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NEOTROPICAL ARADIDAE IN THE COLLECTIONS OF THE CALIFORNIA ACADEMY SCIENCES, SAN FRANCISCO

(Hemiptera: Heteroptera)

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ABSTRACT. Twelve new species of the Neotropical Aradidae are described in this paper: *Proxius (Neoproxius) peruvianus* from Peru, *Dysodius equatorianus* from Ecuador, *Coloborhinus peruvianus* from Peru, *Neuroctenus aztequi* from Mexico, *N. chilensis* from Chile, *N. rossi* from Ecuador, *N. schlingeri* from Peru and Ecuador, *N. substitutus* from Mexico, *N. vanduzeei* from Panama, *Mezira arnaudi* from Peru, *M. maculata* from Mexico, and *M. vulcanica* from Ecuador.

The name *Neuroctenus villiersi* Kormilev, 1973, is replaced by *Neuroctenus andrei* Kormilev, new name, since the former was preoccupied by *Neuroctenus villiersi* Hoberlandt, 1968.

Introduction

During the last twenty-five years, the number of Neotropical species of the family Aradidae has more than doubled. Nevertheless, in the lot of specimens studied, twelve new species were discovered and are here described.

Of particular interest is the brachypterous form of *Carventus mexicanus* Bergroth, previously unrecorded. The genus *Dysodius* Lepeletier and Serville included four species, all rather common in Central America and in the northern part of South America. Unexpectedly, a fifth species was found in Ecuador.

Central and North Chile are separated from Argentina by a very high barrier, the Sierra de los Andes, and from Peru by a desert, so that infiltration of species from one country to another is practically impossible. Only in the South, where the Andes are much lower and where more accessible passes exist, is the interchange of fauna between Chile and Patagonia easily affected. As a consequence, the Aradid fauna of Chile is extremely poor; only four species belonging to four subfamilies are recorded. Of these, three also occur in Patagonia. In this lot, a new species of the genus *Neuroctenus* Fieber was collected from Sierra Nahuelbuta, west of Angol, about 350 miles (560 kilometers) south of Santiago de Chile. It is the southernmost locality for the genus in the Americas.

The name *Neuroctenus villiersi* Kormilev (1973) from Colombia, is preoccupied by *Neuroctenus villiersi* Hoberlandt (1968) from the Congo. Hence, I hereby propose *Neuroctenus andrei* Kormilev, new name, to replace the former one.

Acknowledgments

I wish to express my sincere gratitude to Dr. Paul H. Arnaud, Jr., Chairman of the Department of Entomology, California Academy of Sciences, for the privilege to study this interesting lot of Aradidae from the collections under his care. I also wish to thank Dr. Richard C. Froeschner, Associate Curator - Hemiptera, Department of Entomology, Smithsonian Institution, Washington, D. C., for kindly sending me additional data on *Proxius schwarzii* Heidemann, thus permitting me to separate my new species from the latter.

All measurements were taken with a micromillimeter eyepiece, 25 units equal 1 mm. For convenience, the length of abdomen was taken from the tip of scutellum to the tip of hypopygium in the male or segment IX in the female, respectively. California Academy of Sciences is abbreviated CAS.

Subfamily ISODERMINAE

Genus *ISODERMUS* Erichson

Isodermus gayi (Spinola).

Anchomichon gayi Spinola, 1852, p. 216.
Ecpiestocoris castaneus Blanchard *in* Spinola, 1852, p. 223.
Mezira ? patagonica Stål, 1859, p. 260.
Brachyrhynchus gayi Walker, 1873, p. 9.
Isodermus gayi Stål, 1873, p. 147.

Two males: Chile, Los Muermos Forest, 20 January 1951, E. S. Ross, A. E. Michelbacher.

Subfamily ANEURINAE

Genus *ANEURUS* Curtis

Aneurus fritzi Kormilev.

Aneurus fritzi Kormilev, 1960b, p. 218.

Eight males, 17 females, 3 nymphs: Peru, 50 mi. (80 km.) S. Tingo Maria, Carpish Crest, 28 December 1954, E. I. Schlinger, E. S. Ross.

Subfamily CARVENTINAE

Genus *PROXIUS* Stål

Proxius (Neoproxius) gypsatus Bergroth.

Proxius gypsatus Bergroth, 1898c, p. 100.
Proxius (Neoproxius) gypsatus Usinger and Matsuda, 1959, p. 113 (note).

One female: Peru, Monson Valley, Tingo Maria, 9 October 1954, E. I. Schlinger, E. S. Ross.

