.

"*Habitat*: British Columbia; Corfield, Vancouver."

"Two males (the collectors not indicated on the labels)." Under the explanation of plate 5 Smith stated: "All the photographs were made from actual type specimens, except 11 and 12."

Smith (1903, Amer. Ent. Soc. Trans. 29(3): pl. 3, fig. 6) illustrated the valve of the male genitalia.

Syntypes examined: 2 (USNM and AMNH)

- (1) "Nephelodes pectinatus Smith ♂ type"; "Brit. Col."; "Type No. 4840 U.S.N.M."; "36311"; "♂ genitalia on slide 3626, May 25, 1941, J.F.G.C." [Good condition] [USNM]
- (2) "Nephelodes pectinatus Smith ♂ cotype"; "Corfield, Vancouver, British Columbia, S., 7-9, 1896"; "J. B. Smith Collection, Rutgers" [AMNH]

Discussion.—Smith's comment at the end of the explanation of plate 5 that the specimens illustrated were "actual type specimens" was originally interpreted by this author to mean the "♂ type" or "♀ type." Because any specimen figured at the time of description would of necessity have to be from the type-series, the statement would not be necessary unless intended to indicate certain specimens of the series. It now appears, unless Smith was again in error, that the statement was merely Smith's way of stating figures 11 and 12, *Drasteria distincta* Neumögen, were not types.

Because of my original interpretation, I did not check the "♂ cotype;" in the American Museum of Natural History against the illustration of figure 5. The "♂ type" in the U.S. National Museum does not appear to be the specimen figured, so it follows that the "♂ cotype" must be the one since only two examples were in the type-series. It is true, however, that it is sometimes difficult to say with certainty that a specimen is or is not the one illustrated. Position of wings, legs, and antennae is used, but they can be changed if re-mounted. Since I am not now certain that the "♂ cotype" was the one illustrated, I have selected, labeled, and now designate the "♂ type" in the U.S. National Museum as the lectotype.

Eucalyptera pectinicornis Smith, 1899, N.Y. Ent. Soc. Jour. 7(4):232.

"*Habitat*: Phoenix, Arizona." "I have five specimens, two males and three females, from Dr. Barnes; all more or less dilapidated, but sufficiently good to make the species easily recognizable."

Syntypes examined: 4 (USNM)

- (1) "Eucalyptera pectinicornis Smith ♂ type"; "Ariz."; "Type No. 4165 U.S.N.M."; "36511"; "♂ genitalia on slide #717, Nov. 2, 1936, J.F.G.C."
- (2) "Eucalyptera pectinicornis Smith ♀ type"; "Ariz."; "Type No. 4165 U.S.N.M."; "Acc. No. 34638 U.S.N.M."; "♀ genitalia on slide #718, Nov. 2, 1936, J.F.G.C."
- (3) "Eucalyptera pectinicornis Smith cotype"; "Ariz."; "157" [A ♂, abdomen missing]
- (4) "Eucalyptera pectinicornis Smith cotype"; "Phoenix, Ariz., W. Barnes"; "♀ genitalia on slide #719, Nov. 2, 1936, J.F.G.C."

Discussion.—Only one syntype is actually labeled "Phoenix, Arizona." Another specimen with a Smith determination label from Phoenix is in the U.S. National Museum, but it is not marked as a cotype. It is a female. The "♂ type" has been selected, labeled, and is now designated the lectotype.

Feltia pectinicornis Smith, 1890, U.S. Natl. Mus. Bul. 38, p. 114, pl. 4, fig. 59, e and f.

"Thus far I have seen the species from Texas only." The name given in the explanation of figure 59 is *pectinata*!

Smith (1893, U.S. Natl. Mus. Bul. 44, p. 82) stated: "The types are in the U.S. National Museum."

Syntypes examined: 6 (USNM)

- (1) "30/9."; "Texas, Belfrage"; "Collection C. V. Riley"; "Type No. 95 U.S.N.M." [A ♂, apex of right forewing broken, genitalia intact]
- (2) "29/9."; "Texas"; "Collection Belfrage"; "Collection C. V. Riley"; "Type No. 95 U.S.N.M." [A ♂, apex of left forewing broken, genitalia intact]
- (3) "5/10."; "Texas"; "Collection Belfrage"; "Collection C. V. Riley"; "Type No. 95 U.S.N.M." [A ♀, fair condition]
- (4) "8/10."; "108. Agrotis tricola Lintner"; "Texas"; "Collection Belfrage"; "Type No. 95 U.S.N.M." [A ♂, fair condition but abdomen missing]
- (5) "15/10."; "Texas"; "Collection Belfrage"; "Collection C. V. Riley"; "Type No. 95 U.S.N.M."; "♂ genitalia slide #3, 20 Feb 30, C.H."; "Genitalia Slide USNM 36550 [Re-numbered]" [Fair condition]
- (6) "11/10."; "Texas"; "Collection Belfrage"; "Type No. 95 U.S.N.M." [A ♂, good condition, antennae missing]

Discussion.—None of the specimens are labeled as types by Smith; however, based on Smith's comment of 1893 and the low USNM type number, there seems little doubt that they are the syntypes. The syntype bearing the date label "15/10." and the Carl Heinrich genitalia preparation label has been selected, labeled, and is now designated the lectotype.

Mamestra pectinicornis Smith, 1906, N.Y. Ent. Soc.

Jour. 14: 11.

"Habitat.—Palmerly, Cochise Co., Ariz., in July; Brooklyn Institute." "Two males and others

in collections from the same general locality."

Syntypes examined: 2 (USNM)

- (1) "Mamestra pectinicornis Smith ♂ type"; "Palmerly, Cochise Co., Ariz., VII"; "Type No. 33821 U.S.N.M."; "♂ genitalia on slide 793, Mar., 1958, E.L.T."
- (2) "Mamestra pectinicornis Smith cotype"; "Palmerly, Cochise Co., Ariz., VII"; "Barnes collection" [A ♂]

Discussion.—It is not known whether Smith labeled any of the other specimens as "type" or "cotype," how many there were, what collections they were in, and what locality labels were on the specimens. It seems likely that he probably did not label them. The "Barnes collection" label may be in error, or if correct, it may indicate Smith sent or returned a specimen to Barnes. The "♂ type" has been selected, labeled, and is now designated the lectotype.

Carneades pedalis Smith, 1890, U.S. Natl. Mus. Bul. 38, p. 220.

"HABITAT.—Colorado." "A single male specimen only of this very pretty and distinctly marked species is before me from the U.S. Museum collection, taken by Mr. Bruce."

Smith (1893, U.S. Natl. Mus. Bul. 44, p. 98) stated: "The type is in the National Museum."

Holotype.—In the U.S. National Museum. The specimen is labeled "Carneades pedalis Smith Type"; "Colo., 18"; "Colo. Bruce"; "Type No. 122 USNM." The abdomen is missing.

Leucania pendens Smith, 1905, Canad. Ent. 37: 66.

"HABITAT: Chokaloskee, Florida, in May." "One female in very good condition, from Mr. George Franck."

Holotype.—In the American Museum of Natural History. The specimen is labeled "Leucania pendens Smith ♀ type"; "Chokal., Fla."; "J. B. Smith Collection Rutgers"; "41"; "Leucania pendens is prob. *calpota*." The specimen is in good condition except the abdomen is missing. A loose abdomen is in the box with the specimen.

Agroperina pendina Smith, 1910, N.Y. Ent. Soc. Jour. 18(3): 146, pl. 5, fig. 16.

"Habitat.—Calgary, Alberta, in July; Winnipeg, Brandon, Miniota, Manitoba, June and July; Olds, British Columbia, August." "A series of 13 males and 6 females is before me for comparison."

Syntypes examined: 8 (4 AMNH and 4 USNM)

- (1) "Agroperina pendina Smith ♂ type"; "Head of Pine Creek, 22. VII.96, Calgary, Alberta, F. H. Wolley Dod"; "J. B. Smith Collection, Rutgers" [Good condition, complete] [AMNH]
- (2) "Agroperina pendina Smith ♀ type"; "Calgary [sic] Alberta"; "July 8-15"; "J. B. Smith Collection, Rutgers" [Good condition] [AMNH]
- (3) "Agroperina pendina Smith Paratype"; "Winnipeg, Manitoba"; "J. B. Smith Collection, Rutgers"; "♂ Genitalia mounted on

- slide no. 6685, F. H. Rindge" [AMNH]
- (4) "*Agroperina pendina* Smith Paratype"; "Brandon, Manitoba"; "J. B. Smith Collection, Rutgers" [A ♀] [AMNH]
- (5) "*Agroperina pendina* Smith Paratype"; "Winnipeg, Manitoba"; "Barnes Collection"; "♂ genitalia on slide #2183, Nov. 14, 1938, J.F.G.C." [USNM]
- (6) "*Agroperina pendina* Smith Paratype"; "Calgary [sic], Alberta"; "July 8-15"; "Barnes Collection"; "♂ genitalia on slide #2184, Nov. 14, 1938, J.F.G.C." [USNM]
- (7) "*Agroperina pendina* Smith Paratype"; "Miniota, Manitoba, Can., VII-4"; "♀ genitalia on slide #2185, Nov. 14, 1938, J.F.G.C." [USNM]
- (8) "*Agroperina pendina* Smith Paratype"; "Cartwright, Manitoba"; "24 ♂♂, 12.VII.01"; "Barnes Collection"; "♂ genitalia on slide #374, July 20, 1936, J.F.G.C." [USNM]

Discussion.—The last syntype listed has a locality label not mentioned by Smith. Eleven syntypes have not been located. The illustration of the male genitalia (pl. 5, fig. 16) was prepared from a Calgary specimen according to the explanation of the plate. There are two genitalic slides of this species among the Smith slides in the American Museum of Natural History. One has "Montana," a locality not mentioned by Smith. The other is without locality and may be the slide used for the illustration. That slide was not prepared from any of the syntypes that have been located. The "♂ type" in the American Museum of Natural History has been selected, labeled, and is now designated the lectotype.

***Oxycnemis perfundis* Smith, 1894, Amer. Ent. Soc.**

Trans. 21: 87, pl. 6, fig. 6.

"**Hab.**—Nueces River, Texas; Southern Texas." "I have seen quite a number of this little species, and have had specimens for some time."

Syntypes examined: 2 (USNM)

- (1) "*Oxycnemis perfundis* Smith Type"; "Tex."; "Type No. 5106 U.S.N.M."; "36511" [A ♂, fair condition, genitalia intact]
- (2) "*Oxycnemis perfundis* Smith Type"; "Nueces River, Texas"; "Col. B. Neumögen"; "Type No. 33917 U.S.N.M." [A ♂, fair condition, genitalia intact, right legs missing, abdomen greasy]

Discussion.—The syntype bearing USNM type number 5106 has been selected, labeled, and is now designated the lectotype. The other syntype has a more definite locality, but the candidate selected was the specimen figured by Smith.

***Xylomiges peritalis* Smith, 1892, U.S. Natl. Mus. Proc. 15: 69, pl. 3, fig. 2.**

"**HABITAT:** Colorado (Bruce); Oregon (Strecker)."

"A single specimen in good condition from Mr. Neumoegen's collection; but I have seen others, also of Mr. Bruce's collecting."

Smith (1893, U.S. Natl. Mus. Bul. 44, p. 233) stated: "The type is in the Neumoegen Collection."

McDunnough (1943, Canad. Ent. 75:55) stated: "... where *peritalis*, based on a single Colorado male, . . ." and "... the exact status of *peritalis* cannot be definitely established until after the war when it may be possible to examine again the type in the United States National Museum."

Syntypes examined: 1 (USNM)

- (1) "*Xylomiges peritalis* Smith Type"; "Colo., Bruce"; "Col. B. Neumögen"; "Type No. 33839 U.S.N.M." [A ♂, abdomen glued to thorax, right valve of genitalia missing]

Discussion.—The specimen probably should be treated as the holotype and has been so treated by McDunnough. Smith was not clear in the original description whether he had only a single specimen for examination and description or whether only one specimen was considered to be in good condition. He mentioned "others" and he listed a second locality "Oregon (Strecker)." To assure that the specimen from Colorado in the U.S. National Museum is considered the type-specimen, it has been labeled and is now designated the lectotype.

***Rhizagrotis perolivalis* Smith, 1905, N.Y. Ent. Soc.**

Jour. 13(4): 194.

"**Habitat.**—Calgary, Alberta, head of Pine Creek, July 9, 10, 14." "One male and three females, all in good condition from Mr. F. H. Wolley Dod."

Lectotype.—In the American Museum of Natural History. Designated by Todd (Oct. 4, 1968, Wash. Ent. Soc. Proc. 70(3): 274).

***Scotogramma perplexa* Smith, 1888, U.S. Natl. Mus.**

Proc. 10: 469.

"**Habitat.**—Colorado." "The type is a unique ♀ in the collection of Mr. Tepper."

Smith (1890, U.S. Natl. Mus. Proc. 12 (781): 463) gave the same information.

Smith (1893, U.S. Natl. Mus. Bul. 44, p. 129) stated: "The type is in the Tepper collection."

Holotype.—In the collection of Michigan State University. The specimen is labeled "Type" [on a yellow, rhomboidal label]; "Col." It is a female in fair condition.

***Carneades perturbata* Smith, 1890, U.S. Natl. Mus.**

Bul. 38, p. 222.

"**HABITAT.**—Colorado." "A single male specimen, collected by Mr. Bruce is in the collection U.S. National Museum."

Smith (1893, U.S. Natl. Mus. Bul. 44, p. 97) stated: "The type is in the National Museum."

Holotype.—In the U.S. National Museum. The specimen is labeled "*Carneades perturbata* Smith Type"; "Col. 11"; "Colo., Bruce"; "Type No. 118 USNM." The hindwings and abdomen are missing.

***Euxoa pestula* Smith, 1904, Canad. Ent. 36(6): 150.**

"**Habitat.**—Calgary, Alberta, July, August and September, F. H. Wolley Dod." "Twenty examples, representing both sexes in almost equal numbers."

Lectotype.—In the American Museum of Natural History. Designated by Todd (Oct. 4, 1968, Wash. Ent. Soc. Proc. 70(3): 275).

Discussion.—Even though the lectotype was selected by Todd, 1968, five syntypes have been discovered since then in the Canadian National Museum. All the specimens are from Calgary, Alberta.

***Mamestra petita* Smith, 1901, Amer. Ent. Soc. Trans. 27: 235, pl. 10, fig. 10 (as 19 in explanation).**

"The seventh series is composed of one male from Seattle, Washington, and three females from Corfield, Vancouver." "We have therefore a good species which I call *petita*, and which represents typical *olivacea* on the Pacific Coast." On page 239 he referred to the entity as *Mamestra petita* n. sp., and on page 240, under *Mamestra petita* Smith, stated: "Also a good species, concerning whose distribution little can be said definitely; Seattle, Washington, and Corfield, Vancouver, are not enough to generalize upon."

Syntypes examined: 4 (2 USNM and 2 AMNH)

- (1) "*Mamestra petita* Smith, ♀ type"; "Corfield, Vancouver"; "Type No. 5761, U.S.N.M." [Good condition, complete] [USNM]
- (2) "*Mamestra petita* Smith, ♀ cotype"; "Corfield, Vancouver"; "Barnes collection" [Wing condition fair, abdomen missing] [USNM]
- (3) "*Mamestra petita* Smith, ♂ type"; "Seattle, Wash."; "Collection J. B. Smith" [Wing condition good, genitalia broken, valves missing] [AMNH]
- (4) "*Mamestra petita* Smith, ♀ cotype"; "Corfield, Vancouver"; "Collection J. B. Smith" [Somewhat rubbed, complete] [AMNH]

Discussion.—A slide of a right valve was located in the American Museum of Natural History. It is undoubtedly prepared from the "♂ type." It is poor and the base of the valve does not agree with the illustration (pl. 10, fig. 10 (19)). I have located three Smith slides of *Mamestra petita* Smith in the U.S. National Museum. They are USNM Smith slides numbers 975, 976, and 978. They are from Mt. Angel, Oreg., F. Epper; Kaslo, British Columbia, #24067; and Wellington, British Columbia, G. W. Taylor; respectively. All are marked as female, but they contain only parts or whole valves of male genitalia. The localities are not given in Smith's text under the name, but it is possible that he had the material and made the slides before the completion of the manuscript and that the illustration could have been prepared from one or the other of these slides. Because of this possibility, I consider that the "♀ type" is a better lectotype candidate and I have selected, labeled, and now designate that specimen as the lectotype. It is located in the collection of the U.S. National Museum. Incidentally "Corfield" is a collector, not a locality.

***Cucullia phila* Smith, 1908, N.Y. Acad. Sci. Ann. 18(2): 117.**

"*Habitat:* Philadelphia, Pa.; Maryland." "Two males and two females. The two males and one female are from Mr. Frederick Weigand of Philadelphia, and are bred specimens. The Maryland example is

old, and has been left unnamed for years, because I had no record of its source, and I doubted a new eastern species so rare that only one example should occur in collections."

Syntypes examined: 2 (AMNH and USNM)

- (1) "*Cucullia phila* Smith ♂ type"; "Phila., Penn."; "J. B. Smith Collection, Rutgers" [Excellent condition, complete] [AMNH]
- (2) "*Cucullia phila* Smith ♀ type"; "Phila., Penn."; "Barnes Collection"; "*affarata* Stkr. compared with type ♂ Coll. Stkr. Prac. exact. H. W. of type somewhat paler being ♂. F.H.B." [Abdomen missing] [USNM]

Discussion.—One male syntype from Philadelphia and a female syntype from Maryland have not been located. The "♂ type" in the American Museum of Natural History has been selected, labeled, and is now designated the lectotype.

***Acontia pima* Smith, 1905, N.Y. Ent. Soc. Jour. 13(4): 209.**

"*Habitat.*—Babaquivera Mts., Pima County, Arizona." "Two good males from Dr. Barnes, collected by Mr. Poiling."

Barnes and McDunnough (1913, Contrib. Nat. Hist. Lepidoptera N. Amer. 2(1): 44, pl. 21, fig. 5) illustrated a male cotype from Babaquivera Mountains, Ariz.

Syntypes examined: 2 (AMNH and USNM)

- (1) "*Acontia pima* Smith ♂ type"; "Babaquivera Mts., Pima Co., Ariz."; "J. B. Smith Collection, Rutgers"; "♂ genitalia mounted on slide 10, 316, F.H.R." [Excellent condition] [AMNH]
- (2) "*Acontia pima* Smith Cotype"; "Babaquivera Mts., Pima Co., Ariz."; "Photograph Pl. 21, No. 5" [A ♂, excellent condition] [USNM]

Discussion.—The two syntypes are both excellent lectotype candidates; the sex and condition are the same. One is marked "♂ type," and the other is the syntype that was illustrated. The syntype in the U.S. National Museum has been selected, labeled, and is now designated the lectotype. The selection was based mainly on Recommendation 74B of the International Code of Zoological Nomenclature; however, another factor affecting the selection was that the original series came from William Barnes whose collection is now housed in the U.S. National Museum.

***Carneades pindar* Smith, 1900, U.S. Natl. Mus. Proc. 22(1203): 451.**

"*Habitat.*—Bluff, Utah (Mrs. H. M. Peabody)." "Two males from the U.S. National Museum, in not the best of condition." "*Type.*—Cat. No. 4789, U.S.N.M."

Hampson (1903, Catalogue of the Lepidoptera Phaenae in the Collection of the British Museum, v. 4, p. 295) stated: "Pl. LXVI, fig. 9" and "This species is unknown to me; figured from a photograph from the type in U.S. Nat. Mus."

Lectotype.—In the U.S. National Museum. Desig-

nated by Todd (Oct. 4, 1968, Wash. Ent. Soc. Proc. 70(3): 275).

Nocloa plagiata Smith, 1906, N.Y. Ent. Soc. Jour. 14: 13.

"*Habitat*.—Arizona; southern Arizona, Poling; Palmerly, Cochise County, in August, Brooklyn Institute Collection." "One male and two females in good or fair condition."

Syntypes examined: 3 (1 AMNH and 2 USNM)

- (1) "Nocloa plagiata Smith δ type"; "Arizona"; "J. B. Smith Collection, Rutgers" [A little rubbed, complete] [AMNH]
- (2) "Nocloa plagiata Smith ϕ type"; "Palmerly, Cochise Co., Ariz."; "Type No. 33954 U.S.N.M." [USNM]
- (3) "Nocloa plagiata Smith cotype"; "So. Arizona, Poling" [A ϕ] [USNM]

Discussion.—The " δ type" in the American Museum of Natural History has been selected, labeled, and is now designated the lectotype.

Agrotis planifrons Smith, 1890, Amer. Ent. Soc. Trans. 17: 42.

"*Habitat*.—N.W. British Columbia." "A single specimen only, from Mr. Neumoegen, in good condition."

Smith (1890, U.S. Natl. Mus. Bul. 38, p. 60) has the same information.

Smith (1893, U.S. Natl. Mus. Bul. 44, p. 65) stated: "The type is in Mr. Neumoegen's collection."

Holotype.—In the U.S. National Museum. The specimen is labeled "Agrotis planifrons Smith Type"; "N.W. Brit. Col."; "Col. B. Neumoegen"; "Type No. 33775 USNM." It is a male with a female abdomen glued on; the latter is damaged dorsally toward the base by dermestids.

Noctua plebeia Smith, 1898, N.Y. Ent. Soc. Jour. 6: 105.

"*Habitat*.—Vancouver, August 14th; Livingston, British Columbia; California." "I have two males and one female, and have seen other specimens; one at least from Oregon, and I think also a specimen or two from Washington. The California specimen is the only female and is, I believe, from some point in the Sierra Nevada Mountains." Hampson (1903, Catalogue of the Lepidoptera Phalaenae in the Collection of the British Museum, v. 4, p. 417) stated: "Pl. LXX, fig. 24" and "This species is unknown to me; figured from a photograph from type in U.S. Nat. Mus." " δ , Br. Columbia."

Syntypes examined: 3 (2 USNM and 1 AMNH)

- (1) "Noctua plebeia Smith δ type"; "Br. Col."; "Acc. No. 34638 U.S.N.M."; "Type No. 4154 U.S.N.M." [Valves of genitalia missing] [USNM]
- (2) "Noctua plebeia Smith ϕ type"; "Vanc., 8-14-96, Livingston"; "Type No. 4154 U.S.N.M."; "36511" [A δ] [USNM]
- (3) "Noctua plebeia Smith Cotype"; "Callfor-

nia"; "Collection J. B. Smith" [A ϕ , thorax badly broken by verdigris] [AMNH]

Discussion.—Smith was correct that the only female was the specimen from California. He apparently had forgotten his statement and labeled the second male " ϕ type" in error. Rindge (1955, p. 126) referred to the syntype received from the Smith collection at Rutgers as "Cotype male, California." It is a female. The " δ type" was used to prepare a painting illustrated by Hampson, 1903. The " ϕ type," a male, in the U.S. National Museum has been selected, labeled, and is now designated the lectotype. It was selected because the genitalia are intact.

Mamestra plicata Smith, 1898, Ent. News 9: 243.

"*Hab.*—Glenwood Springs, Colorado, in May; Dr. Wm. Barnes." "One male, the smaller, and one female specimen are under examination." "A female specimen taken by Mr. Bruce in Garfield County, Colorado, at an elevation of 6000 feet expands 43 mm., and is therefore larger than any of the others."

Smith (1903, N.Y. Ent. Soc. Jour. 11(1): pl. 1, fig. 7) illustrated the valve of the male genitalia.

Syntypes examined: 2 (USNM)

- (1) "Mamestra plicata Smith δ type"; "Glenwood Springs, Col., 5, 1895, W. Barnes"; "Type No. 4988 U.S.N.M."; "36511" [Left valve of genitalia missing]
- (2) "Mamestra plicata Smith ϕ type"; "Glenwood Springs, Col., 5-1, 1895, W. Barnes"; "50"; "Barnes Collection"

Discussion.—In the discussion of the original description Smith commented that either the other female is another species or if the same, it illustrates the great range of variation in the species. The specimen, if a syntype, has not been located. The " δ type" has been selected, labeled, and is now designated the lectotype.

Oncocnemis pohono Smith, 1899, N.Y. Ent. Soc. Jour. 7: 38.

"*Habitat*: High Sierras, California." "A single male was received from Mr. H. G. Dyar, numbered 11138." "The name is given at his suggestion and is the Indian term for the Bridal Veil Falls near which, as I understand it, the specimen was taken." "An accident has rendered the type defective; but all the wings are in good condition."

Holotype.—In the U.S. National Museum. The specimen is labeled "Oncocnemis pohono Smith δ type"; "H. G. Dyar, no. 11, 138"; "Cal."; "Type No. 5125 USNM"; "36511." The head is missing and the valves of the genitalia are broken. Barnes and Benjamin (1924, p. 155) indicated that the type was in the U.S. National Museum. They repeatedly misspelled the specific name.

Xylina pomona Smith, 1899, N.Y. Ent. Soc. Jour. 7(4): 230.

"*Habitat*.—Alameda County, California, in July, larva on apple, Koebele. Olympia, Washington." "I have a male and female, the former from Washing-

ton, the latter belonging to the National Museum, from California."

Smith (1900, Amer. Ent. Soc. Trans. 27: 25) treated this name as a synonym of *contenta* Grote, which he illustrated on plate 1, figure 11, and plate 4, figures 17 and 18.

Syntypes examined: 2 (USNM and AMNH)

- (1) "Xylina pomona Smith ♀ type"; "Alameda Co., Cal."; "July"; "434"; "Larva on Apple"; "Through C. V. Riley"; "124"; "Type No. 5113 U.S.N.M."; "36511" [Good condition][USNM]
- (2) "Xylina pomona Smith ♂ type"; "Olympia, Wash."; "Collection J. B. Smith" [Poor condition, wings rubbed, thorax broken ventrally by verdigris, valves of genitalia missing][AMNH]

Discussion.—Because of the poor condition and absence of the valves of the genitalia of the "♂ type," the "♀ type" in the U.S. National Museum has been selected, labeled, and is now designated the lectotype.

Euxoa poncha Smith, 1910, Amer. Ent. Soc. Trans. 36(3): 258.

"*Hab.*—Denver, Ft. Collins, Poncha Springs, Colorado, in July." "Two males and one female in good condition and very much alike. These also are old specimens, received from Mr. David Bruce and Prof. C. P. Gillette many years ago, and they have, until recently, been associated with *E. medialis* in my collection."

Syntypes examined: 3 (2 AMNH and 1 USNM)

- (1) "Euxoa poncha Smith ♂ type"; "Poncha Spgs., Col., 7/12/98"; "Collection J. B. Smith" [Good condition, complete][AMNH]
- (2) "Euxoa poncha Smith ♀ type"; "Colo., 1494"; "J. B. Smith Collection, Rutgers" [Fairly good condition, complete][AMNH]
- (3) "Euxoa poncha Smith Paratype"; "Colo."; "18, Colo., Bruce"; "Slide 86"; "Barnes Collection" [A ♂, abdomen missing][USNM]

Discussion.—The slide prepared from the paratype is in the U.S. National Museum. It is a Barnes and McDunnough slide. In line with the policy of selecting females in the genus *Euxoa* I originally followed at the beginning of this study, I selected and labeled the "♀ type" in the American Museum of Natural History as the lectotype. D. F. Hardwick has indicated that such selection would be satisfactory. Accordingly, I now designate the "♀ type" as the lectotype.

Ommatostola popofensis Smith, 1900, in Dyar, Wash. Acad. Sci. Proc. 2: 492.

"*Habitat*.—Popoff Island, Alaska, July 15, 1899." "One female in good condition." "*Type*.—Cat. no. 4843, U.S. National Museum."

Holotype.—In the U.S. National Museum. The specimen is labeled "Ommatostola popofensis Smith ♀ type"; "Popoff Island, Alaska, July 15, '99"; "Harriman Expedition '99, T. Kincaid, Collector"; "Type No. 4843 USNM."

Trichoclea postica Smith, 1891, Amer. Ent. Soc. Trans. 18: 115, pl. 2, fig. 5.

"*Hab.*—Denver, Col. (Bruce)." "Male and female are before me, the former from the coll. U.S. Nat. Museum (two specimens), the latter from Mr. Neumoegen."

Smith (1893, U.S. Natl. Mus. Bul. 44, p. 209) stated: "The types are in the National Museum and with Mr. Neumoegen."

Smith (1903, Amer. Ent. Soc. Trans. 29(3): pl. 3, fig. 1) illustrated the valve of the male genitalia.

Syntypes examined: 2 (USNM)

- (1) "Trichoclea postica Smith Type"; "Colo., Bruce"; "Col. B. Neumoegen"; "Type No. 33816 U.S.N.M." [A ♀, complete]
- (2) "Trichoclea postica Smith Type"; "Denver, Colo., D. Bruce, 98"; "Type No. 251 U.S.N.M." [A ♂, abdomen glued to thorax, valves of genitalia missing]

Discussion.—One male syntype that Smith indicated was from the U.S. National Museum has not been located. Smith illustrated part of a valve, but it does not appear to be accurate and the sacculus and clavus are not shown. In the absence of the one syntype and the glued and broken abdomen of the known male, it would not be possible to state whether the drawing was prepared from the known male. In consideration of these facts, the female syntype in the U.S. National Museum has been selected, labeled, and is now designated the lectotype.

Platyperigea praeacuta Smith, 1894, Amer. Ent. Soc. Trans. 21: 61, pl. 3, fig. 6.

"*Hab.*—Colorado; Bruce, No. 11; Glenwood, Colo., September, Barnes, No. 32." "Two female specimens are before me, both of them in fair condition."

Syntypes examined: 2 (USNM and AMNH)

- (1) "Platyperigea praeacuta Smith Type"; "Colo., Bruce"; "Type No. 179 U.S.N.M." [A ♀, in good condition][USNM]
- (2) "Platyperigea praeacuta Smith Type"; "Glenwood Springs, Col., 9, 1892, W. Barnes"; "J. B. Smith Collection, Rutgers" [A ♀, fair condition][AMNH]

Discussion.—The syntype in the U.S. National Museum appears to be the specimen illustrated. The syntype in the American Museum of Natural History definitely is not the specimen illustrated. Accordingly, the "Type" in the U.S. National Museum has been selected, labeled, and is now designated the lectotype. The numbers 11 and 32 mentioned by Smith do not occur on the specimens now.

Anorthodes prima Smith, 1891, Amer. Ent. Soc. Trans. 18: 115, pl. 2, fig. 3.

"*Hab.*—Archer, Fla., May 24th; Washington, D.C., May 15th, September 2d and 12th (U.S. Nat. Mus.); Columbus, O. (Tallant)." "Under the number 3503, bred specimens are in the biological collection (coll. C. V. R.) . . ."

Smith (1893, U.S. Natl. Mus. Bul. 44, p. 198) stated:

"The type is in the National Museum."

Syntypes examined: 5 (USNM)

- (1) "Anorthodes prima Smith Type"; "3503, 14/11 84"; "Collection C. V. Riley"; "Type No. 229 U.S.N.M." [A ♂, good condition, complete]
- (2) "Anorthodes prima Smith Type"; "3503, 14/11 84"; "Collection C. V. Riley"; "Type No. 229 U.S.N.M." [A ♀, good condition]
- (3) "Anorthodes prima Smith Type"; "Washington, D.C., 15/5 84, A. Koebele collector"; "Type No. 229 U.S.N.M." [A ♂, genitalia slightly damaged]
- (4) "Anorthodes prima Smith Type"; "Archer, Fla., 3-82"; "24/5 -82"; "Type No. 229 U.S.N.M." [A ♀, good condition]
- (5) "Anorthodes prima Smith Type"; "D.C."; "120"; "H. F. Schoenborn collection" [A ♀, good condition]

Discussion.—Smith did not indicate how many specimens were in the type-series, but from the syntypes located and the locality data published, there were at least six. No examples from Columbus, Ohio, have been located. The dates cited by Smith do not agree in part with some on the syntypes, but it seems that Smith did not record some, and also he cited dates from larvae and pupae in the immature collection with Riley's biological note number 3503. The syntypes with this number have no locality given but it is presumed that it was Washington, D.C. The male syntype with the biological note number 3503 is the best specimen as to condition and completeness of the two syntypes of that sex. It has been selected, labeled, and is now designated the lectotype.

Perigrapha prima Smith, 1891, Amer. Ent. Soc. Trans. 18: 119.

"*Hab.*—Sierra Nevada, Cal." "A single female specimen from Mr. Hy. Edwards in which the antennae are lengthily serrate or very shortly pectinated."

Smith (1893, U.S. Natl. Mus. Bul. 44, p. 209) stated: "The type is in the Edwards collection."

Smith (1911, N.Y. Ent. Soc. Jour. 19(3): 145) stated: "Only a single male example from Sierra Nevada!"

Holotype.—In the American Museum of Natural History. The specimen is labeled "Perigrapha prima Smith Type"; "Sier. Nev., Cal"; "Edw"; "No. 10 921 Collection Hy. Edwards"; "Type No. AMNH"; "Slide No. St. 4 ♀" [McDunnough]. The abdomen had been glued on before McDunnough prepared the slide. McDunnough (1949, p. 13) stated that the type was used for text figure 116 of Holland's "Moth Book" (1903, p. 205).

Taeniocampa proba Smith, 1910, Canad. Ent. 42(10): 322-323.

"A single male example from Alameda County, California, in January, differs superficially from *inherita*, but agrees most exactly in genitalic structure. It is at least an even chance that it is only a local form of *inherita*, but I will call it *proba*." "T.

proba Smith."

Holotype.—In the American Museum of Natural History. The specimen is labeled "Taeniocampa proba Smith ♂ type"; "Alameda Co., Cal."; "Jan."; "J. B. Smith Collection Rutgers"; "♂ Gen. m. o. s. by Smith" [Rindge label]. There is a genitalia slide in the American Museum labeled "Taeniocampa proba Sm., ♂ genitalia, Type spec."

Agrotis proclivis Smith, 1888, U.S. Natl. Mus. Proc. 10: 453.

"*Habitat*.—Arizona." "One ♂ (Tepper) and one ♀ (Neum.)"

Smith (1890, U.S. Natl. Mus. Bul. 38, p. 106, pl. 4, fig. 50) illustrated the "harpe and clasper" of the male genitalia.

Smith (1893, U.S. Natl. Mus. Bul. 44, p. 79) stated: "The types are in the Tepper and Neumoegen collections."

Syntypes examined: 2 (USNM and MSU)

- (1) "Agrotis proclivis Smith Type"; "S.W. Arizona"; "Col. B. Neumoegen"; "Type No. 33769 U.S.N.M." [A ♀, good condition] [USNM]
- (2) "Agrotis proclivis Smith"; "Type" [rhomboid label, yellow paper]; "Arizona" [A ♂, venter of head and thorax damaged by dermestids, right valve of genitalis missing] [MSU]

Discussion.—The syntype in the U.S. National Museum has been selected, labeled, and is now designated the lectotype. The factors governing the selection were condition of syntypes, characteristic pattern of maculation, number of Smith holotypes and lectotypes in the two institutions, and the location in this museum of most types of the species of *Loxagrotis* McDunnough, the genus of which *proclivis* is the type-species.

Mamestra prodeniformis Smith, 1888, U.S. Natl. Mus. Proc. 10: 464.

"*Habitat*.—Southwestern Arizona." "A single ♂ specimen in Mr. Neumoegen's collection." "Long after the above description was written, I received from Professor Snow for identification a ♀, which expands 1.50 inches (37 mm), but agreed perfectly with the ♂ in maculation. This specimen was from New Mexico."

Smith (1892, U.S. Natl. Mus. Proc. 14: 219) stated:

"HABITAT.—Southwest Arizona, New Mexico."

"One specimen, New Mexico (J. B. S.), collected by Professor Snow, is in the Museum collection." He figured the "harpe" and "clasper" of the male genitalia on plate 9, figure 19.

Smith (1893, U.S. Natl. Mus. Bul. 44, p. 117) stated: "A type is in the National Museum; another with Mr. Neumoegen."

Syntypes examined: 2 (USNM?)

- (1) "Mamestra prodeniformis Smith ♂ type"; "S.W. Arizona"; "Col. B. Neumoegen"; "Type No. 33805 USNM" [A ♂, both valves missing]

- (2) "prodeniformis Smith"; "New Mexico, F. H. Snow"; "Collection J. B. Smith"; "Type No. 150 USNM" [A ♂, with glued-on ♀ abdomen]

Discussion.—There is another specimen, a female in very poor condition, in the Francis Huntington Snow Entomological Collection of the University of Kansas that is also from New Mexico, collected by Snow. It is not marked type by Smith, but by Snow. It bears a machine-printed label on gray paper; "Type specimen, Species discovered by F. H. Snow." I consider that it is a pseudotype. Snow probably had two specimens and sent one to Smith for determination and retained the other. I believe that the second specimen listed in the collection of the U.S. National Museum is probably a syntype and that it is the specimen Smith believed to be a female from New Mexico. Curiously, however, the type book entry for type 150 USNM shows a notation "Without abdomen." The entry was dated June 18, 1896. I have selected, labeled, and now designate the "♂ type" from southwestern Arizona in the collection of the U.S. National Museum as the lectotype of this species.

Anytus profundus Smith, 1900, *Canad. Ent.* 32(8): 218, pl. 5, fig. 4.

"*Habitat.*—Brandon, Manitoba (Hanham)." "Two males are at present before me, and Mr. Hanham has other specimens similar in appearance." Under the explanation of the plate he stated: "All the photographs were made from actual type specimens, except 11 and 12."

Smith (1910, *Psyche* 17(5): 208) stated: "In 1900 I described, in the *Canadian Entomologist* XXXII, p. 218 . . . *Anytus profundus*, from two Brandon, Man., males, sent in by Mr. Hanham." "More material came in later, from the type and other localities, . . ." He illustrated the male genitalia on plate 11, figures 5-8. Although figure 5 is stated to be from Brandon, Manitoba, it is not known whether it represents one of the syntypes.

Syntypes examined: 2 (USNM)

- (1) "*Anytus profundus* Smith ♂ type"; "Brandon, Man."; "Type No. 4984 U.S.N.M."; "36511" [Good condition, except right valve of genitalia missing]
- (2) "*Anytus profundus* Smith ♂ cotype"; "Brandon, Man."; "1854"; "Type No. 4984 U.S.N.M."; "36511" [Good condition, complete]

Discussion.—The "♂ type" was the specimen illustrated by Smith (pl. 5, fig. 4). It has been selected, labeled, and is now designated the lectotype.

Copicucullia propinqua Smith, 1894, *Amer. Ent. Soc. Trans.* 21: 85, pl. 4, fig. 11.

"*Hab.*—Colorado; Bruce, Nos. 107 and 539, 1 ♂, 1 ♀."

Syntypes examined: 2 (USNM)

- (1) "*Copicucullia propinqua* Smith ♂ type"; "Colo., Bruce"; "107"; "Type No. 272 U.S.N.M."; "♂ genitalia on slide #2614, Nov.

- 6, 1939, J.F.G.C." [Right hindwing missing]
- (2) "*Copicucullia propinqua* Smith ♀ type"; "Colo., Bruce"; "TYPE" [red machine-printed letters]; "Barnes Collection"; "♀ Genitalia Slide: USNM 1884, J. G. Franclemont" [Fair condition]

Discussion.—The genitalia slide of the male syntype has only the broken remains of the vinculum, tegumen, uncus, and aedeagus; the valves are missing. The "♂ type" was the specimen illustrated by Smith. *C. propinqua* Smith has been treated as a junior synonym of *C. antipoda* (Strecker), and the genitalia of the "♀ type" confirm that placement. Accordingly, the "♀ type" has been selected, labeled, and is now designated the lectotype.

Campometra protea Smith, 1906, *Canad. Ent.* 38(7): 234.

"*Habitat.*—Yavapai Co., Arizona, May 21-31. Hutson. Babaquivera Mts., Pima Co., Arizona, in September. Poling. Readington [sic], Arizona, Dr. Barnes." "A series of over 50 examples is before me at present, and I have had nearly as many more for comparison, all from the same general faunal region."

Syntypes examined: 21 (15 AMNH and 6 USNM)

- (1) "*Campometra protea* Smith ♂ type"; "Yavapai Co., Ariz., V-30"; "J. B. Smith Collection, Rutgers" [Good condition, complete] [AMNH]
- (2) "*Campometra protea* Smith ♂ type"; same data except "V-22" [Good condition, complete] [AMNH]
- (3-14) "*Campometra protea* Smith ♂ cotype, ♀ cotype or cotype"; same data except "V-23, V-25, V-28, V-29, V-31, VI-21, VI-24" [9 ♂ and 3 ♀] [AMNH]
- (15) "*Campometra protea* Smith cotype"; "southern Arizona, Poling"; "June 15-30" [A ♂] [AMNH]
- (16) "*Campometra protea* Smith cotype"; "Yavapai Co., Ariz., V-31"; "Type No. 34128 U.S.N.M."; "Collection Brklyn. Mus."; "♂ genitalia slide #2059, Sept. 26, 1938, J.F.G.C." [USNM]
- (17) "*Campometra protea* Smith cotype"; "Yavapai Co., Ariz., V-23"; "Collection Brklyn. Mus."; "♀ genitalia slide #2060, Sept. 26, 1938, J.F.G.C." [USNM]
- (18) "*Campometra protea* Smith ♂ cotype"; "Babaquivera Mts., Ariz., Pima Co."; "Sept." [USNM]
- (19) "*Campometra protea* Smith ♂ cotype"; "Yavapai Co., Ariz., V-29" [USNM]
- (20) "*Campometra protea* Smith cotype"; same data except "V-31" [A ♀] [USNM]
- (21) "*Campometra protea* Smith ♀ cotype"; same data except "V-27" [USNM]

Discussion.—Many of the original type-series apparently were not marked as types by Smith. No syntypes from Readington, Ariz., have been located. The "♂ type" in the American Museum of Natural History has been selected, labeled, and is now designated the lectotype.

Oncocnemis pudorata Smith, 1893, Ent. News 4(3): 99, pl. 6, fig. 8.

"*Hab.*—Laggan, British Col., Agnes Lake 6700 feet, Aug. 19, 1891, Mr. Thos. E. Bean, Nos. 458, 491, ♂ and ♀."

Smith (1894, Amer. Ent. Soc. Trans. 21: 63, pl. 2, fig. 8) again described this as new using the same plate and stated: "Two specimens, male and female are before me, and I understand that Mr. Bean has others."

Syntypes examined: 2 (USNM and AMNH)

- (1) "Oncocnemis pudorata Smith ♂ type"; "491"; "Type No. 190 U.S.N.M." [Good condition, complete] [USNM]
- (2) "Oncocnemis pudorata Smith ♀ type"; "Brit. Col."; "458"; "J. B. Smith Collection, Rutgers" [Good condition, complete] [AMNH]

Discussion.—The "♀ type" appears to be the specimen Smith illustrated. Although the male genitalia might possess better specific characters than those of the female, the pattern of maculation of the wings of both sexes seems sufficiently distinctive for the recognition of the species. For that reason, the "♀ type," with the sex illustrated, in the American Museum of Natural History, has been selected, labeled, and is now designated the lectotype.

Xylina puella Smith, 1900, Amer. Ent. Soc. Trans. 27: 30, pl. 4, fig. 25.

"*Hab.*—California." "Two female examples without more definite locality."

Hampson (1906, Catalogue of the Lepidoptera Phalaenae in the Collection of the British Museum, v. 6, p. 272) stated: "Pl. CII. fig. 30" and "This species is unknown to me; figured from a drawing from type in the U.S. Nat. Mus." "♀, California."

Syntypes examined: 2 (USNM)

- (1) "Xylina puella Smith ♀ type"; "Cal."; "Type No. 5380 U.S.N.M."; "36511"; "♀ Genitalia Slide: USNM 46, J. G. Franclemont" [Excellent condition]
- (2) "Xylina puella Smith ♀ cotype"; "Cal."; "Ottol." [Very good condition]

Discussion.—The "♀ type" has been selected, labeled, and is now designated the lectotype.

