

## A FURTHER CONTRIBUTION TO THE SYSTEMATICS OF THE TRIBE MEROPACHYINI (HETEROPTERA: COREIDAE: MEROPACHYINAE)

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### ABSTRACT

Four new genera and three new species from Mexico, Belize, San Salvador, Honduras, Costa Rica, Brazil, Peru and Bolivia are described, illustrated and included in the tribe Meropachyini (Coreidae). *Flavius tristriatus* Kormilev is transferred to the new genus *Badilloniella*. A key to the 16 known genera of Meropachyini is given.

Key Words: Insecta, Heteroptera, Coreidae, Meropachyinae, new genera, new species, Neotropical

### RESUMEN

Cuatro nuevos géneros y tres nuevas especies provenientes de México, Belize, San Salvador, Honduras, Costa Rica, Brasil, Perú y Bolivia son descritos, ilustrados, he incluidos en la tribu Meropachyini (Coreidae). *Flavius tristriatus* Kormilev es transferido a un nuevo género, *Badilloniella*, con la combinación *Badilloniella tristriatus* (Kormilev). Se incluye una clave para separar los 16 géneros conocidos de la tribu Meropachyini.

The knowledge of the tribe Meropachyini has been summarized recently by Brailovsky (1999), and Brailovsky and Luna (2000). Since then the senior author has accumulated further material of this tribe and from it has been compiled the present paper which includes the description of four new genera, and three new species collected in Mexico (1), Belize (1), San Salvador (1), Honduras (1), Costa Rica (1), Brasil (4), Peru (1) and Bolivia (2), as well as a modification in the generic position of *Flavius tristriatus* Kormilev (1951) which is transferred to the new genus *Badilloniella*, with the binomen *Badilloniella tristriatus* (Kormilev) new combination.

The tribe Meropachyini Stål, restricted to the Western Hemisphere, is recognized by the elongate scutellum which extends beyond the distal end of the clavus, hind acetabulae projecting laterally and visible in dorsal view, and hind tibiae broadly curved distally.

A key to the 16 genera included in Meropachyini is given.

All measurements are in millimeters.

Acronyms used are: AMNH (American Museum of Natural History, New York); BMNH (The Natural History Museum, London); CAS (California Academy of Sciences, San Francisco, CA); CMNH (Carnegie Museum of Natural History, Pittsburgh, PA); CNCI (Canadian National Collection of Insects, Ottawa, Ontario, Canada); FSCA (Florida State Collection of Arthropods, Gainesville, FL); INBIO (Instituto Nacional de Biodiversidad, Santo Domingo de Heredia, Costa Rica); TAMU (Texas A & M University Insect Collection, College Station, TX); UMRM (W. R. Enns Entomology Museum, University of Missouri, Co-

lumbia, MO); UNAM (Instituto de Biología, Universidad Nacional Autónoma de México); ZMUH (Zoologisches Institut und Museum, Universität Hamburg, Germany).

### FEATURES IN COMMON OF THE GENERA DESCRIBED

Head. Antenniferous tubercles unarmed; antennal segment IV the longest, III the shortest, or II and III subequal, and I longer than II and III; postocular tubercle absent; mandibular plate absent; head ventrally and posterior to the buccula with conical tubercle; rostrum short barely reaching anterior third of mesosternum; rostral segment III the shortest, IV usually the longest, or I longer or subequal than II, or I and II longer than IV. Thorax. Pronotum. Wider than base of scutellum; frontal angles obtuse, not projected; humeral angles obtuse or barely projected; anterolateral margins obliquely straight, smooth, or dentate, or tuberculate, and not emarginate; triangular process absent; calli smooth and polished or tuberculate. Mesosternum raised or not, with anterior margin in front of area between fore legs produced into narrowed subacute tubercle, posterior third between middle legs prominent, and provided with one tubercle at each side; lateral margin of mesopleura raised on a elongate tubercle, almost overlapping the propleuron; metasternum slender, rectangular, anterior margin raised on two large lobes, separated along midline by a wide or narrow furrow; each lobe overlapping with the two lobes of posterior border of mesosternum; posterior margin of metathorax straight, lateral angles projected into broad rect-

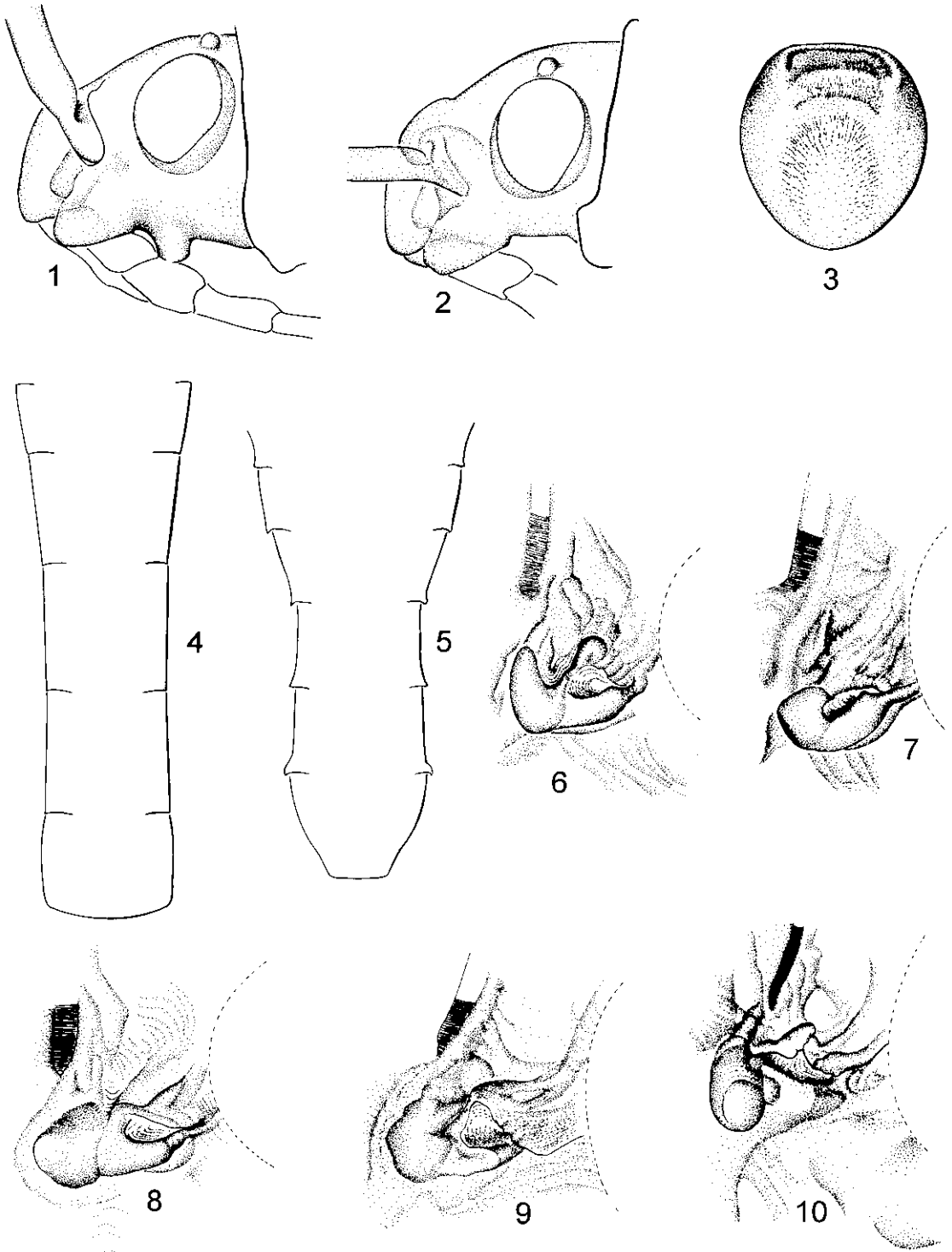
angular plate, lying against metacoxae, and at middle third bilobed or entirely flat, broad, and weakly declivent; metathorax laterally expanded, in dorsal view with metapleura and acetabulae prominently visible; metathoracic peritreme located near lower margin of metapleuron, with upper third closed; canal short, semicircular, with raised sides; anterior lobe variable throughout genera, posterior lobe short, obtuse, slightly exposed. Legs. Hind coxae strongly separated, visible beyond costal margins and sides of body in dorsal view, with outer apical angle tuberculate; hind trochanter conspicuously tuberculate and exposed, or weakly convex; fore and middle femora relatively slender, unarmed or armed with one to three subdistal tubercles; hind femur markedly incrassate, reaching at most the middle third of abdominal sternite VII, with dorsal surface smooth or tuberculate and ventral surface strongly armed with spines and tubercles; fore and middle tibiae unarmed, sulcate, and slightly expanded at posterior third; hind tibia curved, compressed, shorter than femur, with outer margin not expanded and remarkably sulcate, inner margin usually markedly expanded, and apically armed with a broad long spine. Scutellum. Longer than wide, and always longer than clavus; straight or coarctate near base; disc with Y-shaped elevation; apex rounded. Hemelytra. Macropterous; claval suture present but covered by apex of scutellum; clavus partially covered by scutellum; costal margin shallowly concave. Abdomen. Gradually narrowing beyond middle, and slightly expanded posteriorly; abdominal seg-

