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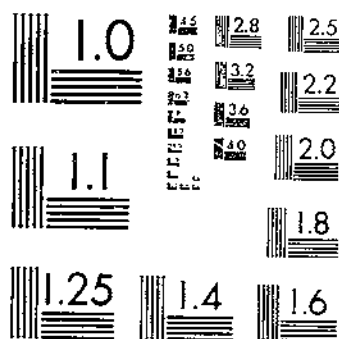
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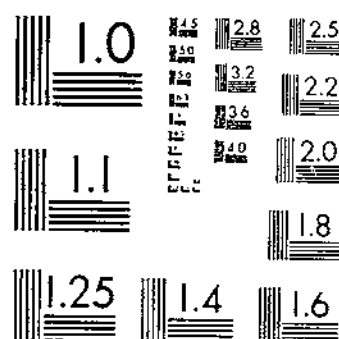
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THE PARASITIC WASPS OF THE GENUS MACROTELEIA WESTWOOD OF THE NEW WORLD  
HUESEBECK, C. F. W. 1 OF 1

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**The Parasitic Wasps of the Genus *Macroteleia* Westwood  
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By Carl F. W. Muesebeck

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The value of the loans from the Canadian National Collection must be especially emphasized, for they comprised more than 900 specimens in good condition, nearly all from Neotropical localities. Without this material the study would have been incomplete. Moreover, Dr. Masner was helpful in channeling to me specimens of *Macroteleia* he found in other institutions, which he had occasion to visit, and I am further indebted to him for advice concerning the taxonomic status of *Macroteleia* and certain of its closest relatives.

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# The Parasitic Wasps of the Genus *Macroteleia* Westwood of the New World

## (Hymenoptera, Proctotrupoidea, Scelionidae)

By CARL F. W. MUESSEBECK<sup>1</sup>

The literature dealing with the genus *Macroteleia* Westwood is meager. The only comprehensive taxonomic study is that by Kieffer (1926: 520-544).<sup>2</sup> It contains keys to all the species known at that time and their descriptions. Forty-six species are treated, including 19 for the New World. Apart from this work the literature has consisted mainly of scattered descriptions of new species and brief treatments of the species of limited areas. Ashmead (1893: 216-218) keyed and described the three species then known from North America; Kieffer (1912: 59-61) treated three species of the Seychelles and (1914: 298-310) the five species then known from the Philippines; Nixon (1931: 367-376) treated the seven African species; Dodd (1933: 75-80) reported on the four known Australian species; and Risbec (1950: 598) gave a key to nine African species.

Almost nothing has been published on the biology or host relationships of members of the genus, but the few available records indicate that

species of *Macroteleia* appear to develop mainly in the eggs of Tettigoniidae. Ashmead (1893: 218) recorded *M. virginensis* Ashmead from the eggs of a species identified as *Orchelimum glaberrimum* (Burmeister), now considered to have been *O. erythrocephalum* Davis; Morgan (1901: 31) stated that *Macroteleia* sp. near *M. floridana* Ashmead parasitized eggs of *Orchelimum agile* (DeGeer); Cole (1931: 39) listed *Macroteleia* sp. near *M. floridana* as a parasite of *Conocephalus* sp.; and in his description of *M. surfacci*, Brues (1907: 154) stated that the specimens of the type-series had been reared from eggs of a "locustid." The new species described here as *M. secreta* and *M. pilosa* were reared from eggs of Tettigoniidae, and a long series of *M. punctulata* Kieffer in the collection of the U.S. National Museum of Natural History was reared from eggs of *Bucrates cepitatus* (DeGeer) (Tettigoniidae). In addition, two specimens of *M. macrogaster* Ashmead were reared from eggs of *Orchelimum* sp.

### Genus MACROTELEIA Westwood

*Macroteleia* Westwood, 1835: 70. (Type-species: *Macroteleia cleonymoides* Westwood. By monotypy.)

*Macroteleia* Agassiz, 1846: 221. Emendation.

*Baconeura* Foerster, 1856: 100, 102. No species—Ashmead, 1887: 99. Two species. (Type-species: *Baconeura floridana* Ashmead. Designated by Muesebeck and Walkley, 1956: 335.)

*Buccura* Ashmead, 1887: 99. Error.

*Prosaepus* Kieffer, 1908: 121, 147. (Type-species: *Anteris elongata* Ashmead. Original designation.)

*Stictoteleia* Kieffer, 1926: xxix, 272, 546. (Type-species: *Macroteleia virginensis* Ashmead. Original designation.)

The genus *Macroteleia* has not been satisfactorily defined, although Masner (1964: 137) clarified the situation somewhat by suppressing *Prosaepus* Kieffer and *Stictoteleia* Kieffer as synonyms of *Macroteleia*. I hope that the following characterization will define the genus clearly and set it apart from related or superficially similar genera. Material I have seen has ranged in length from slightly more than 3 mm to nearly 9 mm.

Head rarely strongly transverse, usually rather thick from front to back, and in side view frons

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<sup>2</sup> The year in italic after an author's name refers to Literature Cited, p. 50.

declining strongly backward; frons broadening below, not or weakly impressed medially above antennal sockets; lateral ocelli nearly touching eyes, rarely removed by as much as half diameter of an ocellus; antennae 12-segmented in both sexes; in female, first flagellar segment normally longer than pedicel and much longer than remaining flagellar segments (in a few Nearctic species, first three flagellar segments of female antennae are subequal) and last six segments comprising a well-defined club; in male, antennae filiform, with segments 2 and 4-9 of flagellum subequal and either subquadrate or somewhat longer than broad, third flagellar segment always slightly larger than second and fourth segments, normally narrowed at base and broadened at apex (in a few Nearctic species it is greatly lengthened).

Thorax moderately stout, usually about as broad as high and not or only slightly narrower than head; notaulices always present; scutellum, metanotum, and propodeum all unarmed; disc of scutellum somewhat transverse and bordered in front and behind by a row of irregular, sometimes poorly defined, foveae; metanotum very short; propodeum in female sometimes entire and about as long as disc of scutellum but more often divided medially into two separated lobes, these usually triangular or subtriangular in form when widely separated, and broadly rounded or truncate at inner ends when only very narrowly separated; propodeum of male not divided, short medially; prepectus well defined, elliptical to broadly oval; mesopleuron with a conspicuous, usually smooth, oblique impression along middle; metapleuron usually largely rugulose but in a few Nearctic species it is longitudinally striate; legs slender but femora, especially of posterior legs, somewhat broadened; tibial spur formula 1-1-1; wings not extending to end of abdomen; marginal vein considerably longer than stigmal vein but much shorter than postmarginal.

Abdomen variable in form, sometimes stout with all or most segments broader than long, but often elongate and slender with all segments conspicuously longer than broad; first tergite in female without a horn but sometimes a little protuberant at base medially; dorsolateral carinae usually well developed and complete on second and third tergites in male, and sometimes in female, but in this sex often weak or indistinct; sixth and last visible abdominal segment in female compressed

laterally and usually elongate; in male, seven tergites visible, the seventh varying in form but rather uniform within species; in New World species it varies from strongly transverse to about as long as broad, with apex sometimes truncate but usually more or less incised medially; it is never narrowed into a sharp point as in many Old World species, particularly African species; usually seventh tergite surpasses seventh sternite, but sometimes it does not, whereas in a few species it is decidedly surpassed by seventh sternite, and in those forms eighth abdominal segment terminates in a stout spine, which projects back beyond both seventh tergite and seventh sternite; usually eighth segment is concealed beneath seventh tergite and is visible only in lateral view; venter of abdomen usually with median longitudinal keel, which is normally more strongly developed in males than in females, and in occasional species, especially some Nearctic forms, it is not developed in either sex or is apparent only basally; abdomen always sculptured; in New World species it is usually largely closely punctate to rugulose punctate, generally longitudinally so, but in a few Nearctic species it is longitudinally striate above and below, although the striation fades out posteriorly; in many Old World species the entire abdomen is completely, strongly, and closely striate on both dorsal and ventral surfaces.

Color is variable but most species are black; very few are entirely yellowish (only one known New World species), but some have head, thorax, or abdomen more or less yellowish to rufous; wings usually hyaline or subhyaline, occasionally a little infumated; legs varying from completely yellow to almost entirely black or blackish.

There is considerable intraspecific variation and in some cases the differences between related species are subtle. Accordingly, identification is sometimes difficult, especially from single specimens or from males that are not associated with females. In the males of some species, however, good distinguishing characters are to be found in the form and development of the seventh and eighth abdominal segments.

The depositories of the holotypes of the new species described in this bulletin are indicated in the descriptions. "USNM" refers to deposition in the U.S. National Museum of Natural History, and the following number is that given the holotype in the museum's register of insect types.

# KEY TO NEW WORLD SPECIES OF MACROTELEIA WESTWOOD

1. Metapleuron and both dorsal and ventral surfaces of abdomen longitudinally striate; first three segments of female antennal flagellum elongate, subequal; third flagellar segment of male antenna greatly lengthened, much longer than first segment (all Nearctic species) ..... 2  
 Metapleuron rugose, punctate or rugulose punctate; abdomen usually largely rugulose, punctate or rugulose; antennae not as above ..... 7
2. Head, in dorsal view, lenticular, narrowing roundly forward; female propodeum medially barely half as long as scutellum; female abdomen very slender, three times as long as head plus thorax and fifth tergite more than twice as long as broad at base; wings extending only to middle of fourth tergite.....*linearis*, new species  
 Head not lenticular; female propodeum relatively much longer; abdomen shorter and not so slender; wings relatively longer ..... 3
3. Occiput largely, and temples and cheeks with separated punctures; a broad, smooth, and polished strip along outer eye margin extending to extreme lower end of eye ..... 6  
 Occiput largely, and temples and cheeks densely rugulose punctate; the smooth and polished strip along outer eye margin narrow and narrowing below so that it practically vanishes at lower end of eye ..... 4
4. Thorax narrowing imperceptibly forward from tegulae, very nearly as broad at shoulders as at tegulae; wings extending to middle of fifth abdominal tergite; all legs, including coxae and tarsi, yellow; antennal flagellum of female entirely yellow except for the black club.....*famelica* (Say)  
 Thorax narrowing conspicuously forward from tegulae and decidedly narrower at shoulders than at tegulae; wings usually extending barely to end of fourth abdominal tergite; tarsi completely darkened; antennal flagellum of female entirely darkened ..... 5
5. All coxae black or piceous; middle lobe of mesoscutum with separated punctures; club of female antenna six times as long as wide and sixth abdominal tergite only twice as long as broad at base; second flagellar segment of male antenna hardly as long as fourth.....*macrogaster* Ashmead  
 Coxae yellow, posterior pair sometimes a little darkened basally; middle lobe of mesoscutum densely (contiguously) punctate anteriorly and closely punctate even on posterior half; club of female antenna five times as long as wide and sixth abdominal tergite three times as long as broad at base; second flagellar segment of male antenna longer than fourth.....*spartinae*, new species
6. At least hind coxae somewhat darkened and sometimes all coxae black; wings usually extending to middle of fifth abdominal tergite; abdomen and metapleura very coarsely striate; prepectus with row of foveae along anterior margin.....*goldsmithi* Girault  
 All coxae yellow; wings usually extending only to end of fourth abdominal tergite; abdomen and metapleura more weakly striate; prepectus with foveae at anterior margin not so apparent.....*floridana* (Ashmead)
7. Mesoscutum with median longitudinal carina, usually well developed but sometimes (especially in *erythrogaster*) present only anteriorly ..... 8  
 Mesoscutum without median longitudinal carina ..... 12
8. Disc of scutellum flat and without any trace of median longitudinal carina; propodeum of female divided into two widely separated lobes ..... 9  
 Disc of scutellum not so flattened and with median longitudinal carina; propodeum of female, if divided, with lobes barely separated ..... 10
9. Thorax reddish yellow.....*crinia*, new species  
 Body entirely black.....*carinata* Ashmead
10. Head very densely and coarsely punctate or rugulose punctate ..... 11  
 Head with shallow, mostly separated, punctures on a finely shagreened surface.....*erythrogaster* Ashmead

11. Abdomen slender, most of tergites much longer than broad (both sexes); wings usually not extending beyond fourth abdominal tergite; sixth tergite of female four to five times as long as broad at base and longitudinally striate on sides; abdomen often more or less reddish on tergites 2-4.....*rufiventris* (Szabó)  
Abdomen stout, tergites 2-5 broader than long in female (male unknown); wings extending nearly to end of fifth abdominal tergite; sixth tergite of female 2.5 times as long as broad at base and rugose on sides; abdomen entirely black.....*unica*, new species
12. Thorax at least largely yellowish or reddish..... 13  
Thorax entirely black..... 16
13. Head, thorax, and abdomen completely honey yellow.....*rutilla*, new species  
Head and abdomen black..... 14
14. Head strongly transverse, in dorsal view 1.8 times as broad as long; temples narrow and receding; middle lobe of mesoscutum closely punctate but not rugulose; pronotum black (Ecuador).....*insignis*, new species  
Head not so transverse; middle lobe of mesoscutum rugulose or rugulose punctate; thorax entirely reddish yellow except sometimes mesosternum darkened..... 15
15. Malar space fully half as long as eye height; wings extending barely to end of fourth abdominal tergite; thorax entirely reddish yellow; seventh abdominal tergite of male not so transverse, sharply incised medially at apex, and clearly surpassing seventh sternite.....*rufithorax*, new species  
Malar space only one-third as long as eye height; wings extending nearly to end of fifth abdominal tergite; mesosternum black or piceous; seventh abdominal tergite of male nearly twice as broad as long, subtruncate at apex, and not surpassing seventh sternite.....*simulans*, new species
16. Venter of abdomen with median longitudinal carina on sternites 2-4 and often on sternite 5; rarely with such a carina only at base of abdomen but then propleuron largely smooth and shiny; female propodeum usually divided into two separated lobes; segments 4-9 of male antennal flagellum nearly always about as broad as long..... 17  
Venter of abdomen without median longitudinal carina, very rarely with a faint carina that does not extend beyond third sternite; propleuron always largely sculptured, nearly always shagreened in upper anterior angle; female propodeum not distinctly divided into two separated lobes; segments 4-9 of male antennal flagellum markedly longer than broad (except in *rugosa*); all strictly Nearctic species except *rugosa*, which occurs widely in both Nearctic and Neotropical regions..... 47
17. Small species, measuring 3.2-4 mm in length..... 18  
Larger species, normally 4.5 to more than 8 mm in length..... 25
18. Occiput with few widely separated and very shallow punctures on a surface that is covered with delicate microsculpture; all femora normally darkened.....*occipitalis*, new species  
Occiput largely closely punctate..... 19
19. Mesopleuron smooth and polished medially below oblique impression and on transition to mesosternum..... 20  
Mesopleuron punctate or rugulose punctate below impression..... 21
20. Shoulders of thorax angulate; middle lobe of mesoscutum weakly and sparsely punctate on posterior half; all coxae black (Colombia).....*nilida*, new species  
Shoulders of thorax rounded; middle lobe of mesoscutum completely and closely punctate; at least female coxae yellow (Brazil).....*munda*, new species
21. Notaulices very fine, not foveolate; seventh abdominal tergite of male narrowly triangular and narrowly incised at apex (fig. 11).....*triangularis*, new species  
Notaulices normal, foveolate; seventh abdominal tergite of male not as above..... 22
22. All coxae of female honey yellow and middle abdominal tergites of female usually more or less brownish yellow or reddish; seventh abdominal tergite of male truncate or subtruncate at apex.....*sanctirineenti* Ashmead  
Coxae and abdomen of both sexes black or blackish; seventh abdominal tergite of male usually strongly notched at apex..... 23

23. Middle lobe of mesoscutum entirely, closely, and strongly punctate; wings usually extending nearly or quite to end of fifth abdominal tergite; female propodeum cleft at middle of posterior margin but not distinctly divided into two lobes.-----*densa*, new species
- Middle lobe of mesoscutum sparsely and rather weakly punctate medially; wings normally extending only to end of fourth abdominal tergite or slightly farther; female propodeum divided into two very narrowly separated lobes that are broadly truncate at inner ends.-----24
24. Thorax not, or barely, narrower at shoulders than at tegulae; ocellar triangle with some weak but distinct punctures; a few weak but apparent punctures on middle lobe of mesoscutum adjacent to notaulices; seventh abdominal tergite of male nearly as long as broad, narrowly notched at apex, and with apical angles broadly rounded (fig. 34) (Brazil)-----*foveolata*, new species
- Thorax narrowing from tegulae to shoulders; ocellar triangle very delicately shagreened and without distinct punctures; middle lobe of mesoscutum without punctures adjacent to notaulices; seventh abdominal tergite of male conspicuously broader at base than long, broadly and deeply emarginate at apex, and with apical angles acute (fig. 12) (Argentina)-----*platensis* Brèthes
25. In female, fourth and fifth abdominal sternites largely smooth and polished; propodeal lobes very widely separated (fig. 42); in male, eighth abdominal segment terminating in a stout spine that projects back beyond apex of seventh tergite (fig. 22); mesopleuron smooth and polished below impression; occiput covered with small, shallow punctures on a finely shagreened and subopaque surface; a very narrow opaque strip of delicate microsculpture along outer eye margins.-----*punctulata* Kieffer
- In female, fourth and fifth abdominal sternites largely sculptured; separation of propodeal lobes variable; eighth abdominal segment of male not terminating in a spine and not projecting beyond seventh tergite; otherwise not as above.-----26
26. Coxae yellow (possibly darkened in males of some species where males are still unknown)-----27
- Coxae piceous to black-----36
27. Mesopleuron smooth and polished and impunctate, or virtually so, below impression and on transition to mesosternum.-----28
- Mesopleuron punctate or rugulose punctate below impression.-----34
28. Eyes unusually large, malar space only one-fourth as long as eye height; temples very narrow and strongly receding from eyes; female propodeum not divided but having two closely parallel median longitudinal carinae; sixth abdominal segment of female very stout, only twice as long as broad at base (Brazil)-----*mira*, new species
- Eyes not so large; female propodeum divided into two separated lobes; sixth segment of female abdomen not so stout.-----29
29. Length of the two known specimens more than 8 mm; head as seen from above nearly twice as broad as long (Brazil)-----*grandis*, new species
- Not nearly so large; head not so strongly transverse.-----30
30. Propleuron almost completely smooth and polished; propodeal lobes of female very narrowly separated.-----31
- Propleuron largely sculptured at least on lower half.-----33
31. Middle lobe of mesoscutum completely and rather closely punctate; prepectus coarsely longitudinally striate; dorsolateral carinae on second abdominal tergite, in female, very prominent; metanotum of female without a projection extending back between propodeal lobes.-----32
- Middle lobe of mesoscutum sparsely and minutely punctate on posterior half, very shiny; prepectus partly smooth and polished; dorsolateral carinae on second abdominal tergite, in female, very weak; metanotum with a small, triangular projection extending back to space between propodeal lobes (Peru)-----*rossi*, new species
32. Abdomen hardly twice as long as head plus thorax; body length around 4.5 mm; wings and wing veins yellowish; tarsi yellowish (Costa Rica, Panama)-----*testaceinerva* Cameron
- Abdomen more elongate, at least 2.5 times as long as head plus thorax; body length around 5.5 mm; wings somewhat smoky, veins dark brown; tarsi darkened (Ecuador, Brazil)-----*concinna*, new species

33. Occiput with well-separated punctures on a finely shagreened surface; propleuron completely sculptured, being finely shagreened and opaque in upper anterior angle; dorsolateral carinae of second abdominal tergite in female complete and very prominent (United States)-----*banksi*, new species  
 Occiput densely and strongly punctate, surface largely smooth and shiny; propleuron smooth and shiny in upper anterior angle; dorsolateral carinae of second abdominal tergite in female very weak, usually irregular and incomplete (Brazil, Argentina, Paraguay)----- (all females, some males) *larga*, new species
34. Head in front view circular, narrowing below eyes so that it is narrower at level of antennal sockets than at middle of eyes; wings normally extending to end of fourth abdominal tergite; prepectus completely and coarsely rugose striate (Honduras to Brazil)-----*ligula*, new species  
 Head in front view subquadrate, cheeks bulging so that head is fully as wide at level of antennal sockets as at middle of eyes; wings normally extending only to middle of fourth abdominal tergite; prepectus usually punctate or partly smooth and polished on upper half----- 35
35. Occiput margined medially by lower edge of a row of contiguous, irregular foveae; shoulders of thorax usually broadly rounded; usually a little very weak but apparent transverse sculpture in very bottom of mesopleural impression; sixth and seventh abdominal tergites of male broader than long (Canada, United States, Cuba)-----*elongata* (Ashmead) (in part)  
 Occiput not margined medially by a row of irregular foveae; shoulders of thorax angulate; bottom of mesopleural impression smooth; male abdomen very slender, sixth tergite longer than broad, seventh at least as long as broad at base (Caribbean, from Jamaica to Trinidad)-----*insolita*, new species
36. Antennae, including scapes, and all legs completely, black or blackish; occiput, vertex, and frons very densely and coarsely rugulose punctate, with no interspaces; shoulders of thorax smoothly rounded, not at all prominent (Mexico)-----*coracina*, new species  
 Antennae and legs not so completely darkened; head not so coarsely and densely sculptured----- 37
37. Entire body, but especially thorax and hind coxae, covered with short, pale, subappressed hair that obscures surface in some areas; lower part of mesopleuron, entire mesosternum, and middle lobe of mesoscutum extremely, densely and finely punctate; length nearly 7 mm; seventh abdominal tergite of male twice as broad at base as long and not, or barely, surpassing seventh sternite (fig. 35) (Brazil)-----*pilosa*, new species  
 Body not unusually hairy; otherwise not as above----- 38
38. Notaulikes very fine and not distinctly foveolate; a small, very slender species usually not more than 4.6 mm long; occiput covered with very delicate micro-sculpture on which are scattered small and weak punctures; occiput margined medially by the lower edge of a tight row of large, irregular foveae; female antennae yellow except club (Costa Rica, Mexico)-----*subtilis*, new species  
 Notaulikes foveolate; at least not above combination of characters----- 39
39. Prepectus entirely coarsely longitudinally striate or rugulose striate----- 42  
 Upper half of prepectus largely smooth and polished or irregularly punctate----- 40
40. Ventral keel of abdomen not developed beyond second sternite in female or beyond third sternite in male; lobes of female propodeum very narrowly separated; seventh abdominal tergite in male broad at base, broadly truncate at apex, and barely surpassing seventh sternite (Galapagos Archipelago)-----*absona*, new species  
 Ventral keel of abdomen developed on at least sternites 2-4 in both sexes; lobes of female propodeum widely separated----- 41
41. All femora partly darkened; temples receding from eyes; mesopleuron without sculpture in very bottom of impression (Peru)-----*lourusendi*, new species  
 Femora yellow; temples not receding but rather broadly rounded; a little weak but apparent transverse sculpture in very bottom of mesopleural impression (Canada, United States, Cuba)-----*elongata* (Ashmead) (in part)

42. Hind femora black on apical half, fore and middle femora somewhat darkened; wings distinctly smoky and extending to middle of fifth abdominal tergite (Peru).....*rima*, new species  
Femora normally yellowish, hind femora sometimes a little darkened in male; wings relatively shorter and usually hyaline or subhyaline..... 43
43. Upper part of occiput and vertex with separated shallow punctures on a finely shagreened or alutaceous surface; dorsolateral keels well developed and complete on second abdominal tergite in female..... 44  
Occiput and vertex closely punctate, surface smooth; dorsolateral keels indistinct, weak or incomplete on second abdominal tergite in female..... 45
44. First abdominal tergite longitudinally rugose in female and very coarsely, irregularly striate in male; shoulders of thorax normally broadly rounded; apical third of fifth abdominal tergite in female completely and strongly punctate (Trinidad to Argentina).....*herbigrada* Brues  
First abdominal tergite largely closely punctate in female and finely rugulose punctate in male; shoulders of thorax angulate; apical third of fifth abdominal tergite in female medially impunctate or weakly and sparsely punctate (Colombia).....*secreta*, new species
45. Head thick, in side view about as long as high; cheeks very broad, as broad as distance between eyes at median ocellus (Nearctic).....*parilis*, new species  
Head not so thick; cheeks not as broad as distance between eyes at median ocellus..... 46
46. Head in front view circular, narrowing evenly below eyes; occiput not margined medially (Costa Rica).....*amoena*, new species  
Head in front view subquadrate, broad below eyes; occiput margined medially by the lower edge of a tight row of foveae (Brazil, Argentina, Paraguay)..... (some males) *larga*, new species
47. Abdomen rather stout, most of tergites at least as broad as long..... 48  
Abdomen slender and elongate, most or all of tergites longer than broad..... 51
48. All coxae dark and hind femora often darkened apically; a smooth and shiny or finely alutaceous strip along outer eye margins.....*rugosa* (Provancher) (in part)  
Legs, including coxae, yellow; occasionally fore coxae of female and all coxae of male darkened; without a smooth or alutaceous strip along outer eye margins... 49
49. Head in front view broad below eyes, as broad at level of antennal sockets as at middle of eyes; fore coxae usually darkened; female propodeum medially at least half as long as first abdominal tergite; seventh abdominal tergite of male extending clearly beyond apex of seventh sternite (fig. 8).....*virgulinis* Ashmead  
Head in front view narrowing below eyes so that it is narrower at level of antennal sockets than at middle of eyes; all coxae, at least in female, entirely yellow; female propodeum medially not half as long as first abdominal tergite; seventh abdominal tergite of male (where male is known) not distinctly surpassing seventh sternite (fig. 3)..... 50
50. Notaulices very fine, not distinctly foveolate; prepectus largely smooth and polished; mesoscutum as long as broad; sixth abdominal tergite of female finely and closely punctate dorsally, longitudinally rugulose on sides.....*neomexicana*, new species  
Notaulices not fine, foveolate; prepectus rugulose striate; mesoscutum broader than long; sixth abdominal tergite of female longitudinally rugose dorsally with a few elongate punctures between ridges, coarsely longitudinally striate on sides.....*discors*, new species
51. All coxae clear yellow..... 52  
Coxae darkened..... 53
52. Head thick, in dorsal view only 1.3 times as broad as long and bulging behind eyes; wings usually not extending beyond middle of fourth abdominal tergite; sixth tergite of female about six times as long as broad at base.....*exilis*, new species  
Head more transverse and not bulging behind eyes; wings usually extending to middle of fifth abdominal tergite; sixth tergite of female about four times as long as broad at base.....*compar*, new species

53. Body length normally 4.5-5.5 mm; sixth abdominal segment of female strongly compressed laterally, higher than wide at base and usually five or six times as long as broad at base; seventh tergite of male not or barely surpassing seventh sternite (fig. 15)-----*surfacci* Brues  
 Body length normally 3-4 mm; sixth abdominal segment of female not so compressed, at least as broad at base as high and usually less than four times as long as broad at base; seventh tergite of male distinctly surpassing seventh sternite (fig. 13)-----*rugosa* (Provancher) (in part)

## DESCRIPTIONS OF SPECIES

### *Macroteleia absona*, new species

(Fig. 32)

This is most similar to *M. rima*, new species, from which it differs especially in its abbreviated and weak median longitudinal keel on the venter of the abdomen, in its more densely punctate occiput, and smoother prepectus.

