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KEY AND DIAGNOSES FOR THE GENERA OF OCHLERINI (HEMIPTERA: PENTATOMIDAE: DISCOCEPHALINAE)

L. H. ROLSTON

Department of Entomology, Louisiana Agricultural Experiment Station, Louisiana State University, Baton Rouge, Louisiana 70803

Abstract.—A key and diagnoses for 28 genera of Ochlerini are provided. New genera proposed are: *Barola, Catulona, Clypona, Coranda, Cromata, Forstona, Pseudadoxoplatys, Stalius* and *Uvaldus.* New species are *Barola farfala, Catulona pensa, Catulona apaga, Clypona aerata, Coranda castana, Cromata ornata, Forstona speciosa, Pseudadoxoplatys mendacis, Schaefferella fusca, Stalius trisinuatus* and *Uvaldus concolor.* New synonymy recognized is *Melanodermus* Stål, 1867, as a junior synonym of *Ochlerus* Spinola, 1837, resulting in revival of the combination *Ochlerus circummaculatus* Stål, 1867, and new combinations of *Coranda picipes* (Stål, 1872) and *Stalius tartareus* (Stål, 1862). *Typhoeocoris* Breddin, 1903, is placed in the synonymy of *Caracia* Stål, 1872, and *T. fulvifemur* Breddin, 1903, in the synonymy of *C. sexdens* Stål, 1872. The holotype of *Parochlerus latus* Breddin, 1904, is redescribed. The male genitalia of this species are described since only the female was known previously. A redescription of *Tetrochlerus fissiceps* Breddin, 1904, is given, and a voucher specimen is designated inasmuch as type material of this species is unknown. A lectotype and paralectotype are designated for *Ochlerus tartareus* Stål, 1862.

The previously established genera that are considered here were formerly included in Halyini of the nominate pentatomid subfamily. A decade ago, these genera were removed to Discocephalinae (Rolston and McDonald, 1979), and subsequently Ochlerini was proposed to contain them apart from other genera in Discocephalinae (Rolston, 1981).

Members of Ochlerini are exceedingly dull in appearance, being largely of funereal hues. They have attracted little attention from taxonomists and as a consequence their classification is rudimentary. The ochlerines reside in the tropics and subtropics of the Western Hemisphere. Species of a few genera feed on herbaceous plants and are commonly collected. However, most species apparently inhabit the forest canopy, which explains their scarcity in collections and why most specimens were taken at lights or on freshly felled trees.

CHARACTERS INVOLVING THE ROSTRUM AND EYES

The position of the rostrum and eyes relative to each other and to other morphological features are used extensively in the key and diagnoses. The anterior limit (origin) of the labium has been determined with the venter of the insect uppermost and the longitudinal axis of the thorax and abdomen at right angles to the line of observation. The apparent relationship of the labium and eyes is altered when the head is in an abnormal position. Likewise, the relationship of the apex of the rostrum

to the abdominal sternites and of the apex of the rostral segments to the coxae is changed if the head is abnormally deflexed, reflexed or protruded. The proximity of the eyes to the pronotum is, of course, decreased in the latter case. In using these characters care must be exercised to ascertain that the head of the specimen is normally positioned.

MEASUREMENTS

All measurements are in millimeters and, unless qualified, are rounded to the nearest 0.05 mm. Dimensional lines on illustrations equal 0.5 mm.

EXCLUDED GENERA

Breddin (1903a) described *Typhoeocoris fulvifemur* as a new genus and new species from Ecuador, indicating neither the disposition of the specimen upon which he based his descriptions nor the classification other than "Rhynchoten." Froeschner (1981) ventured to catalog this insect as a halyine, but Breddin's descriptions fit a rather bizarre pentatomine described earlier by Stål (1872). I therefore propose the following synonymy:

Caracia Stål, 1872:14–15.
Typhoeocoris Breddin, 1903a:122. **NEW SYNONYMY.**
Caracia sexdens Stål, 1872:15.
Typhoeocoris fulvifemur Breddin, 1903a:122–123. **NEW SYNONYMY.**

Breddin (1912) also described from Peru a new genus and new species, *Melambyrsus hoplita,* that he placed near *Ochlerus* and *Melanodermus.* Again, the disposition of the type was not revealed. From the description, *Melambyrsus* seems similar to *Moncus* Stål, but for the present it must remain a *nomen dubium.*

Spinola (1850a) proposed the generic name *Audinetella* in his synoptic table, parenthetically stating that the genus was based on an unpublished species from Brazil. Description of the genus and species, *Audinetella bipunctata* Spinola, appeared the same year (Spinola, 1850b). Here, however, the two female syntypes are said to have come from Cayenne, and this is probably correct. These specimens pose a nomenclatural problem because one is *Lincus croupius* Rolston, 1983, and the other a *Paralincus* species that is apparently unnamed. *Audinetella* Spinola, 1850, is senior to both *Lincus* Stål, 1867, and *Paralincus* Distant, 1911. Use of *Audinetella* as the senior synonym of *Paralincus* would be of small consequence since there is scant primary literature on this little known genus and its junior synonym *Vauriana* Ruckes, 1958, but use of *Audinetella* as the senior synonym of *Lincus* would be very disruptive. There is considerable primary literature on this large genus, much of it concerning the role of *Lincus* species as vectors of diseases afflicting palms. Unfortunately, the description of *Audinetella bipunctata* fits only *Lincus croupius* in several critical aspects, so there is actually no choice in associating the binomen and specimen. For these reasons I am petitioning the International Commission on Zoological Nomenclature to suppress the binomen *Audinetella bipunctata* Spinola, 1850, for purposes of priority.

Ochlerini Rolston, 1981

Diagnosis. Superior surface of third tarsal segment of hind legs shallowly excavated in females (only flattened in *Adoxoplatys*) and sometimes in males.

Trichobothria on at least last sternite located laterad of adjacent spiracles, excepting *Pseudadoxoplatys* with mesial trichobothrium of each pair on last sternite on imaginary line tangential to, and projecting caudad from, spiracular openings on last two sternites (Fig. 5). Basal segment of rostrum projecting caudad of bucculae, terminating on prosternum. Mesosternum thinly carinate mesially, metasternum usually so. Metapleural ostioles each accompanied by auricle, this sometimes elongated but not drawn out into ruga. Scutellum longer than wide at base (excepting brachypterous forms). All tibiae broadly sulcate. Spiracles present on paratergite 8 of females, on sternite 8 of males.

Labium usually arising on or posterior to plane transecting head at right angles to longitudinal axis of body and at anterior limit of eyes, but arising before this plane in several genera (*Adoxoplatys, Neoadoxoplatys, Pseudadoxoplatys*; *Ochlerus, Orbatina, Schraderia*; and *Phereclus*).

Comments. Only the tarsal character appears unique among western hemisphere pentatomids, all other characteristics of the tribe appearing in various combinations elsewhere. The tribe's greatest affinity outside of the subfamily is with Pentatomini.

KEY TO GENERA OF OCHLERINI

1.	Hemelytra fully developed	2
–	Brachypterous, membranes of hemelytra much reduced or absent	32
2(1).	Clearly defined intercalary segment present at base of 2nd rostral segment; metasternum broadly sulcate between lateral rims, with or without median, longitudinal carina in sulcus	3
–	Intercalary rostral segment absent; metasternum usually without lateral rims, usually carinate; flat or tectiform if lateral rims present	4
3(2).	Antennae 4-segmented; inferior surface of femora armed with many small tubercles of similar size, most of them in 2 rows	*Adoxoplatys* Breddin (p. 6)
–	Antennae 5-segmented; inferior surface of femora armed with preapical pair of spines, of which at least mesial member is stout, and usually with lesser spines or tubercles	*Neoadoxoplatys* Kormilev (p. 6)
4(2).	Both trichobothria of each pair on sternite 7 laterad of imaginary line tangential to outer margin of spiracular openings on sternites 6 and 7 and projecting caudad (Fig. 9); length of head before ocelli usually less than 0.8 of width of head across eyes; sides of abdomen usually convex from dorsal view	5
–	Mesial trichobothrium of each pair on sternite 7 on such imaginary line (Fig. 5); length of head before ocelli 0.8 or more of width of head across eyes; sides of abdomen subparallel (Fig. 4)	*Pseudadoxoplatys,* new genus (p. 7)
5(4).	Width of scutellum at distal ends of frena about 0.6 or more of basal width; costal angles of coria projecting little if any past apex of scutellum	6
–	Width of scutellum at distal ends of frena less than 0.6 of basal width; costal angles of coria projecting well beyond apex of scutellum	10
6(5).	Scutellum reaching apex of abdomen	*Moncus* Stål (p. 8)
–	Scutellum shorter, an imaginary, transverse line at apex of scutellum crossing penultimate connexival sclerites	7

7(6). Anteapical tooth present on lateral margins of each jugum (Fig. 6) ..... *Schraderia* Ruckes (p. 9)

– Lateral margins of juga unarmed 8

8(7). Humeral angles subacute, produced laterad of hemelytra by distance subequal to one-half width of eye; elevated edge of each evaporative area sigmoid (Fig. 8) ... *Orbatina* Ruckes (p. 10)

– Humeral angles little produced; elevated edge of each evaporative area usually arcuate (Fig. 10) 9

9(8). Anterolateral angles of pronotum projecting anteriorly little if any beyond posterior limit of eyes (Fig. 11); scutellum not constricted near posterior ends of frena; metasternum with thin, weak carina ..... *Ochlerus* Spinola (p. 10)

– Anterolateral angles of pronotum projecting anteriorly well past posterior limit of eyes, reaching near middle of eyes; scutellum usually slightly constricted near posterior ends of frena; mestasternum flat, or tectiform, or thinly and weakly carinate ..... *Stalius,* new genus (p. 11)

10(5). Space between each eye and pronotum equal to or greater than 0.2 diameter of eye (Figs. 21–24) 11

– Eyes contiguous with pronotum or nearly so 15

11(10). Labium arising before imaginary plane bisecting head at anterior limit of eyes ..... *Phereclus* Stål (p. 14)

– Labium arising behind such a plane 12

12(11). Inferior surface of femora armed distally with small, peg-like tubercles, these reduced or absent on posterior femora ..... *Paralincus* Distant (p. 14)

– Inferior surface of femora smooth or granulate 13

13(12). Space between each eye and pronotum greater than one-half diameter of eye (Fig. 23); juga shorter than tylus ..... *Eritrachys* Ruckes (p. 15)

– Space between each eye and pronotum less than one-half diameter of eye (Figs. 24, 25); juga as long as or longer than tylus 14

14(13). Second rostral segment attaining mesocoxae, rostral apex lying on sternite 3 ... *Herrichella* Distant (p. 15)

– Second rostral segment attaining metacoxae, rostral apex lying on sternite 6 ... *Barola,* new genus (p. 16)

15(10). Second rostral segment terminating between procoxae and mesocoxae; rostrum not projecting beyond sternite 3, usually not reaching onto abdomen 16

– Second rostral segment attaining anterior limit of mesocoxae, or nearly so, or reaching beyond this point; rostrum extending onto or beyond sternite 3 19

16(15). Anterolateral margins of pronotum convex; juga separated before tylus, pincer-shaped (Fig. 29) ..... *Clypona,* new genus (p. 17)

– Anterolateral margins of pronotum concave or sinuous; juga contiguous before tylus or nearly so 17

17(16). Anterolateral margins of pronotum slightly sinuous with small, triangular tooth at anterolateral angles 18

– Anterolateral margins of pronotum concave with anterolateral angles projecting forward to anterior limit of eyes, this projection curving mesad and dorsad .... *Forstona,* new genus (p. 20)

18(17). Basal plates somewhat tumescent near posterior margin, unevenly convex in profile; pygophore strongly concave mesially ventrad of posterior margin; antennae 4-segmented ..... *Miopygium* Breddin (part) (p. 19)

– Basal plates evenly convex; pygophore convex mesially ventrad of posterior margin; antennae 5-segmented ..... *Uvaldus,* new genus (part) (p. 25)

19(15). Humeri strongly emarginated (Fig. 35); veins of hemelytral membranes sometimes reticulated ..... *Schaefferella* Spinola (part) (p. 21)

– Humeri weakly or not emarginated; veins of hemelytral membranes simple or furcate, often with some basal cells 20

20(19). Anteocular processes well developed, acute (Figs. 43, 44, 47) 21

– Anteocular margins of head projecting at most as obtuse processes 23

21(20). Pronotum scarcely declivitous, anterolateral angles broadly rounded (Fig. 43) .. .. *Alathetus* Dallas (part) (p. 23)

– Pronotum decidedly declivitous, anterolateral angles narrowly rounded or angular 22

22(21). Disk of basal plates swollen near posterior margin (Fig. 45); pygophore about one-fourth as wide as maximum width of abdomen, posterior surface lacking subconical projection ..... *Alitocoris* Sailer (part) (p. 23)

– Disk of basal plates almost evenly convex; pygophore about two-fifths as wide as maximum width of abdomen, bearing large subconical projection on posterior surface ..... *Macropygium* Spinola (p. 24)

23(20). Second rostral segment ending between mesocoxae, rostral apex of female and usually of male not reaching sternite 6 24

– Second rostral segment projecting past mesocoxae, rostral apex of both sexes extending to or beyond sternite 6 29

24(23). Disk of basal plates swollen near posterior margin, or their posterior margin standing well out from 9th paratergites, these profoundly concave basally, forming pit; third antennal segment at least twice length of second 25

– Disk of basal plates not conspicuously swollen, their posterior margin appressed to 9th paratergites; length of third antennal segment much less than twice length of second 26

25(24). Basal plates evenly convex, their posterior margin standing well out from 9th paratergites (Fig. 53); 9th paratergites profoundly concave at base, each together with adjacent margin of basal plate forming pit; dorsal margin of pygophore projecting at bottom of mesial emargination as nearly horizontal projection ... . *Uvaldus,* new genus (part) (p. 25)

– Disk of basal plates with swollen area, posterior margin appressed to 9th paratergites, these not forming basal pit; pygophore without projection at base of emargination ..... *Alitocoris* Sailer (part) (p. 23)

26(24). Lateral margins of juga anterior to anteocular concavity tapering sharply toward apex (Fig. 65) 27

– Lateral margins of juga parallel or subparallel between anteocular concavity and apex 28

27(26). Antennae 5-segmented ..... *Parochlerus* Breddin (p. 27)

– Antennae 4-segmented ..... *Tetrochlerus* Breddin (p. 29)

28(26). Second gonocoxae visible (Figs. 36, 39); humeri noticeably emarginated, produced laterad of base of hemelytra by about two-fifths width of eye (Fig. 35) .... *Schafferella* Spinola (part) (p. 21)

– Second gonocoxae hidden (Figs. 72, 78); humeri not produced .... *Catulona,* new genus (p. 30)

29(23). Length of second antennal segment less than one-third length of third antennal segment and less than width of eye ..... *Alitocoris* Sailer (part) (p. 23)

– Second antennal segment at least one-half as long as third antennal segment and longer than width of eye 30

30(29). Metasternum flat or slightly tectiform, sometimes weakly carinate for part of its length ..... *Lincus* Stål (p. 35)

– Metasternum clearly carinate mesially for entire length 31

31(30). Juga exceeding tylus, their lateral margins briefly subparallel between anteocular concavity and apex (Fig. 79) ..... *Cromata,* new genus (p. 33)
– Tylus exceeding juga; lateral margins of juga before anteocular concavity tapering toward apex (Figs. 84, 86) ..... *Coranda,* new genus (p. 36)
32(1). Pronotum strongly explanate (Fig. 43) ..... *Alathetus* Dallas (part) (p. 23)
– Pronotum not explanate or with only anterolateral angles strongly produced 33
33(32). Anterolateral angles of pronotum extending anteriorly well beyond eyes; hemelytral membranes lacking ..... *Brachelytron* Ruckes (p. 38)
– Anterolateral angles of pronotum not projecting anteriorly beyond eyes; hemelytral membrane present but much reduced ..... *Miopygium* Breddin (part) (p. 19)

Adoxoplatys Breddin, 1903

Adoxoplatys Breddin, 1903b:368; Kirkaldy, 1909:XXXIII, 238 (type species designated); Kormilev, 1949:315–316, 324 (description, species keyed); Kormilev, 1950: 343 (synonymy); Kormilev, 1955:12–15 (Breddin's species redescribed, species keyed); Ruckes, 1958:23 (systematic position). (Type species *Adoxoplatys minax* Breddin, 1903, by subsequent designation, Kirkaldy, 1909.)

