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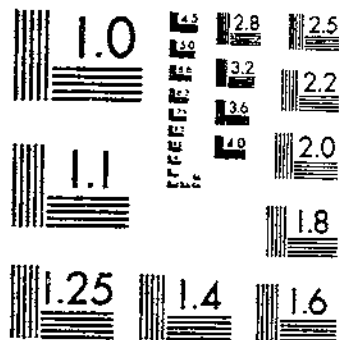
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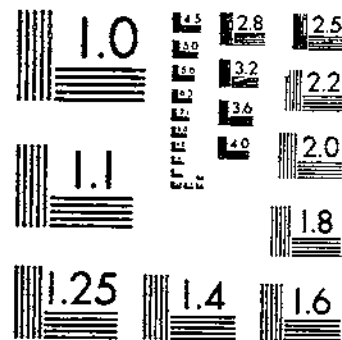
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Technical Bulletin No. 1521

Agricultural Research Service
UNITED STATES DEPARTMENT OF AGRICULTURE

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HOST RECORDS FOR LEPIDOPTERA REARED IN EASTERN NORTH AMERICA

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This bulletin provides host plant information and other data on the species of Lepidoptera that I have reared from eggs or larvae, together with those reared by James H. McDunnough while he was a research associate at the Nova Scotia Museum, Halifax. Localities, host plants, dates of adult emergence, and number of adults reared are given. This information was accumulated from field investigations in many places between the early 1940's and 1975, but much of it dates from intensive collecting in Nova Scotia between 1948 and 1963. Most of the microlepidoptera were reared by McDunnough and the macrolepidoptera by me, although there was some overlap. For brevity I have in general not differentiated between those responsible for the rearings, except several species reared by others; e.g. the additional records of Nova Scotian microlepidoptera contributed by Barry Wright of the Nova Scotia Museum. Otherwise, all rearing records since 1962 are based on my work only. I identified all the macrolepidoptera included here. In addition, I have verified at the U.S. National Museum, Washington, D.C., and elsewhere many of McDunnough's original determinations of the microlepidoptera and have corrected a few errors.

Host records are given for 487 species, based on about 5,572 preserved specimens, mostly spread adults, although associated larvae were kept of most broods reared from eggs, as indicated in the text.

The arrangement is basically that of the checklist by McDunnough (1938, 1939),¹ but the nomenclature has been updated in accordance with many revisions since then. Some of the more important references consulted for this purpose were McDunnough (1949, 1954a), Forbes (1948, 1954, 1960), Heinrich (1956), Obratzsov (1963), Powell (1964), Razowski (1966), Ferguson (1969), and Hodges (1974). Others are given in the Literature Cited. A reference in parentheses immediately following a scientific name usually gives the source of a taxonomic change if the name differs from that used in the McDun-

¹The year in italic after the author's name indicates the reference in Literature Cited, p. 45.

nough checklist. Included also are a few original taxonomic changes that were considered necessary.

Two families of microlepidoptera are omitted—the Gelechiidae, currently being studied by R. W. Hodges, and the Coleophoridae, being revised by Barry Wright. Several hundred specimens of these two groups were reared in Nova Scotia, especially the Coleophoridae, which were one of McDunnough's specialties.

The broods reared ex ovo were obtained from eggs laid by captive female moths collected in the field. All other records, where no further explanation is given, were based on larvae collected from the host plant and identified from the adult, which subsequently emerged.

The dates given refer to emergence of reared adults unless otherwise indicated. The dates for reared adults are of course not especially meaningful, as species that fly in June or July outdoors may be induced to emerge in winter or early spring indoors. Similarly, fall species, such as the hibernating cuculline noctuids, often emerge in July or August when reared. However, the dates are given to show when emergence may be expected under laboratory conditions and also to aid in correlating the information given here with the actual specimens should future revisers wish to reexamine and identify this material. Dates of larval preservation reveal the time of year that a species may be expected to be in the last instar. Nearly all larvae were in that stage when preserved.

In parentheses following the date is the number of adults actually obtained from the rearing. This number does not necessarily testify for or against the appropriateness of the host plant. Often a large and healthy brood of larvae was reared to maturity, but all or nearly all the resulting pupae died during hibernation, presumably because the unnatural conditions under which they were kept over winter were unsatisfactory. Species of *Ferulia*, *Semiothisa*, and *Orthofidonia* were among those that presented this problem repeatedly. Some broods were lost to virus diseases, and few if any pupae or adults were obtained. Host records are given for a few species with distinctive, readily identifiable larvae that were found in positive association with specific plants, even though for various reasons no adults were obtained. These include such species as *Papilio glaucus*, *Limenitis archippus*, *Darapsa pholus*, *Halisidota caryae*, *Harrisimemna trisignata*, and *Datana major*.

Sometimes the host given is not native to the locality where the insect was obtained as, for example, "*Nemoria livaria* (Gn.). Charleston, S.C., ex ovo on *Quercus borealis*," or "*Dasychira manto* (Stkr.). Welaka, Fla., ex ovo on *Pinus banksiana*." This simply means that the larvae were reared successfully on substitute foods where the na-

tive ones were unobtainable and that the natural hosts may be assumed to be closely related plants, in these cases other species of oak and pine that grow in the Southeast.

A food plant on which to rear larvae hatched from eggs is usually selected by trial and error. It should be emphasized that the chosen plant, although successful as a food in the laboratory, may not be the usual host in nature. For example, chokecherry is a very useful food for many relatively unspecialized macrolepidoptera in the Northeast, sweet gum for many species in the Southeast, and plantain or dandelion for many of the Arctiidae, but it cannot be assumed that these insects are regularly associated with these in nature or that they would not prefer some other plant if offered the choice. Some species thus easily reared occur naturally in habitats where such plants never grow. About all that such host data tell us is that the larvae will accept these plants and may be successfully reared on them. The most reliable host records are obtained by collecting larvae directly from identified plant species in the field, especially if they are found repeatedly on them or under any other circumstances that leave no doubt as to the host relationship.

McDunnough's host notations on the specimen labels and sometimes even in his published papers require some interpretation. Sometimes he carefully identified the plant to species, but often he did not do so if he thought that its specific determination was either unimportant or obvious to anyone familiar with the local flora. Many of his host labels give only generic terms, such as oak, birch, cherry, willow, aspen, blackberry, *Viburnum*, *Myrica*, *Vaccinium*, *Robinia*, and *Kalmia*.

As a result of my close association with McDunnough in this work (Ferguson 1963a), I know what most of these plants are and have provided the full or corrected scientific names whenever I have been certain of what they should be. For example, when McDunnough spoke of *Myrica*, he always meant *Myrica gale* L.; he referred to *M. asplenifolia* as *Comptonia* and to *M. pensylvanica* as bayberry. His *Viburnum* was always *V. cassinoides*, and *Kalmia* was always *K. angustifolia*. These are the most ubiquitous representatives of their genera in Nova Scotia. Less common related species, such as *Viburnum alnifolium* Marsh. and *Kalmia polifolia* Wang., were also present, but to my knowledge he never collected anything from them. In such instances he would have indicated the difference as with the three species of *Myrica*. His *Vaccinium* was always one of the several closely related species of blueberries, not cranberry or foxberry. His use of the name aspen always referred to *Populus tremuloides*, whereas poplar may have been this or some other species.

Sometimes we both used only generic names because of difficulties in plant identification. This was often so with species of *Amelanchier*, *Crataegus*, *Salix*, and *Vaccinium* in Nova Scotia, where several very closely related species are present, and with my records for oak in the Eastern United States. Sometimes I was not sure of the species, or I found that the larvae being reared would feed indiscriminately on any species of oak. To conserve space, I have reduced plant names to genus only when there is no possibility of ambiguity; that is, when only the one species is present in the region or when all the rearing records for a particular plant genus are known to refer to one host species.

The following list is a guide to the plant names, covering those given in abbreviated or colloquial form on the labels of the specimens, as well as those that I have intentionally shortened to conserve space. Where a plant name appears only once or a few times in the text, it is given in full except for the omission of the authors' names. These plants are well known, and their names are readily found in numerous botanical works, such as Roland and Smith (1909), on which I have relied heavily. Inclusion of authors' names would seem a useless redundancy.

alder. Usually *Alnus rugosa* (DuRoi) Spreng; sometimes *A. crispa* (Ait.) Pursh.

Alnus sp. Same as alder.

Aronia. McDunnough reared several species from an *Aronia* that he determined as *melanocarpa* (Michx.) Ell. On reviewing this I found that the closely similar *A. prunifolia* (Marsh.) Rehd. is the commoner plant in southern Nova Scotia, and I consider it very likely that some if not all the records for *melanocarpa* actually refer to *prunifolia*.

aspen. *Populus tremuloides* Michx.

bayberry. *Myrica pensylvanica* Loisel.

beech. *Fagus grandifolia* Ehrh.

birch. *Betula papyrifera* Marsh. or *B. populifolia* Marsh. On his host data labels McDunnough never differentiated between these two species, both of which were common where he collected.

blackberry. Probably *Rubus allegheniensis* Porter unless otherwise indicated.

Chamaedaphne. *Chamaedaphne calyculata* (L.) Moench, var. *angustifolia* (Ait.) Rehd., the only species present.

cherry. From the vicinity of Halifax, Nova Scotia, this probably always refers to *Prunus pensylvanica* L.; from elsewhere, to *P. pensylvanica* or *P. virginiana* L.

Hamamelis. *Hamamelis virginiana* L., the only species present.

- Ilex*. *Ilex verticillata* (L.) Gray. *Ilex glabra* (L.) Gray was also present but rare, and nothing was collected from it.
- Larix*. *Larix laricina* (DuRoi) Koch, the only species present.
- Ledum*. *Ledum groenlandicum* Oeder.
- Liquidambar*. *Liquidambar styraciflua* L.
maple. Probably *Acer rubrum* L., usually the commonest species.
- oak. *Quercus borealis* Michx. (or *Q. rubra* L.) if not otherwise indicated.
- pine. Records from Nova Scotia always refer to *Pinus strobus* L. unless otherwise indicated.
- Plantago*. *Plantago major* L., broad-leaved plantain.
- plantain. *Plantago major* L.
- poplar. Either *Populus tremuloides* Michx. or *P. grandidentata* Michx.
- Populus* sp. Same as poplar.
- Rhodora. *Rhododendron canadense* (L.) BSP.
- Robinia* sp. Probably *Robinia pseudo-acacia* L., but the similarly introduced *R. viscosa* Vent. is also present in Nova Scotia.
- Salix* sp. Willow. Unless otherwise indicated, it may be assumed that this refers to one of the pussy willows, probably *Salix discolor* Muhl. or *S. humilis* Marsh.
- spruce. *Picea glauca* Moench (Voss), *P. rubens* Sarg., or *P. mariana* (Mill.) BSP.
- Taraxacum*. *Taraxacum officinale* Weber. common dandelion.
- Viburnum*. *Viburnum cassinoides* L. Although several other species of *Viburnum* are present in Nova Scotia, all the rearing was done from *cassinoides*, which is commonest.
- willow. See *Salix* sp.

The reared specimens resulting from this work have become to some extent scattered in various collections and largely deposited in a museum that may be regarded by some as too inaccessible. Nearly all the microlepidoptera and some of the macrolepidoptera are in the Nova Scotia Museum, Halifax. Many of the macrolepidoptera are in the U.S. National Museum, Washington, D.C., except for butterflies, some of which are in the Allyn Museum of Entomology, Sarasota, Fla. Some specimens have become dispersed to other collections through exchange.

Those of us now involved as authors in the large publication project, *The Moths of America North of Mexico* (e.g., Ferguson (1971-72), Hodges (1971, 1974), Munroe (1972-73)), more than ever realize the need for better biological information. The life histories of a large proportion of North American Lepidoptera, perhaps 75 percent, remain entirely undocumented, and many others are only inadequately known. Well-substantiated information covering any of them is worth publishing. Undoubtedly a vast amount of unpublished life-history

data exists in the records and collections of other lepidopterists, who could fill gaps in our knowledge if they would make their store of information available. Of course, host plants must be identified accurately, to species if possible, and any evidence should be supplied that will indicate whether the plant is to be regarded as the true host or merely one that the larvae will accept under abnormal circumstances. The two-volume index by Tietz (1972), reasonably complete to about 1950, is an extremely helpful guide to most of what has been published on the early stages of North American macrolepidoptera.

PAPILIONIDAE

Papilio polyxenes asterius Stoll. Petite Riviere, N.S.² *Ligusticum scothicum*. 17 Jan. 1971 (1). Baddeck, N.S., same host, 20, 25 Feb., 4 Mar. 1950 (4). Adelphi, Md., parsley, 22 Apr. 1973 (2). Colesville, Md., parsley, 6 July 1974 (1). Larvae found many times on *Daucus dioica*, *D. carota*, *Carum carvi*, and *Heracleum lanatum* in Nova Scotia.

Papilio brevicauda Saunders. Salmonier River, Avalon Peninsula, Nfld., *Heracleum lanatum*, 28 Mar. 1955 (1) (several larvae found on this host in July 1954). Portugal Cove, St. Phillips, Quidi Vidi Harbour, all on the Avalon Peninsula, Nfld.; Millville (larva preserved 5 Aug. 1959). Port aux Basques, SW. Nfld.; St. Paul Island, Cabot Strait, N.S.; Terre Noire (larvae preserved 30 July, 6 Aug. 1949). Eel Cove, Englishtown, and Baddeck, Cape Breton Island, N.S.; Tabusintac, N.B.; all the foregoing on *Ligusticum scothicum*. Hundreds of eggs and larvae collected from *Ligusticum* in July and early August during 1949-62, adults emerging the following spring.

Papilio glaucus canadensis R. & J. Larvae found on apple, cultivated cherry, ash, poplar, willow, alder, and white birch at various localities in Nova Scotia; several adults reared.

Battus philenor (L.). Balsam, N.C., many larvae on *Aristolochia durior*, 24 June 1974, penultimate and last instars; last-instar larvae preserved 10 July.

PIERIDAE

Golias eurytheme (Bdv.). Halifax, N.S., reared ex ovo on *Trifolium* sp., from female taken 13 July 1943; adults emerged in August.

²The following abbreviations are used throughout this bulletin: CNC, Canadian National Collection; N.B., New Brunswick; Nfld., Newfoundland; and N.S., Nova Scotia.

LYCAENIDAE

Strymon melinus Hbn. Petite Riviere, N.S., *Myrica asplenifolia*, 1 Mar. 1949 (1), from larva found in August 1948.

Feniseca tarquinius novascotiae McD. Armdale, N.S., from larvae feeding on colonies of white woolly aphids (*Prociphilus tessellatus* Fitch) on branches of *Alnus rugosa*, 15 Nov.-26 Dec. 1945 (many adults reared from about 100 larvae collected in early September). Waverley, N.S., same host, 5 Mar. 1949 (several). Auburn, N.S., same host, 19 Apr. 1952 (1). They spin loose silken passageways through dense masses of aphids, feeding as they go. If only large last-instar larvae are taken, they will pupate without further feeding, and adults will emerge a few weeks later, sometimes without diapausing. Mortality of such larvae and of resulting pupae was very low; they were easily reared.

Glaucopsyche lygdamus couperi Grt. Bartibog, N.B., *Melilotus alba*, 7 May 1953 (1).

Glaucopsyche lygdamus mildredae Chermock. Baddeck, N.S., *Lathyrus japonica*, 27, 28 Feb., 5 Mar. 1951 (4) (larvae preserved 15 Aug.). Until 1954 the only populations known from Nova Scotia were of this coastal form limited to beach pea, but that year the inland subspecies *couperi* was found in Cumberland Co., which it appears to have entered from adjacent New Brunswick. *G. lygdamus couperi*, which is obviously associated with *Vicia* and *Melilotus* as well as *Lathyrus*, has since become widespread in areas of Nova Scotia where no *Glaucopsyche* species was ever previously reported. It is to be expected that the subspecies will interbreed and that *mildredae* will cease to exist as a separate entity, distinguished by larger spots on the underside and peculiar food preference.