**Female.**—Length about 4.6 mm. Head slightly wider than thorax, in dorsal view 1.6 times as broad as long, in front view broad below eyes and not narrower at level of antennal sockets than at middle of eyes; malar space nearly half as long as eye height; occiput margined medially by lower edge of a tight row of foveae that are open above; occiput very densely and shallowly punctate, narrow interspaces with delicate microsculpture; vertex and upper frons shiny, with well-separated punctures, interspaces in part with fine microsculpture; lower frons laterally dull, shagreened, and closely punctate; cheeks and temples closely and strongly punctate with a few rugulae between punctures; a very narrow, smooth, and polished strip along outer eye margins.

Thorax barely narrowing forward from tegulae; shoulders smoothly rounded; notaulices sharp, finely foveolate; middle lobe of mesoscutum with well-separated punctures that are somewhat denser anteriorly than elsewhere, interspaces smooth and shiny; lateral lobes distinctly and rather closely punctate; propodeum very narrowly but distinctly divided into two lobes that are broadly rounded on inner ends; a short, broadly triangular projection from metanotum extending back to space between propodeal lobes; propleuron largely smooth and polished on upper half with only a row of foveae at anterior margin, a few longitudinal rugae at lower end; mesopleuron smooth and very shiny medially below impression, with only a few minute and weak punctures; metapleuron punctate; wings

extending to end of fourth abdominal tergite or a little farther.

Abdomen about 2.4 times as long as head plus thorax; all tergites at least a little longer than broad, except fifth, which is as broad at base as long; sixth tergite about four times as long as broad at base; tergites 1-5 closely and finely punctate, in part contiguously punctate; sixth tergite closely rugulose punctate on dorsal edge, punctures elongate; fifth tergite with some short and irregular striae at sides, sixth closely and finely, though somewhat irregularly, longitudinally striate on sides; dorsolateral carinae not developed on second tergite; venter evenly and closely punctate; the weak median longitudinal keel not extending beyond second sternite.

Black; antennal scape honey yellow; pedicel and basal flagellar segments brown, paler beneath, club black; all coxae black; fore and middle femora partly a little darkened; hind femora blackish except outwardly toward apices; remainder of legs yellow brown; wings weakly infumated.

**Male.**—Essentially like female; segments 4-9 of antennal flagellum barely longer than broad; propodeum medially half as long as first abdominal tergite; tergites 5 and 6 considerably broader than long, seventh barely surpassing seventh sternite, much broader at base than long and broadly truncate at apex; venter with median longitudinal keel well developed on sternites 2 and 3; wings extending to middle of fifth abdominal tergite; femora somewhat more extensively darkened than in female.

**Holotype female.**—In the California Academy of Sciences.

**Distribution.**—Known only from the holotype and a female paratype collected by D. Q. Cavagnaro and labeled "Galapagos Arch., Isla Fernandina, W-side, iii. 1964." and a male paratype labeled "Galapagos Arch., Isla Santa Cruz, E slope, 16. iv. 1964."

***Macroteleia amoena*, new species**

Superficially this is most similar to *M. townsendi*, new species, but it may be distinguished readily from that species by its head shape and yellowish femora.

**Female.**—Length about 5.2 mm. Head just wider than thorax, in dorsal view about 1.4 times as broad as long, in front view circular, narrowing below eyes and narrower at level of antennal sockets than at middle of eyes; malar space a little less than half as long as eye height; occiput not margined medially, densely and sharply punctate; vertex and upper frons also closely punctate but not so sharply; lower frons with very shallow, more or less confluent punctures on a weakly granulose surface; cheeks coarsely rugose punctate; temples less coarsely sculptured and opposite upper fourth of eyes finely shagreened and with shallow punctures.

Thorax narrowing slightly forward from tegulae; shoulders subangulate; notaulices foreolate; middle lobe of mesoscutum rather flat and sharply punctate, most closely anteriorly and at posterior end; lateral lobes weakly punctate; propodeum divided into two well-separated subtriangular lobes; a rather broad median projection from metanotum extending into space between propodeal lobes; propleuron smooth in upper anterior angle, finely rugulose below; prepectus rather sharply and coarsely longitudinally striate; mesopleuron sparsely punctate medially below impression; metapleuron rugose; wings extending to end of fourth abdominal tergite.

Abdomen a little less than three times as long as head plus thorax; all tergites longer than broad, sixth about five times as long as broad at base; first tergite longitudinally rugulose punctate and with a narrow apical border of short, fine, close, longitudinal striae; second tergite densely punctate, and with some longitudinal rugulae; third and fourth tergites contiguously punctate, fourth more weakly than third; fifth tergite also closely punctate medially but more finely and shallowly, at sides brokenly longitudinally aciculate; sixth tergite closely, shallowly, and irregularly punctate on dorsal edge, finely and very closely longitudinally aciculate on sides; dorsolateral carinae present on second tergite but weak; venter of abdomen closely punctate; median longitudinal keel

distinct on sternites 2–4, very weak or not apparent on fifth sternite.

Black; antennal scape yellow; pedicel and first four flagellar segments pale beneath, brown above, club black; legs yellow except all coxae, which are black; wings hyaline.

**Holotype female.**—In the Canadian National Collection.

**Distribution.**—Known only from the holotype and one female paratype, both labeled as having been taken by O. Peck at Alajuela, Costa Rica, 8–28 February 1970.

***Macroteleia banksi*, new species**

This may prove to be *M. elongata* (Ashmead), but I believe it to be distinct since it differs in characters that are normally reliable in this genus. The occiput is more sparsely and more weakly punctate than in *elongata*; the propleuron is differently sculptured; dorsolateral carinae are very well developed and complete on abdominal tergites 2 and 3 in the female; the ventral keel of the female abdomen is sharp even on the fifth sternite; the wings and veins are yellowish; and the mesopleuron is smooth and polished medially below the impression.

**Female.**—Length about 6 mm. Head in dorsal view about 1.4 times as broad as long, in front view with bulging cheeks so that head width at level of antennal sockets is not less than at middle of eyes; malar space about half as long as eye height; surface of occiput, vertex, and upper frons shagreened and with well-separated, shallow punctures; upper frons more closely punctate than occiput; lower frons laterally granulose and dull, with shallow punctures; cheeks and temples strongly punctate, punctures mostly separated; a very narrow, dull, shagreened strip along outer eye margins.

Thorax a little narrower than head, not distinctly narrowing forward from tegulae; shoulders subangulate; mesoscutum shiny, weakly convex; notaulices consisting of rows of large and deep punctures; middle lobe of mesoscutum closely punctate on anterior half, sparsely punctate on posterior half; lateral lobes not punctate; propodeum divided into two well-separated subtriangular lobes that are rugulose punctate; a tongue-like projection from middle of metanotum extending into space between propodeal lobes;

propleuron entirely sculptured, upper angle with delicate microsculpture and subopaque; prepectus smooth and polished except for a large and deep fovea at the lower end and a row of deep punctures, variable in size, along anterior margin; mesopleuron with well-separated punctures anteriorly, smooth and polished medially below impression; metapleuron rugulose punctate on posterior half; wings extending to well beyond middle of fourth abdominal tergite.

Abdomen about three times as long as head plus thorax; all tergites much longer than broad, fifth twice as long as broad at base, sixth about five times; first tergite punctate basally, longitudinally rugulose striate apically; tergites 2-5 closely punctate, second and third contiguously or confluent punctate, following more sparsely; fifth tergite finely and closely aciculate at sides; sixth with longitudinally elongate punctures on dorsal edge, finely and very closely longitudinally aciculate on sides; dorsolateral carinae strong and complete on second and third tergites; venter closely punctate on basal sternites, more sparsely on apical ones; median longitudinal keel well developed on sternites 2-5.

Black; scape of antenna yellow; pedicel and first four flagellar segments yellowish below, somewhat darkened above, club black; legs, including all coxae, yellow; wings and veins yellowish.

**Holotype female.**—In the Museum of Comparative Zoology, Harvard University.

**Distribution.**—Known only from the holotype, which was collected by Nathan Banks at Chesapeake Beach, Md., on 4 September.

### *Macroteleia carinata* Ashmead

(Figs. 31 and 40)

*Macroteleia carinata* Ashmead, 1894: 222. ♀.

*Macroteleia gladiator* var. *trisulcata* Kieffer, 1910 (1909): 317. New synonymy.

*Macroteleia carinata* (Ashmead), Kieffer, 1926: 390.

*Triteleia nigricorpus* Szabó, 1957: 256. ♀, ♂. New synonymy.

I have seen the holotypes of *M. carinata* Ashmead and *M. gladiator* var. *trisulcata* Kieffer. They are certainly the same species; and although I have not seen the type of *Triteleia nigricorpus* Szabó, the description leaves little doubt that it

also is *M. carinata*. Structurally *M. carinata* is very similar to *M. eximia*, new species, but it differs conspicuously in being entirely black and in its less strongly sculptured head and thorax.

**Female.**—Length of available specimens 4.5-7 mm. Head thick, in dorsal view about 1.3 times as broad as long; malar space 0.4 as long as eye height; cheeks broad, bulging beyond eyes; occiput, vertex, and upper frons closely punctate, in part confluent, interspaces, where they occur, smooth; occiput not margined medially; cheeks and temples rugose punctate.

Thorax fully as wide as head, only slightly narrower at shoulders than at tegulae; shoulders broadly rounded to subangulate; mesoscutum rather flat, very shiny, with a complete though low median longitudinal keel, usually rather closely punctate but sometimes partly smooth posteriorly, punctures on lateral lobes usually very weak; notaulices sharp, foveolate; disc of scutellum short, flat, with scattered and very shallow punctures; propodeum divided into two widely separated triangular lobes, which are largely, weakly rugulose; a short, very broad, and apically truncate projection from metanotum extending into space between propodeal lobes; propleuron weakly and irregularly sculptured; prepectus rugose striate; mesopleuron closely rugulose below impression; metapleuron rugose; wings usually extending only to middle of fourth abdominal tergite.

Abdomen normally more than three times as long as head plus thorax; all segments elongate, those after first much longer than broad, fifth tergite usually at least twice as long as broad at base, and sixth sometimes more than five times as long as broad at its base; dorsolateral carinae well developed on second tergite and at least indicated on third; venter usually somewhat longitudinally rugulose striate and with a median longitudinal keel on sternites 2-5.

Black; scape of antenna yellowish; pedicel and first four or five flagellar segments usually light brown below and darkened above, club black; legs, normally including all coxae, honey yellow; rarely hind coxae a little darkened.

**Male.**—Essentially like female; flagellar segments 4-9 of antenna as broad as long; wings extending very nearly to end of fourth abdominal tergite; sixth tergite a little broader at base than long, seventh subtriangular, about as long as broad

at base, far surpassing seventh sternite, and rather strongly narrowed toward apex, which is not at all incised medially in the two known specimens.

**Types.**—The holotype of *M. carinata* (from the island of St. Vincent) is in the U.S. National Museum of Natural History (No. 2539), and that of *M. gladiator* var. *trisulcata* (from Brazil) is in the California Academy of Sciences. The type-specimens of *T. nigricorpus* (from Costa Rica) are in the Hungarian Natural History Museum.

**Distribution.**—In addition to the holotypes of *M. carinata* and *M. gladiator* var. *trisulcata*, I have seen more than 100 female specimens, most of them from Trinidad and Colombia, others from Mexico, El Salvador, Costa Rica, Canal Zone, Dominican Republic, and Brazil; and in the United States, from Virginia, South Carolina, Georgia, Florida, Louisiana, and Missouri. I have seen only two male specimens, one from El Salvador and one from North Carolina.

### *Macroteleia compar*, new species

(Figs. 2 and 38)

This is most similar to *M. discors*, new species, but it is more slender, the thorax narrows forward from the tegulae more strongly than in *discors*, and the sixth abdominal tergite in the female is more elongate and differently sculptured.

**Female.**—Length about 4 mm. Head slightly wider than thorax, in dorsal view about 1.6 times as broad as long, in front view narrowing below so that it is a little narrower at level of antennal sockets than at middle of eyes; malar space 0.4 as long as eye height; occiput sharply margined, medially by lower edge of a row of contiguous foreae; occiput and upper frons with closely placed punctures on a shagreened surface that is rather dull; vertex sparsely punctate; lower frons laterally coarsely granulose, with some shallow punctures; lower temples and cheeks finely rugulose punctate.

Thorax distinctly narrowing forward from tegulae; shoulders rounded, not at all prominent; notaulices sharp and usually distinctly foveolate; middle lobe of mesoscutum completely, closely, and rather sharply punctate, subopaque; lateral lobes indistinctly punctate; propodeum short, very narrowly divided medially (apparently in-

completely). inner ends of lobes broadly truncate; propleuron largely shagreened and rather dull; prepectus large, shiny, coarsely striate; mesopleuron finely rugulose below impression; metapleuron rather coarsely rugulose punctate; wings normally extending to middle of fifth abdominal tergite.

Abdomen at least 2.5 times as long as head and thorax combined; tergites 1-5 usually longer than broad, sixth tergite usually about four times as long as broad at base; dorsum of abdomen rugulose punctate, most strongly so toward base, sculpture weakening gradually caudad; sixth tergite finely and closely punctate on dorsal edge, longitudinally rugulose striate on sides; dorsolateral carinae not developed on second tergite; venter of abdomen closely punctate and without a median longitudinal keel.

Black; scape of antenna yellowish; pedicel and first four flagellar segments pale below, darkened above; club black; legs, including all coxae, yellow; wings subhyaline.

**Male.**—In general like female; flagellar segments 4-9 of antenna subequal, all considerably longer than broad; dorsolateral carinae sometimes weakly indicated on second tergite; seventh tergite broader at base than long, usually truncate at apex (although occasionally very weakly emarginate), and not or barely surpassing seventh sternite.

**Holotype female.**—In the Canadian National Collection.

**Distribution.**—Known only from the type-series, which consists of the following: Three females (one the holotype) and six males from Williamsville, Mo., collected by J. T. Becker in August and September 1969, and isolated specimens (both sexes) from various localities in Ontario, Massachusetts, Connecticut, Maryland, Virginia, West Virginia, and South Carolina.

### *Macroteleia concinna*, new species

(Fig. 9)

This is very similar to *M. ligula*, new species, but it may be distinguished by its receding temples, its smoother propleura and mesopleura, and dark tarsi, and in the female additionally by its darker antennal flagellum and different conformation of the metanotum. From *M. rossi*, new species, which it also closely resembles, it may be readily sepa-

rated as pointed out in the description of that species.

**Female.**—Length about 5.5 mm. Head a little wider than thorax, as seen from above about 1.75 times as broad as long, in side view about two-thirds as long as high, and in front view narrowing roundly below eyes and a little narrower at level of antennal sockets than at middle of eyes; temples and cheeks receding; surface of head shiny, not all shagreened; occiput closely punctate, not distinctly margined medially; punctures in the ocellar area few but sharp; upper frons contiguously punctate; lower frons (narrowly along eyes) strongly rugulose punctate; cheeks and temples very shiny, coarsely and contiguously punctate; a smooth and polished slightly raised line along outer eye margins.

Thorax barely narrower at shoulders than at tegulae; shoulders subangulate; mesoscutum rather flat, middle lobe closely, finely, and rather uniformly punctate and shiny, not at all shagreened, even along notaulices; notaulices foveolate; lateral lobes shiny and with a few minute and weak punctures; metanotum with a short median keel that extends back to a point between inner ends of very narrowly separated, subtriangular lobes of propodeum; propleuron almost completely smooth and polished; prepectus coarsely longitudinally striate; mesopleuron below impression smooth and polished; metapleuron rugose; wings extending to end of fourth abdominal tergite and often beyond that.

Abdomen usually about 2.5 times as long as head plus thorax; all tergites longer than broad, sixth about four times as long as broad at base; first tergite longitudinally rugose or rugose striate; second, third, and fourth tergites closely longitudinally rugose with punctures in the depressions; fifth tergite with elongate punctures medially, more or less finely longitudinally striate at sides; sixth tergite with fine elongate punctures on dorsal edge, finely longitudinally striate on sides; dorsolateral carinae sharp and complete on second tergite and well developed on basal half of third; venter with a median longitudinal keel on sternites 2-5, otherwise ventral surface of abdomen largely, strongly, longitudinally rugulose punctate.

Black; antennal scape yellow; pedicel and first three flagellar segments yellowish brown below,

darker above, club black; legs yellow, including all coxae, but all tarsi somewhat darkened; wings slightly infumated.

**Male.**—Except in secondary sexual characters essentially like female; flagellar segments 4-9 of antenna about as broad as long; propodeum short, with two prominent, widely spaced longitudinal ridges medially; abdominal tergites 2, 3, and 4 strongly and closely rugulose punctate and much longer than broad; 5 and 6 contiguously punctate; first and fifth tergites barely longer than broad; sixth and seventh broader than long, seventh broadly emarginate at apex and distinctly surpassing seventh sternite; dorsolateral carinae very prominent and complete on second and third tergites; wings extending at least to middle of fifth abdominal tergite; coxae sometimes slightly darkened basally.

**Holotype female.**—In the Canadian National Collection.

**Distribution.**—Ecuador and Colombia. The holotype and 8 female and 12 male paratypes were taken 16 km southeast of Santo Domingo de los Colorados in the Province of Pichincha, Ecuador, by S. and J. Peck 15-30 June 1975; and 10 females and 8 males (paratypes) were taken by various collectors in the same general area in February, May, June, and July 1975. Also included in the type-series are four females and one male labeled "Valle, Colombia, Central Hydroelectricity del Rio Anchicaya, 400 m. 29.i.72." and a single male labeled "Choco, Colombia, 8.v.73, 1000 m. mountain rain forest, J. Helava."

### *Macroteleia coracina*, new species

(Fig. 36)

This differs from related species in being entirely black, with even the antennae and legs completely black or blackish, in having unusually long wings, and in having the head unusually densely and strongly sculptured.

**Female.**—Length about 5 mm. Head, as seen from above, about 1.4 times as broad as long, from in front not narrower at level of antennal sockets than at middle of eyes; malar space about one-third as long as eye height; occiput margined only at sides; occiput, vertex, frons, temples, and cheeks very densely and strongly rugose punctate, with no interspaces

Thorax slightly narrower than head, distinctly narrowing forward from tegulae; shoulders smoothly rounded; mesoscutum strongly convex; notaulices sharp, narrow, not, or only weakly foveolate; middle lobe of mesoscutum closely and rather evenly punctate, spaces between punctures smooth; lateral lobes more sparsely and more shallowly punctate; propodeum divided but lobes barely separated, their inner ends broad: propleuron rugose along lower and posterior margins, smooth above; prepectus coarsely striate; mesopleuron punctate below impression; metapleuron rugose; wings long, extending nearly or quite to end of fifth abdominal tergite.

Abdomen only slightly more than twice as long as head plus thorax; tergites 1-3 a little longer than broad, 4 and 5 a little broader than long, 6 only a little more than twice as long as broad at base where segment is much broader than high; sixth tergite shorter than third and not longer than fourth in the available material; first tergite largely longitudinally striate, anteriorly with a few punctures in striae; second, third, and fourth tergites strongly longitudinally rugulose punctate, sculpture becoming gradually weaker caudad; fifth tergite punctate, laterally longitudinally rugulose punctate; sixth tergite punctate dorsally, longitudinally rugulose on sides; dorsolateral keels distinct on second tergite though rather weak; venter punctate to rugulose punctate; a weak median longitudinal keel present on at least first four sternites, sometimes extending to apex of sixth sternite.

Deep black; antennae, including scapes, black; mandibles blackish; all coxae and femora black, tibiae and tarsi piceous; wings hyaline.

**Male.**—Essentially like female except for secondary sexual differences: flagellar segments 4-9 of antenna barely longer than broad; abdominal tergites 6 and 7 much broader than long; seventh tergite distinctly surpassing seventh sternite and somewhat incised medially at apex; dorsolateral carinae sharp and prominent on tergites 2 and 3; wings faintly smoky.

**Holotype female.**—In the Canadian National Collection.

**Distribution.**—Known only from three females and two males that were collected at San Cristobal de las Casas, Chiapas, Mexico, in May and June 1969, elevation approximately 7,200'; the holotype was taken 1-3 June 1969.

### *Macroteleia densa*, new species

(Fig. 29)

This appears to be most closely related to *M. munda*, new species, from which it is readily distinguished, however, by its darkened coxae and by having the mesopleuron densely rugulose punctate below the impression.

**Female.**—Length about 4 mm. Head, as seen from above, about 1.5 times as wide as long, in side view about as high as long, and in front view subquadrate, as broad at level of antennal sockets as at middle of eyes; cheeks broadly rounded; malar space nearly or quite half as long as eye height; occipital margin complete, defined medially by lower edge of a tight row of foveae; occiput, vertex, and upper frons very closely, evenly and strongly, in part contiguously, punctate, small interspaces, where they occur, with delicate microsculpture; cheeks and temples closely punctate or rugulose punctate up to eyes.

Thorax slightly narrower than head, not or barely narrowing forward from tegulae; shoulders angulate; mesoscutum as long as wide; notaulices sharply impressed, weakly foveolate; middle lobe of mesoscutum entirely closely punctate, punctures large and uniform but not deep; lateral lobes also punctate but very weakly; disc of scutellum very shallowly but closely punctate over its entire surface, rather dull; propodeum indistinctly divided, cleft at posterior margin apparently not extending quite to base, lobes not triangular but broadly truncate at cleavage; propleuron shiny and smooth in upper angle, roughened below; prepectus rugulose striate; mesopleuron rather densely rugulose punctate below impression; mesosternum closely punctate; metapleuron strongly rugose; fore wings extending to middle of fifth abdominal tergite or a little beyond that.

Abdomen 2.3 times as long as head plus thorax; all tergites usually a little longer than broad except fifth, which is usually subequal in length and width, and sixth, which is not quite three times as long as broad at base; first tergite rugulose basally, longitudinally striate apically; tergites 2-4 with strong, uniform, contiguous punctures; fifth tergite completely and closely punctate but more weakly than fourth; sixth tergite irregularly punctate dorsally, irregularly longi-

tudinally striate on sides; dorsolateral carinae apparent on second tergite but weak; venter closely, longitudinally, rugulose punctate; sternites 2-5 with a sharp median longitudinal keel.

Black; antennal scape brownish yellow; legs yellowish except coxae, which are black or piceous, and tarsi, which are usually darkened; wings hyaline.

**Male.**—Essentially like female; flagellar segments 4-9 of antenna subquadrate; abdomen very slender, tapering gradually caudad from end of third segment; first and sixth tergites about as broad as long; tergites 2-5 longer than broad; 7 slightly broader than long and extending well beyond apex of seventh sternite, narrowing slightly to apex where it is rather deeply notched medially; dorsolateral carinae complete and prominent on second and third tergites. In the two available males, antennae and legs are piceous to black.

**Holotype female.**—In the Canadian National Collection.

**Distribution.**—Brazil. Described from three females (holotype and paratypes) and one male paratype labeled "Brazil, Repesa Rio Grande, Guanabara, viii-ix, 1972, M. Alvarenga;" two paratypes (male and female) with similar data except "vii, 1972," and two female paratypes labeled, respectively, "Carnaúba, Pernambuco, April 1972, M. Alvarenga" and "Brazil, S. Caraca, S. Barbara, Minas Gerais, March 1971, Oliveira."

### *Macroteleia discors*, new species

(Fig. 3)

This is very similar to *M. virginicus* Ashmead, but it may be distinguished from that species without much difficulty. In the female all coxae are clear yellow and the sixth abdominal tergite is longitudinally striate on the sides, whereas in the female of *virginicus* the fore coxae are normally darkened and the sixth abdominal tergite is irregularly rugulose on the sides. In the male the seventh abdominal tergite does not extend distinctly beyond the seventh sternite, whereas in *virginicus* it noticeably surpasses it. Moreover the head in both sexes is not so broad below the eyes, in front view, and the propodeum tends to be relatively shorter.

**Female.**—Length around 3.8 mm. Head slightly wider than thorax, as seen from above about 1.6

times as broad as long, in front view roundly narrowing below eyes, being a little narrower at level of antennal sockets than at middle of eyes; malar space about 0.4 as long as eye height; temples noticeably receding; occiput margined medially although sometimes weakly and irregularly; occiput and upper frons closely punctate on a shagreened surface; vertex shagreened and more sparsely punctate; lower frons laterally granulose, with shallow, contiguous punctures; lower temples and cheeks coarsely rugulose punctate.

Thorax narrowing forward only slightly from tegulae; shoulders rounded, occasionally subangulate; notaulices strongly foreolate; middle lobe of mesoscutum rather strongly punctate, punctures mostly well separated except anteriorly and sparse near notaulices, interspaces mostly with delicate microsculpture; lateral lobes usually largely shagreened, with a few very faint punctures; propodeum medially less than half as long as first abdominal tergite, weakly incised at middle of posterior margin; propleuron largely finely shagreened; prepectus strongly rugulose striate; mesopleuron rugulose punctate below impression; metapleuron shiny, largely punctate; wings extending to end of fourth abdominal tergite and often beyond that.

Abdomen about 2.3 times as long as head plus thorax; first tergite subequal in length and width; tergites 2-5 usually all broader than long; sixth tergite ranging from less than twice to 2.8 times as long as broad at base; first tergite usually rugose punctate on basal half, rugose striate apically; tergites 2-5 rather closely rugulose punctate, the sculpture becoming gradually weaker caudad; fifth tergite with some irregular longitudinal raised lines laterally; sixth tergite on dorsal edge coarsely longitudinally rugulose punctate, on sides longitudinally striate; dorsolateral carinae not developed on second tergite; venter very shiny, largely punctate, and without a median longitudinal keel.

Black; antennal scape yellowish; pedicel and first four flagellar segments brownish, club black; legs, including all coxae, yellow; wings hyaline.

**Male.**—In general like female; flagellar segments 4-9 of antenna subequal, much longer than broad; first abdominal tergite subequal in length and width, remainder all broader than long, seventh much broader at base than long and nearly

twice as broad at base as at apex, which is weakly emarginate medially; seventh tergite not or barely surpassing seventh sternite; a weak median longitudinal carina on second tergite; wings slightly smoky; fore coxae sometimes darkened.

**Holotype female.**—USNM 73573.

**Distribution.**—The type-series comprises 8 females (1 the holotype) and 27 males taken at Gainesville, Fla., in August 1973 by E. E. Grissell, some 30 specimens from various localities in Georgia and Florida, and about 100 additional specimens (both sexes) collected at Gainesville by E. E. Grissell in 1975. The host remains unknown.

### *Macroteleia elongata* (Ashmead)

(Figs. 17 and 45)

*Anteris elongata* Ashmead, 1887: 118. ♂.

*Macroteleia punctata* Kieffer, 1904: 532. ♂. New synonymy.

*Prosaephus elongatus* (Ashmead), Kieffer, 1908: 148.