ment VII of male usually laterally exposed; abdominal sternite II visible, slender, with or without conical tubercle located close to posterior border of metathorax; abdominal sternite II near lateral angles with small or well developed conical tubercles laying against the metacoxae; abdominal sternite III weakly or clearly expanded, and in dorsal view with spiracle visible. Male genitalia. Genital capsule. Simple, semiglobose; posteroventral edge with broad tongue-like middle plate; lateral angles rounded, and weakly exposed. Paramere. Simple and straight; anterior lobe convex, continuous with the body; posterior lobe variable. Female genitalia. Abdominal sternite VII with plica and fissura; plica triangular; fissura with inner margin overlapping; gonocoxae I subtriangular, in caudal view closed, in lateral view almost straight, with upper border rounded; paratergite VIII triangular, with spiracle visible; paratergite IX squarish, longer than paratergite VIII. Spermatheca. Bulb elongated; spermathecal duct conspicuously coiled proximally, with two to four distal coils; flank distinct; chamber more or less globose.

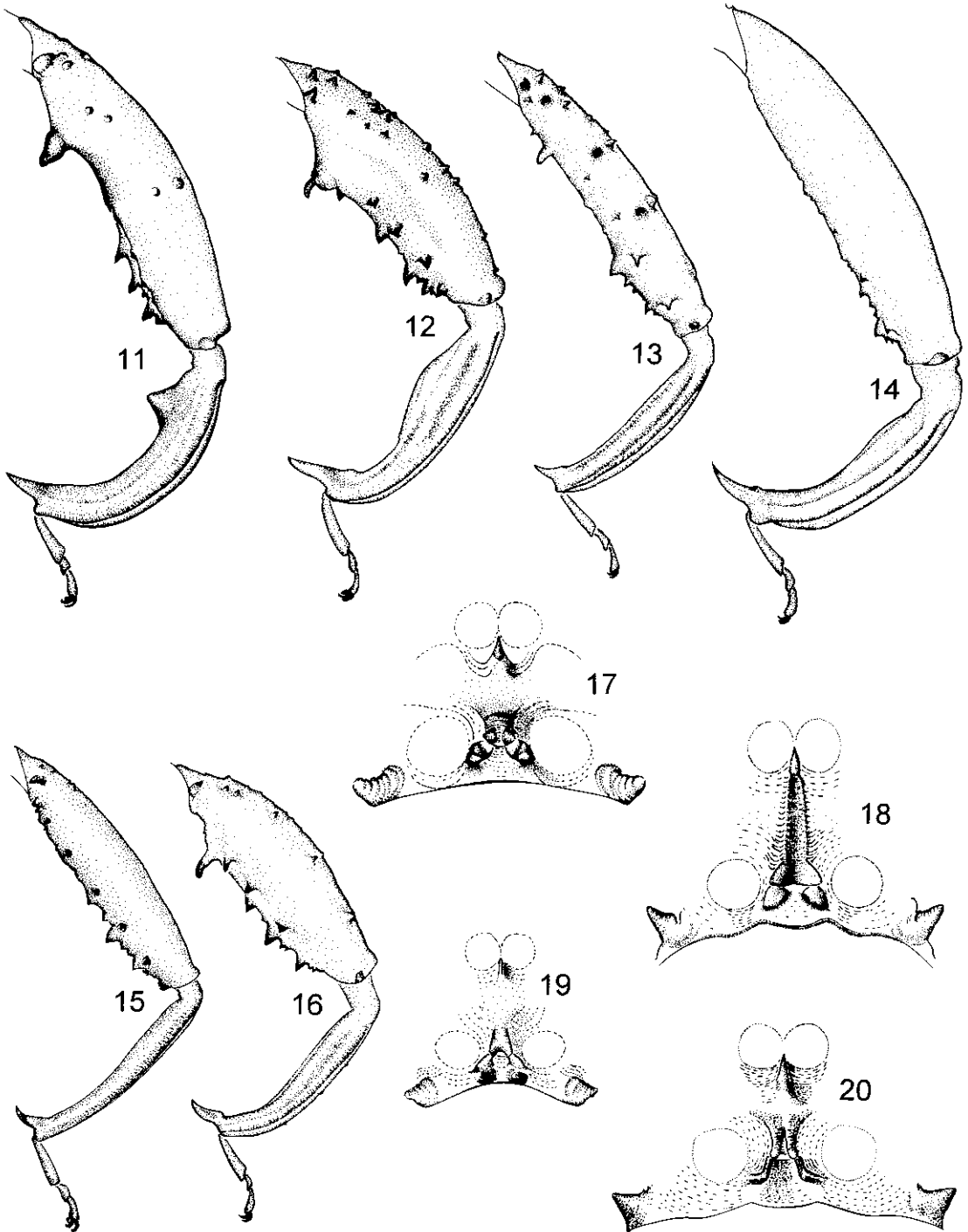
Integument. Head, collar, calli, clavus, corium, prosternum, mesosternum, metasternum, connexival segments, and pleural abdominal sterna impunctate; pronotal disc strongly punctate, and abruptly striate; scutellum punctate, except the Y-shaped elevation which is finely striate; propleura, posterior margin of metapleura, acetabulae, and abdominal sterna punctate; metapleura tuberculate; antennal segments and legs covered with short decumbent to suberect setae.

KEY TO GENERA OF MEROPACHYDINI

- 1. Posterior border of pronotum without a triangular projection . . . . . 2
- 1'. Posterior border of pronotum with a triangular projection above each basal angle of scutellum . . . . . 10
- 2. Head ventrally and posterior to buccula with a strong conical tubercle (Fig. 1) . . . . . 3
- 2'. Head ventrally and posterior to buccula smooth, without a tubercle at most with an irregular callosity (Fig. 2) . . . . . 7
- 3. Posterior margin of metasternum lateral to middle third bilobed (Fig. 19); calli densely tuberculate . . . . . *Serranoniella* new genus
- 3'. Posterior margin of metasternum at middle third flat (Figs. 17 and 20); calli smooth or with few tubercles . . . . . 4
- 4. Posterior margin of metapleura with a creamy yellow hardened protuberance; mesosternum conspicuously raised, deeply sulcate at midline; male abdominal sternite III laterally with a creamy yellow hardened protuberance; male hind femur proximally without a strong conical spine-like projection (Fig. 14) . . . . . *Romoniella* new genus
- 4'. Posterior margin of metapleura without creamy yellow hardened protuberance; mesosternum weakly convex, not longitudinally sulcate; male abdominal sternite III laterally flat, without creamy yellow hardened protuberance; male hind femur proximally with strong conical spine-like projection (Fig. 11) . . . . . 5
- 5. Calli smooth; body surface densely pubescent; male hind tibia proximally with strong conical spine-like projection (Fig. 11). . . . . *Badilloniella* new genus
- 57'. Calli tuberculate; body surface almost glabrous; male hind tibia basally without conical spine-like projection (Figs. 12-14) . . . . . 6



Figs. 1 and 2. Head in lateral view. 1, *Badilloniella tristriatus* (Kormilev). 2, *Marichisme limbatus* (Stål). Fig. 3. Caudal view of male genital capsule of *Badilloniella tristriatus* (Kormilev). Figs. 4 and 5. Abdomen. 4, *Romoniella perfecta* Brailovsky and Barrera, New Species. 5, *Badilloniella tristriatus* (Kormilev). Figs. 6-10. Metathoracic peritreme. 6, *Peranthus longicornis* Dallas. 7, *Romoniella perfecta* Brailovsky and Barrera, New Species. 8, *Marichisme limbatus* (Stål). 9, *Badilloniella tristriatus* (Kormilev). 10, *Esparzaniella reclusa* Brailovsky and Barrera, New Species.