Celastrina pseudargiolus (Bdv. & LeC.). Larvae found on several occasions in Nova Scotia in flower heads of *Aralia hispida* and *Viburnum cassinoides*. The form associated with *Viburnum* is the small northern one, commonly with a large brown patch in the middle of the underside of the hindwing (*lucia* (Kby.)); adults that seem to be associated with *Aralia* are larger, paler, and fly in June, about a month later than the smaller form but not quite late enough to be a second generation. There are no later summer broods in this region. I have long suspected that these are two species, but I could never rear adults from the larvae collected.

NYMPHALIDAE

Limenitis arthemis (Drury). Halifax, N.S., reared from larvae on *Amelanchier* sp. and *Populus* sp. (2).

- Limenitis archippus* (Cramer). Larvae and their hibernacula found many times on willow in Pictou Co., N.S., and New Haven Co., Conn.
- Vanessa atalanta rubria* (Fruhstorfer) (for nomenclature of this and the following species, see Field 1971). Doyles, Nfld., *Urtica dioica*, August 1959 (many); larvae preserved 26, 30 July.
- Cynthia cardui* (L.). Larvae abundant some seasons in Nova Scotia and New Brunswick on thistle (*Cirsium arvense*), occasionally on burdock (*Arctium minus*) and hollyhock (*Athaea rosea*). In early August 1952 I found larvae in great numbers at Tabusintac Beach, N.B., on beach wormwood (*Artemisia stelleriana*), and in August 1973 found them again on this plant at Bayswater Beach, Lunenburg Co., N.S.
- Nymphalis milberti viola* (dos Passos). Doyles, Nfld., *Urtica dioica*. 18-27 July 1959 (many); larvae preserved 26 July.
- Nymphalis antiopa* (L.). Witless Bay Line, Avalon Peninsula, Nfld., willow, August 1954 (many). Smith's Cove, Digby Co., N.S., willow, 24 Aug. 1945 (preserved larvae).
- Polygonia interrogationis* (F.). Wolfville, Kings Co., N.S., *Humulus lupulus*, 25 Aug.-3 Sept. 1948 (2). Great Village, Colchester Co., N.S., elm, August 1948 (several).
- Phyciodes tharos arctica* dos Passos. Colonies of young larvae often common in Nova Scotia in late summer on *Aster umbellatus*.
- Melitaea harrisii albimontana* Avin. Waverley, Halifax Co., N.S., reared from larvae found on *Aster umbellatus* in the spring (May, early June); adults in late June (3).

SPHINGIDAE

(For classification of this family, see Hedges 1971.)

- Manduca sexta* (L.). Adelphi, Md., tomato, 7 June 1970 (1).
- Sphinx gordius gordius* Cramer. Lakehurst, N.J., ex ovo on *Vaccinium* sp. (blueberry) and *Myrica asplenifolia*, 23-30 Aug. 1956 (8), 15 Apr. 1957 (2).
- Sphinx gordius borealis* Clark. Bog east of Big Indian Lake, Halifax watershed area, N.S., ex ovo on *Myrica asplenifolia*, 18 Apr. 1963 (3). Washington, Litchfield Co., Conn., ex ovo on *M. asplenifolia*, 17 Apr.-3 May 1966 (17), 3 Oct. 1965 (1).
- Lapara bombycoides* Wlk. Mount Uniacke, N.S., larvae collected from *Pinus strobus* (twice); no adults reared.
- Emerinthus jamaicensis* (Drury). Green Bay, Lunenburg Co., N.S., willow, 20 Apr. 1957 (1).
- Paonias excaecatus* (J. E. Smith). Parrsboro, N.S., larvae on birch (McD.). Armdale, N.S., *Betula papyrifera*, 3 Apr. 1974 (1).

- Hemaris thysbe* (F.). Petite Riviere, N.S., *Viburnum cassinoides*, 8 Mar. 1949 (1). Halifax watershed area, N.S., same host, 25 Feb. 1951 (1).
- Hemaris diffinis* (Bdv.). French Village, Halifax Co., N.S., *Diervilla lonicera*, 19 May 1953 (1). Larvae and eggs were also found on this host at Armdale, N.S.
- Eumorpha pandorus* (Hbn.). Armdale, N.S., reared from pupa found in soil beneath a large Virginia creeper (*Parthenocissus quinquefolia*) covering side of house; emerged 20 July 1952 (specimen figured by Hodges 1971, pl. 11, fig. 19). I originally misidentified the supposed host as *Ampelopsis* (Ferguson 1954: 206).
- Darapsa pholus* (Cramer). Armdale, N.S., larva found on *Viburnum*, August 1970.

SATURNIIDAE

(For classification of this family, see Ferguson 1971-72.)

- Dryocampa rubicunda* (F.). Halifax watershed area, N.S., larvae abundant on *Acer rubrum* in August 1973, adults 22, 24 Apr. 1974; nine mature larvae preserved 13 Aug.
- Anisota virginiensis virginiensis* (Drury). Argyle, Yarmouth Co., N.S., *Quercus borealis*, 14 Apr.-15 May 1958 (4); mature larva preserved 21 Aug. 1957. Armdale, N.S., same host, 12 May 1947 (1).
- Hemileuca maia* (Drury). W. Tisbury, Martha's Vineyard, Mass., *Quercus ilicifolia*, 11, 18 Oct. 1948 (2); larvae had been collected in July 1947.
- Hemileuca lucina* Hy. Edw. Costigan, Penobscot Co., Maine, *Spiraea latifolia*, 5-10 Sept. 1953 (13).
- Antheraea polyphemus polyphemus* (Cramer). Annapolis Royal, N.S., willow, 28 Feb. 1947 (1).
- Actias luna* (L.). Lincoln, Maine, ex ovo on white Birch (1).
- Euclonhora cecropia* (L.). Reared in Nova Scotia from cocoons found on *Prunus virginiana*, *P. pensylvanica*, *Amelanchier* sp., *Cyataegus* sp., *Betula* sp., *Alnus* sp., *Populus* sp., *Acer rubrum*, *Spiraea* sp., and *Viburnum cassinoides*.
- Euclonhora columbia* (S. I. Smith). Dorchester, N.B., ex ovo on *Lonicera laricina*, 2-8 Apr. 1953 (12). Debert, Colchester Co., N.S., ex ovo on same host, no adults reared (larvae preserved 22 July 1960). Green Bay, Lunenburg Co., N.S., ex ovo on same host, no adults reared (larvae preserved August 1956).
- Callosamia promethea* (Drury). Jefferson, N.H., reared from cocoons found on cherry (2), ash (2), and hazel (1), 26 Feb.-22 Mar. 1950.
- Callosamia securifera* (Maassen). McClellanville, S.C., reared from cocoon found on *Magnolia virginiana*, 6 May 1970 (1).

ARCTIIDAE

- Pagara simplex* Wlk. McClellanville, S.C., ex ovo on wild *Lactuca* sp., from female taken August 1968; adults emerged 8 Sept. 1968 (12); larvae preserved 29 Aug.
- Halisidota caryae* (Harris). Bangs' Falls, Medway River, Queens Co., N.S., larvae abundant on *Vaccinium* sp. (blueberry) and *Quercus borealis*, September 1953 (no adults reared). Granville Ferry, Annapolis Co., N.S., larvae on alder, August 1946 (none reared).
- Halisidota maculata* (Harris). Annapolis Royal, N.S., *Alnus* sp., 30 Apr. 1947 (1). Halifax, N.S., *Salix* sp., 25 Mar. 1946 (1). Owl's Head Harbour, Halifax Co., N.S., *Salix* sp., 10 Mar. 1946 (1), 17 Mar. 1946 (2). Halifax watershed area, N.S., *A. rugosa*, August 1973, several larvae found.
- Halisidota tessellaris* (J. E. Smith). Annapolis Royal, N.S., oak, 1947 (1). Swanton, Vt., *Ulmus fulva*, 1 June 1947 (1).
- Holomelina costata* (Stretch) (= *intermedia* Graef. See Ferguson 1974b). Junction, Kimble Co., Tex., ex ovo on *Plantago major*, from female taken 18 June 1972; adults emerged in August.
- Holomelina opella* (Grt.). Beltsville, Md., ex ovo on *Taraxacum*, 12-15 Aug. 1970 (13); larvae preserved. McClellanville, S.C., ex ovo on *Taraxacum* from female taken 6 Aug. 1968; adults in October (41).
- Holomelina fragilis* (Strecker). Slate Creek, 9 mi NW. of Hill City, Black Hills, S. Dak., 6,000 ft., ex ovo on *Taraxacum*, from female taken 20 July 1964; adults in September (many).
- Holomelina aurantiaca* (Hbn.). Leesburg, Va., ex ovo on *Taraxacum*, July 1970 (many).
- Holomelina lamae* (Freeman). Bog on Prospect Rd., Halifax Co., N.S., ex ovo on *Plantago*, from female taken 21 July 1952; adults in September-October (many).
- Phragmatobia fuliginosa rubricosa* (Harris). Halifax watershed area, N.S., ex ovo on *Plantago*, from female found flying by day on 3 May 1954; adults in June-July (many).
- Phragmatobia assimilians* Wlk. Waverley, N.S., reared 6 Mar. 1949, Mount Uniacke, N.S., reared 29 Mar. 1951, from mature larvae found crawling on ground in winter; host unknown.
- Spilosoma latipennis* Stretch (my use of *Spilosoma* follows Forbes 1960). Hamden, Conn., ex ovo on *Taraxacum* and *Plantago*, from female taken 10 June 1967; adults 15-22 Mar. 1968 (32); larvae preserved 21, 23 July.
- Spilosoma virginica* (F.). Armdale, N.S., *Myrica gale*, 18 Mar. 1968 (1); found on many other plants but not reared.

- Spilosoma congrua* Wlk. McClellanville, S.C., reared from a mass of eggs found on wild *Lactuca* sp. in August 1968; larvae fed on *Lactuca* and *Taraxacum*; adults emerged 23 Oct.–18 Nov. 1968 (7); larvae preserved 18 Sept., 6 Oct. This species also reared ex ovo on *Plantago* at Annapolis Royal, N.S., 1946.
- Spilosoma prima* Slosson. Annapolis Royal, N.S., ex ovo on *Plantago*, 1946.
- Estigmene acrea* (Drury). Armdale, N.S., cultivated carrot, 9 Mar. 1949 (1). Port William, Kings Co., N.S., "roadside weeds." 8 Mar. 1949 (1). Annapolis Royal, N.S., *Plantago* sp., larvae preserved 13 Sept., one adult reared 4 May 1947. Caribou Beach, Pictou Co., N.S., several found feeding on *Senecio jacobaea*, 8 Aug. 1973 (one preserved).
- Hyphantria textor* Harris. Pale larvae with gray hair—Terence Bay, Halifax Co., N.S., *Alnus rugosa*, 15, 19, 25 Apr. 1954 (3); Armdale, N.S., *Betula populifolia*, 4 Mar. 1945 (1); same locality, *B. papyrifera*, many larvae preserved 13 Aug. 1973. Dark larvae with brown hair—Hampton, N.H., in larger nests on *Prunus serotina*, adults 17, 21 May 1974 (5); larvae preserved 1 Sept. 1973 (4).
- Hyphantria cunea* (Drury). McClellanville, S.C., ex ovo from pure white August female, on alder, birch; larvae preserved 17 Oct. 1968; no adults reared.
- Ecpantheria scribonia* (Stoll). Adelphi, Md., larvae that are almost mature found regularly in garden in late fall; will eat *Taraxacum* and other low plants; one adult reared 16 Dec. 1971.
- Apantesis virgo* (L.). Armdale, N.S., reared several times from hibernated larvae found in spring; will feed on *Plantago*, *Taraxacum*, and other herbaceous plants.
- Apantesis placentia* (J. E. Smith). Welaka, Fla., ex ovo on *Taraxacum*, from female taken 10 Apr. 1962; adults 29 June–7 July 1962 (14); larvae preserved 2, 3 June.
- Apantesis figurata* (Drury). Lakehurst, N.J., ex ovo on *Plantago*, from female taken June 1956; adults in August (many).
- Apantesis phalerata* (Harris). McClellanville, S.C., ex ovo on *Taraxacum*, from female taken in August 1968; adults in October (83); larvae preserved 6 Oct.
- Apantesis vittata* (F.). Hamden, Conn., ex ovo on *Plantago*, from female taken 4 June 1966; adults August–October (77).
- Apantesis radians* Wlk. McClellanville, S.C., ex ovo on *Taraxacum*, from female taken August 1968; adults in September (96).

Tyria jacobaeae (L.). Caribou Beach and Caribou Island, Pictou Co., N.S., five larvae on ragwort 8 Aug. 1973 (one preserved); two adults emerged 13 May. 3 June 1974. This European species has been released in Nova Scotia, Oregon, and California in an effort to control ragwort (*Senecio jacobaea* L.). The larvae were full grown when found. Although there had been a moderate amount of feeding, especially on the flowers or flowerbuds, few plants had been severely damaged.

CTENUCHIDAE

Ctenucha virginica (Charpentier). Truro, Colchester Co., N.S., grass, 15 June 1954 (1). New Glasgow, Pictou Co., N.S., grass, 5 July 1955 (1). Scott's Bay, Kings Co., N.S., grass, 7 July 1954 (1). Halifax watershed area, N.S., grass, 18 June 1953 (1).

NOCTUIDAE

- Charadra deridens* (Gn.). Lake Kejimkujik, N.S., beech, 19 Mar. 1958 (1).
- Acrionicta dactylina* Grt. Pictou, N.S., *Salix* sp., 27 Aug. 1944 (three larvae preserved). Halifax watershed area, N.S., *Alnus* sp., 10 Apr. 1951 (1); *A. rugosa*, 5 May 1974 (1) (larvae preserved 27 Aug.).
- Acrionicta leporina vulpina* (Grt.). Mount Uniacke, N.S., *Salix* sp., 15 Apr. 1957 (1).
- Acrionicta radcliffei* (Harv.). White Point Beach, N.S., "cherry," 5 Apr. 1955 (1).
- Acrionicta grisea* Wlk. Sackville, Halifax Co., N.S., *Alnus* sp., 5 Mar. 1951 (1). Mount Uniacke, N.S., *Alnus* sp., 10 Mar. 1951 (1). Annapolis Royal, N.S., *Alnus* sp., 4 May 1947 (1).
- Acrionicta funeralis* G. & R. Wolfville, N.S., *Salix* sp., 16 Apr. 1949 (1).
- Acrionicta haesitata* (Grt.). Annapolis Royal, N.S., *Quercus borealis*, 28 Oct. 1946, 7 May 1947 (2).
- Acrionicta impleta* Wlk. Annapolis Royal, N.S., *Salix* sp., 28 Apr. 1947 (1).
- Acrionicta lithospila* Grt. Annapolis Royal, N.S., *Quercus borealis*, 1947 (1).
- Acrionicta oblinata* (J. E. Smith). Halifax watershed area, N.S., *Myrica gale*, 8, 28 Mar. 1951 (2); *Alnus* sp., 5, 9 Mar. 1951 (2). White Point Beach, N.S., *M. gale*, 6 Apr. 1957 (1); *Viburnum cassinoides*, 13 Apr., 7 May 1955 (2). Pictou, N.S., *Salix* sp., 23 Feb., 1945 (1).