Carneades pugionis Smith, 1900, U.S. Natl. Mus. Proc. 22(1203): 419.

"*Habitat.*—Denver, Colorado; Foothills (Bruce); Calgary, Canada, July 23, August 29 (Dod)." "Seven specimens, all males. The three Denver specimens are from as many different collectors, and Mr. Bruce probably collected his example near Golden." "*Type.*—Cat. No. 4791, U.S.N.M."

Syntypes examined: 4 (3 USNM and 1 AMNH)

- (1) "Carneades pugionis Smith ♂ type"; "Col."; "Collection G. D. Hulst"; "Type No. 4791 U.S.N.M."; "36511"; "♂ genitalia slide 2176, ELT." [USNM]
- (2) "Carneades pugionis Smith cotype"; "Col. Snow"; "Collection J. B. Smith"; "Type No. 4791 U.S.N.M." [A ♂] [USNM]

- (3) "Carneades pugionis Smith cotype"; "70, Foot-Hills, Colo., D. Bruce"; "Type No. 4791 U.S.N.M."; "Agrees with type 4 Dentata Grt. in Amer. Ent. Soc." [A ♂] [USNM]

- (4) "Carneades pugionis Smith cotype"; "Colo., 1440"; "J. B. Smith Collection, Rutgers" [A ♂] [AMNH]

Discussion.—Three syntypes from Denver, Colo., have not been located. Of the three syntypes bearing the USNM type number 4791, listed in the original description, the "♂ type" has been selected, labeled, and is now designated the lectotype.

Xanthia pulchella Smith, 1900, Canad. Ent. 32(8): 223, pl. 5, fig. 1.

"*Habitat.*—Livingston, Vancouver, IX., 14; British Columbia." "One male and two females; one of the latter defective." Under the explanation of the plate he stated: "All the photographs were made from actual type specimens, except 11 and 12."

Syntypes examined: 2 (AMNH and USNM)

- (1) "Xanthia pulchella Smith ♂ type"; "Vanc. 501, Livingston, 9.14.96"; "Collection J. B. Smith" [Good condition, complete] [AMNH]
- (2) "Xanthia pulchella Smith ♀ type"; "Brit. Col."; "Type No. 5352 U.S.N.M."; "36511" [Excellent condition, complete] [USNM]

Discussion.—One syntype, a female, a little defective (Smith) has not been located. Both syntypes listed here bear a remarkable resemblance to the figure illustrated by Smith, but I believe that the "♂ type" was probably the specimen used. Since the selection of a male as lectotype seems preferable to a female lectotype, I have selected, labeled, and now designate the "♂ type" in the American Museum of Natural History as the lectotype.

Xylomiges pulchella Smith, 1894, Amer. Ent. Soc. Trans. 21: 81, pl. 5, fig. 2.

"*Hab.*—Vancouver." "A single perfect male from Mr. Neumoegen's collection is before me." "[Other specimens have since come to hand.]"

Holotype.—in the U.S. National Museum. The specimen is labeled "Xylomiges pulchella Smith ♂ type"; "Victoria, B.C."; "38"; "Col. B. Neumoegen"; "Type No. 33842 USNM"; "♂ genitalia on slide 1610, JFGC." In the original description Smith mentioned some other specimens, but he did not indicate where they were from or what sex they represented. I have found only the one specimen labeled as a type.

Narthecophora pulverea Smith, 1900, U.S. Natl. Mus. Proc. 22(1203): 486.

"*Habitat.*—Tucson, Arizona, July 19, 20, 21." "Two males and two females, . . ." "The examples were taken by Mr. E. A. Schwarz, and are from the collection of the United States National Museum." "*Type.*—Cat. No. 4783, U.S.N.M."

Syntypes examined: 4 (2 USNM and 2 AMNH)

- (1) "Narthecophora pulverea Smith ♂ type"; "Tucson, Ar., 20-7"; "E. A. Schwarz, Collector"; "Type No. 4783 U.S.N.M." [Good condition, complete] [USNM]

- (2) "Nartheophora pulverea Smith ♀ type"; "Tucson, Ar., 21-7"; "E. A. Schwarz, Collector"; "Type No. 4783 U.S.N.M." [A ♂, very good condition, complete!] [USNM]
- (3) "Nartheophora pulverea Smith ♂ cotype"; "Tucson, Ar., 19-7"; "E. A. Schwarz, Collector"; "J. B. Smith Collection, Rutgers" [AMNH]
- (4) "Nartheophora pulverea Smith ♀ cotype"; "Tucson, Ar., 20-7"; "E. A. Schwarz, Collector"; "J. B. Smith Collection, Rutgers" [AMNH]

Discussion.—Only the syntypes marked "♂ type" and "♀ type" bear the USNM type number 4783 cited in the original description. Both are males, not male and female as labeled. The "♀ type" in the U.S. National Museum is in the best condition. It has been selected, labeled, and is now designated the lectotype.

Renia pulverosalis Smith, 1895, U.S. Natl. Mus. Bul. 48, p. 75, pl. 7, figs. 17 and 18.

"HABITAT.—Glenwood Springs, Colo., August and September." "Six specimens, equally divided as to sex, are before me, all from Dr. William Barnes." In the explanation of figures 17 and 18, page 123, he stated: ". . . from the types in the collection of the United States National Museum: somewhat enlarged."

Syntypes examined: 4 (3 USNM and 1 AMNH)

- (1) "Renia pulverosalis Smith Type"; "Col."; "Type No. 317 USNM"; "36511" [A ♂, fairly good condition, complete] [USNM]
- (2) "Renia pulverosalis Smith Type"; "Glenwood Springs, Col., Sept. 1892, W. Barnes"; "421"; "Type No. 317 U.S.N.M." [A ♂, left hindwing damaged] [USNM]
- (3) "Renia pulverosalis Smith Type"; "Glenwood Springs, Col., 8. 1892, W. Barnes"; "439"; "Type No. 317 U.S.N.M." [A ♀, poor condition] [USNM]
- (4) "Renia pulverosalis Smith Type"; "Glenwood Springs, Col., Sept. 1892, W. Barnes"; "J. B. Smith Collection, Rutgers" [A ♀, worn, complete] [AMNH]

Discussion.—The two male syntypes in the U.S. National Museum are the specimens Smith illustrated. The one from Glenwood Springs was used for figure 17, and the other labeled "Col." was used for figure 18. The latter is the best specimen. It has been selected, labeled, and is now designated the lectotype.

Mamestra assimilis var. **pulverulenta** Smith, 1888, U.S. Natl. Mus. Proc. 10: 468.

"A specimen received from Mrs. Fernald differed so much from the typical form of this species that I believed it new, until I had compared the genitalia."

Smith (1893, U.S. Natl. Mus. Bul. 44, p. 121) stated: ". . . ; Mrs. Fernald has the type of the variety." Barnes and McDunnough (1918, Contrib. Nat. Hist. Lepidoptera N. Amer. 4(2): 95) stated: "Through the kindness of Prof. H. T. Fernald of Amherst, Mass.,

we have received a photograph of the unique type of this species contained in Mrs. Fernald's Collection, now in the possession of the Massachusetts Agricultural College; . . ."

Holotype.—In the U.S. National Museum. The specimen is labeled "Mamestra pulverulenta Smith Type"; "♂"; "Fernald"; "Barnes Collection." The right valve of the genitalia is missing.

Perigea pulverulenta Smith, 1891, Amer. Ent. Soc. Trans. 18: 105.

"*Hab.*—Colorado (Bruce); Las Vegas, N. Mex. (Meeske); New Mexico (Snow); Arizona (Edwards)." "Four of the specimens collected by Mr. Bruce are in the collection of the United States National Museum, two of them labeled simply 'Colorado,' the others labeled 'Foot-hills.'"

Smith (1893, U.S. Natl. Mus. Bul. 44, p. 154) stated: "Types are in the National Museum and with Mr. Neumoegen."

Franclemont (1941, Canad. Ent. 73: 132) stated: "Smith's types of *pulverulenta* were also in the National Museum; and upon doing the genitalia of these, it was found that they represented not one, but two species. Thus it was necessary to limit Smith's name to one species. This was done by choosing the specimen that best fitted his description."

Syntypes examined: 6 (USNM)

- (1) "Perigea pulverulenta Smith Type"; "71, Foothills, Colo., Bruce"; "Type No. 180 U.S.N.M."; "♂ genitalia slide #1568, J.F.G.C." [Fair condition]
- (2) "Perigea pulverulenta Smith Type"; "72, Foothills, Colo., Bruce"; "Type No. 180 U.S.N.M." [A ♀, fair condition]
- (3) "Perigea pulverulenta Smith Type"; "62, Colo."; "Collection C. V. Riley"; "Type No. 180 U.S.N.M."; "♂ genitalia slide #1570, J.F.G.C."; "Holotype, Pseudanarta perplexa J. G. Franclemont"
- (4) "Perigea pulverulenta Smith Type"; "5 Colo., B."; "Type No. 180 U.S.N.M."; "Paratype Pseudanarta perplexa J. G. Franclemont" [A ♀]
- (5) "Perigea pulverulenta Smith Type"; "Arizona"; "Col. B. Neumoegen"; "Type No. 33885 U.S.N.M." [A ♀, abdomen glued to thorax]
- (6) "Las Vegas, N.M., H. Meeske '89"; "Col. E. L. Graef"; "Collection Brklyn Mus." [A ♂, valves of genitalia broken beyond claspers]

Other syntypes: 2 (AMNH)

Rindge (1955, p. 127) listed two "Type" specimens, a male from Colorado and a female from Arizona. I did not examine the specimens and cannot quote the label data. The action by Franclemont, 1941, made examination unnecessary.

Discussion.—The sixth syntype listed here was not labeled as this species nor marked type by Smith, but it undoubtedly is a syntype as the data agree with the original description and it is the only specimen so labeled in the U.S. National Museum that includes the

Neumogen material. Franclemont demonstrated that two species were included in the four syntypes he examined. He separated these primarily on the genitalia of the two male syntypes. One he marked as the holotype of the new species, *Pseudanarta perplexa* Franclemont. The other male he selected as the type of *Perigea pulverulenta* Smith, but he did not formally refer to it as the lectotype and he did not label it as such. I have labeled the male, genitalia slide 1568, as the lectotype and so designate it.

***Polia pulverulenta* Smith, 1891, Amer. Ent. Soc. Trans. 18: 106.**

"Hab.—Colorado." "Two male specimens with serate" "The species bears a very decided resemblance to *Mamestra discalis*, and a specimen in the Museum collection (from the Meske collection) bears Mr. Grote's label, *Mamestra discalis*. The specimen was collected by Snow, and I feel assured there are others of this species so misnamed. The other specimen was sent me by Mr. Bruce."

Smith (1893, U.S. Natl. Mus. Bul. 44, p. 166) stated: "The type is in the National Museum."

Syntypes examined: 2 (USNM)

- (1) "*Polia pulverulenta* Smith Type"; "Col., Snow"; "*Mamestra discalis*" [Grote label]; "Type No. 199 U.S.N.M."; "♂ genitalia slide #2568, 3.Oct.'39, J.F.G.C."
- (2) "*Polia pulverulenta* Smith Type"; "Colo., 29, Bruce"; "Type No. 199 U.S.N.M."; "36511" [A ♂, fair condition]

Discussion.—In 1893 Smith stated: "The type is" but this must have been a lapsus for "The types are" as he did not indicate which if either he was referring to. The syntype from which the genitalia were prepared for slide 2568 has been selected, labeled, and is now designated the lectotype.

***Erastria puncticosta* Smith, 1908, N.Y. Acad. Sci. Ann. 18(2): 122.**

"Habitat.—New Brighton, Pa., July 22–Aug. 11." "Nine examples, all male and mostly in good condition."

Syntypes examined: 7 (4 AMNH and 3 USNM)

- (1) "*Erastria puncticosta* Smith ♂ type"; "New Brighton, Pa., 8–3–03, H. D. Merrick"; "J. B. Smith Collection, Rutgers" [Very good condition, complete] [AMNH]
- (2) "*Erastria puncticosta* Smith cotype"; "New Brighton, Pa., VII.25.05, H. D. Merrick"; "J. B. Smith Collection, Rutgers" [A ♂, fair condition, complete] [AMNH]
- (3) Same name label and data except "VII. 22.05" [A ♂] [AMNH]
- (4) Same name label and data except "VII. 24.05" [A ♂] [AMNH]
- (5) "*Erastria puncticosta* Smith cotype"; "New Brighton, Pa., VII.25.05, H. D. Merrick" [A ♂] [USNM]
- (6) Same name label and data except "VIII. 8.05" [A ♂] [USNM]

(7) Same name label and data except "VII. 24.05" [A ♂] [USNM]

Discussion.—The "♂ type" in the American Museum of Natural History has been selected, labeled, and is now designated the lectotype.

***Zanclognatha punctiformis* Smith, 1895, U.S. Natl.**

Mus. Bul. 48, p. 37, pl. 3, fig. 1 (adult), pl. 11, figs. 4 and 5 (foreleg and male antennae).

"HABITAT.—District of Columbia." "A single specimen only, from the United States National Museum, 'Collection C. V. Riley.' The specimen is defective and badly mounted, but seems to have been bred, and bears the number '2585,' April 17, '82." On the explanation of plate 3 he stated: "3. *Zanclognatha punctiformis*: from the type in the collection of the United States National Museum: somewhat enlarged."

Holotype.—In the U.S. National Museum. The specimen is labeled "*Zanclognatha punctiformis* Smith Type"; "No. 2585, Apr. 17 '82"; "Type No. 319 USNM"; "*Xanclognatha laevigata* Grt.? Graef." It is a male.

***Perigonica punctilinea* Smith, 1906, Canad. Ent. 38(7): 233.**

"Habitat.—Southern Arizona, April 15–30. Poling." "Two males and five females in fair to poor condition."

Syntypes examined: 7 (4 AMNH and 3 USNM)

- (1) "*Perigonica punctilinea* Smith ♂ type"; "Apr. 15–30"; "J. B. Smith Collection, Rutgers" [Poor condition, but complete] [AMNH]
- (2) "*Perigonica punctilinea* Smith ♀ type"; "So. Arizona, Poling"; "Apr. 15–30"; "J. B. Smith Collection, Rutgers" [A ♂, not ♀, good condition, complete] [AMNH]
- (3) "*Perigonica punctilinea* Smith ♂ cotype"; same data [AMNH]
- (4) "*Perigonica punctilinea* Smith ♀ cotype"; same data [AMNH]
- (5) "*Perigonica punctilinea* Smith cotype"; "So. Arizona, Poling"; "Apr. 15–30"; "Barnes Collection" [A ♀] [USNM]
- (6) Same name label and date [A ♀] [USNM]
- (7) "*Perigonica punctilinea* Smith ♀ cotype"; "So. Arizona, Poling"; "Barnes Collection" [USNM]

Discussion.—The "♀ type" is a male and in better condition than the "♂ type." Accordingly, the "♀ type" has been selected, labeled, and is now designated the lectotype.

***Cosmia punctirena* Smith, 1900, Canad. Ent. 32(8): 222, pl. 5, fig. 6.**

"Habitat.—Glenwood Springs, Colorado, September (Dr. Barnes); Yellowstone Park, Wyoming, August (Dr. Barnes); Cartwright, Manitoba (Mr. Heath)." "Four males and one female, all in fair condition, and no two alike." "A male specimen from Santa Barbara Co., California (Coquillett), may belong here; but is much undersized, as if a little

crippled, and the antennae seem a little more bristled." Under the explanation of the plate Smith stated: "All the photographs were made from actual type specimens, except 11 and 12."

Syntypes examined: 5 (3 USNM and 2 AMNH)

- (1) "Cosmia punctirena Smith δ type"; "Yellowstone Park, Wyo."; "Aug."; "Type No. 4829 U.S.N.M."; "36511" [Good condition, complete] [USNM]
- (2) "Cosmia punctirena Smith ϕ type"; "Yellowstone Park, Wyo."; "Aug."; "Type No. 4829 U.S.N.M."; "36311" [sic] [USNM]
- (3) "Cosmia punctirena Smith δ cotype"; "Yellowstone Park, Wyo." [USNM]
- (4) "Cosmia punctirena Smith δ cotype"; "Cartwright, Manitoba"; "J. B. Smith Collection, Rutgers" [AMNH]
- (5) "Cosmia punctirena Smith δ cotype"; "Glenwood Springs, Col., 9 1895, W. Barnes"; "J. B. Smith Collection, Rutgers" [AMNH]

Discussion.—The " δ type" in the U.S. National Museum is the syntype illustrated by Smith. It is the best specimen in the series. It has been selected, labeled, and is now designated the lectotype.

Capnodes punctivena Smith, 1900, N.Y. Ent. Soc.

Jour. 8(3): 175.

Habitat.—Charlotte Harbor, Florida (Mrs. Slosson). "A single female, in good condition."

Holotype.—In the American Museum of Natural History. The specimen is labeled "Capnodes punctivena Smith ϕ type"; "Ch. Hbr., Fla."; "Collection J. B. Smith."

Caradrina punctivena Smith, 1894, Amer. Ent. Soc.

Trans. 21:77, pl. 5, fig. 12.

Hab.—Colorado, Bruce, No. 279; McLean, British Columbia, July 24th, at light; Bean, No. 3673.

"One male and one female; the former somewhat rubbed."

Syntypes examined: 2 (USNM and AMNH)

- (1) "Caradrina punctivena Smith δ type"; "Laggan Sta., N. W. T., Bean"; "3673"; "Type No. 4999 U.S.N.M."; "36511" [Fair condition, complete] [USNM]
- (2) "Caradrina punctivena Smith ϕ type"; "Colo. Bruce"; "279"; "J. B. Smith Collection, Rutgers" [Body being broken by verdigris, wings fair, complete] [AMNH]

Discussion.—The locality data for the " δ type" as cited by Smith are not as labeled, although the Bean number is the same. Smith may have cited information received in a letter or list from Bean. The two citations probably refer to the same place. The " ϕ type" seems to be the specimen illustrated, but because of the condition, the sex, the poor illustration, and the vague pattern of female maculation, that syntype is not being selected as the lectotype. Smith's comment that the male was rubbed is doubtful, because that sex is much paler and may account for his comment. The specimen does not appear to be especially rubbed. The " δ type"

in the U.S. National Museum has been selected, labeled, and is now designated the lectotype.

Pleonectyptera punitalis Smith, 1907, Amer. Ent. Soc.

Trans. 33: 375.

Hab.—Arizona: Palmerlee, Cochise Co., Sept.; Huachuca Mts., July 30th, August; Yavapai Co., July 19th; Hot Springs, New Mexico, 7000 feet, August; Durango, Colorado, July 8–16. "Five males and five females in fair condition, and I have seen others in collections. The species was collected by Skinner, Hutson and Schaffer in recent years, and I found one example in the Hulst collection from New Mexico."

Franclemont (1966, Ent. Soc. Wash. Proc. 68(4): 304) quoted the first locality given by Smith as the type locality and stated: "Location of type: American Museum of Natural History."

Syntypes examined: 9 (4 AMNH and 5 USNM)

- (1) "Pleonectyptera punitalis Smith δ type"; "Palmerlee, Ariz."; "J. B. Smith Collection, Rutgers" [Rather worn, complete] [AMNH]
- (2) "Pleonectyptera punitalis Smith ϕ type" same data [Fair condition, complete] [AMNH]
- (3) "Pleonectyptera punitalis Smith cotype"; "Durango, Colo."; "July 8–15"; "J. B. Smith Collection, Rutgers" [A δ , fair condition, complete] [AMNH]
- (4) "Pleonectyptera punitalis Smith cotype"; "Hot Springs, N. Mex., 7000 ft. alt."; "Collection G. D. Hulst" [A ϕ , poor condition, left hindwing torn] [AMNH]
- (5) "Pleonectyptera punitalis Smith δ cotype"; "Huachuca Mts., Ariz., VII–30"; "Type No. 10818 U.S.N.M." [USNM]
- (6) "Pleonectyptera punitalis Smith cotype"; "Yavapai Co., Ariz., VII–19" [A δ] [USNM]
- (7) "Pleonectyptera punitalis Smith cotype"; "Palmerlee, Cochise Co., Ariz., IX"; "Type No. 34140 U.S.N.M."; "Collection Brklyn. Mus." [A ϕ] [USNM]
- (8) "Pleonectyptera punitalis Smith ϕ cotype"; "Ariz."; "Type No. 10818 U.S.N.M." [USNM]
- (9) "Pleonectyptera punitalis Smith cotype"; "Huachuca Mts., Ariz., Aug.–05" [A ϕ] [USNM]

Discussion.—Franclemont, 1966, did not indicate which of the two syntypes, the " δ type" or " ϕ type," from Palmerlee, Ariz., in the American Museum of Natural History, was considered the type. Accordingly, I have selected, labeled, and now designate the " δ type" as the lectotype.

Acronycta pyralis Smith, 1895, Ent. News 6: 340,

pl. 15, fig. 1.

"EXPLANATION OF PLATE XV. 1.—Acronycta pyralis n. sp." " . . . the specimens were all collected by Mr. F. H. Wolley Dod, Calgary, Canada." The latter quote from page 332.

Smith (1895, Ent. News 7(1): 26, (pl. 15, fig. 1, previous paper)) formally described the species

and stated: "*Hab.*—Calgary, July 13." "Two specimens, both females, were sent me by Mr. Dod under the number 31, and this is said to represent his stock."

Smith (1898, U.S. Natl. Mus. Proc. 21(1140): 174, pl. 13, fig. 12) still stated there are only two females, but referred to the figure as a "male adult."

Holotype.—In the U.S. National Museum. The specimen is labeled "Acronycta pyralis Smith Type"; "Calgary, 1894, AH"; "31"; "Type No. 4970 USNM"; "36511." It is a female and is the specimen figured by Smith in 1895.

Mamestra quadrata Smith, 1891, U.S. Natl. Mus. Proc. 14(851): 248, pl. 11, fig. 46.

"HABITAT.—June and July, Placer County, California. (Through C. V. R.)" "There are eight good specimens in the Museum collection, some of which bear the red number 247, indicating biologic notes in Dr. Riley's possession."

Smith (1893, U.S. Natl. Mus. Bul. 44, p. 124) stated: "The types are in the National Museum."

Syntypes examined: 8 (6 USNM and 2 AMNH)

- (1) "Mamestra quadrata Smith Type"; "Placer Co., Cal."; "June"; "247"; "Through C. V. Riley"; "Type No. 154 U.S.N.M."; "Photo J. Franclemont 7 Apr. 61 [underside of name label]" [A ♂, very good condition, complete] [USNM]
- (2) "Mamestra quadrata Smith Type"; same data except no photo note [A ♂] [USNM]
- (3-4) "Mamestra quadrata Smith Type"; same data [2 ♀♀] [USNM]
- (5) "Mamestra quadrata Smith Type"; "Placer Co., Cal."; "June"; "247"; "Type No. 154 U.S.N.M." [A ♀] [USNM]
- (6) "Mamestra quadrata Smith Type"; "Placer Co., Cal."; "July"; "Through C. V. Riley" [A ♂] [USNM]
- (7) "Mamestra quadrata Smith Type"; "Placer Co., Cal."; "June"; "247"; "Collection J. B. Smith" [A ♂, both valves of genitalia missing] [AMNH]
- (8) "Mamestra quadrata Smith Type"; "Placer Co., Cal."; "June"; "247"; "Through C. V. Riley"; "J. B. Smith Collection, Rutgers" [A ♀] [AMNH]

Discussion.—There is a genitalia slide of two valves in the American Museum of Natural History. In this instance, it appears certain that they were from the male syntype now in that institution and that the illustration by Smith was prepared from the right valve, not a reversal of the left valve, which is mounted in such a position that its illustration would be unlikely. The entire type-series was from the U.S. National Museum, and Smith indicated in 1893 that the types were located in that institution. Since the valves were broken from the syntype in the American Museum of Natural History in a dry state, the genitalia are partially destroyed. In order to select a male syntype with complete genitalia and also one from the institution providing the original series, the male syntype photo-

graphed by J. G. Franclemont, the syntype in the best condition, has been selected, labeled, and is now designated the lectotype.

Cyathissa quadrata Smith, 1906, Canad. Ent. 38(7): 225.

"*Habitat*.—San Bernardino Ranch, Cochise Co., Arizona; 3,750 feet, in August. F. H. Snow." "One male and two females in good condition."

Syntypes examined: 3 (2 KU and 1 AMNH)

- (1) "Cyathissa quadrata Smith ♂ type"; "San Bernardino Ranch, Cochise Co., Ariz., 3750 ft., Aug., F. H. Snow" [Fairly good condition, complete] [KU]
- (2) "Cyathissa quadrata Smith ♀ cotype"; same data [KU]
- (3) "Cyathissa quadrata Smith ♀ type"; "San Bernardino Ranch, Cochise Co., Ariz., 3750 ft., Aug., F. H. Snow"; "249"; "J. B. Smith Collection, Rutgers" [Poor condition, right wings broken from thorax, on pin] [AMNH]

Discussion.—The "♂ type" in the Francis Huntington Snow Collection, University of Kansas, has been selected, labeled, and is now designated the lectotype. The species is a synonym of *C. percara* (Morrison, 1874).

Acontia quadriplaga Smith, 1900, Amer. Ent. Soc. Trans. 27: 72.

"*Hab.*—Hot Springs, New Mexico, 7000 feet alt. (Hulst); Arizona; Texas." "Eight examples, of which only one is a male."

Syntypes examined: 5 (3 USNM and 2 AMNH)

- (1) "Acontia quadriplaga Smith ♂ type"; "Ariz."; "Collection G. D. Hulst"; "Type No. 5386 U.S.N.M."; "♂ genitalia on slide 2426, July, 1973, E.L.T." [Fair condition] [USNM]
- (2) "Acontia quadriplaga Smith ♀ type"; "Hot Springs, N. Mex., 7000 ft. alt."; "Type No. 5386 U.S.N.M."; "36511" [USNM]
- (3) "Acontia quadriplaga Smith ♀ cotype"; same data [USNM]
- (4) "Acontia quadriplaga Smith ♀ cotype"; same data [AMNH]
- (5) "Acontia quadriplaga Smith ♀ cotype"; same data [AMNH]

Discussion.—The "♂ type" has been selected, labeled, and is now designated the lectotype.

Himella quadristigma Smith, 1900, U.S. Natl. Mus. Proc. 22(1203): 480.

"*Habitat*.—Bluff, Utah, May 30 (Mrs. H. M. Peabody); Santa Rita Mountains, Arizona, June 19 (E. A. Schwarz)." "One male, three females, all from the U.S. National Museum." "Type.—Cat. No. 4781, U.S.N.M."

Syntypes examined: 4 (2 USNM and 2 AMNH)

- (1) "Himella quadristigma Smith ♂ type"; "Bluff, Utah, May 30, 1898, Mrs. H. M. Peabody"; "Type No. 4781 U.S.N.M." [Fair condition, complete] [USNM]
- (2) "Himella quadristigma Smith ♀ type"; "S.

Rita Mts., Ar., June 19, 98"; "E. A. Schwarz Collector"; "Type No. 4781 U.S.N.M." [USNM]

- (3) "Himella quadristigma Smith ♀ cotype"; "Bluff, Utah, Mrs. H. M. Peabody, 1898"; "Collection J. B. Smith" [AMNH]
- (4) "Himella quadristigma Smith ♀ cotype"; same data [A ♂, poor condition!] [AMNH]

Discussion.—Of the two syntypes bearing the USNM type number, the "♀ type" is in the best condition. However, as it seems more desirable to have a male as lectotype, the "♂ type" in the U.S. National Museum has been selected, labeled, and is now designated the lectotype.

Setagrotis quebecensis Smith, 1900, U.S. Natl. Mus. Proc. 22(1203): 417.

"*Habitat.*—Quebec, Canada." "A single female, very like"

Holotype.—In the U.S. National Museum. The specimen is labeled "Setagrotis quebecensis Smith ♀ type"; "Quebec, Canada"; "127"; "Type No. 4972 USNM"; "36511"; "♀ genitalia on slide 1261, JGF."

Taeniocampa quinquefasciata Smith, 1909, N.Y. Ent. Soc. Jour. 17: 65.

"*Habitat.*—Colorado; Glenwood Springs VII, Garfield Co., 6000 feet; Washington; Pullman, IV, 19, Seattle; Oregon, Corvallis III, 31; Vancouver, B.C., III, 31, IV, 6; Massett, Q. C. I., IV, 28." "Seven males and four females mostly in good condition, from various sources." "My attention was drawn to this species by a somewhat discolored and very fully marked example received for determination from Dr. Fletcher."

Smith (1910, *Canad. Ent.* 42(10): 322) indicated he had material from Wellington and Vancouver, British Columbia, and Pullman, Wash., totaling four males and two females, and he illustrated the male genitalia on plate 8, figure 7. It is unknown whether the specimens discussed and illustrated were syntypes.

Syntypes examined: 6 (3 AMNH and 3 USNM)

- (1) "Taeniocampa 5-fasciata Smith ♂ type"; "Vancouver, B.C., 31.iii.03"; "J. B. Smith Collection, Rutgers" [Excellent condition, complete] [AMNH]
- (2) "Taeniocampa 5-fasciata Smith ♀ type"; "Massett, q. c. 1., 28. 4. 94"; "J. B. Smith Collection, Rutgers" [Fair condition] [AMNH]
- (3) "Taeniocampa 5-fasciata Smith ♂ cotype"; "Pullman, Wash. IV. 19. 94"; "J. B. Smith Collection, Rutgers" [AMNH]
- (4) "Taeniocampa 5-fasciata Smith cotype"; "Seattle, Wash."; "Collection J. B. Smith"; "Barnes Collection" [A ♀] [USNM]
- (5) "Taeniocampa 5-fasciata Smith cotype"; "Colo., Bruce"; "Garfield Co., Colo. 6000 ft."; "Collection J. B. Smith"; "Barnes Collection" [A ♂] [USNM]
- (6) "Taeniocampa 5-fasciata Smith cotype";

"Wellington, Br. Col."; "♂ gen. 186, 30 Jan. 32, F.H.B." [USNM]

Discussion.—Five syntypes have not been located. At least one of these should be from Corvallis, Ore. The last specimen listed may not be a syntype even though so labeled by Smith. It is from a locality not mentioned in the original description. The genitalia illustrated by Smith in 1910 are reversed. The slide from which the illustration undoubtedly was prepared is in the American Museum of Natural History. The slide is labeled as being from a specimen from Wellington, British Columbia. The "♂ type" in the American Museum of Natural History has been selected, labeled, and is now designated the lectotype.

Agrotis quinquelinea Smith, 1890, Amer. Ent. Soc. Trans. 17: 49.

"*Habitat.*—Sierra Nevada, Cal. (McGlashan)." ". . . so far as they can be made out from the single female before me."

Smith (1893, U.S. Natl. Mus. Bul. 44, p. 99) stated: "The type is in the Edwards collection."

Hampson (1903, *Catalogue of the Lepidoptera Phalaenae in the Collection of the British Museum*, v. 4, p. 260) stated: "Pl. LXIV, fig. 14" and "This species is unknown to me; figured from a photograph from type in U.S. Nat. Mus." "♀, California."

Lectotype.—In the U.S. National Museum. Designated by Todd (Oct. 4, 1968, *Wash. Ent. Soc. Proc.* 70(3): 276).

Euxoa quinta Smith, 1908, N.Y. Acad. Sci. Ann. 18(2): 97.

"*Habitat.*—High River, Alberta (Mr. Thomas Baird); Kaslo, B.C., June 1, 30, July 7, 10 (Mr. J. W. Cockle)." "Three males and two females, all in good condition; received from Dr. James Fletcher." McDunnough (1950, *Amer. Mus. Nat. Hist. Bul.* 95(6): 370) stated: "Types: . . . ; *quinta*, holotype, male, High River, Alberta (Rutgers University, New Brunswick, New Jersey); paratype, male, Kaslo, British Columbia (C. N. C.)."

Lectotype.—In the American Museum of Natural History. Designated by Todd (Oct. 4, 1968, *Wash. Ent. Soc. Proc.* 70(3): 277).

Euxoa radiata Smith, 1910, Amer. Ent. Soc. Trans. 36(3): 255.

"*Hab.*—Volga, South Dakota; Colorado; Calgary, Canada, VIII, 29." "Six males and two females in fair condition. One male is out of the Hulst collection from Colorado, one female from Calgary is from Mr. Dod, the others are out of Judge Truman's material."

McDunnough (1950, *Amer. Mus. Nat. Hist. Bul.* 95(6): 374) stated: "Type: Holotype, male, Volga, South Dakota (Rutgers University, New Brunswick, New Jersey)."

Rindge (1955, *Amer. Mus. Nat. Hist. Bul.* 106(2): 128) stated: "Type male, South Dakota; paratype male, Volga, South Dakota; paratype male, Colo-

rado; paratype male, no data except collection S.T. Kemp."

Syntypes examined: 4 (AMNH)

- (1) "Euxoa rabiata Smith ♂ type"; "S.D."; "Collection S. T. Kemp"; "J. B. Smith Collection, Rutgers" [Good condition, complete]
- (2) "Euxoa rabiata Smith Paratype"; "Volga, So. Dak."; "J. B. Smith Collection, Rutgers" [A ♂]
- (3) "Euxoa rabiata Smith Paratype"; "Col."; "J. B. Smith Collection, Rutgers" [A ♂]
- (4) "Euxoa rabiata Smith Paratype"; "Collection S. T. Kemp"; "J. B. Smith Collection, Rutgers" [A ♂]

Discussion.—Two male and two female syntypes have not been located. At least one should be from Calgary, Alberta, dated August 29. It may also be labeled "♀ type." The action by McDunnough, 1950, is a little troublesome, because although he undoubtedly considered the "♂ type" to be equivalent to holotype, he cited as locality the information from a male "Paratype." McDunnough may have thought that since Smith said all his South Dakota material was from Judge Truman's collection, it must have been from Volga. The "♂ type," however, was just labeled "S.D." and from Kemp's collection and may have been from some other locality in the State. The "♂ type" in the American Museum of Natural History has been selected, labeled, and is now designated the lectotype.

Feltia radiata Smith, 1891, List Lepidoptera Boreal Amer., p. 38.

"Feltia Walk."

"1713 subgothica Steph."

Smith (1893, U.S. Natl. Mus. Bul. 44, p. 81) listed the name "*radiata* Harr. Mss." as a synonym of *Feltia subgothica* Haworth and stated: "I have not seen Haworth's work. The figure given by Stephens is a very poor one if it refers to our species; which I am very decidedly inclined to doubt."

Discussion.—This is not an available name according to the 1964 amendment of Article 11(d) of the International Code of Zoological Nomenclature.

Lythroides radiatus Smith, 1903, Amer. Ent. Soc. Trans. 29(3): 206.

"Hab.—Yuma County, Arizona." "This pretty little species is one of those collected by Mr. Hutson in the Colorado desert, and is represented by two females in good condition."

Syntypes examined: 2 (AMNH)

- (1) "Lythroides radiatus Smith Type"; "Yuma Co., Ariz."; "Colorado desert"; "Collection J. B. Smith" [A ♀, fair condition]
- (2) "Lythroides radiatus Smith cotype"; same data [A ♀]

Discussion.—The syntype labeled "Type" has been selected, labeled, and is now designated the lectotype.

Setagrotis radiatus Smith, 1900, U.S. Natl. Mus. Proc. 22(1203): 418.

"Habitat.—Nevada." "Two males, very much alike, from Mrs. F. O. Herring, in only fair condition."

"Type.—Cat. No. 4787, U.S.N.M."

Syntypes examined: 2 (USNM and AMNH)

- (1) "Setagrotis radiatus Smith ♂ type"; "Nevada"; "Type No. 4787 U.S.N.M."; "35311"; "♂ genitalia on slide 1814, Jan. 1964, E. L. Todd" [Good condition] [USNM]
- (2) "Setagrotis radiatus Smith ♂ cotype"; "Nevada"; "Collection J. B. Smith"; "♂ genitalia mounted on slide, F.H. R. no. 15,320" [Fair condition, rubbed] [AMNH]

Discussion.—The "♂ type" probably should be considered the holotype as it is the only specimen to bear the USNM type number 4787 listed in the original description. However, to insure that it is considered the type-specimen, it has been labeled and is now designated the lectotype.

Mamestra rainierii Smith, 1900, U.S. Natl. Mus. Proc. 22(1203): 462.

"Habitat.—Mount Rainier, Washington (C. V. Piper)." "This species, represented by a single, somewhat rubbed male, offers. . . ."

Holotype.—In the U.S. National Museum. The specimen is labeled "Mamestra rainierii Smith ♂ type"; "Mt. Rainier, Wash."; "Wash. Exp. Sta. No. 634"; "Collector C. V. Piper"; "36511."

Homohadena rayata Smith, 1908, N.Y. Ent. Soc. Jour. 16: 93.

"Habitat.—Kerrville, Texas." "Two female specimens from Dr. Barnes."

Syntypes examined: 2 (AMNH and USNM)

- (1) "Homohadena rayata Smith ♀ type"; "Kerrville, Texas"; "395"; "J. B. Smith Collection, Rutgers" [Good condition, complete] [AMNH]
- (2) "Homohadena rayata Smith ♀ cotype"; "Kerrville, Texas"; "*Homohadena rayata* Sm. Comp. with Type, Coll. Sm. See Note No. 60a. Exact." [USNM]

Discussion.—The "♀ type" in the American Museum of Natural History has been selected, labeled, and is now designated the lectotype.

Pleonectyptera rectalis Smith, 1907, Amer. Ent. Soc. Trans. 33: 375.

"Hab.—Arizona: Cochise Co., July 4th; Baboquavaria Mts., Pima Co., July 15, O. C. Poling; Colorado." "Two males and two females in fair to good condition. The two examples from Cochise Co. belong to the U.S. National Museum and are purchased specimens. The Colorado example is out of the old Hulst collection and has no data as to date, exact locality or collector."

Syntypes examined: 4 (2 AMNH and 2 USNM)

- (1) "Pleonectyptera rectalis Smith ♂ type"; "Baboquavaria Mts., Pima Co., Arizona, July 15 to 30, Coll. O. C. Poling"; "J. B. Smith Collection, Rutgers" [Good condition, complete] [AMNH]

- (2) "Pleonectyptera rectalis Smith ♀ type"; "39700"; "Collection Dr. H. G. Dyar"; "Type No. 10817 U.S.N.M." [USNM]
- (3) "Pleonectyptera rectalis Smith ♂ cotype"; "39698"; "Collection Dr. H. G. Dyar"; "Type No. 10817 U.S.N.M." [USNM]
- (4) "Pleonectyptera rectalis Smith ♀ cotype"; "Col."; "J. B. Smith Collection, Rutgers" [Faded, fair condition, but abdomen glued to thorax] [AMNH]

Discussion.—The numbers on the two syntypes in the U.S. National Museum are from Dyar's notebook and are the basis for Smith's locality "Cochise Co., Arizona, July 4th." The "♂ type" in the American Museum of Natural History has been selected, labeled, and is now designated the lectotype.

Carneades recticincta Smith, 1895, Ent. News 6: 334, pl. 15, fig. 7.

Hab.—Calgary, in 1894. "Mr. Dod states that this is a unique. The specimen is a female, but is so characteristic that there can be little doubt of its location."

Holotype.—In the U.S. National Museum. The specimen is labeled "Carneades recticincta Smith Type"; "Calgary, 1894, A.H."; "Type No. 2 USNM." It is a female.

Dryobata [sic] rectifascia Smith, 1891, Amer. Ent. Soc. Trans. 18: 108.

Hab.—Sierra Nevada, Cal. (Edwards). "An incomplete specimen is in the United States National Museum; the wings and antennae are, however, perfect, and the specimen is one of my types." Generic name corrected in errata on page 383, Dryobata.

Smith (1893, U.S. Natl. Mus. Bul. 44, p. 215) stated: "Types are in the National Museum and in the Edwards collection."

Hampson (1906, Catalogue of the Lepidoptera Phalaenae in the Collection of the British Museum, v. 6, p. 221) stated: "Pl. Cl. fig. 29" and "This species is unknown to me; figured from drawing from type in U.S. Nat. Mus." "♂, California."

Syntypes examined: 3 (2 AMNH and 1 USNM)

- (1) "Dryobata rectifascia Smith Type"; "Sier. Nev., Cal."; "Collection J. B. Smith" [A ♂, fair condition, complete] [AMNH]
- (2) "Dryobata rectifascia Smith Type"; "Sier. Nev., Cal."; "Acc. No. 23933 U.S.N.M."; "Type No. 196 U.S.N.M." [A ♀, wings in very good condition, abdomen missing] [USNM]
- (3) "Hadena rectifascia Smith Type"; "Sier. Nev., Cal."; "No. 10422, Collection Hy. Edwards"; "Type, A.M.N.H." [A ♂, fairly good condition except both antennae missing] [AMNH]

Discussion.—Smith did not indicate how many specimens were in the type-series. He did not indicate in 1893 that he had retained a type as he did not mention his collection or that of Rutgers College. The syntype in the U.S. National Museum was the basis for the

illustration of Hampson, 1906, but it is a female, not a male, and it lacks an abdomen. The syntype from the Hy. Edwards collection has a different generic name and a black-bordered label. This would seem to indicate that he labeled it before the other two that have red-bordered labels. In the original description the generic name was misspelled, but Smith corrected the spelling in the "errata" on page 383. The syntype, "No. 10422 Collection Hy. Edwards," in the American Museum of Natural History, has been selected, labeled, and is now designated the lectotype. It is the better of the two male syntypes.

Himella rectiflava Smith, 1908, N.Y. Acad. Sci. Ann. 18(2): 105.

Habitat: Huachuca Mountains, Arizona, July 30."

"One male specimen, in good condition as to wings, somewhat defective as to antennae, etc. The specimen was received in paper in a purchased lot, and the collector is unknown."

Holotype.—In the American Museum of Natural History. The specimen is labeled "Himella rectiflava Smith Type ♂" [The sex sign after the generic name]; "Huachuca Mts., Ariz. VII-30"; "J. B. Smith Collection Rutgers."

Mamestra rectilinea Smith, 1888, U.S. Natl. Mus. Proc. 10: 465.

Habitat.—California, Vancouver, Oregon, California. "Several specimens of each sex, coll. div." Smith ([1891] 1892, U.S. Natl. Mus. Proc. 14: 255) stated: "HABITAT.—New York, Colorado, California, Oregon, Vancouver." "Eight specimens are in the Museum collection: New York (through C.V.R.); Vancouver (J.B.S., the types)."

Smith (1893, U.S. Natl. Mus. Bul. 44, p. 125) stated: "The types are in the National Museum."

Barnes and McDunnough (1916, Contrib. Nat. Hist. Lepidoptera N. Amer. 3(3): 162) stated: "The only types we have found of this species are 2 ♀'s from Vancouver Is. in the National Museum, these are not identical and it is probable that one of them represents a species described by Smith in his paper on *olivacea* and its allies. We would restrict the name *rectilinea* to the type with rigidly oblique t.p. line and considerable olive-green suffusion above the anal angle but without pink shading." McDunnough (1943, Canad. Ent. 75: 46) stated: "Smith (1891, Proc. U.S.N.M., XIV, 255) seems to have pretty definitely restricted the types to the Vancouver Island specimens, although Dyar (this action evidently *ultra vires*) mentions (*op. cit.* 854) types from Sierra Nevada." "In the Contributions Vol. III, 162, Pl. XII, fig. 7 we definitely restricted the type to a Vancouver Island female in United States National Museum."

Syntypes examined: 2 (USNM)

- (1) "Mamestra rectilinea Smith, Type"; "Vancouver Island"; "Collection J. B. Smith"; "Type No. 156, U.S.N.M." [A ♀, abdomen glued on]
- (2) "Mamestra rectilinea Smith, Type"; "Vancouver Island"; "Collection J. B. Smith";

"Type restricted is this specimen, J. McD.";
"♀ genitalia on slide 2692, JFGC."