Diagnosis. Mesial tubercle at base of abdominal venter broad, flat, apposed by sulcate metasternum. At least anterior femora armed on inferior surface with 2 irregular rows of small tubercles; superior surface of third tarsal segment of hind legs flattened but not excavated. Labium arising well before imaginary plane bisecting head at anterior limit of eyes; second rostral segment usually attaining mesocoxae, with well defined intercalary segment at base; apex of rostrum usually on or beyond sternite 5. Length of head before ocelli 0.6–0.8 of width across eyes. Antennae 4-segmented. Juga surpassing tylus. Width of scutellum at distal end of frena nearly one-half of basal width. Coria extending well past apex of scutellum. Body depressed.

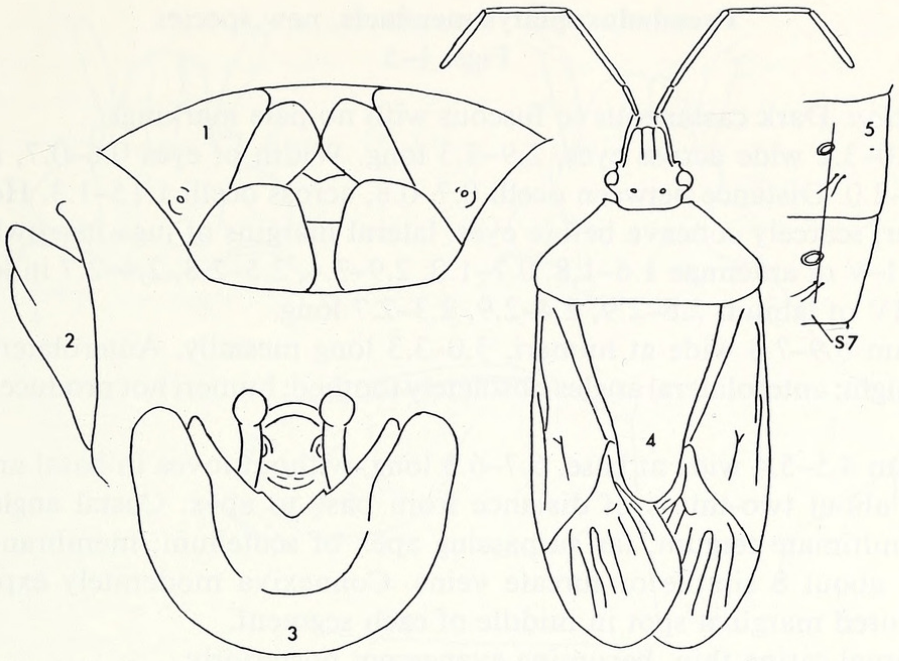
Comments. This genus and *Neoadoxoplatys* are unusual among ochlerines in having a sulcate metasternum, a prominent intercalary rostral segment, and usually a flattened rather than excavated superior surface of the third tarsal segment of the hind legs in both sexes.

The genus ranges from Panama to Argentina and contains 8 nominal species.

Neoadoxoplatys Kormilev, 1956

Neoadoxoplatys Kormilev, 1956:4; Ruckes, 1958:23 (systematic position). (Type species *Neoadoxoplatys saileri* Kormilev, 1956, by original designation.)

Diagnosis. Metasternum broadly and shallowly sulcate, without median carina but sometimes tectiform. Inferior surface of each femur armed with one or two pairs of preapical spines, some spines stout and conspicuous; superior surface of third tarsal segment of hind legs flattened in females, sometimes excavated. Base of abdominal venter unarmed. Labium arising before imaginary plane bisecting head at anterior limit of eyes; second rostral segment reaching mesocoxae, with intercalary segment at base; apex of rostrum on or beyond sternite 5. Antennae 5-segmented. Juga longer than or subequal to tylus. Length of head before ocelli 0.7 of width across eyes. Width



Figs. 1–5. *Pseudadoxoplatys mendacis.* 1. Genital plates, caudoventral view. 2. Pygophore, lateral view. 3. Pygophore, caudal view. 4. Habitus, with hemelytra slightly open. 5. Spiracles and trichobothria on left side of sternites 6 and 7. Symbol: sternite 7 (S7).

of scutellum at distal end of frena 0.4–0.5 of basal width. Coria projecting far past apex of scutellum. Body depressed.

Comments. The genus ranges from Mexico to Argentina and contains 3 nominate species.

Pseudadoxoplatys, new genus
Figs. 1–5

Type species *Pseudadoxoplatys mendacis,* new species.

Diagnosis. Mesial trichobothrium of pair on each side of sternite 7 located on line tangential to lateral margin of spiracular openings on sternites 6 and 7 and projected posteriorly (Fig. 5). Length of head before ocelli 0.8 of width across eyes. Metasternum flat with thin, weak, mesial carina. Base of abdomen and femora unarmed. Labium arising before an imaginary pane bisecting head at anterior limit of eyes, even before antennifers; second rostral segment reaching mesocoxae; apex of rostrum on sternite 5. Antennae 5-segmented; basal segment projecting well beyond apex of head. Width of reticulated part of one eye 0.2 width of head across eyes. Juga and tylus subequal in length. Width of scutellum at distal end of frena about one-half of basal width; costal angles of coria surpassing apex of scutellum. Sides of abdomen subparallel.

Comments. This genus bears a strong resemblance to *Adoxoplatys* and *Neoadoxoplatys* because of the body shape (Fig. 4). However, it is unlike *Adoxoplatys* or *Neoadoxoplatys* in having unarmed femora, in lacking an intercalary rostral segment and in having the metasternum asulcate.

The excavated superior surface of the third tarsal segment of the hind legs of females places this genus among the ochlerines.

Pseudadoxoplatys mendacis, new species
Figs. 1–5

Description. Dark castaneous to fuscous with no pale markings.

Head 3.0–3.2 wide across eyes, 2.9–3.3 long. Width of eyes 0.6–0.7, interocular width 1.7–2.0. Distance between ocelli 0.7–0.8, across ocelli 1.15–1.3. Head almost rectangular, scarcely concave before eyes; lateral margins of juga narrowly reflexed. Segments I–V of antennae 1.6–1.8, 0.7–1.0, 2.9–3.4, 2.5–2.8, 2.4–2.7 in length. Segments II–IV of labium 2.6–2.9, 2.4–2.9, 2.3–2.7 long.

Pronotum 6.9–7.8 wide at humeri, 3.0–3.3 long mesially. Anterolateral margins nearly straight; anterolateral angles obsoletely toothed; humeri not produced, rounded (Fig. 4).

Scutellum 4.5–5.4 wide at base, 5.7–6.5 long, without fovea in basal angles; frena extending about two-thirds of distance from base to apex. Costal angles of coria above penultimate tergum, far surpassing apex of scutellum; membranes fumose, each with about 8 simple or furcate veins. Connexiva moderately exposed, with lighter colored marginal spot in middle of each segment.

Metasternal carina thin, becoming evanescent posteriorly.

Genital plates as in Figure 1. Emargination in posterior pygophoral margin deep, U-shaped from caudal view (Fig. 3). Dorsal margin of inferior ridge V-shaped. Posterolateral corners of pygophore incised, apparently at junction of lateral pygophoral walls and inferior ridge. Parameres visible from caudal view, their apices enlarged, ovoid. Posterior pygophoral margin sigmoid in profile (Fig. 2).

Body length 15.2–17.3.

Types. Holotype, ♂ labeled "PERU: Madre de Dios, Rio Tambopata Reserve, 30 km SW of Puerto Maldonado, 290 m, Nov. 1–26, 1982, Edward S. Ross." Deposited in the California Academy of Sciences.

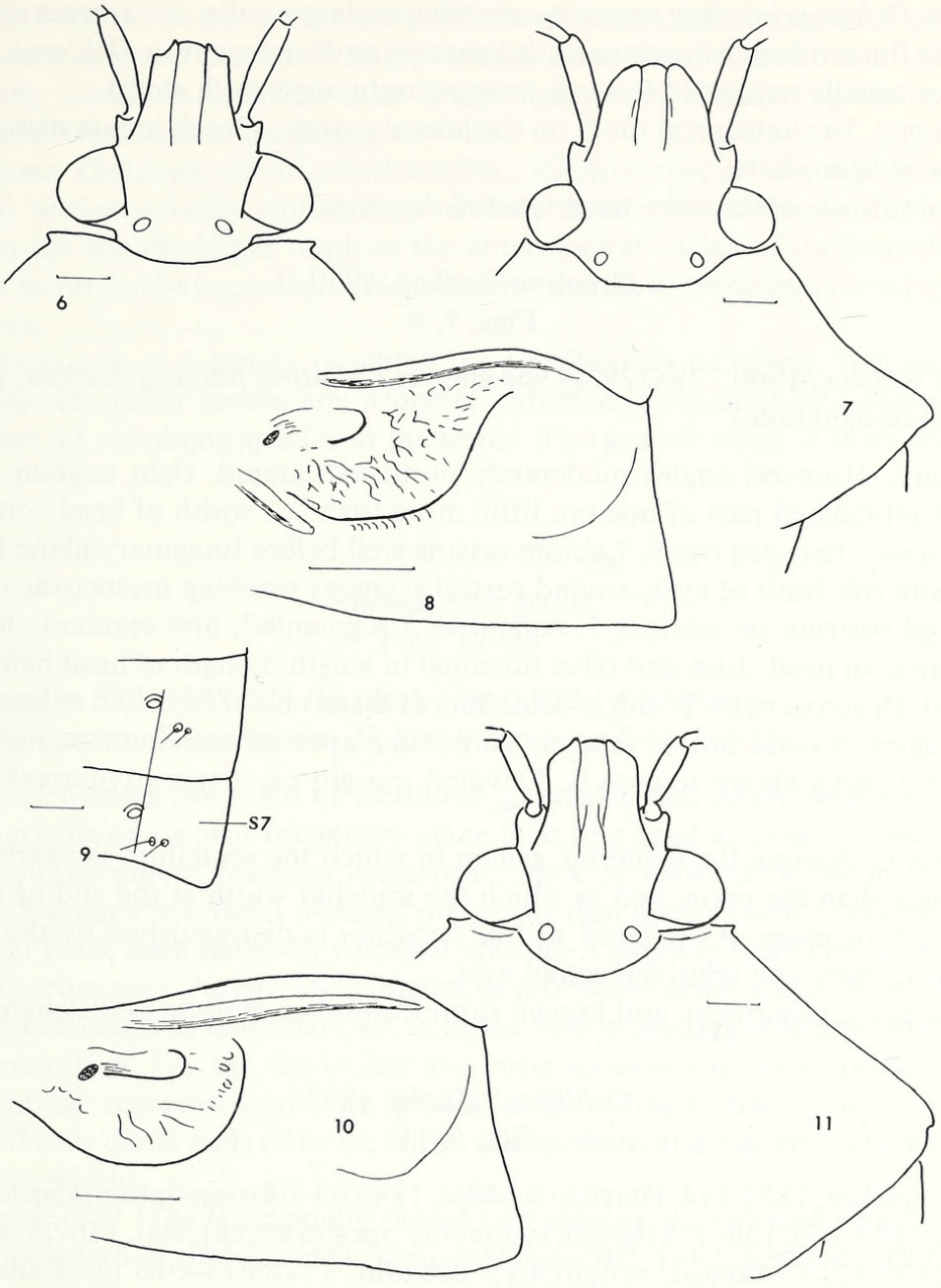
Paratypes, 4♀♀. 1♀ labeled same as holotype (LHR); 1♀ labeled "Frans Steinback Coll. 1956. Todos Santos Prov. Chaparo Dep. 500 M. Cochabamba, Bolivia." and "J. C. Lutz Collection. 1961." (NMNH); 1♀ labeled "Bolivia: Dept. of Santa Cruz, 1120 ft. elevation" and "R. B. Cumming 12-X-59 black light trap" (RMB); and 1♀ labeled "Bolivia: Saavedra, Dept. Santa Cruz Agr. Exp. Sta." and "R. B. Cumming. 27-XII-59. Black light trap" (AMNH).

Moncus Stål, 1867

Moncus Stål, 1867:524; Stål, 1872:12, 13 (keyed); Distant, 1911:245 (synonymy). (Type species *Ochlerus obscurus* Dallas, 1851, by monotypy.)

Hemingius Distant, 1899:423–424 (synonymized by Distant, 1911). (Type species *Ochlerus scaber* Walker, 1867 [=*Ochlerus obscurus* Dallas] by monotypy.)

Diagnosis. Scutellum extending to apex of abdomen, 0.8 as wide at distal end of frena as at base, narrowest there, again widening before apex. Eyes large, reticulated part of each 0.3 width of head across eyes. Labium arising on imaginary plane bisecting head at anterior limit of eyes; second rostral segment reaching mesocoxae; apex of rostrum on sternite 5 or 6. Antennae 5-segmented; basal segment projecting past apex of head. Juga and tylus subequal in length, former compressed apically and pinched around tylus. Length of head before ocelli 0.6 of width across eyes.



Figs. 6–11. 6. *Schraderia hughesae,* head. 7, 8. *Orbatina fulginia.* 7. Head and part of pronotum. 8. Evaporative area, left metapleuron. 9–11. *Ochlerus handlirschi.* 9. Spiracles and trichobothria on left side of sternites 6 and 7. 10. Evaporative area, left metapleuron. 11. Head and part of pronotum. Symbol: sternite 7 (S7).

Comments. The size of the scutellum set this genus apart from all other ochlerines. There are 2 nominate species, both South American.

Schraderia Ruckes, 1959
Fig. 6

Schraderia Ruckes, 1959:3–5. (Type species *Schraderia hughesae* Ruckes, 1959, by original designation.)

Diagnosis. Small preapical tooth present on lateral margin of each jugum (Fig. 6).

Similar to *Ochlerus* in other respects excepting male genitalia. Parameres divergent, essentially linear (stem of parameres subparallel or convergent in *Ochlerus*; head of parameres usually expanded laterad, forming right angle with stem).

Comments. The anteapical tooth on the lateral margin of each jugum distinguishes members of *Schraderia.*

The 2 nominate species are from Central America.

Orbatina Ruckes, 1960
Figs. 7, 8

Orbatina Ruckes, 1960:228–229. (Type species *Orbatina fuligina* Ruckes, 1960, by original designation.)

Diagnosis. Humeral angles moderately produced laterad, right angular (Fig. 7). Width of reticulated part of one eye little more than 0.2 width of head across eyes, 0.7 of distance between ocelli. Labium arising well before imaginary plane bisecting head at anterior limit of eyes; second rostral segment reaching mesocoxae or nearly so; apex of rostrum on sternite 5. Antennae 5-segmented; first segment clearly exceeding apex of head. Juga and tylus subequal in length. Length of head before ocelli 0.75 of width across eyes. Width of scutellum at distal end of frena 0.6 of basal width. Costal angles of coria not or scarcely surpassing apex of scutellum; scutellum and coria terminating above tergum 6. Elevated margin of evaporative areas sigmoid (Fig. 8).

Comments. Among the ochlerine genera in which the scutellum is nearly as long as or longer than the coria, and in which the scutellar width at the end of the frena is about 0.6 or more of the basal width, *Orbatina* is distinguished by the laterally produced humeri and relatively small eyes.

This genus is monotypic and known from Colombia, Bolivia and Panama.

Ochlerus Spinola, 1837
Figs. 9–11

Ochlerus Spinola, 1837:294; Herrich-Schäffer, 1844:63–64 (description, species keyed); Dallas, 1851:150, 156–158 (keyed, synonymy, species keyed); Stål, 1867:524 (keyed); Stål, 1872:12, 13 (keyed, synonymy); Breddin, 1910:615–616 (genitalia). (Type species *Ochlerus cinctus* Spinola, 1837, by monotypy.)

Menipha Amyot and Serville, 1843:112 (synonymized by Stål, 1867). (Type species *Menipha brunnea* Amyot and Serville, 1843 [=*Ochlerus cinctus* Spinola, 1837], by monotypy.)

Melanodermus Stål, 1867:524; Stål, 1872:13. (Type species *Ochlerus circummaculatus* Stål, 1860, by subsequent designation, Kirkaldy, 1909:XXXII.) **NEW SYNONYMY.**

Diagnosis. Eyes large, width of reticulated part of an eye nearly 0.3 width of head acoss eyes, subequal to distance between ocelli (Fig. 11). Labium arising before imaginary plane bisecting head at anterior limit of eyes; second rostral segment reaching mesocoxae; apex of rostrum on sternite 5, 6 or 7. Antennae 5-segmented; basal segment projecting well beyond apex of head. Juga and tylus subequal in length; juga unarmed, subacute or obliquely truncate at apex, there narrow. Length of head

before ocelli 0.7 of width across eyes. Tooth at anterolateral angles of pronotum small, usually directed laterad. Width of scutellum at distal end of frena 0.6–0.75 of basal width; scutellum usually a little longer than coria, terminating above tergum 6 or 7. Metasternum thinly carinate mesially.