- Acronicta lanceolaria* (Grt.). Bog on Prospect Rd., Halifax Co., N.S., *Kalmia polifolia*, 6 May 1953 (1). Herring Cove, Halifax Co., N.S., *Myrica pensylvanica*, 3 May 1974 (1). Smith's Cove, Digby Co., N.S., *M. pensylvanica*, May 1946 (1). Granville Ferry, Annapolis Co., N.S., *Alnus crispa*, 7 May 1947 (1).
- Simyra henrici* (Grt.). Gilbert Cove, Digby Co., N.S., saltmarsh grasses and *Juncus* sp., 9 Mar. 1968 (2); larvae preserved 12, 30 Aug. 1967.
- Harrisimemna trisignata* (Wlk.). Mount Uniacke, N.S., larva found on *Viburnum cassinoides* in August 1950 and reared to pupal stage on this plant (adult did not emerge). Thaxter (1891: 35) reported it on *Dierrilla* and *Ilex verticillata*, probably at Kittery, Maine, in a paper overlooked by subsequent compilers of host information.
- Metalepsis fishi* (Grt.). Mount Uniacke, N.S., ex ovo on *Vaccinium* sp. (blueberry), 2 Apr. 1960 (2); larvae preserved 20 Aug. 1959.
- Xestia "c-nigrum" (L.)*. Lake Kejimikujik, N.S., *Hypericum* sp., 17 Aug. 1957 (1). It is uncertain which of the two American sibling species this represents.
- Abagrotis alternata* (Grt.). Beltsville, Md., *Quercus velutina*, 17 June 1973 (1).
- Anomogyne youngii* (Sm.). Mount Uniacke, N.S., *Larix laricina*, 13 Aug. 1950 (1).
- Polia adjuncta* (Bdv.). Halifax watershed area, N.S., *Alnus rugosa*, 3 June 1974 (1).
- Polia assimilis* (Morr.). Wolfville, N.S., *Myrica asplenifolia*, 11 Mar. 1949 (1).
- Polia atlantica* (Grt.). Tatamagouche, Colchester Co., N.S., eggs found on coarse marsh grass, but larvae that hatched proved to be general feeders and were reared on *Prunus serotina*, 29 Apr. 1959 (1); larvae preserved 21 Aug. 1958 (see also Godfrey 1972: 40).
- Polia nevadae canadensis* (Sm.). Halifax watershed area, N.S., ex ovo on *Betula populifolia* in 1968. For larval description, see Godfrey 1972: 41.
- Polia grandis* (Bdv.). Hamden, Conn., *Cornus florida*, 17 Apr. 1968 (1).
- Mamestra curialis* (Sm.). Smiley Brook, Brooklyn, Hants Co., N.S., ex ovo on *Taraxacum* in 1968. For larval description, see Godfrey 1972: 52.
- Sideridis rosea* (Harv.). White Point Beach, N.S., ex ovo on *Betula papyrifera*, 3-29 Apr. 1957 (5); larvae preserved 23 Sept. 1956.
- Himella intractata* (Morr.). Ithaca, N.Y., ex ovo on *Quercus alba*, 14 Feb.-1 Mar. 1962 (34).

- Xylomyges dolosa* Grt. Halifax watershed area, N.S. ex ovo on *Populus grandidentata* and *P. tremuloides*, 14-18 Mar. 1958 (9); larvae preserved 2 July 1957.
- Orthosia rubescens* (Wlk.). Six Mile Creek, Ithaca, N.Y., ex ovo on several unrecorded deciduous trees (specimens marked "general feeder"), February 1957 (5).
- Orthosia garmani* (Grt.). Bethany, New Haven Co., Conn., ex ovo on *Prunus virginiana*, 4-7 Apr. 1969 (47); larvae preserved 21 May 1968.
- Orthosia alurina* (Sm.). Ithaca, N.Y., ex ovo on *Tilia* sp., *Amelanchier* sp., and other deciduous trees (general feeder), 1 Apr. 1959 (1); larvae preserved 18, 27 May 1958.
- Leucania juncicola* (Gn.). McClellanville, S.C., ex ovo on grasses various spp., October 1968 (several); larvae preserved 23 Sept.
- Cucullia florea* Gn. Annapolis Royal, N.S., *Aster umbellatus*, 28 May 1947 (1). French Village, Halifax Co., N.S., same host, 25 May 1953 (1). Herring Cove, Halifax Co., N.S., same host, 8 June 1953 (1). Enfield, Hants Co., N.S., *Solidago graminifolia*, 7 June 1952 (1).
- Cucullia postera* Gn. Bartibog, Gloucester Co., N.B., *Aster umbellatus*, 24 May 1953 (1).
- Adita chionanthi* (J. E. Smith). Ithaca, N.Y., ex ovo on *Fraxinus pennsylvanicus*, 24 July-2 Aug. 1961 (23).
- Apharetra dentata* (Grt.). Bog on Prospect Rd., Halifax Co., N.S., *Vaccinium* sp. (blueberry), 15 July 1951 (1).
- Feralia jocosus* (Gn.). Boulderwood, near Halifax, N.S., ex ovo on *Abies balsamea*, 28-30 Mar. 1960 (9); larvae preserved 13 July 1959.
- Feralia comstocki* Grt. Near Big Indian Lake, Halifax watershed area, N.S., ex ovo on *Abies balsamea*, 7-8 Apr. 1960 (2); larvae preserved 26 July 1959.
- Litholomia napaea* (Morr.). Halifax watershed area, N.S., ex ovo on *Populus tremuloides*, 22-25 July 1960 (many). Williams' Lake, near Halifax, N.S., ex ovo on same host, 27 June-6 July 1957 (16); larvae preserved 3 June. In nature, adults of this species and those of *Lithophane* do not appear until September or October.
- Lithophane bethunei* (G. & R.). Annapolis Royal, N.S., *Quercus borealis*, 30 Aug. 1946 (1).
- Lithophane innominata* Sm. Halifax watershed area, N.S., from larva found on trunk of red maple (*Acer rubrum*), 1955 (one-normal form).

- Lithophane petulca* Grt. Near Big Indian Lake, Halifax watershed area, N.S., ex ovo from form "ferrealis" on *Prunus virginiana*, *Quercus borealis*, and other trees, 25 Aug. 1959 (1); larvae preserved 19 July.
- Lithophane hemina* Grt. Bethany, New Haven Co., Conn., ex ovo on *Quercus* (various species), 31 July 1968 (1); larvae preserved 21 May.
- Lithophane tepida* Grt. Williams' Lake, near Halifax, N.S., ex ovo on species of *Tilia*, *Quercus*, and other trees (evidently general feeder on deciduous trees), 30 July-16 Aug. 1957 (many); larvae preserved 3, 13 June.
- Lithophane thaxteri* Grt. Halifax watershed area, N.S., ex ovo on *Myrica gale* (no adults reared); larvae preserved 27 June 1960.
- Xylina nupera* (Lint.). Parrsboro, Cumberland Co., N.S., *Juncus* sp. in salt marsh, 16 Sept. 1948 (1). Tatamagouche, Colchester Co., N.S., coarse grasses at edge of salt marsh, 4 Sept. 1958 (1); larva preserved 19 July. Baddeck, Victoria Co., N.S., marsh grasses, 10 Sept. 1949 (1).
- Xylina thoracica* (Put.-Cram.). Purcell's Cove, near Halifax, N.S., ex ovo on *Prunus virginiana*, *Quercus borealis*, *Betula* spp. (general feeder), 1-20 Sept. 1959 (13); larvae preserved 13 July; parent taken 10 May 1959.
- Mniotype ducta* (Grt.). Bog near Big Indian Lake, Halifax watershed area, N.S., ex ovo on *Prunus serotina*, 1958 (no adults reared); larvae preserved August 1958. *P. serotina* does not grow in the acid soil and bog habitats where this species is usually found and cannot be the natural host. The larvae were reared almost to maturity and then stopped feeding, apparently going into diapause.
- Eupsilia trisignata* (Grt.). Boulderwood, near Halifax, N.S., ex ovo on *Prunus virginiana* and *Quercus borealis*, 30 Aug.-14 Sept. 1959 (96); larvae preserved 13 July. Halifax watershed area, N.S., ex ovo on same hosts, from female taken 28 Apr. 1960; adults 7 Aug.-8 Sept. 1960 (27).
- Eupsilia sidus* (Gn.). Bethany, New Haven Co., Conn., ex ovo on *Quercus* (various species); brood 1: 7-24 Aug. 1968 (28); brood 2: 31 July-11 Aug. 1968 (28); larvae preserved 21 May.
- Eupsilia devia* (Grt.). Armdale, near Halifax, N.S., *Aster umbellatus*, 4 Sept. 1950 (1). Several larvae found but only one moth reared; larva preserved 4 July.
- Hypocoena enervata* (Gn.) (= *H. orphnina* (Dyar)). Tatamagouche, Colchester Co., N.S., on *Spartina alterniflora* in salt marsh, 25, 26 July 1958 (2); larvae pupated 12 July; larvae preserved 6 July.

- Papaipema harrisi* (Grt.). French Mountain, Inverness Co., N.S., larvae boring in stems of *Heracleum lanatum*, emerged 1-4 Sept. 1953 (4). Millville, Codroy Valley, Nfld., in stem of *H. lanatum*; larva preserved 12 Aug. 1962.
- Phlogophora periculosa* Gn. Halifax, N.S., *Kalmia angustifolia*, 24 July 1952 (one—form "*v-brunneum*"). Several were found and reared on *Kalmia*, but only the one adult was obtained. Also reared at Halifax from *Acer rubrum*.
- Amphipyra tragopoginis* (L.). Doyles, Codroy Valley, Nfld., *Urtica dioica*, 18 Aug. 1959 (1). Millville, Codroy Valley, Nfld., *Ligusticum scoticum*, 18 Aug. 1959 (1).
- Arzama obliqua* (Wlk.). Ithaca, N.Y., ex pupae in stems of cattail (*Typha latifolia*), in May. 21 May-1 June 1961 (6), 16-21 May 1965 (11). Indian Brook, Victoria Co., N.S., same host, 23 June 1955 (1).
- Pyrria exprimens* (Wlk.). Annapolis Royal, N.S., *Myrica asplenifolia*, 1950 (1).
- Schinia florida* (Gn.) (see Hardwick 1970: 33). Halifax, N.S., *Oenothera* sp., feeding on green seed capsules, 1955 (1).
- Nycteola frigidana* (Wlk.) (see McDunnough 1943: 60). Armdale, Halifax Co., Hubbards, Lunenburg Co., South Milford, Annapolis Co., Baddeck, Victoria Co., N.S., Dorchester, Westmorland Co., N.B., and 11 mi S. of Mt. Albert, Cascapedia Rd., Gaspé Peninsula, Quebec. *Salix* sp., 15 July-28 Aug. 1950 (46).
- Baileya doubledayi* (Gn.). Goodwood, near Halifax, N.S., *Alnus* sp., 27 Feb., 1 Mar. 1951 (3).
- Eutelia pulcherrima* Grt. Hamden, Conn., reared ex ovo on poison-ivy (*Rhus radicans*), in 1968 by Ronald Gagliardi. Three preserved larvae given to me (no date).
- Syngrapha epigrea* (Grt.) (see McDunnough 1944a). Mount Uniacke, N.S., *Myrica gale*, 29 June 1951 (1).
- Autographa ampla* (Wlk.). Halifax watershed area, N.S., *Alnus* sp., 17 June 1951 (1).
- Autographa rubida* Ottol. Mount Uniacke, N.S., ex ovo on *Plantago major*, 15 Aug.-2 Sept. 1956 (14). Boulderwood, near Halifax, N.S., ex ovo on same food plant, 31 Aug.-17 Sept. 1959 (16); larvae preserved 14 Aug.
- Autographa biloba* (Steph.). Lake Kejimikujik, N.S., ex ovo on *Taraxacum officinale*, from female taken 17 June 1957; adults 25-28 July 1957 (6). Charleston, S.C., *Plantago* sp., 15 May 1962 (1); larvae preserved 11 July.
- Catocala antinympha* (Hbn.). Halifax, N.S., *Myrica asplenifolia*, 10 Aug. 1950 (1). Annapolis Royal, N.S., same host, 1 Aug. 1946 (1). South Milford, Annapolis Co., N.S., 1 Aug. 1950 (1).

- Catocala coelebs* Grt. Mount Uniacke, N.S., *Myrica gale*, 9, 22 Aug. 1953 (2). White Point Beach, N.S., same host, 27 July, 2 Aug. 1950 (2). Halifax, N.S., *M. pennsylvanica* (no record of date) (1).
- Catocala parta* Gn. Armdale, N.S., *Salix* sp. with narrow, glabrous leaves (*S. alba*?), 19 Aug. 1941 (1).
- Catocala irene* Behr. Wells, Elko Co., Nev., *Salix* sp., 20 Aug. 1971 (1).
- Catocala concumbens* Wlk. Halifax, N.S., *Salix* sp. (no record of date) (1).
- Catocala sordida* Grt. Halifax, N.S., ex ovo on *Vaccinium* sp. (blueberry), about 1950; few reared to maturity but no adults obtained.
- Catocala herodias gerhardi* B. & Benj. Lakehurst, N.J., ex ovo on *Quercus borealis*, 3-7 July 1948 (4); larva preserved 4 June. Lindenhurst, Long Island, N.Y., ex ovo on *Q. borealis*, 7-11 July 1951 (11). Both lots reared from eggs sent to me by Sidney A. Hessel. The natural host is believed to be *Q. ilicifolia*, but the larvae did very well on red oak.
- Catocala praeclara* G. & R. White Point Beach, N.S., *Aronia melanocarpa*, 3 Sept. 1956 (1). The following descriptive note was made on this larva: Pale gray with little definite maculation, but strong curved tubercles dorsally on 5th segment and curved dorsal black line on rear of 10th. Tubercles, especially those of fifth, tinged with orange.
- Caemurgina crassiuscula* (Haw). Fall River, Halifax Co., N.S., ex ovo on *Trifolium* sp., 14-22 July 1958 (16), from female taken 22 May 1958; larvae preserved 1 July.
- Zale lunata* (Dru.). Adelphi, Md., garden rose, 9 July 1973 (1); larva found in spring.
- Zale duplicata* (Bethune). Lake Kejimikujik, N.S., ex ovo on *Pinus strobus*, 15 Apr. 1959 (1); larvae preserved 19 July 1958.
- Zale largera* (Sm.). Purcell's Cove, near Halifax, N.S., ex ovo on *Pinus banksiana*, from female taken in stand of jack pine, 6 June 1960; no adults reared; larvae preserved 23 July.
- Panopoda rufimargo* (Hbn.). Small, reddish Florida subspecies (possibly a distinct species); Welaka, Fla., ex ovo on oak (various species), 18 June 1973 (1).
- Phoberia atomaris* Hbn. McClellanville, S.C., ex ovo on oak (various species), from 2 females taken 29 Mar. 1969; no adults reared; 25 larvae preserved.
- Phoberia orthosioides* (Gn.). McClellanville, S.C., ex ovo on oak (various species), from female taken 29 Mar. 1969; no adults reared; five larvae preserved.

- Melipotis jucunda* Hbn. Archbold Biological Station, Lake Placid, Fla., from larva found on *Quercus* sp., 3 June 1962 (1); moth somewhat dwarfed (wrong host?).
- Drasteria occulta* (Hy. Edw.). Lakehurst, N.J., ex ovo on *Vaccinium* sp. (blueberry); no adults reared; larvae preserved 1 Aug. 1956.
- Synedoida grandirena* (Haw.). Lequille, near Annapolis Royal, N.S., *Hamamelis virginiana*, 28 Apr.-4 May 1947 (11); larvae preserved 21 Aug. Lake Rossignol, Queens Co., N.S., same host, 27 Apr. 1952 (1).
- Scoliopteryx libatrix* (L.). Reared from larva on *Salix* sp. in Nova Scotia.
- Pangrapta decoralis* Hbn. White Point Beach, N.S., *Vaccinium* sp. (blueberry), 6-16 Apr. 1954 (3).
- Lomanaltes eductalis* (Wlk.). Sackville, Halifax Co., N.S. *Alnus* sp., 22 Feb. 1951 (1). White Point Beach, N.S., *Alnus rugosa*, 10 Apr. 1954 (1).
- Hypena humuli* (Harr.). Wolfville, N.S., *Humulus lupulus*, 8 Sept. 1948 (1).

NOTODONTIDAE

- Ichthyura albosigma* (Fitch). Londonderry, Colchester Co., N.S., reared from larva on *Populus tremuloides*.
- Ichthyura apicalis* Wlk. Reared from larvae on *Salix* sp. in Nova Scotia.
- Datana major* G. & R. McClellanville, S.C., larvae common on cultivated azalea ("*Azalea indica*"?) in August 1968; larvae preserved 23 Sept.
- Datana dreseli* Hy. Edw. Lake Rossignol, Queens Co., N.S., many larvae found on *Hamamelis virginiana* in August 1957; no adults reared; larvae preserved 14 Sept. Purcell's Cove, near Halifax, N.S., blueberry, 7-20 May 1974 (4); larvae preserved 19 Aug. 1978.
- Nadata gibbosa* (J. E. Smith). Armdale, near Halifax, N.S., *Quercus borealis*, 6 Mar. 1945 (1). Waverley, Halifax Co., N.S., same host, 6 Mar. 1949 (1). Also reared in Nova Scotia from larva on *Betula* sp.
- Notodonta scitipennis* (Wlk.) (= *stragula* Grt.). Smith's Cove, Digby Co., N.S., *Salix* sp., 1946 (1). Mount Uniacke, N.S., same host (1).
- Notodonta simplaria* Graef. Doyles, Nfld., ex ovo on *Populus tremuloides*, from melanitic female taken 6 Aug. 1962; adults 30 Sept. 1962 (3) and 27 Mar.-15 May 1963 (14); larvae preserved 5, 6 Sept.