*Macroteleia elongata* (Ashmead), Muesebeck and Masner, 1967: 300; Masner and Muesebeck, 1968: 39 (lectotype designated).

I have seen the types of *M. elongata* and *M. punctata*, the latter through the kindness of Karl-Johan Hedqvist, of the Swedish Museum of Natural History. The holotype of *punctata* is an almost perfect duplicate of the lectotype of *elongata*. The species is very similar to *M. insolita*, new species, from which it may be distinguished as explained in the description of that species.

**Female.**—Length normally between 5 and 6.5 mm. Head not or barely wider than thorax, in dorsal view about 1.5 times as broad as long, in front view subquadrate, cheeks swollen, so that head is fully as wide at level of antennal sockets as at middle of eyes; malar space a little less than half as long as eye height; occiput rather well margined medially by lower edge of a tight row of large punctures; occiput, vertex, and upper frons closely, though not confluent, punctate on a shagreened ground, punctures rather shallow; lower frons laterally granulate, with very shallow punctures; usually a short and weak but apparent median longitudinal raised line on frons above antennal sockets; cheeks rugulose punctate; often a very narrow, irregular, finely shagreened strip along outer eye margins (more pronounced in male).

Thorax not or barely narrowing forward from tegulae; shoulders subangulate; notaulices foveolate; mesoscutum rather flat, very shiny; middle

lobe strongly punctate, punctures closely placed anteriorly and at posterior end, less closely medially and adjacent to notaulices; lateral lobes largely smooth and shiny, with a few weak punctures; propodeum divided medially into two well-separated subtriangular lobes; a very short and rather broad projection from metanotum extending back between propodeal lobes (fig. 45); propleuron very smooth and shiny in upper angle, finely rugulose below; prepectus usually with a few irregular longitudinal striae at lower end but weakly and irregularly punctate or largely smooth and polished on upper half; mesopleuron punctate below impression; metapleuron irregularly punctate posteriorly; wings normally extending just about to middle of fourth abdominal tergite.

Abdomen usually at least three times as long as head plus thorax; all tergites much longer than broad, sixth usually more than six times as long as broad at base; first tergite longitudinally rugose punctate; second and third tergites coarsely longitudinally rugulose punctate, punctures usually elongate; fourth tergite more weakly rugulose punctate; fifth usually somewhat compressed laterally, minutely punctate down middle and finely striate toward sides; sixth tergite usually irregularly rugulose striate on dorsal edge, finely longitudinally striate on sides; dorsolateral carinae weak or indistinct on second tergite; venter strongly punctate to rugulose punctate and with a weak median longitudinal keel on sternites 2-4.

Black; scape of antenna brownish yellow; also pedicel and flagellar segments 1-4 beneath, these usually darker above, club black; legs yellow, all coxae often completely yellow but frequently they are more or less darkened, especially in northern specimens; wings subhyaline.

**Male.**—Flagellar segments 4-9 of antenna subequal, a little longer than broad; propodeum medially about as long as disc of scutellum and with two prominent, submedian, well-separated longitudinal ridges; second and third abdominal tergites longer than broad, others either subequal in length and width or broader than long; seventh tergite broader at base than long, weakly but distinctly emarginate at apex, conspicuously surpassing seventh sternite; first tergite closely rugose striate; dorsolateral carinae well developed on second and third tergites; ventral keel of abdomen more prominent than in female; coxae

sometimes completely yellow but more often somewhat darkened and occasionally black.

**Types.**—Lectotype male of *elongata*, USNM 24538; holotype of *punctata* in the Swedish Museum of Natural History.

**Distribution.**—In addition to the lectotype and a paralectotype of *elongata*, both from Florida, and the holotype of *punctata*, from Texas, I have seen about 35 specimens of this species from various localities in Ontario, New York, Maryland, Virginia, Georgia, Florida, Alabama, Louisiana, Ohio, Illinois, Missouri, Iowa, Kansas, Oklahoma, and Texas; also a single specimen from Guane, Cuba.

### *Macroteleia erythrogaster* Ashmead

(Fig. 1)

*Macroteleia erythrogaster* Ashmead, 1894: 223. ♀.

In the presence of a median longitudinal carina on the mesoscutum and scutellum and in the usually large ferruginous abdomen (in the female), this species resembles *M. rufiventris* (Szabó), but it is readily distinguished from that species by its much more weakly sculptured head, its relatively shorter abdomen and longer wings, the very weak development of the median carinae of mesoscutum and scutellum, the poorly developed median ventral keel of the abdomen, and by being normally much smaller.

**Female.**—Length usually 3–3.8 mm. Head very slightly wider than thorax, in dorsal view about 1.5 times as broad as long, in front view narrowing roundly below eyes so that it is a little narrower at level of antennal sockets than at middle of eyes; malar space about 0.4 as long as eye height; occiput not distinctly margined medially, closely but shallowly punctate on a surface that is usually weakly alutaceous; vertex shiny, rather closely punctate; upper frons closely and shallowly punctate on a finely shagreened surface; lower frons laterally rugulose; cheeks closely and coarsely rugulose punctate.

Thorax narrowing forward only very slightly from tegulae; shoulders broadly rounded or subangulate; mesoscutum with a median longitudinal carina that is usually weak and often indistinct posteriorly; notaulices sharp, fine, usually not distinctly foveolate; middle lobe of mesoscutum rather closely though shallowly punctate; disc of

scutellum shiny and with a weak longitudinal keel medially that is sometimes apparent only posteriorly; propodeum narrowly notched medially behind but apparently not divided into two separated lobes; propleuron largely smooth above, rugulose in lower angle; prepectus coarsely striate; mesopleuron rugulose punctate on rounded transition to mesosternum; metapleuron rugulose; wings usually extending to beyond middle of fifth abdominal tergite.

Abdomen about twice as long as head plus thorax; second and third tergites usually a little longer than broad, first, fourth, and fifth usually slightly broader than long, and sixth not more than 2.5 times as long as broad at base, where it is much broader than segment is high; tergites 1–5 irregularly rugulose punctate, sculpture becoming gradually weaker caudad; sixth tergite closely but weakly punctate above, irregularly longitudinally striate on sides; dorsolateral carinae faint or very weak on second tergite; venter usually closely rugulose punctate and with a very weak median longitudinal keel that is usually faint beyond third tergite.

Head and thorax black; scape of antenna yellowish; pedicel and flagellum darkened; abdomen normally yellowish to ferruginous except for being narrowly darkened at base and broadly at apex (there is considerable variation in extent and intensity of darkening); legs including all coxae usually yellow to brownish yellow, fore coxae and fore femora occasionally partly piceous, tarsi usually more or less less darkened; wings hyaline.

**Male.**—I have seen only a single male (from Trinidad); it is structurally essentially like the female, but the abdomen is entirely black and relatively more slender, the dorsolateral carinae are very prominent on second and third tergites, and the ventral keel of the abdomen is much more prominent than in the female; the seventh tergite is relatively broad, only faintly emarginate at the apex, and extends well beyond the seventh sternite.

**Holotype female.**—Presumably in the British Museum.

**Distribution.**—In addition to three female paratypes from St. Vincent, which are in the U.S. National Museum of Natural History, I have seen about 90 specimens from Trinidad, Tobago, Costa Rica, Panama, Guyana, Colombia, Ecuador, and Venezuela. The material from Ecuador includes

five females, which have all coxae and femora black and the abdomen usually entirely black. At first I thought these might represent a distinct form, but they agree so completely with *erythrogaster* in structure that I believe they cannot be considered more than a dark variation. At any rate it seems unwise to treat them as a distinct taxon on the basis of the few available specimens.

***Macroteleia exilis*, new species**

(Fig. 4)

This appears to be most closely related to *M. surfacei* Brues, but it differs conspicuously in its thicker head and yellow coxae.

**Female.**—Length normally about 5 mm. Head not wider than thorax, as seen from above about 1.3 times as broad as long, in lateral view very nearly as long as high, and in front view subquadrate, being fully as broad as level of antennal sockets as at middle of eyes; malar space hardly 0.4 as long as eye height; occiput sharply margined at sides and margin rather well indicated medially by lower edge of a row of contiguous foveae or large punctures; occiput sparsely and weakly punctate, interspaces usually at least equal to width of punctures and having delicate microsculpture; ocellar triangle smooth and shiny, with only a few weak punctures; upper frons shiny and with a few well-separated punctures medially, along eyes shagreened and with a few very shallow punctures; temples, and more especially cheeks, swollen, punctate, punctures interspersed with some weak rugulae; a narrow strip of delicate microsculpture along outer eye margins.

Thorax narrowing forward rather noticeably from tegulae; shoulders evenly rounded; notaulices sharp, foveolate; middle lobe of mesoscutum with fine shallow punctures down middle, adjacent to notaulices with narrow strips of delicate microsculpture and a few faint punctures; lateral lobes with some microsculpture and a few weak or indistinct punctures; propodeum very short medially and there incised on posterior margin but not divided into two distinctly separated lobes, its surface longitudinally rugulose striate; propleuron closely shagreened and opaque except in its lower angle where it is rugulose; broad prepectus longitudinally striate; mesopleuron strongly punctate below impression; metapleuron punctate,

shiny; fore wings usually not extending beyond middle of fourth abdominal tergite.

Abdomen very slender, 3.5 times as long as head plus thorax; all tergites much longer than broad, sixth usually at least six times as long as broad at base; tergites 1-4 closely rugulose punctate, more or less longitudinally so, but sculpture becoming gradually weaker caudad; fifth tergite and sixth on its dorsal edge punctate and with some weak, irregular lineation; sixth tergite very weakly, irregularly, and incompletely longitudinally aciculate on sides; dorsolateral carinae not developed on second tergite; venter very shiny and finely punctate, and without a median longitudinal keel.

Black; scape and pedicel of antenna, as well as underside of flagellar segments 1-4, yellow, remainder of antenna darkened to black; legs, including all coxae, entirely honey yellow; wings hyaline.

**Male.**—Flagellar segments 4-9 of antenna subequal, about twice as long as broad; abdomen more closely punctate than in female and tapering evenly and rather strongly from end of third segment to apex; at least tergites 2-4 longer than broad; seventh tergite somewhat broader than long, weakly emarginate at apex, and not surpassing seventh sternite; all coxae yellow; antennal scape yellow, pedicel and flagellum brown.

**Holotype female.**—USNM 73574.

**Distribution.**—Known only from the type-series. In addition to the holotype and two male paratypes from Livingston County, Mich., E. S. George Reserve, taken in August 1957, the series contains six females from localities in Iowa, Kansas, and Texas and one male each from West Virginia and Kansas.

***Macroteleia eximia*, new species**

(Fig. 7)

Structurally this is most similar to *M. carinata* Ashmead, from which it is immediately distinguishable by its reddish-yellow thorax.

**Female.**—Length about 6.5 mm. Head barely wider than thorax, in dorsal view about 1.4 times as broad as long, in front view as broad at level of antennal sockets as at middle of eyes; malar space only slightly more than one-third as long as eye height; occiput margined at sides only; occiput, vertex, and frons strongly, somewhat irregularly,

closely, and in part even contiguously, punctate; cheeks and temples with separated punctures that are arranged more or less in vertical rows, interspaces smooth and shiny.

Thorax narrowing forward somewhat from tegulae; shoulders rounded: mesoscutum rather flat; notaulices coarsely foveate; middle lobe of mesoscutum with a complete and prominent median longitudinal keel, rugulose punctate on anterior declivity, otherwise sparsely and irregularly punctate, interspaces smooth and polished; lateral lobes largely smooth and shiny; the broadly transverse disc of scutellum smooth and polished; propodeum divided into two unusually widely separated, triangular lobes that are irregularly rugulose: a short and broad median projection from metanotum extending to space between propodeal lobes: propleuron largely smooth and shiny: prepectus longitudinally rugulose striate: mesopleuron smooth and polished, with only some minute and weak punctures below impression: metapleuron rugose: wings extending about to end of fourth abdominal tergite.

Abdomen about three times as long as head plus thorax: all tergites decidedly longer than wide, sixth strongly compressed laterally and about seven times as long as broad at base in the available specimens: first tergite largely longitudinally rugose striate, rugose at base; tergites 2-5 longitudinally rugulose, second most coarsely, fifth most weakly, all with numerous punctures in depressions: sixth tergite longitudinally rugulose punctate on dorsal edge, longitudinally aciculate on sides; dorsolateral carinae well developed on second tergite and weakly indicated on third; venter of abdomen longitudinally rugulose punctate; sternites 2-5 with a prominent median longitudinal keel.

Head black: scape and pedicel of antenna honey yellow: segments 1-4 of flagellum yellowish, first brownish above, first club segment brownish, remainder of club brownish black: thorax reddish yellow: mesosternum and a small spot at apex of metapleuron darkened: abdomen black: legs, including all coxae, yellow; wings subhyaline.

**Male.**—Essentially like female; antennae very slightly thickened toward apices, flagellar segments 4-9 fully as broad as long; abdomen very slender; tergites 1-5 longer than broad, 6 slightly broader than long, 7 nearly as long as broad at base, nar-

rowing weakly to apex where it is incised at middle; seventh tergite extending beyond apex of seventh sternite: dorsolateral carinae very prominent on tergites 1-3.

**Holotype female.**—In the Canadian National Collection.

**Distribution.**—British Honduras and Mexico. Four females, holotype and paratypes, were taken at Middlesex, British Honduras, in April 1965 by E. C. Welling; and two males (paratypes) were collected in Mexico: One labeled "Mex., Oax. 6 mi. S. Valle Nacional, 2000', 18-20.v.71," the other "Mex., Ver. 19.vi.69, U. Mex. Biol. Res. Sontecomapan, 400', W. R. Mason." In addition, two female and one male paratypes were collected by R. and K. Dreisbach at Orizaba, Veracruz, Mexico, in 1961.

### *Macroteleia famelica* (Say)

(Fig. 24)

*Sparasion famelicus* Say, 1836: 276. ♀.

*Macroteleia famelica* (Say), Muesebeck, 1972: 13.

Although the type is apparently no longer in existence, I believe I have identified the species correctly. Superficially it is rather similar to *M. floridana* (Ashmead), but it is readily distinguished from that species by its more coarsely sculptured head, by its evenly striate abdominal tergites 1-4, by the thorax being relatively broader at the shoulders, by its longer wings, by the differently sculptured sixth abdominal tergite in the female, and by the color of the female antennae.

**Female.**—Length about 4.2 mm. Head broader than thorax, as seen from above about 1.6 times as broad as long, as seen from in front narrowing gradually below eyes so that it is apparently narrower at level of antennal sockets than at middle of eyes: malar space about 0.4 as long as eye height; occiput, temples, and cheeks densely rugulose punctate, except for a very narrow, smooth, and polished strip along outer eye margins: occipital margin complete although irregular medially where it is defined by lower edge of a tight row of large foveae; vertex shiny, weakly rugulose, and with a few punctures; upper frons closely punctate, lower frons laterally densely rugulose: first three flagellar segments of antenna subequal, more than twice as long as broad.

Thorax narrowing only very slightly forward from tegulae, where it is barely wider than at

shoulders; notaulices fine, not distinctly foveolate; middle lobe of mesoscutum sharply punctate, very closely so anteriorly; lateral lobes weakly punctate; propodeum medially fully as long as scutellum, not divided, and having two prominent and closely parallel median longitudinal keels and lateral of these a few irregular longitudinal ridges; propleuron punctate below, finely rugulose above; prepectus very finely and densely punctate; mesopectus closely and evenly punctate; mesopleuron very closely rugulose punctate below impression; metapleuron longitudinally striate; fore wings extending nearly to end of fifth abdominal tergite.

Abdomen about twice as long as head plus thorax; tergites 1-4 coarsely longitudinally striate, and with a few punctures in the striae; tergite 5, and tergite 6 dorsally, closely longitudinally rugulose punctate, the latter rugulose on sides; first tergite about as long as broad at apex; second and third tergites slightly longer than broad; fourth and fifth broader than long; sixth about twice as long as broad at base; dorsolateral carinae developed on tergites 2 and 3; venter of abdomen coarsely striate on sternites 1-5, closely punctate on sternite 6; a median longitudinal carina on sternites 2-4.

Black; antennae yellow except club which is black; legs, including all coxae, entirely bright yellow except extreme tips of tarsi, which are darkened; wings hyaline.

**Male.**—Like female in basic characters; antennae filiform; first flagellar segment longer than pedicel, second about as long as pedicel, third greatly lengthened, more than twice as long as fourth segment, and weakly keeled on inner edge; fourth to ninth flagellar segments subequal and about 1.5 times as long as broad; eighth abdominal segment developed into a stout, sharp spine that is curved upward and projects back from beneath the very short seventh tergite (fig. 24).

**Holotype female.**—Apparently lost.

**Distribution.**—The type was said to be from Indiana. The only specimens that I have identified as *familica* are two females and one male in the Canadian National Collection, the females labeled "Williamsville, Mo., 15 Aug.-10 Sept. 1969, J. T. Becker. Malaise trap," the male with similar data except "25 July-15 Aug. 1969;" and a single female in the U.S. National Museum of Natural History

that was taken at Columbia, Mo., 5 September 1968, also in a malaise trap, by F. D. Parker.

### *Macroteleia floridana* (Ashmead)

(Fig. 21)

*Baconcurea floridana* Ashmead, 1887: 99. ♀, ♂.

*Macroteleia floridana* Ashmead, 1893: 217.

This is superficially similar to *M. spartinae*, new species, from which it may be readily distinguished, however, by its more weakly sculptured head, by the broader polished strip along the outer margins of the eyes, by the differently sculptured fifth abdominal tergite in the female, and by the relatively shorter third segment of the antennal flagellum in the male. Structurally it is most similar to *M. goldsmithi* Girault, from which it appears to differ in having paler coxae and in some minor structural details mentioned in the description of *goldsmithi*.

**Female.**—Length usually about 4 mm. Head slightly wider than thorax, as seen from above about 1.4 times as broad as long, in front view broadly rounded below eyes and not narrower at level of antennal sockets than at middle of eyes; malar space about half as long as eye height; cheeks bulging slightly; cheek and temple with a broad, smooth, and polished strip along outer eye margin that does not narrow below but continues to lower limit of eye; behind this strip, cheek is punctate, punctures rather large and umbilicate and mostly separated, interspaces smooth and shiny; occiput irregularly punctate below, weakly and sparsely punctate above on a surface that has a little faint microsculpture; vertex largely smooth and shiny, with only a few scattered punctures; upper frons sparsely punctate, lower frons laterally finely rugulose punctate; pedicel of antenna and first two flagellar segments subequal, third flagellar segment a little shorter; club about five times as long as broad.

Thorax narrowing forward from tegulae, conspicuously broader at tegulae than at shoulders, which are gently rounded; notaulices very fine, not distinctly foveolate; middle lobe of mesoscutum finely punctate, most closely anteriorly; lateral lobes faintly punctate; propodeum not divided, medially about as long as scutellum, weakly and irregularly rugulose, and with a few poorly developed longitudinal ridges; propleuron very

shiny, weakly and incompletely sculptured; prepectus very finely rugulose; mesopleuron closely, in part confluent, punctate beneath impressed area; mesosternum closely, evenly, and finely punctate; metapleuron largely irregularly longitudinally striate; fore wings extending to apex of fourth abdominal tergite.

Abdomen about twice as long as head plus thorax; tergites 1, 4, and 5 subequal in length and width, 2 and 3 a little longer than wide, and 6 slightly more than twice as long as wide at base; tergites 1-4 rather irregularly longitudinally striate or rugulose striate and with some irregular and weak punctures in striae, tergite 4 more weakly and less completely sculptured than the others; 5 finely and weakly punctate medially, rugulose striate at sides; tergite 6 shiny with only a few punctures on dorsal edge, longitudinally rugulose striate on sides; dorsolateral carinae strong and complete on tergites 2 and 3; tergite 2 also with a fine median longitudinal keel; venter striate on sternites 1-5, with some punctures in striae; a median longitudinal keel on sternites 2-5.

Black; antennal scape yellow, remainder of antenna darkened; all legs, including coxae, yellow, tarsi weakly darkened.

**Male.**—Generally similar to female; third segment of antennal flagellum shorter than scape but nearly or quite twice as long as fourth flagellar segment, which is about as long as second; venter of abdomen somewhat more coarsely sculptured than in female, being largely longitudinally striate; a prominent and thick spine on a broad triangular base (eighth abdominal segment) projecting caudad from beneath seventh tergite, which is very short and strongly transverse and is surpassed by seventh sternite; tarsi darker than in female.

**Lectotype female.**—(Selected by Masner and Muesebeck (1968: 40), USNM 24536.

**Distribution.**—In addition to the lectotype, which is from Florida, I have seen four males and two females from localities in Maryland, South Carolina, Georgia, Florida, and Missouri.

### *Macroteleia foveolata*, new species

(Figs. 34 and 46)

This is exceedingly like *M. plutensis* Brèthes and is sometimes very difficult to distinguish, especially in the female where the differences are very

subtle. The thorax is relatively broader anteriorly, narrowing only indistinctly forward from the tegulae; the notaulices are usually more coarsely foveolate, and the middle lobe of the mesoscutum normally has some shallow but distinct punctures along the notaulices (usually lacking in *plutensis*); in the male the seventh abdominal tergite is relatively longer than in *plutensis*, being about as long as broad at base and not so deeply or broadly incised at the apex as in *plutensis*, with the apical lateral angles broadly rounded rather than acute.

**Female.**—Length usually about 4 mm. Head distinctly a little broader than thorax, in dorsal view about 1.5 times as broad as long, in front view as broad at level of antennal sockets as at middle of eyes; occiput irregularly margined medially by lower edge of a tight row of foveae; occiput and upper frons closely but shallowly punctate on a shagreened surface; vertex shagreened and with only a few scattered punctures; lower frons strongly shagreened or granulose and opaque; cheeks and temples strongly rugulose punctate.

Thorax usually hardly narrower at shoulders than at tegulae; mesoscutum rather flat; notaulices coarsely foveolate; middle lobe of mesoscutum finely shagreened and subopaque, densely punctate on anterior third and at extreme posterior end but sparsely in middle area; propodeum very narrowly divided, the inner ends of lobes broad and subtruncate; propleuron smooth and shining in upper anterior angle, rugulose below; prepectus usually rather strongly longitudinally rugulose striate; mesopleuron punctate below impression; metapleuron rugulose; wings extending to end of fourth abdominal tergite or a little farther.

Abdomen a little more than twice as long as head plus thorax, slender; all tergites usually longer than broad, fifth sometimes as broad at base as long and sixth a little less than four times as long as broad at base; first tergite longitudinally rugose but often with some coarse punctures basally; tergites 2-4 contiguously and strongly punctate or rugulose punctate; fifth tergite sometimes closely punctate but often weakly and incompletely punctate medially, usually brokenly longitudinally striate on sides; sixth tergite irregularly punctate dorsally, longitudinally striate on sides; dorsolateral carinae more or less indicated on second tergite; venter closely punctate, median longitudinal carina well developed on sternites 2-4, often indistinct on 5.

Black; antennal scape yellowish brown, often partly infuscated, remainder of antenna usually piceous to black; legs brownish yellow but all coxae blackish and sometimes femora somewhat darkened; wings hyaline.

**Male.**—Essentially similar to female: flagellar segments 4-9 of antenna usually barely longer than broad; dorsolateral carinae sharp and prominent on second abdominal tergite and often on third: seventh tergite clearly surpassing seventh sternite, nearly or quite as long as broad at base, narrowing a little to apex where it is usually sharply notched medially but with lateral angles broadly rounded.

**Holotype female.**—In the British Museum.

**Distribution.**—Known only from Brazil. The holotype is labeled "Brasilien, Nova Teutonia, 97°11'B. 52°23'L. ii-1937. Fritz Plaumann." About 50 paratypes (both sexes) are from localities in the States of Pará, Bahia, Goiás, Minas Gerais, Rio de Janeiro, São Paulo, Santa Catarina, and Mato Grosso.

### *Macroteleia goldsmithi* Girault

(Fig. 27)

*Macroteleia floridana* var. *goldsmithi* Girault, 1920: 150, ♀.

This is exceedingly similar to *M. floridana* (Ashmead), and it may prove to be that species, but there appear to be some differences and the available material is too meager to justify suppression of *goldsmithi* as a synonym of *floridana* at this time. The specimens presently identified as *floridana* have all coxae yellow, whereas those determined as *goldsmithi* have at least the posterior coxae more or less darkened. The abdomen in *goldsmithi* is normally more coarsely striated both above and below, the ventral striation usually being so strong that the median longitudinal keel cannot be easily traced: in *goldsmithi* the prepectus has a row of rather large foveae along the anterior margin (not so apparent in *floridana*), the metapleuron is more coarsely striate, and usually the wings are relatively a little longer than in *floridana*.

**Female.**—Length 3.2 mm. (holotype) to 4 mm. Head, as seen from above, 1.4 times as broad as long, in front view subquadrate and fully as wide at level of antennal sockets as at middle of eyes;

cheeks and temples with a broad, smooth, and polished strip along outer eye margins that extends to extreme lower end of eyes, behind this with mostly well-separated, umbilicate punctures, interspaces smooth and polished; malar space about 0.4 as long as eye height; occiput with close but separate punctures, very shiny; vertex very shiny and largely smooth; upper frons usually weakly punctate, very shiny; lower frons finely rugulose laterally; first three segments of antennal flagellum lengthened, club about five times as long as broad.

Thorax narrowing forward conspicuously so that it is considerably narrower at shoulders than at tegulae; shoulders not at all prominent; mesoscutum strongly convex anteriorly; notaulices fine, indistinctly foveolate; middle lobe finely but sharply punctate, closely so anteriorly; lateral lobes rather evenly though somewhat more weakly punctate; propodeum medially nearly or quite as long as scutellum, with two closely parallel, submedian longitudinal carinae and usually one or two less prominent carinae laterad of each of those; propleuron very shiny but largely finely, irregularly rugulose punctate; prepectus very finely rugulose punctate; lower part of mesopleuron closely punctate to rugulose punctate; mesosternum finely and closely punctate; metapleuron coarsely longitudinally striate; wings usually extending to middle of fifth abdominal tergite or somewhat beyond that.

Abdomen usually about twice as long as head plus thorax: first tergite subequal in length and width; second and third tergites usually a little longer than broad (though not in holotype); fourth and fifth somewhat broader than long; sixth tergite usually about twice as long as broad at base; tergites 1-4 coarsely longitudinally striate, first and second especially; fifth tergite punctate medially, longitudinally striate laterally; sixth smooth and shiny dorsally with only a few weak and minute punctures, longitudinally rugulose striate on sides; dorsolateral carinae well developed on second tergite and sometime on third; venter of abdomen coarsely longitudinally striate; median keel usually not conspicuous because of the coarse striation.

Black; antennal scape yellowish; pedicel and first four flagellar segments dark brown, club black; legs yellow or yellowish, but at least posterior coxae, and sometimes all coxae, black or

somewhat darkened; tarsi not or only weakly and incompletely darkened.