Comments. Ochlerus circummaculatus Stål, the type species selected by Kirkaldy (1909) for *Melanodermus,* differs only trivially from other *Ochlerus* species, most notably in the slightly larger tooth at the anterolateral angles of the pronotum and the longer tooth on the bucculae. *Melanodermus* therefore becomes a junior synonym of *Ochlerus.*

Ochlerus is one of 5 genera in which the scutellum is relatively long and broad subapically. The other genera are: *Moncus, Orbatina, Schraderia* and *Stalius.*

There are 15 nominate species in the genus. The generic range is from Mexico to Brazil.

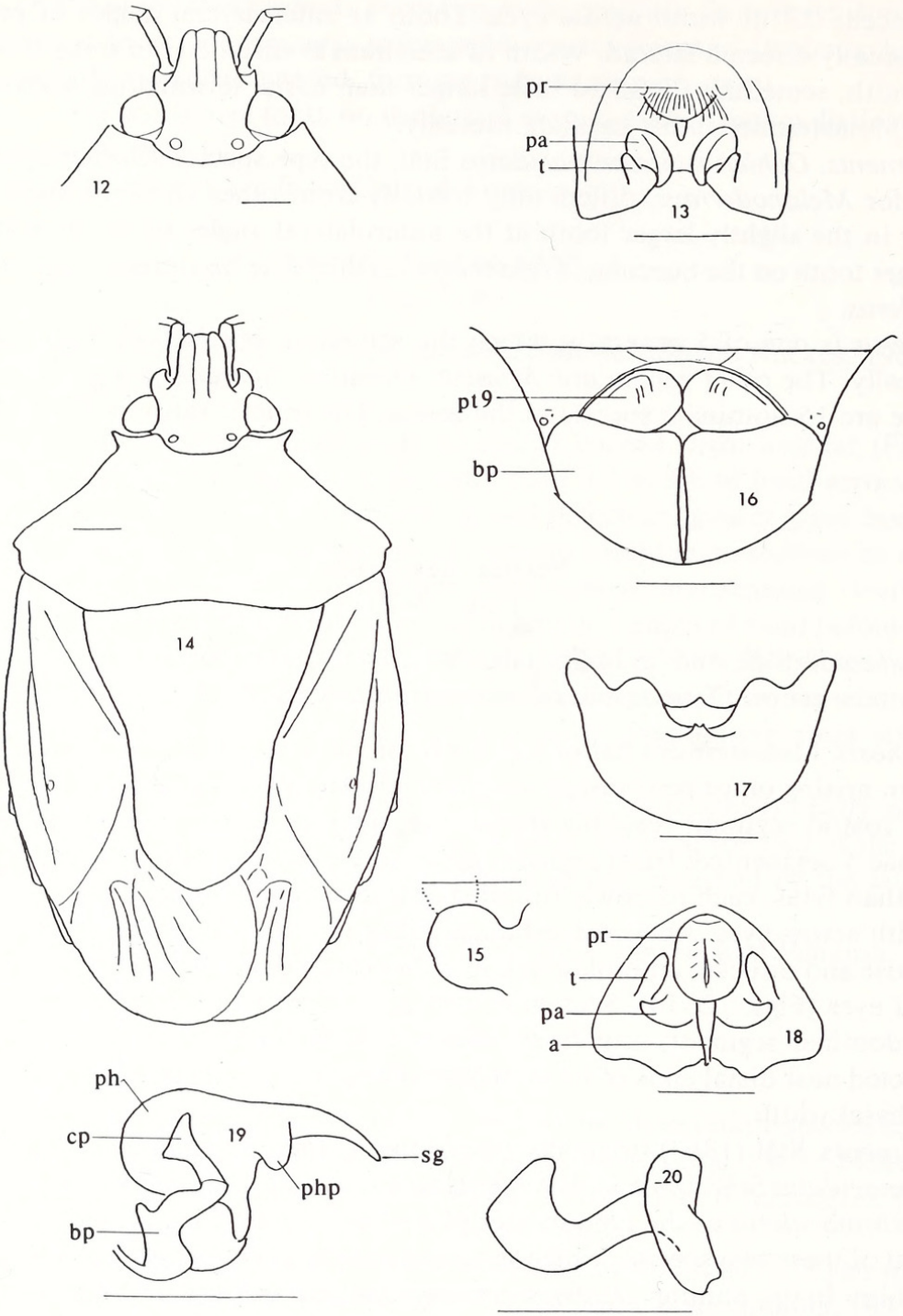
Stalius, new genus
Figs. 12–20

Melanodermus Stål, 1867:524 (in part); Stål, 1872:13 (in part).
Stalius, new genus. (Type species *Ochlerus tartareus* Stål, 1862.)

Diagnosis. Metasternum flat or tectiform, or weakly and thinly carinate mesially. Labrium arising on or near imaginary plane bisecting head at anterior limit of eyes; second rostral segment reaching metacoxae; apex of rostrum on sternites 5 or 6. Antennae 5-segmented; basal segment projecting past apex of head. Juga little or no longer than tylus, each narrowly rounded apically. Length of head before ocelli 0.6–0.7 width across eyes. Anterolateral angles of pronotum acute and directed forward, or spinose and directed anterolaterad, in either case projecting well beyond posterior limit of eyes (Figs. 12, 14). Scutellum and coria terminating above penultimate or last abdominal segment; scutellum usually a little longer than coria and slightly constricted near distal ends of frena; width of scutellum at distal ends of frena nearly 0.6 of basal width.

Comments. Stål (1867) originally placed two species in *Melanodermus*: *Ochlerus circummaculatus* Stål, 1860, and *Ochlerus tartareus* Stål, 1862. Kirkaldy (1909) chose *O. circummaculatus* as the type species of *Melanodermus.* I have examined the type material of these two species, which is conserved in the Naturhistoriska Riksmuseet, Stockholm. In my opinion *Ochlerus circummaculatus* belongs in the genus *Ochlerus,* which reduces *Melanodermus* Stål, 1867, to a junior synonym of *Ochlerus* Spinola, 1837. *Ochlerus tartareus* is not congeneric with *O. circummaculatus* and does not fit into any established genus. *Stalius* is therefore proposed to accommodate *O. tartareus* and the new species whose description follows. Of the 2 syntypes of *Ochlerus tartareus,* both female, the one labeled (a) "Mexico," (b) "Salle,'" (c) "Type," (d) "300/80," (e) "Riksmuseum Stockholm" is selected as lectotype. The paralectotype is labeled (a) "Columbia" (sic), (b) "Stål," (c) "Type," (d) "Paratypus," (e) "301/80," (f) "Riksmuseum Stockholm."

Two other species were subsequently added in *Melanodermus*: *M. picipes* Stål, 1872, and *M. dilutipes* Breddin, 1904. I have examined the holotype of *M. picipes,* also conserved in the Naturhistoriska Riksmuseet, but have been unable to locate



Figs. 12–20. 12, 13. *Stalius tartareus.* 12. Head and anterior part of pronotum. 13. Genital cup. 14–20. *Stalius trisinuatus.* 14. Habitus, composite drawing. 15. Left antennifer, lateral view. 16. Genital plates, caudoventral view. 17. Pygophore, caudal view. 18. Genital cup. 19. Aedeagus, right lateral view. 20. Right paramere, lateral view. Symbols: aedeagus (a); basal plate (bp); capitate process (cp); paramere (pa); paratergite 9 (pt9); phallotheca (ph); phallothecal process (php); proctiger (pr); secondary gonopore (sg); tubercle (t).

the type of *M. dilutipes*. *M. picipes* is assigned to a new genus, *Coranda,* that is proposed later in this paper.

Stalius trisinuatus, new species
Figs. 14–20

Description. Mostly fuscous; rostrum, legs, basal 0.2 of last antennal segment yellowish brown or at least paler than rest of antennae; distal part of coxae and numerous more or less confluent femoral spots, fuscous.

Antennifers cupped laterally about base of antennae (Figs. 14, 15). Segments I–V of antennae 0.7–0.9, 0.7–0.8, 1.2–1.4, 1.3–1.6, 1.7–1.9 in length. Width of head across eyes 2.2–2.5, length 1.7–2.0; length of head before ocelli 0.6–0.7 of width across eyes. Interocular width 1.1–1.2; distance across ocelli 0.9–1.05. Eyes slightly longer than wide; width of an eye about one-half of interocular width. Juga and tylus subequal in length; lateral margins of former subparallel between anteocular concavity and narrowly rounded jugal apices (Fig. 14). Segments II–IV of labium 2.2–2.4, 1.6–1.9, 1.8–2.1 long.

Anterolateral angles of pronotum armed with oblique spine; anterolateral margins of pronotum slightly sinuous, narrowly reflexed. Disk rough, rugose or coarsely granular. Width at humeri 5.2–6.1, mesial length 2.5–2.8.

Scutellar margin usually broadly impressed along frena; disk somewhat rugose basally, smooth caudad of frena. Width of scutellum at base 3.3–4.0, width at distal end of frena 0.6 of basal width; length 3.9–5.0. Membranes of coria darkly fumose, each with 9–10 simple veins.

Smooth, castaneous, submarginal band present on each side of abdominal venter. Area about trichobothria similarly colored.

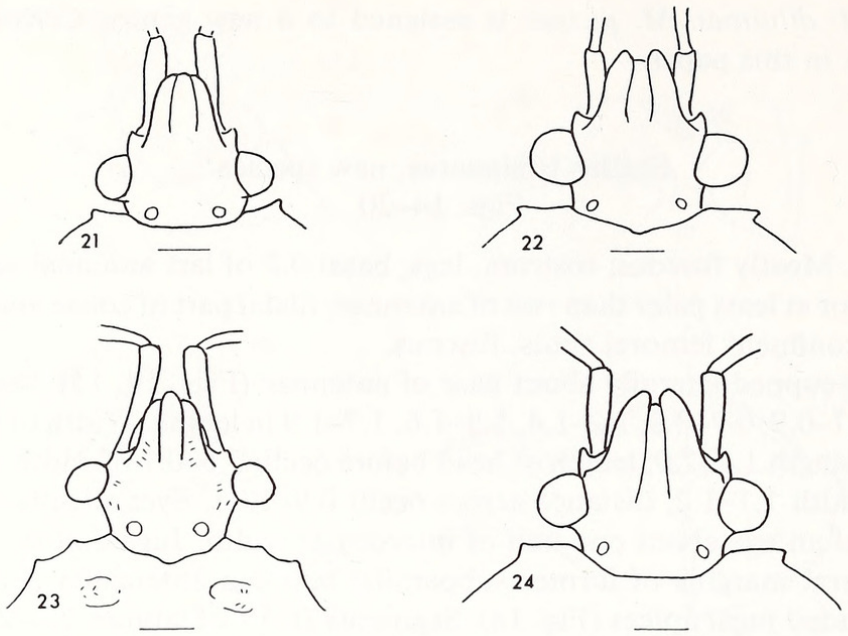
Ninth paratergite concave basally, abruptly bent in posterior direction near apex, flattened and densely setose at apex (Fig. 16). Posterior margin of basal plates shallowly concave beneath 9th paratergites from caudal view.

Posterior margin of pygophore sinuous from caudal view, broadly emarginate mesially, less deeply and less widely emarginate laterally, entire emargination consisting of 3 concave and 2 convex curves (Fig. 17). Membraneous tubercle present on each side of genital cup arising from lateral wall, well removed from posterior margin (Fig. 18). Parameres compressed, aduncate (Fig. 20). Aedeagus heavily sclerotized and pigmented, phallotheca appearing monolithic (Fig. 19).

Types. Holotype, ♂ labeled (a) "COSTA RICA: Puntarenas, Monteverde area. 6 June–14 June 1973. 1400–1700 meters" and (b) "Erwin & Hevel Central American Expedition, 1973." Deposited in National Museum of Natural History, Washington.

Paratypes, 2♂♂, 9♀♀. 1♂ and 5♀♀ with same labeling as holotype (2 LHR, 4 NMNH); 1♂, 2♀♀ labeled "PANAMA: Chiriqui Prov. Santa Clara. May 23–25, 1980. E. Riley & LeDoux" (1 LHR, 2 DBT); and 2♀♀ labeled "PANAMA, Chir. Renacimiento, 5000′, Sta. Clara, May '80. Ratcliffe" (1 AMNH, 1 HDE).

Comments. The lobed antennifers, spinose pronotal lobes, and the genitalia readily distinguish this species from *S. tartareus.* The membraneous tubercles in the genital cup of *S. tartareus* are located at the posterior margin of the genital cup, and the mesial emargination in the posterior pygophoral margin is smoothly concave rather than sinuously concave (Fig. 13).



Figs. 21–24. Head and anterior margin of pronotum. 21. *Phereclus pluto.* 22. *Paralincus terminalis.* 23. *Eritrachys bituberculata.* 24. *Herrichella thoracica.*

Phereclus Stål, 1862
Fig. 21

Phereclus Stål, 1862:98; Stål, 1867:524 (keyed); Stål, 1872:14 (keyed). (Type species *Phereclus pluto* Stål, 1862, by monotypy.)

Diagnosis. Eyes separated from pronotum by distance equal to 0.3 diameter of an eye; width of reticulated part of one eye about one-fourth width of head across eyes. Labium arising well before imaginary plane bisecting head at anterior limit of eyes; second segment attaining mesocoxae. Anterior margin of pronotum moderately emarginated, a line drawn across anterior limit of pronotum passing along or near anterior margin of ocelli. Antennae 5-segmented; about one-half of basal segment protruding beyond apex of head; second segment about one-half as long as third. Juga subequal to tylus in length, their lateral margins tapering toward narrowly rounded apex of head (Fig. 21). Scutellum nearly 0.5 as wide at distal end of frena as at base.

Comments. From the other 4 ochlerine genera in which the eyes are notably separated from the pronotum, this genus may be distinguished by the origin of the labium. In *Phereclus* the labium originates well before an imaginary plane bisecting the head at the anterior limit of the eyes. In the other genera in which the eyes and pronotum are markedly separated, the labium arises behind such a plane.

The 3 nominal species of this genus come from Colombia.

Paralincus Distant, 1911
Fig. 22

Paralincus Distant, 1911:246; Rolston, 1983b:183–184 (revision). (Type species *Ochlerus terminalis* Walker, 1867, by monotypy.)

Vauriana Ruckes, 1958:10–12 (synonymized by Rolston, 1983b). (Type species *Vauriana bimaculata* Ruckes, 1958, by original designation.)

Diagnosis. Femora armed distally on inferior surface with small, peg-like, seta-bearing tubercles, these obscure or reduced in size and number on posterior femora. Eyes separated from pronotum by about one-half the diameter of an eye (Fig. 22); width of one eye about one-fourth width of head across eyes. Juga longer than tylus, convergent apically, without anteocular process or preapical tooth. Antennae 5-segmented; basal segment of each slightly surpassing apex of head. Labium arising behind imaginary plane bisecting head at anterior limit of eyes; second segment reaching mesocoxae; apex of rostrum on sternites 4–6. Length of head from anterior limit of ocelli to apex 0.7 of width across eyes. Anterior margins of pronotum shallowly concave or sinuous. Scutellar width at distal end of frena 0.5 of basal width. Costal angles of coria surpassing apex of scutellum. Metasternum carinate mesially.

Comments. There are 4 other genera in which the eyes are notably separated from the pronotum: *Barola, Eritrachys, Herrichella* and *Phereclus.* Of these 5 genera, only *Paralincus* has armed femora.

The 3 species of the genus are found in the Amazon basin and northern South America.

Eritrachys Ruckes, 1959
Fig. 23

Eritrachys Ruckes, 1959:10–11. (Type species *Eritrachys bituberculata* Ruckes, 1959, by original designation.)