- Peridea angulosa* (J. E. Smith). Centreville, Kings Co., N.S., ex ovo on *Quercus borealis*; no adults reared; larva preserved 12 Sept. 1950.
- Gluphisia avimacula* Hud. Amherst, N.S., ex ovo on *Populus grandidentata*, 22 Mar. 1963 (1); larva preserved 3 Aug.
- Symmerista canicosta* Franclemont (1946: 100). Lequille, near Annapolis Royal, N.S., *Quercus robur*, 27 Apr. 1947 (2).
- Symmerista leucitys* Franclemont (1946: 97). Lequille, near Annapolis Royal, N.S., *Acer saccharum*, 23, 25 Apr. 1947 (3); larva preserved 13 Sept. 1946.
- Dasylophia thyatiroides* (Wlk.). Lake Kejimikujik, N.S., ex ovo on *Fagus grandifolia*; no adults reared; larvae preserved 1 Aug. 1957 (see Ferguson 1963b: 950).
- Hyparpax perophoroides* (Stkr.). Welaka, Fla., ex ovo on *Quercus* spp., from female taken 8 Apr. 1962; adults 4-16 July 1962 (3); larvae fed on *Q. laevis*, *Q. incana*, and from third instar to maturity on *Q. borealis*; larvae preserved 3 June.
- Schizura ipomoeae* Dbldy. Aylesford, Kings Co., N.S., *Acer [rubrum]*, 6 June 1959 (1).
- Schizura concinna* (J. E. Smith). Larvae found many times on willow, poplar, apple, and bayberry in Nova Scotia, but no adults reared.
- Heterocampa biundata* (Wlk.). Halifax watershed area, N.S., *Alnus rugosa*, 8 Nov. 1973 (1).
- Heterocampa obliqua* Pack. Annapolis Royal, N.S., *Quercus borealis*, 12 May 1947 (1).
- Heterocampa umbrata pulverea* G. & R. Peggy's Cove, Halifax Co., N.S., ex ovo on *Betula papyrifera*, from female taken 14 July 1953; adult 3 Oct. 1953 (1).
- Cerura modesta* Hud. Annapolis Royal, N.S., *Salix* sp., 5 Mar. 1947 (1).

LYMANTRIIDAE

(For classification of this group, see Ferguson 1976.)

- Leucoma salicis* (L.). Larvae in large numbers on introduced white poplar (*Populus alba*), at Halifax, N.S., and Lawrencetown, Annapolis Co., N.S., in 1940's.
- Dasychira tephra* Hbn. Welaka, Fla., *Quercus laurifolia*, 6 June 1972 (1).
- Dasychira leucophaea* (J. E. Smith). McClellanville, S.C., ex ovo on *Quercus coccinea*, 25 Oct.-20 Dec. 1968 (62); larvae preserved 14 Oct.; parent taken 19 Aug. 1968.

- Dasychira atrivenosa* (Palm). McClellanville, S.C., ex ovo on *Liquidambar styraciflua*, 11-21 Oct. 1968 (28); larvae preserved 26 Sept.; parent taken 10 Aug. 1968.
- Dasychira basiflora* (Pack.). Beltsville, Md., ex ovo on *Quercus* (various species). 24 Aug. 1970 (2); larva preserved 16 Aug.; parent taken 14 June 1970.
- Dasychira meridionalis memorata* Fgn. McClellanville, S.C., ex ovo on *Quercus coccinea*. 26 Oct.-15 Nov. 1968 (22); larvae preserved 14 Oct.; parent taken 19 Aug. 1968.
- Dasychira meridionalis kerrvillei* (B. & McD.). San Antonio, Tex., *Quercus virginiana*, 12 Aug. 1972 (1).
- Dasychira dorsipennata* (B. & McD.). Annapolis Royal, N.S., ex ovo on *Quercus*, *Corylus*, *Amelanchier*, and *Salix* spp., 30 Sept.-12 Oct. 1967 (13); larvae preserved 20 Sept. French Village, Halifax Co., N.S., *Betula* sp., 3 Sept. 1952 (1).
- Dasychira dominickaria* Fgn. McClellanville, S.C., ex ovo on *Taxodium distichum*, 27 Nov.-18 Dec. 1971 (12); larvae preserved 19 Nov.
- Dasychira pinicola* (Dyar). Lakehurst, N.J., ex ovo on *Pinus virginiana*, later switched to *P. banksiana*, 9-16 Aug. 1956 (27); larvae preserved 7 Aug.
- Dasychira manto* (Stkr.). Welaka, Fla., ex ovo on *Pinus banksiana*, 29 June-16 July 1962 (36); larvae preserved 11 June. Beltsville, Md., ex ovo on *P. virginiana*, 19-24 Aug. 1970 (17); larvae preserved 16 Aug.
- Orgyia leurostigma plagiata* (Wlk.) (= *O. wardi* Riotte). This subspecies may at times be extremely abundant in Nova Scotia, feeding on almost any tree or shrub. Observations were made as recently as the second and third weeks of August, 1973, when samples of adults and larvae were collected in Halifax Co., N.S. At that time full-grown larvae were found commonly on *Betula papyrifera*, *Alnus crispa*, *A. rugosa*, *Salix* spp., and *Acer rubrum*, and a few were found on *Pinus strobus* and *Myrica pensylvanica*. Christmas tree growers in Nova Scotia regard it as one of the most persistently destructive pests of young balsam fir trees (*Abies balsamea*). At White Point Beach, N.S., McDunnough reared a male from a larva on *Cornus canadensis*, 9 Sept. 1954, a further indication of the range of plants on which this species will feed. Larvae preserved July 1972, 10, 13, 14 Aug. 1973.
- Orgyia leuschneri* Riotte. Oak Creek Canyon, Coconino Co., Ariz., ex ovo on *Acer negundo*, 26 May-1 June 1973 (26); larvae preserved 18 May. Young larvae refused to accept any of several other kinds of foods offered.

- Orgyia antiqua nova* (Fitch). Green Bay, Lunenburg Co., N.S.,
Alnus rugosa, 21-28 Sept. 1956 (9). Nyanza, Victoria Co., N.S.,
 larvae on *Betula papyrifera* (two preserved 31 July 1970).
 Manuel's, Avalon Peninsula, Nfld., *Salix* sp., 9, 24 Aug. 1954 (2).

LASIOCAMPIDAE

- Malacosoma disstria* Hbn. Aylesford, Kings Co., N.S., *Populus tremuloides*, 11-18 July 1951 (10).

THYATIRIDAE

- Pseudothyatira cynatophoroides* (Gn.). Reared from larva on *Betula*
 sp. in Nova Scotia.

DREPANIDAE

- Oreta rosea* (Wlk.). Purcell's Cove, near Halifax, N.S., *Viburnum
 cassinoides*, 13 July 1955 (yellow-banded form) (1).
Drepana arcuata Wlk. Ithaca, N.Y., ex ovo from spring brood female
 taken 22 May 1965 on *Betula populifolia*, 27 June-4 July 1965 (63).

GEOMETRIDAE

- Alsophila pometaria* (Harris). Halifax, N.S., *Tilia europea* (planted
 as shade tree); larvae preserved 12 July 1948.
Nemoria elfa Fgn. (Ferguson 1969: 59). McClellanville, S.C., two
 broods ex ovo on *Liquidambar styraciflua*, 22 May-1 June 1967
 (9), 4-12 June 1970 (13); larvae preserved 14 May. Welaka, Fla.,
 ex ovo on same host, 10 June 1972 (2).
Nemoria licaria (Gn.). Charleston, S.C., ex ovo on *Quercus borealis*,
 19 June-3 July 1962 (57); larvae preserved 2 June. Welaka, Fla.,
 ex ovo on same host, 16-24 June 1962 (29); larvae preserved
 28 May.
Nemoria saturiba Fgn. (Ferguson 1969: 70). McClellanville, S.C.,
 two broods ex ovo on *Liquidambar styraciflua*. 21 Oct. 1968, 29
 Apr. 1969 (two—one pupa overwintered), and 28-29 Nov. 1969
 (5); larva preserved 26 Sept. 1968.
Nemoria darwiniata (Dyar). Near Wells, Elko Co., Nev., ex ovo on
Salix sp., 9 Nov. 1971 (1).
Nemoria bifilata (Wlk.) (for nomenclature of this and the following
 species, see Ferguson 1969). McClellanville, S.C., ex ovo on *Rhus
 copallina*, 6-13 Oct. 1968 (12); larvae preserved 23 Sept.
Nemoria bistriaria bistriaria Hbn. McClellanville, S.C., ex ovo on
Quercus (various spp.), 22 May-18 June 1968 (17); larvae pre-
 served 8 May.

- Nemoria bistriaria rubromarginaria* (Pack.). Ithaca, N.Y., ex ovo on *Quercus* (various spp.); no adults reared; larvae preserved 13 July 1965.
- Nemoria rubrifrontaria* (Pack.). Aylesford, Kings Co., N.S., ex ovo on *Myrica asplenifolia*. 19 Mar.-14 Apr. 1964 (31); larvae preserved 3 Aug. Wolfville, N.S., same host, 22 Mar. 1949 (1). Petite Riviere, N.S., same host, 13-23 Mar. 1949 (4). Pictou, N.S., same host, 21, 24 Feb. 1944 (2). Halifax, N.S., same host, 21, 27 Apr. 1952 (2). Armdale, near Halifax, N.S., same host, 7, 11 Feb. 1949 (2). Bog on Prospect Rd., Goodwood, near Halifax, N.S., *M. gale*, 1 Mar. 1951 (1); three more larvae found in same place, same host, in August 1973 (one preserved 21 Aug., two being reared).
- Nemoria mimosaria* (Gn.). Near Big Indian Lake, Halifax watershed area, N.S., ex ovo on *Betula papyrifera*, March 1964 (40). Waverley, N.S., *Salix* sp., 12 Mar. 1949 (1). Sackville, Halifax Co., N.S., *Alnus* sp., 22 Feb. 1951 (1). Pictou, N.S., *Myrica asplenifolia*, 2 Feb. 1943 (1). Larvae preserved 18 Aug.
- Dichorda iridaria iridaria* (Gn.). Hamden, Conn., ex ovo on *Rhus typhina*, 25-31 July 1967 (3).
- Dichorda iridaria latipennis* (Hulst.). McClellanville, S.C., ex ovo on *Rhus copallina*, 16 Sept.-25 Sept. 1968 (14), 28 Apr.-1 May 1969 (3); three pupae overwintered; larvae preserved 2 Sept.
- Synchlora liquoraria albolineata* Pack. (see Ferguson 1969: 148). Halifax, N.S., *Gaylussacia baccata*, 20 July 1950 (1). Doyles, Nfld., ex ovo on *Rubus strigosus* (raspberry). Larvae went into diapause about third instar, and no adults were obtained (two larvae preserved).
- Synchlora aerata* (F.). New Haven, Conn., ex ovo on *Rudbeckia hirta*, 2 Aug. 1964 (1); larvae ate flowers (one preserved 26 July).
- Synchlora gerularia* (Hbn.). Welaka, Fla., ex ovo on blossoms and seeds of dandelion (*Taraxacum officinale*), 9 June 1972 (1).
- Chloropteryx tepperaria* (Hlst.). McClellanville, S.C., ex ovo on *Taxodium distichum*, 10-27 Oct. 1968 (10); larvae preserved 18 Sept.; larvae would also feed on *Tsuga canadensis*.
- Hethemia pistasciaria* (Gn.) (see Ferguson, 1969: 222). Aylesford, Kings Co., N.S., ex ovo on *Vaccinium* sp. (blueberry), March 1964 (7); larvae preserved 4 Aug. 1963. Hamden, Conn., ex ovo on red oak; no adults reared (one larva preserved 21 July 1967).
- Mesothea incertata* (Wlk.). Three Brooks, Pictou Co., N.S., *Salix* sp. (pussy willow), 5, 11 Feb. 1945 (2). Wolfville, N.S., *Myrica asplenifolia*, 8 Mar. 1949 (1).

- Cyclophora pendulinaria* (Gn.) (see Herbulot 1962: 56). Halifax, N.S., *Myrica asplenifolia*, 27 Apr. 1953 (1); *M. pensylvanica*, 20 Apr. 1952 (1). Armdale, near Halifax, N.S., *M. asplenifolia*, 3 Mar. 1949 (1). Mount Uniacke, N.S., same host, 22 Feb. 1951 (1). Petite Riviere, N.S., same host, 14, 16 Aug. 1948, 5 Mar. 1949 (4). White Point Beach, N.S., same host, 29 Mar. 1954 (1).
- Acasis viridata* (Pack.). Baddeck, N.S., flower head of *Viburnum cassinoides*, 22 Feb. 1951 (1).
- Gladara limitaria* (Wlk.), **new combination** (*Nyctobia* Halst. 1896. preoccupied by *Nyctobia* Thorell, 1869, in the Arachnida). Halifax, N.S., *Kalmia angustifolia*, 21 Apr. 1953 (1).
- Lobophora nivergerata* Wlk. Hartland, Windsor Co., Vt., *Salix* sp., 6 Mar. 1968 (1).
- Operophtera brumata* (L.). Halifax, N.S., *Tilia europea*, 1 Dec. 1950 (1); flower head of *Viburnum cassinoides* (larva preserved 28 June); *Quercus borealis* (larvae preserved 22 June).
- Hydria undulata* (L.). Halifax, N.S., *Rhododendron canadense*, 2 Apr. 1951 (1), 29 Apr. 1952 (3). White Point Beach, N.S., *Spiraea* sp. (probably *latifolia*), 26 Mar. 1955 (1). Cascapedia Rd., Gaspé Peninsula, Quebec, *Salix* sp., 12 Mar. 1951 (1).
- Hydria prunivorata* (Fgn.) (Ferguson 1955: 329; 1958: 43). Kentville, N.S., *Prunus serotina*, 27 Apr.-2 May 1952 (3). Argyle, N.S., same host, 21 Mar.-8 Apr. 1958 (31).
- Eupithecia palpata* Pack. (with dull, unicolorous median space). Mount Uniacke, N.S., *Pinus strobus*, 1-9 Mar. 1949 (4).
- Eupithecia* n. sp. near *palpata* Pack. (with red-brown median space). Mount Uniacke, N.S., ex ovo on *Picea* sp. (probably *rubens*), 15, 17 Apr. 1952 (3). Lake Kejimkujik, N.S., ex ovo on *Tsuga canadensis*, 9-11 Mar. 1958 (19); larvae preserved 4 Aug. 1957.
- Eupithecia transcanadata* MacKay (1951: 77). Parrsboro, N.S., *Abies balsamea*, 9 Feb. 1945 (1).
- Eupithecia miserulata miserulata* Grt. Halifax, N.S., *Aster acuminatus*, 30 Aug. 1957 (1). White Point Beach, N.S., *Thalictrum polygamum*, 21, 25 Aug. 1953 (3); *Myrica gale*, 11 Sept. 1956 (1). Adelphi, Md., *Thymus* sp., 5 July 1971 (1); *Salix* sp. (pussy willow), 8 July 1973 (1).
- Eupithecia castigata* (Hbn.). Sackville, N.S., *Alnus* sp., 7 Apr. 1951 (1).
- Eupithecia fletcherata* Taylor. Purcell's Cove, near Halifax, N.S., *Prenanthes trifoliolata*, 9 Apr. 1951 (1).
- Eupithecia satyrata fumata* Taylor. Sackville, N.S., *Spiraea latifolia*, 6 Apr. 1951 (1). White Point Beach, N.S., *Spiraea* sp., 22 May 1952, 15 Apr., 19 May 1954 (3); *Thalictrum polygamum*, 9-29 Apr. 1954 (8). Lequille, near Annapolis Royal, N.S., flower