Proxius (Neoproxius) palliatus Champion.

Proxius palliatus Champion, 1898, p. 69.
Proxius (Neoproxius) palliatus Usinger and Matsuda, 1959, p. 113 (note).

Two females: Peru, Monson Valley, Tingo Maria, 10 November - 9 December 1954, E. I. Schlinger, E. S. Ross.

Proxius (Neoproxius) peruvianus Kormilev, new species. (Figure 1.)

FEMALE. Elongate, abdomen with parallel borders from connexivum III to VI; heavily incrusted on head and fore disc of pronotum; partially incrusted on hind disc of pronotum, scutellum, connexivum and prosternum; incrusted only laterally on meso- and metasternum and on venter. Non-incrusted portions naked and smooth.

Head as long as its width across eyes (18:17.5), shorter than its width across posterolateral angles (18:22); anterior process deeply incised anteriorly, genae parallel, longer than clypeus, produced beyond tips of first antennal segments. Antenniferous tubercles dentiform, diverging, reaching middle of antennal segment I. Eyes small, convex. Posterolateral angles of head forming large, apically blunt lobes. Hind border transverse, sinuate laterad of neck. Clypeus produced posteriorly as a thin, median carina on a triangular, median elevation, extending from base of clypeus to hind border of head. Area laterad of this elevated disc deeply depressed for the reception of antennae. Antennae short and thin, almost as long as head (18.5:18); relative lengths of antennal segments I to IV 5:3:5.5:5. Labium very thin and short, not reaching hind border of labial groove, which is closed posteriorly.

Pronotum subrectangular, slightly constricted between fore and hind lobes, shorter than its maximum width across hind lobe (26:38); fore lobe narrower than hind lobe (36:38). Fore disc with a high, guitar-shaped median elevation, strongly depressed medially; lateral borders of median elevation inflated on fore half, raised and foliaceous on hind half, slightly incised at interlobal depression and produced into small tip on median line posteriorly. Laterad of this elevation are 2 (1+1) small angular projections. Lateral portions of fore disc excavated anteriorly, inflated laterad and posteriad of depressed areas, and bearing two deep troughs on each inflated portion. Hind disc smooth and shiny, with 2 (1+1) high, triangular, incrusted elevations laterally and with 2 (1+1) curved, incrusted ridges at posterolateral angles; between the latter is a high, foliaceous, curved, transverse ridge.

Scutellum shorter than basal width (15.5:22); disc with a high, T-shaped, median elevation, three times longitudinally depressed at base, and sloping in a convex line posteriorly. Lateral borders with 2 (1+1) foliaceous incrustations, which are twice as high on hind half as on fore half; between lateral borders and median elevation disc is a deep depression.

Hemelytra reaching middle of tergum VII, hind wings reaching only to hind border of tergum V. Corium semi-transparent, reaching fore 1/3 of connexivum IV; its exterior border carinate, apically straight, apical angle acute; membrane transversely wrinkled, but without veins.

Abdomen longer than its maximum width across segment III (65:50); connexiva II and III fused together; connexiva III and VII each with one round, callous spot, connexiva IV to VI each with two. Postero-exterior (PE) angles of connexiva III to V slightly protruding, PE-VI distinctly protruding, PE-VII forming acute points, reaching tips of paratergites and tricuspidate segment IX. Lateral borders of connexiva III to VI subparallel, VII straight and converging; tergum VII raised and truncate posteriorly. Spiracles II to VIII dorsolateral, placed on the lower portion of a double lateral border and visible from above.

Legs unarmed.

Color red-brown, incrustation from ochraceous to reddish brown.

Total length 5.00 mm.; width of pronotum 1.52 mm.; width of abdomen 2.00 mm.

Holotype: female (CAS), Peru, Yurac, 67 mi. (108 km.) E. Tingo Maria, 4 October 1954, E. I. Schlinger, E. S. Ross.

Proxius peruvianus is related to *P. schwarzii* Heidemann, but may be separated from it by: genae longer, produced beyond tip of antennal segment I; sculpture on the head and pronotum different; and transverse ridge on the hind lobe of pronotum uninterrupted in the middle.