Discussion.—Barnes and McDunnough, 1916, definitely restricted the second specimen listed here and labeled it as such. They did not use the term "lectotype," but their action would seem to constitute lectotype selection. To absolutely insure that the specimen is considered to be the type-specimen, I have labeled it and now designate it as the lectotype.

***Oncocnemis relecta* Smith, 1894, Amer. Ent. Soc.**

Trans. 21: 65, pl. 6, fig. 11.

"*Hab.*—Colorado; Bruce, No. 483." "A single male specimen only is before me, and I believe that Mr. Bruce took no others."

Holotype.—In the U.S. National Museum. The specimen is labeled "Oncocnemis relecta Smith ♂ type"; "483"; "Type No. 193 USNM."

***Oncocnemis regina* Smith, 1902, N.Y. Ent. Soc. Jour. 10: 44.**

"*Habitat.*—Regina, N.W.T., 1886, Dr. James Fletcher." "A single male, in poor condition, . . ."

Holotype.—In the American Museum of Natural History. The specimen is labeled "Oncocnemis regina Smith ♂ type"; "Regina, N.H.C., 1886"; "James Fletcher, Col. at Regina, N.W.T., No. 20"; "J. B. Smith Collection Rutgers."

***Carneades relaxus* Smith, 1900, U.S. Natl. Mus. Proc. 22(1203): 432.**

"*Habitat.*—San Francisco and Sierra Nevada, California." "One male and one female, and there is just a little doubt as to their really being sexes of the same species; line for line they are the same, and such little differences as occur are well within the range of variation in allied species. Nevertheless there is a vague dissimilarity which prevents my marking the female as type though it is the better example of the two." "*Type.*—Cat. No. 4800, U.S.N.M."

Holotype.—In the U.S. National Museum. The specimen is labeled "Carneades relaxus Smith ♂ type"; "S. Frans., Calif."; "Type No. 4800 USNM"; "36511." The valves of the genitalia are missing. Smith specifically eliminated the female from consideration as a type.

***Taeniocampa reliqua* Smith, 1899, N.Y. Ent. Soc. Jour. 7(4): 226.**

"*Habitat.* Park County, Colorado; 10,000 feet. Bruce." "The type is a unique female from the collection of the U.S. National Museum, . . ."

Holotype.—In the U.S. National Museum. The specimen is labeled "Taeniocampa reliqua Smith ♀ type"; "Park Co, Colo., 10,000 ft., Bruce"; "Type No. 5701 USNM"; "36511." It is a female with thorax split by verdigris, but the abdomen and hindwings are glued back as a unit.

***Agrotis remota* Smith, 1890, Amer. Ent. Soc. Trans. 17: 47.**

"*Habitat.*—Sierra Nevada, Cal. (McGlashan)."

". . . however, in the specimens before me raising any question of the proper group to which it

should be referred." [Multiple specimens indicated] Smith (1893, U.S. Natl. Mus. Bul. 44, p. 93) stated:

"The type is in the Edwards collection."

Hampson (1903, Catalogue of the Lepidoptera Phalaenae in the Collection of the British Museum, v. 4, p. 228) stated: "Pl. LXII. fig. 31" and "This species is unknown to me; figured from a photograph from type in U.S. Nat. Mus. and coloured figure from specimen in American Museum of Natural History."

Barnes and McDunnough (1918, Canad. Ent. 50: 195) stated: "We cannot agree with Mr. Dod in referring *tristicula* to this species; it is true that the ♀'s in the Hy. Edwards' collection represent *nesilens* but the ♂ specimen in the National Museum labeled 'type' and to which the name must be held is a form (superficially like *nesilens* we admit) closely allied to some of the *tesseloides* forms and well matched by the specimens we figured as *orbicularis* (Pl. XVII, fig. 16)."

McDunnough (1950, Amer. Mus. Nat. Hist. Bul. 95(6): 393) stated: "Two females of this form [*nesilens*] are in the Henry Edwards collection as spurious types of *remota* Smith, the error being commented on by Barnes and McDunnough in 1918."

Syntypes examined: 1 (USNM)

- (1) "Agrotis remota Smith Type"; "Sier. Nev., Cal."; "Type No. 4978 U.S.N.M."; "36511"; "♂ genitalia on slide 2285, Apr. 1966, E.L.T."

Other syntypes: 2 (AMNH)

Two female syntypes from the same locality in the Hy. Edwards collection, now in the American Museum of Natural History, were not examined because of the restriction of the type by Barnes and McDunnough, 1918.

Discussion.—The "Type" in the U.S. National Museum has been selected, labeled, and is now designated the lectotype. The type-series originally was probably all from the Henry Edwards collection and may explain Smith's comment in 1893 as to the location of the type.

***Agrotis rena* Smith, 1890, Amer. Ent. Soc. Trans. 17: 53.**

"*Habitat.*—Sierra Nevada, Cal. (McGlashan)." "The series before me, by the kindness of Mr. Edwards, shows quite a long range of variation with comparatively narrow limits." "Types in coll. Rutgers College, coll. Hy. Edwards, and coll. U.S. National Museum." "Since the above was written I find two specimens referable to this species in Mr. Neumoegen's collection, marked California, without indication of special locality."

Smith (1890, U.S. Natl. Mus. Bul. 38, p. 189, pl. 5, fig. 65) illustrated the kind of "harpe and clasper" that are characteristic of a species group including *rena*.

Smith (1893, U.S. Natl. Mus. Bul. 44, p. 102) stated: "Types are in the National Museum, and in the Edwards collection."

Syntypes examined: 6 (2 USNM and 4 AMNH)

- (1) "Agrotis rena Smith Type"; "Sier. Nev.,

Cal.;"Type No. 128 U.S.N.M.;"♂ genitalia on slide 2297, Apr. 1966, E.L.T." [Good condition] [USNM]

- (2) "Agrotis rena Smith Type"; "Sier. Nev., Cal.;" "Type No. 128 U.S.N.M.;" "♂ genitalia on slide 2296, Apr. 1966, E.L.T." (Good condition) [USNM]
- (3) "Agrotis rena Smith Type"; "Sier. Nev., Cal.;" "No. 9863, Collection Hy. Edwards"; "Type, A.M.N.H." [A ♂] [AMNH]
- (4) "Agrotis rena Smith Type"; "Sier. Nev., Cal.;" "No. 9862, Collection Hy. Edwards"; "Type, A.M.N.H." [A ♂] [AMNH]
- (5) "Agrotis rena Smith Type"; "Sier. Nev., Cal.;" "No. 9860, Collection Hy. Edwards"; "Type, A.M.N.H." [A ♀] [AMNH]
- (6) "Agrotis rena Smith Type"; "Sier. Nev., Cal.;" "Collection J. B. Smith" [A ♂, abdomen glued to thorax] [AMNH]

Discussion.—Smith did not mention the number of examples in the type-series. He did not mark the two examples from the Neumögen collection as types. In the original description he stated that a type or types were in the Rutgers College collection and in two other collections, but in 1893 he neglected to list Rutgers College as a location of type material of this species. It is not known whether the deletion was intentional or merely a lapsus. The latter seems most likely as a specimen marked "Type" was received by the American Museum of Natural History with other Smith material from Rutgers. It is likely that the original type-series consisted of more than a single species, but all syntypes will have to be examined in detail, including the genitalia to determine if this is so. In consideration of these facts, and after comparing the syntypes in the U.S. National Museum with the original description and studying the male and female genitalia, D. F. Hardwick suggested that the female syntype be made the lectotype. Accordingly, that syntype in the U.S. National Museum has been selected, labeled, and is now designated the lectotype.

Isogona reniformis Smith, 1903, Amer. Ent. Soc., Trans. 29(3): 214.

"**Hab.**—Hackley, Texas, in April." "Three male and two female examples in poor condition, through Mr. George Franck."

Syntypes examined: 5 (AMNH)

- (1) "Isogona reniformis Smith ♂ type"; "Harris Co., Tex.;" "Collection J. B. Smith"
- (2) "Isogona reniformis Smith ♀ type"; "Hockley, IV 1-10"; "Tex.;" "Collection J. B. Smith"
- (3) "Isogona reniformis Smith cotype"; "Hockley, IV 1-10"; "Tex.;" "J. B. Smith Collection, Rutgers" [A ♂]
- (4) "Isogona reniformis Smith cotype"; "Harris Co., Tex.;" "Collection J. B. Smith" [A ♂]
- (5) "Isogona reniformis Smith cotype"; "Tex.;" "J. B. Smith Collection, Rutgers" [A ♀]

Discussion.—The entire series is in the American Museum of Natural History. All the syntypes are worn,

rubbed, and some with damaged hindwings, but all have the abdomens with complete genitalia. The "♂ type" has been selected, labeled, and is now designated the lectotype.

Schinia reniformis Smith, 1900, U.S. Natl. Mus. Proc. 22(1203): 487.

"**Habitat.**—Colorado (Bruce); Denver, June 20 (Os-lar)." "Six specimens, evenly divided as to sex, and I have seen others." "**Type.**—Cat. No. 4824, U.S.N.M."

Syntypes examined: 6 (3 USNM and 3 AMNH)

- (1) "Schinia reniformis Smith ♂ type"; "Colo., Bruce"; "Type No. 4824 U.S.N.M.;" "36311" [Good condition, abdomen greasy] [USNM]
- (2) "Schinia reniformis Smith ♀ type"; "Colo., Bruce"; "Type No. 4824 U.S.N.M.;" "36311" [Good condition, abdomen greasy] [USNM]
- (3) "Schinia reniformis Smith ♀ cotype"; "Colo., Bruce"; "Barnes collection" [Wings damaged, legs missing] [USNM]
- (4) "Schinia reniformis Smith ♂ cotype"; "Denver, Col., VI-25"; "Collection J. B. Smith" [Poor condition, abdomen greasy] [AMNH]
- (5) "Schinia reniformis Smith ♂ cotype"; "Colo., Bruce"; "Collection J. B. Smith" [Fair condition] [AMNH]
- (6) "Schinia reniformis Smith ♀ cotype"; same data [Good condition, abdomen missing] [AMNH]

Discussion.—Only the "♂ type" and "♀ type" bear the USNM type number cited in the original description. The "♂ type" in the U.S. National Museum has been selected, labeled, and is now designated the lectotype.

Polia resolute Smith, 1894, Amer. Ent. Soc. Trans. 21: 70, pl. 5, fig. 5.

"**Hab.**—Colorado, Bruce; Nos. 263, 265." "Two specimens, ♂ and ♀, in very good condition." Barnes and McDunnough (1913, Contrib. Nat. Hist. Lepidoptera N. Amer. 2(1): 42) stated: "*Resolute* Sm. is nothing but a slightly paler *illepida*; we have a specimen which has been compared with the ♂ type in the Nat. Museum."

Syntypes examined: 2 (USNM and AMNH)

- (1) "Polia resolute Smith ♂ type"; "Colo., Bruce"; "263"; "Type No. 200 U.S.N.M." [Very good condition except abdomen missing] [USNM]
- (2) "Polia resolute Smith ♀ type"; "Colo., Bruce"; "265"; "Collection J. B. Smith" [Ragged condition, left forewing and both hindwings torn] [AMNH]

Discussion.—The "♂ type" is the syntype illustrated by Smith, and it is the syntype used to identify the species in 1913 by Barnes and McDunnough. It is unfortunate that the abdomen is missing, but the pattern of maculation should be sufficient for recognizing the application of the name. The "♂ type" has been selected, labeled, and is now designated the lectotype.

Mamestra restora Smith, 1910, Ent. Soc. Amer. Ann.

3(2): 156, pl. 23, fig. 5.

"Habitat: Kaslo, B.C., VII, 10, IX, 1." "One ♂ and one ♀ in good condition."

Syntypes examined: 2 (AMNH)

- (1) "Mamestra restora Smith, ♂ type"; "Kaslo, B.C., VII/10"; "J. B. Smith Collection Rutgers" [Wing condition excellent, abdomen missing]
- (2) "Mamestra restora Smith, ♀ type"; "Kaslo, B.C., IX/1"; "J. B. Smith Collection Rutgers" [Apical parts of forewings rubbed and torn, complete]

Discussion.—Smith illustrated the genitalia of the "♂ type" and stated in the explanation of plate 23, figure 5: "Mamestra restora: from type ♂." I have been unable to locate the slide, but as this is the only male of the series and since the genitalia were illustrated (entire structure), I have selected, labeled, and now designate the specimen as the lectotype.

Heliodes restrictalis Smith, 1900, U.S. Natl. Mus.

Proc. 22(1203): 485.

"Habitat.—Butte County, California (Coquillett)."

"One male and one female, in fair condition only, from the U.S. National Museum." "Type.—Cat. No. 4817, U.S.N.M."

Syntypes examined: 2 (USNM and AMNH)

- (1) "Heliodes restrictalis Smith ♂ type"; "Butte Co., Cal."; "Coquillett collector"; "Type No. 4817 U.S.N.M." [Good condition, complete] [USNM]
- (2) "Heliodes restrictalis Smith ♀ type"; "Butte Co., Cal."; "Coquillett Collector"; "J. B. Smith Collection, Rutgers" [Fairly good condition, complete] [AMNH]

Discussion.—The "♂ type" in the U.S. National Museum is the only syntype to bear the USNM type number cited in the original description. Because of that fact, because it is a male, and because the type-series originally came from the U.S. National Museum, the "♂ type" has been selected, labeled, and is now designated the lectotype.

Acronycta revellata Smith, 1897, Ent. News 8(6): 150

(in key).

Smith (1898, U.S. Natl. Mus. Proc. 21(1140): 112, pl. 21, fig. 10) described the species in detail and stated: "Habitat.—Glenwood Springs, Colorado, in June; Salida, Colorado, 7,500 feet; Washington."

"Four males and one female are represented in the series before me, and"

"The specimens before me show practically no variation, and types are in the collection U.S. National Museum, Rutgers College, Mr. E. L. Graef, and Dr. William Barnes."

Syntypes examined: 4 (USNM)

- (1) "Acronycta revellata Smith ♂ type"; "835 Salida, Colo., 7000 ft., Bruce"; "Type No. 3665 U.S.N.M." [Good condition except genitalia broken, incomplete]
- (2) "Acronycta revellata Smith ♀ type"; "836

Garfield Co., Colo., 7000 ft., Bruce"; "Colo.,

Bruce"; "Type No. 3665 U.S.N.M."; "36511"

[Wings partially broken]

- (3) "Acronycta revellata Smith ♂ cotype"; "Glenwood Spgs., Col."; "June 8-15"; "11" [Good condition, complete]
- (4) "Acronycta revellata Smith ♀ cotype"; "W.T."; "Col. Edw. L. Graef."; "Collection Bryklyn. Mus." [A ♂, good condition!]

Discussion.—There is a specimen in the American Museum of Natural History with Smith's name label, but as it was not marked a type, it has not been included. It is a male with the abdomen missing, and it is labeled "Acronycta revellata Smith"; "Easton, Wash., K"; "Collection J. B. Smith." Smith did not mention the specific locality in the original description. The specimens marked as cotypes were probably just marked "cotype" by Smith, as he indicated there were four males and one female. The sex signs are at the right middle of the label and probably were added to the label at a later date by some other individual. The one marked "♀ cotype" is a male, which would agree with Smith's comment on the number of each sex. It is not possible to determine whether the illustration of genitalia (pl. 21, fig. 10) was made from the "♂ type," from the specimen in the American Museum of Natural History, or from some other specimen. In order to have a lectotype with complete genitalia, the "♂ cotype" from Glenwood Springs, Colo., in the U.S. National Museum has been selected, labeled, and is now designated the lectotype.

Pleonectyptera reversalis Smith, 1907, Amer. Ent.

Soc. Trans. 33: 371.

"Hab.—Esper Ranch, Brownsvills [sic], Texas."

"One male in good condition from the collection of the Brooklyn Institute, taken by Mr. Schaeffer."

Holotype.—In the American Museum of Natural History. The specimen is labeled "Pleonectyptera reversalis Smith ♂ type"; "Esper Rch., Brownsville, Tex."; "91"; "J. B. Smith Collection Rutgers."

Agrotiphila rigida Smith, 1891, Amer. Ent. Soc. Trans.

18: 134.

"Hab.—Colorado (Bruce)." "A single specimen of this species, from Mr. Neumoegen's collection, is before me, and is in good condition."

Smith (1893, U.S. Natl. Mus. Bul. 44, p. 110) stated: "South Park, Colorado." "The type is in Mr. Neumoegen's collection."

Holotype.—In the U.S. National Museum. The specimen is labeled "Agrotiphila rigida Smith Type"; "Colo. Bruce"; "Col. B. Neomögen"; "Type No. 33729 USNM."

Renia rigida Smith, 1905, Canad. Ent. 37: 70.

"HABITAT: Oak Creek Canyon, Arizona, 6,000 feet, August." "One male and one female in fair condition, from Prof. F. H. Snow."

Syntypes examined: 2 (AMNH and USNM)

- (1) "Renia rigida Smith ♂ type"; "Oak Creek Canyon, Ariz., 6000 ft., Aug., F. H. Snow"; "J. B. Smith Collection, Rutgers" [AMNH]

- (2) "*Renia rigida* Smith ♀ type"; "Oak Creek Canyon, Ariz., 6000 ft., Aug., F. H. Snow" [USNM]

Discussion.—The "♂ type" in the American Museum of Natural History has been selected, labeled, and is now designated the lectotype.

***Siavana rigida* Smith, 1903, Canad. Ent. 35(1): 14.**

"Habitat: Huachaca Mts., Arizona. One male and one female from Dr. Barnes."

Syntypes examined: 2 (AMNH and USNM)

- (1) "*Siavana rigida* Smith ♂ type"; "Huachuca Mts., Ariz."; "Collection J. B. Smith" [Very good condition, complete] [AMNH]
(2) "*Siavana rigida* Smith ♀ type"; "Huachuca Mts., Ariz."; "Box 255a" [USNM]

Discussion.—The "♂ type" in the American Museum of Natural History has been selected, labeled, and is now designated the lectotype.

***Morrisonia rileyana* Smith, 1890, Ent. Amer. 6(11): 212.**

"Hab.—Florida." "I have seen two specimens of this species, one in Dr. Riley's collection (coll. U.S. Nat. Museum), the locality of which I do not remember, and one from Mrs. Slosson, taken in Florida."

Smith (1892, U.S. Natl. Mus. Proc. 15: 82) stated: "HABITAT: Florida; Texas, March 27, Central Missouri, April 21." "Two specimens are in the Museum collection (C.V.R.), another from Florida, is with Mrs. Slosson." Smith illustrated the "harpe and clasper" on plate 3, figure 11, under the name *rileyi*!

Smith (1893, U.S. Natl. Mus. Bul. 44, p. 231) stated: "The type is in the National Museum."

Syntypes examined: 1 (USNM)

- (1) "*Morrisonia rileyana* Smith Type"; "27/3"; "704"; "Collection C. V. Riley"; "Type No. 258 U.S.N.M." [A ♂, a little ragged, valves of genitalia missing]

Discussion.—The syntype from Florida (Slosson collection) has not been located. It is not known whether Smith's failure to mention that specimen in 1893 was intentional or a lapsus. The syntype in the U.S. National Museum undoubtedly was originally from Belfrage and collected in Texas. The date agrees with that cited by Smith in 1892, and the specimen was listed as from Texas by Smith at that time. The syntype in the U.S. National Museum has been selected, labeled, and is now designated the lectotype.

***Nocloa rivulosa* Smith, 1906, N.Y. Ent. Soc. Jour. 14:14.**

"Habitat.—Santa Barbara, Calif., Hy. Edwards Collection, Amer. Mus. N.H.; Yuma Co., Ariz., March, Mr. Hutson; Phoenix, Ariz., March 19, Dr. Barnes." "One male and two females in only fair condition. Two of these are very old examples, the third, the male, being the only recent example and making the description possible."

Syntypes examined: 3 (2 AMNH and 1 USNM)

- (1) "*Nocloa rivulosa* Smith ♂ type"; "Yuma

Co., Ariz."; "2/23"; "J. B. Smith Collection, Rutgers" [Fair condition, complete] [AMNH]

- (2) "*Nocloa rivulosa* Smith ♀ type"; "Sta. Barbara, California"; "No. 11429 Collection Hy. Edwards"; "Type, A.M.N.H." [A ♂, large dark example!] [AMNH]

- (3) "*Nocloa rivulosa* Smith cotype"; "Phoenix, Ariz."; "Phoenix, Ariz., 3-19-97, Jelf" [A ♀, abdomen on pin] [USNM]

Discussion.—The "♀ type" is a male! The "♂ type" in the American Museum of Natural History has been selected, labeled, and is now designated the lectotype.

***Feltia robustior* Smith, 1899, Canad. Ent. 31: 206.**

"Habitat.—Brandon, Manitoba, August 27, Sept. 1, 1968." "Two male specimens, No. 441, from Mr. Hanham, who says there is a third in Mr. Boger's collection."

Hampson (1903, Catalogue of the Lepidoptera Phalaenae in the Collection of the British Museum, v. 4, p. 341) stated: "Pl. LXVIII, fig. 1" and "This species is unknown to me; figured from a photograph from type in U.S. Nat. Mus."

Syntypes examined: 2 (USNM and AMNH)

- (1) "*Feltia robustior* Smith ♂ type"; "Brandon, Man."; "27.8.98"; "Type No. 4976 U.S.N.M."; "36511" [Very good condition, complete] [USNM]
(2) "*Feltia robustior* Smith ♂ cotype"; "1.9.98"; "Brandon, Man."; "441"; "Collection J. B. Smith"; "♂ genitalia mounted on slide by Smith [Rindge label]" [Rubbed, right valve of genitalia missing] [AMNH]

Discussion.—The right valve of the male genitalia is mounted on a slide in the American Museum of Natural History. According to Rindge (1955, p. 129), it is marked "male type." The "♂ type" in the U.S. National Museum has the genitalia complete. The "♂ type" has been selected, labeled, and is now designated the lectotype.

***Pachnobia roosta* Smith, 1903, Amer. Ent. Soc. Trans. 29(3): 203.**

"Hab.—Nushagak, Alaska, August 28, '01, McKay, collector." "One male, in fair condition, from the U.S. National Museum."

Holotype.—In the U.S. National Museum. The specimen is labeled "*Pachnobia roosta* Smith ♂ type"; "Nushagak, Alaska, Aug. 28. 81, McKay Collection, No. 76"; "Type No. 6808 USNM"; "♂ gen. on slide 376, 23 Aug. 32" [FHB.]; "Barnes collection." The Barnes collection is probably in error.

***Xylophasia rorulenta* Smith, 1904, Psyche 11(2): 55.**

"Habitat.—Calgary, Alberta, June and July; Winnipeg, Manitoba; Denver, Colorado in May; New York without date or specific locality." "Ten good examples equally divided as to sex are before me, and"

Syntypes examined: 6 (1 USNM and 5 AMNH)

- (1) "*Xylophasia rorulenta* Smith ♂ type"; "Cal-

gary, 12.VII.99, F. H. Wolley Dod"; "Head of Pine Creek"; "♂ genitalia on slide 486, Aug. 8, 1936, J.F.G.C." [Good condition] [USNM]

(2) "Xylophasia rorulenta Smith ♀ type"; "Calgary, Alta., 17. VII.03, F. H. Wolley Dod"; "Head of Pine Creek"; "J. B. Smith Collection, Rutgers" [Fairly good condition] [AMNH]

(3) "Xylophasia rorulenta Smith ♂ cotype"; "Winnipeg, Manitoba"; "J. B. Smith Collection, Rutgers" [AMNH]

(4) "Xylophasia rorulenta Smith ♂ cotype"; "N.Y."; "J. B. Smith Collection, Rutgers" [AMNH]

(5) "Xylophasia rorulenta Smith ♀ cotype"; "Denver, Col., V-19"; "J. B. Smith Collection, Rutgers" [AMNH]

(6) "Xylophasia rorulenta Smith ♀ cotype"; "Calgary, Alta., 2. VII.96, F. H. Wolley Dod"; "J. B. Smith Collection, Rutgers" [AMNH]

Other syntypes: 2 (CNC)

(1) "Xylophasia ♂ cotype"; "Calgary, Alta., 10-VII-03"

(2) "Xylophasia rorulenta ♀ cotype"; "Calgary, Alta., 26-VI-96"

Discussion.—Two syntypes have not been located. The "♂ type" in the U.S. National Museum has been selected, labeled, and is now designated the lectotype.

Oncocnemis rosea Smith, 1903, N.Y. Ent. Soc. Jour. 11(1): 11.

"*Habitat*: Colorado desert, Hy. Edwards; southern Arizona, April 1-15, Poling." "Two males; one is an old specimen given me many years ago by the late Henry Edwards. I recognized it as distinct from the described species, but realized also that it must be a discolored example; so I held it until I received recently from Dr. Barnes a fresh male which belongs to the same species."

Hampson (1906, Catalogue of the Lepidoptera Phalaenae in the Collection of the British Museum, v. 6, p. 169) stated: "Pl. C, fig. 8." This illustration is of a ♂ cotype that he stated was from the J. B. Smith collection from the Colorado desert. On the explanation of figure 8, plate C, he stated: "♂, Colorado!"
Syntypes examined: 2 (AMNH)

(1) "Oncocnemis rosea Smith ♂ type"; "So. Arizona, Poling"; "Apr. 1-15"; "Collection J. B. Smith" [Fair condition, complete]

(2) "Oncocnemis rosea Smith ♂ cotype"; "Colorado desert"; "Collection J. B. Smith" [Faded]

Discussion.—It appears that the specimen illustrated by Hampson, 1906, was the "♂ cotype," but he had the wrong locality in the explanation of the figure. On the other hand, Smith clearly indicated that the description was based mainly on the "♂ type." Accordingly, the "♂ type" in the American Museum of Natural History has been selected, labeled, and is now designated the lectotype.

Thyreion rosea Smith, 1891, Amer. Ent. Soc. Trans. 18: 121.

"*Hab.*—Colorado (Bruce)." "The single male from which this description is made is from Mr. Neumoegen's collection, but I think I have seen others, also of Mr. Bruce's collecting, from the same locality."

Smith (1893, U.S. Natl. Mus. Bul. 44, p. 268) stated: "The type is with Mr. Neumoegen."

Holotype.—In the U.S. National Museum. The specimen is labeled "Thyreion rosea Smith Type"; "Colo. Bruce"; "Col. B. Neumoegen"; "Type No. 33710 USNM"; "♂ genitalia on slide 2827 JFGC." There is a pseudotype in the U.S. National Museum labeled "Thyreion rosea Smith Type"; "Colo. Bruce"; "Collection Wm. Schaus"; "Type No. 9220 USNM"; "♂ genitalia on slide 2825 JFGC." The type label is not in Smith's handwriting, nor in that of Schaus from whose collection the specimen came to the U.S. National Museum. Schaus entered the specimen in the type book, but indicated that it was a questionable type by placing the word "type" in quotation marks.

Amolita roseola Smith, 1903, Amer. Ent. Soc. Trans. 29(3): 223.

"*Hab.*—Hastings, Florida, March and October."

"Six males, from Mr. Kearfott,"

Hampson (1910, Catalogue of the Lepidoptera Phalaenae in the Collection of the British Museum, v. 9, p. 311, fig. 132) listed a male cotype from Hastings, Fla. (Kearfott).

Syntypes examined: 4 (3 AMNH and 1 USNM)

(1) "Amolita roseola Smith ♂ type"; "Hastings, Fla., March"; "Collection W. D. Kearfott"; "J. B. Smith Collection, Rutgers" [Fairly good condition, complete] [AMNH]

(2-3) "Amolita roseola Smith cotype"; same data [2 ♂♂] [AMNH]

(4) "Amolita roseola Smith cotype"; "Hastings, Fla., Sept. 21"; "10516"; "Collection W. D. Kearfott" [A ♂, right forewing missing] [USNM]

Discussion.—One syntype has not been located. It is not known whether the illustration by Hampson was prepared from the syntype in the British Museum (Natural History). The date on the syntype in the U.S. National Museum was not cited by Smith. The "♂ type" in the American Museum of Natural History has been selected, labeled, and is now designated the lectotype. This selection locates the type in one of the two collections containing most of the Smith types and also locates the type of an American species in an American collection.

Leucania farcta var. *roseola* Smith, 1894, Amer. Ent. Soc. Trans. 21: 75, pl. 5, fig. 9.

"*Hab.*—British Columbia." "One male specimen from Mr. Neumoegen's collection." Smith actually listed this as *Leucania roseola* n. var. *farcta*. It is clear that this was an error as *farcta* is a Grote species described 13 years previously, and also

Smith correctly cited the name in the explanation of plate 5 on the page 88.

Smith (1902, U.S. Natl. Mus. Proc. 25(1283): 202, pl. 6, fig. 25) added nothing, but illustrated the valve of the male genitalia.

Holotype.—In the U.S. National Museum. The specimen is labeled "Leucania farcta var. roseola Smith Type"; "Br. Cola."; "Col. B. Neumögen"; "Type No. 33847 USNM." The abdomen is glued on!

Mamestra roseosuffusa Smith, 1900, U.S. Natl. Mus. Proc. 22(1203): 466.

"*Habitat*.—Arizona." "A single good male, which has been in my collection for some years."

Holotype.—In the U.S. National Museum. The specimen is labeled "Mamestra roseosuffusa Smith ♂ type"; "Ariz."; "36511"; "Type No. 5119 USNM."

Phaeocyma rubiata Smith, 1908, U.S. Natl. Mus. Proc. 35(1645): 265, pl. 33, fig. 4, pl. 35, fig. 9.

"*Habitat*.—Arizona; January, May, August." "*Types*.—Coll. U.S.N.M., Coll. No. 12029; also cotypes Coll. Rutgers College and Doctor Ottolengui." "Only 2 of the 18 examples before me have specific localities—Phoenix and Nogales—but several of them are dated. There are 13 males to 5 females, . . ."

Syntypes examined: 12 (4 AMNH and 8 USNM)

- (1) "Phaeocyma rubiata Smith ♂ type"; "Ariz."; "Collection G. D. Hulst" [Good condition, complete] [AMNH]
- (2) "Phaeocyma rubiata Smith ♀ type"; "Arizona"; "J. B. Smith Collection, Rutgers"; "♀ Genitalia mounted on slide by Smith [Rindge label]" [Good condition, abdomen missing] [AMNH]
- (3) "Phaeocyma rubiata Smith cotype"; "Phoenix, Arizona, 1-25"; "J. B. Smith Collection, Rutgers" [A ♂] [AMNH]
- (4) "Phaeocyma rubiata Smith cotype"; "Collection G. D. Hulst" [A ♂, abdomen missing] [AMNH]
- (5) "Phaeocyma rubiata Smith cotype"; "Arizona"; "Barnes collection" [A ♂, abdomen missing] [USNM]
- (6) "Phaeocyma rubiata Smith cotype"; "Arizona"; "Barnes collection" [A ♂] [USNM]
- (7) "Phaeocyma rubiata Smith cotype"; "Ariz."; "Barnes collection"; "♂ genitalia on slide #2071, Oct. 3, 1938, J.F.G.C." [USNM]
- (8) "Phaeocyma rubiata Smith cotype"; "Arizona"; "Collection Brklyn. Mus."; "♀ Genitalia on slide #2072, Oct. 3, 1938, J.F.G.C." [USNM]
- (9) "Phaeocyma rubiata Smith cotype"; "Arizona"; "May 1-7"; "Barnes collection" [A ♂] [USNM]
- (10) "Phaeocyma rubiata Smith cotype"; "Arizona"; "Collection Brklyn. Mus."; "Type No. 34099 U.S.N.M." [A ♂] [USNM]
- (11) "Phaeocyma rubiata Smith cotype"; "Arizona"; "Aug. 16-23"; "Barnes collection"

[A ♀] [USNM]

(12) "Phaeocyma rubiata Smith cotype"; "Arizona"; "Barnes collection" [A ♀] [USNM]

Discussion.—There are four other specimens in the U.S. National Museum, three males and one female, bearing Smith name labels that probably are also part of the original type-series. Three are from "Arizona" or "Ariz.," and one male is labeled "Nogales, Ariz."; "June 1-7"; "Barnes collection." All are complete. Because they are not marked type, they have not been listed here. If they are part of the type-series, 16 of the original 18 specimens are accounted for, including all 5 females. Smith apparently planned to send the "♂ type" and "♀ type" to the U.S. National Museum as indicated by the comment in the original description concerning the location of the types and the citation of a USNM type number. This is also shown by the fact that eight Smith species of *Phaeocyma* were entered in the type book on August 8, 1908, before publication of the paper on November 10, 1908. Five of the entries, *P. metata*, *curema*, *bethunei*, *colorado*, and *rubiata*, are marked "Type" and the other three "cotype." The numbers are 12023 through 12030. This all agrees with the published data. However, Smith did not send these specimens to the U.S. National Museum, and no specimens in this collection bear those numbers.

Other authors have shown that for at least some of the species described in *Phaeocyma* by Smith the type-series were mixtures of species. For that reason, where genitalic preparations illustrated by Smith can be identified and associated definitely with specimens, those specimens should be the most important lectotype candidates. In the case of *rubiata*, male and female genitalia slides illustrated (pl. 33, fig. 4, and pl. 35, fig. 9, respectively) are in the American Museum of Natural History. Two male syntypes listed lack abdomens and two male syntypes have not been located, so it is not possible to associate the male genitalia slide with a specimen. However, all the female syntypes have been located and only the "♀ type" lacks an abdomen, so the genitalic preparation must have been made from that syntype. Accordingly, that specimen has been selected, labeled, and is now designated the lectotype.

Leucania rubripallens Smith, 1902, U.S. Natl. Mus.

Proc. 25(1283): 182.

"*Habitat*.—Sierra Nevada, California (Hy. Edwards); Salt Lake, Utah (Hy. Edwards); Utah in July (Poling); Denver, Colorado, June 10 (Osler); Glenwood Springs, Colorado, June 24, July 10, 16, and August 24 (Barnes)." "Eleven examples are before me, and they vary little except in the depth of the red tinge and in the amount of black on the secondaries."

"*Type*.—No. 6246, U.S.N.M." This was a typographical error, the number should be 6245.

Barnes and McDunnough (1913, Contrib. Nat. Hist. Lepidoptera N. Amer. 2(1): 16, pl. 7, fig. 2) illustrated "♂ type, Glenwood Spgs., Colo."

McDunnough (1943, Canad. Ent. 75: 57) stated:

" . . . the name was based on material from Glenwood Spgs., Colo. (type locality) and other specimens from Utah and California."

Syntypes examined: 6 (4 USNM and 2 AMNH)

- (1) "Leucania rubripallens Smith ♂ type"; "Glenwood Spgs., Colo."; "July 8-15"; "Barnes collection"; "Photograph, Pl. 7, No. 2"; "♂ Genitalia Slide: USNM 580, J. G. Franclemont" [Good condition] [USNM]
- (2) "Leucania rubripallens Smith ♀ type"; "Denver, Col., VI-10"; "Type No. 6245 U.S.N.M."; "♀ Genitalia Slide: USNM 633, J. G. Franclemont" [USNM]
- (3) "Leucania rubripallens Smith ♂ type"; "Glenwood Spgs., Col."; "June 24-30"; "Collection J. B. Smith" [Good condition] [AMNH]
- (4) "Leucania rubripallens Smith cotype"; "Utah, July 1900, Poling"; "Type No. 6245 U.S.N.M." [A ♂] [USNM]
- (5) "Leucania rubripennis [sic] Smith ♀ cotype"; "Glenwood Spgs., Colo."; "July 16-23"; "Barnes collection" [USNM]
- (6) "Leucania rubripallens Smith ♀ cotype"; "Glenwood Spgs., Col."; "Aug. 24-30"; "Collection J. B. Smith" [AMNH]

Discussion.—Five specimens of the original series have not been located. At least one from Salt Lake, Utah, may be in the American Museum of Natural History via the Henry Edwards collection. A study of the label data and the information in the original description reveals several discrepancies. Several of the dates are incompletely cited, and the date from the "♂ type" in the U.S. National Museum is not given. One syntype bears the wrong name label, a similar Grote name. The USNM type number given is wrong. And finally Smith labeled two specimens "♂ type." When the factors important to lectotype selection—sex, labeled "type" or "cotype," illustrated, bearing USNM type number, locality, and condition—are considered, the "♂ type" in the U.S. National Museum seems the best lectotype candidate. Accordingly, it has been selected, labeled, and is now designated the lectotype.

Agrotis rufula Smith, 1888, U.S. Natl. Mus. Proc. 10: 461.

Habitat.—New Mexico; 7000 feet. "A single ♂ specimen in good condition from Prof. F. H. Snow."

Smith (1893, U.S. Natl. Mus. Bul. 44, p. 101) treated the name as a synonym of *infausta* Walker and stated: "The type of Walker's species is in the British Museum; of my own, specimens are in the National Museum and with Prof. Snow."!

Holotype.—In the U.S. National Museum. The specimen is labeled "Agrotis rufula Smith Type"; "Near Hot Springs, Las Vegas, N.M., 7000 ft. July, '82, F. H. Snow"; "Collection J. B. Smith"; "Type No. 126 USNM"; "♂ genitalia on slide 521 FHB"; "Barnes collection." The last label is obviously an error.

Carneades rumatana Smith, 1903, Amer. Ent. Soc. Trans. 29(3): 203.

Hab.—Volga, South Dakota (Truman); Calgary, Alberta, Aug. 23rd (Dod). "Sixteen males and one fe-

male, nearly all in very good condition." "The single example from Mr. Dod, numbered 10, has been in my collection for a long time without a definite place; with the South Dakota material at hand it finds a natural home."

Syntypes examined: 11 (7 AMNH and 4 USNM)

- (1) "Carneades rumatana Smith ♂ type"; "Volga, So. Dak."; "Collection J. B. Smith" [Good condition, complete] [AMNH]
- (2) "Carneades rumatana Smith ♀ type"; same data [Good condition] [AMNH]
- (3-7) "Carneades rumatana Smith cotype"; same data [4 ♂♂ and 1 ♀] [AMNH]
- (8) "Carneades rumatana Smith cotype"; "Volga, So. Dak."; "Barnes Collection"; "Collection J. B. Smith" [A ♂] [USNM]
- (9) "Carneades rumatana Smith cotype"; "Barnes Collection"; "Slide 28a" [A ♂, abdomen missing] [USNM]
- (10-11) "Carneades rumatana Smith cotype"; "Barnes Collection" [2 ♂♂] [USNM]

Other syntypes: 3 (CNC)

- (1-3) "Carneades rumatana cotype"; "Volga, South Dakota #873" [sex unknown]

Donald La Fontaine discovered these three syntypes in the collection of the Canadian National Museum. Their sex is not known.

Discussion.—The "♀ type" in the American Museum of Natural History has been selected, labeled, and is now designated the lectotype.

Hadena runata Smith, 1899, Canad. Ent. 31: 257.

Habitat.—Winnipeg, Manitoba, June and July (Hanham); Pullman, Washington (Piper). "A good series of specimens shows little variation save in the shade of the ground color."

Smith (1903, Canad. Ent. 35(5): pl. 4, fig. 8) illustrated the valve of the male genitalia.

Syntypes examined: 9 (5 USNM and 4 AMNH)

- (1) "Hadena runata Smith ♂ type"; "W. Man., July"; "Winnipeg, Man."; "Type No. 4362 U.S.N.M."; "♂ genitalia on slide #44, March 23, 1936, J.F.G.C." [USNM]
- (2) "Hadena runata Smith ♀ cotype"; "W. 3/7/97"; "Type No. 4362 U.S.N.M."; "♀ genitalia on slide #45, March 23, 1976, J. F.G.C." [USNM]
- (3) "Hadena runata Smith cotype"; "W. Man., July"; "Winnipeg, Man."; "Barnes collection" [A ♂, genitalia broken] [USNM]
- (4) "Hadena runata Smith cotype"; same data [A ♀, abdomen glued to thorax] [USNM]
- (5) "Hadena runata Smith cotype"; "W. Man., July"; "Winnipeg, Man."; "Type No. 4362 U.S.N.M."; "36511" [A ♀] [USNM]
- (6) "Hadena runata Smith cotype"; "W. 20/6/97"; "J. B. Smith Collection, Rutgers" [A ♂] [AMNH]
- (7) "Hadena runata Smith cotype"; "Winnipeg, Man., 25/6/97"; "J. B. Smith Collection, Rutgers" [A ♀] [AMNH]

(8) "Hadena runata Smith cotype"; "Winnipeg, Man."; "J. B. Smith Collection, Rutgers" [A ♂] [AMNH]

(9) "Hadena runata Smith cotype"; "Winnipeg, Man."; "J. B. Smith Collection, Rutgers" [A ♀] [AMNH]

Discussion.—The "♂ type" in the U.S. National Museum has been selected, labeled, and is now designated the lectotype.

Melicleptria sabulosa Smith, 1906, N.Y. Ent. Soc. Jour. 14: 16.

Habitat.—"California"; "Doble, Calif., April 19." "One male from Mr. Henry Edwards; one female from Mr. George H. Hutson; both in good condition."

Barnes and Benjamin (1924, Contrib. Nat. Hist. Lepidoptera N. Amer. 5(3): 105) placed this species as a synonym of *fasciata* and stated: "A specimen compared with the type of *fasciata* (Hy. Edw. Coll.) by the senior author agrees with the '♂ type' of *sabulosa* (Barnes Coll.)."

Syntypes examined: 2 (USNM and AMNH)

- (1) "Melicleptria sabulosa Smith ♂ type"; "Calif."; "Barnes collection"; "♂ gen. 729, 31 Dec. 33, FHB." [Fair condition] [USNM]
- (2) "Melicleptria sabulosa Smith ♀ type"; "Doble, Cal."; "4/19"; "J. B. Smith Collection, Rutgers" [Fair condition] [AMNH]

Discussion.—Because Barnes and Benjamin utilized the "♂ type" in synonymizing Smith's *sabulosa* with *M. fasciata* (Hy. Edwards) and because of the sex, that syntype now in the U.S. National Museum has been selected, labeled, and is now designated the lectotype.

Taeniocampa [sic] saleppa Smith, 1907, Amer. Ent. Soc. Trans. 33: 132.

Hab.—British Columbia; Wellington, April 12th, 14th; J. Bay, Victoria, August 17th." "Four males and one female in fair or good condition, the Wellington examples from W. J. Bryant."

Smith (1911, N.Y. Ent. Soc. Jour. 19(3): 149) stated: "My series at present contains 5 ♂ and 2 ♀. All my examples are from Wellington, British Columbia, and were taken in April."

Syntypes examined: 3 (2 AMNH and 1 USNM)

- (1) "Taeniocampa saleppa Smith ♂ type"; "Wellington, B.C., 14.IV.03"; "Collection J. B. Smith" [Fairly good except left hindwing torn and nick in right forewing] [AMNH]
- (2) "Taeniocampa saleppa Smith ♀ type"; "Wellington, B. Col."; "12. 4. 04"; "J. B. Smith Collection, Rutgers" [Good condition] [AMNH]
- (3) "Taeniocampa saleppa Smith ♂ cotype"; "J. Bay, Vict., B.C., 17/8/00 E. 1."; "Collection J. B. Smith"; "Barnes Collection" [Fairly good condition, complete] [USNM]

Discussion.—The "♂ type" in the American Museum of Natural History has been selected, labeled, and is now designated the lectotype. It is not in as good

condition as the "♀ type," but the male genitalia should be more significant in determining the status of the name.

Rhynchagrotis sambo Smith, 1908, Canad. Ent. 40: 287.