- head of *Aralia hispida*, 21 Apr. 1947 (1). Baddeck, N.S., *Chelone glabra*, 9 Apr. 1951 (1); flower heads of *Viburnum cassinoides*, 9, 17 Mar. 1951 (2).
- Eupithecia strattonata* Pack. Sackville, N.S., *Alnus* sp., 1 Mar. 1951 (1).
- Eupithecia russeliata* Swett (see McDunnough 1955). Halifax, N.S., *Kalmia angustifolia*, 5 May, 2 June 1952 (2); *Rhododendron canadense*, 25 Apr.-1 May 1952 (4), 25 Mar. 1957 (1). Annapolis Royal, N.S., *K. angustifolia*, no date (1); larvae preserved 9 Oct.
- Eupithecia coagulata* Gn. (= *geminata* Pack. For correct application of these names, see Rindge 1952: 3). Halifax, N.S., *Solidago puberula*, 6 Sept. 1954 (1).
- Eupithecia perfuscata youngata* Taylor (see McDunnough 1949: 630). Halifax, N.S., *Betula papyrifera*, 20 Apr. 1954 (1).
- Eupithecia anticaria* Wlk. Purcell's Cove, near Halifax, N.S., *Spiraea latifolia*, 30 Mar., 27 Apr. 1951 (2).
- Eupithecia ravocostaliata* Pack. Mount Uniacke, N.S., *Viburnum cassinoides*, 10 Apr. 1952 (1).
- Lygris diversilineata* (Hbn.). Annapolis Royal, N.S., *Parthenocissus tricuspidata* (Boston ivy), 10 Sept. 1946 (1).
- Dysstroma citrata* (L.). Millville, Codroy Valley, Nfld., *Potentilla pacifica* at edge of salt marsh, 12 Aug. 1959 (1).
- Thera juniperata* (L.). Halifax, N.S., *Juniperus communis*, 28 Aug.-28 Sept. 1950. Sackville, N.S., same host, 24-26 Sept. 1950 (14); larvae preserved 9 Sept. Apparently introduced from Europe. First reported from Maine (as *Thera procteri* Brower 1940: 139), later from Nova Scotia as *T. juniperata* with *T. procteri* as a synonym (Ferguson 1954: 301).
- Hydriomena renanciata* (Wlk.). Halifax, N.S., *Alnus rugosa*, 7 Apr. 1954 (1). Goodwood, near Halifax, same host, 16 Feb. 1951 (1). White Point Beach, N.S., same host, 29 Mar. 1954, 17 Nov. 1956 (2).
- Hydriomena transfigurata transfigurata* Swett (see McDunnough 1954a). Lake Kejimikujik, N.S., ex ovo on *Quercus borealis*. Larvae went into diapause in last instar and no adults were obtained; larvae preserved 12 Aug. 1958.
- Mesoleuca ruficollata* (Gn.). Halifax, N.S., *Rubus* sp. (blackberry), 26 Apr. 1959 (1).
- Rheumaptera hastata* (L.) (see Herbulot 1962: 54, 57; McGuffin 1973). Halifax, N.S., *Betula papyrifera*, 5 Mar. 1951, 26 Apr. 1952 (2); *Myrica pensylvanica*, 11, 12 Mar. 1951 (2). White Point Beach, N.S., *M. gale*, 9 Apr. 1954 (1).

- Rheumaptera* sp. near *hastata* but smaller, with more white on the wings, and limited to bogs. Bog at Goodwood, Prospect Rd., Halifax Co., N.S., *Myrica gale*, 4-11 Mar. 1951 (4); about 100 larvae collected from *M. gale* in this same locality in mid-August 1973. Peggy's Cove, Halifax Co., N.S., same host, 9 Mar. 1951 (1). French Village, Halifax Co., N.S., same host, 4 May 1953 (1). White Point Beach, N.S., 8, 12 Apr. 1954, 10 Mar. 1957 (4). Halifax, N.S., *M. pennsylvanica*, 9 Mar. 1951 (one—determination doubtful).
- Rheumaptera subhastata* (Nolcken). Sackville, N.S., *Abnus* sp., 5 Mar. 1951 (1). Many larvae collected from nests on both *A. crispata* and *A. rugosa* in Halifax watershed area, N.S., mid-August 1973, believed to be this.
- Bapta semiclarata* (Wlk.). White Point Beach, N.S., *Aronia melanocarpa*, 7 Apr. 1956 (1).
- Bapta vestaliata* (Gn.). Armdale, N.S., *Sorbus americana*, 18 Mar. 1949 (1); *Prunus* sp. (plum), 14 Mar. 1949 (1).
- Bapta glomeraria* (Grt.). Boulderwood, near Halifax, N.S., ex ovo on *Prunus pennsylvanica*, emerged February 1960 (48); larvae preserved 2 July 1959.
- Deilinea erythemaria* (Gn.). Halifax, N.S., *Salix* sp., 20 May 1953 (1). Mount Uniacke, N.S., *Salix* sp., 5-10 Mar. 1951 (5). Three Brooks, Pictou Co., N.S., *Salix* sp., 5 Feb. 1945 (1).
- Semiothisa bisignata* (Wlk.). Armdale, N.S., *Pinus strobus*, 26 Oct. 1946 (1).
- Semiothisa bicolorata* (F.). Beltsville, Md., *Pinus virginiana*, 7, 21 Mar. 1974 (2); larvae preserved September 1973.
- Semiothisa transitaria* (Wlk.). Charleston, S.C., ex ovo on *Pinus banksiana*, 25 June-6 July 1962 (136); larvae preserved 11 June.
- Semiothisa distribuaria* (Hbn.). Welaka, Fla., ex ovo on *Pinus banksiana*, 14-20 June, 6 Sept., 2 Oct. 1962 (47); larvae preserved 28 May.
- Semiothisa signaria dispuncta* (Wlk.). Armdale, N.S., *Abies balsamea*, 13 Mar. 1949 (1); ex ovo on *Picea* sp. and *A. balsamea*, 28-31 Aug. 1960 (4). Waverley, N.S., *A. balsamea*, 23 Mar. 1949 (1). Mount Uniacke, N.S., *A. balsamea*, 3 Mar. 1949 (1). Centreville, Kings Co., N.S., same host, 5 Oct. 1951 (1). White Point Beach, N.S., ex ovo on *Picea* sp., 3, 5 Sept. 1953 (3); larvae preserved.
- Semiothisa pinistrobata* Fgn. (Ferguson 1972: 563). Halifax, N.S., ex ovo on *Pinus strobus*, 3 Mar.-18 May 1952 (4). Armdale, near Halifax, N.S., ex ovo on *P. strobus*, 26 Feb. 1968 (1); larva preserved 18 Sept. 1967.

- Semiothisa fissinotata* (Wlk.). Kearney Lake Rd., Halifax Co., N.S., ex ovo on *Tsuga canadensis*, 7-8 Mar. 1958 (6). Hammond's Plains, near Halifax, N.S., ex ovo on same host, 8-9 Mar. 1955 (7). Lake Kejinkujik, N.S., ex ovo on same host, 8-11 Mar. 1958 (14); another brood, ex ovo on same host, 17 Aug.-7 Oct. 1960 (8); larvae preserved 10, 15 July, 4 Aug.
- Semiothisa banksianae* Fgn. (Ferguson 1974c: 591). Dorchester, N.B., ex ovo on *Pinus banksiana*, 1950; no adults reared.
- Semiothisa submarmorata* (Wlk.). Debert, Colchester Co., N.S., ex ovo on *Larix laricina*; large brood reared but no adults obtained.
- Semiothisa oweni* (Swett). Armdale, N.S., ex ovo on *Larix laricina*, two larvae preserved 25 Aug. 1948 but no adults reared. Mount Uniacke, *L. laricina*, 24 Feb. 1951 (1).
- Semiothisa granitata* (Gn.). Lakehurst, N.J., ex ovo on *Pinus strobus*, 22 May 1956 (2); another brood ex ovo on *P. virginiana*, later switched to *P. banksiana*, 2 Aug.-15 Sept. 1956 (13); larvae preserved.
- Semiothisa sexmaculata sexmaculata* (Pack.). Mount Uniacke, N.S., *Larix laricina*, 4 Mar. 1949 (2).
- Semiothisa continuata* (Wlk.). McClellanville, S.C., ex ovo on *Juniperus virginiana* and *J. chinensis*, mostly the latter, 19 June-31 July 1974 (41); probably associated with *J. virginiana* in this locality.
- Semiothisa atrofasciata* (Pack.). Junction, Kimble Co., Tex., ex ovo on *Juniperus ashei*, later switched to various other species, such as *J. virginiana* and *J. chinensis*, on which larvae completed their development, 15-24 Aug. 1972 (25).
- Semiothisa mellistrigata* (Grt.). Three Brooks, Pictou Co., N.S., *Salix* sp., 11 Feb. 1945 (1).
- Itame andersoni* (Swett). Coldbrook, Kings Co., N.S., *Vaccinium* sp. (blueberry), 26 June 1951 (1).
- Itame sulphurea* (Pack.). Mount Uniacke, N.S., *Myrica gale*, 4-12 July 1950 (5).
- Eufidonia convergaria* (Wlk.). Armdale, N.S., ex ovo on *Pinus strobus*, 4. 16 Mar. 1968 (3); larvae preserved 8 Sept.
- Eufidonia discospilata* (Wlk.). Petite Riviere, N.S., *Myrica asplenifolia*, 4 Mar. 1949 (1).
- Orthofidonia tinctoria* (Wlk.) or *esornata* (Wlk.). Armdale, N.S., one of these two species reared ex ovo on *Viburnum cassinoides* in 1951 before I became aware that two sibling species were involved. The parent female, usually kept, has not been found, and no adults were reared; thus the larvae preserved 3 July from this brood cannot positively be identified. It is likely that *Viburnum* is the food of both.

- Orthofidonia flavivenata* (Hulst). Mount Uniacke, N.S., ex ovo on *Viburnum cassinoides*, 4 Apr. 1960 (1). Large brood reared but only the one good adult emerged (larvae preserved).
- Hypagyrtis unipunctata* (Haw.) (= *pustularia* Hbn.). Welaka, Fla., ex ovo on *Prunus serotina*, 12-18 June 1973 (7). Unlike the closely similar *H. esther* (Barnes), these larvae would not eat pine.
- Hypagyrtis subatomaria* (Wood). Armdale, N.S., *Cornus stolonifera*, July 1950 (1). Halifax, N.S., *Amelanchier* sp., 7 July 1950 (1); *Alnus* sp., 11 June 1952 (1). I believe that *H. unipunctata* and *H. subatomaria* are the same species, the former representing the small, browner form of the summer broods, and the latter the large, paler spring form resulting from larvae that have diapaused over winter. In the north where there is only one brood, all specimens are of the spring form.
- Anavitrinella pampinaria* (Gn.). St. Johns Bluff, Duval Co., Fla., *Quercus* sp., 14 May 1962 (1).
- Protoboarmia porcelaria indicataria* (Wlk.). Halifax, N.S., *Picea* sp., 11 June 1952 (1). Caledonia, Queens Co., N.S., *Abies balsamea*, 7 June 1951 (1). The last was reared from a larva collected 16 May, indicating that this species hibernates in the egg or larval stage.
- Ectropis crepuscularia* (Schiff.). White Point Beach, N.S., *Vaccinium* sp. (blueberry), 22 Feb. 1957 (1).
- Phaeoura guernaria* (J. E. Smith) (see Rindge 1961: 105). Annapolis Royal, N.S., *Quercus robur*, 21 Apr. 1947 (1).
- Biston cognataria* (Gn.). Three Brooks, Pictou Co., N.S., *Salix* sp., 17 Feb. 1945 (1). White Point Beach, N.S., *Myrica gale*, 14 Mar. 1957 (1); larva preserved 23 Sept.
- Erannis tiliaria* (Harr.). Armdale, N.S., three larvae from *Betula papyrifera* and cultivated pear preserved 2 July 1950.
- Euchlaena marginata* (Minot). Armdale, N.S., ex ovo on *Amelanchier* sp., large brood reared but no adults emerged; larvae preserved 17, 22 Sept. 1948.
- Xanthotype urticaria* Swett. Armdale, N.S., *Glechoma hederacea*, 29 May 1952 (1). French Village, Halifax Co., N.S., *Rhododendron canadense*, 20 June 1953 (1). South Milford, N.S., from pupa found on *Alnus* sp., 4 July 1950 (1).
- Campaea perlata* (Gn.). Halifax, N.S., *Rosa* sp. (wild rose), 9 June 1953 (1).
- Homochlodes fritillaria* (Gn.). Boulderwood, near Halifax, N.S., ex ovo on *Pteridium aquilinum*, 7-12 Apr. 1960 (6); larvae preserved 19 July; another brood, same host, 7 Apr. 1960 (2); another brood, same host, 24-25 Oct. 1959, 7 Apr. 1960 (7). Mount Uniacke, N.S., ex ovo on same host, 3 Oct. 1960 (1); larvae preserved 3 July.

- Homochlodes lactispargaria* (Wlk.). Mount Uniacke, N.S., ex ovo on *Pteridium aquilinum*, 20 Feb.-1 Mar. 1961 (5); larvae preserved 3 July 1960. Millville, Codroy Valley. Nfld., ex ovo on same host, 7 Apr. 1960 (1).
- Tacparia atropunctata* (Pack.) (see Ferguson 1974a: 473). Armdale, N.S., *Myrica gale*. 27, 28 Feb. 1949 (two deformed adults). Mount Uniacke, N.S., ex ovo on *M. gale*, larva preserved 27 July 1948 (no adults reared).
- Cepphis armataria* (H.-S.). Wellington, Halifax Co., N.S., *Ilex verticillata*, 12 Apr. 1954 (1). Also reared from larva on *Myrica asplenifolia* in Nova Scotia.
- Cepphis decoloraria* (Hulst.). Annapolis Royal, N.S., ex ovo on *Rubus allegheniensis* (blackberry), 26 Apr.-7 May 1947 (many); larvae preserved 11 Aug. 1946. Port Wallis, near Dartmouth, N.S., ex ovo on same host, 3-17 May 1959 (many). Costigan, Penobscot Co., Maine, ex ovo on same host, 1-12 Apr. 1954 (many).
- Plagodis serinaria* (Gn.). Lequille, near Annapolis Royal, N.S., ex ovo on *Betula papyrifera*, 15-23 Apr. 1947 (4); larvae preserved 7, 11 Aug. 1946.
- Plagodis kuetzingi* (Grt.) (= *nigrescens* Hulst. See Rupert 1949: 24). Lequille, near Annapolis Royal, N.S., ex ovo on *Fraxinus* sp. (probably *americana*), 4-27 May 1947 (many).
- Plagodis alcoolaria* (Gn.) Armdale, N.S., *Betula papyrifera*. 3 May 1947 (1).
- Plagodis phlogosaria iris* Rupert (Rupert 1949: 31). Armdale, N.S., ex ovo on *Betula papyrifera*. 22 Apr.-11 May 1952 (13); larva preserved 20 Aug. 1951. White Point Beach, N.S., *Alnus crispa*, 9 Apr. 1954 (1).
- Anagoga occiduaria* (Wlk.). Mount Uniacke, N.S., *Viburnum cassinoides*, 11 Mar. 1951 (1).
- Hyperetis alienaria* (H.-S.). Rockingham, near Halifax, N.S., *Acer rubrum*. 4 May 1953 (1).
- Hyperetis nepiasaria* Wlk. Armdale, N.S., *Kalmia angustifolia*, 7 Mar. 1946, 26 Apr., 2 May 1947 (4). Halifax, N.S., *Cornus canadensis*, 12 Apr. 1954 (1).
- Nematocampa filamentaria* Gn. Lakehurst, N.J., *Gleditsia triacanthos*, 24 June 1956 (1).
- Metarranthis refractaria* (Gn.). Halifax, N.S., ex ovo on *Prunus serotina*, 26 Apr.-17 May 1959 (±0); larvae preserved 28 Aug. 1958. White Point Beach, N.S., ex ovo on *Vaccinium* sp. (blueberry), 24 Apr.-1 May 1956 (5).
- Metarranthis hypochraria* (H.-S.). Annapolis Royal, N.S., ex ovo on *Prunus virginiana*, February-March 1950 (21).