**Male.**—Third segment of antennal flagellum as long as first and second segments combined and more than twice as long as fourth; flagellar segments 4-9 subequal, all about 1.5 times as long as broad; propodeum medially with two prominent subparallel keels; a stout, broad-based, and slightly upcurved spine (eighth abdominal segment) projecting caudad from beneath seventh tergite; seventh tergite transverse and not extending back as far as apex of seventh sternite.

**Holotype female.**—USNM 20845.

**Distribution.**—In addition to the holotype, which is from Illinois, I have seen specimens (nine females and four males) from localities in Pennsylvania, Virginia, North Carolina, South Carolina, Florida, Alabama, Illinois, Michigan, Missouri, and Kansas.

### *Macroteleia grandis*, new species

This is the largest *Macroteleia* I have seen. It appears to be most similar to *M. pilosa*, new species, but in addition to being much larger it differs conspicuously in lacking the dense hair covering and the dense mesopleural sculpture of *pilosa* and in having completely yellow legs.

**Female.**—Length 8.7 mm. Head transverse, as seen from above nearly twice as broad as long, in front view broadly rounded below eyes and about as broad at level of antennal sockets as at middle of eyes; malar space hardly 0.4 as long as eye height; occipital margin medially defined by lower edge of a tight row of large and deep foveae; occiput, vertex, upper frons, temples, and cheeks densely punctate, with no delicate microsculpture apparent; lower frons laterally rugose punctate.

Thorax about as wide as head, gradually narrowing forward from tegulae; shoulders not prominent; notaulices strongly foveolate; middle lobe of mesoscutum completely, closely, and uniformly punctate; lateral lobes also punctate but less closely and more finely; propodeum divided into two well-separated triangular lobes; mesanotum with a short triangular median process projecting back between inner ends of propodeal lobes; propleuron largely smooth and shiny; prepectus also largely smooth, with only a few small punctures and a few weak longitudinal ridges; lower part of

mesopleuron smooth and shiny, with only a few very minute punctures; metapleuron rugulose punctate; wings extending to base of fifth abdominal tergite.

Abdomen very slender, more than three times as long as head plus thorax; all tergites much longer than broad, second and third about twice as long as broad, and sixth about six times as long as broad at base; surface of tergites 1-4 longitudinally rugulose punctate, punctures more or less confluent and arranged in irregular rows; fifth tergite and dorsal edge of sixth finely longitudinally rugulose punctate, sixth irregularly, brokenly, longitudinally striate on sides; fifth tergite narrowing strongly caudad, barely more than half as wide at apex as at base; dorsolateral carinae well developed on second tergite; venter of abdomen closely, longitudinally rugulose punctate; median longitudinal keel well developed on sternites 2-4, faint on 5.

Black; antennal scape yellow; pedicel yellow below, brownish above; flagellar segments 1-4 brown, club black; legs, including all coxae and tarsi, golden yellow.

**Holotype female.**—In the Museum of Comparative Zoology, Harvard University.

**Distribution.**—The holotype was taken at Teresópolis, Brazil, in January 1969 by C. Porter and A. Garcia. The only other known specimen is a female paratype collected in March 1966 by H. and M. Townes at the same locality.

### *Macroteleia herbigrada* Brues

(Figs. 26 and 47)

*Macroteleia herbigrada* Brues, 1915: 22. ♂.

This species is very similar to *M. larga*, new species, from which it may be distinguished as pointed out in the description of *larga*.

**Female.**—Length of available specimens ranging from 4.7 to 6 mm. Head barely wider than thorax, in dorsal view usually 1.4-1.6 times as broad as long, from in front appearing subquadrate, with cheeks broadly rounded so that width of head at level of antennal sockets equals its width at middle of eyes; malar space about 0.4 as long as eye height; occiput not distinctly margined medially; occiput closely punctate and shiny, especially below; farther upward, toward ocelli, background generally alutaceous or finely reticu-

late and the punctures farther apart; vertex and upper frons also shallowly punctate on an alutaceous surface; lower frons usually contiguously punctate on a shagreened ground; usually a short median elevated line on frons just above antennal sockets; cheeks and temples rugulose punctate, usually more coarsely so than in *larga*; sometimes a little alutaceous sculpture very narrowly along outer eye margins.

Thorax not, or barely, narrowing forward from tegulae; shoulders not angulate; notaulices sharp, foveolate; middle lobe of mesoscutum shiny, closely punctate anteriorly, and usually at posterior end, often more sparsely near middle; lateral lobes weakly, sometimes not distinctly, punctate; propodeum divided into two separated subtriangular lobes that are rugulose; a tongue-like projection from middle of posterior margin of metanotum extending into space between propodeal lobes; propleuron smooth and shiny in upper angle, rugulose punctate below; prepectus irregularly longitudinally rugulose or rugulose striate; mesopleuron below impression punctate and shiny; metapleuron rugose; wings extending nearly or quite to apex of fourth abdominal tergite.

Abdomen usually 2.7-3 times as long as head plus thorax; all tergites longer than broad, sixth four to six times as long as broad at base; first tergite rugulose, longitudinally so on posterior half; tergites 2-4 strongly rugulose punctate; 5 somewhat more weakly so and irregularly longitudinally aciculate at sides; sixth tergite closely longitudinally rugulose punctate on dorsal edge, very finely longitudinally striate on sides; dorsolateral carinae usually well developed on second tergite and indicated on third; venter coarsely longitudinally rugulose punctate and with a median longitudinal keel on sternites 2-5.

Black; scape of antenna, and usually pedicel, brownish yellow; flagellar segments 1-4 often brownish yellow below but dark above; legs yellow except all coxae, which are black or blackish; wings hyaline.

**Male.**—Flagellar segments 4-9 of antenna about as broad as long; propodeum very short, usually with four strong longitudinal keels; abdomen slender and narrowing noticeably beyond third tergite; first tergite coarsely rugose-striate, following closely punctate; tergites 5 and 6 normally longer than broad and much more weakly sculp-

tured than preceding tergites, usually very shiny; seventh tergite usually about as long as broad at base, sometimes a little longer than broad, weakly or not at all emarginate at apex and extending well beyond seventh sternite; dorsolateral carinae sharp and prominent on tergites 2 and 3; antennae usually pale beneath, otherwise black or blackish; all coxae black; hind femora sometimes partly darkened, especially apically; wings subhyaline.

**Holotype male.**—In the Museum of Comparative Zoology, Harvard University.

**Distribution.**—In addition to the holotype, which is labeled as from Independência, Paraíba, Brazil, I have seen numerous specimens of both sexes from Brazil and Argentina, and occasional specimens from Paraguay, Ecuador, Venezuela, Colombia, Trinidad, and Tobago.

### *Macroteleia insignis*, new species

(Fig. 28)

This somewhat resembles *M. simulans*, new species, but the head differs in being strongly transverse, with narrow and receding temples, and the posterior margin of the pronotum is unusually prominent and keel-like, rising above the adjacent parts of the mesoscutum; moreover the male abdomen is not so slender as in *simulans* and is differently sculptured, and the seventh abdominal tergite is strongly bilobed.

**Male.**—Length about 5.2 mm. Head strongly transverse, noticeably wider than thorax, as seen from above 1.8 times as broad as long, and in lateral view 1.6 times as high as long; temples unusually narrow and strongly receding; malar space little more than one-fourth as long as eye height; occiput completely sharply margined; occiput contiguously, in part confluent, strongly punctate; vertex and frons also strongly and closely punctate; cheeks and temples rugulose punctate; a fine, smooth, and polished line adjacent to outer eye margins; flagellar segments 4-9 of antenna all slightly longer than broad.

Thorax narrowing forward noticeably from tegulae; shoulders rounded; posterior margin of pronotum very prominent, high, and keel-like, smooth and polished; mesoscutum flat; notaulices sharply impressed, broad but weakly foveolate; middle lobe sharply punctate, closely so anteriorly and at posterior end, interspaces smooth and shiny; lat-

eral lobes with very shallow punctures, interspaces smooth; disc of scutellum smooth and polished, with only a few exceedingly minute punctures laterally; propodeum medially shorter than scutellum, with two closely placed and prominent longitudinal carinae medially and a prominent longitudinal carina laterad of each of those; propleuron smooth and shiny in upper angle, elsewhere rugulose; prepectus unusually narrow, elliptical, crossed by a few irregular ridges; mesopleuron smooth and polished medially below impression; metapleuron coarsely rugose; fore wings extending to near end of fifth abdominal tergite.

Abdomen about twice as long as head plus thorax, broadening to base of fourth segment and narrowing caudad from end of that segment; first three tergites longer than broad in the two available specimens; fourth tergite about as broad as long and last three tergites broader than long; seventh tergite strongly transverse, deeply incised at apex, and extending barely beyond apex of seventh sternite; first tergite very coarsely longitudinally striate; tergites 2-4 longitudinally rugulose punctate, sculpture becoming gradually weaker caudad; tergites 5 and 6 closely punctate; dorsolateral carinae prominent on tergites 2 and 3; venter of abdomen strongly and closely rugulose punctate; a prominent median longitudinal keel on sternites 2-4.

Black; antennal scape yellowish, slightly darkened apically, rest of antenna dark brown to black; mesoscutum, scutellum, metanotum, propodeum, and most of mesopleura red; prothorax largely, mesosternum and metapleura black or blackish; legs yellow, including all coxae entirely; hind femora a little darkened dorsally toward apices, also extreme apices of hind tibiae and all tarsi slightly darkened.

**Holotype male.**—In the Canadian National Collection.

**Distribution.**—Known only from the holotype and one male paratype, both labeled "Pompeya, Napo R., Pastaza, Ecuador, 14-22. v. 1965, L. Pens."

### *Macroteleia insolita*, new species

(Fig. 6)

This is exceedingly similar to *M. elongata* (Ashmead) and the female is not easily distinguished. However, the dorsolateral carinae of the second

tergite are better developed than they are normally in *elongata*, and the shoulders are more strongly angulate; the male is readily distinguished by its very slender abdomen, with the fifth, sixth, and seventh tergites conspicuously elongate.

**Female.**—Length about 6 mm. Head slightly wider than thorax, in dorsal view about 1.5 times as broad as long, in front view subquadrate and fully as broad at level of antennal sockets as at middle of eyes; cheeks bulging; occiput not margined medially, closely punctate on a surface of delicate microsculpture; vertex more sparsely punctate; upper frons densely punctate; lower frons laterally finely granulose and with shallow punctures; cheeks and temples coarsely rugulose punctate.

Thorax virtually as broad at shoulders as at tegulae; shoulders subangulate; notaulices sharply impressed and finely foveolate; mesoscutum shiny, weakly convex; middle lobe smooth and polished between punctures, which are abundant on anterior half and sometimes at posterior end but sparse medially; lateral lobes very shiny, with some minute and very weak punctures; propodeum divided into two clearly separated subtriangular lobes; a fingerlike projection from metanotum extending back to space between lobes; propleuron smooth in upper angle, finely rugulose below; prepectus sometimes largely smooth and polished along posterior margin but in other specimens irregularly rugulose striate or rugulose punctate; mesopleuron punctate below impression; metapleuron rugose; wings extending to middle of fourth abdominal tergite or a little beyond but not reaching base of fifth tergite.

Abdomen in the few available specimens 2.7-3 times as long as head plus thorax; all tergites longer than broad, sixth usually about five times as long as broad at base; first tergite coarsely punctate at base medially, elsewhere longitudinally rugose; tergites 2-4 coarsely longitudinally rugulose punctate, sculpture becoming gradually weaker caudad; fifth tergite rather sparsely punctate medially; sixth longitudinally rugulose on dorsal edge; both fifth and sixth tergites finely and very closely longitudinally striate on sides; dorsolateral carinae present on second tergite and indicated on third; venter closely covered with shallow, elongate punctures, more sparsely on fifth sternite than on preceding ones; median longita-

dinal keel well developed on sternites 2-4, weakly indicated on 5.

Black; scape, pedicel, and first four flagellar segments of antenna yellowish, club black; legs, including all coxae, yellow, hind coxae sometimes a little darkened basally; wings hyaline or subhyaline.

**Male.**—Flagellar segments 4-9 of antenna as broad as long; propodeum hardly one-third as long as first abdominal tergite and with two prominent, well-separated, longitudinal keels medially; wings not extending to end of fourth abdominal tergite; abdomen extremely slender and tapering to apex from third segment; all tergites longer than broad, even seventh, in the two known males, a little longer than broad at base and barely half as broad at apex as at base, subtruncate or weakly notched medially at apex, and extending far beyond apex of seventh sternite; dorsolateral carinae sharp and prominent on tergites 2 and 3; hind coxae sometimes slightly darkened basally; antennae largely yellowish below, brownish above.

**Holotype female.**—USNM 73580.

**Distribution.**—Known only from the small type-series, which consists of the following: Female holotype and a male paratype labeled "On sugarcane, Monymusk Estate, Jamaica, W.I., vii.1959" (holotype) and "vi.1959" (paratype), single female paratypes from Trinidad, St. Lucia, and Dominica, and a male paratype from Dominica. Two males in the Canadian National Collection from Paraguay appear to belong here, but they are not included in the type-series.

### *Macroteleia larga*, new species

(Figs. 33 and 43)

This is a very abundant Neotropical species but seems to be undescribed. It rather closely resembles *M. herbigrada* Brues, from which it differs in the female coxae being nearly always completely yellow (those of the male are frequently also completely yellow but nearly as often they are blackish, at least the posterior pair), in the more completely and sharply margined occiput, in the more shiny head, with the occiput, vertex, and upper frons more coarsely punctate on a smooth surface (without the reticulate microsculpture usually found in *herbigrada*), and in having the dorsolateral carinae of the abdomen at most only weakly

indicated on the second tergite in the female. Moreover the male abdomen does not taper so markedly caudad as in *herbigrada*, the apical tergites are more closely sculptured, and the seventh tergite is usually broadly bilobed at the apex (in *herbigrada* it is very narrow and truncate or weakly notched at the apex).

**Female.**—Length normally ranging from 5.5 to 6.5 mm. Head barely wider than thorax, in dorsal view about 1.6 times as broad as long, from in front usually rather circular and usually a little narrower at level of antennal sockets than at middle of eyes; malar space about one-third as long as eye height; occiput completely margined, medially by lower edge of a row of contiguous foveae; occiput very strongly, in large part contiguously, punctate, very shiny and without a background of delicate microsculpture; ocellar area usually closely punctate or rugulose punctate, very shiny, and without surface microsculpture; upper frons strongly and contiguously punctate, very shiny; lower frons laterally rugulose; no median elevated line on frons above antennal sockets, as normally in *herbigrada*; cheeks and temples completely and strongly rugose punctate.

Thorax barely narrowing forward from tegulae; shoulders broadly rounded or weakly subangulate; mesoscutum very shiny, without delicate microsculpture; notaulices consisting of rows of even, large punctures or foveae; middle lobe of mesoscutum closely punctate anteriorly and often at posterior margin, usually sparsely punctate on a small area across middle; lateral lobes very shiny and smooth but with at least a few punctures; propodeum divided into two well-separated subtriangular lobes; a tongue-like projection extending from metanotum toward space between propodeal lobes; propleuron smooth and shiny in upper angle, elsewhere more or less rugulose; prepectus coarsely longitudinally striate or rugulose striate; mesopleuron below large oblique impression and on transition to mesosternum normally largely smooth and polished medially; metapleuron rugulose; fore wings usually not reaching apex of fourth abdominal tergite.

Abdomen usually at least three times as long as head plus thorax; all tergites distinctly longer than broad, but their relative lengths and widths varying considerably, as shown by the following rather extreme examples:

Tergite.....	1	2	3	4	5	6
Length.....	70	95	100	90	70	110
Width.....	60	80	80	70	55	25
Tergite.....	1	2	3	4	5	6
Length.....	80	130	160	130	125	200
Width.....	60	80	80	75	55	28

First tergite rugulose medially at base, otherwise longitudinally rugulose striate; tergites 2-4 closely longitudinally rugulose or rugulose punctate, sculpture becoming gradually weaker caudad; fifth tergite usually largely very finely rugulose aciculate, with numerous sharp punctures; sixth tergite densely longitudinally rugulose striate on dorsal edge, very finely and closely longitudinally aciculate on sides; dorsolateral carinae usually not developed beyond first tergite, at most weak and irregular on second tergite; venter of abdomen punctate, gradually more weakly so caudad; a prominent median longitudinal keel on sternites 2-4, distinct but weaker on 5.

Black; antennal scape yellow; pedicel and first four flagellar segments usually brownish yellow below but darkened above; wings subhyaline; legs, including all coxae, normally completely yellow, except that hind tarsi are a little darkened apically and occasionally hind coxae are slightly darkened basally.

**Male.**—In general like female except for secondary sexual differences; flagellar segments 4-9 of antenna not or just longer than broad; propodeum very short medially, only one-third as long as first abdominal tergite and with several widely spaced longitudinal keels or ridges that are sometimes obscured by abundant covering of long hair; abdomen slender, in part parallel-sided, narrowing a little beyond fourth segment; first five tergites usually a little longer than broad, sixth and seventh broader than long, seventh only slightly surpassing seventh sternite and usually broadly bilobed at apex; first tergite very coarsely longitudinally rugulose striate; tergites 5, 6, and 7 longitudinally rugulose punctate, usually much more strongly sculptured and relatively broader than in *herbigrada*; dorsolateral keels complete and very prominent on second and third tergites; venter of abdomen closely rugulose punctate; median longitudinal keel prominent on sternites 2-5; all coxae sometimes yellow but more often

they are more or less darkened, especially posterior pair, and rarely all coxae are black; wings a little infumated.

**Holotype female.**—In the Canadian National Collection.

**Distribution.**—Ten females (holotype and paratypes) and many male paratypes are labeled "S. Bocaina, S. José de Barreiro, São Paulo (State), Brazil, 1650 m, March 1973, F. H. Oliveira." Also included in the type-series are numerous specimens from other localities in Brazil and a few specimens from Argentina and Ecuador.

### *Macroteleia ligula*, new species

(Fig. 10)

From *M. concinna*, new species, which *ligula* resembles most closely, it may be distinguished as explained in the description of *concinna*.

**Female.**—Length about 5.5 mm. Head distinctly a little wider than thorax, in dorsal view 1.5 times as broad as long, in front view narrowing below eyes and a little narrower at level of antennal sockets than at middle of eyes; malar space about 0.4 as long as eye height; occipital margin usually complete but sometimes not distinct on a narrow medial space; occiput closely and strongly punctate, in part contiguously so; vertex with only a few small punctures, surface very shiny; upper frons closely, finely punctate; lower frons laterally more strongly punctate on a granulose surface; cheeks and temples rugulose punctate up to eyes, there being no shagreened or smooth strip along outer eye margins.

Thorax not or barely narrower at shoulders than at tegulae; shoulders subangulate; mesoscutum rather flat; middle lobe largely uniformly punctate but most closely punctate anteriorly; lateral lobes with some shallow punctures; spaces between punctures on mesoscutum smooth and shiny; notaulices relatively broad, foveate; propodeum divided into two well-separated subtriangular lobes; a narrow tongue-like projection from middle of metanotum extending between inner ends of propodeal lobes; propleuron not so completely smooth as in *concinna*; prepectus strongly longitudinally rugulose or rugulose striate; lower part of mesopleuron (below impression) finely and

closely punctate; metapleuron rugose; fore wings extending to end of fourth abdominal tergite.

Abdomen about 2.7 times as long as head plus thorax; all tergites longer than broad, all except first conspicuously so; first tergite longitudinally rugose striate; second and third tergites strongly longitudinally rugulose punctate; fourth strongly and contiguously punctate; fifth closely but more weakly punctate; sixth rugulose on dorsal edge, very finely longitudinally striate on sides; dorsolateral carinae usually well developed on second tergite; venter closely punctate and with a median longitudinal keel on sternites 2-5.

Black; scape and pedicel of antenna, and first four flagellar segments almost entirely, yellow, first and second flagellar segments sometimes a little brownish above; legs, including all coxae, yellow; wings hyaline or subhyaline.

**Male.**—In basic characters similar to female; flagellar segments 4-9 of antenna at least as broad as long; abdomen very slender with tergites 1-5 longer than broad, 6 nearly as long as broad, and 7 about as long as broad at base and narrowing only slightly to apex, which is weakly emarginate medially; seventh tergite extending well beyond apex of seventh sternite; first tergite coarsely longitudinally rugose striate; tergites 2-4 densely rugulose punctate; dorsolateral carinae prominent on tergites 2 and 3; hind coxae of the single known male a little darkened basally.

**Holotype female.**—USNM 73579.

**Distribution.**—The type-series, which comprises all the known specimens, consists of the following: Holotype labeled "Turrialba, C. R., 19.vii.1965, P. J. Spangler;" eight female paratypes from Costa Rica, Honduras, Trinidad, Canal Zone, and Brazil, and a single male paratype from Trinidad.

### *Macroteleia linearis*, new species

A very distinct species of the *macrogaster* group. It differs from all the other known members of this group in its extremely slender form and its somewhat lenticular head.

**Female.**—Length of holotype 4.8 mm. Head rather lenticular, in dorsal view roundly narrowing forward, 1.5 times as broad as long; as seen from in front circular, narrowing below eyes and narrower at level of antennal sockets than at middle of eyes; head very shiny; malar space 0.4 as

long as eye height; occiput completely margined, rugulose punctate; vertex with fine reticulate microsculpture and a few widely spaced, shallow punctures; upper frons sparsely punctate; lower frons granularly rugulose; cheeks and temples with well-separated punctures, a narrow smooth and polished strip along outer eye margin, fading out below before reaching lower limit of eye, cheek being finely shagreened here adjacent to eye; pedicel of antenna and flagellar segments 1-3 subequal in length, elongate; club about five times as long as wide.

Thorax narrowing forward from tegulae; shoulders evenly rounded, with no suggestion of angulation; mesoscutum about as long as wide; notaulices very fine, not foveolate; middle lobe of mesoscutum sharply punctate, punctures well separated, especially on posterior half, interspaces smooth and polished; lateral lobes smooth and shining with scattered minute punctures; propodeum very short medially, where it is less than half as long as scutellum; propleuron very shiny, faintly and sparsely punctate; prepectus weakly longitudinally rugulose; mesopleuron closely and finely rugulose punctate below impression; mesosternum closely punctate; metapleuron narrowly longitudinally striate above, finely rugulose punctate below; wings extending to middle of fourth abdominal tergite.

Abdomen very slender, more than three times as long as head plus thorax; first tergite much longer than broad; second, third, and fourth tergites nearly twice as long as broad, fifth tergite more than twice as long as its greatest width, sixth three times as long as broad at base; tergites 1-5 longitudinally striate, sixth with a few scattered punctures on dorsal edge, longitudinally striate on sides; dorsolateral keels sharp and complete on second tergite and on base of third; venter of abdomen closely and strongly longitudinally striate; sternites 2-4 with a well-developed median longitudinal keel.

Black; antennae entirely darkened except for brownish-yellow scape; legs, including coxae, brownish yellow, hind coxae darkened basally; all tarsi weakly darkened.

**Holotype female.**—USNM 73578.

**Distribution.**—Known only from the holotype, which was collected in Ramsey County, Minn., 29 August 1972, by A. C. Peterson.

***Macroteleia macrogaster* Ashmead**

(Figs. 23 and 41)

*Macroteleia macrogaster* Ashmead, 1893: 217. ♀, ♂.

The male and female, which Ashmead described under this name, are two different species. Masner and Muesebeck (1968) selected the male as the lectotype because the female was fragmentary and otherwise in very poor condition; and based on the male the species belongs in the small group of Nearctic species in which the dorsum of the abdomen is almost completely longitudinally striate, the metapleura are largely longitudinally striate, the basal segments of the antennal flagellum in the female are unusually elongate, and the third segment of the antennal flagellum in the male is greatly lengthened. From its closest relatives *macrogaster* may be distinguished as shown in the key.

**Female.**—Length around 4.7 mm. Head very slightly broader than thorax, in dorsal view about 1.5 times as broad as long, in front view subquadrate, as broad at level of antennal sockets as at middle of eyes; malar space half as long as eye height; occiput carinately margined only at sides, closely rugulose punctate; vertex very delicately longitudinally roughened; upper frons largely strongly and contiguously or confluent punctate to rugulose punctate; lower frons rugulose; cheeks and temples closely rugulose punctate; a very narrow smooth and polished strip along outer eye margins, fading out below at lower limits of eyes; first three segments of antennal flagellum much lengthened, first longer than, and second about as long as, pedicel, third a little shorter but still twice as long as fourth segment; club of antenna slender, about six times as long as wide.

Thorax noticeably narrowing forward from tegulae; shoulders weakly subangulate; notaulices sharply impressed but usually not distinctly foveolate; middle lobe of mesoscutum closely but separately punctate (punctures usually not contiguous even anteriorly, where they are densest); lateral lobes sparsely and finely punctate on a smooth and shiny surface; propodeum medially about as long as scutellum, with two closely parallel and rather prominent longitudinal carinae medially and several longitudinal ridges laterad of each of those; propleuron very shiny and partly smooth; prepec-

tus very finely rugulose; mesopleuron closely longitudinally rugulose below impressed area; mesosternum closely and finely punctate; metapleuron largely longitudinally striate; wings extending just about to end of fourth abdominal segment.

Abdomen about twice as long as head plus thorax; tergites 2 and 3 a little longer than broad and tergite 6 a little more than twice as long as broad at base; tergites 1, 4, and 5 usually subequal in length and width or slightly broader than long; tergites 1-4 closely longitudinally striate; 5 medially longitudinally rugulose punctate, more or less rugulose striate laterally; 6 with some elongate punctures on dorsal edge, longitudinally rugulose or rugulose striate on sides; dorsolateral carinae well developed on tergites 2 and 3; venter of abdomen strongly longitudinally striate and with a distinct median longitudinal keel on sternites 2-5.

Black; scape of antenna light brown; legs yellowish brown, all coxae usually darkened, sometimes black; tarsi darkened; wings hyaline.

**Male.**—In general like female; second segment of antennal flagellum hardly as long as fourth, third as long as first and second combined and twice as long as second or fourth; apex of abdomen with a very stout, broadly based spine (eighth segment) projecting back from beneath seventh tergite, which is strongly transverse and is far surpassed by seventh sternite.

**Lectotype male.**—(Selected by Masner and Muesebeck (1968: 403), USNM 24535.

**Distribution.**—In addition to the lectotype, which is from Texas, I have seen five females and five males from scattered localities in Ontario, Maine, Pennsylvania, District of Columbia, Virginia, South Carolina, and Michigan. Two specimens from Mt. Holly Springs, Pa., were reared from eggs of *Orchelimum* sp.

***Macroteleia mira*, new species**

Although this species has a well-developed median longitudinal keel on abdominal sternites 2-4, as in the *M. punctulata* group, the propodeum of the female is not divided, as normally in the species of that group, but resembles that of *M. virginiana* and its relatives, in which, however, the venter of the abdomen lacks a median keel; moreover *mira* is conspicuously larger than species of

the *virginiensis* complex, in size resembling *punctulata* and related species. Among the New World species of *Macroteleia* it appears to be unique.