Figs. 11-16. Hind leg. 11, *Badilloniella tristriatus* (Kormilev). 12, *Esparzaniella reclusa* Brailovsky and Barrera, New Species. 13, *Marichisme limbatus* (Stål). 14, *Romoniella perfecta* Brailovsky and Barrera, New Species. 15, *Serraniella amblysa* Brailovsky and Barrera, New Species. 16, *Peranthus longicornis* Dallas. Figs. 17-20. Thorax in ventral view showing mesosternum and metasternum. 17, *Esparzaniella reclusa* Brailovsky and Barrera, New Species. 18, *Romoniella perfecta* Brailovsky and Barrera, New Species. 19, *Serraniella amblysa* Brailovsky and Barrera, New Species. 20, *Badilloniella tristriatus* (Kormilev).

- 6. Dorsal surface of hind femur conspicuously tuberculate (Fig. 12); posterior angles of male connexival segments III to V each armed with a large and blunt spine (female unarmed) . . . . . (Fig. 23)  
 . . . . . *Esparzaniella* new genus
- 6'. Dorsal surface of hind femur smooth, or scarcely tuberculate (Figs. 14, 16); posterior angles of male connexival segments III to V unarmed . . . . . *Peranthus* Stål
- 7. Scutellar disc without a distinct Y-shaped elevation; posterior margin of mesosternum at each side with one short lobe touching anterior lobe of metasternum; posterior margin of metasternum flat; dorsal surfaces of hind femora smooth . . . . . 8
- 7'. Scutellar disc with a clearly Y-shaped elevation; posterior margin of mesosternum at each side with one large lobe freely projecting backwards and bending up, not touching anterior lobe of metasternum; posterior margin of metasternum at middle third with a deep depression of capsule-like appearance; dorsal surfaces of hind femora weakly to strongly tuberculate from base to apex. . . . . 9
- 8. Scutellum remarkably slender abruptly narrowed on distal half, apex bifid; antennal segment I slender, less than 2.05 mm; metapleura not laterally expanded; hind femora scarcely incrassate; inner face of hind tibia weakly expanded; abdominal sternite III of male with small lateral prominences . . . . .  
 . . . . . *Larraldiella* Brailovsky
- 8'. Scutellum not remarkably slender, narrowing very gradually to distal end, apex rounded; antennal segment I robust, longer than 2.10 mm; metapleura laterally expanded; hind femur conspicuously incrassate; inner face of hind tibia expanded; abdominal sternite III of male smooth, without lateral prominences . . .  
 . . . . . *Gracchus* Stål
- 9. Dorsal surface of hind femora strongly tuberculate from proximal to distal end (Fig. 13); hind trochanter convex, not tuberculate; scutellum 1.7 to 2.2 times longer than wide, apically rounded; anterior margins of thoracic mesopleura each with a black elongate spot . . . . . *Marichisme* Kirkaldy
- 9'. Dorsal surface of hind femora weakly tuberculate from proximal to middle third; hind trochanter tuberculate; scutellum 3.3 to 3.8 times longer than wide, and apically acute; anterior margins of thoracic mesopleura without a black spot. . . . . *Soteloniella* Brailovsky
- 10. Head ventrally posterior to buccula with a strong conical tubercle (Fig. 1). . . . . 11
- 10'. Head ventrally posterior to buccula smooth, without a tubercle (Fig. 2) . . . . . 13
- 11. Hind femur conspicuously clavate, slender towards base, and abruptly thickened beyond middle . . . . . *Possaniella* Brailovsky
- 11'. Hind femur never clavate, uniformly incrassate . . . . . 12
- 12. Middle third of posterior margin of metasternum flat, without lateral lobes; anterior lobe of metathoracic peritreme with a black lunular spot; body surface densely pubescent; scutellum clearly contracted near base; dorsal surfaces of hind femur strongly tuberculate . . . . . *Flavius* Stål
- 12'. Middle third of posterior margin of metasternum with two lateral lobes; anterior lobe of metathoracic peritreme tooth-shaped without a black lunular spot; body surface not densely pubescent; scutellum not contracted near base; dorsal surfaces of hind femur smooth . . . . . *Alcocerniella* Brailovsky
- 13. Posterior margin of mesosternum trilobed, with mesial lobe expanded and broad, and lateral lobes short; scutellum strongly constricted near base; scutellar disc with a broad Y-shaped elevation. . . . .  
 . . . . . *Meropachys* Burmeister
- 13'. Posterior margin of mesosternum bilobed, or without lobes; scutellum not or weakly constricted near base; scutellar disc without a distinct Y-shaped elevation . . . . . 14
- 14. Posterior margin of metasternum bilobed . . . . . *Hirilcus* Stål
- 14'. Posterior margin of metasternum not bilobed . . . . . 15
- 15. Posterior margin of metasternum projected in a medial quadrangular plate directed straight downward; pronotal humeral angles obtuse . . . . . *Juaristiella* Brailovsky
- 15'. Posterior margin of metasternum flat, straight; pronotal humeral angles subacute, laterally expanded . . . . . *Salamancaniella* Brailovsky and Luna

*Badilloniella* Brailovsky and Barrera,  
NEW GENUS

Type species: *Flavius tristriatus* Kormilev, 1951. Monobasic.

Description. Head. Distance between ocelli 3.3 to 3.6 times diameter of one ocellus; distance between ocelli and eye 1.0 to 1.1 times diameter of one ocellus; head ventrally and behind buccula strongly tuberculate (Fig. 1); rostral segment III shortest, IV longest, I subequal to II. Thorax. Pronotum. Anterolateral borders obliquely straight, smooth; posterior border barely convex; triangular process absent; calli raised, smooth, separated along midline. Mesosternum weakly convex, with posterior margin between middle legs prominent, bilobed, each lobe well separated from mesial line, overlapping the lobes of anterior margin of metasternum; metasternum slender, rectangular, anterior margin raised on two lobes, separated along midline by a wide furrow; each lobe touching the two lobes of posterior margin of mesosternum; posterior margin of metasternum almost straight, each lateral angle projected as a broad rectangular plate, laying against metacoxae, and at middle third flat, without lobes, and projected on a broad plate (Fig. 18). Anterior lobe of metathoracic peritreme raised, elongate, curved, with rounded angles (Fig. 9). Legs. Distance between hind coxae nearly 3.2 to 3.7 times the diameter of one coxa; fore and middle femora relatively slender, unarmed; hind femur markedly incrassate, attaining the middle third of abdominal sternite VII, with dorsal surface weakly tuberculate, and ventrally strongly armed with spines and tubercles in two irregular rows, as well as a strong conical tooth close to base in males and medium sized tubercle in females; inner margin of male hind tibia expanded, curved, and armed basally and distally with a broad spine (Fig. 11); inner margin of female hind tibia expanded, curved, and armed only distally with a broad spine. Scutellum. 1.9 to 2.2 times longer than wide, longer than clavus, coarctate near base; disc with Y-shaped elevation. Abdomen. Posterior angle of male connexival segments III to VI armed with a medium sized and blunt spine (Fig. 5) (female unarmed); abdominal sternite III laterally flat, without conical lobes.

Integument. Body surface densely covered with mixed short and large decumbent to suberect setae.

*Badilloniella tristriatus* was originally placed in the Merocorinae genus *Flavius* Stål due to the head ventrally with a conical tubercle behind the bucculae, fore and middle femora unarmed, and pronotal disc and scutellum densely covered with long to short decumbent to suberect setae. However *Badilloniella* differs from *Flavius* by lacking a triangular projection at the posterior border of the pronotum, by having on the hind femora and

hind tibiae of the male a strong conical projection spine-like near the base, the anterior lobe of metathoracic peritreme without a black lunular spot, the mesosternal disc weakly convex, total length of scutellum 1.9 to 2.3 longer than wide, and hind femur in dorsal view smooth. In *Flavius* the posterior border of the pronotum has a triangular projection, the hind femora and hind tibiae of the male lacks a strong conical projection spine-like near the base, the anterior lobe of the metathoracic peritreme has a black lunular spot, mesosternal disc conspicuously raised, total length of scutellum 3.0 to 3.2 longer than wide, and hind femur in dorsal view strongly tuberculate.