- Metarranthis indeclinata* (Wlk.) (= *broweri* Rupert). Adelphi, Md., ex ovo on *Prunus virginiana*, 23 Nov. 1970 (4).
- Metarranthis* sp. (*lateritiaria* of authors but not Guenée). Lake Kejinkujik, N.S., ex ovo on *Betula papyrifera* and *B. populifolia*, 18–29 Mar. 1958 (36); larva preserved 8 Sept.
- Metarranthis duaria septentrionaria* B. & McD. Mount Uniacke, N.S., ex ovo on *Vaccinium* sp. (blueberry), 17–18 Feb. 1951 (7). Also reared from larva on *Betula* sp. in Nova Scotia (1).
- Metarranthis amyrisaria* (Wlk.) (= *franclemonti* Rupert). Halifax, N.S., ex ovo on *Vaccinium* sp. and *Tilia europea*, 20, 28 Mar. 1951 (2).
- Metarranthis angularia* B. & McD. Yale Preserve, New Haven, Conn., ex ovo on *Prunus virginiana*, 28 Mar.–3 Apr. 1966 (43). Adelphi, Md., *P. serotina*, 10 May 72 (1).
- Metarranthis obfirmaria* (Hbn.). Mount Uniacke, N.S., ex ovo on *Prunus pensylvanica* and *P. virginiana*, 25–30 Mar. 1963 (27); larvae preserved 22 Aug. Welaka, Fla., ex ovo on *P. virginiana*, 14–18 Mar. 1963 (30).
- Metanema determinata* Wlk. Mount Uniacke, N.S., *Salix* sp., 5 Mar. 1951 (1).
- Selenia alciphearia* Wlk. Armdale, N.S., ex ovo on *Betula papyrifera*, 18 Feb. 1951 (6). Mount Uniacke, N.S., ex ovo on same host, 18–19 Feb. 1951 (4); larva preserved 6 Sept. Large broods of larvae were reared but few adults emerged. They would also feed freely on *Acer rubrum*.
- Oingilia catenaria* (Drury). Petite Riviere, N.S., *Myrica pensylvanica*, one preserved larva, 15 Aug. 1948. Aylesford, N.S., *Salix* sp., 1 Oct. 1945 (1).
- Caripeta divisata* Wlk. Boulderwood, near Halifax, N.S., ex ovo from melanic female on *Abies balsamea*; larvae preserved 20 Sept. 1959; no adults reared.
- Caripeta piniata* (Pack.). Armdale, N.S., ex ovo on *Pinus strobus*, January 1949 (2); larva preserved 15 Aug. 1948.
- Lambdina fiscellaria fiscellaria* (Gn.). Armdale, N.S., *Quercus borealis*, Sept. 1949 (1). Waverley, N.S., *Abies balsamea*, 31 Aug. 1950 (1). Parrsboro, N.S., *A. balsamea*, 13 Sept. 1944 (1). Argyle, Yarmouth Co., N.S., *Picea glauca*, 25 Aug., 2 Sept. 1957 (2).
- Lambdina fiscellaria pultaria* (Gn.). Welaka, Fla., ex ovo on oak, various species including *Quercus borealis*. 19–23 June 1962 (4); larva preserved 2 June.
- Lambdina pellucidaria* (G. & R.). Lakehurst, N.J., ex ovo on *Quercus* (various species), no adults reared; one mature larva preserved 14 Aug. 1956. Believed to be most commonly a pine feeder.

- Tetracis crocallata* Gn. Armdale, N.S., *Alnus* sp., 8 Mar. 1949 (1).
Tetracis cachexiata Gn. Armdale, N.S., *Kalmia angustifolia*, 18, 19
 Apr. 1952 (2). Petite Riviere, N.S., *Myrica asplenifolia*, 9 Mar.
 1949 (1). White Point Beach, N.S., *M. gale*, 2 Apr. 1954 (1).
Antepione thisoaria (Gn.). West Dover, Halifax Co., N.S., ex ovo
 on *Alnus rugosa*, 1-6 Apr. 1954 (3). Colesville, Montgomery Co.,
 Md., ex ovo on *Prunus scrotina*, 16 Oct. 1974 (2).
Prochoerodes transversata (Drury). Bog east of Big Indian Lake,
 Halifax watershed area, N.S., *Larix laricina*, 10 Aug. 1968 (1).

EUCLEIDAE

- Packardia geminata* (Pack.). Halifax, N.S., *Viburnum*, 13 Mar. 1951
 (1); pupa overwintered.

PYRALIDAE

- Udea itysalis mertensialis* Munroe (Munroe 1966: 31). White Point
 Beach, N.S., *Mertensia maritima*, 5-12 Aug. 1953 (14).
Phlyctaenia extricalis dionalis (Wlk.) (for nomenclature of this and
 the following species, see Munroe 1954: 429). Halifax, N.S.,
 birch, 7 Mar. 1951, 28 Apr. 1952, 9 May 1959 (3). Larva green
 with black head, later turning yellowish and hibernating; lives
 in web on underside of leaf; pupates in spring.
Phlyctaenia coronata tertialis (Gn.). Halifax, N.S., *Viburnum*,
 13 Mar. 1951 (1).
Macrobotys pertextalis (Led.) (see Munroe 1950: 228). Halifax,
 N.S., *Plantago*, 22 June 1957, 25 June 1954, 4 July 1952, 23 July
 1957 (6).
Schoenobius sp., possibly *clomensellus* Rob. *Tatamagouche*, Col-
 chester Co., N.S., *Spartina alterniflora*, 17-21 July 1958 (8); lar-
 vae preserved 6 July. Larvae are stem borers in the cordgrass of
 salt marshes, living well down in the stem toward the roots, which
 are below high tide level. The species appears to be associated
 with this grass in the intertidal zone of all the larger salt marshes
 in Nova Scotia and is often very abundant.
Tetralopha expandens (Wlk.) (see Munroe 1963: 679). Lake Rossig-
 nol, Queens Co., N.S., *Quercus borealis*, 7 May 1952 (1).
Acrobasis indigenella (Zeller). Halifax, N.S., cherry, 17 July
 1951 (1).
Acrobasis betulella Hulst. Halifax, N.S., birch, 16 July 1952, 18 July
 1950 (2).
Acrobasis rubrifasciella Pack. Halifax, N.S., *Alnus rugosa*, 20-24
 July 1952 (7). White Point Beach, N.S., same host, 9, 16 July
 1954 (2).

- Acrobasis comptoniella* Hulst. Halifax, N.S., *Myrica asplenifolia*, 20 July-3 Aug. 1951-52 (6). White Point Beach, N.S., *M. gale*, 23-28 July 1953 (5).
- Glyptocera consobrinella* (Zeller). Mount Uniacke, Hants Co., N.S., *Viburnum*, 26, 27 Feb. 1951 (7). Purcell's Cove, near Halifax, N.S., same host, 15 Apr. 1954 (4).
- Ortholepis pasadamia* (Dyar). Halifax, N.S., birch, 27 June-25 July 1950-51 (10).
- Ortholepis myricella* McD. (McDunnough 1958: 2). Peggy's Cove, Halifax Co., N.S., *Myrica gale*, 5 July 1952 (one paratype).
- Ortholepis rhodorella* McD. (McDunnough 1958: 4). Armdale, Halifax Co., N.S., *Rhododendron canadense*, 3 July 1950, holotype (CNC).
- Meroptera abditiva* Heinr. White Point Beach, N.S., aspen, 6 Apr. 1954, 28 Mar. 1955 (3).
- Nephoteryx* sp. (*virgatella* Clem.?). Halifax, N.S., *Robinia pseudo-acacia*, 27 Feb., 2 Mar. 1951 (2), 4-9 Sept. 1957 (3), 1 Mar.-6 May 1958 (28).
- Nephoteryx carneella* Hulst. Halifax, N.S., willow, 7 Mar. 1951, 5 May 1953. Mount Uniacke, Hants Co., N.S., same host, 20 Mar. 1951. White Point Beach, N.S., same host, 28-30 Mar. 1955 (5).
- Tulsa finitella* (Wlk.). Halifax, N.S., birch, 2 June 1951 (1).
- Moodna ostrinella* (Clem.). Wolfville, N.S., from old flower heads of *Rhus typhina*, 5 May-13 June 1960 (69).
- Plodia interpunctella* (Hbn.). Halifax, N.S., from larvae feeding on raisins, 11 May, 10 Sept. 1959 (many).

PTEROPHORIDAE

- Trichoptilus lobidactylus* (Fitch). Petite Riviere, Lunenburg Co., N.S., *Hypericum* sp. growing in bog, 27 July 1953 (1).
- Pterophorus evansi* McD. White Point Beach, N.S., *Scutellaria* sp. [either *lateriflora* L. or *galericulata* L.], 31 July-14 Aug. 1953 (29).
- Adaina montana* (Wlsm.), form "*declivis*" (Meyr.). White Point Beach, N.S., *Aster novi-belgii*, 19 Aug.-2 Sept. 1955-56 (17).
- Oidaematophorus homodactylus* (Wlk.). Halifax, N.S., *Solidago* sp., 22 June-23 July 1951, 1953 (5).

TORTRICIDAE (OLETHREUTINAE)

- Episimus argutanus* (Clem.). Halifax, N.S., *Hamamelis*, 27 Feb.-10 Apr. 1951-52 (17). Waverley, Halifax Co., N.S., same host, 1 Mar. 1951 (1). Lake Rossignol, Queens Co., N.S., same host, 18-31 May 1952 (3).

- Lobesia spiraeae* (McD.) (see Obratzsov 1953: 89). White Point Beach, N.S., in flower heads of *Spiraea latifolia*, 25 July-13 Aug. 1953 (18).
- Aterpia approximata* (Heinr.) (see Obratzsov 1951: 276). Ottawa, Ontario, *Lysimachia* sp., 17 June 1955 (2). Reared by T. N. Freeman.
- Aphania fumerea* (Meyr.) (= *youngana* McD. See Clarke 1958: 300). Halifax, N.S., birch, 21 June-10 July 1951 (8).
- Aphania bifida* McD. Halifax, N.S., *Alnus crispa* var. *mollis*, 26 June-31 July 1952-53 (12). Larva pale green with large whitish pinacula; in buds in May.
- Aphania apateticana* McD. Halifax, N.S., willow, 8 Mar. 1951 (2); birch, 6 Mar. 1951 (1).
- Aphania paludicolana* Brower (Brower 1953: 95). White Point Beach, N.S., *Myrica gale*, 28 Sept. 1956 (1).
- Badebecia urticana* (Hbn.). Halifax and White Point Beach, N.S., *Viburnum* (2), *Rosa* sp. (9), *Myrica asplenifolia* (9), willow (1), birch (1), blackberry (probably *Rubus hispidus*) (4): adults emerged May-June.
- Ecartema betulana* Heinr. Halifax, N.S., birch, 17 June-26 July 1950, 1952-53 (12).
- Ecartema electrofuscum* Heinr. Halifax, N.S., *Myrica asplenifolia*, 16 June-8 July 1951-52 (21).
- Ecartema zellerianum* Fern. (= *trepidulum* Heinr. See McDunnough 1956: 1). Halifax, N.S., *Viburnum*, 3-24 July 1950-53 (23). White Point Beach, N.S., same host, 13 July 1953 (1).
- Ecartema hamamelianum* McD. (McDunnough 1944b: 153). Halifax, N.S., *Hamamelis*, 10 June-6 July 1951, 1956 (many).
- Ecartema melanomesum* Heinr. Halifax, N.S., *Kalmia angustifolia*, 16 July 1951 (1). White Point Beach, N.S., same host, 15 July 1953 (1).
- Ecartema valdanum* McD. Halifax, N.S., *Spiraea latifolia*, 26 June-11 July 1951. White Point Beach, N.S., same host, 8 July-13 Aug. 1953-54 (16).
- Ecartema permundanum* Clem. Halifax, N.S., blackberry (*Rubus hispidus*), 19 June-15 July 1951-56. White Point Beach, N.S., same host, 17 July-1 Aug. 1954-55 (34).
- Ecartema baccatarum* McD. (McDunnough 1942: 65). Halifax, N.S., *Gaylussacia baccata*, 9-20 July 1950-53 (16). Purcell's Cove, Halifax Co., N.S., same host, 16, 23 July 1952 (2). White Point Beach, N.S., same host, 10-21 July 1953 (6).
- Ecartema galevora* McD. (McDunnough 1956: 7). Peggy's Cove, Halifax Co., N.S., and White Point Beach, N.S., *Myrica gale*, 9-21 July 1951-53, 1957 (63).

- Ewartema submissanum* McD. Halifax, N.S., *Alnus rugosa*, 25 July 1951 (1).
- Ewartema nananum* McD. White Point Beach, N.S., *Chamaedaphne calyculata*, 18 July-10 Aug. 1951, 1953, 1955-56 (7).
- Ewartema appendiceum* Zeller. Halifax, N.S., *Alnus rugosa*, 16 June 1951, 8 July 1956 (2); *Myrica asplenifolia*, 8 June 1952 (1); *Viburnum*, 1 July 1953 (1); *Rosa* sp., 12 June 1954 (1); blackberry, 8, 12 June 1952-53 (2). White Point Beach, N.S., *A. rugosa*, 12 July 1953 (3). Larva deep blackish brown. head and prothoracic shield black.
- Hedya separatana* (Kft.). Halifax, N.S., birch, 6 May 1953 (1).
- Hedya ochroleucana* (Hbn.). White Point Beach, N.S., *Rosa* sp., 12-31 July 1953, 1955 (12). Lunenburg, N.S., garden rose, 25 July 1963 (one reared by Barry Wright).
- Hedya variegana* (Hbn.). Halifax, N.S., cherry, apple, *Crataegus* sp., *Amelanchier* sp., *Sorbus* sp., *Aronia melanocarpa*, 8 June-5 Aug. 1950-52 (40). Also reared from pupa on *Viburnum* at Halifax, 24 June 1953 (1).
- Olethreutes albiciliata* (Fern.). Halifax, N.S., *Spiraea latifolia*, 27 June-10 July 1951. White Point Beach, N.S., same host, 8-11 July 1953 (5).
- Olethreutes glaciana* (Moesch.). Halifax, N.S., *Myrica asplenifolia*, 5 July 1954 (1).
- Olethreutes trinitana* (McD.). White Point Beach, N.S., *Aronia melanocarpa*, 7 Aug. 1954 (1); blackberry, 14 July 1955 (1).
- Evora hemidesma* (Zeller). Halifax, N.S., *Spiraea latifolia*, 13-27 June 1950-52 (6). Armdale, Halifax Co., N.S., same host, 16, 22 Aug. 1950 (3). White Point Beach, N.S., same host, 6 July-7 Aug. 1953-54 (10).

TORTRICIDAE (EUCOSMINAE)

- Rhyacionia buoliana* (D. & S.). Halifax, N.S., from larvae in shoots of Scotch pine (*Pinus sylvestris* L.). 6-16 July 1951 (20).
- Spilonota ocellana* (D. & S.). Halifax, N.S., birch, 19 May 1953, 16 July 1950 (2).
- Spilonota ocellana* form "*lariciana*" Heinr. Halifax, N.S., *Alnus crispa* var. *mollis*, 13 July 1956 (1); *Betula* sp., 20 June 1951, 16 July 1950 (2). Crystal Cliffs, Antigonish Co., N.S., apple, 2 July 1969 (one reared by Barry Wright).
- Strepsicrates smithiana indentana* (Dyar). White Point Beach, N.S., *Myrica pensylvanica*, 4, 7 Sept. 1954 (2).