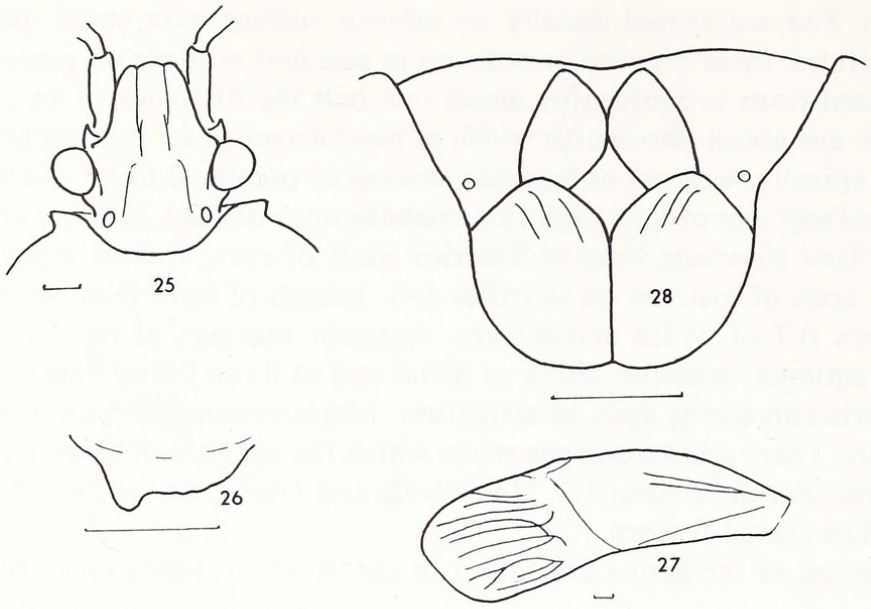
Diagnosis. Eyes pedunculate, separated from pronotum by a little more than one-half the diameter of an eye on anterior-posterior axis (Fig. 23). Antennae 5-segmented; first segment surpassing apex of head; second segment about half as long as third. Juga shorter than tylus. Length of head before ocelli 0.6 of width across eyes. Labium arising behind imaginary plane bisecting head at anterior limit of eyes; second rostral segment attaining mesocoxae; apex of rostrum on penultimate sternite. Pronotal emargination behind head and anterolateral margin on each side of head quite sinuous. Width of scutellum at distal end of frena 0.4 of basal width. Corium surpassing apex of scutellum. Metasternum carinate mesially.

Comments. The pedunculate eyes, well separated from the pronotum, are distinctive. This monotypic genus ranges from Costa Rica to Ecuador.

Herrichella Distant, 1911
Fig. 24

Herrichella Distant, 1911:245–246. (Type species *Herrichella thoracica* Distant, 1911, by monotypy.)

Diagnosis. Eyes separated from pronotum by distance equal to 0.2 diameter of eye (Fig. 24). Antennae 5-segmented; first segment extending little past apex of head; length of segment II less than 0.3 that of segment III. Juga exceeding tylus. Length of head before ocelli 0.6–0.7 width across eyes. Anteocular process poorly developed, obtuse. Labium arising behind imaginary plane bisecting head at anterior limit of eyes; rostral segment II attaining anterior limit of mesocoxae; apex of rostrum reaching sternite 3. Anterior margin of pronotum moderately emarginated. Width of scu-



Figs. 25–28. *Barola farfala.* 25. Head and anterior margin of pronotum. 26. Profile of left buccula. 27. Left hemelytron. 28. Genital plates, caudoventral view.

tellum at distal end of frena 0.5 of basal width. Coria exceeding apex of scutellum. Metasternum carinate mesially.

Comments. The original description is misleading with respect to relationships of the rostrum to the coxae and sternites because the head of the holotype was appreciably reflexed.

This is one of 5 ochlerine genera in which the eyes and pronotum are not contiguous or nearly so. The other genera are *Barola, Eritrachys, Paralincus* and *Phereclus. Herrichella* differs especially from *Eritrachys* is the length of the juga relative to the tylus and in the form of the pronotum, from *Paralincus* in having unarmed femora, from *Phereclus* in the origin of the labium and from *Barola* in having a shorter rostrum, shorter second antennal segment and more developed metasternal carina.

Herrichella is monotypic and known only from Colombia.

Barola, new genus
Figs. 25–28

Type species *Barola farfala,* new species.

Diagnosis. Metasternum nearly flat, very shallowly sulcate on each side of weakly developed, broad, median carina. Labium arising behind imaginary line traversing head at anterior limit of eyes; bucculae strongly toothed (Fig. 26); segment II of rostrum reaching metacoxae, apex attaining penultimate sternite. All trichobothria well laterad of adjacent spiracle. Eyes separated from pronotum by about 0.4 maximum anterior-posterior diameter of eye (Fig. 25). Anteocular process lacking. Antennae 5-segmented; length of segment II about two-thirds that of segment III. Length of head before ocelli three-fourths of width across eyes. Anterior margin of pronotum moderately emarginate behind head, an imaginary line across anterior limits of pronotum passing near anterior limits of ocelli. Costal angles of coria surpassing apex

of scutellum, lying above penultimate connexival segment. Width of scutellum at distal end of frena about one-half of basal width. Femora unarmed.

Comments. This genus is similar to *Herrichella* but differs notably in having a less developed metasternal carina, a longer rostrum and differently proportioned antennal segments.

Barola farfala, new species
Figs. 25–28

Description. Dark brown above with ivory median macule at base of scutellum and yellowish marginal macule on each connexvial segment, those macules on segments 5 and 6 covering most of segment; abdominal venter brownish yellow with conspicuous dark punctation except mesially; legs light brown with slightly darker subapical annulus on femora; last 2 antennal segments slightly lighter colored than fuscous to dark brown basal segments.

Juga not surpassing tylus at apex, their lateral margins tapering from convexity above antennifers to apex (Fig. 25). Vertex of head sharply delineated, strongly convex, nearly tumescent. First antennal segment projecting well beyond apex of head; segments I–V of antennae 0.9, 0.6, 0.9, 2.1, 3.0 long. Segments I–IV of labium 1.5, 2.9, 2.3, 2.3 in length. Head 2.6 wide across, 2.5 long. Interocular distance 1.4; eyes 0.6 wide, 0.6–0.65 long from dorsal view; distance across ocelli 1.4. Base of antennifers ventrally and line running from antennifers to base of head pale.

Pronotum 6.5 wide at humeri, 2.7 long at meson. Anterolateral margins sinuous, reflexed. Punctation rugose.

Scutellum 4.0 wide at base, 5.1 long. Apex narrowly rounded, slightly elevated on each side. Fovea in basal angles black, deeply punctured. Punctation of disk similar to that of pronotum. Exocorium more strongly punctate than endocorium; membranes dark, each with about 11 veins; costal angle acute, submarginal (Fig. 27).

Lateral borders of prothorax broadly calloused, pale. Pleural surfaces of thorax otherwise densely punctate. Lateral borders of abdomen impunctate, shiny; sternites 3–6 with broad, impunctate sulcus; area between sulcus and lateral border uniformly and darkly punctate; spiracles oval, black.

Basal plates submarginally impressed posteriorly (Fig. 28).

Length about 14 including membranes.

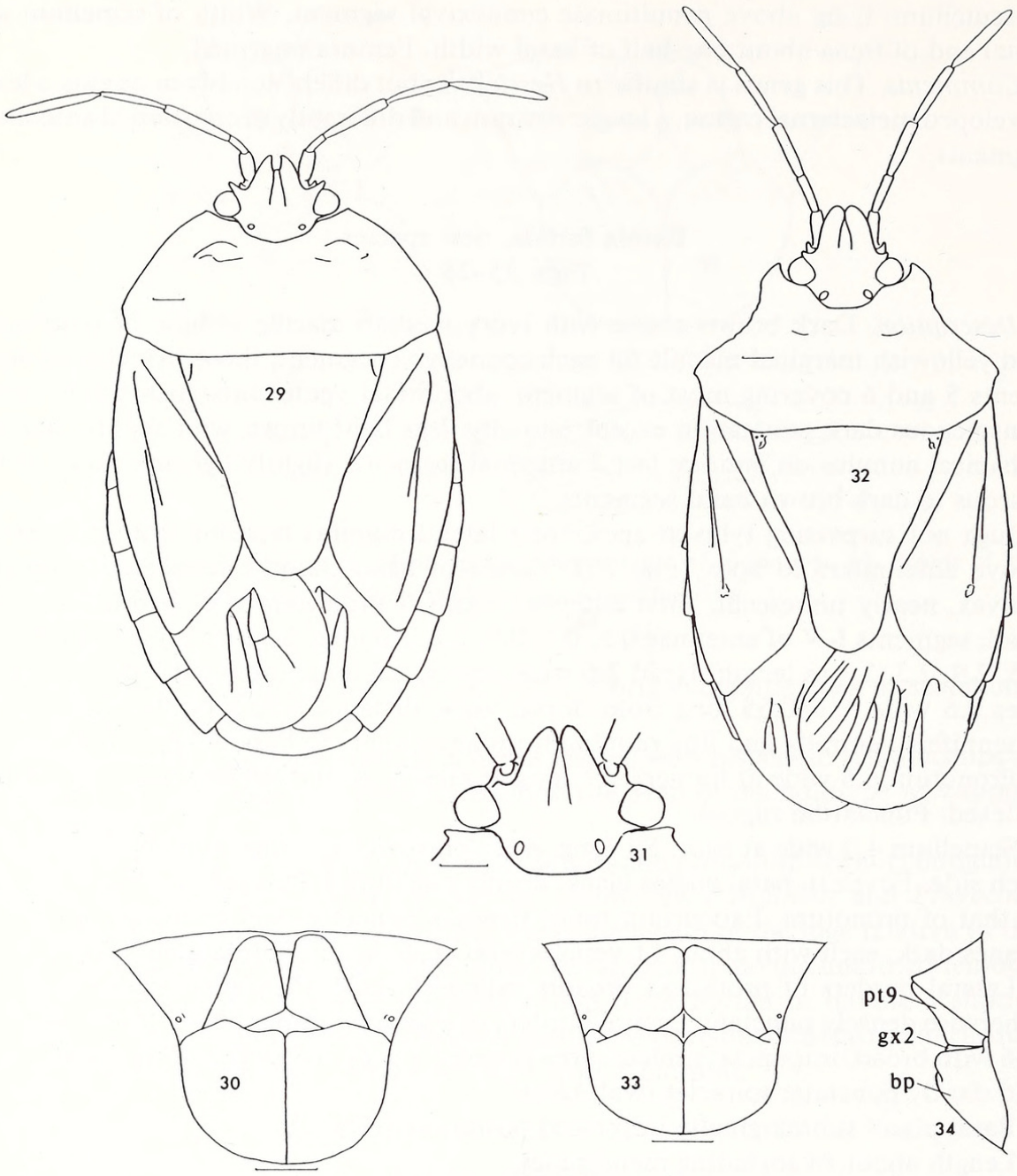
Types. Holotype, ♀ labeled (a) "Barro Colo. Is., Panama C.Z. VII-28-1938.," (b) "Col. by E. C. Williams, Jr." Deposited in the Field Museum of Natural History, Chicago. Segment 3 of right antenna deformed.

Paratype, 1♀ labeled "PANAMA: Prov. Chiriqui, Rovira, 5-VII-64, A. Bruce, 2500 ft. mosquito light trap" (RMB).

Clypona, new genus
Figs. 29, 30

Type species *Clypona aerata,* new species.

Diagnosis. Second rostral segment ending between procoxae and mesocoxae; apex of rostrum lying between metacoxae; labium arising well behind imaginary plane bisecting head at anterior limit of eyes. Antennae 5-segmented; diameter of 3 basal



Figs. 29–34. 29, 30. *Clypona aerata.* 29. Habitus. 30. Genital plates, caudoventral view. 31. *Miopygium cyclopeltoides,* head and anterior pronotal margin. 32–34. *Forstona speciosa.* 32. Habitus. 33. Genital plates, caudoventral view. 34. Same, lateral view. Symbols: basal plate (bp); 2nd gonocoxae (gx2); paratergite 9 (pt9).

segments appreciably greater than that of 2 distal segments; segment II short, one-third or less length of segment III in females (males unknown). Eyes contiguous with pronotum; width of reticulated part of one eye a little less than one-fourth width of head across eyes. Anteocular process large, spinose (Fig. 29). Juga far surpassing tylus, leaving deep incision in apex of head, pincer-shaped before tylus. Length of head before ocelli 0.6 of width across eyes. Anterolateral margins of pronotum explanate; anterolateral angles obtuse. Scutellum little longer than wide at base, length 0.05

greater than basal width; width at distal end of frena 0.5 of basal width; scutellar apex above tergum 5, surpassed by costal angle of coria. Femora and base of abdomen unarmed. Metasternum thinly carinate mesially.

Comments. This genus differs from *Miopygium* in having 5-segmented antennae, apically dehiscent juga, a larger anteocular process and laterally explanate pronotum. It is like *Miopygium, Forstona* and *Uvaldus* in having a relatively short rostrum.

Clypona aerata, new species
Figs. 29, 30

Description. Dorsum fuscous to dark castaneous with scattered flecks and vermiform lines brownish yellow, and general appearance of badly tarnished bronze. Venter colored as dorsum but more extensively pale-marked on thorax. Antennae mostly fuscous, first segment lighter toward base. Rostrum and legs brownish yellow; numerous dark spots on femora and tibiae.

Juga projecting beyond tylus by distance nearly equal to three-fourths length of tylus, narrowly rounded apically (Fig. 29); jugal margins forming incision in apex of head, first diverging then converging. Diameter of eyes 0.6; distance between ocelli 1.1. Width of head across eyes 2.7–2.8, length 2.0–2.1. Basal segment of antennae largest in diameter, segments II and III larger in diameter than segments IV and V; segments I–V of antennae 0.8, 0.5, 1.6–1.9, 1.3–1.4, 2.2–2.3 long. Bucculae obtusely angled or toothed anteriorly, percurrent caudad of angle or tooth, then curving to termination at base of head. Second through last labial segments 1.5, 0.8–0.9, 0.7–0.8 long.

Anterolateral margin of pronotum moderately convex from dorsal apsect; obtuse anterolateral angles sometimes minutely toothed; humeri somewhat bossed before junction of veins on coria; width of pronotum at humeri 6.9–7.4, length mesially 3.0–3.3. Scutellum 4.4–4.8 wide at base, 4.6–5.0 long; fovea in basal angles consisting of a few large, shallow, punctate impressions. Connexiva broadly exposed; segments forming weak serration, each with small, pale, marginal macule at middle. Membranes dark, each with about 7 veins.

Basal plates rather evenly convex; posterior margin of each sigmoid from caudal view; curving ventrad near meson, curving dorsad below 8th paratergite; posterior margin from caudoventral view concave along mesial half (Fig. 30). Length 13.0–13.5.

Types: Holotype, ♀, labeled "Argentina, Ledeimo, July 14–48, P. Wygodzinsky." Deposited in National Museum of Natural History, Washington.

Paratypes, 2♀♀ labeled same as holotype (1 NMNH, 1 AMNH).

Miopygium Breddin, 1904
Fig. 31

Miopygium Breddin, 1904:153. (Type species *Miopygium cyclopeltoides* Breddin, 1904, by monotypy.)

Diagnosis. Rostrum relatively short, apex ranging from metacoxae onto third abdominal sternite; second segment projecting little past procoxae; labium arising well behind imaginary plane bisecting head at anterior limit of eyes. Antennae 4-seg-

mented; basal segment projecting well beyond apex of head; diameter of basal 2 segments conspicuously greater than that of last 2 segments. Anteocular process small, obtuse or acute (Fig. 31). Juga much longer than tylus, contiguous apically or nearly so. Length of head before ocelli little more than one-half width across eyes. Anterolateral margins of pronotum carinate, a short, triangular tooth present at anterolateral angles. Scutellar width at distal end of frena 0.5–0.55 of basal width; length of scutellum usually 0.1 longer than wide. Metasternum carinate mesially.

Comments. The rostrum of most ochlerines extends well onto the abdomen, often nearly to the abdominal apex, but in *Miopygium, Clypona, Forstona* and *Uvaldus* the rostrum does not project onto the abdomen or projects no farther than the third sternite. *Miopygium* differs strikingly from the other 3 genera of this group in having 4-segmented antennae.

There are 2 nominate species, both from Brazil. *M. cyclopeltoides* has two forms, one brachypterous.

Forstona, new genus
Figs. 32–34

Type species *Forstona speciosa,* new species.

Diagnosis. Anterolateral angles of pronotum expanded, curving around eyes, extending nearly to anterior limit of eyes (Fig. 32). Second rostral segment ending between procoxae and mesocoxae; apex of rostrum lying between metacoxae; labium arising well behind imaginary plane bisecting head at anterior limit of eyes. Antennae 5-segmented; basal segment not reaching apex of head, this segment alone of markedly greater diameter than last 2 segments; segment II three-fourths length of segment III in female (male unknown). Eyes contiguous with pronotum; width of reticulated part one-fourth width of head across eyes. Anteocular process present, acute. Juga contiguous before tylus. Length of head before ocelli 0.7 of width across eyes. Scutellar width at distal end of frena a little less than one-half basal width; length nearly 0.2 greater than basal width; apex of scutellum above tergum 5, surpassed by coastal angle of coria. Femora and base of abdomen unarmed. Metasternum thinly carinate mesially.