*Badilloniella* and *Peranthus* Stål share the following characters: head ventrally and behind buccula with a strong conical tubercle (Fig. 1), posterior border of pronotum lacking a triangular projection, mesosternal disc weakly convex, hind femur of male basally with a strong conical spine-like projection, hind femora of both sexes dorsally smooth, and fore and middle femora unarmed (Figs. 11 and 16). In *Badilloniella* the posterior angle of male connexival segments III to VI are each projected as a large and blunt spine (Fig. 5), the hind tibiae of male basally with a strong conical projection like-spine (Fig. 11), calli smooth, and Pronotal disc and scutellum densely covered with long to short decumbent to suberect setae. In *Peranthus* the posterior angles of male connexival segments are unarmed, the male hind tibiae basally lack a conical projection like-spine (Fig. 16), calli tuberculate, and pronotal disc and scutellum almost glabrous.

Etymology. Named for Humberto Badillo Gomez, distinguished Mexican gastroenterologist and specialist in Internal Medicine.

*Badilloniella tristriatus* (Kormilev),

**NEW COMBINATION**

*Flavius tristriatus* Kormilev 1951: 42-44  
Figs. 1, 3, 5, 9, 11, 20-21

Redescription. Male. Dorsal coloration. Head including antennal segments I to IV bright orange; pronotum bright orange with three broad and diffuse longitudinal stripes black to dark brown; scutellum bright orange with three bright red to reddish brown longitudinal stripes, one at middle third and two lateral to middle line; clavus black to dark brown with vein and outer face yellow; corium pale brown to black with veins, and costal and apical margin yellow; hemelytral membrane dark ambarine with veins and basal angle darker; connexival segments III to VI yellow and VII reddish brown with anterior angle yellow; dorsal abdominal segments black with senescent scars IV-V and V-VI yellow. Ventral coloration. Bright orange; apex of rostral segment IV, ventral spines of hind femur, and anterior lobes of mesosternum black; pleural abdominal sterna, tubercles of metapleura,

and several discoidal spots scattered on mesopleura and hind femur yellow to yellow orange; hind tibiae reddish with outer and inner margin black. Genital capsule. Posteroventral edge entire, straight, with small medial plate, and laterally with the angles rounded (Fig. 3); Paramere. Posterior lobe short, broad, apically curved.

Measurements. ♂. Head length 1.70; width across eyes 2.25; interocular space 1.17; interocular space 0.53; distance ocellus to eye 0.16; diameter of ocellus 0.15; preocular distance 1.15. Length antennal segments: I, 3.17; II, 2.55; III, 2.45; IV, 4.10. Length rostral segments: I, 0.62; II, 0.62; III, 0.52; IV, 0.70. Pronotum: Total length 4.45; width across frontal angles 2.60; width across humeral angles 5.40. Scutellar length 4.80; maximum width of anterior lobe 2.10; maximum width of posterior lobe 1.40. Hind leg: femoral length 8.60; tibial length 5.80. Total body length 18.50.

Female. Coloration. Similar to male. Connexival segments VIII IX chestnut orange; dorsal abdominal segments VIII and IX black; genital plates bright orange and scattered with dark brown diffuse spots. Spermatheca. Spermathecal duct with three to four distal coils.

Measurements. ♀. Head length 1.77; width across eyes 2.10; interocular space 1.12; interocular space 0.48; distance ocellus to eye 0.17; diameter of ocellus 0.15; preocular distance 1.20. Length antennal segments: I, 2.90; II, 2.32; III, 2.30; IV, 3.30. Length rostral segments: I, 0.58; II, 0.58; III, 0.42; IV, 0.62. Pronotum: Total length 4.50; width across frontal angles 2.50; width across humeral angles 5.20. Scutellar length 3.90; maximum width of anterior lobe 2.00; maximum width of posterior lobe 1.15. Hind leg: femoral length 7.10; tibial length 5.45. Total body length 16.90.

Distribution. Previously known from the type series collected in Yungas, and Chapare, Bolivia (Kormilev 1951).

Material examined. PERU: 2 ♀♀, Ucayali (Middle Rio), 19-VII-1928, H. Bassler (AMNH); 1 ♀, Madre de Dios, Rio Tambopata Res., 30 km (air), SW Puerto Maldonado, 290m, 20-31-X-1982, R. Wilkerson (FSCA). BOLIVIA: 1 ♂, Cuatro Ojos, XI-1913, Steinbach (CMN); 1 ♀, Departamento Santa Cruz, Provincia Ichilo, Parque Amhoro, Rio Saguayo, 500m, 30-XII-1988, P. Bettella (UNAM); 3 ♀♀, Las Juntas, XII-1913, Steinbach (CMN).

*Esparzaniella* Brailovsky and Barrera,  
NEW GENUS

Type species: *Esparzaniella reclusa* Brailovsky & Barrera, Monobasic.

Description. Head. Distance between ocelli 3.4 to 3.6 times the diameter of one ocellus; distance between ocellus and eye 0.8 to 1.1 times the diameter of one ocellus; head ventrally and behind buccula tuberculate (Fig. 1); rostral segment III

shortest, IV longest, I longer or subequal to II. Thorax. Pronotum. Anterolateral borders obliquely straight, anterior third dentate to tuberculate, and posterior third smooth; posterior border weakly convex; triangular projection absent; calli entire, uniformly elevated, tetralobulate on males, hexalobulate in females, and not separated at midline. Mesosternum weakly convex, with posterior margin between middle legs bilobed; metasternum slender, rectangular, anterior margin raised on two large quadrangular plates, separated along midline by a wide furrow; each plate touching the two lobes of posterior margin of mesosternum; posterior margin of metasternum straight, each lateral angle projected as a broad rectangular plate, laying against metacoxae and at middle third flat, entire, without lobes (Fig. 17). Anterior lobe of metathoracic peritreme strongly raised, elongate, with rounded angles (Fig. 10). Legs. Distance between hind coxae 2.9 to 3.2 times the diameter of one coxa; fore and middle femora slender, ventrally armed with two subdistal spines, and one row of broad tubercles; hind femur of males markedly incrassate, attaining the middle third of abdominal sternite VII; dorsal surface biserially tuberculate from base to apex, and ventrally strongly armed with spines and tubercles on two irregular rows, as well as one broad and large conical projection near the base; hind femur of females similar but without long and broad conical tubercle or spine near base; inner margin of hind tibia armed distally with a broad spine (Fig. 12). Scutellum. 1.7 to 1.9 times longer than wide, elongate, longer than clavus, and slightly coarctate near base; disc with Y-shaped elevation; anterior third medially without circular depression. Abdomen. Posterior angle of male connexival segments III to V armed with a large blunt spine and segments II, VI and VII entire (Fig. 23); posterior angle of female connexival segments II to VII entire, slightly broadened but never projected on a spiny-like projection; abdominal sternite III laterally flat, without conical lobes.

Integument. Body surface rather dull, almost glabrous; propleura close to acetabulae densely and irregularly tuberculate; middle third of pronotal disc with two broad and large conical tubercles.

Etymology. Named for Elvia Esparza, distinguished Mexican artist.

Discussion. *Esparzaniella* and *Peranthus* Stål share the following characters: head ventrally and behind buccula with a conical tubercle (Fig. 1), posterior border of pronotum lacking a triangular projection, hind femur basally with large broad spine (Figs. 12, 16), calli uniformly elevated with 4 to 6 conical tubercles and middle third of posterior margin of metasternum smooth, flat. In *Esparzaniella* the male posterior angle of connexival segments III to V are armed with large spiny-like projection (Fig. 23); the hind femur of both

sexes dorsally armed with two rows of black tubercles, and the anterior lobe of metathoracic peritreme clearly differs in both genera (Figs. 6, 10). In *Peranthus* the male posterior angle of connexival segments III to V are unarmed (Fig. 4), and the hind femur of both sexes dorsally smooth.

*Marichisme* Kirkaldy like *Esparzaniella* has the dorsal surface of hind femur strongly tuberculate from proximal to distal ends (Figs. 12 and 13), and posterior border of pronotum lacking a triangular projection. *Marichisme* differs by the following characters: Head ventrally and behind buccula smooth, without tubercle (Fig. 2), posterior angle of male connexival segments III to V entire, without spine-like projections (Fig. 4), middle third of posterior margin of metasternum with deep capsule-like depression, shape of metathoracic peritreme (Fig. 8), and hind femur of both sexes more elongate, and not markedly incrassate like *Esparzaniella*, whose metasternal posterior margin is flat (Fig. 17).