Habitat.—Kaslo, British Columbia, July and August, Mr. Cogle; Peachland, B.C., in July, Mr. Wallis, through Dr. Fletcher; Ainsworth, B.C., in July, Mr. Findlay, also through Dr. Fletcher." "A series of 12 ♂'s and 12 ♀'s, most of them in good or fair condition,"

Lectotype.—Buckett (1968, Calif. Dept. Agr. Bur. Ent. Occas. Papers No. 15, p. 6) in the synonymical bibliography of *Abagrotis trigona* (Smith) stated: ". . . , lectotype female, Kaslo, B.C., 29 July 1905 (Cogle), genitalia on slide No. 12, 100 F. H. Rindge, type (AMNH), by present designation;" Prior to that selection Buckett had examined my draft copy of this paper and indicated with an asterisk and initialed note that he would select the "♂ type." The data given in the lectotype selection are those of the "♂ type," so his comment "lectotype female" is an error. The lectotype is in the collection of the American Museum of Natural History.

Oncocnemis sanina Smith, 1910, N.Y. Ent. Soc. Jour. 18: 91.

Habitat.—Gunnison, Colo., July 9." "One male, four females, in fair condition only."

Syntypes examined: 4 (AMNH)

- (1) "Oncocnemis sanina Smith ♂ type"; "Gunnison, Colo., VII. 9"; "Collection J. B. Smith" [Fair condition, complete except left antenna missing]
- (2) "Oncocnemis sanina Smith ♀ cotype"; same data [Fair condition]
- (3-4) "Oncocnemis sanina Smith ♀ cotype"; same data [2 ♀ ♀]

Discussion.—One female syntype has not been located. The "♂ type" has been selected, labeled, and is now designated the lectotype.

Schinia sara Smith, 1907, Amer. Ent. Soc. Trans. 33: 130.

Hab.—Wilgus, Cochise Co., Arizona." "Two females, in fair condition." "In the U.S.N.M. are specimens from the Organ Mountains, New Mexico, viii, 30, and ix, 4, elevation 5,300 feet."

Syntypes examined: 2 (AMNH and USNM)

- (1) "Schinia sara Smith ♀ type"; "Wilgus, Ariz., Cochise Co."; "J. B. Smith Collection, Rutgers" [Fair condition except a little rubbed, complete] [AMNH]
- (2) "Schinia sara Smith cotype"; "Wilgus, Ariz., Cochise Co."; "Barnes collection" [A ♀] [USNM]

Discussion.—There are two specimens, male and female, respectively, from the Organ Mountains, N. Mex., in the U.S. National Museum, but they have not been included as syntypes as Smith did not label the specimens with a name label and did not mark them as types.

The "♀ type" in the American Museum of Natural History has been selected, labeled, and is now designated the lectotype.

Mamestra sareta Smith, 1906, *Canad. Ent.* 38(7): 229.

Habitat.—Arizona; Huachuca Mts., May 8–15; Wilgus, Cochise Co.; Gila Co., May 14 and June; Minnehaha, Yavapai Co., Aug. 20 and Oct. 2–5. "Nine males and four females from Dr. Barnes, seven males and ten females from Mr. Hutson."

Syntypes examined: 19 (8 AMNH and 11 USNM)

- (1) "Mamestra sareta Smith, ♂ type"; "Minnehaha"; "Yavapai Co., Ariz. X-3"; "J. B. Smith Collection Rutgers" [Good condition, complete] [AMNH]
- (2) "Mamestra sareta Smith, ♀ type"; "Minnehaha"; "Yavapai Co., Ariz. X-2"; "J. B. Smith Collection Rutgers" [Good condition, complete] [AMNH]
- (3) "Mamestra sareta Smith, cotype"; "Minnehaha"; "Yavapai Co., Ariz. X-3"; "J. B. Smith Collection Rutgers" [A ♂, fairly good condition, complete] [AMNH]
- (4) "Mamestra sareta Smith, cotype"; "Minnehaha"; "Yavapai Co., Ariz. X-3"; "J. B. Smith Collection Rutgers" [A ♂, wing condition good, abdomen missing] [AMNH]
- (5) "Mamestra sareta Smith, cotype"; "Minnehaha"; "Yavapai Co., Ariz. X-3"; "J. B. Smith Collection Rutgers" [A ♂, wing condition fair, abdomen missing] [AMNH]
- (6) "Mamestra sareta Smith, cotype"; "Huachuca Mts., Ariz."; "J. B. Smith Collection Rutgers" [A ♂, good condition, complete] [AMNH]
- (7) "Mamestra sareta Smith, cotype"; "Minnehaha"; "Yavapai Co., Ariz. X-4"; "J. B. Smith Collection Rutgers" [A ♀, wing condition good, abdomen missing] [AMNH]
- (8) "Mamestra sareta Smith, cotype"; "Minnehaha"; "Yavapai Co., Ariz. IX-27"; "J. B. Smith Collection Rutgers" [A ♀, rather worn, complete] [AMNH]
- (9) "Mamestra sareta Smith, ♂ cotype"; "Minnehaha"; "Yavapai Co., Ariz. X-3"; "♂ gen. # 156, FHB."; "Barnes Collection" [Fair condition] [USNM]
- (10) "Mamestra sareta Smith, ♂ cotype"; "Huachuca Mts., Ariz."; "Barnes Collection" [Fair condition] [USNM]
- (11) "Mamestra sareta Smith, ♂ cotype"; "Minnehaha"; "Yavapai Co., Ariz. X-4"; "Barnes Collection" [Fair, complete] [USNM]
- (12) "Mamestra sareta Smith, cotype"; "Wilgus, Ariz., Cochise Co."; "Barnes Collection" [A ♂, fair condition, complete] [USNM]
- (13) "Mamestra sareta Smith, ♂ cotype"; "Wilgus, Ariz., Cochise Co."; "Barnes Collection" [Wings fair, abdomen missing] [USNM]

- (14) "Mamestra sareta Smith, ♀ cotype"; "Minnehaha"; "Yavapai Co., Ariz. X-2"; "Barnes Collection" [Wings fair, abdomen appears to be glued on] [USNM]
- (15) "Mamestra sareta Smith, ♀ cotype"; "Minnehaha"; "Yavapai Co., Ariz. X-4"; "Barnes Collection" [Wings good, abdomen missing] [USNM]
- (16) "Mamestra sareta Smith, ♀ cotype"; "Huachuca Mts., Ariz."; "Barnes Collection" [Wing condition fair, abdomen missing] [USNM]
- (17) "Mamestra sareta Smith, ♀ cotype"; "Huachuca Mts., Ariz."; "May 8–15"; "Barnes Collection" [Fair condition, abdomen in capsule attached to pin] [USNM]
- (18) "Mamestra sareta Smith, ♀ cotype"; "Gila Co., Ariz., O. C. Poling"; "May 15–30"; "Barnes Collection" [Somewhat rubbed, complete] [USNM]
- (19) "Mamestra sareta Smith, cotype"; "Wilgus, Cochise Co., Ariz."; "Barnes Collection" [Fair condition, complete] [USNM]

Discussion.—This species is unusual in that Smith apparently labeled each specimen of the type-series, 30 specimens, with at least a determination label. Eleven specimens, 6 USNM and 5 AMNH, were not marked cotypes. For that reason and because some of the localities were not included in the original description, they have not been included in the series of syntypes, but I believe it is likely that they were part of the original series. The specimen labeled "♂ type" in the American Museum of Natural History has been selected, labeled, and is now designated the lectotype. Two of the syntypes bear dates that were not cited in the description.

Agrotis satiens Smith, 1890, *Amer. Ent. Soc. Trans.* 17: 45.

Habitat.—N.W. British Columbia; 1 ♂ 2 ♀ ♀. Smith (1893, *U.S. Natl. Mus. Bul.* 44, p. 85) stated: "The types are with Mr. Neumoegen, and in the Coll. U.S. National Museum."

Syntypes examined: 3 (USNM)

- (1) "Agrotis satiens Smith Type"; "N.W. Brit. Cola."; "8"; "Acc. No. 25975 U.S.N.M."; "Type No. 100 U.S.N.M." [A ♀]
- (2) "Agrotis satiens Smith Type"; "N.W. Brit. Cola."; "Col. B. Neumoegen"; "Type No. 33743 U.S.N.M." [A ♂]
- (3) "Agrotis satiens Smith Type"; "N.W. Brit. Cola."; "Col. B. Neumoegen" [A ♀]

Discussion.—The female syntype bearing USNM type number 100 has been selected, labeled, and is now designated the lectotype.

Palada scarletina Smith, 1900, *U.S. Natl. Mus. Proc.* 22(1203): 487.

Habitat.—California; San Diego County, California; Utah. "Two males and one female, only the latter in really good condition; the examples received at long intervals. The two males are the smaller and

darker, one of them having been in my old collection twelve years ago." "Type.—Cat. No. 4816, U.S.N.M."

Lectotype.—In the U.S. National Museum designated by Hardwick (1958, *Canad. Ent.* 90 (Sup. 6): 72). The lectotype is a specimen from Utah, a female, labeled "♀ type."

Acontia schwarzii Smith, 1900, *Amer. Ent. Soc. Trans.* 27: 73.

"*Hab.*—Catalina Springs, Arizona, July 24th (E. A. Schwarz); Phoenix, Arizona, January 15th (Dr. Griffith)." "One male and one female are at hand and resemble each other generally."

Syntypes examined: 2 (USNM and AMNH)

- (1) "Acontia schwarzii Smith ♂ type"; "Phoenix, Ariz., 1-15"; "Type No. 5387 U.S.N.M."; "36511"; "♂ genitalia on slide #1461, Jan. 13, 1938, J.F.G.C." [Very good condition] [USNM]
- (2) "Acontia schwarzii Smith ♀ type"; "Catal. Spgs., Ar., 24-7"; "E. A. Schwarz Collector"; "J. B. Smith Collection" [Good condition, but slightly greasy] [AMNH]

Discussion.—The "♂ type" in the U.S. National Museum has been selected, labeled, and is now designated the lectotype.

Oxycnemis sectilis Smith, 1894, *Amer. Ent. Soc. Trans.* 21: 86, pl. 6, fig. 3.

"*Hab.*—Texas." "A single specimen only is before me at present; but the insect is represented in several of the collections, and by more than one specimen."

Hampson (1909, *Catalogue of the Lepidoptera Phalaenae in the Collection of the British Museum*, v. 8, p. 222, pl. CXXVIII, fig. 11) stated: "This species is unknown to me; figured from a drawing from type in U.S. Nat. Mus." On the explanation for plate CXXVIII he stated the specimen was a male from Texas!

Holotype.—In the U.S. National Museum. The specimen is labeled "Oxycnemis sectilis Smith Type"; "Tex."; "Type No. 5105 USNM"; "36511." It is a female, not a male as indicated by Hampson. It is the specimen figured by Smith.

Pleonecyptera secundalis Smith, 1907, *Amer. Ent. Soc. Trans.* 33: 376.

"*Hab.*—Plumas Co., California, May 1st; Los Angeles Co., without date." "Two males and one female; the former good, purchased examples; the latter an old rubbed example collected by Mr. Coquillett over 20 years ago and . . ."

Syntypes examined: 3 (2 AMNH and 1 USNM)

- (1) "Pleonecyptera secundalis Smith ♂ type"; "Plumas Co., Cal., VI. 1"; "J. B. Smith Collection, Rutgers" [Good condition, complete] [AMNH]
- (2) "Pleonecyptera secundalis Smith ♀ type"; "Coquillett, Los Angeles, Cal."; "J. B. Smith Collection, Rutgers" [Rather rubbed] [AMNH]

(3) "Pleonecyptera secundalis Smith ♂ cotype"; "Plumas Co., Cal., VII" [USNM]

Discussion.—The "♂ type" in the American Museum of Natural History has been selected, labeled, and is now designated the lectotype.

Scotogramma sedilis Smith, 1899, *N.Y. Ent. Soc. Jour.* 7: 43.

"*Habitat*: Garfield County, Color., 6000 feet (Bruce)." "Three female specimens are before me, two of them from the U.S. National Museum, and each different from the other."

Syntypes examined: 2 (USNM)

- (1) "Scotogramma sedilis Smith ♀ type"; "760, Garfield Co., Colo., 6000 ft., Bruce"; "Type No. 4150 U.S.N.M."; "I [lower case L]" [Fairly good condition]
- (2) "Scotogramma sedilis Smith ♀ type"; "714, Garfield Co., Colo., 6000 ft., Bruce"; "Type No. 4150 U.S.N.M."; "I [lower case L]" [Fairly good condition]

Other syntypes: Rindge (1955, p. 130) listed a cotype female labeled "Colorado, Bruce." I did not locate the specimen on my visits to the American Museum of Natural History and can not comment on the specimen.

Discussion.—The two syntypes in the U.S. National Museum are both marked "♀ type." The one with 760 on the locality label has been selected, labeled, and is now designated the lectotype.

Carneades segregata Smith, 1894, *Amer. Ent. Soc. Trans.* 21: 47, pl. 4, fig. 6.

"*Hab.*—Colorado." "Seven specimens of this species are before me, all of them males. Two of them are from Mr. Bruce, the others from various sources, none of them with the exact locality."

Syntypes examined: 5 (1 AMNH and 4 USNM)

- (1) "Carneades segregata Smith ♂ type"; "Colo., Bruce"; "J. B. Smith Collection, Rutgers" [Good condition, complete] [AMNH]
- (2) "Carneades segregata Smith ♂ type"; "Col."; "Collection G. D. Hulst"; "Type No. 136 U.S.N.M."; "36511" [USNM]
- (3) "Carneades segregata Smith ♂ type"; "Colo., Bruce"; "Type No. 136 U.S.N.M."; "36511" [USNM]
- (4) "Carneades segregata Smith ♂ type"; "Col."; "Collection G. D. Hulst"; "Type No. 136 U.S.N.M." [USNM]
- (5) "Carneades segregata Smith ♂ type"; same data [Abdomen and hindwings missing] [USNM]

Discussion.—Two syntypes have not been located. The five that have been examined are all labeled "♂ type." The syntype in the American Museum of Natural History appears to be the specimen illustrated by Smith. Accordingly, it has been selected, labeled, and is now designated the lectotype. The genitalia were prepared on a slide (5002) by D. F. Hardwick in April 1965. I

PLANT 4645 (1952)

USDA TECHNICAL BULLETINS

PLANT 4645

THE NOCTUID TYPE MATERIAL OF JOHN B. SMITH (LEPIDOPTERA)

JODD, E. L.

3 OF 3

have not examined the specimen since that date and cannot quote the genitalia label.

Mamestra segregata Smith, 1893, Ent. News 4(3): 100, pl. 6, fig. 11.

"*Hab.*—Laggan, British Col., at light, May 13th and 17th. Bean, Nos. 447, 531, ♂ and ♀."

Smith (1894, Amer. Ent. Soc. Trans. 21: 56, pl. 2, fig. 11) again described this as new, using the same plate.

Smith (1903, N.Y. Ent. Soc. Jour. 11(1), pl. 1, fig. 8) illustrated the valve of the male genitalia.

Syntypes examined: 1 (USNM)

- (1) "Mamestra segregata Smith ♂ type"; "531"; "Laggan, B.C., May 13, Light"; "Type No. 160 U.S.N.M."; "♂ Genitalia Slide: USNM 1960, J. G. Franclemont" [Good condition except small nick in apex of right forewing]

Discussion.—The "♀ type" has not been located. The "♂ type" in the U.S. National Museum has been labeled and is now designated the lectotype. The genitalia on the slide prepared by Franclemont are entire, so the illustration of the valve figured by Smith in 1903 must have been from some specimen received subsequent to the description of the species.

Carneades selenis Smith, 1900, U.S. Natl. Mus. Proc. 22(1203): 459.

"*Habitat.*—Los Angeles County, California (Coquillet)." "A single female, from the collection in the U.S. National Museum."

Holotype.—In the U.S. National Museum. The specimen is labeled "Carneades selenis Smith ♀ type"; "Los Angeles Co., Cal."; "Coquillet"; "Type No. 5154 USNM." Hampson (1903, p. 303) misspelled the specific name as "*silenis*."

Acontia semiatra Smith, 1902, N.Y. Ent. Soc. Jour. 10: 52.

"*Habitat.*—Quartzsite, Yuma Co., Arizona, in March (Geo. S. Hutson)." "One male and three females, all in good condition and all very much alike."

Hampson (1910, Catalogue of the Lepidoptera Phalaenae in the Collection of the British Museum, v. 10, p. 760, pl. CLXXII, fig. 25) listed and illustrated a female cotype from Quartzsite, Yuma County, Ariz.

Syntypes examined: 3 (2 AMNH and 1 USNM)

- (1) "Acontia semiatra Smith ♂ type"; "Yuma Co., Ariz., March"; "Collection J. B. Smith"; "♂ Genitalia mounted on slide No. 10, 332, F. H. Rindge" [AMNH]
- (2) "Acontia semiatra Smith ♀ type"; same data [AMNH]
- (3) "Acontia semiatra Smith ♀ cotype"; "Yuma Co., Ariz., March" [USNM]

Other syntypes: A "♀ cotype" listed and illustrated by Hampson, 1910, is in the British Museum (Natural History).

Discussion.—The only male syntype, the "♂ type," has been selected, labeled, and is now designated the lectotype.

Oncocnemis semicollaris Smith, 1909, N.Y. Ent. Soc. Jour. 17: 60.

"*Habitat.*—Peachland, British Columbia, July 8, 1907." "One female in rather poor condition from Dr. James Fletcher, collected by Mr. J. B. Wallis."

Holotype.—In the American Museum of Natural History. The specimen is labeled "Oncocnemis semicollaris Smith Type"; "43"; "Peachland, B.C., 8.VII.07, J. B. Wallis"; "J. B. Smith Collection, Rutgers." It is rather worn, the antennae are missing, the abdomen is greasy and possibly glued to the thorax [I was unable to determine this point with certainty.] The specimen is a female as stated by Smith.

Chytonix semifascia Smith, 1900, U.S. Natl. Mus. Proc. 22(1203): 415.

"*Habitat.*—Glenwood Springs, Colorado, in July; Garfield County, Colorado, 6,000 feet." "*Type.*—Cat. No. 4147, U.S.N.M." "This pretty little species has been taken by Mr. Bruce and also by Dr. Barnes; both sexes being before me."

Syntypes examined: 3 (2 USNM and 1 AMNH)

- (1) "Chytonix semifascia Smith ♂ type"; "Garfield Co., Colo., 6000 ft., Bruce"; "Colo."; "Type No. 4147 U.S.N.M." [Fairly good condition] [USNM]
- (2) "Chytonix semifascia Smith ♀ type"; "Colo., Bruce"; "694, Garfield Co., Colo., 6000 ft., Bruce"; "Collection J. B. Smith" [Fair condition, but right wings broken, hindwing torn and frayed] [AMNH]
- (3) "Chytonix semifascia Smith cotype"; "Glenwood Spgs., Colo."; "July 1-7" [A ♂, good condition] [USNM]

Discussion.—The "♂ type," the only specimen to bear the USNM type number 4147 listed in the description, has been selected, labeled, and is now designated the lectotype.

Mamestra senatoria Smith, 1900, U.S. Natl. Mus. Proc. 22(1203): 461.

"*Habitat.*—Senator, Arizona, April 24 (female), July 16 (male) (Dr. Barnes)." "One pair in only fair condition, the male the larger and best marked, the female so dark and powdery that the contrasts in the male are the more striking."

Syntypes examined: 2 (USNM)

- (1) "Mamestra senatoria Smith ♂ type"; "Phoenix, Ariz."; "April 24-30"; "Type No. 5117 U.S.N.M."; "♀ genitalia on slide 802, Mar., 1958, E.L.T." [A ♀!]
- (2) "Mamestra senatoria Smith ♀ type"; "Senator, Ariz."; "July 16-23"; "18"; "Barnes collection"; "♂ genitalia on slide 808, Mar., 1958, E.L.T." [A ♂!]

Discussion.—Smith did not mention the Phoenix, Ariz., locality and he cited incomplete dates. He correctly identified the two sexes, but applied the "♂ type" and "♀ type" labels to the wrong specimens. Both syntypes are in fair condition, but the male syntype has the apex of the right forewing broken. The male syntype bearing the "♀ type" label has been selected, labeled, and is now designated the lectotype.

Hydroecia [sic] senilis Smith, 1892, Ent. News 3(10): 251, pl. 10, row 1, fig. 4 [sic]. Should be fig. 6. pl. 10, row 1, fig. 4 [sic]. Should be fig. 6.
"Hab.—Colorado. Bruce (No. 26 ♂, 206 ♀)."
Smith (1894, Amer. Ent. Soc. Trans. 21: 73, pl. 1, row 1, fig. 6) again described this as new using the same plate.
Smith (1899, Amer. Ent. Soc. Trans. 26: 25, pl. 1, fig. 14) illustrated the male genitalia, which he said were damaged.

Syntypes examined: 2 (AMNH and USNM)

- (1) "Hydroecia senilis Smith Type"; "Colo., Bruce"; "Collection J. B. Smith" [A ♂, fair condition, complete] [AMNH]
- (2) "Hydroecia senilis Smith Type"; "Colo., Bruce"; "Type No. 217 U.S.N.M."; "206" [A ♀] [USNM]

Discussion.—The male syntype in the American Museum of Natural History is the specimen illustrated by Smith. It has been selected, labeled, and is now designated the lectotype.

Peridroma serano Smith, 1910, N.Y. Ent. Soc. Jour. 18: 87.

"Habitat.—Chiricahua Mts., Ariz." "Two females in good condition."

Syntypes examined: 2 (AMNH)

- (1) "Peridroma serano Smith ♀ type"; "Chiricahua Mts., Ariz."; "J. B. Smith Collection, Rutgers" [Very good condition]
- (2) "Peridroma serano Smith ♀ cotype"; same data

Discussion.—The "♀ type" in the American Museum of Natural History has been selected, labeled, and is now designated the lectotype.

Pleonecyptera serena Smith, 1911, N.Y. Ent. Soc. Jour. 19(3): 149.

"Habitat.—San Diego, California, V, 2, VI, 9, VII, 31, VIII, 1, IX, 29; Plumas Co., Calif., V, 1; Pasadena, Calif., VI, 20; 'California,' III, 21." "Ten males, 14 females, most of them good specimens, and all the San Diego examples from Mr. George H. Field."

Syntypes examined: 7 (6 AMNH and 1 USNM)

- (1) "Pleonecyptera serena Smith ♂"; "San Diego, Cal., 8.1.10, Geo. H. Field"; "J. B. Smith Collection, Rutgers" [Very good condition] [AMNH]
- (2) "Pleonecyptera serena Smith ♀ type"; "San Diego, Cal., 8.1.10, Geo. H. Field" [Good condition] [USNM]
- (3) "Pleonecyptera serena Smith Paratype"; "Plumas Co., Calif., .1"; "J. B. Smith Collection, Rutgers" [A ♂, good condition] [AMNH]
- (4) "Pleonecyptera serena Smith Paratype"; "San Diego, Cal., 6-4-8"; "J. B. Smith Collection, Rutgers" [A ♂, fair condition] [AMNH]
- (5) "Pleonecyptera serena Smith Paratype"; "San Diego, Cal., 9-29-08"; "J. B. Smith

Collection, Rutgers" [A ♀, good condition] [AMNH]

(6) "Pleonecyptera serena Smith Paratype"; "Plumas Co., Calif., V.1"; "J. B. Smith Collection, Rutgers" [A ♂, poor condition, right forewing missing, right hindwing damaged] [AMNH]

(7) "Pleonecyptera serena Smith Paratype"; "140"; "Cal."; "Coquillet Collection"; "J. B. Smith Collection, Rutgers" [A ♀, good condition] [AMNH]

Discussion.—Apparently the bulk of the type-series was not labeled by Smith. The "♂ type" in the American Museum of Natural History has been selected, labeled, and is now designated the lectotype.

Trichopolia serrata Smith, 1900, U.S. Natl. Mus. Proc. 22(1203): 479.

"Habitat.—Texas, without definite locality. Two males, of which one is in very good condition."

"Type.—Cat. No. 4821, U.S.N.M."

Syntypes examined: 2 (USNM and AMNH)

- (1) "Trichopolia serrata Smith ♂ type"; "Tex."; "36311"; "Type No. 4821 U.S.N.M."; "♂ genitalia on slide #1714, March 29, 1938, J.F.G.C." [Good condition except nick in apex right hindwing] [USNM]
- (2) "Trichopolia serrata Smith cotype"; "Tex."; "J. B. Smith Collection, Rutgers" [A ♂, fair condition] [AMNH]

Discussion.—The "♂ type," the only syntype to bear the USNM type number 4821 listed in the description, has been selected, labeled, and is now designated the lectotype.

Agrotis serricornis Smith, 1888, U.S. Natl. Mus. Proc. 10: 458.

"Habitat.—Southern California."

Smith (1890, U.S. Natl. Mus. Bul. 38, p. 161, pl. 5, fig. 68) illustrated the kind of harpe and clasper found in this species and others.

Smith (1893, U.S. Natl. Mus. Bul. 44, p. 94) stated: "The type is in the Tepper collection."

Holotype.—In the collection of Michigan State University. The specimen is labeled "Type" [rhomboidal label]; "So. Cal."; "Tepper." It is a male in poor condition, the abdomen is glued on, and the left valve of the genitalia is missing. Smith did not indicate the number of specimens before him at the time of the original description. His comment in 1893, "The type . . .," and the fact that I found only one specimen labeled as type and from the type locality lead me to believe the specimen is a holotype.

Carneades servitus Smith, 1895, Ent. News 6: 336, pl. 15, fig. 8.

"Hab.—Male, Colorado, Bruce, No. 418; female, Calgary, 894, No. 38."

Hampson (1903, Catalogue of the Lepidoptera Phalaenae in the Collection of the British Museum, v. 4, p. 308) stated: "P1. LXVI. fig. 29" and "This

species is unknown to me; figured from a photograph from type in U.S. Nat. Mus." "♂, Canada."! McDunnough (1949, Amer. Mus. Novitates 1394, p. 8) stated: "As regards the second species, the name *servita* Smith (1895, Ent. News, vol. 6, p. 336, pl. 15, fig. 8) appears definitely applicable. It was based on single females from Colorado (Bruce) and Calgary, Alberta, and while the specimens are undoubtedly rather aberrant, judging by Smith's figure and the rather poorly colored one given by Hampson (1903, Catalogue of the Lepidoptera Phalaenae in the British Museum, vol. 4, pl. 66, fig. 29) they show in general all the characters of this smaller, paler form."

McDunnough (1950, Amer. Mus. Nat. Hist. Bul. 95(6): 391) stated: "The type is a female from Calgary, Alberta, in the United States National Museum,"

Rindge (1955, Amer. Mus. Nat. Hist. Bul. 106(2): 130) indicated that McDunnough (1949, p. 8) erred in stating the specimens were both females.

Syntypes examined: 2 (AMNH and USNM)

- (1) "Carneades servitus Smith Type"; "Colo., Bruce"; "418"; "Collection J. B. Smith" [A ♂, good condition, complete] [AMNH]
- (2) "Carneades servitus Smith Type"; "Calgary, 1894, A. H."; "Type No. 4 U.S.N.M."; "38"; "♀ genitalia on slide 2308, Apr., 1966, E.L.T." [Prior to genitalia preparation abdomen glued to thorax] [USNM]

Discussion.—Hampson, 1903, was wrong about the sex of the syntype in the U.S. National Museum and McDunnough, 1949, was wrong about the sex of the other syntype. The glued abdomen on the female type presents the possibility that the abdomen might not be authentic. Therefore, the specimen in the American Museum, a male, has been selected, labeled, and is now designated the lectotype.

Carneades sessile Smith, 1900, U.S. Natl. Mus. Proc. 22(1203): 431.

Habitat.—Colorado (Bruce); Hall Valley, August (Barnes). "One male (Bruce) has been in my collection for years; the female has been recently received from Dr. Barnes." "A third specimen, also from Colorado, near Denver, I refer doubtfully to this species."

Hampson (1903, Catalogue of the Lepidoptera Phalaenae in the Collection of the British Museum, v. 4, p. 236) stated: "Pl. LXIII, fig. 15" and "This species is unknown to me; figured from a photograph from type in U.S. Nat. Mus." "♂, Colorado."

Syntypes examined: 2 (USNM)

- (1) "Carneades sessile Smith ♂ type"; "Colo., Bruce"; "Type No. 5142 U.S.N.M."; "36511"; "♂ genitalia on slide 2223, Apr., 1966, E.L.T." [Fair condition]
- (2) "Carneades sessile Smith ♀ type"; "Hall Valley, Colo., Aug., W. Barnes"; "Barnes Collection"; "♀ genitalia on slide 2229, Apr., 1966, E.L.T." [Fair condition]

Discussion.—Because the ovipositor lobes have good specific characters in the genus *Euxoa*, the "♀ type" in the U.S. National Museum has been selected, labeled, and is now designated the lectotype.

Melicleptria sexata Smith, 1906, N.Y. Ent. Soc. Jour. 14: 17.

Habitat.—Aweme, Man., July 21, Mr. Criddle; Roundthwaite, Man., Marmont. "Three males and four females, all in at least fair condition. Two pairs are from Aweme, one male is from Roundthwaite and two females, dated July 27, have no locality label."

Lectotype.—In the American Museum of Natural History. Designated by Hardwick (1958, Canad. Ent. 90 (Sup. 6): 38). The lectotype is labeled "Melicleptria sexata Smith ♂ type"; "Criddle, Aweme, Man., 21.VII.04"; "J. B. Smith Collection, Rutgers"; "Lectotype, Desg. Hardwick, 1958, p. 38."

Schinia sexplagiata Smith, 1891, Amer. Ent. Soc. Trans. 18: 124.

Hab.—Foot-hills near Denver, Col. (Bruce). "A single good male is in the collection U.S. Nat. Museum, from Mr. Bruce, and this is the type." Smith (1893, U.S. Natl. Mus. Bul. 44, p. 275) stated: "The type is in the National Museum."

Holotype.—In the U.S. National Museum. The specimen is labeled "Schinia sexplagiata Smith Type"; "Foothills near Denver, Colo., D. Bruce, 31"; "Type No. 285 USNM."

Carneades siccata Smith, 1893, Ent. News 4(3): 99, pl. 6, fig. 1.

Hab.—Colorado. Bruce, No. 140." Smith (1894, Amer. Ent. Soc. Trans. 21: 46, pl. 2, fig. 1) again described this as new using the same plate and added: "Two males and one female are before me,"

Syntypes examined: 3 (USNM)

- (1) "Carneades siccata Smith Type ♂"; "Colo., Bruce"; "140"; "Type No. 133 U.S.N.M."; "♂ genitalia on slide 1803, Jan., 1964, E.L.T." [Good condition]
- (2) "Carneades siccata Smith Type ♂"; "Colo., Bruce"; "Type No. 133 U.S.N.M."; "36511"; "♂ genitalia on slide 2156, March, 1966, E.L.T." [Fair condition]
- (3) "Carneades siccata Smith Type ♀"; "Colo., Bruce"; "Type No. 133 U.S.N.M."; "♀ genitalia on slide 1804, Jan. 1964, E.L.T." [Fair condition]

Discussion.—Smith did not indicate the number of specimens in the type-series, but the range of size indicated multiple examples. The male syntype bearing the Bruce number "140" has been selected, labeled, and is now designated the lectotype.

Acronycta similana Smith, 1905, N.Y. Ent. Soc. Jour. 13(4): 190.

Habitat.—Chicago, Ill., June 15, Mr. A. Kwiat. ". . . and though there is only one good male

before me, Mr. Kwiat informs me that several others have been taken."

Holotype.—In the American Museum of Natural History. The specimen is labeled "Acronycta similana Smith ♂ type"; "Chicago, 6-15-04"; "J. B. Smith Collection Rutgers."

Cucullia similaris Smith, 1892, U.S. Natl. Mus.

Proc. 15: 41, pl. 2, fig. 3.

"HABITAT: Colorado, Platte Canon on flowers, 6,500 feet." "Three specimens, 2 ♂ and 1 ♀, have been examined and no variation detected."

Smith (1893, U.S. Natl. Mus. Bul. 44, p. 237) stated: "The type is in the National Museum."

Syntypes examined: 3 (2 USNM and 1 AMNH)

- (1) "Cucullia similaris Smith Type"; "Colo., Bruce"; "114"; "Type No. 265 U.S.N.M." [A ♂, valves of genitalia missing] [USNM]
- (2) "Cucullia similaris Smith Type"; "Colo., Bruce"; "109"; "Type No. 265 U.S.N.M." [A ♀, fairly good condition] [USNM]
- (3) "Cucullia similaris Smith Type"; "56, Platte Canon, Colo., on flowers, 6500 ft., D. Bruce"; "J. B. Smith Collection, Rutgers" [A ♂, abdomen and hindwings broken from specimen by verdigris, loose in box] [AMNH]

Discussion.—The locality indicated on the specimen in the American Museum of Natural History is the one cited by Smith, but the male syntype in the U.S. National Museum was the specimen that provided the valve of the male genitalia illustrated by Smith. The latter syntype bears Bruce's number 114. It has been selected, labeled, and is now designated the lectotype.

Oncocnemis simplex Smith, 1888, Insect Life 1: 20.

"Habitat, Ashley Valley, Utah." "A single, somewhat rubbed specimen, without fringes to primaries, in Mr. Edward's collection." Elsewhere in the description he commented that the chief difference between this species and *levis* is found in the male genitalia. This establishes the sex of the specimen described.

Smith (1889, Amer. Ent. Soc. Trans. 16: pl. 8, fig. 6) figured the valve of the male genitalia.

Smith (1893, U.S. Natl. Mus. Bul. 44, p. 159) stated: "The type is in the Edwards collection."

Holotype.—In the American Museum of Natural History. The specimen is labeled "Oncocnemis simplex Smith Type"; "Ashley Valley, Utah"; "Type No. AMNH"; "No. 10613 Collection Hy. Edwards." It is a male in rather worn condition; the abdomen is missing. There is glue on the posterior part of the thorax indicating that the abdomen or an abdomen had been attached by glue at some point. There are also signs of dermestid activity. A genitalia slide is in the American Museum collection. It is labeled "Lab. No. Holotype ♂, Oncocnemis simplex Sm., Remains of genitalia, Ashley Valley Ut., Entomological Branch, Ottawa, Canada." The remains of the genitalia consist of the uncus, tegumen, vinculum, and part of the aedeagus.

Schinia simplex Smith, 1891, Amer. Ent. Soc. Trans. 18: 129.

"Hab.—Colorado." "The specimens were collected by Mr. Bruce, and are distributed in a number of collections, including that of the U.S. Nat. Mus. The specimen before me is marked 'Denver, Light, July 21, 1887.' In the two specimens in the Museum collection, one, marked 'Foot-hills, Colo.' has entirely immaculate secondaries; the other specimen is much deeper in color throughout, and the marginal black band is much more distinct, and is complete, extending also along the costa."

Smith (1893, U.S. Natl. Mus. Bul. 44, p. 276) stated: "The types are in the National Museum."

Syntypes examined: 4 (USNM)

- (1) "Schinia simplex Smith Type"; "100, Foot-hills, Colo., D. Bruce"; "Type No. 286 U.S.N.M."; "♂ genitalia on slide #2829, Feb. 7, 1940, J.F.G.C." [Fair condition, right forewing broken from specimen, on pin]
- (2) "Schinia simplex Smith Type"; "Colo., Bruce"; "Type No. 286 U.S.N.M." [A ♀, abdomen glued to specimen]
- (3) "Schinia simplex Smith Type"; "Colo., Bruce"; "Type No. 286 U.S.N.M." [A ♂, genitalia broken]
- (4) "Schinia simplex Smith Type"; "Colo., Bruce"; "Collection William Schaus"; "♀ genitalia on slide #2830, Feb. 7, 1940, J.F.G.C." [Right hindwing broken from specimen]

Discussion.—The syntype from Denver, July 21, 1887, cited by Smith has not been located. The first two syntypes listed are the ones Smith mentioned as being in the U.S. National Museum. They bear the same kind of Smith "Type" label. Each of the other two syntypes has a different kind of name label. The male syntype bearing the Clarke male genitalia label has been selected, labeled, and is now designated the lectotype.

Oncocnemis simplicia Smith, 1903, N.Y. Ent. Soc.

Jour. 11(1): 12.

"Habitat: Colorado desert." "One male in fair condition."

Holotype.—In the American Museum of Natural History. The specimen is labeled "Oncocnemis simplicia Smith ♂ type"; "Colorado desert"; "Collection J. B. Smith."

Parora snowi Smith, 1908, N.Y. Ent. Soc. Jour. 16: 96.

"Habitat.—Brownsville, Texas, in June." "Five males and four females in fair to good condition. All the males and one of the females came from Prof. F. H. Snow and are dated; three females are from the Esper Ranch, without data, and are out of the collection of the Brooklyn Institute."

Syntypes examined: 7 (1 AMNH, 5 USNM, and 1 KU)

- (1) "Parora snowi Smith ♂ type"; "Brownsville, Texas, July"; "J. B. Smith Collection, Rutgers" [Good condition, complete] [AMNH]
- (2) "Parora snowi Smith ♀ type"; "Esper Rch.,

- Brownsville, Tex." [USNM]
- (3) "Parora snowi Smith ♂ cotype"; "Esper Rch., Brownsville, Tex."; "Type No. 34136 U.S.N.M."; "Collection Brklyn. Mus." [A ♀!] [USNM]
- (4) "Parora snowi Smith ♀ cotype"; "Esper Rch., Brownsville, Tex."; "Collection Brklyn Mus." [USNM]
- (5) "Parora snowi Smith ♀ cotype"; "Esper Rch., Brownsville, Tex."; "88"; "Collection Brklyn Mus." [USNM]
- (6) "Parora snowi Smith ♂ cotype"; "Brownsville, Tex." [A ♀, abdomen and right forewing missing!] [USNM]
- (7) "Parora snowi Smith ♀ cotype"; "Brownsville, Texas, June" [KU]

Discussion.—Two male syntypes have not been located. The two syntypes marked as males in the U.S. National Museum are females. The "♂ type" in the American Museum of Natural History has been selected, labeled, and is now designated the lectotype. "Esper Rch." is an abbreviation for Esperanza Ranch.

Agrotis solitaria Smith, 1885, Ent. Amer. 1: 14.

"*Agrotis festiva* var. *conflua*. Moeschler speaks of a ♀ recently received, and in his lot is a specimen marked *conflua*: but which is certainly not that species. I have *conflua* and *festiva*, and compared with them, this species differs in having a protuberant, roughened clypeus, very heavily armed fore tibia, and entirely different genitalia. I have named the species *solitaria*, and feel certain that Mr. Moeschler has allowed a superficial resemblance to mislead him."

Smith (1885, Stettin. Ent. Ztg. 46: 223) published essentially the same paper, but in German: "*Agrotis festiva* var. *conflua*. Hier, glaube ich, ist Herr Möscher im Irrthum. Unter den Insekten, die er an Herrn Cramer sandte, befindet sich ein Weibchen von Labrador, welches unter dem Namen *conflua* var. bekannt ist. Ob nur dies das Exemplar ist, welches er S. 287 erwähnt, weiss ich zwar nicht, möchte es aber annehmen. In diesem Falle würde sich Herr Möscher geirrt haben, da das erwähnte Exemplar sicher nicht zu *conflua* gehört. Die Stirne hat einen nabelförmigen Zapfen; die Vorderschienen sind sehr stark mit Dornen besetzt und haben an ihrer Spitze auf jeder Seite stärkere Dornborsten. Hingegen sind die Vorderschienen bei *festiva* nur sehr spärlich mit Dornen besetzt, auch fehlt der nabelförmige Zapfen auf der Stirne. Die Art ist ganz neu und von mir als *solitaria* beschrieben worden. Ich habe noch kein amerikanisches Exemplar von *conflua* gesehen, und glaube auch nicht, dass diese Art in Nordamerika vorkommt."

Smith (1888, U.S. Natl. Mus. Proc. 10: 462) again described this as new and stated: "*Habitat.*—Labrador." "A single ♀ specimen from Mr. Moeschler, ticketed '? var. *conflua*.'"

Smith (1893, U.S. Natl. Mus. Bul. 44, p. 104) stated: "The type is in the Moeschler collection."

McDunnough (1950, Amer. Mus. Nat. Hist. Bul. 95(6): 395) stated: "Smith, 1885, Ent. Amer., vol. 1, p. 14; 1885, Stettiner Ent. Zeitg., vol. 46, p. 223; 1887, Proc. U.S. Natl. Mus., vol. 10, p. 462." "The specific name is based on a single Labrador female Smith received from Moeschler as '*conflua* var.,' which he maintained was an error on account of the tuberculate front. Later Smith records the type as being in the Moeschler collection, but it is not figured by Bang-Haas among Moeschler's other agrotid types (1922, Iris), and there is no record as to its present location."

Holotype.—The holotype of this name is apparently lost.

Hadena (Xylophasia) sora Smith, 1903, Canad. Ent. 35(5): 133.

"*Habitat.*—Calgary, Canada, head of Pine Creek, July 2 and 15: Mr. F. H. Wolley Dod." "Two males in good condition."

McDunnough (1927, Canad. Ent. 59: 210) indicated that a cotype from Calgary was in the Canadian National Collection.

Syntypes examined: 1 (AMNH)

- (1) "Hadena sora Smith ♂ type"; "Calgary, F. H. W. Dod, 2.VII. 96"; "Head of Pine Creek"; "J. B. Smith Collection, Rutgers" [Very good condition, complete]

Discussion.—The syntype in the Canadian National Collection has not been examined. The "♂ type" in the American Museum of Natural History has been selected, labeled, and is now designated the lectotype. Donald LaFontaine has verified the existence of a male cotype in the Canadian National Collection.

Chorizagrotis sordida Smith, 1908, N.Y. Ent. Soc. Jour. 16: 86.

"*Habitat.*—Kaslo, B.C., September 6, Mr. Cockle." "1 ♂ and 5 ♀ ♀, fair or good condition."

Lectotype.—In the American Museum of Natural History. Designated by Todd (Oct. 4, 1968, Wash. Ent. Soc. Proc. 70(3): 277).

Schinia sordidus Smith, 1883, Amer. Ent. Soc. Trans. 10: 230.

"*Habitat.*—Selma, Alabama." "A single specimen in my collection, received from Prof. Riley after the plates were already completed and of which therefore no figures are given."

Smith (1893, U.S. Natl. Mus. Bul. 44, p. 279) stated: "The type is in the National Museum." He spelled the name *sordida*.

Holotype.—In the U.S. National Museum. The specimen is labeled "Schinia sordidus Smith Type"; "Selma, Ala., Sept. 1880, E. A. Schwarz"; "Collection of C. V. Riley"; "Type No. 291 USNM"; "Barnes Collection." It is a female. The Barnes collection label is obviously an error. Hampson (1903, p. 93, pl. LIX, fig. 12) figured the species from what he said was a photograph of the type, but in the explanation of the figure he stated: "♂, Texas." Both the sex and the locality are incorrect for the type.

Agrotis soror Smith, 1888, U.S. Natl. Mus. Proc. 10: 453.

"*Habitat*.—Montana." "Two ♀ specimens from Mr. Hulst furnish the types."

Smith (1893, U.S. Natl. Mus. Bul. 44, p. 78) stated: "The type is in the National Museum."

Lectotype.—In the U.S. National Museum. Designated by Todd. (Oct. 4, 1968, Wash. Ent. Soc. Proc. 70(3): 278).

Euxoa sotnia Smith, 1905, N.Y. Ent. Soc. Jour. 13(4): 195.

"*Habitat*.—Stockton, Utah, September 9–24." "A series of eight males and nineteen females, mostly fair, from Mr. Tom Spalding."