Comments. The antennae, pronotum and length of the scutellum distinguish this genus from *Miopygium, Clypona* and *Uvaldus.*

Forstona speciosa, new species
Figs. 32–34

Description. Dull black above and below, but with shades of yellowish brown as follows: fifth and distal part of fourth antennal segments, rostrum, tarsi, and small macule at middle of scutellar base, on disc of each corium and marginally in middle of connexival segments, the latter obscure.

Head rather flat above, densely punctate; margins before eyes narrowly reflexed, width across eyes 2.7, length 2.4. Diameter of eyes 0.6; distance between ocelli 0.9. Segments I–V of antennae 0.7, 0.8, 1.3, 1.5, 1.8 long. Bucculae subacutely toothed anteriorly, curving posteriorly to termination a little before base of head. Second through last labial segments 1.7, 1.3, 1.1 long.

Pronotum behind cicatrices and scutellum strongly rugose; coria densely punctate, weakly rugose. Pronotum 7.1 wide at humeri, 3.1 long mesially. Scutellum 4.5 wide at base, 5.0 long; fovea in basal angles not prominent, consisting of a cluster of strong punctures. Connexiva narrowly exposed. Membranes dark, each with about a dozen veins.

Basal plates tumescent submarginally along posterior margin below 9th paratergite, forming a rounded projection when viewed laterally (Figs. 33, 34).

Type. Holotype, ♀ labeled "Brazil, Rondonia: Vilhena, Nov. 1973. M. Alvarenga." Deposited in the American Museum of Natural History. No paratypes.

Schaefferella Spinola, 1850
Figs. 35–42

Schaefferella Spinola, 1850b:88; Spinola, 1852:128 (reprint); Stål, 1867:523 (keyed); Stål, 1872:12 (keyed, synonymy). (Type species *Schaefferella litigiosa* Spinola, 1850 [=*Cimex incisus* Herrich-Schäffer, 1839], by monotypy.)

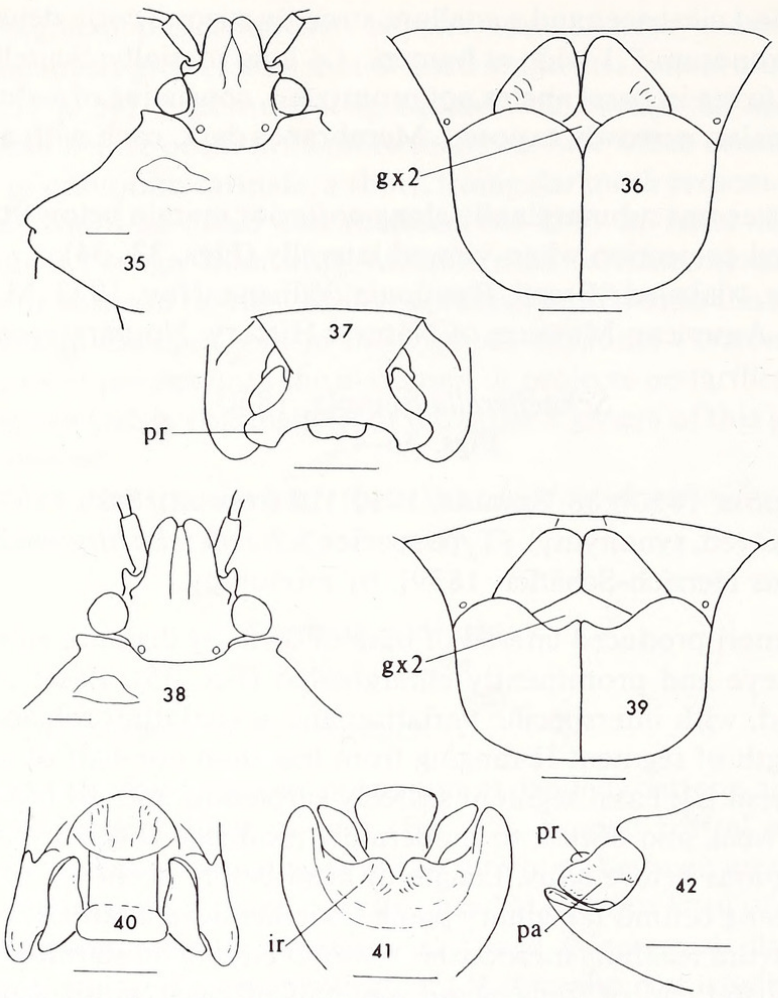
Diagnosis. Humeri produced laterad of base of coria by distance subequal to one-fourth width of eye and prominently emarginated (Fig. 35). Basal 3 segments of antennae enlarged, with interspecific variation and sexual dimorphism in degree of enlargement; length of segment II ranging from less than one-half of segment III to subequal to segment III; basal segment scarcely surpassing apex of head. Anteocular process present, weak and obtuse to moderately produced (Figs. 35, 38); juga convergent or contiguous before tylus. Length of head before ocelli 0.7 of width across eyes. Labium arising behind imaginary plane bisecting head at anterior limit of eyes; segment II of rostrum reaching mesocoxae; rostrum ending on sternites 4 or 5. Width of scutellum at distal end of frena about one-half of basal width. Coria extending past apex of scutellum. Distal part of proctiger expanded laterally (Figs. 37, 40). Metasternum mesially carinate. Basal plates as in Figures 36 and 39, their disk convex with a low prominence near center.

Comment. Schaefferella resembles most closely *Alitocoris* and *Macropygium* in characteristics other than those associated with the genitalia. There are two species in the genus, the type species from Brazil and the other from the Andean region.

Schaefferella fusca, new species
Figs. 38–42

Description. Fuscous with following brown to brownish yellow: basal three-tenths of last antennal segment, humeral emargination, rostrum, tarsi, and in part trochanters and coxae.

Anteocular process reduced to obtuse tubercle (Fig. 38). Juga convergent before tylus, their lateral margins subparallel between concavity before eyes and convexity at apex. Disk of head strongly punctate, vertex rugose, juga transversely rugous basally. Diameter of segments II and III of antennae (in female) only slightly greater than that of segments IV and V; segments I–V of antennae 0.9, 1.3, 1.5, 1.6, 2.0 long. Apex of rostrum reaching middle of sternite 5; length of second through last segments 2.4, 2.2, 1.8. Reticulated part of eye 0.7 wide, distance between eyes 1.6. Distance across ocelli 1.5, between ocelli 1.1. Width of head across eyes 3.1, length 2.4.



Figs. 35–42. 35–37. *Schafferella incisa.* 35. Head and pronotum. 36. Genital plates, caudoventral view. 37. Genital cup. 38–42. *Schafferella fusca.* 38. Head and anterior pronotal margin. 39. Genital plates, caudoventral view. 40. Genital cup. 41. Pygophore caudal view. 42. Distal part of pygophore, lateral view. Symbols: 2nd gonocoxae (gx2); inferior ridge (ir); paramere (pa); proctiger (pr).

Anterolateral margins of pronotum slightly sinuous; tooth at anterolateral angle flat, subtriangular. Disk rugosely punctate. Pronotal width at humeri 7.5, length at meson 3.3.

Scutellum rugose basally, finely punctured apically with a few yellowish brown dots and vermiform marks. Basal width 4.6, length 5.2. Deep fovea present in each basal angle. Frena extending along basal six-tenths of scutellum. Veins of hemelytral membranes simple or furcate; each membrane with about 11 veins.

Genital plates as in Figure 39, with low tumescence near center of basal plates and longitudinal furrows. From caudal view, posterior pygophoral margin with deep, wide, U-shaped emargination half filled by inferior ridge (Fig. 41). Inferior ridge incised mesially, bent posterolaterad on each side of incision. Paramere compressed; posterior part of head convex on mesial face, concave on lateral face; convexities reversed on anterior part of head. Proctiger expanded distally; enlargement reflexed, concave ventrally, convex dorsally (Fig. 40). Extracting pygophore discloses in each lateral wall a large emargination framing head of parameres (Fig. 42).

Types. Holotype, ♂ labeled "ECUADOR. Pastaza, Cuisimi, on Rio Cuisimi, 150 km SE Puyo, 350 m. July 19–23, 1971. B. Malkin." Deposited in the American Museum of Natural History.

Paratype, ♀ labeled "PERU, Loreto. Headwaters of Loreto-Yacu, Yagua Indian Vill. April 21–May 1, 1970. B. Malkin" (LHR).

Comment. This species is readily distinguished from the only other known species of the genus, *S. incisa,* by the predominately fuscous color and lack of reticulation in the hemelytral membranes.

Alathetus Dallas, 1851
Fig. 43

Alathetus Dallas, 1851:160; Rolston, 1982:156. (Type species *Alathetus rufitarsus* Dallas, 1851, by monotypy.)

Diagnosis. Pronotum flat dorsally; anterolateral margins explanate, especially at anterolateral angles (Fig. 43). Anteocular process present. Antennae 4-segmented; basal segment reaching to or beyond apex of head. Labium arising behind imaginary plane bisecting head at anterior limit of eyes; second rostral segment attaining or surpassing mesocoxae; apex of rostrum on or beyond sternite 5. Juga surpassing tylus. In alate species length of head before ocelli 0.7 width across eyes, and width of scutellum at distal end of frena 0.4–0.5 of basal width. Metasternum carinate mesially. Brachypterous species lacking ocelli.

Comments. The genus contains 2 species, the type species from Jamaica and a brachypterous species, *A. haitiensis* Rolston, 1982, from Hispaniola.

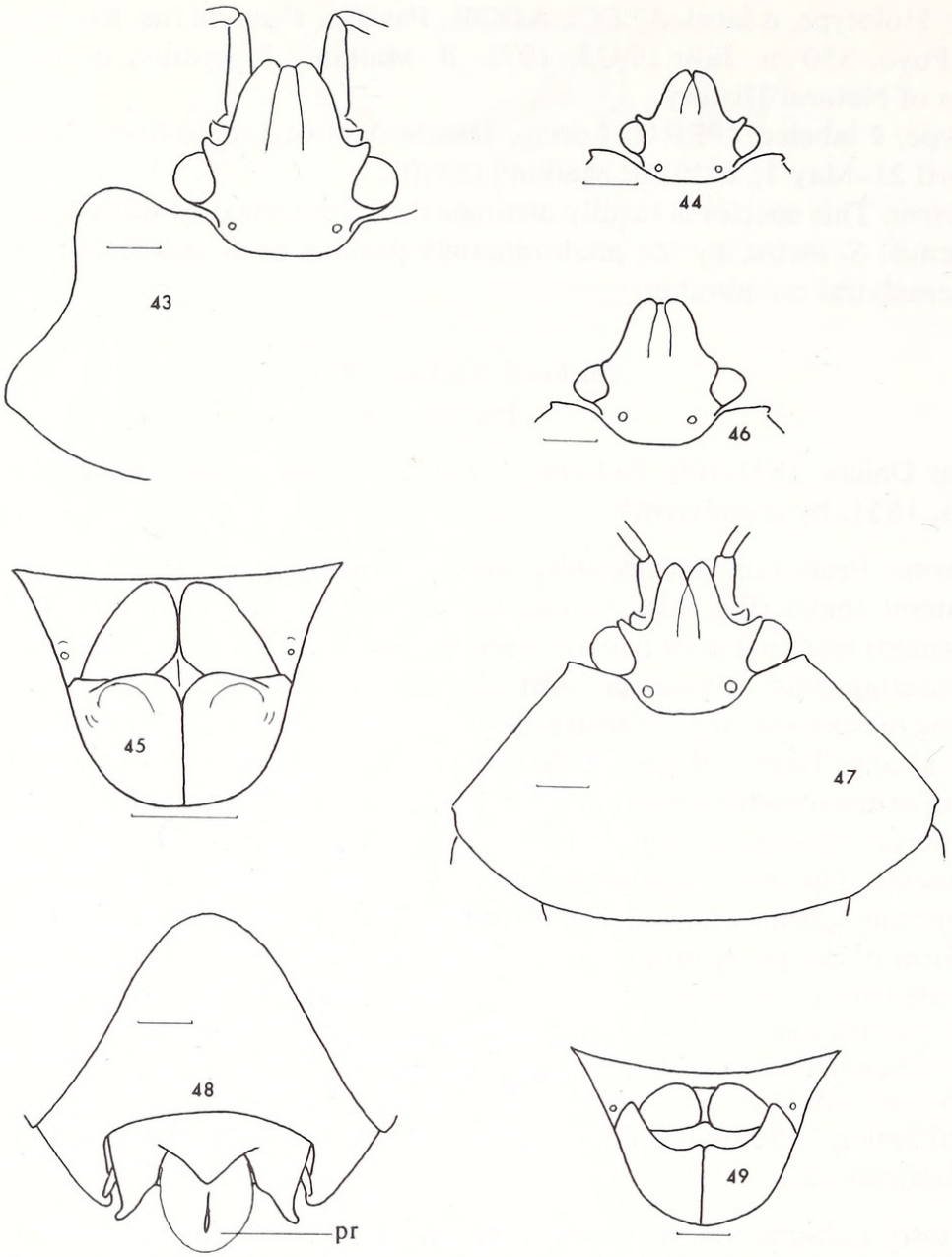
The form of the pronotum in *Alathetus* is distinctive among ochlerine genera.

Alitocoris Sailer, 1950
Figs. 44–46

Alitocoris Sailer, 1950:69–71. (Type species *Alitocoris schraderi* Sailer, 1950, by original designation.)

Diagnosis. Labium arising behind imaginary plane bisecting head at anterior limit of eyes; second rostral segment nearly attaining to slightly surpassing mesocoxae; apex of rostrum reaching sternites 3–5. Length of head before ocelli 0.6–0.7 width across eyes. Anteocular process present, usually a blunt tubercle, occasionally acute and set apart by concave emargination in lateral margin of jugum (Figs. 44, 46). Antennae usually 5-segmented, 4-segmented in some species; first segment extending little or not at all beyond apex of head; basal 3 segments of 5-segmented antennae or basal 2 segments of 4-segmented antennae somewhat to much enlarged, their diameter appreciably greater than that of following segments, particularly in males of some species. Width of scutellum at distal end of frena 0.4–0.5 basal width. Coria surpassing apex of scutellum. Metasternum carinate mesially. Width of pygophore one-fourth of maximum abdominal width. Basal plates with broad tumescence near distal margin (Fig. 45). Posterior surface of pygophore concave, usually obscuring genital cup from caudal view excepting portion visible through mesial emargination.

Comments. There are 5 described species, all from Central America. However, undescribed species extend the genus range from Mexico to southern Brazil.



Figs. 43–49. 43. *Alathetus rufitarsis,* head and pronotum. 44, 45. *Alitocoris parvus.* 44. Head. 45. Genital plates, caudoventral view. 46. *Alitocoris manni,* head. 47–49. *Macropygium reticulare.* 47. Head and pronotum. 48. Pygophore and 7th abdominal sternite, ventral view. 49. Genital plates, caudoventral view. Symbol: proctiger (pr).

Alitocoris shows considerable interspecific variation with respect to size, development of anteocular processes, and antennae (relative diameter and length, and number of segments). The genitalia, however, are interspecifically similar.

Macropygium Spinola, 1837
Figs. 47–79

Macropygium Spinola, 1837:287; Herrich-Schäffer, 1844:48 (description); Dallas, 1851:150, 158–159 (keyed, synonymy). (Type species *Macropygium atrum* Spinola, 1837 [=*Cimex reticularis* Fabricius, 1803], by monotypy.)

Oxyrhinus Amyot and Serville, 1843:113 (synonymized by Dallas, 1851). (Type species *Oxyrhinus subsulcatus* Amyot and Serville, 1843, by monotypy.)

Diagnosis. Anteocular process prominent, spinose (Fig. 47); juga convergent or contiguous apically. Basal 3 of 5 antennal segments enlarged; basal segment usually projecting beyond apex of head; segment II less than one-half length of III; segment III in males nearly twice diameter of each of last 2 segments. Length of head before ocelli 0.6 width across eyes. Labium arising behind imaginary plane bisecting head at anterior limit of eyes; second rostral segment reaching mesocoxae or nearly so; apex of rostrum on sternite 3 or 4. Anterolateral margins of pronotum explanate; anterolateral angles projecting forward to middle of eyes. Scutellar width at distal end of frena 0.5 basal width. Coria surpassing apex of scutellum. Many small tubercles scattered over inferior surfaces of femora, most prominent on front legs. Sternite 7 in male longer than all preceding sternites combined. Pygophore large, 0.4 as wide as greatest abdominal width, bearing large, mesial cone on disk (Fig. 48). Disk of basal plates rather evenly convex, without prominent, swollen area (Fig. 49).