*Esparzaniella reclusa* Brailovsky & Barrera,  
**NEW SPECIES**  
Figs. 10, 12, 17, 23

**Description.** Holotype male. Dorsal coloration. Head, antennal segments, pronotum and scutellum bright chestnut orange; latter with medial and lateral longitudinal stripes reddish brown; clavus black with vein and lateral margin yellow; corium dark brown with veins, and costal and apical margin yellow; hemelytral membrane dark ambarine with basal angle and veins dark brown; connexival segments III to VI yellow and VII reddish brown; dorsal abdominal segments reddish brown with odoriferous scars IV-V and V-VI yellow, and segment VII almost black. Ventral coloration. Bright chestnut orange, with pleural margins of abdominal sterna yellow; hind femur bright chestnut orange with spines and tubercles black; hind tibiae reddish orange with lateral margin and spines black; hind tarsi with basal segment reddish brown and chestnut orange reflections, and medial and distal segments bright chestnut orange; apex of rostral segment IV black; external tubercles of metacoxae reddish brown; tubercles of propleura, mesopleura and metapleura bright orange yellow; evaporating area of metathoracic peritreme dull orange. Genital capsule. Posteroventral edge with broad tongue-like middle plate; lateral angles convex, weakly exposed. Paramere. Posterior lobe elongate, apically ending in a sharp tooth.

**Measurements.** ♂. Head length 1.60; width across eyes 2.15; interocular space 1.15; interocellar space 0.55; distance ocellus to eye 0.17; diameter of ocellus 0.15; preocular distance 1.10. Length antennal segments: I, 3.80; II, 2.80; III, 2.77; IV, 4.40. Length rostral segments: I, 0.68; II, 0.62; III, 0.40; IV, 0.78. Pronotum: Total length 4.20; width

across frontal angles 2.65; width across humeral angles 4.90. Scutellar length 3.95; maximum width of anterior lobe 2.00; maximum width of posterior lobe 1.10. Hind leg: femoral length 7.60; tibial length 6.10. Total body length 17.38.

**Female.** Coloration. Similar to male. Connexival segments VII to IX bright chestnut orange; dorsal abdominal segment VII bright orange with posterior margin dark brown; genital plates bright chestnut orange with dark brown reflections.

**Measurements.** ♀. Head length 1.50; width across eyes 2.15; interocular space 1.12; interocellar space 0.52; distance ocellus to eye 0.12; diameter of ocellus 0.15; preocular distance 1.10. Length antennal segments: I, 3.30; II, 2.60; III, 2.60; IV, 3.90. Length rostral segments: I, 0.68; II, 0.58; III, 0.38; IV, 0.74. Pronotum: Total length 4.05; width across frontal angles 2.35; width across humeral angles 4.95. Scutellar length 3.40; maximum width of anterior lobe 2.00; maximum width of posterior lobe 1.00. Hind leg: femoral length 6.70; tibial length 5.50. Total body length 16.78.

**Holotype:** ♂ BOLIVIA, Beni, Guayaramerin, XII-1956, coll. V. Fritz (AMNH).

**Paratypes:** 1 ♂, 2 ♀♀. Same data as holotype (AMNH, UNAM).

**Etymology.** The specific name refers to the elusive nature of this species.

**Distribution.** Only known from the type series collected in Bolivia.

*Romoniella* Brailovsky and Barrera,  
**NEW GENUS**

**Type species:** *Romoniella perfecta* Brailovsky & Barrera, Monobasic.

**Description.** Head. Distance between ocelli 2.8 to 3.3 times the diameter of one ocellus; distance between ocellus and eye 1.3 to 1.4 times the diameter of one ocellus; head ventrally and behind buccula tuberculate (Fig. 1); rostral segment III the shortest, IV the longest, and I longer or subequal than II. Thorax. Pronotum. Anterolateral borders obliquely straight, smooth; posterior border straight; triangular projection absent; calli smooth, slightly raised, separated at midline by a short longitudinal furrow. Mesosternum conspicuously raised, deeply sulcated, with posterior margin between middle legs bilobed; metasternum slender, rectangular, anterior margin remarkably raised on two large tubercles, separated along midline by a short furrow; each tubercle overlapping the two lobes of posterior margin of mesosternum; posterior margin of metasternum not bilobed, expanded in a broad, declivent plate, with lateral angles projected in a wide conical tubercle, laying against the metacoxae; posterior margin of metapleura slightly curved, and raised on a creamy hardened protuberance (Fig. 18). Metathoracic peritreme bilobulate, with each lobe rounded; evaporating area



deeply concave, with raised sides (Fig. 7). Legs. Distance between hind coxae 3.2 to 3.5 times the diameter of one coxa; fore and middle femora slender, ventrally armed with two subdistal spines, and one row of broad tubercles; hind femur not markedly incrassate, attaining the middle third of abdominal sternite VI; dorsal surface smooth, ventrally armed with two subdistal spines and one row of broad spines and tubercles, running from base to apex; hind tibia armed distally with a broad spine (Fig. 14). Scutellum. 1. 7 to 1.9 times longer than wide, elongate, longer than clavus, and slightly coarctate near base; disc with Y-shaped elevation; anterior third medially without circular depression. Abdomen. Posterior angle of connexival segments III to VII unarmed; male abdominal sternite III clearly expanded, laterally with medium sized creamy yellow hardened protuberance, absent in females.

Integument. Body surface rather dull, and glabrous.

Etymology. Named for Ranulfo Romo, distinguished Mexican neurologist.

Discussion. *Badilloniella* Brailovsky and Barrera, *Esparzaniella* Brailovsky and Barrera, *Gracchus* Stål, *Larraldiella* Brailovsky, *Marchisme* Kirkaldy, *Peranthus* Stål, *Romoniella* here described, and *Soteloniella* Brailovsky are the only known genera in the tribe Meropachydini without a triangular projection on the posterior border of the pronotum (Figs. 21 and 22). In *Badilloniella*, *Esparzaniella*, *Peranthus* and *Romoniella* the head ventrally and behind buccula has an strong tubercle (Fig. 1), lacking in the other genera (Fig. 2). *Romoniella* is clearly segregated because the posterior margin of the metapleura is projected in a creamy yellow hardened prominence, the male abdominal sternite III laterally has a creamy yellow hardened protuberance lacks in the other genera, the hind femur is not markedly incrassate, and the mesosternum conspicuously raised and mesally sulcate (Fig. 18).

*Romoniella perfecta* Brailovsky & Barrera,

**NEW SPECIES**

Figs. 4, 7, 14, 18, 22

Description. Holotype male. Dorsal coloration. Head, and antennal segments I to III yellow; antennal segment IV pale chestnut orange; pronotum yellow with medial and lateral longitudinal stripes pale chestnut red located at anterior lobe; scutellum yellow except basal third with broad and short longitudinal stripe pale chestnut red; clavus and corium pale orange brown; hemelytral membrane dark ambarine with veins brown; connexival segments II to VI yellow and VII dark reddish brown with upper anterior margin yellow; dorsal abdominal segments pale orange, and VII reddish orange with posterior margin reddish brown. Ventral coloration. Head, rostral segments

(apex of IV dark brown), legs, and acetabulae yellow; tarsi, abdominal sterna III to VI and pleural abdominal sterna III to VI yellow with olive green reflections; abdominal spiracle creamy yellow; abdominal sternite VII and pleural abdominal sternite VII yellow with posterior margin chestnut orange; genital capsule chestnut orange; prothorax yellow, with broad anterior stripe close to propleura; mesothorax and metathorax chestnut orange, with posterior margin of mesopleura yellow; posterior margin of metapleura with hardened prominence creamy yellow; hind tibia yellow with basal third dark chestnut red; anterior and posterior lobe of metathoracic peritreme and evaporating area dark chestnut orange. Genital capsule. Posterodorsal edge with broad tongue-like middle plate; lateral angles rounded. Paramere. Posterior lobe broad and apically curved.

Measurements. ♂. Head length 1.95; width across eyes 2.30; interocular space 1.25; interocular space 0.50; distance ocellus to eye 0.20; diameter of ocellus 0.15; preocular distance 1.15. Length antennal segments: I, 4.05; II, 3.10; III 2.90; IV, 4.65. Length rostral segments: I, 0.70; II, 0.70; III, 0.46; IV, 0.78. Pronotum: Total length 4.50; width across frontal angles 2.30; width across humeral angles 5.50. Scutellar length 4.47; maximum width of anterior lobe 2.30; maximum width of posterior lobe 1.20. Hind leg: femoral length 9.30; tibial length 6.12. Total body length 21.70.