**Female.**—Length about 6 mm. Head distinctly wider than thorax, in dorsal view about twice as broad as long, in front view circular, narrowing strongly below large eyes so that it is decidedly narrower at level of antennal sockets than at middle of eyes; malar space only about one-fourth as long as eye height; ocelli unusually large, distance between median and lateral ocelli barely equal to diameter of an ocellus; temples narrow and strongly receding; occiput sharply margined, middle part of margin formed by lower edge of a tight row of foveae that are open above; occiput, vertex, temples, and cheeks closely, confluent punctate to rugulose punctate; upper frons strongly, contiguously punctate; lower frons rugose laterally; first segment of antennal flagellum about as long as second and third segments combined, second as long as pedicel.

Thorax fully as high as broad, dorsally strongly convex, and narrowing slightly forward from tegulae; shoulders gently rounded; notaulices deep, weakly foveolate; middle lobe of mesoscutum rather uniformly, finely punctate, spaces between punctures mostly smooth and shiny; lateral lobes also rather evenly punctate but more shallowly; propodeum not divided, only very slightly emarginate behind, medially more than half as long as first abdominal tergite, and with two closely placed, nearly parallel, median longitudinal keels, laterally rugose; propleuron largely smooth and shining above, rugulose along lower margin; prepectus rugulose punctate; mesopleuron closely, irregularly punctate anteriorly, less densely punctate below impression, spaces between punctures smooth; metapleuron strongly rugose; mesosternum finely punctate but very shiny; wings extending to middle of fifth abdominal tergite.

Abdomen hardly twice as long as head plus thorax, narrow at base, widest at base of fourth tergite; first tergite as broad as long; second to fourth tergites longer than broad; fifth a little broader than long; sixth twice as long as broad at base and much broader at base than segment is high, in holotype barely longer than fifth tergite; first tergite coarsely longitudinally rugose; second with irregular longitudinal ridges, intervals between these coarsely punctate; third in general

sculptured like second but less coarsely; fourth and fifth tergites contiguously, coarsely punctate but sculpture becoming gradually weaker caudad; sixth tergite closely but weakly punctate above, strongly rugulose on sides with no indication of striation there; dorsolateral carinae weakly indicated on second tergite; venter of abdomen rugulose to rugulose punctate on sternites 1–3, punctate on 4 and 5; sternites 2–4 with a well-developed median longitudinal keel.

Black; scape of antenna brownish yellow; pedicel and first three flagellar segments yellowish brown below, darkened above, fourth flagellar segment and club black; legs, including all coxae, golden yellow; wings somewhat smoky.

**Holotype female.**—In the Canadian National Collection.

**Distribution.**—Known only from the holotype, which is labeled "Brazil, São Paulo, Est. biológico Boracéia, 850 m., ii.26.57, M. E. Erwin."

### *Macroteleia munda*, new species

(Fig. 37)

This appears to be most similar to *M. sanctivincenti* Ashmead, from which it may be distinguished as pointed out in the description of that species.

**Female.**—Length of available specimens 3.5–3.8 mm. Head slightly wider than thorax, in dorsal view fully two-thirds as long as wide, in front view just about as broad at level of antennal sockets as at middle of eyes; cheeks and temples strongly and closely rugulose punctate up to eyes; occiput completely margined although weakly and irregularly so medially, strongly and contiguously punctate; vertex shiny, less closely and somewhat irregularly punctate; upper frons closely and sharply punctate.

Thorax slender, narrowing forward slightly from tegulae; shoulders rounded; mesoscutum strongly convex; notaulices narrow, foveolate; middle lobe of mesoscutum completely punctate, closely and sharply anteriorly, somewhat more sparsely on posterior half; narrow lateral lobes weakly punctate; propodeum divided into two narrowly separated subtriangular lobes that are broadly rounded on their inner ends; in some specimens a weak projection extends from metanotum toward space between these lobes; propleuron

smooth in upper angle, rugulose below: prepectus longitudinally rugulose punctate; lower part of mesopleuron largely smooth and polished; anterior wings usually extending to near end of fifth abdominal tergite, sometimes beyond it.

Abdomen only slightly more than twice as long as head plus thorax; tergites 1-3 each a little longer than broad, 4 subequal in length and width, 5 a little broader than long, and 6 about 2.5-3 times as long as broad at base: first tergite coarsely rugose striate; tergites 2-5 densely and strong longitudinally rugulose punctate or reticulate punctate, punctures virtually contiguous and sculpture becoming gradually weaker caudad; sixth tergite punctate above, irregularly longitudinally striate on sides; dorsolateral carinae not distinct beyond first tergite; venter of abdomen rugulose punctate; a weak median longitudinal keel on sternites 2-4.

Black; scape and pedicel of antenna yellow, flagellar segments 1-4 yellowish below, brown above, club black; legs, including all coxae, bright yellow; tarsi weakly darkened; wings subhyaline.

**Male.**—In basic characters like the female; flagellar segments 4-9 of antenna subquadrate; propodeum rugulose, with several prominent irregular, longitudinal ridges; abdomen very narrow and largely parallel-sided: first tergite fully as long as broad at apex: second and third tergites about 1.5 times as long as broad: fourth distinctly longer than broad: fifth usually just broader at base than long; sixth much broader than long; seventh clearly surpassing seventh sternite, broader at base than long and narrowing only a little to apex where it is a little emarginate; first tergite coarsely longitudinally rugose striate, following contiguously punctate but sculpture becoming gradually weaker caudad; dorsolateral carinae prominent on tergites 1-3; venter closely and shallowly punctate; a prominent median longitudinal keel on sternites 2-5; antennal scape yellowish, pedicel and flagellum largely yellowish brown below, dark above; coxae usually piceous, posterior pair darkest, otherwise legs brownish yellow.

**Holotype female.**—In the Museum of Comparative Zoology, Harvard University.

**Distribution.**—Brazil. Known only from the type-series, which consists of the following: Six females (1 the holotype) and 1 male labeled "Brazil, Paraná, Capão, Imbula, Curitiba, 4-25.ii.69, C.

Porter, A. Garcia;" 4 females and 10 males (paratypes from Represa Rio Grande, Guanabara, Brazil); 1 female paratype from Linhares, E. Santo, Brazil, 1 from São Paulo, 1 female and 1 male from Est. Rio de Janeiro, Silva Jardim, Brazil, 1 male from S. Bocaina, Brazil, and 1 female from Apucarana, Pará, Brazil.

### *Macroteleia neomexicana*, new species

Although very similar to *M. discors*, new species, this species seems to be distinct. The thorax narrows more strongly and evenly forward from the tegulae; the notaulices are much finer and not distinctly foveolate; the middle lobe of the mesoscutum is more uniformly punctate, even near the notaulices; the temples are not so distinctly receding as in *discors*; the prepectus is smoother; and the fifth and sixth abdominal tergites in the female are differently sculptured.

**Female.**—Length about 3.8 mm. Head barely wider than thorax, in dorsal view about 1.6 as broad as long, in front view narrowing below eyes so that it is a little narrower at level of antennal sockets than at middle of eyes; malar space about 0.4 as long as eye height; occiput margined, but weakly and irregularly at middle; occiput, vertex, and upper frons finely shagreened, with well-separated small punctures; cheeks rugulose.

Thorax narrowing evenly forward from tegulae; shoulders not defined; notaulices very fine, not distinctly foveolate; mesoscutum as long as broad; middle lobe of mesoscutum completely, closely, and evenly punctate, even close to notaulices, interspaces with weak microsculpture; lateral lobes with weaker but distinct punctures; propodeum less than half as long as first abdominal tergite, weakly notched at middle behind; propleuron largely finely shagreened; prepectus very broad, very shiny, and partly smooth and polished; mesopleuron closely and very finely punctate below impression; metapleuron closely punctate; fore wings extending beyond apex of fourth abdominal tergite.

Abdomen about twice as long as head plus thorax; first tergite subequal in length and width; tergites 2-5 broader than long; sixth tergite about three times as long as broad at base; first tergite strongly longitudinally rugose; second and third tergites strongly, very evenly and contiguously, umbilicately punctate; fourth tergite simi-

lar except toward apex where some interspaces are apparent; fifth medially similarly punctate but more weakly and less densely, laterally weakly rugulose; sixth very densely punctate on dorsal edge, longitudinally rugulose on sides; dorsolateral carinae not indicated on second tergite; venter closely, evenly punctate and without a median longitudinal keel.

Black; scape of antenna yellow; pedicel and first four flagellar segments brownish, club black; legs, including all coxae, yellow; wings hyaline.

**Holotype female.**—USNM 73572.

**Distribution.**—Known from only two females (holotype and paratype) taken at Springer, N. Mex., by C. N. Ainslie, the holotype 7 September 1909, and the paratype 27 August 1909.

### *Macroteleia nitida*, new species

This appears to be most closely related to *M. munda*, new species, but it is smoother and more shiny, the upper frons is more sparsely punctate, the cheeks and temples are less roughened, having large separated punctures (rugulose punctate in *munda*), the shoulders of the thorax differ in being broader and angulate, and all coxae of the female are black.

**Female.**—Length of holotype 3.2 mm. Extremely shiny. Head slightly broader than thorax, in dorsal view 1.4 times as broad as long, in front view subquadrate, its width at level of antennal sockets just about equal to that at middle of eyes; cheeks broadly rounded; malar space about half as long as eye height; occipital margin rather well defined medially although not bordered there by a row of large foveae; occiput with well-separated punctures, interspaces mostly smooth and shiny; vertex with a few shallow punctures on a very smooth surface; upper frons with well-separated, very shallow punctures, interspaces with very delicate microsculpture; lower frons also with well-separated punctures, which are smaller, weaker, and closer together below; cheeks and temples with large separated punctures.

Thorax about as wide at shoulders as at tegulae; shoulders angulate; mesoscutum smooth and polished, with shallow, separate punctures on middle lobe, which are most numerous anteriorly and very sparse on posterior half; lateral lobes not distinctly punctate; notaulices sharp and weakly foveolate; propodeum divided into two distinctly separated

subtriangular lobes; a conspicuous tongue-like projection from middle of metanotum extending into space between propodeal lobes; propleuron smooth and polished in upper anterior angle, rather weakly rugulose elsewhere; prepectus not striate but with a few irregular elongate punctures below, largely smooth on upper part; mesopleuron smooth and polished below impression; wings extending to middle of fifth abdominal tergite.

Abdomen slender, about 2.3 times as long as head plus thorax; tergites strongly convex; in holotype all tergites except fifth somewhat longer than broad, fifth slightly broader than long, sixth about three times as long as broad at base; tergites 1-3 rather coarsely rugulose punctate, sculpture becoming gradually less coarse caudad; tergites 4 and 5 medially closely but separately punctate, fifth closely, though brokenly, longitudinally striate at sides; sixth irregularly punctate on dorsal edge, very closely and finely, longitudinally striate on sides; dorsolateral carinae present on basal half of second tergite; venter of abdomen very shiny, strongly punctate anteriorly, more weakly posteriorly; median longitudinal keel distinct on sternites 1-4, faint on 5.

Black; scape of antenna yellow; pedicel and first four flagellar segments light brown below, darkened above, club black; legs yellow except all coxae, which are black or blackish, and tarsi, which are a little darkened apically; wings hyaline.

**Holotype.**—In the Canadian National Collection.

**Distribution.**—Known only from the holotype, which is labeled "Putumayo, Colombia, 400 m., 0°50' N., 76°30' W., 30.ix.1972, J. Helava."

### *Macroteleia occipitalis*, new species

(Fig. 5)

This closely resembles *M. subtilis*, new species, but it is evidently distinct. It is slightly smaller, the occiput is more delicately sculptured, the wings are relatively longer, the legs are normally darker, and the female propodeum is differently constructed.

**Female.**—Length about 4 mm. Head thick, not more than 1.3 times as broad as long in dorsal view, in front view subquadrate, fully as broad at level of antennal sockets as at middle of eyes; malar space more than half as long as eye height;

occiput with widely separated, very shallow, or even faint, punctures on a surface of delicate microsculpture; occiput completely margined, medially by lower edge of a tight row of foveae that are open above; upper temples (above middle of eyes) with fine microsculpture like occiput; lower temples and cheeks weakly rugulose punctate except narrowly along eyes where they are smooth and shiny; ocelli unusually small; club of antenna stout, less than four times as long as broad.

Thorax a little narrower than head and narrowing forward slightly from tegulae; shoulders angulate; notaulices sharp and fine, not distinctly foveolate; middle lobe of mesoscutum closely but shallowly punctate anteriorly, sparsely and weakly punctate on posterior half where it is largely smooth and shiny; propodeum divided into two very narrowly separated lobes that are broadly truncate at inner ends; metanotum with a small median triangular process extending back to cleft between propodeal lobes; propleuron smooth and shiny in upper angle, rugose below; prepectus longitudinally rugulose striate; mesopleuron punctate below impression; metapleuron rugose; fore wings usually extending to middle of fifth abdominal tergite.

Abdomen usually about 2.2 times as long as head plus thorax; all tergites at least a little longer than broad in available specimens, sixth about four times as long as broad at base where it is narrower than segment is deep; tergites 1-4 rather weakly longitudinally rugulose punctate, sculpture becoming gradually weaker caudad; apex of fourth tergite, and all of fifth medially, finely shagreened and with a few punctures, fifth irregularly and very finely longitudinally aciculate at sides; sixth tergite also very finely and closely aciculate on sides; dorsolateral carinae sometimes complete on second tergite although very delicate; venter of abdomen with shallow, mostly elongate punctures; sternites 2-4 with a weak median longitudinal keel.

Black; antennal scape yellowish brown, remainder of antenna piceous to black; trochanters brownish yellow, all coxae and femora piceous to black, tibiae usually much darkened but at least posterior pair paler on basal half; wings hyaline.

**Male.**—Essentially like female; antennal flagellar segments 4-9 not or barely longer than broad; abdomen very slender; first four tergites sculp-

tured as in female; fifth and sixth weakly punctate and very shiny, fifth noticeably longer than broad in single known male, sixth slightly broader than long; seventh just broader at base than long, shallowly notched medially at apex, and clearly surpassing seventh sternite; dorsolateral carinae strong on tergites 1-3; median keel on venter of abdomen more prominent than in female.

**Holotype female.**—USNM 73575.

**Distribution.**—The holotype is from Summit, Panama Canal Zone, collected in November 1946 by N. L. H. Krauss. Female paratypes (10) are from Peru, Brazil, Colombia, Trinidad, and Costa Rica: the single male paratype is from Peru, taken at the same time and place as the Peruvian female paratype, both of which are in the British Museum. No further material is known.

### *Macroteleia parilis*, new species

(Fig. 16)

This is very similar to *M. secreta*, new species, but it differs especially in the sculpture of the abdomen and in the less strongly angulate shoulders of the thorax.

**Female.**—Length of available specimens ranging from 4.5 to 6 mm. Head stout, in dorsal view usually about 1.3 times as broad as long, in front view fully as broad at level of antennal sockets as at middle of eyes, and in side view about as long as high; cheeks swollen; malar space nearly half as long as eye height; occiput completely margined, closely punctate; cheeks and temples rugulose punctate, cheeks very coarsely so up to eyes; vertex and upper frons shiny, vertex sparsely punctate; lower frons laterally finely rugulose punctate and rather dull.

Thorax very nearly or quite as broad as head, not narrowing forward noticeably from tegulae; shoulders subangulate; notaulices foveolate or coarsely punctate; middle lobe of mesoscutum rather flat, closely punctate anteriorly and usually at posterior end, sparsely punctate in middle, interspaces smooth; lateral lobes smooth except for some sparse and weak punctures, shiny; propodeum divided into two subtriangular lobes; a tongue-like projection from metanotum extending back between propodeal lobes; propleuron smooth and shiny in upper angle, elsewhere more or less roughened; prepectus rugulose striate; meso-

pleuron finely and closely punctate below impression; metapleuron closely punctate or rugulose punctate posteriorly; wings usually extending only to middle of fourth abdominal tergite, but to end of that tergite in occasional small specimens.

Abdomen normally about three times as long as head and thorax combined; all tergites much longer than broad, sixth usually four to six times as long as broad at base; first tergite rugulose medially, more or less longitudinally striate laterally; tergites 2-5 very densely and very shallowly punctate, fifth laterally with some fine longitudinal roughening on basic sculpture; sixth tergite densely and finely rugulose punctate on dorsal edge, very finely longitudinally striate on sides; second tergite with dorsolateral carinae weak or incomplete; venter of abdomen shiny, very closely and finely punctate, and with a median longitudinal carina, which is distinct on sternites 2-4, though not very prominent, and is sometimes weakly indicated on fifth sternite.

Black; scape of antenna entirely yellowish; pedicel and first four flagellar segments brownish yellow to brown, club black; legs yellowish except all coxae, which are more or less darkened; wings hyaline; abdomen sometimes slightly tinged with brown.

**Male.**—Antennal flagellar segments 4-9 subequal, about as broad as long; propodeum with several irregular longitudinal keels, the two submedian ones separated by a distance equal to length of propodeum; first abdominal tergite longitudinally rugose striate; tergites 2-5 closely and finely reticulate, sculpture becoming weaker caudad; sixth and seventh tergites delicately sculptured; tergites 2-5 usually somewhat longer than broad, first, sixth, and seventh tergites broader than long, seventh truncate at apex and surpassing seventh sternite; dorsolateral carinae well developed on second tergite and on base of third; venter of abdomen densely punctate and with a prominent median longitudinal keel on sternites 2-5; wings extending nearly to end of fourth abdominal tergite.

**Holotype female.**—USNM 73576.

**Distribution.**—Known only from the type-series. This comprises, in addition to the holotype, which was taken in Brown County, Tex., 5 October 1937, paratypes (females and males) from San Antonio, Dallas, Laredo, Brownsville, Mathis,

Brackettville, Simton, Cameron County, Bexar County, and Kendall County, Tex.; from Garden City, Elgin, and Auburn, Ala., and from Compass Lake, Fla.; also a male paratype from the Texas-Oklahoma border.

### *Macroteleia pilosa*, new species

(Fig. 35)

Apparently this is most closely related to *M. grandis*, new species, from which it may be immediately distinguished, however, by its smaller size, its dark coxae, its dense covering of short, recumbent hair, especially on the thoracic pleura and the coxae, and its densely sculptured thoracic pleura.

**Female.**—Length about 6.8 mm. Head strongly transverse, as seen from above 1.7 times as broad as long, in front view rather circular, and narrower at level of antennal sockets than at middle of eyes; malar space about 0.4 as long as eye height; occiput margined only at sides, very sharply and very densely punctate; vertex and upper frons with separated punctures on a shagreened surface; lower frons laterally rugulose punctate; cheeks and temples closely and strongly rugulose punctate.

Thorax at tegulae fully as wide as head, gradually narrowing forward from tegulae; shoulders not prominent; mesoscutum only slightly convex; middle lobe completely, closely, and rather evenly punctate, small interspaces mostly smooth and shining; lateral lobes also closely punctate but punctures smaller and weaker; notaulices sharply defined, weakly foveolate; propodeum divided into two large, well-separated subtriangular lobes; a small, short, and broad protuberance of metanotum extending back between propodeal lobes; propleuron completely rugulose punctate; prepectus rugulose; lower part of mesopleuron closely and finely punctate and impression somewhat rugulose in deepest part; mesosternum completely, closely, and finely punctate; metapleuron granulose or finely rugulose; entire thorax densely covered with appressed hair, that on dorsum short, that on sides and sternum longer and directed backward, in some areas so dense that surface sculpture is obscured; hind coxae very densely and finely punctate and densely clothed with pale, appressed hair; fore wings extending to middle of fourth abdominal tergite.

Abdomen three times as long as head plus thorax; all tergites much longer than broad, fifth about twice as long as its greatest breadth, sixth more than six times as long as broad at base; first tergite rugulose punctate, longitudinally so posteriorly; second and third tergites very densely and very finely rugulose punctate; fourth and fifth very densely punctate; dorsal edge of sixth tergite rugulose punctate. sides closely and finely longitudinally aciculate; dorsolateral keels well developed on second tergite and indicated on third; venter of abdomen finely punctate, closely so on basal sternites, more sparsely on apical ones; a median longitudinal keel on sternites 2-4, although it is very weak on fourth sternite and does not reach end of segment; entire abdomen above and below clothed with fine subappressed hair.

Black; antennal scape brownish yellow; pedicel and first four flagellar segments brownish yellow, club blackish; wings slightly smoky; legs largely brownish yellow but all coxae black or blackish (fore coxae pale below) and hind femora darkened except at base and extreme apex.

**Male.**—Antennae slender; flagellar segments 4-9 subequal and a little longer than broad; seventh abdominal tergite strongly transverse, more than twice as broad as long, not or barely surpassing seventh sternite, and weakly emarginate at apex; dorsolateral keels prominent on tergites 1-3 and indicated on 4; legs colored as in female except that middle femora also are somewhat darkened on thickened parts and hind tibiae are darkened apically.

**Holotype female.**—USNM 73577.

**Distribution.**—Known only from two females (holotype and paratype) and one male paratype labeled as having been reared from tettigoniid eggs at Manáos, Brazil, March 1962.

### *Macroteleia platensis* Brèthes

(Fig. 12)

*Macroteleia platensis* Brèthes, 1916: 410. ♀.

I have not seen the type of this species but through the kindness of Luis De Santis, of the Universidad de la Plata, I have had the opportunity to examine topotypical specimens identified as *platensis*. These agree with the original description and I assume they are correctly identified. The species is very similar to *M. foveolata*,

new species, but differs as noted in the description of that species and in the key.

**Female.**—Length 3.5-4 mm. Head rather thick, in dorsal view about 1.35 times as broad as long, in front view fully as broad at level of antennal sockets as at middle of eyes; malar space about half as long as eye height; cheeks somewhat swollen and entirely closely rugulose punctate; temples similarly sculptured although less coarsely; occiput completely margined, medially rather irregularly by lower edge of a tight row of foveae that are open above; occiput and upper frons closely, shallowly, and, in part, contiguously punctate on a finely shagreened ground; lower frons strongly rugulose, with some shallow punctures.

Thorax slightly narrower than head, narrowing forward a little from tegulae; shoulders subangulate; notaulices fine and weakly punctate or foveolate; middle lobe of mesoscutum very closely punctate anteriorly and near posterior end but sparsely punctate medially; lateral lobes very finely and weakly punctate; surface of mesoscutum usually covered with delicate microsculpture or finely shagreened; propodeum divided, but lobes very narrowly separated and their inner ends truncate; propleuron largely rugulose punctate, smooth only in a small space above; prepectus rugulose striate; mesopleuron below impression rugulose punctate; metapleuron rugulose; anterior wings extending to beyond end of the fourth abdominal tergite.

Abdomen 2-2.3 times as long as head plus thorax; tergites 1-3 usually a little longer than broad; 4 and 5 usually subequal in length and width; 6 normally 2.5-4 times as long as broad at base; tergites 1-4 densely rugulose punctate, fourth more weakly sculptured than others; fifth tergite closely punctate medially, weakly rugulose striate on sides; sixth tergite usually closely covered with elongate punctures on dorsal edge, finely longitudinally striate on sides; dorsolateral carinae distinct though weak on second tergite; venter of abdomen closely and finely punctate; a median longitudinal carina on sternites 2-5, very weak on sternite 5.

Black; antennal scape brownish yellow; pedicel and basal flagellar segments usually pale brown beneath, darker above, club black; all coxae black or blackish, hind femora sometimes partly darkened; wings hyaline.

**Male.**—Essentially similar to female; segments 4-9 of antennal flagellum not or barely longer than

wide; abdomen very slender; apical tergites shiny and weakly punctate; seventh tergite clearly surpassing seventh sternite, decidedly broader than long, and narrowing only slightly toward apex where it is broadly and deeply notched, with lateral angles acute.

**Holotype.**—In the Natural History Museum, Buenos Aires.

**Distribution.**—I have seen only a few specimens of both sexes, all from Argentina.

### *Macroteleia punctulata* Kieffer

(Figs. 22 and 42)

*Macroteleia punctulata* Kieffer, 1909: 249. ♂.

*Macroteleia gladiator* Kieffer, 1919 (1909): 316. ♀, ♂.  
New synonymy.

I have not seen the type of *punctulata*, but I believe I have identified the species correctly, and in that case *M. gladiator*, the type-series of which I have studied, is certainly a synonym. From all related species *punctulata* differs in the smooth and polished fourth and fifth abdominal sternites of the female and the structure of the seventh and eighth abdominal segments of the male.

**Female.**—Length normally 5–7 mm. Head barely wider than thorax and rather thick, about 1.4 times as broad as long in dorsal view, as seen from in front just about as broad at level of antennal sockets as at middle of eyes; cheeks bulging a little; malar space about 0.4 as long as eye height; occiput not margined medially, covered with well-separated, small and shallow punctures on a finely alutaceous surface; on upper part of occiput and vertex, punctures usually separated by more than their diameter; upper frons sculptured like most of occiput; lower frons strongly granulose and closely, shallowly punctate; cheeks and temples rugulose punctate; a very narrow shagreened and subopaque strip along outer eye margins.

Thorax narrowing only very slightly forward from tegulae; shoulders broadly rounded; mesoscutum smooth and shiny, weakly and narrowly alutaceous adjacent to notaulices, which are sharp but rather narrow and indistinctly foveolate; middle lobe of mesoscutum punctate, closely so anteriorly, often very sparsely so posteriorly; lateral lobes shiny, with a few weak and minute punctures; propodeum divided into two widely separated subtriangular lobes (fig. 42); a short and

broad median projection from metanotum extending to gap between propodeal lobes; propleuron smooth and polished in upper anterior angle, elsewhere finely rugulose punctate; prepectus longitudinally striate; mesopleuron largely smooth and polished below oblique impression; metapleuron rugose; wings usually extending only to middle of fourth abdominal tergite.

Abdomen usually more than three times as long as head plus thorax; all tergites much longer than broad, fifth usually three times as long as broad at base, sixth, which is very strongly compressed laterally, often more than six times as long as broad at base; first tergite strongly longitudinally rugose; second and third tergites closely, longitudinally rugulose punctate; fourth tergite rather similarly sculptured but much more weakly than second or third and often largely smooth and shiny medially on apical half; fifth noticeably compressed laterally, usually with a few weak punctures down middle, otherwise very finely and closely longitudinally aciculate; sixth extremely narrow and very finely and closely longitudinally aciculate on sides, sometimes even on dorsal edge; dorsolateral carinae usually well developed and complete on second tergite, weak and incomplete on third; venter of abdomen punctate on sternites 1–3, largely smooth and polished on 4 and 5; a median longitudinal carina on sternites 2–4 or 2–5, weak on 4, and usually indistinct on 5.

Black: scape of antenna yellow, also pedicel and first four flagellar segments more or less but these often darkened above, club brown to black; legs yellow, coxae often somewhat darkened and occasionally black, and tarsi more or less darkened; wings hyaline.