Comments. This is the most frequently collected of ochlerine genera and one of the easiest to recognize. The genus is currently monotypic, although there are differences among male genitalia that suggest the possibility of one or more additional species.

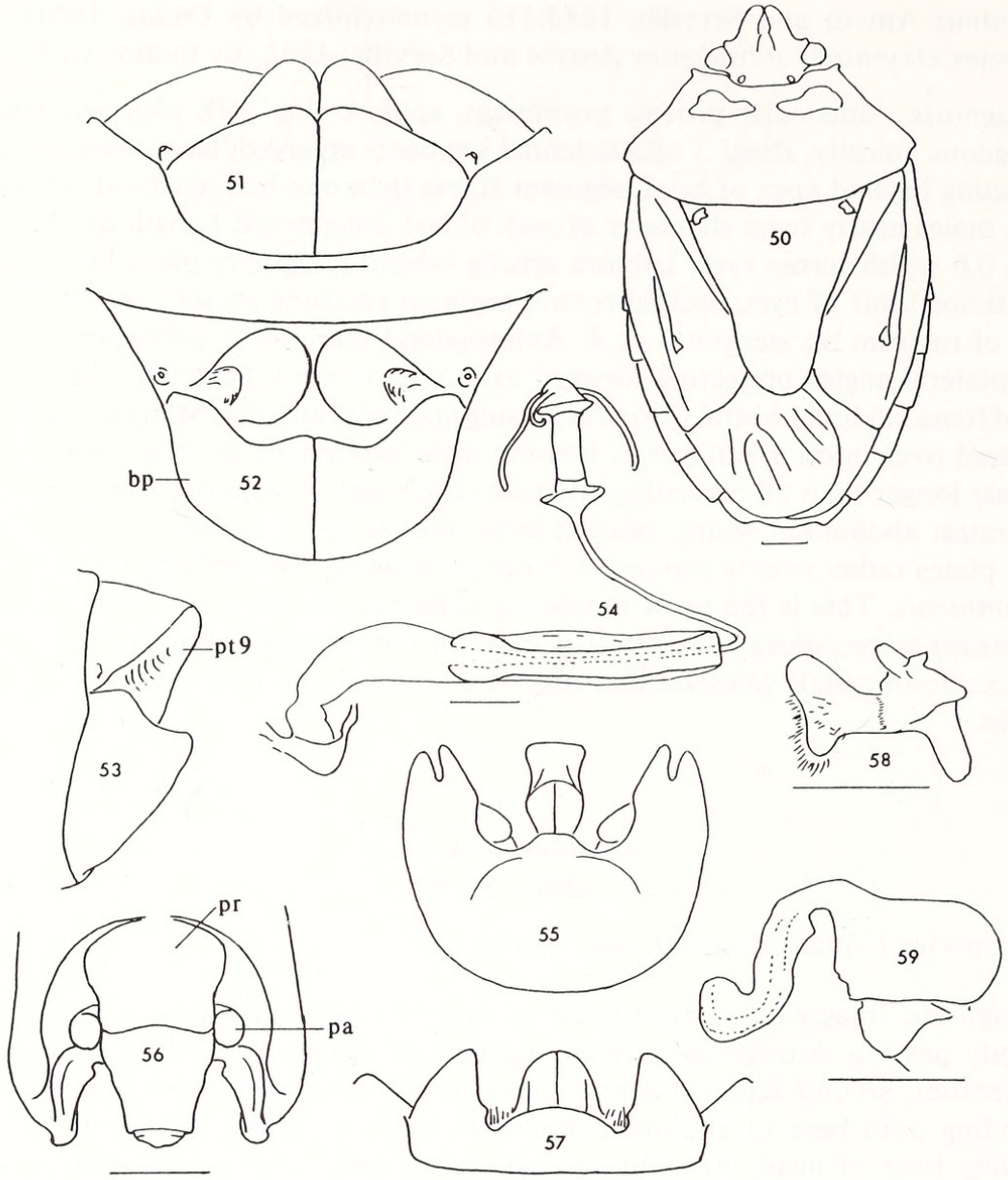
Uvaldus, new genus
Figs. 50–59

Type species *Uvaldus concolor,* new species.

Diagnosis. Imaginary vertical plane at base of labium and at right angles to axis of body passing through eyes; basal segment of rostrum projecting onto concave prosternum, second segment approaching or reaching mesocoxae, apex of fourth extending onto base of abdomen. Bucculae well developed, uniformly produced, reaching base of head. Antennae 5-segmented; basal segment of each projecting slightly past apex of head, third segment 2.5–3.0 times length of second. Eyes contiguous with pronotum. Anteocular process present on each side (Fig. 50). Length of head before ocelli 0.6 of interocular width.

Anterolateral margins of pronotum weakly sinuous; small tooth at each anterolateral corner directed laterad; humeri scarcely produced, weakly emarginated. Width of scutellum at distal end of frena slightly more than one-half basal width; apex of scutellum reaching between imaginary line connecting anterolateral angles of fifth abdominal segment and similar line connecting posterolateral angles of same segment. Costal angles of coria projecting well past scutellar apex.

Mesosternum and metasternum carinate. Ostiolar sulci lacking; rugae short, each reaching 0.15 of distance from ostiole to lateral margin of metapleuron; evaporative areas small, confined to metapleura. Superior surface of last tarsal segments of hind legs flattened or concavely depressed in both sexes. Abdomen without mesial tubercle or spine at base. All trichobothria laterad of spiracular line. Basal plates rather evenly convex, without swollen areas. Width of pygophore 0.3 of maximum abdominal width.



Figs. 50–59. *Uvaldus concolor*. 50. Habitus. 51. Genital plates, caudoventral view. 52. Same, caudal view. 53. Same, lateral view. 54. Spermatheca. 55. Pygophore, caudal view. 56. Genital cup. 57. Pygophore, ventral view. 58. Right paramere, lateral view. 59. Aedeagus, lateral view. Symbols: basal plate (bp); paramere (pa); proctiger (pr); paratergite 9 (pt9).

Uvaldus concolor, new species
Figs. 50–59

Description. Light brown above with fuscous to black punctation, usually with rufous to castaneous flecks on pronotum and scutellum and halos of the same color around punctures; cicatrices dark brown; moderate size callus in each basal angle of scutellum and elongated macule on disk of each corium usually ivory. Venter mostly dark brown; coxae, trochanters and rostrum brownish yellow; femora, tibiae and tarsi mottled in browns of varied intensity. Antennae uniformly light or dark brown.

Juga contiguous before tylus, leaving small indentation in apex of head, moderately reflexed marginally, especially at anteocular concavities (Fig. 50); anterocular process

on each side of juga short, obtuse. Punctation rather dense, irregular. Width of head across eyes 2.4–2.5, length 1.75–1.95; length before ocelli 1.5–1.55; interocular width 1.35–1.5; distance across ocelli 1.1–1.2, between ocelli 0.8–0.9, from each ocellus to nearest eye 0.30–0.35. Segments I–V of antennae 0.65–0.7; 0.4–0.6; 1.3–1.35; 1.2–1.3; 1.6–1.7 long. Fourth antennal segment of males slightly clavate, its greatest diameter exceeding that of all other segments save first. Segments I–IV of labium 1.0; 1.6–1.7; 1.0–1.2; 1.0 long.

Anterolateral pronotal margins slightly sinuous, clearly reflexed. Punctation less dense than on head, coarser, tending to cluster into short, transverse, streptococcal lines. Pronotal width at humeri 5.7–6.2, medial length 2.5–2.8.

Fovea in each basal angle of scutellum shallow, triangular, densely punctate, black; calloused macule contiguous with and about size of fovea, usually ivory. Punctation similar to that on pronotum but denser. Scutellar width at base 3.6–3.9, length 4.0–4.3. Distal margin of each corium nearly straight, inner angle rounded; punctation on endocorium and clavus as on pronotum, denser and finer on exocorium; membranes heavily fumose, each with 6 or 7 simple veins. Connexiva exposed, finely punctate, nearly uniform in color.

Posterior margins of basal plates sinuous from caudal view (Fig. 52), thickened, appearing somewhat separated from other plates (Fig. 53). Paratergite 9 channelized basally. Proximal part of spermathecal duct enlarged; spermathecal bulb small with 3 long diverticula (Fig. 54).

Sides of pygophore produced caudad, deeply sulcate; furrow dividing sides of pygophore from convex area ventrad of genital cup (Fig. 55); ventral border of genital cup convexly produced mesially, projecting horizontally. Distal half of proctiger scleritized, granular (Fig. 56). Parameres bilobed; dorsal lobe globose, smooth; ventral lobe thickly hirsute (Fig. 58).

Types. Holotype, ♂ labeled "Brazil: Est. Rio de Janeiro, Araruama XI. 1981. Coll. M. Alvarenga." Pygophore dissected. Deposited in the Carnegie Museum of Natural History, Pittsburgh.

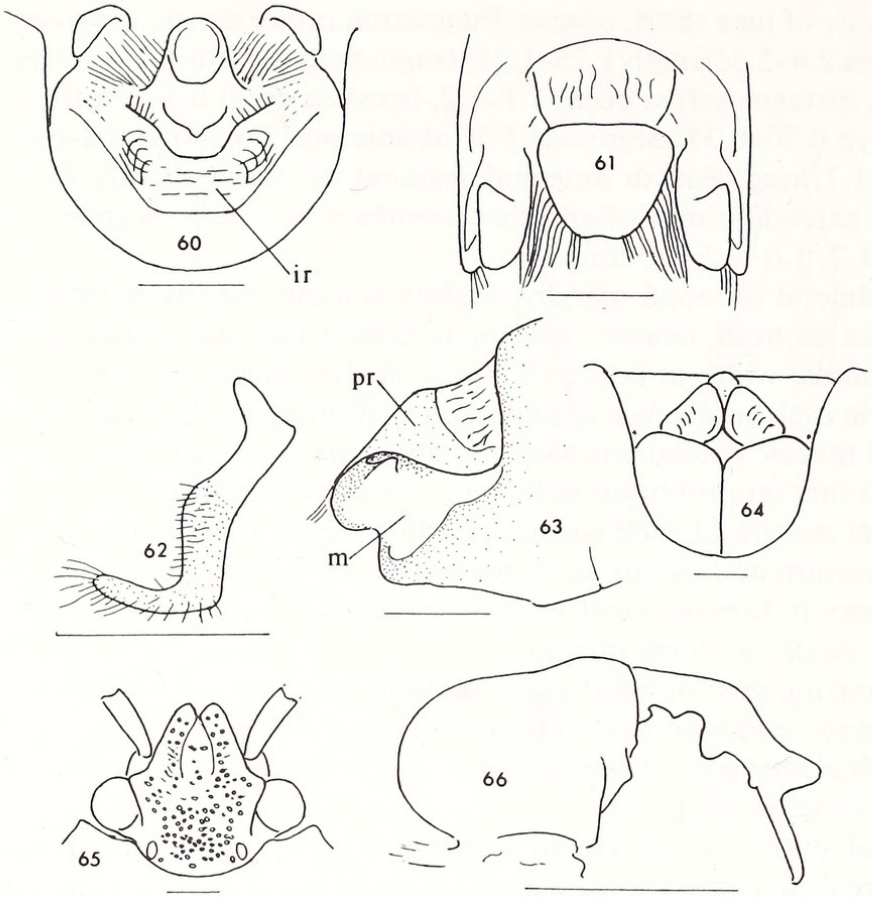
Paratypes 6♀♀ and 1♂ labeled same as holotype. (4♀♀ CMNH; 1♀ DAR; 1♀ DBT; 1♂ LHR.)

Parochlerus Breddin, 1904
Figs. 60–66

Parochlerus Breddin, 1904:153. (Type species *Parochlerus latus* Breddin, 1904, by monotypy.)

Diagnosis. Lateral jugal margins tapering sharply from anteocular concavities to apex of head; juga convergent, projecting beyond tylus (Fig. 65); anteocular process before each eye rudimentary, obtuse. Length of head before ocelli two-thirds of width across eyes. Labium arising behind imaginary plane bisecting head at anterior limit of eyes; second rostral segment reaching slightly past mesocoxae; apex of rostrum on sternite 5. Antennae 5-segmented; basal segment protruding past apex of head; segment II nearly as long as segment III. Scutellar width at distal end of frena about one-half of basal width. Coria surpassing apex of scutellum. Metasternum carinate.

Comments. The generic name was an unfortunate choice because a close relation-



Figs. 60–66. *Parochlerus latus*. 60. Pygophore, caudal view. 61. Genital cup, dorsal view. 62. Paramere. 63. Pygophore, lateral view. 64. Genital plates, caudoventral view. 65. Head. 66. Aedeagus. Symbols: inferior ridge (ir); membranous area of pygophore (m); proctiger (pr).

ship to *Ochlerus* is implied. Only *Tetrochlerus* is obviously near *Parochlerus,* and these two genera appear to stand apart within the tribe.

Parochlerus is monotypic. Breddin's meager description of the type species, based on one female, is amplified by the following redescription, and the male is described. The species is known only from Peru and Amazonas, Brazil.

Parochlerus latus Breddin, 1904
Figs. 60–65

Parochlerus latus Breddin, 1904:153.

Holotype. Black to fuscous except as follows: edge of abdomen ventally, irregular narrow border on lateral margins of juga, scattered calluses and macules on dorsum and venter, basal 0.4 of last antennal segment, all yellowish; remainder of antennae, coxae, tarsi brown to castaneous; evaporative areas slate colored.

Head 2.7 wide at eyes, 2.2 long; width across ocelli 1.25. Punctation rugose, diagonally so on juga. Segments I–V of antennae 0.9, 1.1, 1.6, 1.8, 2.1 long.

Pronotum 7.0 wide at humeri, 3.2 long mesially; anterolateral margins nearly

straight; humeri not produced laterally, obtusely angular; disk rugosely punctate behind cicatrices.

Scutellum 4.5 wide at base, 5.1 long; frena extending 0.6 disance from base to apex; disk somewhat rugose, especially basal part; apex moderately rounded, undifferentiated by color or punctation. Coria punctured similarly to distal part of scutellum; membranes brown, each with about 10 simple or furcate veins. Connexiva moderately exposed, rather densely and strongly punctate.

Prosternum concave, mesosternum narrowly carinate mesially, both conspicuously punctured; metasternum carinate mesially (mostly destroyed by pin). Spiracles oval. Genital plates as in Figure 64.

The female holotype is labeled (a) "Peru, Amar," (b) "Parochlerus latus Breddin," (c) "Coll. Breddin," (d) "Typus," (e) "Holotypus." It is conserved in the Institut für Pflanzenschutzforschung, Eberswalde. The locality may not be interpreted correctly from the handwritten label. The original description indicates the holotype to be a male. Presumably the wrong sex symbol was used by Breddin or by the typesetter.

Males. Similar to female excepting genitalia.

Pygophore with apex V-shaped, mesial emargination of posterior margin truncate from caudal view (Fig. 60). Inferior ridge with U-shaped, mesial emargination; area between posterior pygophoral margin and inferior ridge not excavated. Pygophoral appendage at each posterolateral corner separated by membrane; mesial face of appendage concave; lateral face mostly membraneous, only anterior and dorsal margins sclerotized from lateral view (Fig. 63). Posterolateral pygophoral corners, ventrad of appendages, acutely produced. Proctiger lacking tubercles; margin thickly fringed with long hair, particularly subapically (Fig. 61). Parameres delicate, each bent at right angle, somewhat flattened distally, bearing row of short hair proximad of bend and peripheral fringe of long hair distad of bend (Fig. 62). Theca and structures surrounding ejaculatory duct distad of theca sclerotized; membranous conjunctiva minuscule (Fig. 66).

Tetrochlerus Breddin, 1904

Tetrochlerus Breddin, 1904:153. (Type species *Tetrochlerus fissiceps* Breddin, 1904, by monotypy.)

Diagnosis. Differing from *Parochlerus* only in having 4-segmented antennae; segment III 0.6 length of segment II.

Comments. The type of *T. fissiceps* was not located. However, there is a specimen in the National Museum of Natural History, Washington, DC, that fits Breddin's short description exactly, including a length of 11.5 from the apex of the head to the tip of the hemelytral membranes, excepting that it is female. This specimen is described below and designated voucher specimen. It bears the labels (a) "Balzapamba (Ecuad). R. Haensch S.," (b) "Coll. Breddin," (c) "J. C. Lutz Collection, 1961," (d) "Tetrochlerus fissiceps Breddin."