- Epiblema scudderiana* (Clem.). Guelph, Ontario, from galls on *Solidago canadensis*. 13-25 Mar. 1964 (six reared by Barry Wright).
- Epiblema suffusana* (Zeller). Halifax, N.S., *Rosa* sp., 20 June-14 July 1951-52 (16).
- Gypsonoma fasciolana* (Clem.). Halifax, N.S., *Myrica asplenifolia*, 4-7 Mar. 1951 (4).
- Gypsonoma salicicolana* (Clem.). Halifax, N.S., *Salix bebbiana*, 25 June 1955, 11 July 1952. White Point Beach, N.S., same host, 14 July-5 Aug. 1953 (20).
- Zeiraphera canadensis* Mutuura and Freeman (1966: 159). Lunenburg, N.S., spruce, 10 July 1963 (three reared by Barry Wright).
- Pseudexentera costomaculana* (Clem.) (see Heinrich 1940: 242). Halifax, N.S., *Hamamelis*, 6-12 Apr. 1952 (27).
- Pseudexentera kalmiana* McD. (McDunnough 1959: 4). White Point Beach, N.S., *Kalmia [angustifolia]*, 15 Mar. 1954, holotype (CNC).
- Gretchena semialba* McD. White Point Beach, N.S., from larvae in tips of shoots of *Alnus rugosa*, 28 Feb.-23 Mar. 1955. Mount Uniacke, Hants Co., N.S., same host, 5-16 Apr. 1953 (7).
- Norma dietziana* (Kft.). Wellington, Halifax Co., N.S., *Ilex verticillata*, 5 May 1953 (1).
- Kundryia fuitimana* Heinr. Halifax, N.S., *Nemopanthus macronata*, 28 Feb.-4 May 1953-57 (17); *Arctostaphylos uva-ursi*, 16 July 1975 (one specimen, doubtfully the same species). Wellington, Halifax Co., N.S., *Ilex verticillata*, 24 Apr.-7 May 1953 (7); larvae preserved 13 Sept.
- Rhopobota naevana* (Hbn.). Halifax, N.S., *Gaultheria procumbens*, 12-26 July 1951 (25); *Arctostaphylos uva-ursi*, 12-22 July 1951-52, 1957 (34). Others from White Point Beach, N.S., on cranberry (*Vaccinium oxycoccos* or *V. macrocarpon*), 21-22 July 1953 (2). had been segregated in the Nova Scotia Museum collection by McDunnough who evidently thought they might be different (labeled *geminana* (Steph.) or *vacciniana* (Pack.)?).
- Rhopobota* sp. (*R. ilicifoliana* (Kft.) or *R. naevana* (Hbn.)?). Halifax, N.S., *Nemopanthus macronata*, 26 June-12 July 1953, 1955, 1957 (60). Larvae common in May. McDunnough could see no difference between this and the species on *Gaultheria* and *Arctostaphylos* and thought that they might be the same.
- Rhopobota* sp. (*R. ilicifoliana* (Kft.) or *R. naevana* (Hbn.)?). White Point Beach, N.S., *Ilex verticillata*, 2-20 Aug. 1954-56 (23); *Nemopanthus macronata*, 13 Aug. 1954 (1). Larvae collected in July on *Ilex*, occasionally on *Nemopanthus*. This form

also similar to *R. naevana* except for the occurrence of the larvae 2 months later in the season; it is questionable whether this is a second generation or another species.

- Epinotia simalana* (Hbn.). Halifax, N.S., birch, 2-21 Aug. 1952 (4).
- Epinotia solandriana* (L.). Halifax, N.S., birch, 10 July 1951, 2-11 July 1954-55, 1957 (21).
- Epinotia rectiplicana* (Wlsm.). Halifax, N.S., *Prunus pensylvanica*, 14 Apr.-14 May 1952-53, 1955, 1958 (7); birch, 12 Mar.-29 Apr. 1951-52, 1955 (7); *Alnus rugosa*, 19-21 Apr. 1952 (6).
- Epinotia solicitana* (Wlk.). Halifax, N.S., birch, emerged February-April (many). Larva pale yellow with amber head.
- Epinotia timidella* (Clem.). Halifax, N.S., *Quercus borealis*, 14-20 Apr. 1958 (4). Greenport, Long Island, N.Y., scrub oak (probably *Q. ilicifolia*), 7 Mar. 1951 (1).
- Epinotia nanana* (Treit.). Halifax, N.S., spruce, 6-16 June 1952-53 (12). Chester, Lunenburg Co., N.S., spruce, 2-10 June 1969 (14 reared by Barry Wright).
- Epinotia septemnerana* Kft. Halifax, N.S., *Rhododendron canadense*, 25 Aug.-17 Sept. 1950-51 (7). Peggy's Cove, Halifax Co., N.S., same host, 15 Sept. 1952 (1). White Point Beach, N.S., *Ledum groenlandicum*, 23 Aug.-13 Sept. 1953-55 (7). Larva similar to that of *Pseudeuxentera* spp. but without dark anal plate.
- Anchylopera nubeculana* Clem. Halifax, N.S., *Prunus* sp., 27 Mar. 1953 (1); *Amelanchier* sp., 3 May 1953 (1). Larva also on *Aronia melanocarpa* at White Point Beach, N.S., according to manuscript note by McDunnough, but no adults reared. Larva hibernates.
- Anchylopera rhodorana* McD. (McDunnough 1954b: 2). Halifax, N.S., *Rhododendron canadense*, 14 May 1952, 13 May 1953, 17 Apr. 1957 (3).
- Anchylopera laciniata* (Zeller). Halifax, N.S., *Quercus borealis*, 1-17 May 1952-53 (12). Waverley, Halifax Co., N.S., same host, 6 May 1953 (1).
- Anchylopera* sp. White Point Beach, N.S., *Lathyrus japonicus*, 5-26 Aug. 1954 (11). This species does not seem to agree with *A. maritima* Dyar, which was described from the same host, beach pea.
- Ancylis comptana fragariae* (Walsh & Riley). White Point Beach, N.S., *Fragaria virginiana*, 29 Aug. 1955 (1); blackberry (*Rubus* sp.), 27 Aug., 5 Sept. 1955 (2).
- Ancylis apicana* (Wlk.). Halifax, N.S., *Gaylussacia baccata*, 14 May 1952 (1); birch, 11 Mar. 1951 (1); *Cornus canadensis*, 21-22 Apr. 1954, 3 Oct. 1953, 18 Oct. 1953 (5).

- Ancylis mediofasciana* (Clem.). White Point Beach, N.S., *Aronia melanocarpa*, 11, 17 Mar. 1955 (2). Larva dull greenish brown with large colorless pinacula; head and thorax amber; forms tight roll in leaves of terminal shoot, hibernates, pupates in spring.
- Ancylis tineana* (Hbn.). White Point Beach, N.S., *Prunus pennsylvanica*, 20 Sept. 1954 (1).

TORTRICIDAE (SPARGANOTHINAE)

- Amorbia humerosana* Clem. Halifax, N.S., willow, 3 Mar. 1951, 2 May 1953 (2). White Point Beach, N.S., *Cornus canadensis*, 5 Apr. 1954 (1). Wellington, Halifax Co., N.S., cherry, 25 Apr. 1953 (1). French Village, Halifax Co., N.S., *Alnus rugosa*, 27 Apr. 1953. Mount Uniacke, Hants Co., N.S., alder, 1 Mar. 1951 (1).
- Sparganothis fulgidipennana* (Blanchard) (= *reticulatana* (Clemens)). White Point Beach, N.S., *Spiraea* sp. (probably *latifolia*), 8 Aug. 1954 (1); *Aronia melanocarpa*, 6 July 1954 (1); *Ilex verticillata*, 17 Aug. 1956 (1). Halifax, N.S., *Viburnum*, 22-29 July 1952 (3).
- Sparganothis daphnana* McD. (McDunnough 1961: 6). White Point Beach, N.S., *Aronia melanocarpa*, 29 July-2 Aug. 1955 (2); *Myrica gale*, 10 July 1953 (1); *Chamaedaphne calyculata*, 6, 12 Aug. 1956 (2); *Ilex verticillata*, 14, 15, 21 Aug. 1956 (3).
- Sparganothis sulphureana* (Clem.). Miguasha, Gaspé Peninsula, Quebec, *Thuja occidentalis*, 5 Aug. 1950 (1).

TORTRICIDAE (TORTRICINAE)

- Acleris maximana* (Barnes & Busck). White Point Beach, N.S., aspen, 7 Sept. 1956 (1).
- Acleris macdunnoughi* Obratzsov (1963: 214). White Point Beach, N.S., blackberry (*Rubus* sp.), 21 Aug. 1954 (1); *Spiraea latifolia*, 17 Aug. 1953 (1).
- Acleris schalleriana viburnana* (Clem.). Halifax, N.S., *Viburnum*, 15 Sept. 1950 (1). Purcell's Cove, Halifax Co., N.S., same host, 12 Sept. 1951 (1). Mount Uniacke, Hants Co., N.S., same host, 21 Aug. 1952 (1). White Point Beach, N.S., same host, 31 Aug.-7 Sept. 1955 (10). Baddeck, N.S., same host, 24-28 Aug. 1950 (4).
- Acleris oxycoccana* (Pack.). White Point Beach, N.S., *Chamaedaphne calyculata*, 12 Aug.-6 Sept. 1953-54 (14).
- Acleris chalybeana* (Fern.). Halifax, N.S., birch, 25 Sept. 1952 (1); maple (probably *Acer rubrum*), 19 Oct. 1950 (1).

- Acleris hastiana* (L.) (= *pulverosana* Fern. See Obratzsov 1963: 242). Peggy's Cove, Halifax Co., N.S., *Myrica gale*, 21, 24 Sept. 1950 (2). Determination doubtful; possibly large specimens of *A. walkerana* (McD.).
- Acleris fragariana* Kft. White Point Beach, N.S., *Myrica gale*, 3-22 Sept. 1954, 1956 (22); *Aronia melanocarpa*, 3-11 Sept. 1953-56 (3); blackberry (*Rubus* sp.), 11 Sept. 1954 (1); *Fragaria virginiana*, 24 Aug., 1 Sept. 1955 (2); *Potentilla* sp., 19 Sept. 1954 (1). Peggy's Cove, Halifax Co., N.S., *M. gale*, 8 Sept. 1950 (1).
- Acleris busckana* (McD.). White Point Beach, N.S., *Spiraea latifolia*, 29 Aug.-20 Sept. 1953-55 (14). Sackville, Halifax Co., N.S., same host, 24 Sept. 1950 (2). Larva green with broad blackish head and black shading on prothorax.
- Acleris flavivittana* (Clem.). White Point Beach, N.S., *Prunus pennsylvanica*, 12 Sept. 1954 (1). A specimen of form "*perspicuana*" (Rob.).
- Acleris inana* (Rob.). Halifax, N.S., birch, 6 Aug. 1952 (1); *Alnus* sp., 6 Aug. 1951 (1).
- Acleris bowmanana* (McD.). White Point Beach, N.S., *Aronia melanocarpa*, 8 Sept.-23 Oct. 1954-55 (22); blackberry (*Rubus* sp.), 5 Oct. 1955 (1). Peggy's Cove, Halifax Co., N.S., *Myrica gale*, 15 Sept. 1950 (1).
- Acleris minuta* (Rob.). Prospect Rd., near Halifax, N.S., *Kalmia angustifolia*, 30 Sept.-3 Oct. 1950 (3).
- Acleris logiana placidana* (Robinson). Bridgewater, N.S., cherry, December 1964 (one specimen of form "*tresignana*" (Rob.) reared by Barry Wright).
- Acleris nivisellana* (Wlsm.). White Point Beach, N.S., *Prunus pennsylvanica*, 8 Sept. 1956, 19 Sept. 1954 (2).
- Acleris kearfottana* (McD.). Peggy's Cove, Halifax Co., N.S., *Myrica gale*, 7, 28 July 1951 (2). White Point Beach, N.S., same host, 21-26 Sept. 1956 (3) (two broods?). Halifax, N.S., *Hamamelis*, 11 Sept. 1950 (1). The last specimen, a female, is doubtfully determined, but McDunnough thought it closer to *A. kearfottana* than to *A. semiannula*.
- Acleris tripunctana* (Hbn.) (see Obratzsov, 1963: 220). Hamden, Conn., reared from pupa on *Betula populifolia*, 18 Oct. 1968 (1).
- Acleris semiannula* (Rob.). Halifax, N.S., birch, 22 Aug. 1950 (1).
- Acleris cornana* (McD.). White Point Beach, N.S., *Cornus canadensis*, 4-24 Sept. 1954 (8).
- Croesia semipurpurana* (Kft.) (see Obratzsov 1955: 187). Halifax, N.S., oak, 28 June 1954 (1).
- Croesia curvalana* (Kft.). Halifax, N.S., *Vaccinium* sp. (blueberry), 19 June-13 July 1951-54 (many).

- Archips ferridamus* (Clem.). New Haven, Conn., *Quercus* sp., 19 July 1965 (2).
- Archips cerasivoranus* (Fitch). Lunenburg, N.S., *Prunus virginiana*, 25 July 1963 (four reared by Barry Wright). The large webs of this species are common on chokecherry in Nova Scotia.
- Archips argyrospilus* (Wlk.) complex. Mount Uniacke, Hants Co., N.S., *Ledum groenlandicum*, 22 July 1951 (1).
- Archips myricanus* (McD.). White Point Beach, N.S., *Aronia melanocarpa*, 12 Aug. 1956 (1); *Rosa* sp., 28, 29 July 1953 (3); *Myrica gale*, 23 July-2 Sept. 1955-56 (many); *M. pensylvanica*, 29 July-5 Aug. 1955 (10); *Spiraea latifolia*, 27 July-9 Aug. 1955 (12); *Chamaedaphne calyculata*, 30 July 1953 (1).
- Archips rosanus* (L.). Halifax, N.S., *Crataegus* sp., 29 June 1952 (1); *Viburnum*, 21 July 1950 (1).
- Archips purpuranus* (Clem.). Halifax, N.S., birch, 9 July 1951 (1); *Viburnum*, 19, 23 July 1952 (2); *Cornus canadensis*, 11 July 1954 (1); *Spiraea* sp., 11 July 1951 (1); blackberry (*Rubus* sp.), 28 June, 1 July 1951, 2-11 July 1954 (7).
- Syndemis afflictana* (Wlk.) (see Freeman 1958: 43). Halifax, N.S., *Myrica pensylvanica*, 27 Feb. 1951 (1); *Cornus canadensis*, 8 Apr. 1954 (1). Larva pale yellowish with broad, dark, lateral stripes.
- Choristoneura obsoletana* (Wlk.) (for nomenclature of this and the following species, see Freeman 1958). White Point Beach, N.S., *Aronia melanocarpa*, 28 July 1955 (2); *Chamaedaphne calyculata*, 13 Aug. 1955 (1).
- Choristoneura rosaceana* (Harr.). Halifax, N.S., birch, 9 July 1952 (1); *Alnus rugosa*, 17 July 1952 (1); *Populus* sp., 30 June 1951 (1); *Cornus* sp., 12 July 1950 (1); *Viburnum*, 8 July 1952 (1). Mount Uniacke, Hants Co., N.S., *A. rugosa*, 20 July 1956 (1). Hamden, Conn., *Quercus* sp., 8 June 1968 (1).
- Argyrotaenia velutinana* (Wlk.). White Point Beach, N.S., *Prunus pensylvanica*, 11 Mar. 1955 (1); *Myrica gale*, 8 Mar. 1957 (1).
- Argyrotaenia repertana* Freeman (1944: 84). Halifax, N.S., *Prunus* sp., 26 Feb. 1951 (1); *Myrica pensylvanica*, 23 Feb.-2 Mar. 1951, 17-25, Apr. 1952 (11); *Rhododendron canadense*, 26 Feb. 1951 (1). French Village, Halifax Co., N.S., willow, 29 Apr. 1953 (1). White Point Beach, N.S., *Aronia melanocarpa*, 5 Mar. 1955 (1); *M. gale*, 1-7 Mar. 1957 (6).
- Argyrotaenia pinatubana* (Kft.). Halifax, N.S., *Pinus strobus*, 23 Feb. 1951, 26-28 Mar. 1958 (43). The biology of this species was discussed by Freeman (1960:32).