Syntypes examined: 11 (6 AMNH and 5 USNM)

- (1) "Euxoa sotnia Smith ♂ type"; "Stockton, Ut."; "IX-24-4"; "J. B. Smith Collection, Rutgers" [Rubbed and ragged, but complete] [AMNH]
- (2) "Euxoa sotnia Smith ♀ type"; "Stockton, Ut."; "IX-26-4"; "J. B. Smith Collection, Rutgers"; "♀ Genitalia mounted on slide 9158, F.H.R." [Rubbed] [AMNH]
- (3) "Euxoa sotnia Smith cotype"; "Stockton, Ut."; "IX-14-4"; "Barnes collection" [A ♂] [USNM]
- (4) "Euxoa sotnia Smith cotype"; "Stockton, Ut."; "IX-21-3, Tom Spalding"; "Collection Dr. H. G. Dyar"; "Type No. 9761"; "♀ genitalia on slide #2589, Oct. 11, 1939, J.F.G.C." [USNM]
- (5) "Euxoa sotnia Smith cotype"; "Stockton, Ut."; "IX-23-3, Tom Spalding"; "Acc. No. 10149 U.S.N.M."; "Type No. 33746 U.S.N.M." [A ♀, abdomen glued to thorax] [USNM]
- (6) "Euxoa sotnia Smith cotype"; "Stockton, Ut."; "IX-24-4"; "Barnes Collection"; "Not conspecific with type of *sotnia*" [A ♀] [USNM]
- (7) "Euxoa sotnia Smith cotype"; "Stockton, Ut."; "39809" [A ♀] [USNM]
- (8–11) "Euxoa sotnia Smith cotype"; same data as ♂ type except "IX-5-4"; "IX-9-4"; "IX-22-4"; "IX-25-4" [A ♂ and 3 ♀] [AMNH]

Discussion.—The "♀ type" has been selected, labeled, and is now designated the lectotype. It is in the collection of the American Museum of Natural History.

Hyppa spaldingi Smith, 1909, N.Y. Ent. Soc. Jour. 17: 59.

"*Habitat*.—Stockton, Utah, VI, 30." "A single female in good condition, which I take pleasure in naming after Mr. Tom Spalding, its collector, . . ."

Holotype.—In the American Museum of Natural History. The specimen is labeled "Hyppa spaldingi Smith Type" [♀ in upper right corner after generic name]; "Stockton, Utah, VI, 30-7, Tom Spalding"; "J. B. Smith Collection, Rutgers."

Agrotis spectanda Smith, 1890, Amer. Ent. Soc. Trans. 17: 54.

"*Habitat*.—California (Neumoegen)." "A single female only of this pretty and sharply defined species is at hand."

Smith (1893, U.S. Natl. Mus. Bul. 44, p. 103) stated: "The type is with Mr. Neumoegen."

Holotype.—In the U.S. National Museum. The specimen is labeled "Agrotis spectanda Smith Type"; "Cal."; "Col. B. Neumögen"; "Collection Brklyn. Mus." It is a female and the abdomen is glued on.

Acronycta sperata race *speratina* Smith, 1905, N.Y. Ent. Soc. Jour. 13(4): 190.

"*Habitat*.—Denver, Colorado, in July; Dr. Barnes." "A series of 10 males and 2 females from Colorado shows some interesting differences from the type, albeit none departs for a considerable distance beyond what we would consider typical. With only a few examples at hand a new species is indicated; with a good series the existence of a very distinct form is obvious, and this I have called *speratina*."

Syntypes examined: 4 (2 AMNH and 2 USNM)

- (1) "Acronycta speratina Smith ♂ type"; "Denver, Colo."; "J. B. Smith Collection, Rutgers" [Good condition] [AMNH]
- (2) "Acronycta speratina Smith ♀ cotype"; "Denver, Colo."; "July 8–15"; "J. B. Smith Collection, Rutgers" [Good condition] [AMNH]
- (3) "Acronycta speratina Smith cotype"; "Denver, Col." [A ♂] [USNM]
- (4) "Acronycta speratina Smith cotype"; "Colo., Oslar"; "1544" [A ♀] [USNM]

Discussion.—Eight syntypes including "♀ type" have not been located. The "♂ type" in the American Museum of Natural History has been selected, labeled, and is now designated the lectotype.

Agrotis sponsa Smith, 1888, U.S. Natl. Mus. Proc. 10: 457.

"*Habitat*.—Washington Territory." "One ♀ specimen, collection U.S. Nat. Mus."

Smith (1890, U.S. Natl. Mus. Bul. 38, p. 149) stated: "HABITAT.—Washington."

Smith (1893, U.S. Natl. Mus. Bul. 44, p. 90) stated: "The type is in the National Museum."

Holotype.—In the U.S. National Museum. The specimen is labeled "Agrotis sponsa Smith Type"; "Was. T."; "Holl."; "Type No. 108 USNM"; "Barnes Collection." It is a female. The Barnes collection label is an error.

Noctua sprete Smith, 1902, N.Y. Ent. Soc. Jour. 10: 36.

"*Habitat*.—Hastings, Florida." "Four males and six females from Mr. George Franck, in fair condition."

Syntypes examined: 5 (2 AMNH and 3 USNM)

- (1) "Noctua sprete Smith ♂ type"; "Hastings, Florida"; "Collection J. B. Smith" [Fair condition, complete] [AMNH]
- (2) "Noctua sprete Smith ♀ type"; same data [Good condition] [AMNH]
- (3) "Noctua sprete Smith ♂ cotype"; "Col. E. L. Graef"; "Type No. 33785" [USNM]

- (4) "Noctua sprete Smith cotype"; "575";
"Barnes Collection" [A ♀] [USNM]
(5) "Noctua sprete Smith cotype"; "Stockton,
Utah"; "Type No. 7663 U.S.N.M." [A ♀]
[USNM]

Discussion.—At least five and perhaps six syntypes have not been located. One syntype in the U.S. National Museum bears a locality label not cited by Smith. It was listed in the USNM type book from Stockton, Utah, and received from George Franck! The locality may not be authentic. The "♂ type" in the American Museum of Natural History has been selected, labeled, and is now designated the lectotype.

Anarta squara Smith, 1908, N.Y. Acad. Sci. Ann.
18(2): 112.

"Habitat: Greenland." "Two males and one female." "A somewhat defective female from Colorado may be referable here."

Syntypes examined: 3 (2 AMNH and 1 USNM)

- (1) "Anarta squara Smith ♂ type";
"Greenland"; "J. B. Smith Collection, Rutgers" [Left wings completely deformed, right side fair, complete] [AMNH]
(2) "Anarta squara Smith ♀ type"; "Greenl'd";
"Skinner Coll."; "J. B. Smith Collection, Rutgers" [Fair condition] [AMNH]
(3) "Anarta squara Smith ♂ cotype";
"Greenl'd"; "Skinner Coll."; "Barnes Collection"; "♂ gen. 249, 29 Mar. 33, F.H.B." [Very good condition] [USNM]

Discussion.—The "♂ type" in the American Museum of Natural History has been selected, labeled, and is now designated the lectotype. It is deformed, but the genitalia are intact. When the condition of the two male syntypes are compared, one wonders why Smith labeled the deformed specimen "♂ type" and the other "♂ cotype."

Homohadena stabilis Smith, 1895, Ent. News 6: 340,
pl. 15, fig. 15.

The description consists of a name, an illustration, and a locality (Calgary, Canada, p. 332).

Smith (1895, Ent. News 7(1): 29) described the species in detail, referred to the plate and figure of the previous issue, and stated: "Hab.—Calgary, in July." "Mr. Dod sent me five specimens representing both sexes, all in good condition except one from which the figure was made. This was used, because it was mounted on a low pin like the other specimens photographed, and will serve only to give the general outline." "It seems not uncommon, and besides the specimens sent me, I have seen a number of others sent to the late Mr. Neumoegen."

Holotype.—In the U.S. National Museum. The specimen is a female in very poor condition labeled "Calgary, 5/VIII/93" and "Acc. No. 30410 U.S.N.M." It was not marked as a type by Smith. It is unfortunate that this poor example is the holotype. Smith never intended it to be the holotype, but the original manuscript was published in two numbers of the journal. The first number contained the descriptions of 10 new species

and the plate XV with 16 new species and 1 previously described species, *Neuronina americana* Smith, 1894. The explanation of the plate gives all the names of the new species, and a comment in the introduction of the paper indicates they are all from Calgary, Canada. Thus the names for the six new species that were formerly described in the first number of volume 7 of the Entomological News must be considered to have been based on holotypes and the specimens figured. The other specimens of *stabilis* mentioned by Smith in the second part of the paper are in much better condition, but they must be considered subsequent specimens even though they are marked "Type 1," "Type 2," and "Type 3." The first two are in the U.S. National Museum and the last in the American Museum of Natural History. The fifth specimen has not been located.

Thyreion stena Smith, 1906, N.Y. Ent. Soc. Jour.
14: 15.

"Habitat.—Golden and Fort Collins, Colo., in June." "Two males, one female; one pair from Prof. C. P. Gillette, one taken by myself at Golden."

Syntypes examined: 2 (AMNH and USNM)

- (1) "Thyreion stena Smith ♂ type"; "Colo.,
556"; "Collection J. B. Smith" [Rather worn, complete] [AMNH]
(2) "Thyreion stena Smith ♀ type"; "Ft. Collins,
Col., 6-14-99"; "♀ genitalia on slide #2828,
7 Feb. 1940, J.F.G.C." [USNM]

Discussion.—It is not known whether the "♂ type" was the male received from Professor Gillette or the one Smith took at Golden, Colo. The "♂ type" in the American Museum of Natural History has been selected, labeled, and is now designated the lectotype.

Copipanolis stigma Smith, 1890, Ent. Amer. 6(11): 220.

"Hab.—Florida." "A single male specimen from Mrs. Slosson's collection."

Smith (1893, U.S. Natl. Mus. Bul. 44, p. 113) stated: "The type is in Mrs. Slosson's collection."

Holotype.—In the American Museum of Natural History. The specimen is labeled "Copipanolis stigma Smith Type."; "Florida"; "Collection Mrs. A. T. Slosson, Ac. 26226." It is male, complete, and in fair condition, but verdigris is beginning to form on the pin.

Miodera stigmata Smith, 1908, N.Y. Acad. Sci. Ann.
18(2): 102.

"Habitat: Witch Creek, Cal., Jan. 12-Feb. 3." "Ten males, in good or fair condition."

Syntypes examined: 7 (5 AMNH and 2 USNM)

- (1) "Miodera stigmata Smith ♂ type";
"Witch Cr., Cal., 1.12"; "J. B. Smith Collection, Rutgers" [Good condition, complete] [AMNH]
(2-5) "Miodera stigmata Smith cotype"; same data except "1.13"; "1.11"; "1.19"; "1.15" [4 ♂, fair to good condition] [AMNH]
(6) "Miodera stigmata Smith cotype";
"Witch Cr., Cal., 1-30"; "Barnes collection" [A ♂] [USNM]
(7) "Miodera stigmata Smith cotype"; same data except "1-20" [A ♂] [USNM]

Discussion.—The "♂ type" in the American Museum of Natural History has been selected, labeled, and is now designated the lectotype.

Carneades stigmatalis Smith, 1900, U.S. Natl. Mus. Proc. 22(1203): 425.

Habitat.—Glenwood Springs, Colorado, August (Dr. Barnes). "One male and 5 females, all in fair condition." *Type.*—Cat. No. 4805, U.S.N.M." McDunnough (1952, Amer. Mus. Novitates 1550, p. 3) in a discussion of *Carneades atrofusca* Smith stated: "*Atrofusca* Smith (1900, Proc. U.S. Natl. Mus., vol. 22, p. 447), based most probably on a mixed series but with a Glenwood Springs, Colorado, specimen marked as type, has been listed as a race of *stigmatalis* Smith (1900, *ibid.*, vol. 22, p. 425). It is, however, now known, from a comparison of slides of the genitalia of the male holotypes in the United States National Museum, that the two names refer to distinct species."

Syntypes examined: 6 (4 USNM and 2 AMNH)

- (1) "Carneades stigmatalis Smith ♂ type"; "Glenwood Spring, Col., 8-1894"; "Type No. 4805 U.S.N.M."; "36311"; "♂ genitalia on slide #2597, Oct. 15, 1939, J.F.G.C." [USNM]
- (2) "Carneades stigmatalis Smith ♀ type"; "Glenwood Spring, Col., 8-1894"; "Type No. 4805 U.S.N.M."; "36311" [USNM]
- (3) "Carneades stigmatalis Smith cotype"; "Glenwood Sgs., Colo."; "Aug. 1-7"; "Barnes collection" [A ♀] [USNM]
- (4) "Carneades stigmatalis Smith cotype"; "Glenwood Sgs., Colo."; "Aug. 16-23"; "Barnes collection" [A ♀] [USNM]
- (5) "Carneades stigmatalis Smith cotype"; "Glenwood Springs, Col., 8-1892, W. Barnes"; "J. B. Smith Collection, Rutgers" [A ♂] [AMNH]
- (6) "Carneades stigmatalis Smith cotype"; "Glenwood Springs, Col., 8-1894, W. Barnes"; "J. B. Smith Collection, Rutgers" [A ♂] [AMNH]

Discussion.—In line with the McDunnough restriction and to insure that the "♂ type" is considered the type-specimen, that syntype in the U.S. National Museum has been selected, labeled, and is now designated the lectotype.

Leucania stolata Smith, 1894, Amer. Ent. Soc. Trans. 21: 76, pl. 5, fig. 8.

Hab.—Arizona, Neumoegen. "A single female from Mr. Neumoegen's collection is marked '*Heliophila stolata* Grote Type.' I cannot find any description of the species; but present the above, under Mr. Grote's name, as the species seems to be a good one."

Holotype.—In the U.S. National Museum. The specimen is labeled "Leucania stolata Smith ♀ type"; "Arizona"; "Col. B. Neumoegen"; "Type No. 33850 USNM"; "♀ genitalia on slide 555 JGF." Smith or some other person has apparently removed the Grote manuscript name label.

Orthosia straminea Smith, 1907, Amer. Ent. Soc. Trans. 33: 132.

Hab.—Glenwood Springs, Colorado, October 16th to 23rd. "One good male, from Dr. Barnes." Smith (1907, Amer. Ent. Soc. Trans. 33: 357) stated: "I have only two males, both from Colorado; the type, a fairly good example from Glenwood Springs, in October; the other a decidedly rubbed specimen without date or other information." He figured the genitalia on plate 10, figure 5.

Holotype.—In the American Museum of Natural History. The specimen is labeled "Orthosia straminea Smith ♂ type"; "Glenwood Sgs. Colo."; "Oct. 16-23"; "Collection J. B. Smith." It is badly broken by the formation of verdigris, but the parts are still on the pin. The tip of the abdomen is missing. There is a genitalia slide that probably belongs with the type in the American Museum of Natural History. It consists of the tips of the valves and the uncus. One valve still has the process of the inner face intact.

Yrias strigalis Smith, 1903, Amer. Ent. Soc. Trans. 29(3): 216.

Hab.—Arizona. "One male and two females from the Graef, Huist and Neumoegen collections respectively."

Syntypes examined: 3 (2 AMNH and 1 USNM)

- (1) "Yrias strigalis Smith ♂ type"; "Ariz."; "Collection J. B. Smith" [Fairly good condition, complete] [AMNH]
- (2) "Yrias strigalis Smith ♀ type"; same data [Good condition] [AMNH]
- (3) "Yrias strigalis Smith cotype"; "Ariz."; "Collection G. D. Hulst" [A ♀] [USNM]

Discussion.—The "♂ type" in the American Museum of Natural History, the only male syntype, has been selected, labeled, and is now designated the lectotype.

Calophasia strigata Smith, 1891, Amer. Ent. Soc. Trans. 18:107.

Hab.—Colorado (Bruce). "Two female specimens are before me, neither of them entirely perfect, but yet in excellent condition. One of the specimens is in the United States National Museum."

Smith (1893, U.S. Natl. Mus. Bul. 44, p. 156) stated: "The type is in the National Museum."

Syntypes examined: 2 (USNM)

- (1) "Calophasia strigata Smith Type"; "Col."; "Type No. 182 U.S.N.M."; "Acc. No. 23933 U.S.N.M."; "♀ Genitalia Slide: USNM 1812, J. G. Franclemont" [Apex left forewing broken, wings rubbed]
- (2) "Calophasia strigata Smith Type"; "Col."; "185"; "Type No. 182 U.S.N.M."; "Acc. No. 25975 U.S.N.M." [A ♀, wings fair, abdomen missing]

Discussion.—The syntype with the Franclemont genitalia preparation has been selected, labeled, and is now designated the lectotype.

Eucalyptera strigata Smith, 1902, N.Y. Ent. Soc. Jour. 10: 45

"*Habitat*.—Hackley, Texas, May 29; September 1–10." "Three males and six females from Mr. George Franck, who has others."

Syntypes examined: 8 (7 AMNH and 1 USNM)

- (1) "Eucalyptera strigata Smith δ type"; "Hackley, IX-1-10"; "Tex."; "J. B. Smith Collection, Rutgers" [Good condition, complete] [AMNH]
- (2) "Eucalyptera strigata Smith ϕ type"; same data [Fair condition, verdigris breaking thorax] [AMNH]
- (3) "Eucalyptera strigata Smith δ cotype"; same data [Broken by verdigris, right hindwing torn] [AMNH]
- (4) "Eucalyptera strigata Smith ϕ cotype"; same data [Wings fair, abdomen missing] [AMNH]
- (5) "Eucalyptera strigata Smith δ cotype"; "Hackley, V-29"; "Tex."; "J. B. Smith Collection, Rutgers" [Poor condition, abdomen missing] [AMNH]
- (6) "Eucalyptera strigata Smith ϕ cotype"; same data [Hindwings and abdomen broken from specimen, in box] [AMNH]
- (7) "Eucalyptera strigata Smith ϕ cotype"; same data [Poor condition] [AMNH]
- (8) "Eucalyptera strigata Smith ϕ cotype"; "Hackley, V-29"; "Tex."; " ϕ gen. on slide, AGR. [A. Glenn Richards]" [USNM]

Discussion.—The " δ type" in the American Museum of Natural History has been selected, labeled, and is now designated the lectotype.

Rancora strigata Smith, 1892, Ent. News 3(10): 253, pl. 10, fig. 1, row 1.

"*Hab.*—Victoria, B.C., one ϕ ; Mr. Neumoegen." Smith (1894, Amer. Ent. Soc. Trans. 21: 83, pl. 1, fig. 1, row 1) again described this as new using the same plate. He stated: "A single male specimen in Mr. Neumoegen's collection is the type, and from it the figure was made."

Holotype.—In the U.S. National Museum. The specimen is labeled "Rancora strigata Smith Type"; "Victoria, B.C."; "Col. B. Neumoegen"; "Type No. 33855 USNM"; " δ genitalia on slide 1893 JGF."

Acronycta strigulata Smith, 1897, Ent. News 8(6): 150 (in key).

Smith (1898, U.S. Natl. Mus. Proc. 21(1140): 92, pl. 12, fig. 6, pl. 18, fig. 26, pl. 20, fig. 16) described and illustrated the species in detail and stated:

"*Habitat*.—Colorado (Bruce); Glenwood Springs in July (Dr. Barnes)." "I have three males and two females before me which do not vary, except in size, and that very slightly."

Syntypes examined: 5 (3 USNM and 2 AMNH)

- (1) "Acronycta strigulata Smith Type δ "; "Colo., Bruce"; "Type No. 3664 U.S.N.M." [Hindwings and abdomen broken from specimen, both valves of genitalia missing] [USNM]

- (2) "Acronycta strigulata Smith Type ϕ "; "Glenwood Springs, Col., 7/19 1894, W. Barnes"; "Type No. 3664 U.S.N.M." [Rubbed, left hindwing broken] [USNM]
- (3) "Acronycta strigulata Smith ϕ cotype"; "Glenwood Springs, Col., 7-1895, W. Barnes"; "32" [Fair condition] [USNM]
- (4) "Acronycta strigulata Smith δ cotype"; "Colo., Bruce"; "Collection J. B. Smith" [Fair condition, complete] [AMNH]
- (5) "Acronycta strigulata Smith δ cotype"; same data [Poor condition, broken by verdigris] [AMNH]

Discussion.—I am unable to determine which of the two female syntypes was illustrated by Smith. The antennae of the two are in different positions from those in the illustration! Because of the broken and incomplete condition of the two syntypes marked " δ type" and " ϕ type," the " δ cotype" in fair condition in the American Museum of Natural History has been selected, labeled, and is now designated the lectotype.

Erastria strigularia Smith, 1900, N.Y. Ent. Soc. Jour. 8(3): 173.

"*Habitat*: Florida (Mrs. Slosson), 1 female only."

Holotype.—In the American Museum of Natural History. The specimen is labeled "Erastria strigularia Smith ϕ type"; "Florida"; "Collection J. B. Smith." All that remains of the specimen are the four wings. They are mounted on a card. Rindge (1955, p. 131) said that only the "forewings" remained. This is an error, probably caused by a change in the spelling of *four* to *fore* in the course of publishing his paper. The specimen was a male, not a female as stated by Smith. The left hindwing has the simple frenulum of the male. The frenulum of the right hindwing is missing.

Eucalyptra stygialis Smith, 1903, Amer. Ent. Soc.

Trans. 29(3): 219.

"*Hab.*—Southern Arizona, Poling." "One male example in good condition, received from Dr. Barnes."

Holotype.—In the American Museum of Natural History. The specimen is labeled "Eucalyptra stygialis Smith δ type"; "So. Arizona, Poling"; "J. B. Smith Collection Rutgers."

Cerapoda stylata Smith, 1893, Ent. News 4(3): 99, pl. 6, fig. 4.

"*Hab.*—Colorado, Bruce. Nos. 23, 99, 208."

Smith (1894, Amer. Ent. Soc. Trans. 21: 69, pl. 2, fig. 4) again described this as new, using the same plate, and stated: "One male and three females are before me, all save one from Mr. Bruce."

Barnes and Benjamin (1923, Contrib. Nat. Hist. Lepidoptera N. Amer. 5(2): 76) stated: "The type of *stylata* from Colorado, in the National Museum,"

Syntypes examined: 4 (2 USNM and 2 AMNH)

- (1) "Cerapoda stylata Smith Type ϕ "; "Colo., Bruce"; "208"; "Type No. 195 U.S.N.M."; " ϕ Genitalia Slide: USNM 1816, J. G. Franclemont" [Fair condition] [USNM]

- (2) "Cerapoda stylata Smith Type ♀"; "Type No. 195 U.S.N.M." [Genitalia destroyed by dermestid damage] [USNM]
- (3) "Cerapoda stylata Smith Type ♂"; "Colo., Bruce"; "23"; "Collection J. B. Smith" [Fair condition] [AMNH]
- (4) "Cerapoda stylata Smith Type ♀"; "Colo., Bruce"; "J. B. Smith Collection, Rutgers" [Right wings and abdomen missing] [AMNH]

Discussion.—The female syntype in the U.S. National Museum without locality label is probably the specimen illustrated by Smith. It lacks antennae and cannot therefore be recognized with certainty, but by eliminating the other three syntypes from consideration as specimen illustrated, that syntype becomes the undoubted specimen figured. Two of the syntypes bear the numbers listed by Smith as on the specimens. In an equal choice of one of these as lectotype, I would prefer the only male syntype, but other factors must be considered. Barnes and Benjamin, 1923, restricted the type to the syntype bearing the locality label "Colo., Bruce" in the U.S. National Museum. To insure that the syntype is considered the type-specimen, it has been labeled and is now designated the lectotype.

***Mamestra rubrica* var. *subapicalis* Smith, 1888, U.S.**

Natl. Mus. Proc. 10: 462.

Habitat.—Washington Territory, California."

Smith (1892, U.S. Natl. Mus. Proc. 15: 75) indicated this was a species of *Xylomiges* and stated: "HABITAT: Sierra Nevada, Nevada County, Lake County, Placer County, in June, all in California; Washington." "Several specimens are in the collection of the U.S. National Museum (through C. V. Riley), some of them with the red number 336." He figured the "harpe and clasper" on plate 3, figure 7.

Smith (1893, U.S. Natl. Mus. Bul. 44, p. 234) stated: "Mr. Grote's type [*X. perlubens* Grt.] is in the British Museum and is like my *subapicalis*, the type of which is in the National Museum."

Syntypes examined: 2 (USNM and AMNH)

- (1) "Mamestra subapicalis Smith ♂ type"; "Was. T."; "Holl."; "Collection J. B. Smith"; "Type No. 259 U.S.N.M." [Valves of male genitalia missing, apical part with some dermestid damage, wings fair] [USNM]
- (2) "Mamestra subapicalis Smith Type"; "Sier. Nev., Cal."; "No. 10316 Collection Hy. Edwards"; "Type, AMNH" [A ♀, abdomen hollowed by museum pests, ovipositors missing] [AMNH]

Discussion.—There are five specimens in the U.S. National Museum with the number "336" mentioned by Smith in 1892. Two bear Smith determination labels "*Xylomiges subapicalis* Smith," but none are marked type and I consider them all subsequent material studied by Smith after the original description. There is a Smith slide labeled "#8a"; "207"; "M. subapicalis Smith" in the U.S. National Museum. The slide contains two valves that are undoubtedly from the "♂ type." Smith's comment in 1893 is strange considering the fact he listed two localities in the original description

and in consideration of the existence of the female syntype in the Hy. Edwards collection. The "♂ type" in the U.S. National Museum has been selected, labeled, and is now designated the lectotype.

***Melicleptra subatra* Smith, 1906, N.Y. Ent. Soc. Jour. 14: 18.**

Habitat.—Mt. Rainier, Wash.; Gallatin Co., Mont., elevation 9,400 feet, July 10. "Two males and one female in tolerably good condition; one male and one female numbered 631 of the Washington Experiment Station."

Lectotype.—In the American Museum of Natural History. Designated by Hardwick (1958, Canad. Ent. 90 (Sup. 6): 38). The lectotype is labeled "*Melicleptra subatra* Smith ♀ type"; "Was Exp. Sta. no. 631"; "Mt. Rainier, Wash."; "J. B. Smith Collection, Rutgers"; "Lectotype, Desig. Hardwick 1958 p. 38."

***Hadenella subjuncta* Smith, 1898, Canad. Ent. 30: 323.**

Habitat.—Glenwood Springs, Colo., Aug.; Dr. Barnes. Garfield County, Colo., 6,000 feet; Bruce. Calgary, Canada, July 9th, 16th, 19th and 27th; Mr. Dod. "Thirteen specimens are under examination and others are in collections."

Syntypes examined: 8 (USNM)

- (1) "Hadenella subjuncta Smith ♂ type"; "Glenwood Springs, Col., 9/1 1893, W. Barnes"; "Type No. 4149 U.S.N.M."; "36311"; "♂ genitalia on slide #2086, Oct. 6, 1938, J.F.G.C."
- (2) "Hadenella subjuncta Smith ♀ type"; "Colo., Bruce"; "755, Garfield Co., Colo., 6000 ft., Bruce"; "Type No. 4149 U.S.N.M."; "A"; "♀ genitalia on slide #2087, Oct. 6, 1938, J.F.G.C."
- (3) "Hadenella subjuncta Smith cotype"; "Edge Calgary, 9-VII-93"; "Type No. 4149 U.S.N.M."; "36511" [A ♂]
- (4) "Hadenella subjuncta Smith cotype"; "Glenwood Springs, Col., 8-1892, W. Barnes"; "♀ genitalia on slide #2579, Oct. 8, 1939, J.F.G.C."
- (5) "Hadenella subjuncta Smith cotype"; same data [A ♀]
- (6) "Hadenella subjuncta Smith cotype"; same data except "6/18 1895" [A ♀]
- (7) "Hadenella subjuncta Smith cotype"; "Colo., Bruce"; "754, Garfield Co., Colo., 60000 ft., Bruce"; "Type No. 4149 U.S.N.M."; "A" [A ♂]
- (8) "Hadenella subjuncta Smith cotype"; "Edge Calgary, 27/VII/93"; "14"; "Type No. 4149 U.S.N.M."; "36511" [A ♀]

Discussion.—Five syntypes have not been located. At least two should be from Calgary and bear the dates July 16 and 19. There are two other specimens in the U.S. National Museum from Glenwood Springs, Colo., that bear Smith determination labels, but they are not marked "cotype." J. G. Franclemont has studied the complex of species related to *Oligia toisa* (Grote). He has indicated to me that the first seven syntypes listed

are equal to *tonsa* and he has suggested that the other syntype be selected as the lectotype. This would conserve the name for a distinct species and would maintain the usage of Hampson (1908, Catalogue of the Lepidoptera Phalaenae in the Collection of the British Museum, v. 7, p. 391, pl. CXVIII, fig. 4) and others, particularly Canadian entomologists. Accordingly, the female syntype dated "27/VII/93" from Edge Calgary and bearing the number "14" has been selected, labeled, and is now designated the lectotype.

Andropolia submissa Smith, 1911, N.Y. Ent. Soc. Jour. 19(3): 138.

"Habitat.—Provo, Utah, VIII, 8, Mr. Tom Spalding."
"Five females in good condition,"

Syntypes examined: 5 (4 AMNH and 1 USNM)

- (1) "Andropolia submissa Smith Type";
"Provo, Utah, VIII-8-9, Tom Spalding";
"J. B. Smith Collection, Rutgers" [A ♀,
good condition] [AMNH]
- (2-4) "Andropolia submissa Smith Paratype";
same data [3 ♀ ♀] [AMNH]
- (5) "Andropolia submissa Paratype"; "Provo,
Utah, VIII-8-9, Tom Spalding" [A ♀]
[USNM]

Discussion.—The syntype marked "Type" in the American Museum of Natural History has been selected, labeled, and is now designated the lectotype.

Noctua substrigata Smith, 1895, Ent. News 6: 332,
pl. 15, fig. 4.

"Hab.—Calgary." "Mr. Dod has sent me several specimens of this insect which seems to be not uncommon at Calgary in July and August."

Syntypes examined: 3 (2 USNM and 1 AMNH)

- (1) "Noctua substrigata Smith Type 1"; "Edge
of Calgary, 5/VII/93"; "Type No. 5 U.S.N.M."
[A ♂, very good condition] [USNM]
- (2) "Noctua substrigata Smith Type 2"; "Edge
of Calgary, 9/VII/93"; "Type No. 5
U.S.N.M."; "36511" [A ♂, good condition]
[USNM]
- (3) "Noctua substrigata Smith Type 3"; "Edge
Calgary, 4/VIII/93"; "J. B. Smith Collection,
Rutgers" [A ♂, very good condition]
[AMNH]

Discussion.—The syntype marked "Type 1" in the U.S. National Museum is the specimen figured by Smith. It has been selected, labeled, and is now designated the lectotype.

Synedoida subtermina Smith, 1900, U.S. Natl. Mus.
Proc. 22(1203): 492.

"Habitat.—San Diego County, California." "Two females in good condition, one of them with a grayish bloom over the luteous ground."

"Type.—Cat. No. 4830, U.S.N.M."

Syntypes examined: 2 (USNM and AMNH)

- (1) "Synedoida subtermina Smith ♀ type";
"San Diego Co., Cal."; "302"; "Type No.
4830 U.S.N.M."; "♀ genitalia on slide #630,
25 Sept. 1936, J.F.G.C." [USNM]

- (2) "Synedoida subtermina Smith ♀ cotype";
"San Diego Co., Cal."; "302"; "Collection
J. B. Smith" [Good condition] [AMNH]

Discussion.—The "♀ type" in the U.S. National Museum is the only syntype to bear the USNM type number listed in the original description. It has been selected, labeled, and is now designated the lectotype.

Taeniocampa subterminata Smith, 1888, U.S. Natl.
Mus. Proc. 10: 476.

"Habitat.—Northeastern and Middle States." "It is much more common than *alia*, and I have found specimens in almost every collection I have seen." Smith (1890, U.S. Natl. Mus. Proc. 12(781): 488, pl. 23, fig. 19) illustrated the "harpe and clasper" under the name *T. subterminalis* and stated: "HABITAT.—Maine, New Hampshire, New York." Smith (1893, U.S. Natl. Mus. Bul. 44, p. 206) stated: "Types are in the National Museum and in the Tepper and Fernald collections."

Syntypes examined: 2 (MSU and USNM)

- (1) "Taeniocampa subterminata Smith"; "Type
[rhomboidal label]"; "N.Y. State" [A ♀, good
condition] [MSU]
- (2) "Taeniocampa subterminata Smith Type";
"Collection J. B. Smith"; "Type No. 242
U.S.N.M." [A ♀, abdomen and hindwings
once glued to thorax, abdomen loose in
box] [USNM]

Discussion.—The female syntype in the collection of the Michigan State University bears a locality label and is in the best condition. It has been selected, labeled, and is now designated the lectotype.

Charadra sudena Smith, 1908, N.Y. Ent. Soc. Jour.
16: 80.

"Habitat.—Miami, Florida." "Two males and one female from Dr. Barnes; all of them a little discolored, but otherwise in good condition."

Syntypes examined: 3 (2 AMNH and 1 USNM)

- (1) "Charadra sudena Smith ♂ type"; "Miami,
Fla."; "J. B. Smith Collection, Rutgers"
[AMNH]
- (2) "Charadra sudena Smith ♀ type"; same
data [AMNH]
- (3) "Charadra sudena Smith ♂ cotype";
"Miami, Fla." [USNM]

Discussion.—The "♂ type" in the American Museum of Natural History has been selected, labeled, and is now designated the lectotype.

Taeniocampa suffusa Smith, 1888, U.S. Natl. Mus.
Proc. 10: 474.

"Habitat.—Colorado, Arizona." "Two specimens, ♂ and ♀."

Smith (1890, U.S. Natl. Mus. Proc. 12(781): 483, pl. 23, fig. 11) illustrated the "harpe and clasper" of the male genitalia.

Smith (1893, U.S. Natl. Mus. Bul. 44, p. 203) stated: "The type is in the Graef collection."

Syntypes examined: 2 (USNM)

- (1) "Taen. suffusa Smith, Type ♂"; "Col."; "Coll. Edw. L. Graef"; "Type No. 33803 U.S.N.M." [A ♂, right valve broken]
 (2) "Taen. suffusa Smith, Type ♂"; "Arizona"; "Holl."; "Type No. 240, U.S.N.M." [A ♂, left valve missing]

Discussion.—Smith said that he had one specimen of each sex, but both syntypes are males and each name type label has a male sex symbol in the upper right corner and the word "type" in the lower left. He figured the "harpe and clasper" in 1890, but I have been unable to locate a slide that might have been prepared from either of the two syntypes. There is one Smith slide in the U.S. National Museum, number 257, that is labeled "Mam. suffusa," but it is a mount of an entire genitalia and must, therefore, be from some other specimen. The syntype that bears the label "Type No. 240, U.S.N.M." obviously came to the collection of the U.S. National Museum from Smith with his early collection sometime between 1888 and prior to the publication of his "Catalogue" in 1893. It was entered in the type book of this museum on June 24, 1896, as "Type." It is, therefore, peculiar that Smith stated in the 1893 publication that the type was in the Graef collection. In such instances he normally made some such statement as "Types are in Graef collection and the U.S. National Museum." His statement might be construed by some as equivalent to lectotype selection. Because he did not have a holotype concept and because it can be demonstrated that the article "The" was not used by him in the sense of "the one and only," there might be some objection to considering this lectotype selection. As in other instances, I select, label, and designate the same syntype, from "Col.," as the lectotype. That specimen was from the Graef collection and came to the U.S. National Museum via the collection of the Brooklyn Museum.

Epizeuxis suffusalis Smith, 1899, N.Y. Ent. Soc. Jour. 7(4): 233.

"Habitat: Santa Rita Mts., Ariz. June 16, 19, E. A. Schwarz." "One male and one female only, the latter the larger and much the more obscure."

Syntypes examined: 2 (USNM and AMNH)

- (1) "Epizeuxis suffusalis Smith ♂ type"; "S. Rita Mts., Ar., June 19, 98"; "E. A. Schwarz Collection"; "Type No. 4778 U.S.N.M."; "♂ gen. #43, 6 Feb. 30, C.H." [USNM]
 (2) "Epizeuxis suffusalis Smith ♀ type"; "S. Rita Mts., Ar., Jun 16, 96"; "E. A. Schwarz Collector"; "J. B. Smith Collection, Rutgers" [AMNH]

Discussion.—The "♂ type" in the U.S. National Museum has been selected, labeled, and is now designated the lectotype.

Hadena susquesa Smith, 1908, N.Y. Acad. Sci. Ann. 18(2): 116.

"Habitat: Claremont, Cal. (Carl Baker); San Diego, Cal. (Frank Merrick)." "Two male examples, in good condition, neither with date of capture. The example from Mr. Baker has been in my collection a

long time awaiting a mate; the example from Mr. Merrick is just received, and, while it is not exactly a mate, it is at least a duplicate that shows the species to be a good one, and not discolored, as I had suspected."

Hampson (1910, Catalogue of the Lepidoptera Phalaenae in the Collection of the British Museum, v. 9, p. 501) stated: "Pl. CXLVII. fig. 21" and "This species is unknown to me; figured from a drawing from type in coll. J. B. Smith," "♂, California."

Syntypes examined: 1 (AMNH)

- (1) "Hadena susquesa Smith ♂ type"; "Claremont, Cal., Baker"; "J. B. Smith Collection, Rutgers"

Discussion.—The "♂ type" in the American Museum of Natural History, the only syntype located, has been labeled and is now designated the lectotype. The male from San Diego, Calif., from Frank Merrick is presumed to be lost.

Xylomiges tantiva Smith, 1909, N.Y. Ent. Soc. Jour. 17: 67.

"Habitat.—Redington, Arizona." "Five males and four females from Dr. Wm. Barnes, at whose suggestion I give the specific name. Some of the examples are marked merely southern Arizona, Poling, and were probably taken by that gentleman."

Syntypes examined: 7 (2 AMNH and 5 USNM)

- (1) "Xylomiges tantiva Smith ♂ type"; "So. Arizona, Poling"; "J. B. Smith Collection, Rutgers" [Fair condition, complete] [AMNH]
 (2) "Xylomiges tantiva Smith ♀ type"; "Redington, Arizona"; "J. B. Smith Collection, Rutgers" [Good condition] [AMNH]
 (3) "Xylomiges tantiva Smith cotype"; "Redington, Arizona"; "Barnes collection" [A ♂] [USNM]
 (4) "Xylomiges tantiva Smith cotype"; same data [A ♀] [USNM]
 (5) "Xylomiges tantiva Smith cotype"; "Redington, Arizona"; "Col. Jacob Doll" [A ♀] [USNM]
 (6) "Xylomiges tantiva Smith cotype"; "So. Cala., Poling"; "Barnes collection" [A ♀, head missing] [USNM]
 (7) "Xylomiges tantiva Smith cotype"; "So. Arizona, Poling"; "Col. Jacob Doll"; "Barnes collection" [A ♂] [USNM]

Discussion.—The "♂ type" in the American Museum of Natural History has been selected, labeled, and is now designated the lectotype.

Hadena tapeta Smith, 1900, U.S. Natl. Mus. Proc. 22(1203): 467.

"Habitat.—Cocoanut Grove, Florida (E. A. Schwarz)." "A single good male from the U.S. National Museum." "Type.—Cat. No. 4822, U.S.N.M."

Holotype.—In the U.S. National Museum. The specimen is labeled "Hadena tapeta Smith ♂ type"; "Cocoanut Grove, Fla."; "E. A. Schwarz, collector"; "Type No. 4822 USNM"; "♂ genitalia on slide 2553 JFGC."

Acronycta tartarea Smith, 1903, *Canad. Ent.* 35(5): 127, pl. 4, fig. 1 (δ valve).

"*Habitat*.—Calgary, Alberta, June 23, head of Pine Creek." "One almost perfect male from Mr. F. H. Wolley Dod."

Holotype.—In the American Museum of Natural History. The specimen is labeled "Acronycta tartarea Smith δ type"; "Calgary, Alta., 23-VI-98, F. H. Wolley Dod"; "Head of Pine Creek"; "75"; "Collection J. B. Smith"; "J. B. Smith Collection Rutgers." It is a male, and the right valve of the genitalia is missing. There is a slide in the American Museum that was made by Smith presumably from the holotype.

Euxoa taura Smith, 1905, *Canad. Ent.* 37: 202.

"*Habitat*.—Regina, Assiniboia, August 5; T. N. Willing." "One male in fine condition received from Mr. F. H. Wolley Dod. (No. 11)."

Holotype.—In the American Museum of Natural History. The specimen is labeled "Euxoa taura Smith δ type"; "Regina, Asba., 5.VIII.06, T. N. Willing"; "J. B. Smith Collection Rutgers." It is in good condition except the tip of the left valve is missing.

Hadena tela Smith, 1900, *U.S. Natl. Mus. Proc.* 22(1203): 470.

"*Habitat*.—Rio Verde Mountains, Phoenix, Arizona, August and September (Dr. Barnes)." "Two males and two females; none of them first class."

"*Type*.—Cat. No. 4823, U.S.N.M."

Syntypes examined: 4 (2 USNM and 2 AMNH)

- (1) "Hadena tela Smith δ type"; "Rio Verde Mts., Phoenix, Ariz., Aug. 1893, W. Barnes"; "Type No. 4823 U.S.N.M."; "36311"; " δ genitalia on slide #306, May 23, 1936, J.F.G.C." [USNM]
- (2) "Hadena tela Smith ϕ type"; "Rio Verde Mts., Phoenix, Ariz., Aug. 1893, W. Barnes" [USNM]
- (3) "Hadena tela Smith cotype"; "Rio Verde Mts., Phoenix, Ariz., Sept. 1893, W. Barnes"; "J. B. Smith Collection, Rutgers" [A δ] [AMNH]
- (4) "Hadena tela Smith cotype"; same data [A ϕ] [AMNH]

Discussion.—The " δ type" in the U.S. National Museum is the only syntype to bear the USNM type number listed in the original description. It has been selected, labeled, and is now designated the lectotype.

Carneades teleboa Smith, 1890, *U.S. Natl. Mus. Bul.* 38, p. 219.

"*HABITAT*.—Las Vegas, New Mexico." "A single female specimen from Mr. Neumoegen, collected by Mr. Meeske."

Smith (1893, *U.S. Natl. Mus. Bul.* 44, p. 99) stated: "The type is with Mr. Neumoegen."

Holotype.—In the U.S. National Museum. The specimen is labeled "Carneades teleboa Smith Type"; "Las Vegas, N.M., H. Meske, '89"; "Col. B. Neumoegen"; "Type No. 33753 USNM."

Anytus teltowa Smith, 1910, *Psyche* 17(5): 207, pl. 11, fig. 2.

"*Habitat*: Hampton, N.H., IX, 20; Cohasset, Mass., IX, 3; Elizabeth, N.J., IX, 2-20; Lakehurst, N.J., IX, 27; Vineland, N.J., VIII, 29." Referring to *A. privatus* Wlk. Smith stated: "I have under examination a series of 22 males and 25 females, most of them taken near Elizabeth, N.J., by Mr. Otto Buchholz, and they bring out nicely all variations that I have ever seen in the species. Among my material, however, I picked out a series of five males and six females, that seemed different, and these I have named. *Anytus teltowa* sp. nov."

Syntypes examined: 6 (3 AMNH and 3 USNM)

- (1) "Anytus teltowa Smith δ type"; "Elizabeth, N.J."; "9-9"; "J. B. Smith Collection, Rutgers" [Good condition complete] [AMNH]
- (2) "Anytus teltowa Smith ϕ type"; "Vineland, VIII-29"; "J. B. Smith Collection, Rutgers" [Very good condition] [AMNH]
- (3) "Anytus teltowa Smith Paratype"; "Hampton, N.H., S.A. Shaw"; "IX-29-1908"; "110"; "J. B. Smith Collection, Rutgers" [A δ , abdomen missing] [AMNH]
- (4) "Anytus teltowa Smith Paratype"; "Elizabeth, N.J."; "IX-3" [A δ , excellent condition] [USNM]
- (5) "Anytus teltowa Smith Paratype"; "Elizabeth, N.J."; "IX-2" [A δ] [USNM]
- (6) "Anytus teltowa Smith Paratype"; "Elizabeth, N.J."; "9-2" [A ϕ] [USNM]

Discussion.—There are three females, one from Lakehurst, N.J., and the others from Elizabeth, N.J., in the American Museum of Natural History that bear Smith determination labels. They are most likely syntypes, but they have not been included because Smith did not mark them as types. In addition, there are many specimens from Elizabeth, N.J., via the Smith and the Buchholz collections in the same institution that could be part of the type-series of *teltowa*, but they do not even have determination labels. Finally there are two from Cohasset, Mass., dated "IX-3" that are also probably syntypes in the American Museum of Natural History. The " δ type" in the American Museum of Natural History has been selected, labeled, and is now designated the lectotype. Smith illustrated the male genitalia (pl. 11, fig. 2) and stated it was from a New Jersey specimen. Of the syntypes examined, only the one from Hampton, N.H., lacked the abdomen, but that could not be the specimen that provided the genitalia illustrated by Smith if his comment is correct. There is a Smith slide of genitalia in the American Museum of Natural History.