The difference between *Tetrochlerus fissiceps* and *Parochlerus latus* in the number of antennal segments is hardly sufficient grounds to place each species in a separate genus. However, it seems best to leave this arrangement undisturbed until the male of *T. fissiceps* is known, since the male genitalia of the two species may differ sufficiently to justify retention of the present classification.

Tetrochlerus fissiceps Breddin, 1904

Tetrochlerus fissiceps Breddin, 1904:153.

Voucher. Dark brown except as follows: lateral margins of prothorax above and below, of coria basally, of connexiva and abdominal venter, rufous; submarginal macule in middle of connexival segments, flecks on abdominal venter and basal 0.4 of last antennal segment light brown to brownish yellow; anterior disk of pronotum, head, antennae (except base of last segment), femora and tibiae, fuscous to black.

Head 2.2 wide across eyes, 1.8 long; length before ocelli 0.7 width across eyes; dorsal punctation dense, strong, diagonally rugose on juga; interocular width 1.3, each eye 0.45 wide, anterior-posterior diameter 0.55. Segments I–IV of antennae 0.7, 2.0, 1.3, 1.6 long. Segments II–IV of rostrum, 1.9, 1.3, 1.2 long; bucculae lacking anterior tooth.

Pronotum 6.0 wide at humeri, 2.7 long mesially; anterolateral margins slightly concave, narrowly reflexed; humeri not produced laterad; small tooth at anterolateral angles slightly acute; disk rugosely punctate behind cicatrices.

Scutellum 3.8 wide at base, 4.2 long; frena extending 0.6 of distance from base of scutellum to apex; basal disk rugosely punctate; apex slightly reflexed on each side, black-edged where reflexed. Connexiva narrowly exposed, less densely punctate than border of coria; punctures in macules black.

Prosternum concave; mesosternum and metasternum both carinate mesially and conspicuously punctate. Spiracles oval. Outline of genital plates as in *Parochlerus latus* (Fig. 64); basal plates convex, submarginally impressed at posterolateral angles.

Length 11.5

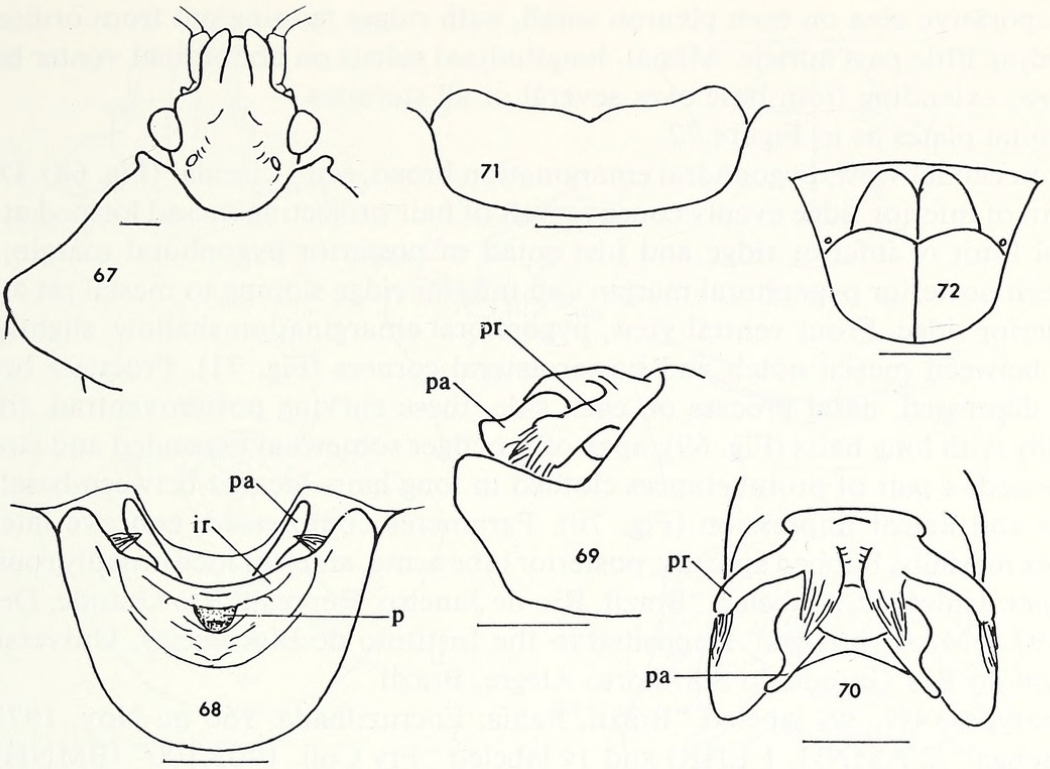
Catulona, new genus
Figs. 67–78

Type species *Catulona pensa,* new species.

Diagnosis. Small tooth at anterolateral angles of pronotum reflexed, directed cephalad or anterolaterad. Juga as long as or slightly longer than tylus, their lateral margins briefly parallel between anteocular concavities and apex of head; each jugum with obtuse, rudimentary, anteocular process (Figs. 67, 73). Length of head before ocelli 0.7 of width across eyes. Eyes relatively small, width of each 0.2 of head width across eyes. Antennae 5-segmented; basal segment reaching apex of head; segments II and III subequal in length. Labium arising slightly behind imaginary plane bisecting head at anterior limit of eyes; segment II reaching mesocoxae; rostral apex on sternites 4 or 5. Humeri weakly produced, scarcely emarginated. Width of scutellum at distal end of frena slightly less than one-half of basal width. Costal angles of coria surpassing scutellar apex, lying above penultimate abdominal segment. Metasternum thinly carinate mesially. Second gonocoxae hidden (Figs. 72, 78).

Last abdominal tergum of male projecting mesially as thin, broad, convex process partially covering genital cup. Proctiger with pair of long, basal processes (Figs. 70, 75). Mesial pit in pygophore at base of and ectad to inferior ridge (Figs. 68, 74).

Comments. The tergal process distinguishes this genus among ochlerines, but either the pygophore must be removed or the hemelytra membranes displaced to see this character.



Figs. 67–72. *Catulona pensa*. 67. Head and pronotum. 68. Pygophore, caudal view. 69. Distal part of pygophore, lateral view. 70. Genital cup. 71. Pygophore, ventral view. 72. Genital plates, caudoventral view. Symbols: inferior ridge (ir); pit (p); paramere (pa); proctiger (pr).

Catulona pensa, new species
Figs. 67–72

Description. Fuscous, usually with brownish dots and vermiform marks on dorsal rugosities, and brownish yellow as follows: 3 basal spots on scutellum (1 mesial, 1 at each basal angle), small macule on disk of each corium, usually middle of each visible connexival segment, basal one-fourth to all of last antennal segment, coxae in part, extension of connexival macules as broken lateral border along abdominal venter, cresent or spot bordering some or all of spiracles mesially. Length 10.7–11.0.

Vertex of head and base of tylus quite swollen (Fig. 67). Punctation on dorsum of head fine to obscure. Juga and tylus of females subequal in length, each separately rounded; juga exceeding tylus in male, leaving nearly square notch in apex of head. Width of head across eyes 2.2–2.4, length 2.0–2.5. Interocular distance 1.2–1.4. Distance across ocelli 1.25–1.4, between ocelli 1.0–1.1. Segments I–V of antennae 0.6–0.7, 0.8–0.9, 0.8–1.0, 1.2–1.3, 1.8–2.1 in length. Last 3 segments of rostrum 2.0–2.3, 1.6–1.9, 1.5–2.0 in length.

Anterolateral pronotal margins slightly sinuous, slightly reflexed; triangular tooth at each anterolateral angle directed cephalad, projecting past posterior margin of eye (Fig. 67). Disk somewhat rugose. Width of pronotum at humeri 5.8–6.3, mesial length 2.5–2.8.

Basal width of scutellum 3.7–4.0, length 4.0–4.6. Membranes of hemelytra dark, with about 9 simple or furcate veins each, those toward costal margin usually faint. Connexvia narrowly exposed.

Evaporative area on each pleuron small, with ridges fanning out from orifice and extending little past auricle. Mesial, longitudinal sulcus on abdominal venter broad, shallow, extending from base over several or all sternites.

Genital plates as in Figure 72.

From caudal view, pygophoral emargination broad, semi-circular (Fig. 68). Dorsal margin of inferior ridge evenly concave; tuft of hair projecting mesad located at each lateral limit of inferior ridge and just entad of posterior pygophoral margin; area between posterior pygophoral margin and inferior ridge sloping to mesial pit at base of inferior ridge. From ventral view, pygophoral emargination shallow, slightly sinuous between mesial notch and posterolateral corners (Fig. 71). Proctiger bearing long, depressed, basal process on each side, these curving posteroventrad, fringed apically with long hairs (Fig. 69); apex of proctiger somewhat expanded and strongly impressed; a pair of protuberances clothed in long hairs located between basal processes and apical impression (Fig. 70). Parameres compressed, concave laterally, convex mesially, bilobed apically; posterior lobe acute, anterior lobe broadly rounded.

Types. Holotype, ♂ labeled "Brazil, Rio de Janeiro; Represa Rio Grande, December 1977, M. Alvarenga." Deposited in the Instituto de Biociências, Universidade Federal do Rio Grande do Sul, Porto Alegre, Brazil.

Paratypes, 4♀♀, 3♀♀ labeled "Brazil, Bahia: Encruzilhada. 960 m. Nov. 1972. M. Alvarenga" (2 AMNH, 1 LHR) and 1♀ labeled "Fry Coll. 1905.100" (BMNH).

Comments. The swollen vertex of the head will separate this species from the one other species of the genus. The swollen vertex also occurs in a few species of *Lincus.*

Catulona apaga, new species
Figs. 73–78

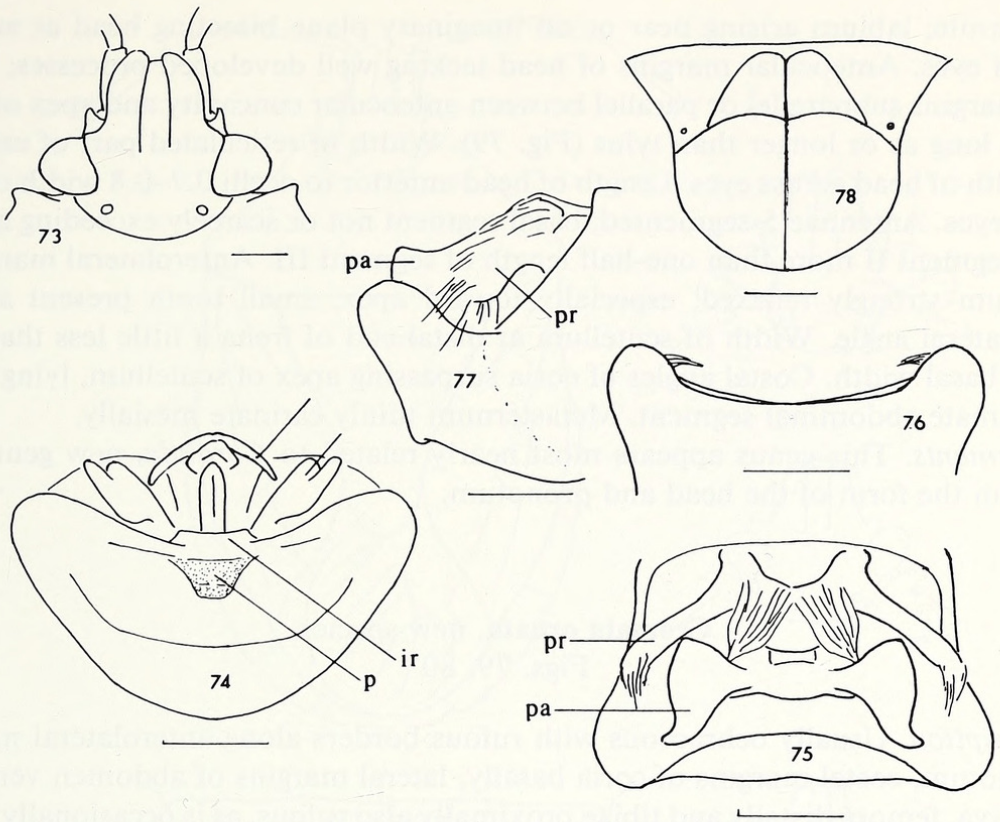
Description. Fuscous with brownish yellow as follows: at base of scutellum large mesial spot and sometimes small spot at each basal angle, small spot on disk of each corium and at mesial edge of each spiracle, short vermiform line on meson of pronotum and several such markings on abdominal venter, submarginal lateral line on each sternite, fifth antennal segment. Length 14.0–14.3.

Neither vertex of head nor base of tylus tumescent. Dorsum of head rugosely punctate, transversely to diagonally so on juga and tylus except apically. Juga surpassing tylus, somewhat convergent apically (Fig. 73). Width of head across eyes 3.0–3.1, length 2.5–2.6. Interocular distance 1.6. Distance across ocelli 1.45–1.5, between ocelli 1.1. Segments I–V of antennae 0.9, 1.2–1.3, 1.2–1.3, 1.5–1.6, 1.7 long. Last 3 rostral segments 2.5, 2.0, 1.9 long.

Anterolateral margins of pronotum shallowly concave, tooth at anterolateral angles subtriangular, directed anterolaterad. Disk rugose, strongly punctate. Width of pronotum at humeri 7.5–7.6, length at meson 3.4–3.5.

Scutellum 4.8 wide at base, 5.5–5.6 long. Membranes of hemelytra dark, nearly opaque, each with about 12 simple or furcate veins. Connexiva rather broadly exposed.

Evaporative areas and basal plates similar to type species (Fig. 78). From caudal view, posterior pygophoral margin forming obtuse, concave emargination; surface entad of posterior margin sloping regularly to inferior ridge; deep, mesial, subtriangular pit located at base of inferior ridge, a shallow sulcus extending from pit toward



Figs. 73–78. *Catulona apaga.* 73. Head and anterior pronotal margin. 74. Pygophore, caudal view. 75. Genital cup. 76. Posterior pygophoral margin, ventral view. 77. Distal part of pygophore, lateral view. 78. Genital plates, caudoventral view. Symbols: inferior ridge (ir); pit (p); paramere (pa); proctiger (pr).

posterior margin (Fig. 74). From ventral view, posterior pygophoral margin shallowly and evenly concave (Fig. 76), from dorsal view slightly sinuous (Fig. 75). Proctiger with pair of large, compressed, basal processes, each directed posterolaterad, fringed apically with long hairs; pair of large, contiguous protuberances just distad of origin of processes, each clothed in long hairs. Parameres compressed, lateral surface of each concave, mesial surface unevenly convex, paramere-head entire, posterodorsal edge forming acute tooth (Fig. 75).

Types. Holotype, ♂ labeled (a) "Brasilia" and (b) "Coll. F. Salvator." Deposited in the National Museum of Natural History, Washington, DC.

Paratypes, 3♀♀. 1♀ labeled "Strum, Brazil" (LHR); 1♀ labeled (a) "Brasilia" and (b) "Coll. F. Salvator" (SZCU); and 1♀ labeled "Beske Rio" (RNH).

Comments. This species differs from *Catulona pensa* in the moderately convex rather than inflated vertex, in larger size and in details of the genitalia.

Cromata, new genus
Figs. 79, 80

Type species *Cromata ornata,* new species.

Diagnosis. Second rostral segment projecting past mesocoxae; apex of rostrum on

last sternite; labium arising near or on imaginary plane bisecting head at anterior limit of eyes. Anteocular margins of head lacking well developed processes; lateral jugal margins subparallel or parallel between anteocular concavity and apex of head; juga as long as or longer than tylus (Fig. 79). Width of reticulated part of each eye 0.2 width of head across eyes. Length of head anterior to ocelli 0.7–0.8 width of head across eyes. Antennae 5-segmented; basal segment not or scarcely exceeding apex of head; segment II more than one-half length of segment III. Anterolateral margins of pronotum strongly reflexed, especially toward apex; small tooth present at each anterolateral angle. Width of scutellum at distal end of frena a little less than one-half of basal width. Costal angles of coria surpassing apex of scutellum, lying above penultimate abdominal segment. Metasternum thinly carinate mesially.

Comments. This genus appears most nearly related to *Coranda,* new genus, but differs in the form of the head and pronotum.

Cromata ornata, new species
Figs. 79, 80

Description. Usually ochraceous with rufous borders along anterolateral margins of pronotum, costal margins of coria basally, lateral margins of abdomen ventrally; connexiva, femora distally and tibiae proximally also rufous, as is occasionally nearly all of dorsum. Punctation, antennae, tibiae except at base, preapical femoral band, large marginal spot at abdominal incisures, band on each side of transverse connexival sutures and pair of spots on apex of scutellum all dark brown to black.