Female. Coloration. Similar to male. Connexival segments III to V yellow, VI dark reddish brown with anterior and posterior border and upper margin yellow, and VII to IX dark reddish brown; dorsal abdominal segments III, VI and VIII yellow, IV-V yellow with lateral margins black, VII pale reddish orange, and IX yellow with posterior margin chestnut orange. Ventrally with head, rostral segments (apex of IV dark brown), propleura, mesopleura and metapleura, abdominal sterna, and genital plates orange yellow; posterior margin of metapleura with hardened prominence creamy yellow; pleural abdominal sterna pale yellow; fore and middle coxae chestnut brown; fore and middle trochanter, femora, tibiae, and tarsi orange yellow; hind leg chestnut orange with spines and tubercles chestnut brown; mesosternum, and metasternum dark brown to black; anterior lobe of metathoracic peritreme dirty orange yellow, posterior lobe and evaporating area black. Spermatheca. Spermathecal duct with two distal coils.

Measurements. ♀. Head length 1.60; width across eyes 2.15; interocular space 1.15; interocular space 0.43; distance ocellus to eye 0.21; diameter of ocellus 0.15; preocular distance 1.12. Length antennal segments: I, 3.25; II, 2.55; III 2.50; IV, 4.10. Length rostral segments: I, 0.68; II, 0.64; III, 0.42; IV, 0.78. Pronotum: Total length 3.65; width across frontal angles 2.25; width across humeral angles 4.70. Scutellar length 3.25; maximum

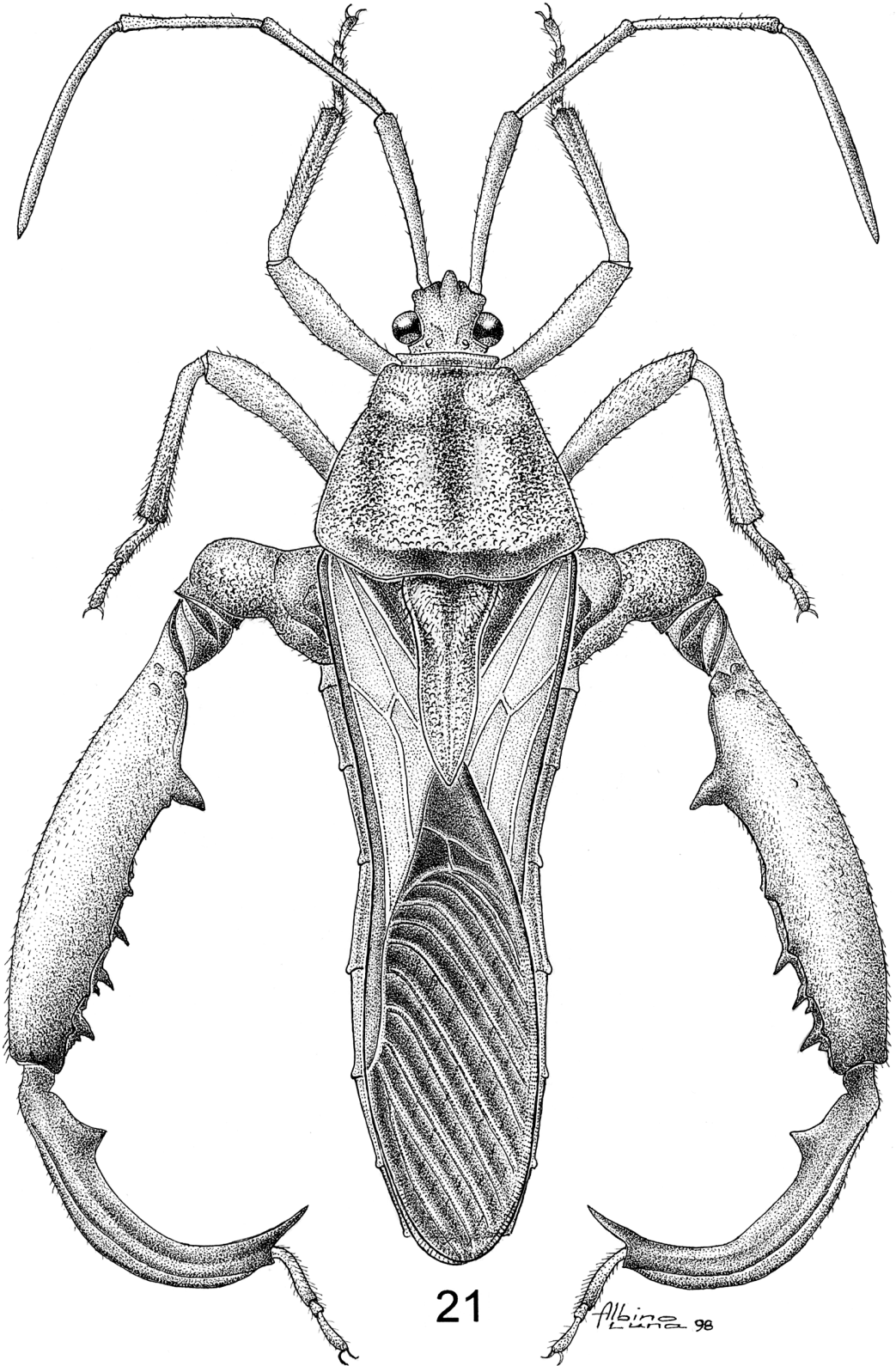
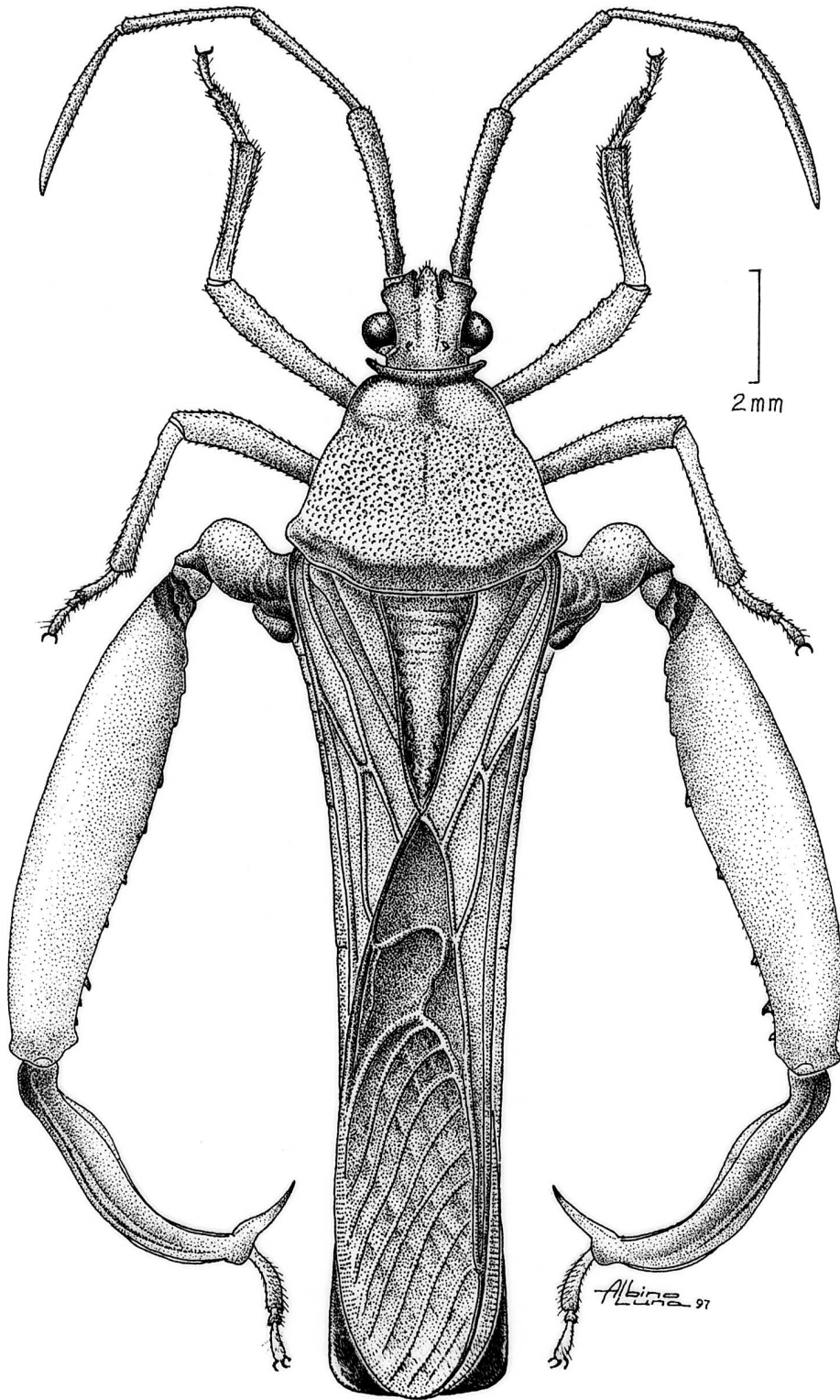


Fig. 21. *Badilloniella tristriatus* (Kormilev), dorsal view.