Pleonectyptera tenalis Smith, 1907, *Amer. Ent. Soc. Trans.* 33: 379.

"*Hab*.—Arizona: Minnehaha, Yavapai Co., August 2d, 4th and 18th; Yuma Co., Southern Arizona, August 15th." "Two males and four females, of which two, from Southern Arizona, are from Mr.

Poling, while others were collected by Mr. Hutson." Smith (1911, N.Y. Ent. Soc. Jour. 19(3): 151) stated: "*Pleonectyptera tenalis* (not *tonalis*) was originally described from six examples, all from Arizona desert areas, and three of these, including the male and female types, are now before me. Now the types of *tenalis* and *finitima* are so utterly unlike that not the merest tyro would be inclined to associate them, and if the specimens in the U.S. National Museum labeled as *finitima* type are really *tenalis* as Dr. Dyar says, it simply means that there has been a tampering with labels by somebody—a fact that I have been inclined to suspect before as to other species."

Syntypes examined: 5 (3 AMNH and 2 USNM)

- (1) "*Pleonectyptera tenalis* Smith δ type"; "Yuma Co., Ariz."; "8/19"; "J. B. Smith Collection, Rutgers" [Good condition complete] [AMNH]
- (2) "*Pleonectyptera tenalis* Smith ϕ type"; "Minnehaha"; "Yavapai Co., Ariz., VIII-18"; "J. B. Smith Collection, Rutgers" [Good condition] [AMNH]
- (3) "*Pleonectyptera tenalis* Smith ϕ cotype"; "Minnehaha"; "Yavapai Co., Ariz., VIII-26"; "J. B. Smith Collection, Rutgers" [Worn] [AMNH]
- (4) "*Pleonectyptera tenalis* Smith ϕ cotype"; "Yavapai Co."; "VIII-4"; "Type No. 10819 U.S.N.M." [USNM]
- (5) "*Pleonectyptera tenalis* Smith ϕ cotype"; "So. Arizona, Aug. 15-30" [USNM]

Discussion.—One male syntype has not been located. The " δ type" in the American Museum of Natural History has been selected, labeled, and is now designated the lectotype.

***Hadena tenera* Smith, 1900, in Dyar, Wash. Acad. Sci. Proc. 2: 491.**

"*Habitat*.—Kukak Bay, Alaska, July 4, 1899." "One male in fair condition . . ." "*Type*. Cat no. 4844, U.S. National Museum."

Holotype.—In the U.S. National Museum. The specimen is labeled "*Hadena tenera* Smith δ type"; "Kukak Bay, Alaska, July 4, '99"; "Harriman Expedition '99, T. Kincaid collector"; "Type No. 4844 USNM"; " δ genitalia on slide 2588 JFGC."

***Mamestra tenisca* Smith, 1910, N.Y. Ent. Soc. Jour. 18: 92.**

"*Habitat*.—Stockton, Utah, IX, 5-15 (Spalding); Bozeman, Montana, VIII, 31, IX, 6 (Exper. Sta.)." "Four males and two females, all in good condition."

Smith (1910, Ent. Soc. Amer. Ann. 3(2): pl. 23, fig. 10) illustrated the male genitalia and stated in the explanation of the figure: "*Mamestra tenisca*: from one of the para-types."

Syntypes examined: 6 (AMNH)

- (1) "*Mamestra tenisca* Smith, δ type"; "Bozeman, Mont., Aug. 21, 1907"; "J. B. Smith Collection Rutgers"; " δ Genitalia mounted

on slide by Smith" [Rindge label] [Wings in good condition, abdomen missing, piece loose in box]

- (2) "*Mamestra tenisca* Smith, ϕ type"; "Stockton, Ut."; "IX-15-4"; "J. B. Smith Collection Rutgers" [Good, complete]
- (3) "*Mamestra tenisca* Smith, cotype"; "Bozeman, Mont., Sept. 6, 1907"; "J. B. Smith Collection Rutgers" [A δ , rubbed, abdomen suspicious, may be glued on]
- (4) "*Mamestra tenisca* Smith, cotype"; "Stockton, Ut."; "IX-5-4"; "J. B. Smith Collection, Rutgers" [A δ , good condition, complete]
- (5) "*Mamestra tenisca* Smith, cotype"; "Stockton, Ut."; "IX-14-4"; "J. B. Smith Collection Rutgers" [A δ , good condition, complete]
- (6) "*Mamestra tenisca* Smith, cotype"; "Stockton, Ut."; "IX-8-4"; "J. B. Smith Collection, Rutgers" [A ϕ , good condition, complete]

Discussion.—Rindge (1955, p. 133) stated: "The type male has the genitalia mounted on slide No. 14." There is a genitalia slide in the American Museum of Natural History, and it undoubtedly was the slide from which Smith prepared the illustration that was presented in the Annals of the Entomological Society of America. It may have been prepared from the " δ type" as Rindge suggested, but there is a possibility that it was prepared from the other male syntype from Bozeman, Mont. The slide is labeled "*Mamestra tenisca* δ —from a type spec. #14." Rindge has added "Type ϕ ." The abdomen on the "cotype" from Bozeman appears to be glued on. If so, it is possible that the abdomen is not from that specimen. This suspicion is strengthened by the statement of Smith in the explanation of the figure: "*Mamestra tenisca*: from one of the para-types." But even if it can be proved that the abdomen is glued on or even that it is a false abdomen, we still could not say with certainty that the genitalia slide was prepared from one specimen or the other.

I believe that the two specimens represent the same species, and if so, the genitalia slide should be typical of either. Smith only used paratype as a term in the text or on labels in a few papers beginning in 1910. In the paper where the figure of *tenisca* was presented, that is his only use of the term and none of the syntypes bear labels with that term. In his other following papers he did use the term in labeling specimens and he used the term in the same sense in which it is used today. It is possible, however, that at the time the genitalia of *tenisca* were figured, Smith might have simply used "para-type" in the sense of our present "syntype." In view of these problems, I believe that the genitalia slide should be treated as if it had been prepared from the " δ type" as Rindge assumed. Accordingly, I have selected, labeled, and now designate the " δ type" and the genitalia slide No. 14 (considered part of the δ type specimen) as the lectotype.

***Acontia tenuescens* Smith, 1902, N.Y. Ent. Soc. Jour. 10: 53.**

"*Habitat*.—Lake Worth, Florida." "Two female examples from Mrs. A. T. Slosson; both of them

minus the abdomen; but otherwise perfect examples."

Hampson (1910, Catalogue of the Lepidoptera Phalaenae in the Collection of the British Museum, v. 10, p. 697, pl. CLXX, fig. 4) listed and illustrated a female cotype from L. Worth, Fla.

Syntypes examined: 1 (AMNH)

- (1) "Acontia tenuescens Smith ♀ type"; "L. Worth, Fla."; "Collection J. B. Smith"; "♂ genitalia mounted on slide 10,358, FHR." [Genitalia slide prepared from false abdomen that had been glued to thorax]

Other syntypes: One female "cotype" in the British Museum (Natural History). It is from the same locality as the syntype in the American Museum of Natural History.

Discussion.—Smith clearly indicated that both specimens lacked abdomens. A male abdomen of a specimen of the *Acontia apela-aprica* complex had been glued to the specimen examined. In response to my request, F. H. Rindge prepared a genitalia slide that revealed the identity of the false abdomen. The illustration of the syntype in the British Museum (Natural History) also shows an abdomen! I do not know whether a false abdomen is glued on that specimen or whether an abdomen was drawn to make the illustration appear complete. The "♀ type" in the American Museum of Natural History has been selected, labeled, and is now designated the lectotype.

Peridroma tenuescens Smith, 1890, U.S. Natl. Mus.

Bul. 38, p. 73.

"HABITAT.—Nebraska." "A single specimen in Mr. Tepper's collection has the above MSS name of Mr. Morrison attached."

Smith (1893, U.S. Natl. Mus. Bul. 44, p. 70) stated: "The types are in the Graef and Neumoegen collections, labeled by Mr. Morrison as types of the name, but not described."

Holotype.—In the collection of Michigan State University. The specimen is labeled "Agrotis tenuescens Morr., Type, 1663"; "Nebr." It is a female in fairly good condition. In the U.S. National Museum there is a specimen marked: "Agr. tenuescens Morr., Type"; "Nebraska, 198"; "Col. B. Neumoegen"; "Type No. 33783 U.S.N.M."; "Barnes collection." It is a female in fair condition. It is the specimen that Smith first mentioned in 1893. It is a pseudotype and was not mentioned in the original description.

Oncocnemis tenuifascia Smith, 1888, Insect Life 1: 18.

"Habitat Colorado." "A single female in Mr. Tepper's collection."

Smith (1889, Amer. Ent. Soc. Trans. 16: 328) stated: "Hab.—Colorado." "A single female in Mr. Tepper's collection; . . ."

Smith (1893, U.S. Natl. Mus. Bul. 44, p. 159) stated: "The type is in the Tepper collection; others in the National Museum."

Holotype.—In the collection of Michigan State University. The specimen is labeled "Type" [rhomboidal

label]; "Col."; "Tepper." It is a female in very good condition.

Anytus tenuilinea Smith, 1903, N.Y. Ent. Soc. Jour.

11: 192.

"Habitat: Stockton, Utah." "One good female from Mr. George Franck."

Smith (1910, Psyche 17(5): 208) stated: "Anytus tenuilinea Smith, was described from a single female sent in by Mr. Spalding of Stockton, Utah, . . ."

Holotype.—In the U.S. National Museum. The specimen is labeled "Anytus tenuilinea Smith Type"; "Stockton, Utah"; "J. B. Smith Collection." It is a female. The abdomen does not look natural, but I was unable to determine by external examination whether it is attached with glue.

Euxoa tepla Smith, 1910, Amer. Ent. Soc. Trans. 36(3): 253.

"Hab.—Colorado (Bruce); Stockton, Utah, IX, 14 (Spalding)." "One male, one female, in good condition and almost exactly alike." ". . . but here the female [sic] is from Colorado, probably near Denver, taken at least a dozen years ago, while the female is from Utah, taken in 1904 or 1905."

Syntypes examined: 2 (AMNH)

- (1) "Euxoa tepla Smith ♂ type"; "Colo."; "21, Colo., Bruce"; "Collection J. B. Smith" [Very good condition, complete]
- (2) "Euxoa tepla Smith ♀ type"; "Stockton, Ut."; "IX-14-4"; "J. B. Smith Collection, Rutgers" [Very good condition]

Discussion.—The "♀ type" has been selected, labeled, and is now designated the lectotype.

Agrotis tepperi Smith, 1888, U.S. Natl. Mus. Proc. 10: 453.

"Habitat.—Montana." "The unique ♀ type is in Mr. Tepper's collection."

Smith (1893, U.S. Natl. Mus. Bul. 44, p. 77) stated: "The type is in the Tepper collection."

Holotype.—In the collection of Michigan State University. The specimen is labeled "Type" [rhomboidal label]; "Montana." It is a female in very good condition.

Carneades termessus Smith, 1900, U.S. Natl. Mus.

Proc. 22(1203): 426.

"Habitat.—Yellowstone Park, Wyoming, in August (Dr. Barnes)." "Two males, very much alike, and in good condition."

Hampson (1903, Catalogue of the Lepidoptera Phalaenae in the Collection of the British Museum, v. 4, p. 231) stated: "Pl. LXIII, fig. 4" and "This species is unknown to me; figured from a photograph from type in U.S. Nat. Mus."

Syntypes examined: 2 (USNM)

- (1) "Carneades termessus Smith ♂ type"; "Yellowstone Park, Wyo."; "Aug."; "Type No. 5143 U.S.N.M."; "45"; "36511"
- (2) "Carneades termessus Smith ♂ cotype"; "Yellowstone Park, Wyo."; "Aug."; "Slide

#79 [Barnes number?]; "Barnes Collection"
[Abdomen missing]

Discussion.—The "♂ type" in the U.S. National Museum has been selected, labeled, and is now designated the lectotype.

Oncocnemis terminalis Smith, 1888, *Insect Life* 1: 19.

"Habitat, Colorado." "A single female in Mr. Tepper's collection."

Smith (1893, U.S. Natl. Mus. Bul. 44, p. 159) stated: "The type is in the Tepper collection; another specimen is in the National Museum."

Holotype.—In the collection of Michigan State University. The specimen is labeled "Type" [rhomboidal label]; "Col."; "Tepper." It is a female in excellent condition. There is a pseudotype in the U.S. National Museum. It is undoubtedly the specimen referred to in 1893. It is labeled "Oncocnemis terminalis Smith Type"; "Col., Bruce, 116"; "Pl. 146, f. 15"; "Type No. 184 USNM."

Yrias terminalis Smith, 1907, *Amer. Ent. Soc. Trans.* 33: 142.

"Hab.—Yavapai County, Arizona, May 20th to 30th."

"Three males and three females from Mr. Hutson, sent in with a lot of *volucris* and *clientis*."

Syntypes examined: 4 (2 AMNH and 2 USNM)

- (1) "Yrias terminalis Smith ♂ type"; "Yavapai Co., Ariz., V-25"; "J. B. Smith Collection, Rutgers" [Good condition, complete] [AMNH]
- (2) "Yrias terminalis Smith ♀ type"; same data except "V-20" [Good condition] [AMNH]
- (3) "Yrias terminalis Smith ♂ cotype"; "Yavapai Co., Ariz., V-21" [USNM]
- (4) "Yrias terminalis Smith ♀ cotype"; same data except "V-24" [USNM]

Discussion.—The "♂ type" in the American Museum of Natural History has been selected, labeled, and is now designated the lectotype.

Taeniocampa terminata Smith, 1888, U.S. Natl. Mus. Proc. 10: 475.

"Habitat.—Southern California." "The type, a unique male, is in Mr. Tepper's collection."

Smith (1890, U.S. Natl. Mus. Proc. 12: 485) added nothing, but he figured the "harpe" and "clasper" on plate 23, figure 13, under the name *Taeniocampa terminalis*!

Smith (1893, U.S. Natl. Mus. Bul. 44, p. 204) stated: "The type is in the Tepper collection."

Holotype.—In the collection of Michigan State University. The specimen is labeled "Type" [rhomboidal label]; "So. Cal." It is a male in good condition, but with the right valve of the genitalia missing.

Carneades ternarius Smith, 1900, U.S. Natl. Mus. Proc. 22(1203): 444.

"Habitat.—Denver, Colorado, October 9; Salida, July 10 (Osler); Fort Collins, Colorado (Gillette); Colorado (Bruce)." "Four specimens, all females and no two alike." "Type.—Cat. No. 4808, U.S.N.M."

Syntypes examined: 1 (USNM)

- (1) "Carneades ternarius Smith ♀ type"; "Denver, Col., X-9"; "36311"; "Type No. 4808 U.S.N.M."

Discussion.—Only one syntype has been located. It is marked "♀ type" and bears the USNM type number cited in the description. It has been labeled and is now designated the lectotype.

Carneades terrenus Smith, 1900, U.S. Natl. Mus. Proc. 22(1203): 436.

"Habitat.—Pullman, Washington, June and July (C. V. Piper)." "Type.—Cat. No. 4802, U.S.N.M." "A series of 12 males and 5 females is quite uniform in general appearance, . . ."

Syntypes examined: 9 (5 USNM and 4 AMNH)

- (1) "Carneades terrenus Smith ♂ type"; "Wash. T."; "Type No. 4802 U.S.N.M."; "36311"; "♂ genitalia on slide 2257, Apr. 24, 1966, ELT." [Fair condition] [USNM]
- (2) "Carneades terrenus Smith ♀ type"; "E. Was."; "Collector C. V. Piper"; "36311"; "Type No. 4802 U.S.N.M."; "♀ genitalia on slide 2258, Apr. 24, 1966, ELT." [Good condition] [USNM]
- (3) "Carneades terrenus Smith cotype"; "Pullman, Wash., 12 June 98"; "Barnes Collection" [A ♂] [USNM]
- (4) "Carneades terrenus Smith cotype"; "Pullman, Wash., 5 July 98"; "Barnes Collection" [A ♂] [USNM]
- (5) "Carneades terrenus Smith cotype"; "Pullman, Wash., 12 July 98"; "Barnes Collection" [A ♀, abdomen missing] [USNM]
- (6) "Carneades terrenus Smith cotype"; "Pullman, Wash., 12 July 98"; "Wash. Exper. Stat. No. 344"; "J. B. Smith Collection, Rutgers" [A ♂] [AMNH]
- (7) "Carneades terrenus Smith cotype"; same data [A ♀] [AMNH]
- (8) "Carneades terrenus Smith cotype"; "E. Was."; "Collector C. V. Piper"; "J. B. Smith Collection, Rutgers" [A ♂] [AMNH]
- (9) "Carneades terrenus Smith cotype"; same data [A ♂] [AMNH]

Discussion.—Eight syntypes have not been located. Of the syntypes examined, only two, the "♂ type" and the "♀ type," bear the USNM type number cited in the description. Because the ovipositor lobes of the female exhibit good specific characters, the "♀ type" in the U.S. National Museum has been selected, labeled, and is now designated the lectotype.

Setagrotis terrifica Smith, 1893, *Ent. News* 4(3): 98, pl. 6, fig. 2.

"Hab.—Colorado. Bruce, No. 51." "Two male specimens."

Smith (1894, *Amer. Ent. Soc. Trans.* 21: 42, pl. 2, fig. 2) again described this as new using the same plate.

Syntypes examined: 2 (AMNH and USNM)

- (1) "Setagrotis terrifica Smith Type"; "Colo.,

Bruce"; "Collection J. B. Smith" [A ♂, good condition, complete] [AMNH]

- (2) "Setagrotis terrifica Smith Type"; "Colo., Bruce"; "51"; "Type No. 80 U.S.N.M." [A ♂] [USNM]

Discussion.—The syntype in the American Museum of Natural History is the specimen illustrated by Smith. It has been selected, labeled, and is now designated the lectotype.

Carneades territorialis Smith, 1900, U.S. Natl. Mus. Proc. 22(1203): 436.

Habitat.—Denver, October 12; Salida, August 10 (Osler); Glenwood Springs, October 1–7 (Barnes), all in Colorado; Pullman, Washington, September 24 (Piper). "Two males and three females are before me." **Type.**—Cat. No. 4793, U.S.N.M."

Lectotype.—In the U.S. National Museum. Designated by Todd (Oct. 4, 1968, Wash. Ent. Soc. Proc. 70(3): 278).

Nephelodes tertialis Smith, 1903, N.Y. Ent. Soc. Jour. 11(1): 19.

Habitat.—Winnipeg, Manitoba, August 16–24, A. W. Hanham. "Eight samples, most of them in at least fair condition and only one of them a female." Smith (1903, Amer. Ent. Soc. Trans. 29(3): pl. 3, fig. 4) illustrated the valve of the male genitalia. Hampson (1905, Catalogue of the Lepidoptera Phalaenae in the Collection of the British Museum, v. 5, p. 358, pl. LXXXVIII, fig. 15) listed and illustrated a male cotype from Winnipeg, Manitoba.

Syntypes examined: 4 (2 AMNH and 2 USNM)

- (1) "Nephelodes tertialis Smith ♂ type"; "Winnipeg, Man."; "18.8.00"; "Collection J. B. Smith" [Good condition except apex of right forewing split, complete] [AMNH]
- (2) "Nephelodes tertialis Smith ♀ type"; same data except "16.8.00" [Good condition] [AMNH]
- (3) "Nephelodes tertialis Smith ♂ cotype"; "Winnipeg, Man."; "24.6.00."; "Type No. 6811 U.S.N.M."; "♂ genitalia on slide #3627, May 25, 1941, J.F.G.C." [USNM]
- (4) "Nephelodes tertialis Smith ♂ cotype"; "22.8.00"; "Collection J. B. Smith"; "Barnes Collection" [Valves of genitalia missing] [USNM]

Other syntypes: A "♂ cotype" from Winnipeg, Manitoba, is in the British Museum (Natural History), London, England.

Discussion.—There is another specimen in the U.S. National Museum from Winnipeg, Manitoba, with a Smith name label. It has not been included as a syntype because Smith did not mark it a type. The "♂ cotype" in the British Museum (Natural History) has been eliminated from consideration as a lectotype candidate because it has not been examined and because it is not in an American institution. It is not possible to determine whether the illustration of the valve of the male genitalia was prepared from one of the specimens of the type-series or from some other specimen. The "♂

type" in the American Museum of Natural History has been selected, labeled, and is now designated the lectotype.

Carneades testula Smith, 1900, U.S. Natl. Mus. Proc. 22(1203): 440.

Habitat.—Calgary, Canada (Dod). "A single male, in good condition."

Holotype.—In the U.S. National Museum. The specimen is labeled "Carneades testula Smith ♂ type"; "V [?] Calgary/94"; "Type No. 5147 USNM"; "36511."

Leucania tetera Smith, 1902, U.S. Natl. Mus. Proc. 25(1283): 187, pl. 5, fig. 11.

Habitat.—Wilgus, Cochise County, and southern Arizona (Barnes). "Three male examples, two of them in fair condition." **Type.**—No. 6247, U.S.N.M."

Syntypes examined: 3 (1 AMNH and 2 USNM)

- (1) "Leucania tetera Smith ♂ type"; "So. Ariz., Poling"; "Collection J. B. Smith" [Fairly good condition, complete] [AMNH]
- (2) "Leucania tetera Smith ♂ cotype"; "Wilgus, Ariz., Cochise Co."; "Type No. 6247 U.S.N.M." [Fair condition, complete] [USNM]
- (3) "Leucania tetera Smith ♂ cotype"; "Wilgus, Cochise Co., Ariz."; "Barnes collection" [1 valve missing from genitalia] [USNM]

Discussion.—The "♂ cotype" in the U.S. National Museum bearing the USNM type number cited in the description has been selected, labeled, and is now designated the lectotype.

Agrotis tetrica Smith, 1888, U.S. Natl. Mus. Proc. 10: 459.

Habitat.—Nevada. "♂ and ♀ from collection of Dr. Bailey, and a darker ♀ in a collection of Tepper."

Smith (1890, U.S. Natl. Mus. Bul. 38, p. 161) stated: "HABITAT.—Texas, Nevada." "The Nevada specimen in Mr. Tepper's collection is somewhat darker than those from Texas, and the maculation is still more completely obsolete." On plate 5, figure 82, he illustrated a valve that was supposed to be like this species and *fumalis*.

Smith (1893, U.S. Natl. Mus. Bul. 44, p. 94) stated: "Types are in the Bailey collection."

Discussion.—Tim McCabe, N.Y. State Museum, has informed the author that the Bailey collection has been destroyed by dermestids. During my examination of the Smith material in the Tepper collection, now at Michigan State University, I failed to find a Smith type of this species. It may be necessary to select a neotype for this name, but I leave that action to a future reviser of the genus.

Parora texana Smith, 1900, U.S. Natl. Mus. Proc. 22(1203): 491.

Habitat.—Brownsville, Texas, June 11 (Townsend); San Diego, Texas, June 12 (Schwarz); Corpus Christi, Texas (Dr. Barnes). "Three females, two of

them from the U.S. National Museum. None of the examples are perfect, but on all of them the characters are well recognizable." "Type.—Cat. No. 4777, U.S.N.M."

Syntypes examined: 3 (2 USNM and 1 AMNH)

- (1) "Parora texana Smith ♀ type"; "San Diego, Texas, 12 June 95"; "E. A. Schwarz Collector"; "Type No. 4777 U.S.N.M." [Head and apex of right forewing missing] [USNM]
- (2) "Parora texana Smith ♀ cotype"; "Corpus Christi, Texas" [Fair condition] [USNM]
- (3) "Parora texana Smith ♀ cotype"; "Brnsville, Tex., 604, Townsend, 11 June 95"; "J. B. Smith Collection, Rutgers" [Fair condition] [AMNH]

Discussion.—The "♀ type" in the U.S. National Museum is the only syntype bearing the USNM type number cited in the description. For that reason, it has been selected, labeled, and is now designated the lectotype.

Perigea texana Smith, 1900, U.S. Natl. Mus. Proc. 22(1203): 476.

Habitat.—Round Mountain (Schaupp); Shovel Mountain, Texas (Barnes). "Eight males and one female, mostly in good condition." "Type.—Cat. No. 4833, U.S.N.M."

Hampson (1909, Catalogue of the Lepidoptera Phalaenae in the Collection of the British Museum, v. 8, p. 553) listed a male cotype from Round Mountain. Barnes and Benjamin (1923, Contrib. Nat. Hist. Lepidoptera N. Amer. 5(2): 83) stated: "Types in: National Museum; Barnes Collection, 'Type ♀, 1 ♂, 'Co-type'; Rutgers College, 4 ♂ 'Cotype(s)'"

Syntypes examined: 8 (4 USNM and 4 AMNH)

- (1) "Perigea texana Smith ♂ type"; "Round Mt., Texas"; "36311"; "Type No. 4833 U.S.N.M."; "♂ genitalia on slide 776, Mar. 1958, ELT." [USNM]
- (2) "Perigea texana Smith ♀ type"; "Shovel Mt., Texas"; "39" [USNM]
- (3) "Perigea texana Smith cotype"; "Round Mt., Texas"; "36311"; "Type No. 4833 U.S.N.M." [A ♂] [USNM]
- (4) "Perigea texana Smith cotype"; "Shovel Mt., Texas"; "40" [A ♂] [USNM]
- (5) "Perigea texana Smith cotype"; "Round Mt., Texas"; "J. B. Smith Collection, Rutgers" [A ♂] [AMNH]
- (6-8) "Perigea texana Smith cotype"; "Brazos Co., Texas"; "J. B. Smith Collection, Rutgers" [3 ♂ ♂] [AMNH]

Discussion.—Two syntypes in the U.S. National Museum bear the USNM type number 4833. Of these, the "♂ type" has been selected, labeled, and is now designated the lectotype.

Renia tilosalis Smith, 1909, N.Y. Ent. Soc. Jour. 17: 70.
Habitat.—Long Island, New York, July 24, August 11; Chester, N.J., August 28, Jamesburg, N.J., Oak Ridge, N.J., August 7; New Brighton, Penn., July 19-August 2. "Nine males, six females most of

them in good condition. The Long Island and Oak Ridge specimens are from Mr. E. Shoemaker; the New Brighton specimens are from Mr. H. D. Merrick, the others are from the college collection."

Syntypes examined: 9 (5 AMNH and 4 USNM)

- (1) "Renia tilosalis Smith ♂ type"; "New Brighton, Pa., 7-23-02, H. D. Merrick"; "J. B. Smith Collection, Rutgers"; "3267" [Good condition, complete] [AMNH]
- (2) "Renia tilosalis Smith ♀ type"; "New Brighton, Pa., 8-2-03, H. D. Merrick"; "J. B. Smith Collection, Rutgers" [Good condition] [AMNH]
- (3) "Renia tilosalis Smith ♂ cotype"; "Oak Ridge, N.J., 8-7-04"; "J. B. Smith Collection, Rutgers" [Slightly rubbed] [AMNH]
- (4) "Renia tilosalis Smith cotype"; "New Brighton, Pa., 7-24-02, H. D. Merrick"; "J. B. Smith Collection, Rutgers" [A ♂, fairly good, complete] [AMNH]
- (5) "Renia tilosalis Smith ♀ cotype"; "New Brighton, Pa., 7-25-02, H. D. Merrick"; "J. B. Smith Collection, Rutgers" [Fair condition] [AMNH]
- (6) "Renia tilosalis Smith cotype"; "New Brighton, Pa., 7-24-02, H. D. Merrick"; "3267" [A ♂, abdomen missing] [USNM]
- (7) "Renia tilosalis Smith cotype"; "New Brighton, Pa., 7-19-02, H. D. Merrick"; "3267" [A ♂] [USNM]
- (8) "Renia tilosalis Smith ♂ cotype"; "Brooklyn, L.I., N.Y., VIII-11-1901"; "3523"; "Ernest Shoemaker Collection, 1956" [USNM]
- (9) "Renia tilosalis Smith ♂ cotype"; "Brooklyn, L.I., N.Y., VII-24-01"; "3523"; "Ernest Shoemaker Collection, 1956" [USNM]

Discussion.—Two male and four female syntypes have not been located. Localities for some of the missing syntypes should be Chester and Jamesburg, N.J., and "Penn." The "♂ type" in the American Museum of Natural History has been selected, labeled, and is now designated the lectotype.

Carneades titubatis Smith, 1894, Amer. Ent. Soc.

Trans. 21: 51, pl. 4, fig. 5.

Hab.—Oregon, Colorado. "Two male specimens of this species are before me at present, one of them from Mr. Graef's, the other from the Hulst collection. I have seen others, collected in Colorado by Mr. Bruce, but have at present no specimens from him."

Hampson (1903, Catalogue of the Lepidoptera Phalaenae in the Collection of the British Museum, v. 4, p. 289) stated: "Pl. LXVI. fig. 1" and "This species is unknown to me; figured from Prof. Smith's plate." "♂, Oregon."

Syntypes examined: 2 (USNM)

- (1) "Carneades titubatis Smith ♂ type"; "Or."; "Type No. 4981 U.S.N.M."; "36511"; "♂ genitalia on slide 2207, Apr., 1966, ELT." [Good condition]

- (2) "Carneades titubatis Smith δ type"; "Or."; "Col. B. Neumögen"; "Type No. 33748 U.S.N.M."; " δ genitalia on slide 2206, Apr., 1966, E.L.T." [Good condition]

Discussion.—Both syntypes are marked " δ type." The syntype bearing USNM type number 4981 is the specimen illustrated by Smith and by Hampson. It has been selected, labeled, and is now designated the lectotype.

Schinia tobias Smith, 1906, N.Y. Ent. Soc. Jour. 14: 24. "*Habitat.*—Phoenix, Ariz., September 16–23." "Two good females, through Dr. Barnes; . . ."

Syntypes examined: 2 (AMNH and USNM)

- (1) "Schinia tobias Smith δ type"; "Phoenix, Ariz."; "Sept. 16–23"; "J. B. Smith Collection, Rutgers" [Good condition, complete] [AMNH]
(2) "Schinia tobias Smith cotype"; "Phoenix, Ariz."; "Barnes collection" [A δ] [USNM]

Discussion.—The " δ type" in the American Museum of Natural History has been selected, labeled, and is now designated the lectotype.

Carneades tocoyae Smith, 1900, U.S. Natl. Mus. Proc. 22(1203): 433.

"*Habitat.*—High Sierras, California (Dr. Dyar)." "A single male in fair condition, No. 11277." "*Tocoya*, according to Dr. Dyar, is the Indian name for the north dome, near where this insect was taken."

Holotype.—In the U.S. National Museum. The specimen is labeled "Carneades tocoyae Smith δ type"; "Cal."; "H. G. Dyar No. 11,277"; "High Sierras, Cal., Tocoyae - name for North Dune"; "36511"; "Type No. 5137 USNM." There is a discrepancy in *dome* of the original description and *Dune* on the label. I do not know which is correct.

Acronycta tonitra Smith, 1908, N.Y. Ent. Soc. Jour. 16: 83.

"*Habitat.*—St. Louis, Missouri, June 9, July 21, August 12, 21, 23, Mr. H. McElhose." "From the single female in my collection I had taken it to be *similana* of which I had only males from Chicago. Mr. A. Kwiat, however, who had both sexes of *similana* received also both sexes of the St. Louis species from Mr. McElhose, demonstrating their specific difference at once. Two males and five females are under examination as co-types. One pair in my collection, the others with Messrs. Kwiat and McElhose, the specific name being a suggestion from Mr. Kwiat."

Hampson (1910, Catalogue of the Lepidoptera Phalaenae in the Collection of the British Museum, v. 9, p. 521) stated: "Pl. CXLVIII, fig. 31" and "This species is unknown to me; figured from a drawing from type in Coll. J. B. Smith." " δ , Missouri."

Syntypes examined: 2 (AMNH)

- (1) "Acronycta tonitra Smith δ type"; "St. Louis, Mo., VI-15-07, H. McElhose" [Abdomen may be glued to thorax]
(2) "Acronycta tonitra Smith δ type"; "1006,

St. Louis, Mo., VII-21-04, H. McElhose"; "J. B. Smith Collection, Rutgers" [Abdomen greasy, possibly glued to thorax]

Discussion.—Rindge (1955, p. 133) listed both specimens as received from Rutgers. Five syntypes have not been located. It is possible that some are in the Field Museum, Chicago, Ill., via the collection of A. K. Wyatt (= A. Kwiat). There are three male specimens in the collection of the U.S. National Museum via the Barnes collection from St. Louis collected by H. McElhose. One is without a date and the others are dated "VI-12-04" and "VIII-20-06." The dates do not agree with those cited by Smith, but they are old enough to have been available. Disagreement in dates between the labels and dates cited are not unusual among the species described by Smith. In fact, the date on the " δ type" of *tonitra* does not agree with any cited by Smith. *A. tonitra* Smith was treated as a junior synonym of *A. lepusculina* form [melanic] *similana* Smith by McDunnough (1938, p. 55, No. 1153). The " δ type" was illustrated by Hampson (1910, pl. CXLVIII, fig. 31). That syntype in the American Museum of Natural History has been selected, labeled, and is now designated the lectotype.

Xylina torrida Smith, 1899, N.Y. Ent. Soc. Jour. 7(4): 228.

"*Habitat.*—Pullman, Washington, October, March and April (C. V. Piper); Garfield Co., Colorado, 4000 feet (Bruce); N.W. British Columbia (Ottolengui); Soda Springs, California, October 16th (Hy. Edwards)." "In all ten specimens are before me, . . ."

Smith (1900, Amer. Ent. Soc. Trans. 27: 36, pl. 2, figs. 23 and 24, pl. 5, fig. 31) mentioned 10 more specimens from Glenwood Springs, Colo., October, March, and April (Barnes) and illustrated an adult and male genitalia.

McDunnough (1942, Canad. Ent. 74: 162) in a discussion preceding the description of *Graptolitha pertorrida*, n. sp., stated: "As there is great likelihood that Smith's type series contained specimens of both the species at present under discussion and that furthermore no type designation was made by the author, I believe I am justified in tying down the name *torrida* Sm. to the species with male genitalia similar to Smith's figure 23."

Syntypes examined: 5 (4 USNM and 1 AMNH)

- (1) "Xylina torrida Smith δ type"; "Colo., Bruce"; "Garfield Co., Colo., 4000 ft., Bruce"; "Type No. 5712, U.S.M.N."; "36511"; " δ genitalia on slide #1617, Feb. 19, 1938, J.F.G.C." [Good condition except both valves of male genitalia missing] [USNM]
(2) "Xylina torrida Smith δ type"; "N.W. Brit. Cola."; "Type No. 33877 U.S.N.M."; "Accession 12578"; " δ genitalia on slide #1618, Feb. 19, 1938, J.F.G.C." [Good condition = *Graptolitha pertorrida* McD] [USNM]
(3) "Xylina torrida Smith cotype"; "Pullman, Wash."; "3/18/95"; "Collector C. V. Piper"; " δ genitalia on slide #2688, Nov. 26, 1939,

J.F.G.C." [Good condition = *Graptolitha pertorrída* McD.] [USNM]

- (4) "Xylina torrida Smith cotype"; "Pullman, Wash."; "4-1-95"; "Collector C. V. Piper" [A ♂, good condition except abdomen missing = *Graptolitha pertorrída* McD.] [USNM]
(5) "Xylina torrida Smith cotype"; "Pullman, Wash."; "3-7-95"; "Collector C. V. Piper"; "J. B. Smith Collection, Rutgers" [A ♂ = *Graptolitha pertorrída* McD. ?] [AMNH]

Discussion.—Five syntypes have not been located.

At least one should be from Pullman, Wash., collected in October. Another syntype from Soda Springs, Calif., on October 16 may be in the American Museum of Natural History as it was from Hy. Edwards, but I did not see it on my visits to that collection. It could be another species placed elsewhere in the collection. In the U.S. National Museum there are two other specimens bearing name labels "Xylina torrida Smith" in Smith's handwriting from Pullman, Wash. The two date labels, "13 April 98" and "2-4-90," are early enough for the specimens to have been included in the original series.

In the collection of the U.S. National Museum two Smith genitalia slides labeled "Xylina torrida" have been located. One slide has a single left valve and was, without doubt, the valve illustrated by Smith in 1900 (fig. 23). The other slide has two valves, and the right valve was used by Smith for figure 24. On the latter slide the sacculus of the left valve is missing. On both slides the valves are flattened, the parts twisted, distorted, or even broken. The tips of the valves are notched. The nature of the apex of the valve does prove that these were not prepared from examples of *Lithophane pertorrída* (McD.), but they are not in good enough condition to separate these valves from those of other species of the genus in which the apex of the valve is notched.

As with most Smith slides of species in which all the syntypes have not been located, there is no positive way to associate the slides with specimens. In the case of *Xylina torrida* Smith, the fact that Smith did not publish the illustrations until his second paper in 1900, and the fact he had 10 other specimens from Glenwood Springs, Colo., at that time, make definite association impossible. Even so, based on the following facts, a reasonable guess can be made as to the source of the slides. Because the bulk of the known syntypes, those from Pullman, Wash., and from "N.W. Brit. Cola," are specimens of *Lithophane pertorrída* (McD.), a species with a differently shaped apex of the valve, it is most probable that the Smith slides were prepared from Colorado specimens. The "♂ type" from Garfield County, Colo., has had the valves removed and by Smith, as no other worker of North American Lepidoptera broke off the valves dry from specimens in order to make slides. Unless other Smith slides are located, it appears likely that one of the Smith slides now in the U.S. National Museum must have been prepared from this specimen.

Because Smith had additional material from Glenwood Springs, Colo., before him when he prepared his paper published in 1900, I checked the U.S. National

Museum collection for examples from that locality. In the series of *torrida*, there are six males and two females from that locality. None have dates showing the year collected, so it is not possible to state whether any were part of the series before Smith. One male dated "March" has had the valves removed, but the sacculus of the left valve did not break free and is still attached to the specimen. The broken piece matches the missing part of the left valve on the Smith slide containing two valves. It appears, therefore, that figure 24 was prepared from the Glenwood Springs specimen and it follows, therefore, that the slide with one valve must be from the "♂ type." Accordingly, the "♂ type" in the U.S. National Museum has been selected, labeled, and is now designated the lectotype. The present action will assure that the type-specimen is the "♂ type" and associated genitalia slides regardless of who is considered to have selected the lectotype. In my opinion McDunnough's action in 1942 did not constitute lectotype selection. Furthermore, the identification of specimens as *torrida* that have genitalia similar to Smith's figure 23 is unsatisfactory because several species of *Lithophane* have genitalia similar to that figure.

Deva trabea Smith, 1895, Ent. News 6: 340, pl. 15, fig. 16.

"EXPLANATION OF PLATE XV. 16. *Deva trabea* n. sp." On page 332 Smith said: ". . . the specimens were all collected by Mr. F. H. Wolley Dod, Calgary, Canada."

Smith (1895, Ent. News 7(1): 29) provided a written description and stated: "*Hab.*—Calgary, 1894." "The specimen is numbered 20, and is said by Mr. Dod to be unique."

Todd (1972, Wash. Biol. Soc. Proc. 85(31): 387) indicated the holotype is located in the U.S. National Museum.

Holotype.—In the U.S. National Museum. The specimen is labeled "*Deva trabea* Smith Type"; "Calgary, 1894 (AH)"; "20"; "Type No. 14 USNM." It is a male.

Acronycta transversata Smith, 1897, Ent. News 8(6): 149 (in key).

Smith, 1898, U.S. Natl. Mus. Proc. 21(1140): 65, pl. 10, fig. 10, pl. 20, fig. 3) provided a detailed description, illustrated adult and genitalia, and stated: "*Habitat.*—Colorado, no date or special locality." "Three males and one female of this species are at hand, . . ."

Hampson (1909, Catalogue of the Lepidoptera Phalaenae in the Collection of the British Museum, v. 8, p. 126) stated: "Pl. CXXV. fig. 32" and "This species is unknown to me; figured from a drawing from cotype in Coll. J. B. Smith." "♀, Colorado." *Syntypes examined:* 3 (2 USNM and 1 AMNH)

- (1) "*Acronycta transversata* Smith ♂ type"; "Colorado"; "Type No. 3662, U.S.N.M." [Good condition except right antenna, left foreleg, and both valves of the genitalia missing] [USNM]
(2) "*Acronycta transversata* Smith ♂ cotype"; "*Acronycta transversata* Sm., Type, Coll.

Edw. L. Graef, Colo.;" "Type No. 33908, U.S.N.M." [Good condition, complete] [USNM]

- (3) "Acronycta transversata Smith cotype ♂"; "Col.;" "Collection G. D. Hulst"; "O.K. X'd with type U.S.N.M., 1910" [Fair condition, complete] [AMNH]

Discussion.—One syntype, a female, has not been located. It probably would have been marked "♀ type" by Smith, but Hampson, 1909, stated his illustration was from a "cotype" in the J. B. Smith collection. On the explanation of the figure he stated "♀, Colorado." If there was a female cotype in the Smith collection at Rutgers, Rindge, 1955, did not mention it, and I did not see it in the American Museum of Natural History. In the collection of the U.S. National Museum there is a Smith slide containing the four parts missing from the "♂ type." The valves are mounted face down, but it is clear that the Smith illustration was of the left valve. Since the only other male syntypes are complete, there can be no doubt that the slide represents the parts of the "♂ type." Smith also indicated in the explanation of plate X, page 188, that figure 10 was from the male type. The "♂ type" in the U.S. National Museum has been selected, labeled, and is now designated the lectotype.

Cerathosia tricolor Smith, 1887, Ent. Amer. 3: 79.

"Hab. Texas." "Many specimens from Texas, where it seems to be not uncommon." "Types in my own collection. Others in the National Museum, Coll. Graef, Tepper, Hulst, Bolter, et al."

Syntypes examined: 3 (USNM)

- (1) "Cerathosia tricolor Smith Type"; "Type No. 350, U.S.N.M." [A ♂, good condition]
(2) "Cerathosia tricolor Smith Type"; "Type No. 350, U.S.N.M." [A ♂, tear in left hindwing]
(3) "Cerathosia tricolor Smith Type"; "Type No. 350, U.S.N.M." [A ♀, abdomen in vial on pin]

Discussion.—The three specimens in the U.S. National Museum are probably the only ones labeled by Smith. In the original description Smith mentioned many collections containing types, but I have found no others. Rindge, 1955, did not list any from the Smith or Hulst collection. I did not find any in the Tepper collection at Michigan State University, and there does not appear to be any received in the Graef collection now in the U.S. National Museum. None of the syntypes in the U.S. National Museum bear locality or date labels. They may have been from Belfrage in Texas. The first male listed here is in the best condition and has been selected, labeled, and is now designated the lectotype.

Taeniocampa trifascia Smith, 1891, Amer. Ent. Soc. Trans. 18: 118.

"Hab.—Foot-hills, Col. (Bruce)." "Three specimens (two males and one female) are before me." "One pair is in the coll. U.S. Nat. Museum; others are in Mr. Bruce's hands."

Smith (1893, U.S. Natl. Mus. Bul. 44, p. 202) stated:

"The type is in the National Museum."

Hampson (1905, Catalogue of the Lepidoptera Phalaenae in the Collection of the British Museum, v. 5, p. 304) stated: "Pl. LXXXIX. fig. 28." and "This species is unknown to me; figured from a drawing from type in U.S. Nat. Mus." "♂, Colorado."