Genus *CARVENTUS* Stål

The genus *Carventus* Stål is mainly distributed in the Oriental and Australian Regions, where there are numerous species. Its subgenus *Burgeonia* Schouteden is distributed in the Ethioptian and Malagasy Regions, but America has, so far, only one extremely rare species, *Carventus mexicanus* Bergroth, recorded from Mexico. This species was previously known only from the macropterous form, although in the Australian Region one species of the genus is brachypterous. In this lot, *Carventus mexicanus* was represented by both macropterous and brachypterous forms, the latter having the hemelytra not reaching the hind border of connexivum II and its corium reaching only to the fore border of connexivum II; the exterior border of the corium is carinate, and the membrane lacks veins. All Oriental species of *Carventus* Bergroth have 2 (1+1) round, shiny tubercles on sternum VII. These tubercles are absent in members of the subgenus *Burgeonia* and in *C. mexicanus*.

Carventus mexicanus Bergroth.

Carventus mexicanus Bergroth, 1895, p. 167.

Macropterous form. Three males, 7 females: Colombia, Cundinamarca, Finca Bella Vista near Sasaima, 29 March 1965, P. R. Craig.

Brachypterous form. Three males, 1 female: same locality and date.

Subfamily MEZIRINAE

Genus *MIORRHYNCHUS* Champion

Miorrhynchus championi Kormilev.

Miorrhynchus championi Kormilev, 1959, p. 65.

One male: Peru, Monson Valley, Tingo Maria, 2 April 1954, E. I. Schlinger, E. S. Ross.

Genus *PICTINUS* Stål

Pictinus spiniger Champion.

Pictinus spiniger Champion, 1898, p. 81.

One male: Panama, Canal Zone, Barro Colorado, D. Q. Cavagnaro, M. E. Irwin.

Genus *NOTAPICTINUS* Usinger and Matsuda

Notapictinus quadraticeps (Champion).

Pictinus quadraticeps Champion, 1898, p. 83.
Notapictinus quadraticeps Usinger and Matsuda, 1959, p. 360.

One female: Ecuador, 6-8 mi. (10-13 km.) W. Mera, Napo-Paztaza, 1500 m., 10 February 1955, E. I. Schlinger, E. S. Ross.

Genus *NANIUM* Bergroth

Nanium parvum Bergroth.

Nanium parvum Bergroth, 1898c, p. 100.

One male: Peru, Monson Valley, Tingo Maria, 16 November 1954, E. I. Schlinger, E. S. Ross.

Genus *CINYPHUS* Stål

Cinyphus emarginatus (Stål).

Depodius emarginatus Stål, 1862, p. 437.
Cinyphus emarginatus Stål, 1873, p. 143.

One male: Mexico, Chiapas, Amantenungodel Valley, 20 August 1972, D. E. Breedlove.

Cinyphus ovatus Kormilev.

Cinyphus ovatus Kormilev, 1960c, p. 6.

One female: Peru, Monson Valley, Tingo Maria, 10 November 1954, E. I. Schlinger, E. S. Ross.

Genus *ARTAGERUS* Stål

Artagerus hispidus Champion.

Artagerus hispidus Champion, 1898, p. 78.

One female: Panama, Canal Zone, Barro Colorado, 24 July 1963, D. Q. Cavagnaro, M. E. Irwin. One female: Peru, 5 mi. (8 km.) SW. Las Palmas, Huanuco, 1000 m., 5 December 1954, E. I. Schlinger, E. S. Ross. One female: Peru, Monson Valley, Tingo Maria, 29 November 1954, E. I. Schlinger, E. S. Ross.

Genus *APHLEBODERRHIS* Stål

Aphleboderrhis comata Champion.

Aphleboderrhis comata Champion, 1898, p. 79.

One male: Peru, Monson Valley, Tingo Maria, 26 October 1954, E. I. Schlinger, E. S. Ross.

Aphleboderrhis pubescens (Walker).

Aradus pubescens Walker, 1873, p. 38.
Aphleboderrhis pubescens Champion, 1898, p. 79.

One female: Peru, Colonia Perene, Rio Perene, 18 mi. (29 km.) NE. La Merced, Junin, 3 January 1955, E. I. Schlinger, E. S. Ross.

Genus *HESUS* Stål

Hesus acuminatus (Fabricius).

Aradus acuminatus Fabricius, 1803, p. 117.
Hesus acuminatus Stål, 1868, p. 95.

Twelve specimens from various parts of Peru.

Hesus cordatus (Fabricius).

Aradus cordatus Fabricius, 1803, p. 117.
Hesus annuliger Stål, 1862, p. 438.
Hesus cordatus Stål, 1868, p. 95.

One of the commonest species in the Neotropical Region. Twenty-nine specimens from Panama, Colombia, Peru, British Guiana, and Brazil.

Hesus flaviventris (Burmeister).