22

Fig. 22. *Romoniella perfecta* Brailovsky and Barrera, New Species, dorsal view.

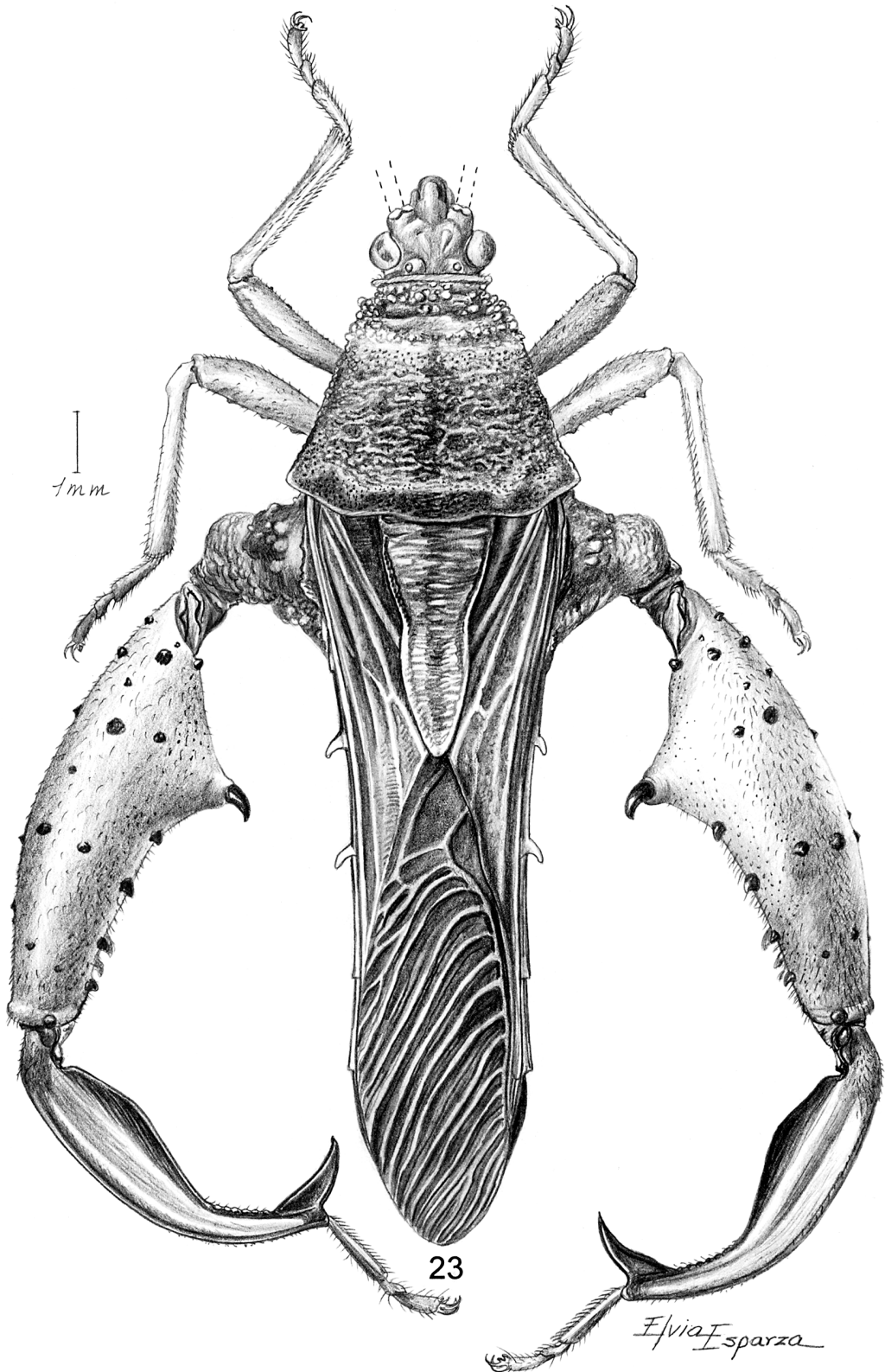


Fig. 23. *Esparzaniella reclusa* Brailovsky and Barrera, New Species, dorsal view.

width of anterior lobe 1.85; maximum width of posterior lobe 0.80. Hind leg: femoral length 6.70; tibial length 5.10. Total body length 17.26.

Variation. 1, Head, antennal segments I to III, pronotum, scutellum, connexival segments, legs, abdominal sterna, and pleural abdominal sterna yellow with olive green reflections. 2, Mesosternum, and metasternum yellow to dark brown. 3, Anterior and posterior lobe of metathoracic peritreme and evaporating area yellow to dark brown.

Holotype: ♂ MEXICO, Chiapas, Ruinas de Bonampak, 21-V-1980, coll. H. Brailovsky (UNAM).

Paratypes. MEXICO: 1 ♂ Chiapas, Tuxtla Gutierrez, El Chorreadero, 26-IX-1961, coll. F. Pacheco (UNAM). 1 ♂ Chiapas, Cascada El Aguacero, about 20 km W of Ocozocoautla, 24-VIII-1974, coll. D. E. and J. A. Breedlove (CAS). 1 ♀ Chiapas, 2.4 km W of Soyalo on road to Chicoasen, 1219 m, 7-IX-1974, coll. D. E. and J. A. Breedlove (CAS). BELIZE: 1 ♀ Belize S. C. Mile 20 Southern Hwy., 19-VIII-1977, coll. C. W. and L. O'Brien and Marshall (UMRM). HONDURAS: 1 ♀ Olucho, El Boqueron, 20-XII-1983, coll. R. W. Jones (TAMU). EL SALVADOR. 1 ♀ San Salvador, IX-1960, coll. Virkki (CNCI). COSTA RICA 1 ♂ Provincia Guanacaste, Estacion Santa Rosa, 300 m, I-1989, coll. GNP Biodiversity Survey (INBIO).

Etymology. The name *perfecta*, refers to the fine proportions and appearance of this species.

Distribution. Widely distributed throughout Southern Mexico and Central America.

*Serranoniella* Brailovsky and Barrera,  
NEW GENUS

Type species: *Serranoniella amblysa* Brailovsky & Barrera, Monobasic.

Description. Head. Distance between ocelli 3.8 to 4.5 times the diameter of one ocellus; distance between ocellus and eye 1.5 to 1.6 times the diameter of one ocellus; head ventrally and behind buccula tuberculate (Fig. 1); rostral segment III shortest, I longest, II longer than IV. Thorax. Pronotum. Anterolateral borders obliquely straight, anterior third weakly tuberculate, posterior third smooth; posterior border barely convex; triangular projection absent; calli weakly raised, and densely tuberculate. Mesosternum weakly convex with posterior margin between middle legs prominent, bilobed, with each lobe well separated from mesial line and overlapping the lobes of anterior margin of metasternum; metasternum slender, rectangular, anterior margin raised on two large lobes, separated along midline by a wide furrow; each lobe touching the two lobes of posterior margin of mesosternum; posterior margin of metasternum almost straight, lateral angles projected as a broad rectangular plate, laying against metacoxae, and at middle third bilobed (Fig. 19). Anterior lobe of metathoracic peritreme raised, elongate, curved

to hemispheric, with rounded angles. Legs. Distance between hind coxae nearly 2.6 to 3.2 times the diameter of one coxa; fore and middle femora relatively slender, unarmed; hind femur markedly incrassate, attaining the middle third of abdominal sternite VII, dorsal surface practically smooth with few tubercles hard to see, ventral surface strongly armed with spines and tubercles in two irregular rows, and male and female without strong conical tooth close to the base; inner margin of hind tibia armed distally with a broad spine (Fig. 15). Scutellum. 1.7 to 1.9 times longer than wide, longer than clavus, straight, not coarctate near base; disc with Y-shaped elevation. Abdomen. Posterior angle of connexival segments unarmed; abdominal sternite III laterally flat, without conical lobes.