Syntypes examined: 3 (2 USNM and 1 AMNH)

- (1) "Taeniocampa trifascia Smith Type"; "53, Colo.;" "Type No. 234, U.S.N.M.;" "♂ genitalia on slide 797, ELT." [Fair condition except somewhat faded] [USNM]
(2) "Taeniocampa trifascia Smith Type"; "89, Foot Hills, Colo., Bruce"; "Type No. 234, U.S.N.M.;" "♀ genitalia on slide 792, ELT." [Good condition] [USNM]
(3) "Taeniocampa trifascia Smith Type"; "Colo., Bruce"; "Collection J. B. Smith"; "♂ Genitalia mounted on slide no. 7193, FHR." [Rather worn] [AMNH]

Discussion.—In the original description Smith stated a pair of the total of three syntypes was in the U.S. National Museum. In 1893 his statement "The type is in the National Museum" seems to imply that he had a holotype, but he did not have such a concept. Since there were two specimens in that collection, it is not possible to know which he was referring to if he was indicating but one specimen. Hampson, 1905, illustrated the male from the U.S. National Museum. Accordingly, the male syntype in the U.S. National Museum has been selected, labeled, and is now designated the lectotype.

Agrotis trifasciata Smith, 1888, U.S. Natl. Mus. Proc. 10: 460.

"Habitat.—Mt. Hood." "One ♀ specimen from Mr. Tepper's collection."

Smith (1893, U.S. Natl. Mus. Bul. 44, p. 95) stated: "The types are in the Tepper and Graef collections."

Holotype.—In the collection of Michigan State University. The specimen is labeled "Type" [rhomboidal label]; "Mt. Hood"; "Tepper." It is a female in very good condition. There is a pseudotype in the U.S. National Museum. It is labeled "Agrotis 3 fasciata Smith ♂ type" [Smith label?]; "M H"; "Col. E. L. Graef"; "Type No. 33756 USNM."

Luperina trigona Smith, 1902, N.Y. Ent. Soc. Jour. 10: 39.

"Habitat.—Smith County, Tenn., August 6, 7, 21."

"Two males and two females in fair condition only, of this remarkable species are before me, through the kindness of Mr. Stanley T. Kemp, of Elizabeth." Hampson (1908, Catalogue of the Lepidoptera Phalaenae in the Collection of the British Museum, v. 7, p. 478) stated: "Pl. CXIX. fig. 26" and "This species is unknown to me; figured from a drawing from type in Coll. J. B. Smith." "♂, Tennessee."

Syntypes examined: 4 (2 AMNH and 2 USNM)

- (1) "Luperina trigona Smith ♂ type"; "Smith Co., Tenn., VIII.6"; "Collection J. B. Smith" [Worn and torn, right valve of genitalia missing] [AMNH]

- (2) "*Luperina trigona* Smith ♀ type"; "Smith Co., Tenn., VIII, 21"; "Aug. 26, 1899"; "Type No. 6244, U.S.N.M."; "♀ Genitalia Slide: USNM 1118, J. G. Franclemont" [Good condition] [USNM]
- (3) "*Luperina trigona* Smith ♂ cotype"; "Smith Co., Tenn., VIII-21"; "Collection J. B. Smith" [Rather worn] [AMNH]
- (4) "*Luperina trigona* Smith ♀ cotype"; "Smith Co., Tenn., VIII-7"; "Collection J. B. Smith" [Faded and worn] [USNM]

Discussion.—Hampson, 1908, illustrated a male syntype from a drawing of the type in the J. B. Smith collection, but as that specimen lacks one of the valves of the genitalia, the "♂ cotype" has been selected, labeled, and is now designated the lectotype.

***Rhynchagrotis trigona* Smith, 1893, U.S. Natl. Mus. Bul. 44, p. 53.**

"HABITAT.—California; Oregon; Colorado; Arizona; Kansas; British Columbia; Glenwood Springs, Colorado, in August." "The types of this species are the specimens named *cupidissima* by me in the collections U.S. National Museum [1890, U.S.N.M. Bull. 38, p. 24]."

Lectotype.—In the U.S. National Museum. Designated by Buckett (1968, Calif. Dept. Agr. Bur. Ent. Occas. Papers No. 15, p. 6).

***Melicleptria triolata* Smith, 1906, N.Y. Ent. Soc. Jour. 14: 18.**

"Habitat.—Los Angeles Co., Calif.; Argus Mts., Calif., in May." "One male and two females, two of them in very fair condition. The specimen from the Argus Mts. was collected by Koebele, belongs to the National Museum and has a little more of the desert habitus than the other examples which, while collected in an arid region, were not so distinctly in a desert area."

Lectotype.—In the American Museum of Natural History. Designated by Hardwick (1958, Canad. Ent. 90 (Sup. 6): 45). Hardwick selected the specimen marked "♀ type" as the lectotype. He was in error in stating that the "♂ type" and "♀ type" were taken in the Argus Mountains. Those two specimens were from Los Angeles County, Calif. The specimen marked "♀ cotype" in the U.S. National Museum was taken in the Argus Mountains.

***Tornacontia tripartita* Smith, 1903, Amer. Ent. Soc. Trans. 29(3): 210.**

"Hab.—Wilgus, Cochise Co., Arizona." "One female in fair condition, from Dr. Barnes' collection."

Holotype.—In the American Museum of Natural History. The specimen is labeled "*Tornacontia tripartita* Smith Type"; "Wilgus, Cochise Co., Ariz."; "Collection J. B. Smith"; "♀ genitalia on slide 10,391 FHR."

***Plagiomimicus triplagiatus* Smith, 1890, Ent. Amer. 6(7): 139.**

"Hab.—Las Vegas, N. Mex.; Hot Springs, 7000 feet;

August." "Several specimens collected by Mr. Meeske, are in the collections of Hulst and Neumoegen."

Smith (1893, U.S. Natl. Mus. Bul. 44, p. 263) stated: "Types are in the Neumoegen collection and in the Rutgers College (Hulst) collection."

Syntypes examined: 2 (USNM)

- (1) "*Plagiomimicus triplagiatus* Smith Type"; "Las Vegas, N.M., H. Meeske, '89"; "Type No. 33949 U.S.N.M." [A ♀, good condition]
- (2) "*Plagiomimicus triplagiatus* Smith Type"; "N. Mex."; "36511"; "Type No. 5104, U.S.N.M." [A ♀, unspread, apex of right forewing broken]

Discussion.—Smith mentioned that there were several specimens in the collections of Neumoegen and Hulst, but he did not state he had them all before him at the time of description. If he had them, he apparently did not label all as types. He mentioned two localities, but the second does not appear on the second syntype. It is not known, therefore, whether Smith had such knowledge from correspondence or some other source or if he examined a specimen with such a specific locality and date label. The syntype with the USNM type number 5104 was entered in the type book on May 19, 1900, and it was sent by Smith. It is possible that it was the specimen from the Hulst collection because Rindge, 1955, did not list the species from either the Smith or the Hulst collections received from Rutgers College. The other syntype is listed in the type book of the U.S. National Museum as received from Neumoegen. It was entered on May 4, 1929, and was actually received as part of the collection from the Brooklyn Museum. That syntype bears a correct locality label, "Las Vegas, N. Mex.," and is in good condition. It has been selected, labeled, and is now designated the lectotype.

***Acronycta tristis* Smith, 1911, Ent. News 22: 316.**

"Habitat.—Canada VIII, 5; Cohasset, Mass., VII, 1, 4; Johnson City, Tenn., VII." "Four males and two females, in fair condition."

Syntypes examined: 6 (5 AMNH and 1 USNM)

- (1) "*Acronycta tristis* Smith Type"; "No. 1275 See Dimmock's Entomological Notes (in MS)"; "J. B. Smith Collection, Rutgers" [A ♂, excellent condition] [AMNH]
- (2) "*Acronycta tristis* Smith Paratype"; "Cohasset, Mass., VII.7"; "J. B. Smith Collection, Rutgers" [A ♂, poor condition, complete] [AMNH]
- (3) "*Acronycta tristis* Smith Paratype"; "Cohasset, Mass."; "J. B. Smith Collection, Rutgers" [A ♂, rubbed and frayed] [AMNH]
- (4) "*Acronycta tristis* Smith Paratype"; "Cohasset, Mass., VII-1"; "♂ Genitalia slide no. 3533, 7 Apr. 1941, J.F.G.C." [Good condition] [USNM]
- (5) "*Acronycta tristis* Smith Paratype"; "Johnson City, Tenn., VII"; "J. B. Smith Collection, Rutgers" [A ♀, fair condition except right forewing broken] [AMNH]

- (6) "*Acronycta tristis* Smith Paratype"; "8.5 C" [Canada?]; "Collection J. B. Smith" [A ♀, fair condition] [AMNH]

Discussion.—Dimmock's entomological notes (manuscript) are now in the U.S. National Museum. Note 1275 indicates a larva collected on oak on September 18, 1897, pupated September 26, and emerged on June 8, 1898. It was identified by J. B. Smith as *Acronycta hamamelis* on March 24, 1900, and the specimen retained by Smith. No locality is given, but it is certain that it was Springfield, Mass. Two other Dimmock notes, 1377a and 1382 concern larvae taken on *Quercus* at Springfield, Mass., on September 18, 1897. Furthermore, from comments made by Dimmock in the introduction to an index to his notes, it is clear that where no locality is given with a note, the locality is that of his residence at that time. The "Type" in the American Museum of Natural History has been selected, labeled, and is now designated the lectotype.

***Carneades tronellus* Smith, 1903, Canad. Ent. 35(1): 11.**
"Habitat: Stockton, Utah, in October. Three ♂ and three ♀, all more or less rubbed or otherwise imperfect, from Mr. George Franck."
Hampson (1903, Catalogue of the Lepidoptera Phalaenae in the Collection of the British Museum, v. 4, p. 232) stated: "*Euxoa tronella*. (Pl. LXIII. fig. 8)" "*Carneades tronellus* Smith, ined." "*Hab.* U.S.A., Utah, Stockton, co-types + ♂ ♀ in Coll. Rothschild." The preface is dated June 20, 1903, and Smith's description appeared in the January issue of the Canadian Entomologist for 1903.

Syntypes examined: 3 (1 AMNH and 2 USNM)

- (1) "*Carneades tronellus* Smith ♂ type"; "Stockton, Utah, X"; "Collection J. B. Smith" [Fair condition, complete, but abdomen greasy] [AMNH]
- (2) "*Carneades tronellus* Smith ♂ cotype"; "Stockton, Utah"; "Barnes Collection"; "♂ Genitalia slide no. 1416, 15 Dec. 1937, J.F.G.C." [Badly rubbed] [USNM]
- (3) "*Carneades tronellus* Smith ♀ cotype"; "Stockton, Utah, IX-2-2, T. Spalding"; "Barnes Collection"; "♀ Genitalia slide no. 1417, 15 Dec. 1937, J.F.G.C." [Fair condition] [USNM]

Discussion.—A pair of syntypes, "♂ cotype" and "♀ cotype," are in the British Museum (Natural History) via the Rothschild collection. One female syntype, probably labeled "♀ type," has not been located. The "♂ type" in the American Museum of Natural History has been selected, labeled, and is now designated the lectotype.

***Noctua trumani* Smith, 1903, Canad. Ent. 35(5): 128, pl. 4, fig. 2.**

"Habitat.—Volga, South Dakota." "Four males and one female, in fair condition." "Some time before his death the late Judge P. C. Truman sent me several boxes of Noctuids, supposedly duplicates, intended to give me an idea of the general character of his local fauna. The specimens were unmounted

and were picked over from time to time to get such species as were being studied. Recently the entire material has been spread, and I find in it the species here described,"

Syntypes examined: 4 (3 AMNH and 1 USNM)

- (1) "*Noctua trumani* Smith ♂ type"; "Volga, So. Dak."; "Collection J. B. Smith" [Good condition, complete] [AMNH]
- (2) "*Noctua trumani* Smith ♀ type"; "Volga, So. Dak."; "Collection J. B. Smith" [Very ragged] [AMNH]
- (3) "*Noctua trumani* Smith ♂ genitalic Type"; "Volga, So. Dak."; "J. B. Smith Collection, Rutgers" [Apex forewing broken, both valves of genitalia missing] [AMNH]
- (4) "*Noctua trumani* Smith cotype"; "Volga, So. Dak."; "Barnes Collection"; "♂ Genitalia Slide: USNM 1983, J. G. Franclemont" [Good condition] [USNM]

Discussion.—One syntype, a male, has not been located. There is in the American Museum of Natural History a Smith genitalia slide of the species. It is almost certainly the source of the illustration of the right valve. It is also probable that the valves on the slide, which are poorly mounted, are from the syntype labeled "♂ genitalic Type." Because the slide and the specimen are poor and because one male syntype is missing, the specimen labeled "♂ genitalic Type" has been eliminated as a lectotype candidate. The "♂ type" in the American Museum of Natural History has been selected, labeled, and is now designated the lectotype.

***Euxoa truva* Smith, 1910, Amer. Ent. Soc. Trans. 36(3): 259.**

"*Hab.*—Denver and Poncha Springs, Colorado; July and September." "Two males and one female in good condition. Specimens received from Mr. Bruce many years ago and placed with *caenis* Grt.,"

Syntypes examined: 2 (AMNH)

- (1) "*Euxoa truva* Smith ♂ type"; "Colo."; "23, Colo, Bruce"; "J. B. Smith Collection, Rutgers" [Fair, nick and split in left hindwing, genitalia intact]
- (2) "*Euxoa truva* Smith ♀ type"; "Poncha Spgs., Col., 7/12/98"; "J. B. Smith Collection, Rutgers" [Fairly good]

Discussion.—One male syntype, apparently from Denver, Colo., September, has not been located. The "♀ type" in the American Museum of Natural History has been selected, labeled, and is now designated the lectotype.

***Mamestra tuana* Smith, 1906, Canad. Ent. 38(7): 229.**

"Habitat.—Huachuca Mts., Arizona." "Three males and eight females, in fair condition, all of them from Dr. Barnes, and all without date."

Syntypes examined: 8 (2 AMNH and 6 USNM)

- (1) "*Mamestra tuana* Smith ♂ type"; "Huachuca Mts., Ariz."; "Collection J. B. Smith" [Fair condition, complete] [AMNH]

- (2) "Mamestra tuana Smith ♀ type"; "Huachuca Mts., Ariz."; "J. B. Smith Collection, Rutgers" [Good condition] [AMNH]
- (3) "Mamestra tuana Smith ♂ cotype"; "Huachuca Mts., Ariz."; "Barnes Collection"; "♂ Genitalia on slide no. 913, 23 Dec. 1936, J.F.G.C." [USNM]
- (4) "Mamestra tuana Smith ♀ cotype"; "Huachuca Mts., Ariz."; "Barnes Collection"; "♀ Genitalia on slide no. 914, 23 Dec. 1936, J.F.G.C." [USNM]
- (5) "Mamestra tuana Smith ♂ cotype"; "Huachuca Mts., Ariz."; "Barnes Collection" [USNM]
- (6-8) "Mamestra tuana Smith ♀ cotype"; same data [USNM]

Discussion.—Three female syntypes have not been located. The "♂ type" in the American Museum of Natural History has been selected, labeled, and is now designated the lectotype.

Mamestra tufa Smith, 1905, N.Y. Ent. Soc. Jour. 13(4): 199.

Habitat.—Stockton, Utah, August 30. "Two male examples, neither of them very good, collected by Mr. Tom Spalding. One of them, from Dr. Barnes, is labeled '02; the other, from my own material, is labelled '04; the inference is that the species is not common."

Syntypes examined: 2 (AMNH and USNM)

- (1) "Mamestra tufa Smith ♂ type"; "Stockton, Ut."; "VIII-30-4"; "J. B. Smith Collection, Rutgers" [Fair condition, tear in right hindwing, complete] [AMNH]
- (2) "Mamestra tufa Smith ♂ cotype"; "Stockton, Utah"; "8-30-02"; "Barnes Collection" [Fair condition, left antenna missing] [USNM]

Discussion.—The "♂ type" in the American Museum of Natural History has been selected, labeled, and is now designated the lectotype.

Acronycta turpis Smith, 1911, Ent. News 22: 311.

Habitat.—Provo, Utah, VII, 24. "A single male, in good condition, from Mr. Thomas Spalding."

Holotype.—In the American Museum of Natural History. The specimen is labeled "Acronycta turpis Smith Type"; "Provo, Utah, VII-24-8, Tom Spalding"; "J. B. Smith Collection Rutgers." It is a male, becoming greasy, but otherwise in good condition and complete.

Pronoctua typica Smith, 1894, Amer. Ent. Soc. Trans. 21: 45, pl. 4, fig. 1.

Hab.—Colorado, Bruce; Nos. 229, 491."

Syntypes examined: 3 (USNM)

- (1) "Pronoctua typica Smith ♂ type"; "491"; "Barnes Collection"; "♂ Gen. #1324, F.H.B. 17 Dec. 1935" [Fair condition]
- (2) "Pronoctua typica Smith ♀ type"; "Colo., Bruce"; "Type No. 91, U.S.N.M." [Good condition]
- (3) "Pronoctua typica Smith ♀ type"; "Colo., Bruce"; "229"; "Type No. 91, U.S.N.M."; "♀

Gen. #1325, F.H.B. 17 Dec. 1935" [Fair condition]

Discussion.—Smith did not indicate how many specimens he had under examination. He did list two collection numbers. The first two syntypes listed bear name labels that differ from the other syntype label. The lines of the border are handmade with red ink and straight edge. I am not certain that the name and other information are in Smith's handwriting. The "♀ type" bearing number "229" certainly bears a Smith label and it is the specimen illustrated on plate 4, figure 1. Even so, the "♂ type" bears the number "491" cited by Smith. The "♂ type" has been selected, labeled, and is now designated the lectotype.

Antitype uintara Smith, 1911, N.Y. Ent. Soc. Jour. 19(3): 135.

Habitat.—San Diego, Calif., XI, II, III; Witch Creek, California, II, 3-14. "Fourteen examples, all males and in fair to good condition."

Syntypes examined: 10 (8 AMNH and 2 USNM)

- (1) "Antitype uintara Smith Type"; "Witch Cr., Cal., 1.18"; "J. B. Smith Collection, Rutgers" [Very good condition, complete] [AMNH]
- (2-5) "Antitype uintara Smith Paratype"; same data except dates 2.3, 2.14, and 2.15 [4 ♂♂] [AMNH]
- (6-7) "Antitype uintara Smith Paratype"; "San Diego, Calif., III"; "J. B. Smith Collection, Rutgers" [2 ♂♂] [AMNH]
- (8) "Antitype uintara Smith Paratype"; same data except "XI" [A ♂] [AMNH]
- (9) "Antitype uintara Smith Paratype"; "San Diego, Calif., II" [A ♂] [USNM]
- (10) "Antitype uintara Smith Paratype"; "San Diego, Calif., III" [A ♂] [USNM]

Discussion.—One male and two female syntypes have not been located. The "Type" in the American Museum of Natural History has been selected, labeled, and is now designated the lectotype.

Tricholita ulamora Smith, 1911, N.Y. Ent. Soc. Jour. 19(3): 141.

Habitat.—San Diego, California, X, 20, 1908, Mr. George H. Field. "A single male in good condition, . . ." "It was received from Mr. Field under the number 73, and has had no mates since its receipt, from any source."

Holotype.—In the American Museum of Natural History. The specimen is labeled "Tricholita ulamora Smith Type ♂"; "San Diego, Cal., 10-20-08, Geo. H. Field"; "J. B. Smith Collection Rutgers."

Mamestra uliginosa Smith, 1905, N.Y. Ent. Soc. Jour. 13(4): 202.

Habitat.—Southern Arizona, Poling; Kerrville, Texas, Dr. Barnes. "Two males and three females in good or fair condition, none of them dated."

Syntypes examined: 4 (2 AMNH and 2 USNM)

- (1) "Mamestra uliginosa Smith, ♂ type"; "Kerrville, Texas"; "Collection J. B. Smith"

[Good condition, some water spots on right forewing and anal areas of hindwings]

[AMNH]

- (2) "Mamestra uliginosa Smith, ♀ type"; "Kerrville, Texas"; "J. B. Smith Collection Rutgers" [Hindwings torn, complete] [AMNH]
- (3) "Mamestra uliginosa Smith, cotype"; "So. Arizona, Poling"; "Barnes Collection" [A ♂, fair condition, complete] [USNM]
- (4) "Mamestra uliginosa Smith, cotype"; "So. Arizona, Poling"; "Barnes Collection" [A ♀, abdomen glued on] [USNM]

Discussion.—One female syntype has not been located. I have selected, labeled, and now designate the "♂ type" in the collection of the American Museum of Natural History as the lectotype.

Eucalyptra umbonata Smith, 1903, Amer. Ent. Soc. Trans. 29(3): 221.

"*Hab.*—Hastings, Florida, April (Kearfott) and June (Barnes)." "I have eight examples, all of them males."

Syntypes examined: 7 (6 AMNH and 1 USNM)

- (1) "Eucalyptra umbonalis Smith ♂ type"; "Hastings, Florida"; "June 24–30"; "J. B. Smith Collection, Rutgers" [Rather worn, verdigris bad, complete] [AMNH]
- (2–3) "Eucalyptra umbonalis Smith ♂ cotype"; "Hastings, Fla., April"; "Collection of W. D. Kearfott"; "J. B. Smith Collection, Rutgers" [2 ♂♂, rather poor, complete] [AMNH]
- (4–6) "Eucalyptra umbonalis Smith cotype"; same data [3 ♂♂, 1 fair condition and others broken or rubbed] [AMNH]
- (7) "Eucalyptra umbonalis Smith ♂ cotype"; "Hastings, Florida"; "June 24–30"; "Barnes"; "♂ genitalia on slide, AGR [A. Glenn Richards]" [USNM]

Discussion.—One male syntype has not been located. The name labels of the syntypes all have a different termination to the specific name than proposed in the original publication. Smith either decided to change it after labeling the specimens or misspelled it in the manuscript. The syntype labeled "♂ type" in the American Museum of Natural History has been selected, labeled, and is now designated the lectotype.

Bomolocha umbralis Smith, 1884, Brooklyn Ent. Soc. Bul. 7: 4.

"*Hab.* Florida." "One ♀ specimen furnished the type."

Smith (1893, U.S. Natl. Mus. Bul. 44, p. 392) stated: "The type is in the National Museum."

Smith (1895, U.S. Natl. Mus. Bul. 48, p. 104) stated: "The specimen now before me is a male and resembles the type which is in the United States National Museum."

Holotype.—in the U.S. National Museum. The specimen is labeled "Bomolocha umbralis Smith Type"; "Indian Riv., Florida"; "Collection J. B. Smith"; "Type No. 324 USNM."

Oncocnemis umbrifascia Smith, 1894, Amer. Ent. Soc. Trans. 21: 64.

"*Hab.*—Colorado (Bruce); N.W. British Columbia, Neumoegen." "Two specimens have been examined, one of them in Mr. Neumoegen's collection, the other from Mr. Bruce, now in the U.S. National Museum."

Syntypes examined: 1 (USNM)

- (1) "Oncocnemis umbrifascia Smith Type"; "N.W. Brit. Cola."; "Col. B. Neumoegen"; "Type No. 33861, U.S.N.M."

Discussion.—One syntype from Colorado (Bruce) has not been located. According to the information in the original description, the syntype was supposed to be in the U.S. National Museum. In the absence of this syntype, the example in the U.S. National Museum received via the Neumoegen collection has been selected, labeled, and is now designated the lectotype.

Scotogramma umbrosa Smith, 1888, U.S. Natl. Mus. Proc. 10: 470.

"*Habitat.*—Arizona, Colorado." "Three ♀ specimens from as many collections are before me." Smith (1893, U.S. Natl. Mus. Bul. 44, p. 130) stated: "Types are in the National Museum."

Barnes and McDunnough (1916, Contrib. Nat. Hist. Lepidoptera N. Amer. 3(3): 162) stated: "The types in the National Museum are 2 ♀'s, one from Colorado, the other from Arizona. As we are not quite certain that these represent a single species, we would propose restricting the type to the Colorado ♀."

Syntypes examined: 2 (USNM)

- (1) "Scotogramma umbrosa Smith, Type"; "Ari."; "Holl."; "Type No. 163, U.S.N.M." [A ♀, excellent condition, complete]
- (2) "Scotogramma umbrosa Smith, Type"; "Col."; "Cramer"; "Collection J. B. Smith"; "Type No. 163, U.S.N.M."; "Type restricted to this Colo. spec., J. McD." [A ♀, abdomen glued on, greasy, apex of right forewing broken]

Discussion.—One syntype has not been located. In the U.S. National Museum there are two other specimens identified as this species by Smith, but they are not marked type. One is a female labeled "Col."; "Cramer"; "Collection Brklyn. Mus." It has the apical part of the abdomen missing. The other specimen is labeled "Scotogramma umbrosa Sm. var."; "Col."; "Col. B. Neumoegen." It is presently placed in the series of *Laciniolia luteimacula* B. and B. The statement by Barnes and McDunnough, 1916, about restricting the type to the Colorado female does not seem very positive. They did not state "we restrict the type," but rather "we would propose restricting . . ." The words "propose restricting" means they suggest restricting, and to me this is indefinite and implies a future action. It is unclear why they suggested that the Colorado specimen rather than the one from Arizona be selected. Considering the present condition of the specimen from Colorado, that seems to be a poor choice, but perhaps the specimen was in a different condition at the time of

their proposal. In order to prevent any possible confusion, I have selected, labeled, and now designate the "Type" from Colorado as the lectotype.

Peridroma saucia form unica Smith, 1890, U.S. Natl. Mus. Bul. 38, p. 70.

"The term *margaritosa* applies to the nearly uniformly luteous specimens, rare in the United States, while I have somewhere named a very distinctly marked specimen without any confusing shades *unica*. The term is not sanctioned by description, and I now deem the form not sufficiently constant to require a name."

Holotype.—In the collection of Michigan State University. The specimen is labeled "Agrotis unicus Smith Type"; "N. Car."; "Tepper." Smith did not intend to describe this form, but his remarks and the publication of a name constitute a valid description.

Hadena uncinata Smith, 1902, N.Y. Ent. Soc. Jour. 10: 41.

"*Habitat*.—Soda Springs, August 27, California; Sierra Nevada, California, two female examples." "The specimen from Sierra Nevada is type No. 4949 of the U.S. National Museum, and both came through Mr. Henry Edwards, years ago and at quite different times."

Syntypes examined: 1 (USNM)

- (1) "Hadena uncinata Smith ♀ type"; "Sier. Nev., Cal."; "36511"; "Type No. 4994 U.S.N.M." [Fair condition]

Other syntypes: 1 (AMNH)—Rindge (1955, p. 134) listed a "♀ cotype" of this species received from the Rutgers College collections. I did not examine the specimen. Rindge cited the date as August 24, which is different from that cited by Smith. I do not know which date is correct. The specimen is from Soda Springs, Calif.

Discussion.—When I was studying the Smith type material in the American Museum of Natural History, I found two females labeled "Hadena uncinata Smith Type"; "Sier. Nev., Cal."; "No. 10445, Collection Hy. Edwards"; "Type A.M.N.H." segregated in the type collection. The name type labels were Smith's. In recording the data labels, I did not check against the original description at the time and was not then aware that the two specimens were not syntypes. As a result, I did not examine the regular series of this species and I did not see the "♀ cotype." Smith apparently had forgotten he had returned the labeled specimens to Edwards. He also apparently gave the name to others, as there is a specimen in the U.S. National Museum that came from Neumoegen, which is labeled "Hadena uncinata Sm. MSS" and is from "Cal." The "♀ type" in the U.S. National Museum has been selected, labeled, and is now designated the lectotype. The type number cited by Smith is incorrect and undoubtedly the result of the accidental transposition of the last two digits.

Scotogramma uniformis Smith, 1893, Ent. News 4(3): 101, pl. 6, fig. 12.

"*Hab.*—Laggan, British Col., July 31st, far above

timber (7000 feet). Bean, No. 465."

Smith (1894, Amer. Ent. Soc. Trans. 21: 58, pl. 2, fig. 12) again described this as new, using the same plate. He added "1891" to the date and stated: "A single male in very good condition is before me, though Mr. Bean has others."

Holotype.—In the U.S. National Museum. The specimen is labeled "Scotogramma uniformis Smith ♂ type"; "465"; "Laggan, B.C., Above timber, July 31, 91"; "Type No. 165 USNM."

Taeniocampa uniformis Smith, 1888, U.S. Natl. Mus. Proc. 10: 472.

"*Habitat*.—Arizona." "One ♂, and one ♀. Collection Hulst and Smith."

Smith (1890, U.S. Natl. Mus. Proc. 12: 479) illustrated the "harpe and clasper" of the male genitalia.

Smith (1893, U.S. Natl. Mus. Bul. 44, p. 202) stated: "Types are in the National Museum and the Graef collection."

Syntypes examined: 2 (USNM)

- (1) "Taeniocampa uniformis Smith Type"; "Ariz."; "Col. B. Neumoegen"; "Type No. 33832, U.S.N.M." [A ♂, left valve of genitalia missing]
- (2) "Taeniocampa uniformis Sm., Coll. Edw. L. Graef"; "Arizona"; "Collection Brklyn. Mus." [A ♀]

Discussion.—Recognition of the syntypes and selection of a lectotype for this species have not been easy. There are all sorts of discrepancies between published information and label data. The actual number of syntypes also is in question, because in addition to the two listed here, there are two other specimens in the collection of the U.S. National Museum labeled as types by Smith and sent to this collection by him as the types! They were entered in the type book on June 24, 1896. The specimens are labeled "Taeniocampa uniformis Smith Type"; "Holl."; "137"; "Pl. XIII, f. 23"; "Type No. 233 U.S.N.M." and "Taeniocampa uniformis Smith Type"; "Col"; "Collection J. B. Smith"; "Type No. 233 U.S.N.M."; "♂ gen. #5, Sept. 24, 1931, FHB."; "Barnes Collection."

Both specimens are male. I consider both to be pseudotypes. I do not know when or why Smith labeled these as types, but I presume that it was probably during the preparation of his 1890 paper on the group or at least prior to his 1893 statement that types were in the U.S. National Museum and the Graef collection. In his 1893 "Catalogue" (p. 11), Smith stated: "I deem it a positive advantage to have types in several collections, but I would name nothing a type which came to hand after the original description was written." It appears, however, that is what he did in this instance and in others, i.e., *Hydroecia unimoda* Smith.

The two specimens I am treating as syntypes are both from Arizona, the locality mentioned in the original description. In the case of the male, it is unknown why Smith did not mention that it was from the Neumoegen collection. The female is not labeled type, but it is from Arizona and from the Graef collection mentioned by

Smith in 1893 as containing a type. Finally, it is the only possible syntype located of that sex. The male syntype in the U.S. National Museum has been selected, labeled, and is now designated the lectotype.

A Smith genitalia slide has been located in the U.S. National Museum. It contains the broken pieces of the left valve and probably is from the specimen selected as lectotype. It is labeled "4 T." and "Taen. uniformis." The first label undoubtedly refers to figure 4 of Smith's plate 23 of the 1890 paper. That plate contains only species placed in *Taeniocampa* by Smith. Figure 4 is obviously a composite drawing and is inaccurate in three respects. It shows a right valve rather than the left, the apical part is not properly connected, so that the distal part of the ventral margin is incorrect, and finally, the process from the dorsal margin of the valve does not have another free process extending along its length and it is differently shaped. The species is actually a synonym of *Homorthodes fufurata* (Grt., 1875) or a closely related species. An examination of the male genitalia of the type of that species reveals that Smith's illustration of the genitalia of that species (pl. 23, fig. 1) is also inaccurate.

Schinia unimacula Smith, 1891, Amer. Ent. Soc. Trans. 18: 126.

"*Hab.*—Colorado (Bruce)." "The type is from Mr. Neumoegen's collection, and there are three handsome examples in the collection U.S. Nat. Museum, all of Mr. Bruce's collecting."

Smith (1893, U.S. Natl. Mus. Bul. 44, p. 276) stated: "Types are in Mr. Neumoegen's collection and in the National Museum."

Syntypes examined: 2 (USNM)

- (1) "Schinia unimacula Smith Type"; "Colo. Bruce"; "Col. B. Neumoegen"; "Type No. 33719 U.S.N.M." [A ♂, good condition except abdomen greasy]
- (2) "Schinia unimacula Smith Type"; "Colo. Bruce"; "Collection J. B. Smith"; "Type No. 287 U.S.N.M." [A ♀, good condition]

Discussion.—It would appear from the original description that Smith treated the syntype from the Neumoegen collection as the holotype. But as has been stated before he did not have a holotype concept. In this instance, this is shown by the facts that in 1893 he referred to types of this species in two collections and that he labeled two syntypes as "Type." The other two examples that were before him are without doubt still in the U.S. National Museum. There are only two specimens besides the two "Type" examples from "Colo. Bruce." Both are males and both lack Smith determination labels. Although I believe that they are syntypes, I have not so listed them as such, because in the absence of Smith type or identification labels there could always be a question, even though slight, as to their authenticity. The male "Type," which originated from the Neumoegen collection, has been selected, labeled, and is now designated the lectotype.

Hydroecia unimoda Smith, 1892, Ent. News 3(10): 251, pl. 10, row 2, fig. 6.

"*Hab.*—Colorado. Bruce (no. 244) one ♂." The legend for the plate actually states that figure 4 is *unimoda*, but that is an error.

Smith (1894, Amer. Ent. Soc. Trans. 21: 73, pl. 10, row 2, fig. 6) again described this as new, using the same plate. He stated: "*Hab.*—Colorado, Bruce (Nos. 122, 244)." "Two male specimens are before me"

Holotype.—In the American Museum of Natural History. The specimen is labeled "Hydroecia unimoda Smith Type"; "Colo. Bruce"; "Collection J. B. Smith." It is a male and it is the specimen figured by Smith. The 244 is no longer on the specimen. There is a pseudotype in the U.S. National Museum. It is the second specimen mentioned in the second description. It is labeled "Hydroecia unimoda Smith Type"; "Colo., Bruce"; "122"; "Type No. 218 USNM"; "♂ genitalia on slide 411 JFGC."

Xylophasia unita Smith, 1904, Psyche 11(2): 54.

"*Habitat.*—Calgary, Alberta, Head of Pine Creek, June 26; F. H. Wolley Dod." "One female, in good condition." "I have another female example from Corvallis, Oregon, which I refer here with considerable doubt."

Holotype.—In the American Museum of Natural History. The specimen is labeled "Xylophasia unita Smith ♀ type"; "Calgary, Alta., 26.VI.97, F. H. Wolley Dod"; "Head of Pine Creek"; "J. B. Smith Collection Rutgers."

Euxoa ura Smith, 1905, Canad. Ent. 37: 203.

"*Habitat.*—Stockton, Utah, September 18 to October 4; Mr. Thomas Spalding." "Eighteen males and ten females, most of them in good condition and showing so great a range of variation that I am by no means certain that only one species is involved." *Syntypes examined*: 9 (3 AMNH, 5 USNM, and 1 KU)

- (1) "Euxoa ura Smith ♂ type"; "Stockton, Ut., IX-26-3, Tom Spalding" [Good condition except tear and worn spot on left forewing] [AMNH]
- (2) "Euxoa ura Smith ♀ type"; "Stockton, Ut.," "IX-22-4"; "J. B. Smith Collection, Rutgers"; "♀ genitalia mounted on slide no. 9160, FHR." [Good condition] [AMNH]
- (3) "Euxoa ura Smith ♀ cotype"; "Stockton, Ut.," "X-2-4"; "J. B. Smith Collection, Rutgers" [AMNH]
- (4) "Euxoa ura Smith ♂ cotype"; "Stockton, Ut., IX-20-3, Tom Spalding"; "Slide 39"; "Agrees with T ♂ *ura* in Rutgers. Type a little redder. J. McD."; "Barnes Collection" [Right forewing with apex missing] [USNM]
- (5) "Euxoa ura Smith ♂ cotype"; "Stockton, Ut., IX-18-3, Tom Spalding"; "Barnes Collection" [Apex of left forewing broken] [USNM]
- (6) "Euxoa ura Smith ♂ cotype"; "Stockton, Ut.," "X-4-4"; "Barnes Collection" [USNM]
- (7) "Euxoa ura Smith ♂ cotype"; "Stockton, Ut.," "X-4-4"; "Acc. No. 10142"; "Type No."

33744 U.S.N.M. [USNM]

- (8) "Euxoa ura Smith ♀ cotype"; "Stockton, Ut.," "IX-22-4"; "Barnes Collection" [USNM]
(9) "Euxoa ura Smith ♂ cotype"; "Stockton, Ut., IX-25-3, Tom Spalding"; "Univ. of Kan., Lot 905" [Excellent condition] [KU]

Discussion.—Nineteen syntypes, 12 males and 7 females, have not been located. It is likely that they were not labeled by Smith. This may be due in part to the fairly large number of examples (more than he usually labeled) and possibly to the fact that some may not actually be this species, as Smith indicated he was not certain that only one species was represented in the series. The "♀ type" in the American Museum of Natural History has been selected, labeled, and is now designated the lectotype. D. F. Hardwick concurs in the selection of this candidate.

Euxoa ura form uramina Smith, 1905, *Canad. Ent.* 37: 204.

Habitat.—Stockton, Utah, September 8 to October 4; Mr. Thomas Spalding. "Of the third form I have 4 ♂ and 2 ♀, ranging in size from 1.00 to 1.20 inches, none of the males exceeding 1.10, while the two females are nearly of a size. This has a little reddish in its general appearance, but the maculation is greatly obscured throughout. This form is the more likely to prove distinct, and I propose the term *uramina* for it to call attention to its existence."

Syntypes examined: 5 (2 AMNH and 3 USNM)

- (1) "Euxoa uramina Smith ♂ type"; "Stockton, Ut., IX-23-3, Tom Spalding"; "J. B. Smith Collection, Rutgers" [Good condition, complete] [AMNH]
(2) "Euxoa uramina Smith ♀ type"; "Stockton, Ut., IX-18-3, Tom Spalding"; "♀ genitalia mounted on slide no. 9162, FHR." [AMNH]
(3) "Euxoa uramina Smith ♀ type"; "Stockton, Ut., IX-26-3, Tom Spalding"; "Barnes Collection" [Abdomen missing] [USNM]
(4) "Euxoa uramina Smith ♂ cotype"; "Stockton, Ut., IX-29-3, Tom Spalding"; "Barnes Collection"; "Slide 40a"; "This does not agree with type of *uramina* in Rutgers." [USNM]
(5) "Euxoa uramina Smith ♂ cotype"; "Stockton, Ut., IX-26-3, Tom Spalding"; "Barnes Collection" [Apex of left valve missing] [USNM]

Discussion.—One male syntype has not been located. It could be one of several specimens in the U.S. National Museum bearing Smith determination labels "Euxoa uramina Smith" or "Euxoa ura var. Smith." The two female syntypes are each marked "♀ type." Since the one in the U.S. National Museum lacks an abdomen, the "♀ type" in the American Museum of Natural History has been selected, labeled, and is now designated the lectotype.

Lathosea ursina Smith, 1898, *Canad. Ent.* 30: 324.

Habitat.—Glenwood Springs, Colo., March 27th to

April 13th; Dr. Barnes. Garfield County, Colo., 6,000 feet; Mr. Bruce. "Twelve specimens are under examination, only one of which is a female." Barnes and McDunnough (1913, *Contrib. Nat. Hist. Lepidoptera N. Amer.* 2(1): 14, pl. 6, fig. 17) illustrated a "♂ cotype" from Glenwood Springs, Colo., under the name "*Trichopolia (Lathosea) ursina* Sm." *Syntypes examined:* 10 (8 USNM and 2 AMNH)

- (1) "Lathosea ursina Smith ♂ type"; "Glenwood Springs, Col., 1894, 4/3, W. Barnes"; "Type No. 4161 U.S.N.M."; "Acc. No. 34638" [Good condition, complete] [USNM]
(2) "Lathosea ursina Smith ♀ type"; "Glenwood Springs, Col., 1893, 4/3, W. Barnes"; "Type No. 4161 U.S.N.M."; "36311" [Fairly good condition] [USNM]
(3) "Lathosea ursina Smith cotype"; "Garfield Co., Colo., 6000 ft., Bruce"; "Colo. Bruce"; "Type No. 4161 U.S.N.M."; "36511" [A ♂] [USNM]
(4) "Lathosea ursina Smith cotype"; "Glenwood Springs, Col., 1893, 4/3, W. Barnes"; "Type No. 4161 U.S.N.M."; "Acc. No. 34638" [A ♂] [USNM]
(5-7) "Lathosea ursina Smith cotype"; "Glenwood Springs, Col., 1893, 4/3, W. Barnes"; "Barnes Collection" [3 ♂ ♂] [USNM]
(8) "Lathosea ursina Smith cotype"; same data plus "Photograph Pl. 6, No. 17" [A ♂] [USNM]
(9-10) "Lathosea ursina Smith cotype"; "Glenwood Springs, Col., 1893, 3/27, W. Barnes"; "J. B. Smith Collection, Rutgers" [2 ♂ ♂] [AMNH]

Discussion.—Two male syntypes have not been located. If Smith was correct on the dates cited, at least one may be dated April 13. Four syntypes bear the label "Type No. 4161 U.S.N.M." in the type book only two are recorded on February 3, 1899. Smith apparently sent four to this institution, kept two, and returned at least four to Barnes. He may have sent two others elsewhere. Barnes and McDunnough, 1913, illustrated one of the male syntypes, but as it is not as good a specimen as the "♂ type" and because both are in the U.S. National Museum, it has not been selected as the lectotype. The "♂ type," the best specimen, has been selected, labeled, and is now designated the lectotype.

Merolonche ursina Smith, 1898, *U.S. Natl. Mus. Proc.*

21(1140): 180, pl. 10, figs. 5, 6, pl. 22, fig. 22.

Habitat.—Colorado. "Several specimens of both sexes have been at hand, most of them collected by Mr. David Bruce in the mountainous districts toward Glenwood, whence Dr. William Barnes has also received it."

Smith (1911, *Pomona Jour. Ent.* 3(3): 566) stated: "Ursini [sic] Smith was described from Colorado," Elsewhere in the text and in the key he spelled the specific name correctly.

Syntypes examined: 3 (2 USNM and 1 AMNH)

- (1) "Merolonche ursina Smith ♂ type"; "Colo.

- Bruce"; "Type No. 3757 U.S.N.M." [Fairly good condition, complete] [USNM]
- (2) "Merolonche ursina Smith ♀ type"; same data [Fair condition except left antenna missing] [USNM]
 - (3) "Merolonche ursina Smith cotype ♂"; "Colo., Bruce"; "Collection J. B. Smith" [Fair condition except left antenna missing] [AMNH]

Discussion.—The "♂ type" in the U.S. National Museum has been selected, labeled, and is now designated the lectotype.

Mamestra u-scripta Smith, 1891, U.S. Natl. Mus. Proc. 14(851): 228.

"HABITAT.—Sierra Nevada, California; Nevada County, California." "I have received this from Mr. Edwards, and there are two female specimens in the National Museum (through C.V.R.), which bear the red number 344, indicative of a biological note in Dr. Riley's possession."

Smith (1893, U.S. Natl. Mus. Bul. 44, p. 119) stated: "Types are in the National Museum and in the Edwards collection."