**Male.**—In general similar to female; segments 4–9 of antennal flagellum hardly longer than broad; propodeum rugulose with two widely separated longitudinal ridges submedially, but sculpture usually obscured by rather dense hair covering; abdomen tapering caudad from third segment; tergites 1–5 conspicuously longer than broad, 6 about as broad as long, 7 about twice as broad at base as long and less than half as long as 6, surpassed by seventh sternite; a sharp, very stout, broad-based spine (eighth abdominal segment) projecting caudad from below seventh tergite; venter with a prominent median longitudinal keel on sternites 2–6.

**Types.**—The location of the holotype of *punctulata* is unknown to me. The female lectotype of *gladiator*, here designated, is in the California Academy of Sciences. It is labeled "Para. Brazil, Baker 102." Of the six additional syntypes in that institution, two females are *punctulata*, but three females and the single male are *M. herbigrada* Brues. Of the four syntypes of *gladiator* in the collection of Cornell University, the three females are *punctulata* and the single male is *herbigrada*.

**Distribution.**—In addition to the type-series of *gladiator*, which is from Para. Brazil, I have seen many specimens of *punctulata* from localities in Mexico, Honduras, British Honduras, Costa Rica, Panama, Trinidad, Venezuela, Colombia, Guyana, Brazil, Paraguay, Peru, and Ecuador and a single Nearctic specimen from Lucedale, Miss. In the U.S. National Museum of Natural History there is a series of *punctulata* from Colombia labeled as having been reared from "cricket eggs" and another series from Venezuela recorded from eggs of *Bucrates capitatus* (DeGeer) (Tettigoniidae).

### *Macroteleia rima*, new species

This somewhat resembles *M. rossi*, new species, and *M. townsendi*, new species, both of which, like *rima*, are known only from Peru. From *rossi* it differs most noticeably in being stouter and in its darker legs, and from *townsendi* in being stouter, in its relatively longer wings, smoother propleuron, and prominent dorsolateral carinae on the second abdominal tergite.

**Female.**—Length about 5.2 mm. Head barely wider than thorax, in dorsal view about 1.4 times as wide as long, in front view about as broad at level of antennal sockets as at middle of eyes; malar space 0.4 as long as eye height; temples receding; occiput sharply margined medially by lower edge of a tight row of foveae; occiput with close but separated punctures, interspaces largely smooth and polished; vertex very shiny, with only a few punctures; upper frons closely but separately punctate, interspaces with a little delicate microsculpture; lower frons with very shallow punctures on a shagreened ground; cheeks and lower temples coarsely and closely punctate, upper temples weakly punctate.

Thorax not distinctly narrowing forward from tegulae; shoulders subangulate; notaulices foveolate or coarsely punctate; middle lobe of

mesoscutum closely punctate on anterior half and at posterior end, sparsely punctate medially, interspaces smooth and polished; lateral lobes very shiny and with a few weak punctures; propodeum divided medially into two narrowly separated lobes, inner ends of which are broadly rounded; a slender, fingerlike projection from metanotum extending back between propodeal lobes; propleuron smooth and polished except narrowly along anterior margin; prepectus rugulose striate; mesopleuron finely punctate below impression; metapleuron coarsely rugose; wings extending to middle of fifth abdominal tergite.

Abdomen about 2.3 times as long as head plus thorax: first and fifth tergites in the three available specimens at least as broad as long, rest longer than broad, sixth about 3.5 times as long as broad at base: first tergite rugulose punctate; tergites 2-5 contiguously, in part confluent, punctate, fifth tergite brokenly striate at sides; sixth dorsally punctate and with some short longitudinal rugulae, on sides finely longitudinally striate; dorsolateral carinae prominent on second tergite and indicated on base of third; venter densely rugulose punctate and with a prominent median longitudinal keel on sternites 2-5.

Black; scape of antenna brownish yellow, remainder of antenna dark brown to black; legs largely brownish yellow but all coxae black, fore and middle femora a little darkened on apical half, and hind femora blackish on apical two-thirds; wings a little infumated.

**Holotype female.**—In the California Academy of Sciences.

**Distribution.**—Known only from the holotype and two female paratypes collected by E. I. Schlinger and E. S. Ross at Tingo Maria, Peru, the holotype 26 October 1954, one paratype 8 October 1954, and the other 9 December 1954.

### *Macroteleia rossi*, new species

This is very similar to *M. concinnus*, new species, but it is clearly distinct. The mesoscutum and head are more finely and less densely punctate: as seen from in front the head is broad below the eyes; the prepectus is partly smooth and polished (in *concinnus* normally coarsely striate or foveate); in the female there is a fingerlike projection from the metanotum into the space between the propodeal lobes (wanting in *concinnus*); and the abdo-

men is not nearly so coarsely sculptured as in *concinna*, with the dorsolateral carinae of the second abdominal tergite poorly developed and incomplete. From *M. townsendi*, new species, which it also resembles, it differs especially in the color of the legs.

**Female.**—Length about 5.5 mm. Head very slightly wider than thorax, in dorsal view about 1.5 times as broad as long, in front view subquadrate, with cheeks bulging a little so that width of head at level of antennal sockets is not less than at middle of eyes; malar space about 0.4 as long as eye height; occiput indistinctly margined medially, shallowly and separately punctate, interspaces smooth; upper frons more closely punctate than upper part of occiput but punctures mostly not contiguous, interspaces smooth; lower frons closely punctate; cheeks and temples closely punctate but punctures mostly separated; a very narrow, smooth, and shiny strip along outer eye margins.

Thorax narrowing forward a little from tegulae; shoulders subangulate; notaulices weakly and irregularly foveolate and less convergent than usually so that middle lobe of mesoscutum is noticeably wider at apex than lateral lobes; middle lobe of mesoscutum minutely punctate, closely but separately anteriorly, very sparsely on posterior half, interspaces smooth; lateral lobes very shiny, with some minute, weak punctures; propodeum divided into two narrowly separated lobes; a small fingerlike projection from metanotum extending back between propodeal lobes; propleuron almost completely smooth and polished; prepectus with a row of several punctures along anterior edge, otherwise largely smooth and polished; mesopleuron largely smooth and polished below impression; metapleuron rugose; wings of holotype torn off, mounted separately on card point.

Abdomen about 2.7 times as long as head plus thorax; all tergites longer than broad, sixth about four times as long as broad at base; tergites 1-5 closely punctate, punctures more or less in irregular longitudinal rows, fifth tergite irregularly, brokenly striate at sides and with some punctures in striae; sixth tergite with close, elongate punctures on dorsal edge, finely and closely longitudinally striate on sides; dorsolateral carinae indicated on second tergite but weak; venter of abdomen closely punctate; median longitudinal keel

well developed on sternites 2-4 but not apparent on 5.

Black; antennal scape yellowish; pedicel and basal flagellar segments dark brown, club black; legs, including coxae, yellow.

**Holotype female.**—In the California Academy of Sciences.

**Distribution.**—Known only from the holotype, which is labeled as having been collected by E. I. Schlinger and E. S. Ross at Tingo Maria, Peru, 8 September 1954.

### *Macroteleia rufithorax*, new species

Superficially this is rather similar to *M. eximia*, new species, but it differs especially in lacking a median keel on the mesoscutum and in the character of the abdominal sculpture.

**Female.**—Length of holotype 6.5 mm. Head, in dorsal view, about 1.5 times as broad as long; malar space half as long as eye height; occiput completely margined although more weakly and irregularly so medially; occiput, vertex, frons, temples, and cheeks coarsely rugose punctate.

Thorax very little narrower than head, narrowing only slightly forward from tegulae; shoulders broadly rounded; mesoscutum weakly convex; notaulices coarsely foveate; middle lobe of mesoscutum with large, irregular punctures that are in part confluent, posteriorly with some irregular, smoothed, longitudinal rugae; lateral lobes with some shallow punctures; propodeum divided into two narrowly separated lobes that are subtriangular but have inner ends broadly truncate; propleuron smooth and shiny above, finely rugulose below; prepectus crossed by several prominent ridges; mesopleuron largely smooth below impression; metapleuron rugose; wings extending to a little beyond middle of fourth abdominal tergite.

Abdomen more than three times as long as head plus thorax; all tergites much longer than broad, fifth twice, sixth more than six times as long as broad at base; sixth segment strongly compressed, distinctly higher than broad at base; first tergite longitudinally rugose striate; tergites 2-5 longitudinally rugulose punctate, sculpture becoming gradually weaker caudad; sixth tergite finely rugulose on dorsal edge, very finely and closely longitudinally striate on sides; dorsolateral carinae well developed on tergites 2 and 3 and weakly indicated on base of 4; venter finely, evenly punctate.

tate; a well-developed median longitudinal carina on sternites 2-5.

Head black; scape of antenna and flagellum largely, including underside of club, brownish yellow, upper surface of club brown; thorax entirely reddish yellow; legs, including all coxae, concolorous with thorax; wings usually subhyaline; abdomen black except extreme base of first tergite, which is concolorous with thorax.

**Male.**—In general similar to female; flagellar segments 4-9 of antenna about as long as broad; propodeum very short and with two prominent submedian keels; wings extending to end of fourth abdominal tergite; abdomen about 2.5 times as long as head plus thorax; sixth abdominal tergite a little broader than long; seventh tergite far surpassing seventh sternite, broader at base than long, narrowing gradually to apex where it is sharply notched medially.

**Holotype female.**—USNM 73581.

**Distribution.**—Known only from the holotype, which is labeled "Cambito, Trujillo Prov., Dom. Rep., Dec. 22, 1955, J. Maldonado-Capriles Coll." and a male paratype (in the Canadian National Collection) labeled "Dominican Republic, Constanza, Cord. Central: 6.x.1972, 1250m, J. Klapperich."

***Macroteleia rufiventris* (Szabó),  
new combination**

(Fig. 14)

*Triteleia rufiventris* Szabó, 1957: 258, 258. ♀.

Although I have not seen the type, I believe I have correctly identified as this species specimens from Panama, Costa Rica, Mexico, and Missouri. If so, the color of the abdomen varies from largely reddish to black. The most northerly specimen I have seen (a female from Missouri) has the abdomen completely black dorsally. Of two males taken at the same locality in Oaxaca, Mexico, one has a completely black abdomen, whereas the abdomen of the other is largely ferruginous. I have been unable to find any morphological basis for the recognition of more than one species in the available material that I am identifying as *rufiventris*. From *M. crinita*, new species, and *M. carinata* Ashmead, which are closely related, *rufiventris* differs conspicuously in the presence of a stout median keel on the disc of the scutellum and in hav-

ing the female propodeum not distinctly divided, and from *M. unica*, new species, which has a stout keel on the scutellum, it may be readily distinguished as shown in the key.

**Female.**—Length of available specimens 5.5-6.3 mm. Head barely wider than thorax, in dorsal view about 1.6 times as broad as long; malar space only a little more than one-third as long as eye height; carinate margin of occiput interrupted medially; occiput, vertex, and upper frons coarsely, contiguously punctate, in part confluent so; lower frons laterally, cheeks and temples rugose to rugose punctate; distance between lateral ocelli and eyes equal to about half diameter of an ocellus.

Thorax narrowing forward from tegulae only very slightly; shoulders subangulate to broadly rounded; mesoscutum closely punctate between coarsely foveate notaulices and with a low, median longitudinal keel that is sometimes very weak; disc of scutellum with scattered punctures and a broad, rather low, median longitudinal keel; propodeum very short medially, shorter than disc of scutellum and not distinctly divided into two lobes; conspicuous patch of very dense, recumbent, white hair on each side of propodeum; propleuron largely rugulose, smooth only in small area in upper angle; prepectus longitudinally rugulose striate; mesopleuron closely punctate below impression; mesosternum smooth and very shiny, with only some minute and weak punctures; metapleuron rugose; fore wings hardly reaching apex of fourth abdominal tergite.

Abdomen nearly or quite three times as long as head plus thorax; first tergite sometimes hardly longer than broad but all remaining tergites much longer than broad, sixth four to five times as long as broad at base; first tergite longitudinally striate or rugose striate; second and third tergites rather longitudinally rugulose or rugulose reticulate; fourth and fifth rugulose punctate, sculpture becoming weaker caudad; sixth tergite strongly compressed laterally, closely covered with elongate punctures on narrow dorsal edge, finely and closely longitudinally striate on sides; dorsolateral carinae strong on second tergite although sometimes fading before end of tergite; venter of abdomen irregularly punctate or rugulose punctate and with a rather weak median longitudinal keel on sternites 2-5.

Head and thorax black; abdomen varying from largely ferruginous to entirely black, ferruginous

coloring, when present, most pronounced on middle tergites; antennal scape yellow, flagellar segments 1-4 usually yellowish below, darker above, club brownish black; legs, including all coxae, yellow; wings subhyaline.

**Male.**—Considerably smaller than female, at least in available specimens: in structure and sculpture generally like female; flagellar segments 4-9 of antennae about as broad as long; in smallest specimens fore wings extend nearly to apex of fifth abdominal tergite; seventh abdominal tergite a little broader at base than long, slightly emarginate at apex, and clearly surpassing seventh sternite; tarsi darkened.

**Holotype female.**—In the Hungarian National Museum of Natural History.

**Distribution.**—The holotype is from Costa Rica. I have seen five female specimens, one each from Costa Rica, Panama, and Mexico (Veracruz) and two from Missouri, and three males, all from Mexico, two from the State of Oaxaca and one from Veracruz.

### *Macroteleia rugosa* (Provancher)

(Figs. 13 and 39)

*Papagus rugosus* Provancher, 1881: 293. ♂.

*Macroteleia rufipes* Cameron, 1904: 52. ♀. New synonymy.

*Macroteleia pubescens* Kieffer, 1905: 17. ♂. New synonymy.

*Macroteleia rufipes* Kieffer, 1906 (1905) *May*: 264. ♂. ♀. New synonymy.

*Macroteleia kiefferi* Brues, 1906 (Oct.): 140. New name for *M. rufipes* Kieffer. New synonymy.

*Macroteleia erythropus* Cameron, 1907 (1906): 277. ♂. New synonymy.

*Macroteleia rugosa* (Provancher), Masner, 1969: 779.

I have had the opportunity of studying the types of all the species listed above and I am of the opinion that all the names apply to a single, very widely distributed species, which appears to be most similar to *M. surfacei* Brues. It differs from that species in being normally smaller, in its distinctly foveolate notaulices, in the less strongly compressed sixth abdominal segment of the female, in the absence of any indication of longitudinal striation at the sides of the fifth abdominal tergite of the female, and in the seventh tergite of the male clearly surpassing the seventh sternite.

**Female.**—Length normally 3.2-3.8 mm. Head in dorsal view about 1.5 times as broad as long, in front view subquadrate, its width at level of antennal sockets not less than that at middle of eyes;

malar space about half as long as eye height; surface of occiput, vertex, and upper frons finely shagreened and usually somewhat mat; occiput with shallow, usually well-separated punctures, occipital margin defined medially by lower edge of a tight row of coarse punctures; vertex usually with only a few indistinct punctures; upper frons punctate like occiput; temples and cheeks rugulose punctate, with a narrow strip of delicate reticulate microsculpture along outer eye margins.

Thorax slightly narrower than head, and narrowing a little from tegulae to shoulders, which are weakly subangulate; notaulices foveolate; middle lobe of mesoscutum closely punctate on a surface that is usually largely finely shagreened or alutaceous; lateral lobes shagreened but not distinctly punctate; propodeum very narrowly, often indistinctly, notched medially behind but not divided into two separated lobes, rugose, medially as long as disc of scutellum; propleuron finely shagreened on upper half, rugulose and more shiny below; prepectus large and normally coarsely rugose striate; mesopleuron below impressed area closely rugulose punctate; metapleuron rugose; wings usually extending to middle of fifth abdominal tergite or a little farther.

Abdomen about twice as long as head plus thorax; first three tergites normally a little longer than broad, fourth and fifth usually broader than long, sixth usually 3.5-4 times as long as broad at base and at least as broad at base as the segment is high; first tergite rugulose punctate, usually longitudinally rugulose punctate posteriorly; second and third tergites contiguously and rather coarsely punctate or punctate rugulose; fourth closely punctate but more weakly sculptured than second and third; fifth very weakly punctate, granulose or shagreened laterally and there not at all longitudinally striate or lineolate; sixth tergite punctate dorsally, longitudinally striate on sides; dorsolateral carinae not developed beyond first tergite; venter of abdomen closely punctate, without a median longitudinal keel, except occasionally a very weak one on basal sternites.

Black; scape of antenna brownish yellow, sometimes darkened apically; pedicel and first flagellar segments brown, club black; wings hyaline; all coxae darkened and usually hind femora apically; otherwise legs brownish yellow.

**Male.**—In general like female but usually more slender; segments 4-9 of antennal flagellum some-

what longer than broad; dorsolateral carinae more or less developed on second abdominal tergite; seventh tergite distinctly surpassing seventh sternite, a little broader at base than long, usually weakly emarginate at apex but sometimes virtually truncate; venter of abdomen with a very weak (sometimes indistinct) median longitudinal carina apparent on basal three sternites; legs usually darker than in female.

**Types.**—The male holotype of *rugosa* (Provancher) from Canada is in the Quebec Provincial Museum Collection at Laval University, Sainte Foy, Quebec. The female lectotype (here designated) of *rufipes* Cameron, from San Marcos, Nicaragua, is in the British Museum, and female paralectotypes are in the California Academy of Sciences and Cornell University. The holotype of *pubescens* Kieffer, from Managua, Nicaragua, is in the Museo Civico di Storia Naturale, Genoa, Italy. The female lectotype (here designated) of *rufipes* Kieffer, from Managua, Nicaragua, is in the California Academy of Sciences; paralectotype males are in that collection and in that of Cornell University. Finally, the male lectotype (here selected) of *erythropus* Cameron, from Havana, Cuba, is in the British Museum; a paralectotype male is in the collection of Cornell University.

**Distribution.**—In addition to the types just mentioned, I have seen numerous specimens, including material from Ontario and Saskatchewan in Canada, and in the United States from New Hampshire south to Florida and west to the Pacific coast. From south of the United States I have seen specimens from Mexico, Guatemala, Honduras, El Salvador, Nicaragua, Costa Rica, Canal Zone, Colombia, and Brazil; and in the Caribbean, from Cuba, Haiti, Dominican Republic, Jamaica, Puerto Rico, and Trinidad. The only reared specimens that have come to my attention are two from Sinaloa, Mexico, which are labeled as having been reared from cricket eggs.

### *Macroteleia rutila*, new species

Because of the division of the female propodeum into two well-separated triangular lobes, this species falls in the *punctulata* group, but it differs from all other known New World species in being completely reddish yellow.

**Female.**—Length about 6 mm. Head from above about 1.6 times as broad as long, as seen from in

front subquadrate, as broad at level of antennal sockets as at middle of eyes; temples and cheeks rounded, bulging a little; malar space about half as long as eye height; vertex, frons, temples, and cheeks shallowly and finely rugulose punctate; occiput closely punctate but over most of its surface not contiguously so, interspaces faintly alutaceous.

Thorax slightly narrower than head, very nearly as broad at shoulders as at tegulae; shoulders broadly rounded; mesoscutum rather flat; notaulices foveolate; middle lobe of mesoscutum closely punctate anteriorly and at posterior end, more sparsely medially; lateral lobes shiny, with a few weak punctures; disc of scutellum very strongly transverse, more than twice as broad as long, smooth and polished; propodeum divided into two well-separated triangular lobes; a median projection from metanotum extending back to a point between apices of propodeal lobes; propodeum smooth and shiny anteriorly, punctate posteriorly; prepectus weakly and sparsely punctate; mesopleuron weakly punctate below impression; fore wings extending to middle of fourth abdominal tergite.

Abdomen fully three times as long as head plus thorax; all tergites much longer than broad, first 1.5 times as long as broad at apex and strongly humped medially at base; sixth segment very strongly compressed laterally, conspicuously higher than broad at base; sixth tergite six times as long as broad at base, irregularly, brokenly striate on dorsal edge, very finely and closely longitudinally striate on sides; tergites 1-5 largely rugulose punctate, 5 finely longitudinally striate at sides; venter closely, finely punctate and without a median longitudinal keel beyond third sternite.

Reddish yellow; only apical segments of antennal club and extreme tip of abdomen darkened.

**Holotype female.**—USNM 73582.

**Distribution.**—Known only from the holotype, which was taken in a ricefield at Florida, Cuba, in 1957.

### *Macroteleia sanctivincenti* Ashmead

(Fig. 30)

*Macroteleia Sancti-Vincenti* Ashmead, 1894: 223. ♀.

This appears to be most closely related to *M. munda*, new species, but usually it can be easily

distinguished. It is less coarsely sculptured, especially on the abdomen; the dorsolateral carinae are better developed on the second abdominal tergite in the female; the wings are relatively shorter; the mesopleuron is not smooth and polished below the impression as in *munda*; the female abdomen is usually more or less reddish or brownish yellow on the second and third tergites (in *munda* the abdomen is always entirely black); and in the male the seventh abdominal tergite narrows strongly to the apex, where it is only half as broad as at the base and subtruncate, whereas in *munda* it narrows gradually to the apex, where it is normally broadly bilobed.

**Female.**—Length normally 3.2–3.8 mm. Head slightly wider than thorax, in dorsal view about 1.4 times as broad as long, in side view nearly as long as high; malar space about 0.4 as long as eye height; occiput not distinctly margined medially, finely and shallowly but densely punctate; vertex, upper temples, and upper frons similarly punctate; lower frons contiguously punctate on a granulose surface; cheeks and lower temples closely rugulose punctate.

Thorax narrowing only very slightly in front, nearly as broad at shoulders as at tegulae; shoulders broadly rounded or subangulate; notaulices sharply impressed and foveolate; middle lobe of mesoscutum usually very closely punctate anteriorly and at posterior end, more sparsely in middle; lateral lobes shiny and more weakly punctate; propodeum divided into two distinctly separated, rugose lobes; a small but distinct tongue-like projection from metanotum extending back between propodeal lobes; propleuron smooth in upper anterior angle, elsewhere rugulose; prepectus rugulose striate; mesopleuron punctate below impression; metapleuron rugulose; wings extending to end of fourth abdominal segment, sometimes a little farther.

Abdomen about 2.3 times as long as head plus thorax; all tergites usually longer than broad, 1–5 only slightly, 6 about three times as long as broad at base; tergites 1–5 finely rugulose punctate, the sculpture becoming gradually weaker caudad; sixth tergite weakly and irregularly punctate on dorsal edge, finely and closely longitudinally striate on sides; dorsolateral carinae well developed on second tergite; venter of abdomen shiny and closely punctate; a weak median longitudinal keel on

sternites 2–5, sometimes not distinct on fifth sternite.

Black; antennal scape yellow, remainder of antenna dark brown to black; legs, including all coxae, honey yellow, very rarely coxae darkened; wings subhyaline; abdomen usually more or less rufous to orange yellow on tergites 2–4, but extent and intensity of color are extremely variable, and rarely abdomen is virtually entirely blackish above.

**Male.**—In general like female except in color; flagellar segments 4–9 of antenna not or barely longer than broad; dorsolateral carinae of abdomen well developed on tergites 2 and 3; seventh tergite far surpassing seventh, tergite and narrowing strongly to apex where it is truncate or nearly so; abdomen usually entirely black; all coxae black or blackish and femora often somewhat darkened.

**Holotype.**—Presumably in the British Museum.

**Distribution.**—In addition to 2 paratypes, which, like the holotype, are from St. Vincent, I have seen approximately 70 specimens of this species from localities in Trinidad, Panama, Guyana, Colombia, Brazil, and Bolivia.

### *Macroteleia secreta*, new species

This is very similar to *M. herbigrada* Brues, but it is apparently distinct. The shoulders are more sharply angulate; the mesopleuron is more densely punctate below the impression; the prepectus is not so strongly and evenly rugulose striate as in *herbigrada*; and the vertex is usually more dull; furthermore, in the female the fifth abdominal tergite is not so strongly or so completely punctate as in *herbigrada*; and in both sexes the first tergite is largely punctate rather than rugose or rugose striate.

**Female.**—Length 5–6 mm. Head barely wider than thorax, in dorsal view about 1.4 times as broad as long, in front view subquadrate and at least as broad at level of antennal sockets as at middle of eyes; malar space about 0.4 as long as eye height; cheeks bulging somewhat; occiput more or less distinctly margined medially by lower edge of a tight row of irregular foveae; occiput, vertex, and upper frons shallowly and closely, though separately, punctate on a finely shagreened ground; lower frons finely rugulose; cheeks and temples rugose punctate.

Thorax barely broader at tegulae than at shoulders; shoulders angulate; notaulices weakly, irregularly foveolate; middle lobe of mesoscutum closely punctate anteriorly, more sparsely so elsewhere, especially medially, smooth between punctures; lateral lobes faintly punctate, propodeum divided into two well-separated subtriangular lobes; a short and rather broad projection from metanotum extending into space between propodeal lobes; propleuron smooth above, punctate below; prepectus rugulose on upper part, longitudinally striate below; mesopleuron below impression very densely punctate or finely rugulose punctate; metapleuron finely rugulose; wings not reaching apex of fourth abdominal tergite.

Abdomen about three times as long as head plus thorax; all tergites considerably longer than broad, fifth usually twice as long as broad at base and sixth four to five times; first tergite very densely and somewhat irregularly punctate, in part confluent punctate; second and third tergites closely and finely rugulose punctate; fourth also but more weakly; fifth tergite dorsally very weakly and sparsely punctate, usually impunctate apically; sixth longitudinally rugulose striate on dorsal edge, with a few weak punctures, both fifth and sixth tergites very finely and closely longitudinally striate on sides; dorsolateral carinae well developed on second tergite; venter of abdomen closely punctate, especially anteriorly; median longitudinal keel of venter well developed on sternites 1-3, weak but apparent on 4, not distinct on 5.

Black; antennal scape yellowish brown; pedicel and basal flagellar segments brown, usually paler beneath; club black; wings hyaline; legs brownish yellow except all coxae, which are blackish, and fore and middle tarsi, which are completely darkened.

**Male.**—In general like female; third segment of antennal flagellum much larger than second and nearly twice as long as broad at apex; flagellar segments 4-9 barely longer than broad; abdomen slender, first and sixth tergites as long as broad, tergites 2-5 longer than broad; seventh tergite broader at base than long, weakly incised medially at apex, and slightly but distinctly surpassing seventh sternite; first tergite longitudinally rugulose with some weak punctures; keel on abdominal sternites 1-5 well developed.

**Holotype female.**—USNM 73774.

**Distribution.**—The type-series consists of seven females (one the holotype) and one male that were reared from eggs of a tettigoniid at Palmira, Colombia, by J. de la Cruz in 1975. Not included in the type-series but apparently this species are two additional female specimens, one from the Canal Zone and one from Brazil.

### *Macroteleia simulans*, new species

(Fig. 20)

This is known only in the male. It is superficially similar to *M. rufithorax*, new species, but the eyes of *simulans* are much larger and the malar space correspondingly much shorter, the mesosternum is black, and the seventh abdominal segment is very different from that of the male of *rufithorax*. From *M. eximia*, new species, which it also resembles somewhat, it differs in having the scutellum much more coarsely sculptured, in the absence of a distinct median keel on the mesoscutum, in relatively longer wings, and in the very different seventh abdominal segment.