- Argyrotaenia mariana* (Fern.). Halifax, N.S., *Viburnum*, 25 Apr. 1953 (1); *Kalmia angustifolia*, 17, 20 Apr. 1952 (2). Purcell's Cove, near Halifax, N.S., *Prenanthes* sp. (probably *P. trifoliolata*), 2 Mar. 1951 (1).
- Argyrotaenia quercifoliata* (Fitch). Bridgewater, N.S., oak, 6 July 1964 (one reared by Barry Wright). Hamden, Conn., oak, 5 June 1968 (2).
- Clepsis melaleucana* (Wlk.). Halifax, N.S., birch, 7 June 1952 (1); *Alnus crispa* var. *mollis*, 10 June 1952 (1); *Hamamelis*, 9 June 1951 (1); *Pyrola* sp., 12 June 1954 (1); *Spiraea* sp., 9 June 1953 (1).
- Clepsis persicana* (Fitch). Halifax, N.S., cherry, 17-29 May 1951-53, 14, 16 Sept., 1 Oct. 1951 (13); *Rosa* sp., 12 June 1954 (1); blackberry (*Rubus* sp.), 6-7 June 1952 (2); birch, 3 June 1951 (1); *Alnus crispa* var. *mollis*, 11-14 June 1952 (3); *Alnus* sp., 13 May 1957 (1); *Cornus canadensis*, 29 June 1954 (1); *Vaccinium* sp. (blueberry), 19 June 1954 (1); *Rhododendron canadense*, 17 May 1955 (1). Halifax watershed area, Halifax Co., N.S., willow, 4 June 1953 (1). Aylesford, Kings Co., N.S., *Myrica asplenifolia*, 22 May 1960 (1). Marriott's Cove, Lunenburg Co., N.S., strawberry, 28-29 May, 9 June 1969 (four reared by Barry Wright). Lunenburg, N.S., *Maianthemum canadense*, 24 May 1969 (one reared by Barry Wright).
- Pandemis limitata* (Rob.). Halifax, N.S., larch, 30 July 1951 (1); alder, 5 July 1951 (1); plum, 3, 9 July 1968 (two reared by Barry Wright); *Viburnum*, 14 Aug. 1952 (1). White Point Beach, N.S., *Myrica gale*, 13 July 1955, 9 Aug. 1955, 21 Aug. 1956 (5).
- Aphelia alleniana alleniana* (Fern.) (see Obratzov 1959). St. Paul Island, Cabot Strait, N.S., buckbean (*Menyanthes trifoliata*), 31 July-6 Aug. 1955 (4); *Aralia nudicaulis*, 4 Aug. 1955 (2); *Ligusticum scoticum*, 4 Aug. 1955 (1); *Aster umbellatus*, 4 Aug. 1955 (1). White Point Beach, N.S., *Aronia melanocarpa*, 20, 24 Aug. 1953-54 (2); *Rosa* sp., 26 July-8 Aug. 1953 (6); *Prunus serotina*, 23 July 1955 (1); blackberry (*Rubus* sp.), 13-18 Aug. 1955, 2 Sept. 1954 (6); *Myrica pensylvanica*, 2 Aug. 1955 (1); *M. gale*, 10 July-18 Aug. 1956 (6); *Spiraea latifolia*, 22 July-18 Aug. 1953 (6); *A. umbellatus*, 25 July 1954 (1). Baddeck, N.S., *M. pensylvanica*, 6-18 Aug. 1950 (3). Larva green with slightly darker dorsal stripe.
- Eulia ministrana* (L.). Halifax, N.S., cherry, 11 May 1952 (1); alder, 7, 9 Mar. 1951 (2); *Viburnum*, 14 Mar. 1951 (1). Larva green with prominent black head, hibernates.

COCHYLIDAE (PHALONIIDAE)

Phalonia oenotherana Riley. Halifax, N.S., *Oenothera* sp. (probably *O. biennis*), 15, 18 Aug. 1955 (2). Lunenburg, N.S., *Oenothera* sp., 10 Aug.-3 Sept. 1963 (four reared by Barry Wright).

OECOPHORIDAE

(For classification of this family, see Hodges 1974.)

- Agonopterix lythrella* (Wlsm.). White Point Beach, N.S., *Hypericum virginicum*, 30 July-20 Aug. 1953-55 (many). Lake Kejimikujik, Queens Co., N.S., same host, 29 July-9 Aug. 1957 (9).
- Agonopterix walsinghamella* (Bsk.). Halifax, N.S., *Myrica asplenifolia*, 4 Sept. 1952 (1). White Point Beach, N.S., same host, 19 Aug. 1953 (1); *M. gale*, 28, 31 Aug. 1954 (2).
- Agonopterix robiniella* (Pack.). Halifax, N.S., *Robinia* sp., 17-28 July 1957 (18).
- Agonopterix argillacea* (Wlsm.). White Point Beach, N.S., *Salix bebbiana*, 9 Aug. 1953 (1).
- Bibarambla allenella* (Wlsm.). Halifax, N.S., birch, 13 Mar.-25 May 1951-53, 4, 6 May 1959 (18); *Alnus rugosa*, 21 Mar. 1954, 18 Apr., 5-10 May 1952 (6); *Salix* sp., 21 Mar. 1951 (1). White Point Beach, N.S., birch, 16 Apr. 1954 (1). French Village, Halifax Co., N.S., *A. rugosa*, 17 May 1953 (1).
- Semioscopis inornata* Wlsm. White Point Beach, N.S., aspen, 21 Feb. 1957 (1).
- Semioscopis aureorella* Dyar. White Point Beach, N.S., cherry, 15 Mar. 1954 (1).
- Depressaria cinereocostella* Clem. White Point Beach, N.S., *Ligusticum scoticum*, 22 July-17 Aug. 1953 (11). Shediac, N.B., same host, no date.
- Depressaria pastinacella* (Dup.). French Mt. and North Mt., Cape Breton Highlands National Park, N.S., *Heracleum lanatum*, 18-23 Aug. 1953 (26).
- Nites betulella* (Bsk.). Halifax, N.S., birch, 3-18 July 1952, 1956-57 (9); *Gaylussacia baccata*, 12 July 1957 (1).
- Machimia tentoriferella* Clem. White Point Beach, N.S., *Cornus canadensis*, 29 Aug.-12 Sept. 1954 (4); *Viburnum*, 5 Sept. 1954 (1). Bridgewater, N.S., cherry, autumn of 1964 (one reared by Barry Wright).
- Psilocorsis reflexella* Clem. Halifax, N.S., birch, 28 Apr.-2 May 1953 (14); *Quercus borealis*, 6 Apr.-4 May 1958-59 (20). Purcell's Cove, near Halifax, N.S., aspen, 7-26 Apr. 1958 (6). Lunenburg, N.S., *Betula papyrifera*, 21, 26 Apr. 1971 (four reared by Barry

Wright). Larva pale green with round blackish head; prothoracic plate brown or blackish; dorsal setae short, pale, lateral ones long, black; spiracle and tubercle 3 black. Larvae collected August-September.

Psilocorsis quercicella Clem. Halifax, N.S., birch, 28 Mar. 1958, 17, 22 May 1953 (4); *Quercus borealis*, 6-29 Apr. 1952-58 (4). Debert, Colchester Co., N.S., beech, 22-29 Apr. 1959 (7), 17 Oct. 1958. Larvae pale green, head and prothoracic plate black.

Hofmannophila pseudospretello (Stainton). Halifax, N.S., reared from larvae on dried corn, 11 May 1959 (2).

BLASTOBASIDAE

Valentinia sp. Starr's Point, Kings Co., N.S., from larvae boring in acorns of *Quercus borealis*, 9 July 1953 (3). Moths resemble very small, dull *V. glandulella* (Riley).

GLYPHIPTERYGIDAE

Allonomyia vicarialis (Zeller). Halifax, N.S., birch, 22 July 1952 (1). Crystal Cliffs, Antigonish Co., N.S., apple, 16 July 1969 (one reared by Barry Wright).

Allonomyia diana (Hbn.). White Point Beach, N.S., birch, 31 July 1954 (1).

Choreutis inflatella Clem. White Point Beach, N.S., *Scutellaria* sp. [either *S. lateriflora* or *S. galericulata*], 11-17 Aug. 1953 (14).

SESIIDAE

Bembecia marginata (Harr.). Reared from pupa in raspberry cane, 5 Sept. 1928. No locality given but believed to be from Baddeck, N.S.

HELIODINIDAE

Schreckensteinia festaliella Hbn. White Point Beach, N.S., raspberry, 2-29 Mar. 1955 (29).

YPONOMEUTIDAE

Argyresthia conjugella Zeller. Halifax, N.S., *Crataegus* sp., 27-29 June 1952 (8). Determination doubtful; possibly European *A. ephippiella* F.

HELIOZELIDAE

Antispila freemani Lafontaine (1973: 991). White Point Beach, N.S., *Cornus canadensis*, 3-10 Mar. 1955 (8). Determined by McDunnough as *A. cornifoliella* Clem., but now believed to belong to this recently described species.

GRACILLARIIDAE

- Lithocolletis blancardella* (F.) (see Stultz 1962). Kentville, N.S., apple, 21 Aug. 1959 (8). Chester, Lunenburg Co., N.S., same host, 15-26 June 1967-68, 27-31 July 1966 (18 reared by Barry Wright). Evidently introduced from Europe.
- Lithocolletis lucidicostella* Clem. Arkell, Ontario. *Acer saccharum*, 8 Jan., 2 Feb. 1964 (two reared by Barry Wright).
- Lithocolletis ostryaefoliella* Clem. Halifax, N.S., beech, 6-12, Aug. 1950 (10).
- Lithocolletis martiella* Braun. Halifax, N.S., birch, 8 Apr.-6 May 1953, 2-10 Aug. 1950-51 (9).
- Lithocolletis diversella* Braun. Halifax, N.S., *Vaccinium* sp. (blueberry), 6 May 1954 (1); *Gaylussacia baccata*, 3, 4 May 1952 (2).
- Lithocolletis scudderella* Frey & Boll. Chester, Lunenburg Co., N.S., willow, 25 Aug. 1966 (1); *Populus alba*, 27 July-7 Aug. 1966 (3) (reared by Barry Wright).
- Lithocolletis salicivorella* Braun. New Ross, Lunenburg Co., N.S., willow, 18 Apr. 1969 (five reared by Barry Wright).
- Lithocolletis propinquinella* Braun. Halifax, N.S., cherry, 27 Mar. 1958 (2).
- Lithocolletis ostensackenella* (Fitch). Halifax, N.S., *Robinia* sp., 4-18 Mar. 1951 (13).
- Lithocolletis emberizapennella* Bouché. Armdale, Halifax Co., N.S., an extremely abundant leaf miner on cultivated (and escaped) *Lonicera tatarica* in 1967; not previously noticed in this area and apparently a recent introduction. Larvae and pupae collected late July-early August, adults emerged 6-11 Aug. 1967 (34) (larvae preserved 30 July). In Europe reported on *L. tatarica*, *L. xylosteum*, and *Symphoricarpos racemosus*. This moth is very similar to *Lithocolletis mariacella* Cham., also a honeysuckle feeder, and the relationship between the two needs further investigation. Identified by George Lewis, Biosystematics Research Institute, Ottawa, Ontario.
- Lithocolletis hamameliella* Bsk. Halifax, N.S., *Hamamelis*, 6 Mar. 1951, 26 Apr.-5 May 1952 (10).

- Lithocolletis comptoniella* Darl. (Darlington 1949: 183). Halifax, N.S., *Myrica asplenifolia*, 20 Apr. 1954 (1).
- Lithocolletis* sp. (undescribed?). Halifax, N.S., *Alnus crispa* var. *mollis*, 25. 30 Apr. 1952 (2), 28 July 1950 (1). French Village, Halifax Co., N.S., same host, 1-8 Aug. 1950 (18). White Point Beach, N.S., same host, 5-21 Aug. 1956 (8).
- Acrocerope astericola* (Frey & Boll). Halifax, N.S., *Aster novi-belgii*, 27 Apr.-8 May 1953 (3). Larvae mining entire leaf; collected in October.
- Callisto guttea solitariella* (Dietz). Halifax, N.S., *Amelanchier* sp., 16 Apr. 1952 (1).
- Callisto kalmiella* (Dietz). Halifax, N.S., *Kalmia angustifolia*, 9 May 1953 (1).
- Callisto peregrinaella* Darl. (Darlington 1949: 183). Halifax, N.S., *Myrica asplenifolia*, 11-27 May 1953-54 (14).
- Callisto crataegifoliella* (Clem.). Halifax, N.S., *Amelanchier* sp., 22, 25 Apr. 1952 (2). White Point Beach, N.S., same host, 7 Aug. 1953 (1). Determination doubtful.
- Callisto* sp. near *conspicuellla* (Dietz). Halifax, N.S., birch, 12-14 Apr. 1952, 15 Aug. 1952 (9).
- Gracillaria syringella* (F.). Halifax, N.S., ash, 14 Apr., 26 Aug.-3 Sept. 1952 (13).
- Gracillaria betulivora* McD. (McDunnough 1946: 94). Halifax, N.S., birch, 11-20 Aug. 1951 (4). White Point Beach, N.S., birch, 21 Aug. 1953 (1).
- Gracillaria anthobaphes* Meyr. Halifax, N.S., *Vaccinium* sp. (blueberry), 14 Mar. 1955, 12. 20 Apr. 1954 (4).
- Gracillaria rhodorella* McD. (McDunnough 1954b: 14). Halifax, N.S., *Rhododendron canadense*, 14 May 1952, 22 Apr. 1954 (3). The two dated 22 Apr. are paratypes.
- Gracillaria canadensisella* McD. (McDunnough 1956: 15). Halifax, N.S., *Cornus canadensis*, 11-19 Apr. 1954 (six paratypes).
- Gracillaria coroniella* Clem. Halifax, N.S., birch, 8-27 Aug. 1951-52, 1956 (7).
- Gracillaria superbifrontella* Clem. Halifax, N.S., *Hamamelis*, 1-13 May 1953 (10).
- Gracillaria invariabilis* Braun. Halifax, N.S., *Prunus pennsylvanica*, 2-14 Aug. 1951-52 (11). White Point Beach, N.S., same host, 6 Aug.-7 Sept. 1953-54 (13).
- Gracillaria asplenifoliatella* Darl. (Darlington 1949: 184). Halifax, N.S., *Myrica asplenifolia*, 3-30 Aug. 1951-52 (16). White Point Beach, N.S., same host, 12, 14 Aug. 1954, 5 Sept. 1956 (3); *M. gale*, 13 Aug.-7 Sept. 1953 (21). Possibly a synonym of *Gracillaria flavella* Ely.

- Gracillaria flavella* Ely (see McDunnough 1954b: 12). Halifax, N.S., *Myrica pensylvanica*. 7-31 Aug. 1951-52 (17). White Point Beach, N.S., same host, 15, 24 Aug. 1956 (2).
- Gracillaria alnivorella* Cham. Halifax, N.S.. *Alnus crispa* var. *mollis*, 19 June-6 July, 23, 26 Aug. 1950-51, 1953-54 (19). White Point Beach, N.S., same host, 14 Aug. 1953 (1).
- Gracillaria pulchella* Cham. Halifax, N.S.. *Alnus rugosa*, 31 July-29 Aug. 1950, 1952, 1956 (17).

LYONETIDAE

- Bucculatrix quinquenotella* Cham. Halifax, N.S., *Quercus borealis*, 3-6 Mar. 1951 (5).
- Bucculatrix canadensisella* Cham. Halifax, N.S., birch, 5, 9 June 1951 (3).
- Bucculatrix sexnotata* Braun. Halifax, N.S., *Aster novi-belgii*, 17 Apr.-18 May 1952 (7).
- Bucculatrix angustata* Frey & Boll (= *crescentella* Brn. See Braun 1963: 89). White Point Beach, N.S., *Aster novi-belgii*, 30 July-2 Aug. 1955 (5).

TISCHERIIDAE

- Tischeria citrinipennella* Clem. Halifax, N.S., *Quercus borealis*, 5-6 Mar. 1951, 17-26 Apr. 1952 (12).

NEPTICULIDAE

- Nepticula rosaeoliella* Clem. Halifax, N.S., *Rosa* sp., 11 June 1952 (1).

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