Syntypes examined: 5 (4 AMNH and 1 USNM)

- (1) "Mamestra u-scripta Smith Type"; "Sier. Nev., Cal."; "No. 10236, Collection Hy. Edwards"; "TYPE, A.M.N.H." [A ♂, fairly good condition, complete] [AMNH]
- (2) "Mamestra u-scripta Smith Type"; same data except "No. 10235, Collection Hy. Edwards" [A ♀, fair condition] [AMNH]
- (3) "Mamestra u-scripta Smith Type"; same data except "No. 10237, Collection Hy. Edwards" [A ♀, fair condition] [AMNH]
- (4) "Mamestra u-scripta Smith Type"; "Sier. Nev., Cal."; "Collection J. B. Smith" [A ♂, both valves of genitalia missing] [AMNH]
- (5) "Mamestra u-scripta Smith Type"; "Sier. Nev., Cal."; "Type No. 152, U.S.N.M."; "Acc. No. 23933, U.S.N.M." [A ♂, good condition, complete] [USNM]

Discussion.—Smith mentioned two females in the U.S. National Museum that bore the red number 344. I do not believe that they were before him at the time of the description, and I have not treated them as syntypes. A search has revealed only one such specimen. It is not labeled as a type and does not bear a Smith determination label. Smith must have had at least five examples from the Hy. Edwards collection. Of these it appears that he returned three, one to the U.S. National Museum, and kept one male. He did not refer in print to the specimen he retained as a type. He did prepare a genitalia slide (right valve), possibly from that specimen. The slide is in the American Museum of Natural History. He did not illustrate the genitalia. Because the type-series was originally from the Hy. Edwards collection and because the majority of syntypes were returned to that collection, I have selected, labeled, and now designate the male syntype bearing the Hy. Edwards number 10,236 as the lectotype. It is in the American Museum of Natural History.

Taeniocampa utahensis Smith, 1888, U.S. Natl. Mus. Proc. 10: 473.

"Habitat.—Utah." "A single ♂ specimen from the late Capt. D. H. Murdock, U.S. Army, in my collection. (Coll. U.S.N.M.)"

Smith (1890, U.S. Natl. Mus. Proc. 12: 482) stated: "The species was collected by Capt. D. H. Murdock, U.S. Army, near Fort Thornburgh, and I have never seen another specimen. The type is in the National Museum."

Smith (1893, U.S. Natl. Mus. Bul. 44, p. 203) stated: "The type is in the National Museum."

Holotype.—In the U.S. National Museum. The specimen is labeled "Taeniocampa utahensis Smith Type"; "Collection J. B. Smith"; "Type No. 237 USNM"; "♂ genitalia on slide 107 FHB."

Carneades vallis Smith, 1900, U.S. Natl. Mus. Proc. 22(1203): 430.

"Habitat.—Laggan, British Columbia, 5,000 feet, September 9 (Bean)." "A single female only, in fair condition."

Holotype.—In the U.S. National Museum. The specimen is labeled "Carneades vallis Smith ♀ type"; "Laggan, B.C., 5000 ft., Sep 9"; "36511"; "Type No. 5157 USNM."

Carneades vanidicus Smith, 1900, U.S. Natl. Mus. Proc. 22(1203): 453.

"Habitat.—Phoenix, Arizona, November 4 to 11 (Griffith); Pullman, Washington, September 27 (Piper)." "Seven specimens, of which half are male and half are female, one example being the most complete possible example of a union of both sexes. The left side from the median line of the body is completely male, the right side is as completely female. Ovipositor and claspers are both present and the difference in antennal structure is marked." "Type.—Cat. No. 4807, U.S.N.M."

Syntypes examined: 4 (2 USNM and 2 AMNH)

- (1) "Carneades vanidicus Smith ♂ & ♀ type"; "Pullman, Wash., 1 Sept. 98"; "36311"; "Type No. 4807 U.S.N.M."; "♂ genitalia on slide 2161, Mar., 1966, ELT." [Right forewing badly torn, right hindwing mostly missing, antenna and frenulum of right side are female, those parts of left side are male] [USNM]
- (2) "Carneades vanidicus Smith cotype"; "Phoenix, Ariz., XI-19"; "Not conspecific with type of vanidicus in N. Mus., J. McD." [A ♀, fair condition] [USNM]
- (3) "Carneades vanidicus Smith cotype"; "Phoenix, Ariz., XI-5"; "J. B. Smith Collection, Rutgers" [A ♂] [AMNH]
- (4) "Carneades vanidicus Smith cotype"; "Phoenix, Ariz., XI-19"; "J. B. Smith Collection, Rutgers" [A ♂] [AMNH]

Discussion.—Three syntypes have not been located. If Smith is correct in the dates given in the original description, it appears that one must be from Pullman, Wash., dated September 27, the others from Phoenix, Ariz., dated November 4 and 11. It should be

pointed out, however, that Smith did not cite the date of the hermaphroditic specimen nor the November 19 date on two of the "cotypes." In the case of the latter, he may have interpreted the "19" to be an 11. As the McDunnough note on the "cotype" in the U.S. National Museum indicates, there is the possibility that the specimens from the two localities represent different species. The "♂ & ♀ type" in the U.S. National Museum is the only syntype bearing a USNM type number 4807 cited in the original description and it is the only located syntype from Pullman, Wash. In consideration of these facts, it has been selected, labeled, and is now designated the lectotype. The genitalia are mostly male and typical of *Euxoa olivia* (Morrison) males except the right tegumen and the uncus are slightly aberrant, and there is an incompletely formed ovipositor lobe at the right of the base of the uncus. Selection of the lectotype for this species has been discussed with D. F. Hardwick, who has studied *Euxoa* extensively. He concurs with the selection made.

***Stretchia variabilis* Smith, 1891, Amer. Ent. Soc.**

Trans. 18: 119, pl. 2, fig. 8.

"Hab.—Colorado (Bruce)." "Several specimens are before me from Mr. Neumoegen and Mr. Bruce, and no two of them are alike."

Smith (1893, U.S. Natl. Mus. Bul. 44, p. 208) stated: "The types are in the National Museum and in the Neumoegen collections."

Syntypes examined: 4 (USNM)

- (1) "Xylomiges variabilis Smith Type"; "Colo., Bruce"; "B"; "Type No. 245 U.S.N.M."; "36511" [A ♂, hindwings and abdomen broken from but still attached to rest of specimen by filament of verdigris]
- (2) "Stretchia variabilis Smith Type"; "Col."; "Type No. 245 U.S.N.M." [A ♂, fairly good condition, complete]
- (3) "Xylomiges variabilis Smith Type"; "Colo., Bruce"; "Collection B. Neumoegen" [A ♀]
- (4) "Xylomiges variabilis Smith Type"; "Colo., Bruce"; "Collection B. Neumoegen"; "Type No. 33836 U.S.N.M." [A ♂, valves of genitalia missing]

Discussion.—The exact number of specimens in the original series is not known. On page 120 of the original description, in a discussion of color variation, Smith's comments indicate a minimum of five, but as he mentioned types in only two collections, both now in the U.S. National Museum, and only four syntypes have been located, it appears that he labeled but four. None were received from the Rutgers collection by the American Museum of Natural History. It also appears that Smith labeled the first specimens studied as "Xylomiges variabilis" and decided before publication to place the species in *Stretchia*. Only one syntype is so labeled. There is a Smith genitalia slide consisting of two valves mounted with the inner surface down on the slide in the U.S. National Museum. It also is labeled "Xylomiges variabilis," and it is apparent that figure 8, plate 2, was taken from the right valve although figured as a left valve! The right valve only has been denuded

of scales; the left valve is oriented in an oblique plane. Smith apparently missed seeing the line of the ventral margin of the valve at the point where it crosses the "clasper." In consideration of the condition of the syntypes, the name labels, and so forth, the male syntype in the U.S. National Museum labeled "*Stretchia variabilis* Smith Type" has been selected, labeled, and is now designated the lectotype.

***Annaphila variegata* Smith, 1908, N.Y. Acad. Sci. Ann. 18(2): 122.**

"Habitat.—Placer County, California, 2500 feet."

"Five males and five females, in good condition and all very much alike."

Syntypes examined: 8 (7 AMNH and 1 USNM)

- (1) "Annaphila variegata Smith ♂ type"; "Placer Co., 2500 ft., Cal."; "♂ Genitalia mounted on slide No. 2363, FHR."; "J. B. Smith Collection, Rutgers" [Only fair condition, left hindwing mostly missing] [AMNH]
- (2) "Annaphila variegata Smith ♀ type"; "Placer Co., 2500 ft., Cal."; "♀ Genitalia mounted on slide No. 2310, FHR."; "J. B. Smith Collection, Rutgers" [Very good condition] [AMNH]
- (3-4) "Annaphila variegata ♂ cotype"; "Placer Co., 2500 ft., Cal."; "J. B. Smith Collection, Rutgers" [2 ♂♂] [AMNH]
- (5-7) "Annaphila variegata ♀ cotype"; same data [3 ♀♀] [AMNH]
- (8) "Annaphila variegata ♂ cotype"; "Placer Co., 2500 ft., Cal." [USNM]

Discussion.—One pair of syntypes has not been located. Rindge and C. I. Smith (1952, Amer. Mus. Nat. Hist. Bul. 98, art. 3, p. 225) treated this species as a synonym of *A. lithosina* Hy. Edwards and under "Types" stated, "*Variegata*, in the collection of Rutgers University." They did not select a lectotype. Accordingly, the "♂ type" in the American Museum of Natural History has been selected, labeled, and is now designated the lectotype.

***Mamestra variolata* Smith, 1888, U.S. Natl. Mus. Proc. 10: 467.**

"Habitat.—Washington Territory." "Type with Mr. E. L. Graef. One ♂ and one ♀ examined."

Smith (1892, U.S. Natl. Mus. Proc. 14: 238, pl. 9, fig. 35) illustrated the "harpe and clasper" of the male genitalia and stated: "HABITAT.—Washington." "One of the type specimens is in the Museum collection (Coll. J. B. S.), the other is with Mr. E. L. Graef."

Smith (1893, U.S. Natl. Mus. Bul. 44, p. 122) stated: "Types are in the National Museum and in Mr. Graef's collection."

Hampson (1905, Catalogue of the Lepidoptera Phalaenae in the Collection of the British Museum, v. 5, p. 118) stated: "Pl. LXXXVI. fig. 10" and "This species is unknown to me; figured from a drawing from type in U.S. Nat. Mus." "♂, Washington."

Syntypes examined: 2 (USNM)

(1) "Mamestra variolata Smith Type"; "W. T."; "Graef"; "Type No. 33806, U.S.N.M."; "♂ gen. 119, 15 Dec. 31, FHB." [Very good condition]

(2) "Mamestra variolata Smith Type"; "Was. T."; "Collection J. B. Smith"; "Type No. 153, U.S.N.M." [A ♂, fairly good condition, complete]

Discussion.—Smith was incorrect as to the sex of one of the syntypes. Hampson's illustration must have been taken from the second listed syntype as it was the only one in the U.S. National Museum at the time. The illustration is so poor that it is unlikely the species could ever be recognized from it. So there is little reason for selecting that specimen as the lectotype. The other syntype is in better condition. The genitalia were prepared by Benjamin and possibly used by him and others subsequently to recognize the species. Accordingly, the "Type" with the USNM type number 33806 has been selected, labeled, and is now designated the lectotype.

Mamestra vau-media Smith, 1888, U.S. Natl. Mus. Proc. 10: 466.

Habitat.—Colorado. "The type is with Mr. Cramer, and was collected by Mr. Bruce" Smith (1893, U.S. Natl. Mus. Bul. 44, p. 126) stated: "The type is with Mr. J. Doll."

Discussion.—I have not located any specimens of this species labeled as such by Smith. The information in the original description is so vague that it is not possible to say whether Smith had a single specimen or more than one. His comment in 1893 that the type was with Doll appears to be an error. There is a specimen in the U.S. National Museum from Calgary, Canada, that has the following note attached: "Doll never heard of *vau-media* but Smith said type with Cramer so it ought to be in the Barnes coll. See note 123." I do not know who wrote the label or to what the reference about note 123 means. There is a genitalia slide in the U.S. National Museum (USNM Smith slide number 238), which is labeled "#39" and "M. v-media, Cramer III." The slide consists of the broken apices of the two valves. I doubt that the species can be identified from this slide, but in the absence of other evidence I think that this slide must be considered to be the holotype and that the remainder of the specimen has been lost or destroyed, or it is at least not recognizable.

Mamestra vau-orbicularis Smith, 1902, N.Y. Ent. Soc. Jour. 10: 42.

Habitat.—Corvallis, Oregon, June 21, 1900, Professor Washburn. "A single male in good condition." Smith (1902, N.Y. Ent. Soc. Jour. 10: 142) stated: "In the description of the above species [*vau-orbicularis*] in the March number of the JOURNAL the specimen received was inadvertently credited to Prof. Washburn, formerly of Corvallis, from whom I had in times past received material. As a matter of fact the credit should be to Prof. A. B. Cordley who has been good enough to follow his predecessor in favoring the undersigned with noctuid material. JOHN B. SMITH."

Holotype.—In the American Museum of Natural History. The specimen is labeled "Mamestra vau-orbicularis Smith ♂ type"; "Corvallis, Or., 1900"; "June 21"; "Collection J. B. Smith."

Bomolocha vega Smith, 1900, U.S. Natl. Mus. Proc. 22(1203): 494.

Habitat.—Las Vegas, New Mexico (Bolter); Lower California (Barnes). "Four males in good or fair condition and much alike, save for the difference in the amount of contrast between the shadings." *Type.*—Cat. No. 4820, U.S.N.M."

Syntypes examined: 4 (2 USNM and 2 AMNH)

- (1) "Bomolocha vega Smith ♂ type"; "Las Vegas, N.M."; "77"; "Type No. 4820, U.S.N.M."; "36311" [Good condition, complete] [USNM]
- (2) "Bomolocha vega Smith ♂ cotype"; "Southern Cal."; "34" [Rather rubbed and faded, both forewings torn at apices, complete] [USNM]
- (3) "Bomolocha vega Smith ♂ cotype"; "Southern Cal."; "Collection J. B. Smith" [Worn but complete] [AMNH]
- (4) "Bomolocha vega Smith ♂ cotype"; same data [Fair condition, complete] [AMNH]

Discussion.—This species apparently was named from the Las Vegas, N. Mex., locality. The only syntype from there is also the only syntype marked "type" and the only one to bear the U.S. National Museum type number cited in the original description. For those reasons, it has been selected, labeled, and is now designated the lectotype.

Leucania velutina Smith, 1900, U.S. Natl. Mus. Proc. 22(1203): 480.

Habitat.—Biscayne Bay, Florida (Mrs. Stosson). "The type and only specimen is a female, lacking antenna but otherwise in good condition."

Holotype.—In the American Museum of Natural History. The specimen is labeled "Leucania velutina Smith ♀ type"; "Bisc. Bay, Fla."; "Collection J. B. Smith." The name was subsequently stated to be preoccupied, and the species was renamed *lutina* by Smith in 1902.

Taeniocampa venata Smith, 1890, Ent. Amer. 6(7): 123.

Hab.—New York. "A single male in good condition, collected by Mr. Bruce, many years ago, and numbered 63."

Smith (1893, U.S. Natl. Mus. Bul. 44, p. 206) placed his name as a synonym of *T. rubrescens* (Wlk.) and stated: "The types of both species are now in the National Museum. *Rubrescens* was described from Dr. Bethune's collection, and to his courtesy the Museum owes the type".

Holotype.—In the American Museum of Natural History. The specimen is labeled "Taeniocampa venata Smith Type"; "N.Y."; "63"; "Collection J. B. Smith."

Lythrades venatus Smith, 1903, Amer. Ent. Soc. Trans. 29(3):207.

"*Hab.*—Santa Fé, New Mexico, in July at light."
"One female in rather poor condition from Prof. T. D. A. Cockerell, number 3783, and there is a similar specimen from the same source in the collection of the U.S. National Museum."

Hampson (1910, Catalogue of the Lepidoptera Phalaenae in the Collection of the British Museum, v. 9, p. 530) stated: "Pl. CXLVIII, fig. 19" and "Figured from drawing from Co-type in U.S. Nat. Mus." "*♀*, New Mexico."

Barnes and Benjamin (1924, Contrib. Nat. Hist. Lepidoptera N. Amer. 5(3): 164) stated: "It is represented in the Smith Collection by the unique type (*♀*) from Santa Fe, N. Mex."

Syntypes examined: 1 (AMNH)

- (1) "Lythrodes venatus Smith Type"; "CkII. 3783, Sta. Fe., July, at light"; "7"; "Collection J. B. Smith" [A *♂*, fair condition, but beginning to break at thorax from verdigris formation, com; lete]

Discussion.—Smith mentioned another specimen in the U.S. National Museum, but he obviously did not have it before him at the time of the description and he did not mark it a type nor put a determination label on the specimen. Hampson referred to it as a "Cotype" and said it was a female from New Mexico. It is a male and is labeled "CkII. 7, Sta. Fe., Aug. at light." I consider that the specimen in the American Museum of Natural History is the holotype, but for those who do not, I selected, labeled, and now designate it the lectotype.

Cosmia venosa Smith, 1903, N.Y. Ent. Soc. Jour. 11(1): 21.

"*Habitat*: Corvallis, Oregon, June 4-29, at light, A. B. Cordley; Olympic Mts., Washington, C. V. Piper; Victoria, British Columbia, July 7, through Dr. Fletcher." "Two male and four female examples are before us."

Syntypes examined: 6 (3 AMNH and 3 USNM)

- (1) "Cosmia venosa Smith *♂* type"; "Corvallis, Ore., 6-12-98"; "Collection J. B. Smith" [Fairly good condition, complete] [AMNH]
- (2) "Cosmia venosa Smith *♀* type"; "Corvallis, Or., 6-4-98"; "39"; "At light" [USNM]
- (3) "Cosmia venosa Smith *♀* cotype"; "Corvallis, Or., 6-29-96"; "J. B. Smith Collection, Rutgers" [AMNH]
- (4) "Cosmia venosa Smith *♀* cotype"; "Corvallis, Or., 6-8-98"; "J. B. Smith Collection, Rutgers" [AMNH]
- (5) "Cosmia venosa Smith *♂* cotype"; "Vict. B. C., 7/7/99 [on reverse] 49"; "Type No. 6809 U.S.N.M." [USNM]
- (6) "Cosmia venosa Smith"; "Olympic Mts., Wash."; "Collection C. V. Piper" [A *♀*, right forewing worn and torn at apex] [USNM]

Discussion.—The last specimen listed here was not marked a type by Smith, but the locality data were cited by him. As all the other syntypes are accounted for, it would appear almost certain to be a syntype also. The "*♂* type" in the American Museum of Natural His-

tory has been selected, labeled, and is now designated the lectotype.

Orthosia verberata Smith, 1904, Canad. Ent. 36(6): 153.

"*Habitat*.—Calgary, Alberta, head of Pine Creek, at treacle, September 17, 23 and 27, Mr. Dod." "Two males and two females, in good condition."

Smith (1907, Amer. Ent. Soc. Trans. 33: 352) stated: "The types were received from Mr. Dod, labelled 'Head of Pine Creek, Calgary, Alberta,' at various dates after the middle of September." He figured the male genitalia on plate 10, figure 4.

Syntypes examined: 2 (AMNH)

- (1) "Orthosia verberata Smith *♂* type"; "Calgary, Alta., 17.IX.03, (Treacle), F. H. Wolley Dod"; "Head of Pine Creek"; "J. B. Smith Collection, Rutgers" [Good condition, complete]
- (2) "Orthosia verberata Smith *♀* type"; same data except "27-IX-03" [Good condition]

Other syntypes: 2 (CNC)

- (1) "Orthosia verberata Smith *♂* cotype"; "Calgary, Alta., 17-IX-03"
- (2) "Orthosia verberata Smith *♀* cotype"; "Calgary, Alta., 23-IX-03"

Discussion.—The "*♂* type" in the American Museum of Natural History has been selected, labeled, and is now designated the lectotype.

Hydroecia verona Smith, 1899, Amer. Ent. Soc. Trans. 26: 32, pl. 2, fig. 20 (valve).

"*Hab.*—Winnipeg, Manitoba." "A single male specimen was received from Mr. Hanham."

Holotype.—In the U.S. National Museum. The specimen is labeled "Hydroecia verona Smith Type"; "95"; "355" [blue paper]; "Type No. 4997 USNM"; "36511"; "*♂* genitalia on slide 1315 JGF." There are similar blue "355" labels on specimens of other species from Winnipeg, Manitoba. An example is the type of *Hydroecia frigida* Smith. The genitalia slide prepared by Franclemont is of the entire genitalia, but the right valve is separated from the rest of the genitalia. He removed the valve from a Smith slide and mounted the one valve and the remainder of the genitalia on a new slide. Smith's drawing would appear to be of the left valve, but he often mounted the valves face down and also sometimes reversed the drawings. It is possible that he was able to draw the genitalia in situ if they were extended.

Xylophasia versuta Smith, 1895 [Nov. 30], Ent. News 6: 340, pl. 15, fig. 14.

"EXPLANATION OF PLATE XV. 14. *Xylophasia versuta* n. sp." On page 332 in the introduction he stated: ". . . the specimens were all collected by Mr. F. H. Wolley Dod, Calgary, Canada."

Smith (1895 [Dec. 31], Ent. News 7(1): 27, (pl. 15, fig. 14)) formally described the species, referring to the plate in the preceding issue of the journal, and stated: "*Hab.*—Calgary, June 26 and July 2 'at Treacle.'" "Mr. Dod sent me two females and said

they were the only ones taken in 1894." In this paper he used the name "*Hadena (Xylophasia) versuta*, n. sp."

Holotype.—In the U.S. National Museum. The specimen is labeled "Xylophasia versuta Smith Dupl type"; "Calgary, 2/VII/94"; "Type No. 11 USNM"; "36511"; "♀ genitalia on slide 1339 JGF"; "Lectotype, Part III, Lep. N.Y., p. 164–165 footnote, Oct. 1954." A pseudotype, the other specimen mentioned in the second Smith paper, is also in the U.S. National Museum. It is labeled "Xylophasia versuta Smith Type"; "Calgary, 26/VI/94"; "Type No. 11 USNM"; "♀ genitalia on slide 1340 JGF." Franclemont (1954, pp. 163–164, footnote 31) discussed the two specimens and selected the specimen figured by Smith (fig. 14) as the lectotype. It is the specimen treated as the holotype in this paper, and it is the type-specimen regardless of whether it is considered to be the holotype or the lectotype.

***Euxoa vertesta* Smith, 1910, Amer. Ent. Soc. Trans. 36(3): 254.**

"**Hab.**—Stockton, Utah, September 8, Mr. Spalding." "Only one male and one female, . . ."
Syntypes examined: 1 (USNM)

- (1) "*Euxoa vertesta* Smith Type"; "Stockton, Ut."; "IX-6-4"; "Barnes Collection"; "♂ genitalia on slide 1175, June 29, 1937, J.F.G.C." [Good condition]

Discussion.—The other syntype, a female according to Smith, has not been located. It may bear the date of September 8. It is not known why Smith did not mention the date of the syntype located. It may have been misread by Smith; it is in pencil, but the "6" seems clear to me. In the absence of other known syntypes, the "Type" in the U.S. National Museum has been selected, labeled, and is now designated the lectotype.

***Xylina vertina* Smith, 1904, Psyche 11(2): 58.**

"**Habitat:** Corvallis, Oregon, September 8, at light; British Columbia—no date." "Two males in good condition."

Hampson (1906, Catalogue of the Lepidoptera Phalaenae in the Collection of the British Museum, v. 6, p. 274) listed and illustrated a male cotype from British Columbia on plate CIII, figure 1.

Syntypes examined: 1 (AMNH)

- (1) "*Xylina vertina* Smith ♂ type"; "Corvallis, Or., 10-8-96"; "At light"; "Collection J. B. Smith" [Fair condition, complete]

Other syntypes: Hampson, 1906, indicated a male cotype in the British Museum (Natural History). He also illustrated the specimen.

Discussion.—In spite of the fact that Hampson illustrated a syntype, that specimen has been eliminated as a lectotype candidate because the pattern of maculation, even if accurately portrayed, is not of much significance in this genus of similarly maculated species and because it seems preferable to select as type a syntype in an American institution. Accordingly, the "♂ type" in the American Museum of Natural History has been selected, labeled, and is now designated the lectotype. The date on the specimen does not agree

with Smith's published date. Smith interpreted the 10th month to be September.

***Euxoa vestitura* Smith, 1905, Canad. Ent. 37: 201.**

"**Habitat.**—St. John, New Brunswick, August 9–19." "Eleven males and two females, most of them in at least fair condition. These specimens were taken in 1899 or 1900 and have been in my collection for years, somewhat doubtfully associated with *brunneigera*, of which I have never had good material from the type locality."

McDunnough (1950, Amer. Mus. Nat. Hist. Bul. 95(6): 382) stated: "Types: . . . ; *vestitura*, holotype, male, allotype, female, St. John, New Brunswick (Rutgers University, New Brunswick, New Jersey); paratypes same locality (U.S.N.M.)."

Syntypes examined: 9 (5 AMNH and 4 USNM)

- (1) "*Euxoa vestitura* Smith ♂ type"; "St. J., N.B., August 15, 99"; "Collection J. B. Smith" [Good condition, complete] [AMNH]
- (2) "*Euxoa vestitura* Smith ♀ type"; same data except "August 7, 99" [Fair condition] [AMNH]
- (3–5) "*Euxoa vestitura* Smith ♂ cotype"; same data except "August 15, 99 and August 17, 00" [3 ♂♂] [AMNH]
- (6) "*Euxoa vestitura* Smith ♂ cotype"; "St. J., N.B., August 9, 99"; "Collection J. B. Smith"; "Barnes collection"; "Slide 102a" [USNM]
- (7) "*Euxoa vestitura* Smith ♂ cotype"; "St. J., N.B., August, 15, 99"; "Collection J. B. Smith"; "Barnes collection" [USNM]
- (8) "*Euxoa vestitura* Smith ♂ cotype"; same data except "August 16, 99" [USNM]
- (9) "*Euxoa vestitura* Smith ♀ cotype"; same data [Abdomen missing] [USNM]

Discussion.—Four syntypes have not been located. They may not have been marked as types by Smith. McDunnough, 1950, referred to one of the syntypes in the American Museum as the "holotype, male," but he did not indicate which male he referred to. It may be presumed that he was discussing the "♂ type." It is not the holotype, but this action may be construed by some as lectotype selection. To insure that the type-specimen is considered by all to be the "♂ type," it has been selected, labeled, and is now designated the lectotype.

***Perigea veterata* Smith, 1894, Amer. Ent. Soc. Trans. 21: 62, pl. 3, fig. 7.**

"**Hab.**—Glenwood Springs, Colo., September and October; Barnes, Nos. 445, 446, 447." "Three specimens, representing both sexes are before me, none of them perfect, but all of them in at least fair condition."

Syntypes examined: 3 (USNM)

- (1) "*Perigea veterata* Smith ♂ type"; "Glenwood Springs, Col., Oct. 1892, W. Barnes"; "Type No. 181, U.S.N.M."; "♂ gen. slide no. 1027, 10 Sept. 34, FHB." [Somewhat faded and worn]

- (2) "*Perigea veterata* Smith ♂ type"; "Glenwood Springs, Col."; "Sept. 16-23" [A ♀!, faded and worn]
- (3) "*Perigea veterata* Smith ♀ type"; "Glenwood Springs, Col., Oct. 1892, W. Barnes"; "Type No. 181, U.S.N.M."; "36511" [Fair condition except faded]

Discussion.—Only one of the "♂ type" specimens is a male. That syntype has been selected, labeled, and is now designated the lectotype.

***Fishia vinela* Smith, 1903, N.Y. Ent. Soc. Jour. 11: 191.**

"*Habitat:* Denver, Colorado, October 3 (Osler); Glenwood Springs, Colorado, September and October (Barnes)." "Three male examples in good condition are before me at present. Dr. Barnes has others and it is probable that specimens are in collections mingled with *Hadena evelina* French."

Syntypes examined: 3 (2 AMNH and 1 USNM)

- (1) "*Fishia vinela* Smith Type"; "Glenwood Springs, Col., 1894-10, W. Barnes"; "Collection J. B. Smith" [A ♂, fair condition except nicks in apices of forewings, complete] [AMNH]
- (2) "*Fishia vinela* Smith Cotype"; "Glenwood Springs, Col., 9-1894, W. Barnes"; "Barnes collection"; "♂ Genitalia slide no. 1384, 14-Jan., 1936, FHB." [USNM]
- (3) "*Fishia vinela* Smith Cotype"; "Denver, Col., X-10"; "Collection J. B. Smith" [A ♂] [AMNH]

Discussion.—The syntype marked "Type" in the American Museum of Natural History has been selected, labeled, and is now designated the lectotype.

***Hadena (Luperina) virguncula* Smith, 1899, Canad. Ent. 31: 259.**

"*Habitat:* Garfield Co., Colorado, 6,000 feet (Bruce)." "A single female which has been awaiting a mate some ten years or more."

Holotype.—In the U.S. National Museum. The specimen is labeled "*Hadena virguncula* Smith ♀ type"; "Garfield Co., Colo., 6000 ft."; "Type No. 4992 USNM"; "36511"; "♂ genitalia on slide 855 JFGC." It is a male, not a female as indicated by Smith.

***Bryophila viridimedia* Smith, 1905, N.Y. Ent. Soc. Jour. 13(4): 188.**

"*Habitat.*—Cochise county, Arizona, June 24." "One male in very good condition from Mr. George Franck."

Holotype.—In the American Museum of Natural History. The specimen is labeled "*Bryophila viridimedia* Smith ♂ type"; "Cochise Co., Ariz., VI. 24"; "J. B. Smith Collection Rutgers."

***Hadena viridimusca* Smith, 1899, Canad. Ent. 31: 264.**

"*Habitat:* Columbus, Ohio; VI., 20; VII., 9, at sugar (N. W. [sic] Tallant); Texas, V., 16 (Belfrage); New Jersey." "Four specimens, 2 males and 2 females, are at hand, and I have seen others."

Hampson (1908, Catalogue of the Lepidoptera Phalaenae in the Collection of the British Museum, v. 7, p. 159) stated: "Pl. CXI. fig. 29" and "This species is unknown to me; figured from a drawing from type in Coll. J. B. Smith." "♂, Ohio." *Syntypes examined:* 3 (USNM)

- (1) "*Hadena viridimusca* Smith ♂ type"; "Columbus, Ohio"; "Type No. 4364, U.S.N.M."; "Collection W. N. Tallant"; "Sugar, VI.20.92"; "♂ genitalia on slide #8, March 14, 1936, J.F.G.C." [Good condition]
- (2) "*Hadena viridimusca* Smith ♀ type"; "Columbus, O., Sugar, VI-9, 85, W. N. Tallant"; "Type No. 4364, U.S.N.M."; "♀ genitalia on slide #9, March 14, 1936, J.F.G.C."; "36511" [Good condition]
- (3) "*Hadena viridimusca* Smith ♀ cotype"; "16/5"; "Cotype ♀ USNM No. 4364" [A ♂, abdomen mostly eaten by dermestids!]

Discussion.—The third syntype listed is apparently the one from Texas as evidenced by the date label. The syntype from New Jersey, presumably a male, has not been located. The "♂ type" and the "♀ type" were received from Smith and entered in the U.S. National Museum type book on July 20, 1899, the same year as the description was published. It is strange, therefore, that Hampson, 1908, should say that the male type he illustrated was in the J. B. Smith collection. He said it was from Ohio. Since the "♂ type" is the only syntype from Ohio, that must be the specimen from which the drawing was made that Hampson used to illustrate the species. The "♂ type" has been selected, labeled, and is now designated the lectotype.

***Oncocnemis viriditincta* Smith, 1894, Amer. Ent. Soc. Trans. 21: 66, pl. 6, fig. 12.**

"*Hab.*—McLean, British Columbia; Bean, No. 3676." "A single specimen only of this very distinct species is at hand, and according to Mr. Bean no others were taken. The example is a female in good condition,"

Holotype.—In the American Museum of Natural History. The specimen is labeled "*Oncocnemis viriditincta* Smith ♀ type"; "McLean, B. C., Aug. 21"; "3676"; "J. B. Smith Collection Rutgers."

***Carneades vulpina* Smith, 1895, Ent. News 6: 335, pl. 15, fig. 5.**

"*Hab.*—Calgary, September 20th, 'Treacle.' " "This is the number 18 of Mr. Dod's list, and he says that 'it is probably unique.' "

Holotype.—In the U.S. National Museum. The specimen is labeled "*Carneades vulpina* Smith Type"; "Calgary, 20/IX/94"; "Type No. 3 USNM." It is a male.

***Xylina winnipeg* Smith, 1900, Amer. Ent. Soc. Trans. 27: 31, pl. 2, fig. 17, pl. 4, fig. 27.**

"*Hab.*—Winnipeg, Manitoba." "Two males in good condition, received from A. W. Hanham."

Syntypes examined: 2 (USNM and AMNH)

- (1) "*Xylina winnipeg* Smith ♂ type"; "W. Man."; "Winnipeg, Manitoba"; "Type No.

5379, U.S.N.M."; "36511" [Good condition except both valves of genitalia missing][USNM]

- (2) "Xylina winnipeg Smith δ cotype"; "Winnipeg, Manitoba"; "J. B. Smith Collection, Rutgers" [Good condition, complete] [AMNH]

Discussion.—The syntype in the American Museum of Natural History was the specimen used to illustrate the adult (pl. 4, fig. 27). Because it was illustrated and because the genitalia are intact, it has been selected, labeled, and is now designated the lectotype.

Carneades xyliniformis Smith, 1890, U.S. Natl. Mus. Bul. 38, p. 221.

"HABITAT.—Las Vegas, New Mexico." "A single female from Mr. Neumoegen, collected by Mr. Meeske in 1889."

Smith (1893, U.S. Natl. Mus. Bul. 44, p. 96) treated this as a synonym of *sculptilis* Harvey and stated: "Dr. Harvey's type is in the British Museum, and is like the type of *xyliniformis* in the National Museum."

Holotype.—In the U.S. National Museum. The specimen is labeled "Carneades xyliniformis Smith Type"; "Las Vegas, N.M., H. Meeske '89"; "Col. B. Neumoegen"; "Type No. 33763 USNM."

Mamestra yakima Smith, 1900, U.S. Natl. Mus. Proc. 22(1203): 464.

"Habitat.—Yakima, Washington (C. V. Piper)." "One male and two females, in only fair condition."

"Type.—Cat. No. 4836, U.S.N.M."

Syntypes examined: 3 (2 USNM and 1 AMNH)

- (1) "Mamestra yakima Smith δ type"; "Yakima, Wash."; "36311"; "Collector C. V. Piper"; "Type No. 4836, U.S.N.M."; " δ genitalia slide #1502, 25 Jan. 1938, J.F.G.C." [Fairly good condition, wings raised] [USNM]
- (2) "Mamestra yakima Smith φ type"; "Yakima, Wash."; "Wash. Exp. Sta. No. 105"; "Collector C. V. Piper"; "Type No. 4836, U.S.N.M."; "3611"; " φ genitalia slide #1503, J.F.G.C." [Good condition, wings raised] [USNM]
- (3) "Mamestra yakima Smith Cotype"; "Yakima, Wash."; "Collector C. V. Piper"; "Collection J. B. Smith"; " φ Genitalia mounted on slide no. 14,903, F.H.R." [Right forewing missing] [AMNH]

Discussion.—The " δ type" and the " φ type" each bears the U.S. National Museum type number mentioned in the original description. The " δ type" has been selected, labeled, and is now designated the lectotype.

Phaeocyma yavapai Smith, 1908, U.S. Natl. Mus. Proc. 35(1645): 267, pl. 33, fig. 6, pl. 35, fig. 11.

"Habitat.—Yavapai County, Arizona, July 22–August 5; Glenwood Springs, Colorado, in May."

"Types.—Rutgers College Collection: cotypes, Coll.

U.S.N.M., No. 12030, and Doctor Barnes." "One male and 3 females collected by Mr. Hutson; 2 males and 1 female from Doctor Barnes."

Syntypes examined: 11 (5 AMNH and 6 USNM)

- (1) "Phaeocyma yavapai Smith δ type"; "Yavapai Co., Ariz., VII-22"; "J. B. Smith Collection, Rutgers"; " δ Genitalia mounted on slide by Smith [Rindge label]" [Fairly good, slit in left forewing] [AMNH]
- (2) "Phaeocyma yavapai Smith δ type"; same data except for Rindge label indicating a φ genitalia slide by Smith [AMNH]
- (3) "Phaeocyma yavapai Smith δ cotype"; same data [AMNH]
- (4) "Phaeocyma yavapai Smith φ cotype"; "Yavapai Co., Ariz., VIII-11"; "Minnehaha"; "J. B. Smith Collection, Rutgers" [AMNH]
- (5) "Phaeocyma yavapai Smith cotype"; "Glenwood Spgs., Col."; "June 8–15"; "J. B. Smith Collection, Rutgers" [A δ] [AMNH]
- (6) "Phaeocyma yavapai Smith φ cotype"; "Yavapai Co., Ariz., VIII-5"; "Minnehaha" [USNM]
- (7) "Phaeocyma yavapai Smith cotype"; "Glenwood Spgs., Colo."; "May 1–7"; "Barnes collection" [A φ] [USNM]
- (8) "Phaeocyma yavapai Smith cotype"; "Glenwood Spgs. Colo."; "Collection Brklyn Mus."; "Type No. 34100, U.S.N.M." [A δ , abdomen glued on] [USNM]
- (9) "Phaeocyma yavapai Smith cotype"; "Glenwood Spgs., Col."; "May"; "Barnes collection" [A δ] [USNM]
- (10) "Phaeocyma yavapai Smith cotype δ "; "Yavapai Co., Ariz., O. Buchholz"; "Aug. 8–15"; "Barnes collection" [USNM]
- (11) "Phaeocyma yavapai Smith cotype φ "; "Yavapai Co., Ariz., O. Buchholz"; "May 16–25"; "Barnes collection" [USNM]

Discussion.—There appear to be more specimens marked as types than indicated by Smith! None have any indication that they were collected by Hutson, but the Arizona specimens were assumed to be the ones he collected. In the U.S. National Museum, two of the syntypes show Otto Buchholz as the collector. Buchholz or Grossbeck prepared the genitalia slides in this genus for Smith. Even if those two specimens are pseudotypes, there are still two more specimens marked types than indicated by Smith, apparently one from each of the two localities. Rindge (1955, p. 136) indicated that there are genitalia slides in the American Museum of Natural History for the " δ type," " φ type," and one male cotype. The " δ type" in the American Museum of Natural History has been selected, labeled, and is now designated the lectotype.

Semiophora youngii Smith, 1902, Canad. Ent. 34(2): 29.

"Habitat.—Mer Bleue, near Ottawa, Ontario, Canada; Mr. C. H. Young." "Two males and five females, and each different from every other." "The specimens were sent me by Dr. Fletcher, who tells

me that he knows the early stages, and that Mr. Young has bred some of the examples submitted to me. It will be his pleasure to add to the history of this unusually variable and interesting species. The dates on the specimens before me range from August 19 to September 7."

Barnes and Benjamin (1924, *Contrib. Nat. Hist. Lepidoptera N. Amer.* 5(3): 116) stated: "The name should be restricted to the '♀ type' as the male type appears to be a small specimen of *janualis*. The '♂ type' and the '♀ type' are in the Smith Collection, Rutgers College. A female 'cotype' in the Barnes Collection is the same form as the '♀ type.'"

McDunnough (1932, *Canad. Ent.* 64: 111) stated: "As regards *youngi* the species was described from specimens bred from larvae found in moss at the base of larch trees in a cold bog (Mer Bleu) near Ottawa, Ont. and part of the type series of both adults and larvae is before me; as already noted by Barnes and Benjamin (1924, *Contributions*, V(3) 116) a *janualis*-like form occurred along with other much darker and more maculate specimens and the name has been restricted to this latter form, in which there is frequently a darkish suffusion between the spots, but not an inferior connecting black line."

Syntypes examined: 4 (2 AMNH and 2 USNM)

- (1) "*Semiophora youngii* Smith ♂ type"; "Mer Bleu, Ontario"; "19.8.01"; "Collection J. B. Smith" [Excellent condition, complete] [AMNH]
- (2) "*Semiophora youngii* Smith ♀ type"; same except "30.8.99" [Very good condition] [AMNH]
- (3) "*Semiophora youngii* Smith ♀ cotype"; "Mer Bleu, near Ottawa, Can., 7.9.1901, C. H. Young"; "Type No. 6153, U.S.N.M."; "genitalia on slide 2048, HWC." [USNM]
- (4) "*Semiophora youngii* Smith ♀ cotype"; "21.8.01"; "Barnes collection" [USNM]

Discussion.—Three syntypes have not been located. There is a pair of specimens reared from larvae at Mer Bleu by Young that is not marked as type in the U.S. National Museum. The action of Barnes and Benjamin, 1924, does not appear to be positive. However, McDunnough considered it to be a definite restriction, so it seems best to follow the same course to insure that the type-specimen is the same regardless as to which action is considered restrictive. Accordingly, the "♀ type" in the American Museum of Natural History has been selected, labeled, and is now designated the lectotype.

***Oxycnemis yuma* Smith, 1907, Amer. Ent. Soc. Trans. 33: 138.**

Hab.—Yuma County, Arizona, in April; Walters Station, California, in April (Hutson); Gila County, Arizona, in June (Poling); Kerrville, Texas, May 24th to 30th (Dr. Barnes). "Five male and thirteen

female specimens, mostly in good condition and mostly of the desert material sent in by Mr. Hutson."

Hampson (1909, *Catalogue of the Lepidoptera Phalaenae in the Collection of the British Museum*, v. 8, p. 220, pl. CXXVIII, fig. 10) listed and illustrated a male cotype from Walters Station, Calif. He treated *yuma* as a synonym of *O. gracillinea* (Grote).

Syntypes examined: 12 (10 AMNH and 2 USNM)

- (1) "*Oxycnemis yuma* Smith ♂ type"; "Colorado desert"; "Yuma Co., Ariz."; "Collection J. B. Smith" [Good condition, complete] [AMNH]
- (2) "*Oxycnemis yuma* Smith ♀ type"; same data [Good condition] [AMNH]
- (3-7) "*Oxycnemis yuma* Smith ♀ cotype"; same data [5 ♀ ♀] [AMNH]
- (8) "*Oxycnemis yuma* Smith ♂ cotype"; same data [USNM]
- (9) "*Oxycnemis yuma* Smith ♀ cotype"; same data [USNM]
- (10) "*Oxycnemis yuma* Smith ♂ cotype"; "Kerrville, Texas"; "May 24-30"; "Collection J. B. Smith" [AMNH]
- (11) "*Oxycnemis yuma* Smith ♂ cotype"; "southern Arizona, Poling"; "Collection J. B. Smith" [AMNH]
- (12) "*Oxycnemis yuma* Smith ♀ cotype"; "Gila Co., Ariz., June 1902, O. C. Poling" [AMNH]

Discussion.—One male syntype is in the British Museum (National History), but five female syntypes have not been located. The "♂ type" in the American Museum of Natural History has been selected, labeled, and is now designated the lectotype.

***Euxoa zembia* Smith, 1905, N.Y. Ent. Soc. Jour. 13(4): 198.**

Habitat.—Stockton, Utah, Sept. 4-22. "Four males and nineteen females, mostly in good condition, from Mr. Tom Spalding."

Syntypes examined: 5 (3 AMNH and 2 USNM)

- (1) "*Euxoa zembia* Smith ♀ type"; "Stockton, Ut."; "X-2-4"; "J. B. Smith Collection, Rutgers" [Good condition, complete] [AMNH]
- (2) "*Euxoa zembia* Smith ♂ type"; same data except "X-8-4" [Rubbed, left hindwing torn] [AMNH]
- (3) "*Euxoa zembia* Smith cotype"; same data, no date [A ♀] [AMNH]
- (4) "*Euxoa zembia* Smith cotype"; "Stockton, Ut."; "IX-24-4"; "Barnes collection" [A ♂] [USNM]
- (5) "*Euxoa zembia* Smith cotype"; same data except "X-2-4" [A ♀] [USNM]

Discussion.—Smith apparently only labeled a few of the 23 specimens of the original series. The "♀ type" in the American Museum of Natural History has been selected, labeled, and is now designated the lectotype.

END