**Male.**—Length about 4.5 mm. Head, from above, about 1.6 times as broad as long; malar space one-third as long as eye height; occiput not margined medially; occiput, vertex, and frons very coarsely, contiguously punctate to rugose punctate, also cheeks and temples; cheeks rounded but not swollen beyond eyes; flagellar segments 4-9 of antenna about as broad as long.

Thorax barely narrower than head, narrowing very slightly forward from tegulae; shoulders broadly rounded; mesoscutum gently convex; notaulices broad and coarsely foveate; middle lobe of mesoscutum coarsely rugose punctate, interspaces where present smooth; from some angles there is a suggestion of an irregular and incomplete median longitudinal keel on middle lobe of mesoscutum; small lateral lobes weakly rugulose punctate; disc of scutellum rugulose punctate but punctures smaller and more shallow than those on mesoscutum; propodeum slightly shorter than disc of scutellum and with two narrowly separated, strong, submedian keels and two or three additional longitudinal ridges laterad of each of those; propleuron smooth above, punctate below; prepectus coarsely longitudinally rugose striate; mesopleuron longitudinally rugulose punctate be-

low impression; metapleuron rugose; anterior wings extending very nearly to end of fifth abdominal tergite.

Abdomen much narrower than thorax, middle segments nearly parallel-sided; tergites 1-3 a little longer than broad, 4-7 broader than long; seventh tergite strongly transverse, nearly or quite twice as broad as long, broadly truncate at apex, and not surpassing seventh sternite; first tergite coarsely longitudinally striate; tergites 2-5 coarsely rugose reticulate, sculpture becoming gradually a little weaker caudad; tergites 6 and 7 strongly rugose punctate; dorsolateral carinae prominent and complete on second tergite, weaker and incomplete on third; venter closely rugose punctate; a prominent median longitudinal keel on sternites 2-5.

Head black; scape of antenna yellowish; pedicel and flagellum brownish; thorax entirely reddish except mesosternum, which is black or blackish; tegulae and legs concolorous with thorax; wings a little infumated; abdomen black.

**Holotype male.**—In the Canadian National Collection.

**Distribution.**—Known only from a series of 11 males (holotype and paratypes) labeled "Muste, nr. Huixtla, Chiapas, Mexico, 440 m." and collected by E. C. Welling in November 1970.

### *Macroteleia spartinae*, new species

(Fig. 25)

This belongs in the group of Nearetic species that have a longitudinally striate abdomen, longitudinally striate metapleura, and modified antennae. In its closely and coarsely sculptured head it resembles *M. macrogaster* Ashmead, from which it may be distinguished as shown in the key; in other respects it is similar to *M. floridana* (Ashmead), differing, however, as pointed out in the description of that species.

**Female.**—Length about 5 mm. Head barely wider than thorax, as seen from above about 1.5 times as broad as long, in front view with broadly rounded cheeks and not narrower at level of antennal sockets than at middle of eyes; malar space about half as long as eye height; occiput not margined medially, largely densely rugulose punctate; vertex very finely shagreened and with a few scattered, shallow punctures; frons rugulose punctate,

very densely so laterally below middle of eyes; cheeks and temples densely rugulose punctate, without smooth interspaces as in *floridana*; a narrow smooth and polished strip along outer eye margin, narrowing below and fading out at lower end of eye, cheek being sculptured up to eye at this point; flagellar segments 1-3 of antenna much lengthened, successively a little shorter but even third nearly as long as pedicel; club five times as long as broad.

Thorax narrowing in front, noticeably narrower at shoulders than at tegulae; shoulders not prominent; notaulices very fine, not distinctly foveolate; middle lobe of mesoscutum completely and closely punctate; lateral lobes also rather closely but more finely punctate; propodeum not divided, about as long medially as disc of scutellum, with some irregular longitudinal ridges that are more or less obscured by hair covering; propleuron irregularly and weakly sculptured, very shiny; prepectus very finely rugulose and with a row of foveae along anterior margin; mesopleuron closely rugulose punctate below impression; mesosternum densely punctate; metapleuron largely finely longitudinally striate, finely rugulose in lower posterior angle; wings extending barely to apex of fourth abdominal tergite.

Abdomen about twice as long as head plus thorax; tergites 1-4 finely longitudinally striate, 4 more weakly than the others; fifth tergite finely longitudinally striatopunctate; sixth with some elongate punctures dorsally, longitudinally striate on sides; tergites 1, 2, and 3 a little longer than broad, 4 and 5 subequal in length and width, 6 about three times as long as broad at base; dorsolateral carinae sharp and complete on tergites 2 and 3; second tergite also with a median longitudinal keel; venter closely striate on sternites 1-5 and with a prominent median longitudinal keel on sternites 2-4, weakly indicated on 5; sixth sternite finely rugulose punctate.

Black; antennae black except for yellowish scapes; legs yellowish, hind coxae sometimes a little darkened basally; all tarsi darkened.

**Male.**—Antennae filiform; third flagellar segment about as long as scape, second a little longer than fourth, which is hardly half as long as third; flagellar segments 4-9 subequal, about twice as long as broad; a prominent, stout spine on a broad base (eighth abdominal segment) projecting back-

ward from beneath seventh tergite, which is short and transverse and is greatly surpassed by seventh sternite.

**Holotype female.**—USNM 73583.

**Distribution.**—The holotype and two paratypes (male and female) were taken on *Spartina* on Sapelo Island, Ga., in June 1963 by H. Kale; two additional paratypes (male and female) were collected on the same plant at the same locality in October 1963 by E. P. Odum, and one female paratype is labeled "Oceanville, N.J., 9.viii.50."

***Macroteleia subtilis*, new species**

(Fig. 18)

Although very similar in habitus and general structure to *M. occipitalis*, new species, *M. subtilis* may be distinguished by being a little larger, by its somewhat more strongly punctate occiput, paler legs, the relatively longer female abdomen and relatively shorter wings, and by the different female propodeum in which the two lobes are subtriangular and more widely separated than in *occipitalis*.

**Female.**—Very slender. Length usually around 4.5 mm. Head not or barely wider than thorax, as seen from above 1.4 times as broad as long, from in front subquadrate and fully as broad at level of antennal sockets as at middle of eyes; cheeks and temples broadly rounded and strongly punctate to rugulose punctate, upper temples more sparsely punctate; occiput finely and completely margined, medially by lower edge of a tight row of large foveae; occiput with relatively sparse, shallow punctures on a finely shagreened surface; vertex with only a few shallow punctures on a surface of delicate microsculpture; upper frons finely shagreened and rather dull with well-separated punctures; lower frons laterally closely punctate on a granulose surface.

Thorax almost as wide at shoulders as at tegulae; shoulders subangulate; notaulices fine and sharp, not distinctly foveolate; middle lobe of mesoscutum closely punctate anteriorly, sparsely on posterior half, shiny; lateral lobes shiny, with scattered and faint punctures; propodeum divided, lobes subtriangular and well separated; a broad median process of metanotum extending back into space between propodeal lobes; propleuron smooth and shiny in upper angle; prepectus rugulose

striate, sometimes weakly so or smooth on upper part; mesopleuron closely punctate below impression; metapleuron rugulose; wings extending to end of fourth abdominal tergite.

Abdomen very slender, about 2.6 times as long as head plus thorax; all tergites longer than broad, sixth about five times as long as broad at base; tergites 1-3 closely rugulose punctate, 4 and 5 closely punctate, 5 more sparsely and more weakly than 4 and very shiny, finely longitudinally aciculate at sides; sixth tergite irregularly punctate on dorsal edge, very finely and closely longitudinally aciculate on sides; dorsolateral carinae usually not apparent beyond first tergite; venter very shiny, largely finely punctate; a median longitudinal keel present on sternites 2-4 though rather weak on 4, not apparent on fifth sternite.

Black; scape, pedicel, and first four segments of antennal flagellum yellow or brownish yellow; legs yellow, but coxae, especially middle and posterior pairs, and tarsi, darkened; wings subhyaline.

**Male.**—In general like female; flagellar segments 4-9 of antenna just about as broad as long; propodeum a little shorter than disc of scutellum and with several irregular longitudinal ridges; abdomen very slender, tapering caudad from end of third segment; first tergite a little broader than long; tergites 2-6 all longer than broad; seventh tergite as broad at base as long, very weakly emarginate at apex, and clearly surpassing seventh sternite; dorsolateral carinae well developed on tergites 2 and 3.

**Holotype female.**—In the Museum of Comparative Zoology, Harvard University.

**Distribution.**—This species is known to me only from the following material: Two females (holotype and paratype) and one male paratype labeled "Costa Rica, Guanacaste Prov., 6 mi. W. Canas, Taboga, 2-18 February 1967, R. W. Mathews," and one female paratype from Cotaxtla, Veracruz, Mexico.

***Macroteleia surfacei* Brues**

(Fig. 15)

*Macroteleia surfacei* Brues, 1907: 153, ♀.

This is very similar to *M. caillii*, new species, from which it differs especially in its less cubical head, indistinctly foveolate notaulices, and dark coxae. From *M. rugosa* (Provancher), which it

also resembles in some respects, it differs as pointed out in the description of that species.

**Female.**—Length usually 4.5–5.5 mm. Head not distinctly wider than thorax, in dorsal view about 1.5 times as broad as long, in front view somewhat swollen below eyes so that it is as broad at level of antennal sockets as at middle of eyes; malar space about half as long as eye height; occiput with very shallow, usually well-separated, small punctures on a delicately shagreened surface, and margined medially by the irregular lower edge of a tight row of shallow foveae that are open above; vertex and upper frons delicately shagreened, impunctate or with only a few weak punctures and usually subopaque; lower frons laterally granulose and with closely placed, extremely shallow punctures; cheeks and temples rugulose punctate except for a narrow, smooth, and shiny strip along outer margins of eyes.

Thorax narrowing forward a little from tegulae; shoulders rounded or weakly subangulate; notaulices sharp and very fine, not or indistinctly foveolate; middle lobe of mesoscutum closely and finely punctate; lateral lobes with weak microsculpture and usually without distinct punctures; propodeum medially hardly one-third as long as first abdominal tergite, narrowly and deeply incised in middle of posterior margin but apparently not divided into two completely separated lobes; propleuron largely finely shagreened or, irregularly very finely sculptured; prepectus usually finely longitudinally rugulose striate but sometimes partly smooth; mesopleuron finely punctate below impression; metapleuron rugulose or rugulose punctate; wings usually extending to end of fourth abdominal tergite or a little beyond.

Abdomen about three times as long as head plus thorax; all tergites longer than broad, sixth five or six times as long as broad at base; sixth segment strongly compressed and higher at base than wide; first tergite longitudinally rugose; tergites 2–4 strongly, contiguously punctate to rugulose punctate, sculpture becoming gradually weaker caudad; fifth tergite more weakly punctate and with some irregular, very fine, longitudinal sculpture at sides; sixth weakly punctate on dorsal edge, finely longitudinally striate on sides; dorsolateral carinae not developed on second tergite; venter finely and closely punctate; no median keel apparent beyond second sternite.

Black; antennal scape brownish yellow below, darker on dorsal surface; pedicel and first four flagellar segments dark brown, club black; legs brownish yellow, all coxae darkened; hind femora usually darkened apically; wings hyaline.

**Male.**—In general similar to female; all flagellar segments of antennae markedly longer than broad; dorsolateral carinae usually complete on second tergite and present on base of third; seventh tergite broader at base than long, weakly emarginate at apex, and barely surpassing seventh sternite.

**Lectotype female.**—USNM 26580 (lectotype selected by Masner and Muesebeck (1968: 40)).

**Distribution.**—I know this species only from the lectotype and four female paratypes, all from Chester, N.J., reportedly reared from eggs of a "locustid," and all except the lectotype more or less broken and in poor condition; and about 15 additional specimens, several of them collected on *Spartina*, from New Jersey, North Carolina, Georgia, Mississippi, and Illinois.

### *Macroteleia testaceinerva* Cameron

(Fig. 19)

*Macroteleia testaceinerva* Cameron, 1904: 52. ♀.

Among related species, *M. testaceinerva* is conspicuous because of its unusually long, yellowish wings with yellow venation and the very prominent and complete dorsolateral carinae on the second and third abdominal tergites of the female.

**Female.**—Length of the few available specimens 4.2–4.8 mm. Head, as seen from above, about 1.7 times as wide as long, in front view rather circular, its width at level of antennal sockets slightly less than at middle of eyes; ocelli large, distance between median and lateral ocelli barely greater than diameter of an ocellus; malar space about one-third as long as eye height; temples receding; occiput and vertex coarsely and closely, but not confluent, punctate, interspaces where present smooth or faintly alutaceous; occipital margin interrupted medially; frons and temples very closely and strongly punctate; cheeks rugulose punctate up to eyes.

Thorax stout, very slightly narrower than head, hardly wider at tegulae than at shoulders; shoulders rounded; notaulices foveolate; middle lobe of mesoscutum completely punctate, very densely an-

teriorly and on a very narrow line down the middle; punctures not uniform in size, interspaces smooth; punctures on lateral lobes very small and weak; propodeum divided but lobes only very narrowly separated, inner end of each with a tuft of long hairs; propleuron almost completely smooth and shiny; prepectus longitudinally rugose; mesopleuron smooth and polished below impression; mesosternum largely smooth and polished; metapleuron with a few coarse, irregular rugae; wings extending to beyond middle of fifth abdominal tergite.

Abdomen hardly twice as long as head plus thorax, broadening very slightly to end of third tergite, then narrowing rather strongly to apex; length and width of first, fourth, and fifth tergites subequal, second and third tergites a little longer than broad, sixth about 2.5 times as long as broad at base; tergites 1-4 longitudinally rugose punctate, sculpture becoming gradually weaker caudad; fifth tergite medially and sixth on its dorsal edge weakly rugulose punctate, sixth irregularly rugulose striate on sides; dorsolateral carinae very prominent on tergites 2 and 3; venter rugulose punctate, median longitudinal keel on sternites 2-5.

Black; antennal scape, pedicel, and first four flagellar segments yellow, club black; legs, including all coxae, golden yellow; wings more or less yellowish and veins yellowish.

**Male.**—In general like female; flagellar segments 4-9 of antenna not longer than broad; propodeum short, with four longitudinal ridges; abdomen slender, parallel-sided for most of its length; tergites 6 and 7 slightly broader at base than long, latter clearly surpassing seventh sternite, narrowing gradually caudad and weakly emarginate medially at apex; dorsolateral keels very prominent on tergites 2 and 3 and basal half of 4; underside of antennal flagellum brownish yellow; all legs, including coxae, entirely bright yellow.

**Holotype female.**—In the British Museum.

**Distribution.**—In addition to the holotype, which is from Panama, I have seen two females and one male from Panama, one male from Costa Rica, and one male from Bolivia.

### *Macroteleia townsendi*, new species

Although superficially rather similar to *M.*

*vossi*, new species, this form is readily distinguished by its dark coxae, darkened femora, and pale tarsi, as well as by its coarser notaulices and more extensively sculptured propleuron.

**Female.**—Length about 6 mm. Head very slightly broader than thorax, in dorsal view 1.5 times as broad as long, in front view just about as wide at level of antennal sockets as at middle of eyes; temples receding; malar space about half as long as eye height; occiput irregularly margined medially by lower edge of a tight row of large punctures, strongly and closely but separately punctate on a finely shagreened surface; frons similarly sculptured; vertex shagreened and with punctures more widely spaced; cheeks and temples densely rugulose punctate.

Thorax narrowing forward very slightly from tegulae; shoulders broadly rounded; notaulices broad and irregularly foveate; middle lobe of mesoscutum with punctures well separated, especially on middle part, interspaces smooth and polished; a little weak shagreening along inner margins of notaulices; lateral lobes shiny, vaguely punctate; propodeum divided into two well-separated subtriangular lobes; a small median triangular projection from metanotum extending into space between propodeal lobes; propleuron smooth in upper anterior angle, rugulose on lower half; prepectus with a few irregular punctures on upper half, rugulose or confluent punctate below; mesopleuron with only a few weak punctures below impressed area; metapleuron coarsely rugose; wings extending about to end of fourth abdominal tergite.

Abdomen a little more than three times as long as head plus thorax; all tergites longer than broad, sixth fully five times as long as broad at base in holotype; first tergite very shiny, with separated punctures basally and longitudinally rugulose punctate apically; tergites 2-5 very closely and strongly punctate, 2 with some of punctures confluent, 5 more shallowly punctate than the rest; 6 with elongate punctures on dorsal edge, and both 5 and 6 finely and very closely longitudinally aciculate on sides; dorsolateral carinae not developed on second tergite; venter of abdomen densely punctate anteriorly, more sparsely posteriorly; a well-developed median longitudinal keel on sternites 2-5.

Black; scape and pedicel of antenna yellow;

flagellar segments 1-4 brownish yellow, club black; all coxae piceous and all femora partly darkened, remainder of legs, including tarsi, yellowish.

**Holotype female.**—USNM 73584.

**Distribution.**—Known only from the holotype, which was collected by C. H. T. Townsend at Puente Piedra, Peru, 19 May 1910.

### *Macroteleia triangularis*, new species

(Figs. 11 and 44)

This is most similar to *M. foveolata*, new species, from which it differs in that the occiput is not margined medially, the notaulices are not distinctly foveolate, the middle lobe of the mesoscutum is more shiny and more evenly punctate, the female propodeum is narrowly incised medially behind but not distinctly divided as in *foveolata*, the wings are relatively longer, the coxae, especially in the female, are not so dark, and the seventh abdominal tergite in the male narrows more strongly to the apex.

**Female.**—Length 3.5-4 mm. Head noticeably wider than thorax, in dorsal view about 1.5 times as broad as long, in front view about as broad at level of antennal sockets as at middle of eyes; occiput not margined medially, covered with close but usually not contiguous, very shallow punctures, interspaces, especially on upper part, finely shagreened; vertex and upper temples finely shagreened and with widely separated and shallow punctures; upper frons very closely punctate; lower frons shagreened and with extremely shallow (faint) punctures; cheeks and lower temples coarsely, contiguously punctate.

Thorax narrowing slightly forward from tegulae; shoulders broadly rounded or subangulate; notaulices very sharp and fine, not distinctly foveolate; middle lobe of mesoscutum very shiny and rather evenly punctate, most closely in front; lateral lobes shiny, faintly roughened; propodeum narrowly and deeply incised medially on posterior margin but apparently not divided; propleuron smooth and shiny in upper angle, more or less roughened below; prepectus longitudinally striate or rugulose striate; mesopleuron weakly punctate below impressed area; metapleuron rugulose or rugulose punctate; fore wings usually extending to middle of fifth abdominal tergite.

Abdomen usually about 2.2 times as long as head

plus thorax; second and third tergites longer than broad, first, fourth, and fifth very slightly longer than broad or subequal in length and width, sixth tergite usually about 3.5 times as long as broad at base; first tergite largely longitudinally rugulose; tergites 2-4 longitudinally rugulose punctate; fifth and sixth tergites shiny and weakly punctate medially, fifth broadly longitudinally aciculate laterally, sixth finely longitudinally striate on sides; dorsolateral carinae apparent on second tergite though usually weak; venter closely punctate; median longitudinal keel weak and sometimes not apparent beyond third sternite.

Black; antennal scape yellow; coxae brown to black, fore coxae usually brownish yellow; hind femora often somewhat darkened; wings hyaline.

**Male.**—Antennal flagellar segments 4-9 subequal, not or slightly longer than broad; propodeum less than half as long as first abdominal tergite and with two well-separated longitudinal keels medially; wings usually extending to end of fifth abdominal tergite; dorsolateral carinae well developed on tergites 1-3; seventh tergite far surpassing seventh sternite and triangular in shape, fully as long as broad at base, narrowing strongly to apex where it is unusually narrow and narrowly incised medially; venter of abdomen rather strongly longitudinally rugulose punctate; median longitudinal keel well developed on sternites 1-5; coxae often somewhat darker than in female.

**Holotype female.**—In the Canadian National Collection.

**Distribution.**—The type-series, the only known material, consists of 4 females (1, the holotype) and 2 males taken at Putumayo, Colombia, 30 November 1972 by J. Hielava, and about 30 additional paratypes (both sexes) from localities in Trinidad, Colombia, Guyana, Brazil, Paraguay, Bolivia, and Peru.

### *Macroteleia unica*, new species

In general structure this is most similar to *M. rufiventris* (Szabó), but it is conspicuously shorter and stouter and differs further as shown in the key.

**Female.**—Length 4 mm. Head slightly wider than thorax, in dorsal view 1.5 times as broad as long, in front view narrowing below eyes; malar space 0.4 as long as eye height; posterior ocelli removed from eyes by a distance equal to half di-

ameter of one of them; occipital carina broadly interrupted medially; occiput, vertex, and upper frons very coarsely, contiguously punctate to rugulose punctate; lower frons laterally rugose; cheeks and temples rugose punctate, temples receding.

Thorax not narrowing forward distinctly from tegulae; shoulders virtually rectangular; notaulices foveate or coarsely punctate; middle lobe of mesoscutum irregularly punctate, punctures varying considerably in size, and provided with a median longitudinal keel that is irregular and not well developed; lateral lobes a little shagreened and weakly punctate; disc of scutellum densely punctate each side of prominent median longitudinal keel; propodeum medially much shorter than disc of scutellum, narrowly notched at middle of posterior margin but apparently not divided, and with several irregular longitudinal carinae each side of middle; propleuron smooth and polished on upper half, irregularly and finely rugulose below; prepectus coarsely rugose striate; mesopleuron weakly punctate below polished impression; metapleuron coarsely rugose; fore wings extending nearly to end of fifth abdominal tergite.

Abdomen slightly more than twice as long as head plus thorax, broadening strongly to third tergite, where it is about as broad as mesoscutum; first tergite about as long as broad; tergites 2-5 all at least a little broader than long, fifth 1.5 times as broad at base as long; sixth tergite 2.5 times as long as broad at base; first tergite coarsely longitudinally rugose striate; tergites 2-5 closely punctate, 2 and 3 with some prominent, irregular, longitudinal rugae separating rows of punctures; 6 very finely punctate on dorsal edge, rugose on sides; dorsolateral carinae weak and irregular but complete on second and third tergites; venter of abdomen finely punctate and with a complete median longitudinal keel.

Black; antennal scape brownish yellow; pedicel and basal flagellar segments brown, club black; legs, including all coxae, yellow; wings slightly discolored.

**Holotype female.**—In the California Academy of Sciences.

**Distribution.**—Known only from the holotype, which was collected by J. Q. Cavagnaro and M. E. Irwin 19 June 1963 at Quezaltepeque, El Salvador, at an altitude of 500 meters.

### *Macroteleia virginiensis* Ashmead

(Fig. 8)

*Macroteleia virginiensis* Ashmead, 1893: 217, 218. ♀.

This is very similar to *M. discors*, new species, but it differs as explained in the description of that species and as indicated in the key.

**Female.**—Length about 3.8 mm. Head slightly wider than thorax, in dorsal view about 1.6 times as broad as long, in front view rather subquadrate, not narrowing below eyes and as broad at level of antennal sockets as at middle of eyes; malar space nearly half as long as eye height; occipital margin rather well defined medially by lower edge of a tight row of irregular marginal punctures or foveae; occiput, vertex, temples, and upper frons densely punctate on a shagreened ground; cheeks strongly rugulose punctate.

Thorax barely narrowing forward from tegulae; shoulders subangulate; notaulices sharp and fine, finely foveolate; middle lobe of mesoscutum closely punctate on a surface that is more or less shagreened, especially adjacent to notaulices; lateral lobes very weakly and sparsely punctate; propodeum half as long as first abdominal tergite and with two closely parallel median longitudinal keels; propleuron largely finely rugulose; prepectus strongly and closely longitudinally rugulose striate; mesopleuron densely and strongly rugulose punctate below impression; metapleuron rugulose punctate; fore wings usually extending a little beyond fourth abdominal tergite.

Abdomen in its widest part nearly as broad as thorax, usually a little less than twice as long as head plus thorax; tergites 2-5 wider than long, 6 usually only a little more than twice as long as broad at base; first tergite largely longitudinally rugulose or rugulose striate; tergites 2-5 densely rugulose punctate, sculpture becoming weaker caudad; 6 punctate above, rugulose (not at all striate) on sides; dorsolateral carinae not developed on second tergite, or weak and apparent only at base of tergite; venter of abdomen without a distinct median longitudinal keel, sometimes with a faint suggestion of one on second tergite.

Black; scape brownish yellow; pedicel and basal flagellar segments of antenna brown, club black; legs, including middle and hind coxae, normally

yellow, fore coxae somewhat darkened; wings subhyaline.

**Male.**—Essentially like female; sometimes all coxae blackish; flagellar segments 4–9 of antenna subequal, considerably longer than broad; seventh abdominal tergite broader at base than long, distinctly roundly notched medially at apex, and noticeably surpassing seventh sternite.

**Holotype female.**—NSNM 2249.

**Distribution.**—In addition to the holotype, which is from Arlington, Va., I have seen about 20 specimens (males and females) from localities in Pennsylvania, North Carolina, South Carolina, Florida, Mississippi, Ohio, Michigan, Iowa, Missouri, Kansas, and Texas.

## DOUBTFUL NEW WORLD SPECIES OF MACROTELEIA

Since I have been unable to see the types of the following species and cannot identify any of the three from the original descriptions, I am compelled to leave them as unrecognized forms:

*Macroteleia testaceipes* Kieffer, 1908: 23. ♂. British Honduras. *Macroteleia punctativentris* Kieffer, 1908: 24. ♀. British Honduras. *Macroteleia paraensis* Kieffer, 1910 (1909): 317. ♂. Pará, Brazil.

## SPECIES INCORRECTLY REFERRED TO MACROTELEIA

### *Calotelea erythrothorax* (Kieffer), new combination

*Macroteleia erythrothorax* Kieffer, 1908: 22. ♀.

Although the type has not been seen, the description of this species excludes it from *Macroteleia*. Almost certainly it belongs in *Calotelea* Westwood.

### *Triteleia pallipes* (Brues), new combination

*Hoploteleia pallipes* Brues, 1915: 8. ♂.

*Macroteleia pallipes* (Brues), Masner, 1965: 300.

Masner indicated that he was placing this in *Macroteleia* "with some doubts." I have seen the holotype. It is a *Triteleia*.

### *Calotelea nigriceps* (Kieffer)

*Macroteleia nigriceps* Kieffer, 1905: 18. ♀.

*Calotelea nigriceps* (Kieffer), Bin, 1974: 455.

### *Baryconus erythropus* (Cameron), new combination

*Macroteleia erythropus* Cameron, 1913: 134. ♂.

*Hoploteleia erythropus* (Cameron), Dodd, 1920: 341.

This is clearly a species of *Baryconus* Foerster, of which *Hoploteleia* Ashmead is a synonym. Moreover, the name is preoccupied by *Macroteleia erythropus* Cameron, 1907 (1906): 277.