Integument. Body surface almost glabrous, scattered with short decumbent to suberect setae.

Etymology. Named after Araceli Silvia Reyes Serrano wife of the junior author.

Discussion. *Serranoniella* like *Hirilcus* Stål with posterior margin of metasternum bilobed, and hind femur basally without strong conical expansion like spine (Fig. 15). In *Hirilcus* the posterior border of the pronotum has a triangular projection above each basal angle of scutellum, the head ventrally and behind buccula smooth or at most with an irregular callosity, and the scutellum is clearly coarctate and not simple and straight like in *Serranoniella* which pronotum lack a triangular projection and the head ventrally and behind buccula has a strong conical tubercle.

*Serranoniella amblysa* Brailovsky & Barrera,  
NEW SPECIES  
Figs. 15, 19, 24

Description. Holotype male. Dorsal coloration. Head, antennal segments and pronotum bright chestnut orange; scutellum chestnut orange with medial, and lateral longitudinal stripes bright orange red; clavus and corium chestnut orange with claval and corial veins, and costal and apical margin dull yellow; hemelytral membrane dark ambarine with basal angle and veins brown; connexival segments III to VI yellow, and VII dark brown with posterior third yellow; dorsal abdominal segments dark brown, with odoriferous scars IV-V and V-VI yellow. Ventral coloration. Chestnut orange; apex of rostral segment IV, and spines and tubercles of hind femur dark brown; pleural abdominal sterna III to VI yellow, and VII bright chestnut orange; hind tibia bright chestnut orange with pale reddish reflections. Genital capsule. Posteroventral edge entire, straight, with small medial plate, and laterally with the angles rounded. Paramere. Posterior lobe remarkably elongate, apically curved.

Measurements. ♂. Head length 1.50; width across eyes 2.05; interocular space 1.15; interocel-

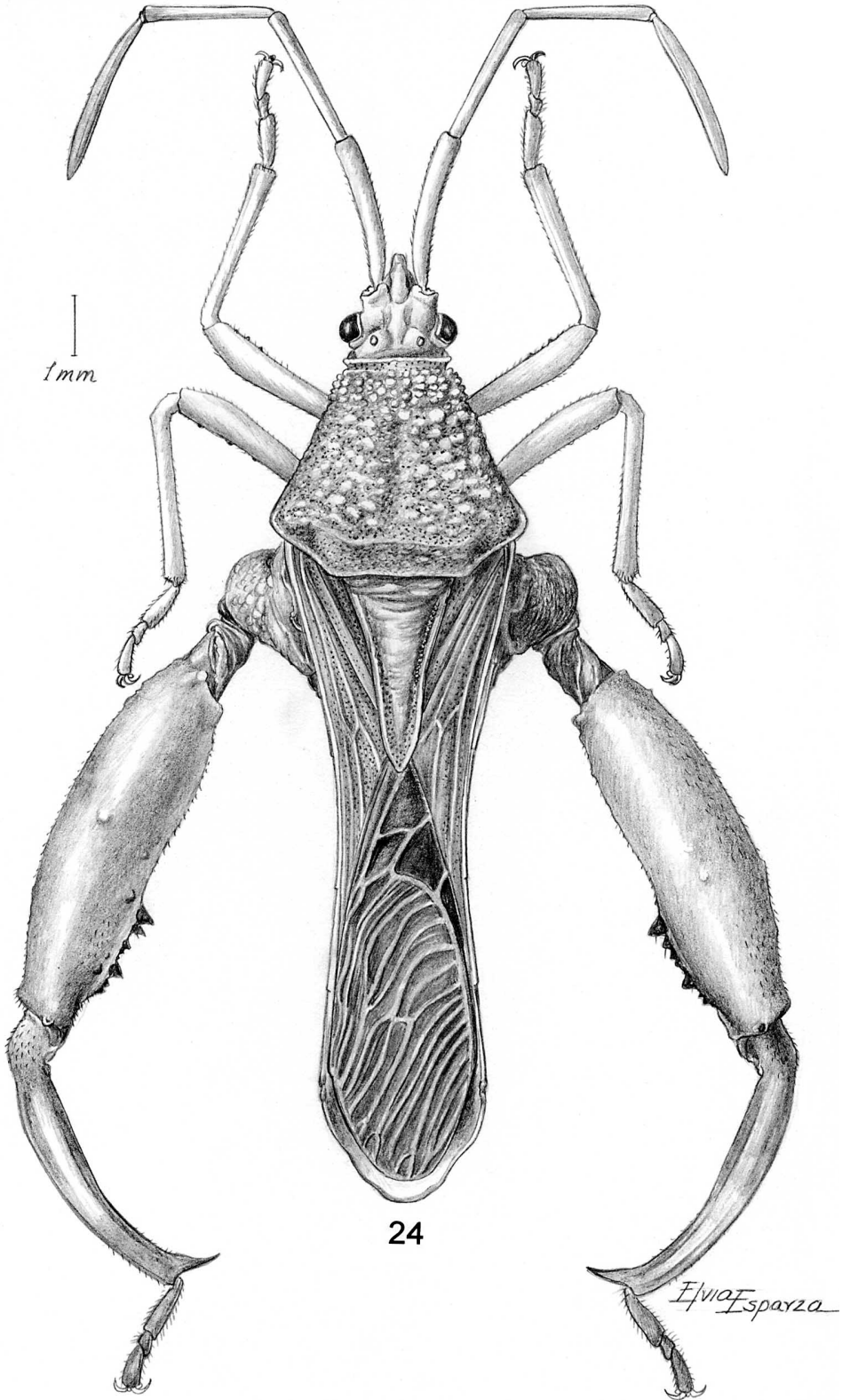


Fig. 24. *Serranoniella amblysa* Brailovsky and Barrera, New Species, dorsal view.

lar space 0.55; distance ocellus to eye 0.20; diameter of ocellus 0.12; preocular distance 1.05. Length antennal segments: I, 3.00; II, 2.32; III, 2.17; IV, 3.20. Length rostral segments: I, 0.76; II, 0.72; III, 0.56; IV, 0.66. Pronotum: Total length 3.75; width across frontal angles 2.35; width across humeral angles 4.45. Scutellar length 3.40; maximum width of anterior lobe 1.80; maximum width of posterior lobe 0.85. Hind leg: femoral length 6.85; tibial length 5.30. Total body length 16.47.

Female. Coloration. Similar to male. Dorsal surface of hind tibia chestnut orange with pale reddish reflections and ventral surface with anterior third dark chestnut red, and posterior third pale chestnut orange; connexival segments VIII-IX dark chestnut orange; dorsal abdominal segments VIII-IX dark brown; genital plates bright chestnut orange. Spermatheca. Spermathecal duct with two distal coils.

Measurements. ♀. Head length 1.40; width across eyes 1.85; interocular space 0.95; interocular space 0.42; distance ocellus to eye 0.17; diameter of ocellus 0.11; preocular distance 1.15. Length antennal segments: I, 2.55; II, 2.10; III, 2.05; IV, 3.30. Length rostral segments: I, 0.74; II, 0.70; III, 0.50; IV, 0.66. Pronotum: Total length 2.95; width across frontal angles 1.80; width across humeral angles 3.65. Scutellar length 2.60; maximum width of anterior lobe 1.50; maximum width of posterior lobe 0.70. Hind leg: femoral length 5.30; tibial length 4.40. Total body length 13.30.

Holotype: ♂ BRAZIL, Santarem (acc. 6324), IV-1919, coll. S. M. Klages (CMNH).

Paratypes. BRAZIL: 3 ♀. Same data as for holotype (CMNH, UNAM). 1 ♂ Santarem (acc. 2966), coll. S. M. Klages (UNAM). Santarem (acc. 6324), VI-1919, coll. S. M. Klages (CMNH). 1 ♀ Para, Santarem, 6-IV-1956, coll. Elias & Roppa

(UNAM). 1 ♂, 1 ♀ Para, Unt Amazonas, J. A. P. ded Eing. nr. 145, 1933 (ZMUH).

Etyymology. From the Greek word *amblys* meaning blunt, obtuse, for the blunt body shape.

Distribution. Only known from Brazil.

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