Head across eyes 2.2–2.5 wide, 2.0–2.5 long. Segments I–V of antennae 0.7–0.8, 0.7–1.0, 1.1–1.3, 1.3–1.6, 2.0–2.2 long. Segments II–IV of rostrum subequal in length, 2.3–2.7. Juga usually a little longer than tylus, their lateral margins sharply reflexed, subparallel between anteocular concavities and apex of head (Fig. 79).

Anterolateral margins of pronotum slightly sinuous from dorsal view; pronotal width at humeri 5.7–6.6, length mesially 2.6–3.2; disk divided along meson by impunctate line that continues for entire length of scutellum.

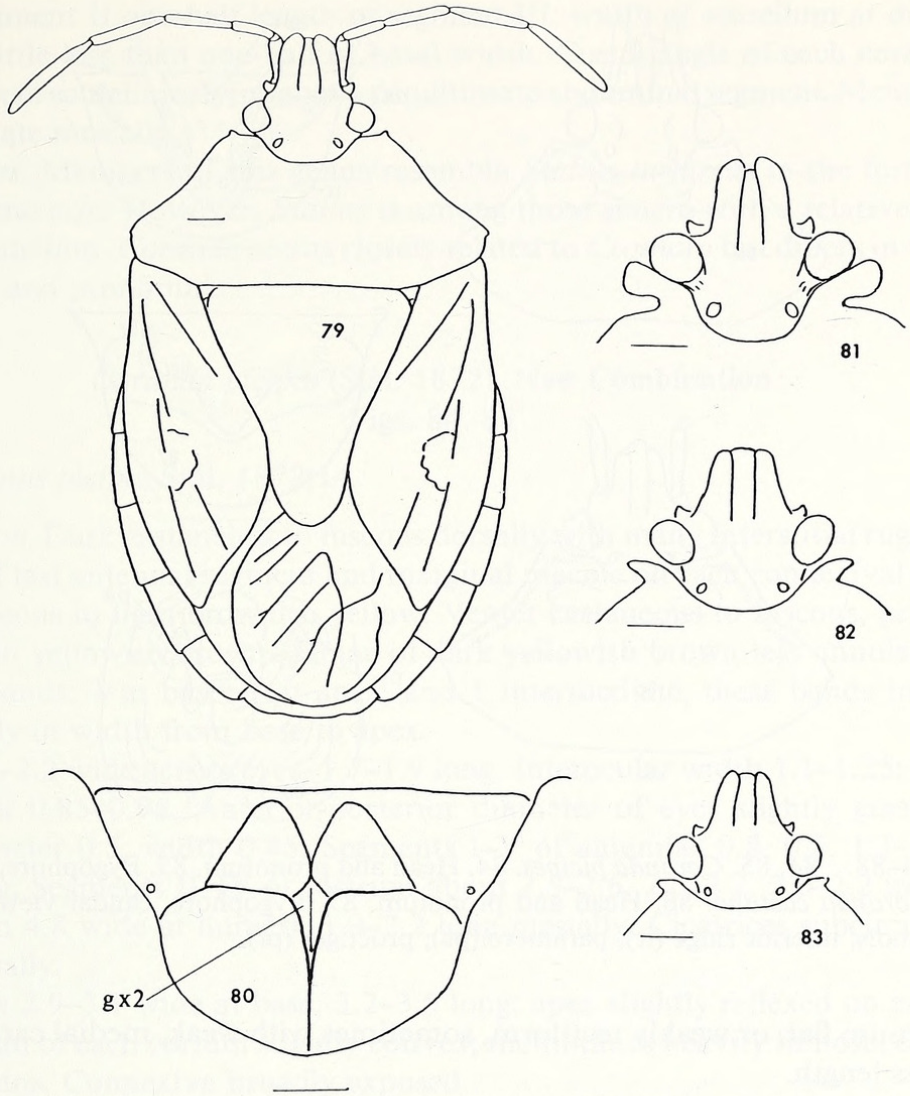
Scutellum 3.6–4.1 wide at base, 4.0–4.6 long; fovae in basal angles small, consisting of a few clustered punctures, isolated by an impunctate band; apex reflexed slightly at large, dark, marginal spots. Costal margins of coria reflexed basally; large, impunctate lacuna present on disk of each corium; membranes lightly fumose, each with about 7 veins. Connexiva broadly exposed.

Gonocoxae 2 tectiform where exposed (Fig. 80).

Types. Holotype, ♀ labeled "Brazil, Espiritu Santos: Linhares, Sept. 1972, M. Alvarenga." Deposited in the American Museum of Natural History.

Paratypes, 8♀♀. 1♀ labeled same as holotype (AMNH); 1♀ labeled "Brazil, Mato Grosso, Lat. 12°31′ and Long. 55°37′, Sinop, October, 1974. M. Alvarenga" (AMNH); 4♀♀ labeled "Brazil, Bahia, Encruzilhada, 960 m. Nov. 1972, M. Alvarenga" (2 AMNH, 2 LHR); 1♀ labeled "BRAZIL: São Paulo, São Paulo, 3 February 1974, Coll. V. N. Alin" (DAR); 1♀ labeled "Encruzilhada, Bahia, Brazil, XIII 1980" and "A. Martinex e M. Alvarenga" (LHR).

Comments. Among ochlerines, this species is the most colorful. Even so it is rather drab.



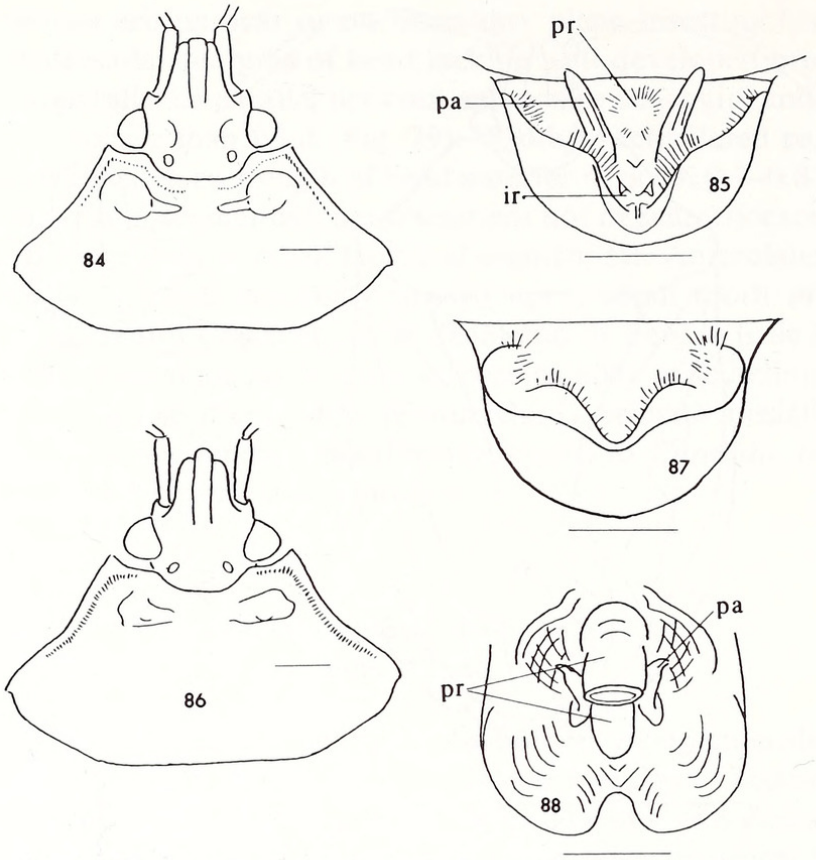
Figs. 79–83. 79, 80. *Cromata ornata.* 79. Habitus. 80. Genital plates, caudoventral view. 81–83. Head and anterior part of pronotum. 81. *Lincus securiger.* 82. *L. styliger.* 83. *L. dentiger.* Symbol: 2nd gonocoxae (gx2).

Lincus Stål, 1867
Figs. 81–83

Lincus Stål, 1867:524; Stål, 1872:12, 14; Rolston, 1983a:2–7 (revision). (Type species *Pentatoma rufospilata* Westwood, 1837, by original designation.)

Minilincus Ruckes, 1958:14–15 (synonymized by Rolston, 1983a). (Type species *Minilincus parvulus* Ruckes, 1958, by original designation.)

Diagnosis. Labium originating behind imaginary plane bisecting head at anterior limit of eyes; second rostral segment extending a little past mesocoxae; rostral apex on or beyond penultimate sternite. Antennae 5-segmented, basal segment reaching or surpassing apex of head. Juga as long as or longer than tylus, sometimes contiguous apically. Length of head before ocelli 0.6–0.8 of width across eyes. Scutellum 0.4–0.5 as wide at distal end of frena as at base. Coria extending past apex of scutellum.



Figs. 84–88. 84, 85. *Coranda picipes*. 84. Head and pronotum. 85. Pygophore, caudal view. 86–88. *Coranda castana*. 86. Head and pronotum. 87. Pygophore, caudal view. 88. Genital cup. Symbols: inferior ridge (ir); paramere (pa); proctiger (pr).

Metasternum flat, or weakly tectiform, sometimes with weak, medial carina for only part of its length.

Comments. Most species of *Lincus* are recognizable as members of the genus by their well-developed pronotal lobes (Figs. 81, 82), although several species have unremarkable pronotal lobes (Fig. 83). This is one of the largest ochlerine genera with 35 described species (Rolston, 1983a, 1989; Dolling, 1984). Some of these species are known to be of economic importance as vectors of plant diseases. The genus is widely distributed in Central and South America.

Coranda, new genus
Figs. 84–88

Type species *Melanodermus picipes* Stål, 1872.

Diagnosis. Anterolateral angles of pronotum acute, projecting forward beyond base of eyes; anterolateral margins prominently reflexed, especially toward apex (Figs. 84, 86). Second rostral segment reaching anterior limit of metacoxae; rostral apex lying on last abdominal sternite; labium arising on or near imaginary plane bisecting head at anterior limit of eyes. Anteocular process absent; lateral jugal margins tapering from anteocular concavity to apex of head; tylus longer than juga. Width of reticulated part of each eye 0.25 as wide as head across eyes; length of head before ocelli 0.7–0.8 of head width across eyes. Antennae 5-segmented; basal segment surpassing apex

of head; segment II one-half length of segment III; width of scutellum at distal end of frena a little less than one-half of basal width. Costal angle of each corium surpassing apex of scutellum, lying above penultimate abdominal segment. Metasternum thinly carinate mesially.

Comments. Members of this genus resemble *Stalius tartareus* in the form of the pronotum and size. However, *Stalius* is among those genera with a relatively broad and long scutellum. *Coranda* seems closely related to *Cromata* but differs in the form of the head and pronotum.

Coranda picipes (Stål, 1872), **New Combination**
Figs. 84, 85

Melanodermus picipes Stål, 1872:14.

Description. Dark castaneous to fuscous dorsally with many interstitial rugae, basal one-third of last antennal segment and marginal macule on each connexival segment light castaneous to light brownish yellow. Venter castaneous to fuscous, generously mottled with yellowish brown. Tibiae of dark yellowish brown legs annulated with 3 fuscous bands: 1 at base, 1 at apex, and 1 intermediate, these bands increasing progressively in width from base to apex.

Head 1.9–2.2 wide across eyes, 1.7–1.9 long. Interocular width 1.1–1.25; distance across ocelli 0.85–0.95. Anterior-posterior diameter of eyes slightly greater than width, diameter 0.5, width 0.45. Segments I–V of antennae 0.8, 0.6, 1.1–1.2, 1.1, 1.6–1.8 long. Segments II–IV of rostrum about 2.5–2.6, 2.0–2.2, 2.0–2.2 in length.

Pronotum 4.8 wide at humeri, 1.9–2.2 long mesially. Cicatrices subcircularly elevated laterally.

Scutellum 2.9–3.1 wide at base, 3.2–3.5 long; apex slightly reflexed on each side. Distal margin of each corium slightly convex; membranes heavily fumose, each with 9 simple veins. Connexiva broadly exposed.

Mesial emargination of pygophore deep from caudal view, sinuously V-shaped. Parameres visible from caudal view, divergent, straight, their posterior surface sulcate (Fig. 85). Inferior ridge divided mesially, with small, triangular tooth on each side of division.

Length 9.8.

Distribution. Colombia (Bogotá), Peru (La Libertad).

Comments. The holotype of *Melanodermus picipes,* which now lacks a pygophore, was examined. It is conserved in the Naturhistoriska Riksmuseet, Stockholm.

This species is transferred from *Ochlerus* (=*Melanodermus*) because the short and subapically narrow scutellum (relative to *Ochlerus*), the long rostrum, and other characteristics are contraindicative of *Ochlerus.* From the other species of the genus, *C. picipes* is particularly distinguished by the form of the pygophore and fuscous coloration.

Coranda castana, new species
Figs. 86–88

Description. Brown to light castaneous dorsally; cicatrices and densely punctate band on each side of vertex fuscous; border anterior to and laterad of cicatrices and

much of head dark castaneous; connexiva alternated, with yellowish median macule traversing all or part of each segment. Abdominal venter dully mottled in shades of brown. Legs and rostrum brownish yellow; basal segment of antennae light brown, segments II–IV light brown (V missing).

Head 2.0 wide across eyes, 1.9 long; length of head before eyes 0.75 of width across eyes. Interocular width 1.05, distance across ocelli 0.85. Each eye about 0.5 wide; anterior-posterior diameter equal to width. Segments I–IV (V missing) of antennae 0.8, 0.5, 1.1, 1.2 long. Segments II–IV of rostrum 3.2, 2.1, 2.1 long.

Pronotum 5.1 wide at humeri, 2.2 long mesially.

Scutellum 3.0 wide at base, 3.3 long; apex slightly reflexed on each side. Distal margin of each corium slightly convex; membranes heavily fumose, each with 9 simple veins. Connexiva broadly exposed.

Dorsal margin of pygophore tumescent on each side of mesial emargination (Figs. 87, 88). Parameres with stout apical hook on anterior edge. Inferior ridge flattened, V-shaped from dorsal view.

Length 9.7.

Type. Holotype, ♂ labeled (a) "Santa Jnez [sic] (Ecuad.) R. Haensch S.," (b) "coll. Breddin." Deposited in the Akademie der Landwirtshaftswissenschaften, Eberswalde. No paratypes.

Comment. The trisinuate posterior pygophoral margin and castaneous coloration distinguish this species from *C. picipes,* which has a single medial emargination in the posterior pygophoral margin and fuscous coloration.

Brachelytron Ruckes, 1958

Brachelytron Ruckes, 1958:17–19. (Type species *Brachelytron angelicus* Ruckes, 1958, by original designation.)

Diagnosis. Brachypterous, coria truncate distally above tergum 4, not reaching broadly rounded scutellar apex above tergum 5. Ocelli present but small. Anterolateral angles of pronotum curving around head, projecting anteriorly beyond eyes. Anteocular processes short, acute. Juga surpassing tylus. Antennae 5-segmented, first segment extending only to apex of head. Labium arising behind imaginary plane bisecting head at anterior limit of eyes; second rostral segment reaching mesocoxae. Metasternum carinate.

Comments. The genus is monotypic, represented so far by a single specimen from Brazil.

Brachypterous forms occur in two other genera, *Alathetus* and *Miopygium.* Of these, only the latter genus is sympatric. In addition to the distinguishing characteristics given in the key, *Miopygium* differs from *Brachelytron* in having 4-segmented antennae, the basal segment of which projects beyond the apex of the head, and a shorter rostrum, with the second segment reaching just beyond the procoxae.

CODENS FOR PARATYPE DEPOSITION

AMNH, American Museum of Natural History, New York
BMNH, British Museum (Natural History), London
CAS, California Academy of Sciences, San Francisco

CMNH, Carnegie Museum of Natural History, Pittsburgh
DAR, D. A. Rider collection
DBT, D. B. Thomas, Jr. collection
HDE, H. D. Engleman collection
LHR, L. H. Rolston collection
NMNH, U.S. National Museum of Natural History, Washington
RMB, R. M. Baranowski collection
RNH, Riksmuseum van Natuurlijke Historie, Leiden
SZCU, Systematic Zoology, Charles University, Prague.

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Prof. Carlo Vidano (Universita Delgi Studi) attempted to examine the relevant material in the Spinola collection before the collection was moved to the Museo Regionale di Scienze Naturali, Torino. His efforts are appreciated.

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