## LITERATURE CITED

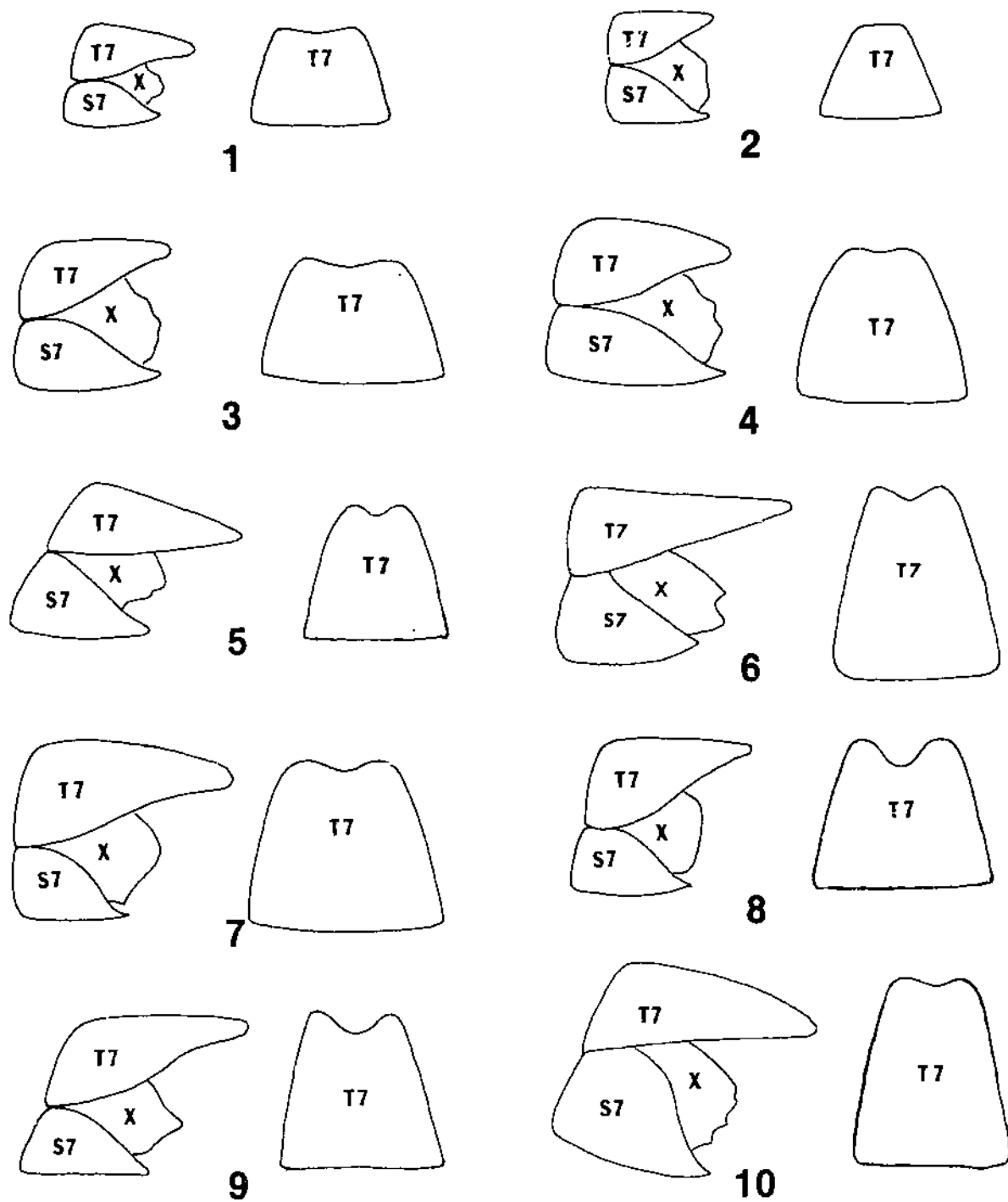
- AGASSIZ, L.  
1846. NOMENCLATOR ZOOLOGICUS, INDEX UNIVERSALIS. 393 pp. Solothurn, Switzerland.
- ASHMEAD, W. H.  
1887. STUDIES ON THE NORTH AMERICAN PROCTOTRUPTIDAE, WITH DESCRIPTIONS OF NEW SPECIES FROM FLORIDA. Ent. Amer. 3: 73-76, 97-100, 117-119.
1893. MONOGRAPH OF THE NORTH AMERICAN PROCTOTRYPIDAE. U.S. Natl. Mus. Bul. 45: 1-472, illus.
1894. REPORT ON THE PARASITIC CYNIPIDAE, PART OF THE BRACONIDAE, THE ICHNEUMONIDAE, THE PROCTOTRYPIDAE, AND PART OF THE CHALCIDIDAE. PT. 2. In Riley, C. V., Ashmead, W. H., and Howard, L. O., Report Upon the Parasitic Hymenoptera of the Island of St. Vincent. Linn. Soc. London, Jour. Zool. 25: 108-254.
- BIN, F.  
1974. THE TYPES OF SCELIONIDAE (HYMENOPTERA: PROCTOTRUPTOIDEA) IN SOME ITALIAN COLLECTIONS (MUSEUMS OF GENOA AND FLORENCE, INSTITUTE OF PORTICI). Entomophaga 19: 453-466.
- BRETHES, J.  
1916. HYMENOPTERES PARASITES DE L'AMERIQUE MERIDIONALE. Buenos Aires Mus. Nac. de Hist. Nat. An. 27: 401-430, illus.
- BRUES, C. T.  
1906. NOTES AND DESCRIPTIONS OF NORTH AMERICAN PARASITIC HYMENOPTERA II. Wis. Nat. Hist. Soc. Bul. 4: 143-152.
1907. NOTES AND DESCRIPTIONS OF NORTH AMERICAN PARASITIC HYMENOPTERA V. Wis. Nat. Hist. Soc. Bul. 5: 150-161.
1915. SOME NEW PARASITIC HYMENOPTERA FROM BRAZIL. Psyche 22: 1-13.
- CAMERON, P.  
1904. NEW HYMENOPTERA MOSTLY FROM NICARAGUA. Invertebrata Pacifica 1: 46-69.
- 1907 (1906). ALGUNOS HIMENOPTEROS COLECCIONADOS POR EL PROFESSOR BAKER EN CUBA. Cuba Cent. Agron. Ann. Rpt. 1: 275-285.
1913. THE HYMENOPTERA OF THE GEORGETOWN MUSEUM. PT. V. Timmeri 2: 105-137.
- COLE, A. C., Jr.  
1931. TYPIA INSECTS AND THEIR PARASITES. Ent. News 42: 35-39.
- DODD, A. P.  
1920. NOTES ON THE EXOTIC PROCTOTRUPTOIDEA IN THE BRITISH AND OXFORD MUSEUMS. Ent. Soc. London, Trans. 1920: 321-382.
1933. THE AUSTRALIAN SPECIES OF MACROTELEIA AND PROSAPEGUS (SCELIONIDAE, HYMENOPTERA). Roy. Soc. Queensland, Proc. 44: 75-103.
- FOERSTER, A.  
1856. HYMENOPTEROLOGISCHE STUDIEN. Heft 2, pp. 1-150. Aachen.
- GIRAULT, A. A.  
1920. NEW SERPHIDOID, CYNIPOID AND CHALCIDOID HYMENOPTERA. U.S. Natl. Mus. Proc. 58: 177-216.
- KIEFFER, J. J.  
1904. BESCHREIBUNG NEUER PROCTOTRYPIDEN UND EVANIDEN. Arkiv för Zool. 1: 525-562.
1905. NOUVEAUX PROCTOTRYPIDES EXOTIQUES. Genova Mus. Civico Storia Nat. Ann. (3) 2 (52): 9-39.
- 1906 (1905). BESCHREIBUNG NEUER PROCTOTRYPIDEN AUS NORD- UND ZENTRALAMERIKA. Berlin. Ent. Ztschr. 50: 237-290.
1908. NOUVEAUX PROCTOTRYPIDES ET CYNIPIDES D'AMERIQUE. Bruxelles Soc. Sci. Ann. 32 (1): 7-64.
1909. NOUVEAUX SCELIONIDES DE L'AMERIQUE DU SUD (HYM.). Soc. Ent. de France Bul. 1909: 247-250.
- 1910 (1909). DESCRIPTION DE NOUVEAUX MICROHYMENOPTERES DU BRESIL. Soc. Ent. de France Ann. 78: 287-348.
1912. REPORTS OF THE PERCY SLADEN TRUST EXPEDITION TO THE INDIAN OCEAN IN 1905. NO. IV. HYMENOPTERA, PROCTOTRUPTOIDEA. Linn. Soc. London, Trans. (ser. 2), Zool. 15: 45-80.
1914. ENUMERATION DES SERPHIDES (PROCTOTRYPIDES) DES ILES PHILIPPINES AVEC DESCRIPTION DE GENRES NOUVEAUX ET D'ESPECES NOUVELLES. Philippine Jour. Sci. 9: 285-311.
1926. SCELIONIDAE. Das Tierreich 48: v-xxxvi, 1-855, illus.
- MASNER, L.  
1964. A COMPARISON OF SOME NEARCTIC AND PALEARCTIC GENERA OF PROCTOTRUPTOIDEA (HYMENOPTERA) WITH REVISIONAL NOTES. Acta Soc. Ent. Czechoslovenica 61: 123-155.
1965. THE TYPES OF PROCTOTRUPTOIDEA (HYMENOPTERA) IN THE CHARLES T. BRUES COLLECTION AT THE MUSEUM OF COMPARATIVE ZOOLOGY. Psyche 72: 295-304.

1969. THE PROVANCHER SPECIES OF PROCTOTRUPOIDEA (HYMENOPTERA). *Nat. Canad.* 96: 775-784.
- and MUESEBECK, C. F. W.  
1968. THE TYPES OF PROCTOTRUPOIDEA (HYMENOPTERA) IN THE UNITED STATES NATIONAL MUSEUM. *U.S. Natl. Mus. Bul.* 270: 1-143.
- MORGAN, H. A.  
1901. THE DIFFERENTIAL GRASSHOPPER IN THE MISSISSIPPI DELTA. OTHER COMMON SPECIES. *U.S. Dept. Agr., Div. Ent., Bul.* 30, pp. 7-33.
- MUESEBECK, C. F. W.  
1972. NEARCTIC SPECIES OF SCALIONIDAE (HYMENOPTERA: PROCTOTRUPOIDEA) THAT PARASITIZE THE EGGS OF GRASSHOPPERS. *Smithson. Contrib. Zool.* 122: 1-33, illus.
- and MASNER, L.  
1967. SUPERFAMILY PROCTOTRUPOIDEA. In Krombein, K. V., and Burks, B. D., *Hymenoptera of America North of Mexico*, Synoptic Catalog. *U.S. Dept. Agr. Agr. Monog.* 2, 2d Sup., pp. 285-305.
- and WALKLEY, L. M.  
1956. TYPE SPECIES OF THE GENERA AND SUBGENERA OF PARASITIC WASPS COMPRISING THE SUPERFAMILY PROCTOTRUPOIDEA (ORDER HYMENOPTERA). *U.S. Natl. Mus. Proc.* 105: 319-419.
- NIXON, G. E. J.  
1931. ON SOME NEW SOUTH AFRICAN PROCTOTRUPOIDEA. *Eos* 7: 355-382, illus.
- PROVANCHER, L.  
1881. FAUNE CANADIENNE LES INSECTES—HYMENOPTERA, VIII., PTEROMALIENS. *Nat. Canad.* 12: 293-297.
- RISBEC, J.  
1950. LA FAUNE ENTOMOLOGIQUE DES CULTURES AU SENEGAL ET AU SOUDAN FRANCAIS. II. CONTRIBUTION A L'ETUDE DES PROCTOTRUPIDAE. *Trav. Lab. Ent. Secteur Soudanais de Rech. Agron.*, pp. 9-639, illus.
- SAY, T.  
1836. DESCRIPTIONS OF NEW NORTH AMERICAN HYMENOPTERA, AND OBSERVATIONS ON SOME ALREADY DESCRIBED. *Boston Jour. Nat. Hist.* 1: 210-305.
- SZABO, J. B.  
1957. BEITRAGE ZUR KENNNTNIS DER GATTUNG TRITELIA KIEFFER, 1906. *Budapestinensis Rolando Eötvös Nominatae Univ. Sci., Sec. Biol., Ann.* 1: 255-260.
- WESTWOOD, J. O.  
1835. CHARACTERS OF NEW GENERA AND SPECIES OF HYMENOPTEROUS INSECTS. [London] *Zool. Soc. Proc.* 3: 68-72.

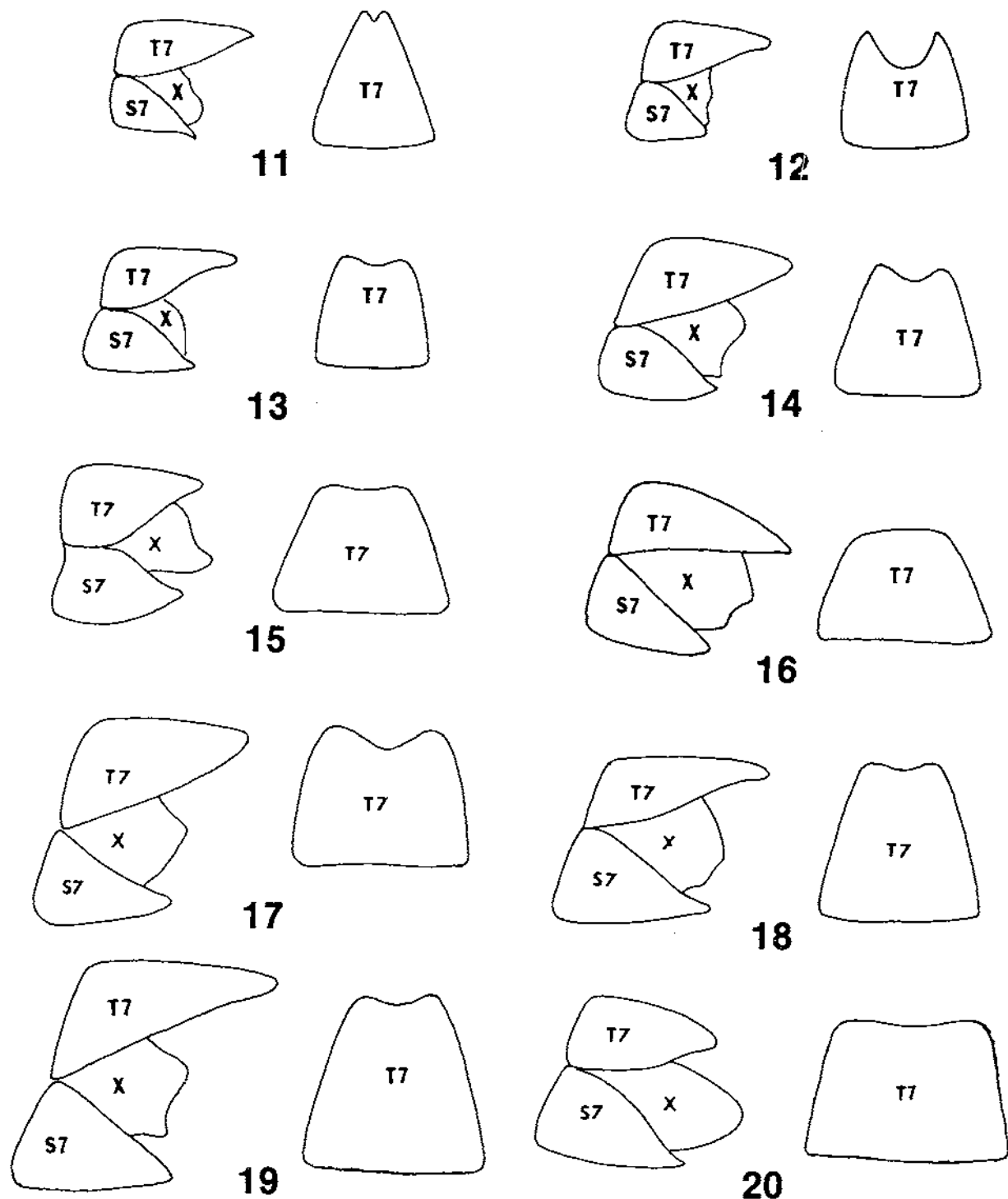
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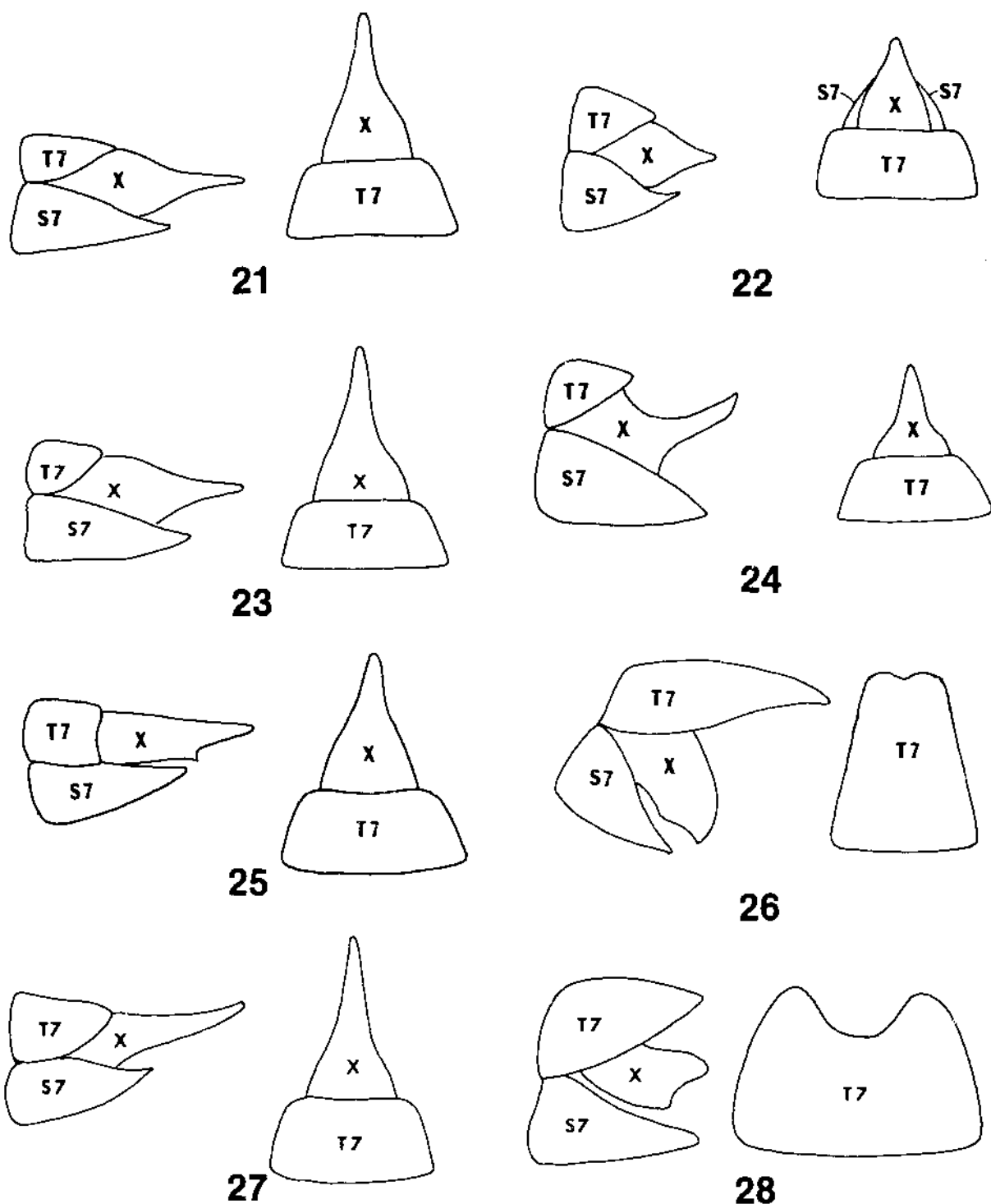
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FIGURES 1-10.—Seventh and eighth abdominal segments of *Macroteleia* males: 1, *erythrogaster* Ashmead; 2, *compar*, new species; 3, *discora*, new species; 4, *exilis*, new species; 5, *occipitalis*, new species; 6, *insolita*, new species; 7, *eximia*, new species; 8, *virginicensis* Ashmead; 9, *concinna*, new species; 10, *ligula*, new species. (T7=tergite 7; S7=sternite 7; X=segment 8)



FIGURES 11-20.—Seventh and eighth abdominal segments of *Macroteleia* males: 11, *triangularis*, new species; 12, *platensis* Brèthes; 13, *rugosa* (Provancher); 14, *rufiventris* (Szabó), new combination; 15, *surfacci* Brues; 16, *parilis*, new species; 17, *elongata* (Ashmead); 18, *subtilis*, new species; 19, *testaccinerva* Cameron; 20, *simulans*, new species. (T7=tergite 7; S7=sternite 7; X=segment 8)



FIGURES 21-28.—Seventh and eighth abdominal segments of *Macroteleia* males: 21, *floridana* (Ashmead); 22, *punctulata* Kieffer; 23, *macrogaster* Ashmead; 24, *famelica* (Say); 25, *spartinae*, new species; 26, *herbigrada* Brues; 27, *goldsmithi* Girault; 28, *insignis*, new species. (T7=tergite 7; S7=sternite 7; X=segment 8)



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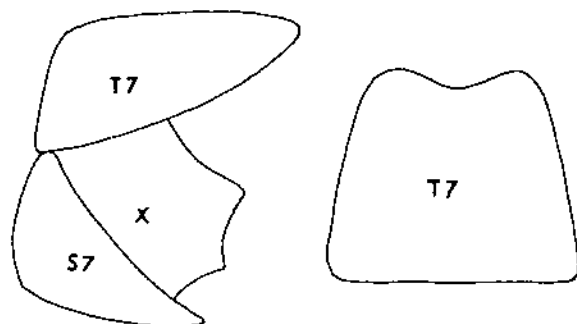
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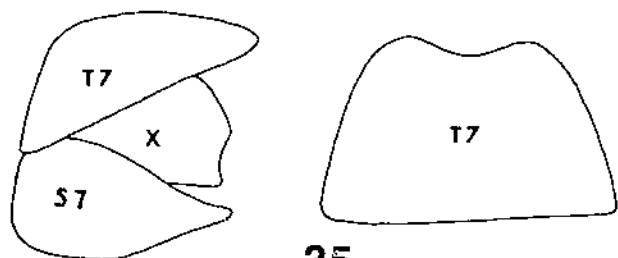
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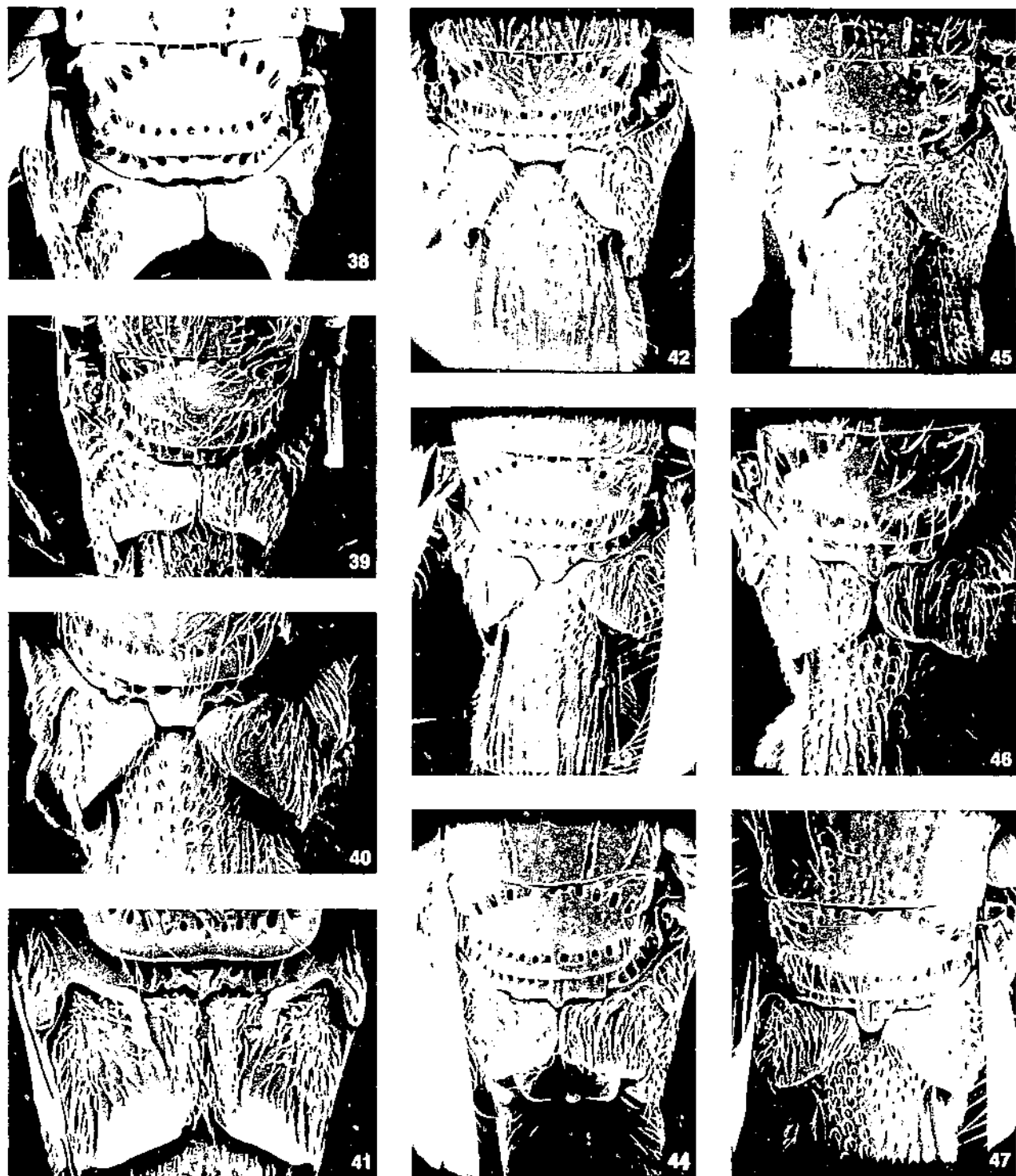


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FIGURES 29-37.—Seventh and eighth abdominal segments of *Macroteleia* males: 29, *densa*, new species; 30, *sanctivincenti* Ashmead; 31, *carinata* Ashmead; 32, *absona*, new species; 33, *larga*, new species; 34, *farcolata*, new species; 35, *pilosa*, new species; 36, *coracina*, new species; 37, *munda*, new species. (T7=tergite 7; S7=sternite 7; X=segment 8)



FIGURES 38-47. Different types of female propodeum, in *Macroteleia*: 38, *compur*, new species; 39, *rupisa* (Provancher); 40, *carinata* Ashmead; 41, *mayraquaster* Ashmead; 42, *punctulata* Kieffer; 43, *lirga*, new species; 44, *longopubris*, new species; 45, *chrygata* (Ashmead); 46, *forculata*, new species; 47, *herbigrada* Brues.

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