Dysodius flaviventris Burmeister, 1835, p. 255.
Hesus flaviventris Stål, 1862, p. 438.

Very common. Nine specimens from Panama and Peru.

Hesus subarmatus Stål.

Hesus subarmatus Stål, 1873, p. 142.

Twelve specimens from Colombia, Peru, Bolivia, and Brazil.

Hesus mexicanus Kormilev.

Hesus mexicanus Kormilev, 1968a, p. 281.

Two males, 2 females: Panama, Gatun Lake, March 1930 and 16 August 1931. One female: Guatemala, San Jose, 16 May 1951.

Genus *HELENUS* Buchanan-White

Helenus hirsutus Champion.

Helenus hirsutus Champion, 1898, p. 75.

One female: Panama, Canal Zone, Barro Colorado, 24 July 1963, D. Q. Cavagnaro.

Champion described this Panamanian species with certain doubts, since he considered that it might be synonymous with *H. hesiformis* Buchanan-White from Brazil. I have seen some specimens from the Guianas which are slightly different from specimens from Central America, but if they are a different species, it is not quite clear at this time.

Genus *DYSODIUS* Lepeletier and Serville

Dysodius lunatus (Fabricius).

Acanthia lunata Fabricius, 1794, p. 72.
Aradus lunatus Fabricius, 1803, p. 117.
Dysodius lunatus Burmeister, 1835, p. 255.

Widely distributed in the tropical Americas, showing a variety in size. Fifty-seven specimens from Mexico, Panama, Colombia, Peru, and Surinam.

Dysodius crenulatus (Stål).

Depodius crenulatus Stål, 1862, p. 437.
Dysodius crenulatus Stål, 1873, p. 143.

Thirty-three specimens from Mexico, El Salvador, Guatemala, Costa Rica, and Panama.

Dysodius brevipes Bergroth.

Dysodius brevipes Bergroth, 1898b, p. 26.

Two males, 2 females: Mexico, Rio Balsas, Wickham coll. One male, 1 female: Mexico, Sonora, 7 mi. (11 km.) SE. Alamos, 12 August 1960, P. H. Arnaud, Jr., E. S. Ross.

Dysodius ampliventris Bergroth.

Dysodius ampliventris Bergroth, 1894, p. 103.

Two males, 3 females: Panama, Gatun Lake and Barro Colorado. One male, 4 females: Brazil, Reserva Ducke, 25 km. N. Manaus, 23 March 1964, C. E. and E. S. Ross.

Dysodius equatorianus Kormilev, new species.
(Figure 2.)

MALE. Ovate; lateral borders of anterior process of head, posterior borders of postocular tubercles, borders of pronotal lobes and exterior borders of connexiva roughly crenulate. Head, pronotum, scutellum, corium, and connexivum partially covered with adherent yellow tomentum and white incrustation.

Dysodius equatorianus is closely related to *D. ampliventris* Bergroth, and probably was confused with it, but may be separated from the latter by: exterior borders of connexiva angularly produced (straight in *D. ampliventris*), and relatively longer antennae, 1.95 times as long as width of

head across eyes (1.65 times in *D. ampliventris*).

Measurements: head longer than its width across eyes (56:47), as long as width of head across postocular spines (56:56); relative lengths of antennal segments I to IV: 35:17.5:22:17.5; pronotum shorter than its width across humeri (54:103), or across pronotal lobes (54:140); scutellum shorter than its basal width (40:62); abdomen shorter than its width across segment IV (145:167); hypopygium shorter than its maximum width (29:32).

Anterior process of head reaching 3/4 of antennal segment I; postocular spines acute, produced far beyond outer borders of eyes; labium reaching hind border of labial groove, which is closed posteriorly. Anterolateral angles of pronotum produced into 2 (1+1) large, oblique lobes; fore disc with 2 (1+1) oblique ridges. Hemelytra reaching hind border of tergum VI, corium reaching middle of connexivum III. Paratergites thin, clavate, reaching middle of hypopygium; the latter cordate, with a thin and high median carina, flanked on posterior half by 2 (1+1) oblique ridges. All spiracles ventral, placed far from border.

Legs unarmed.

Color black, partially red-brown; middle of sternum and venter ferruginous and smooth.

Total length 11.88 mm.; width of pronotum 5.60 mm.; width of abdomen 6.68 mm.

Holotype: male (CAS), Ecuador, 2.8 mi. (4.5 km.) N. Puyo, Napo-Paztaza, 953 m., 9 February 1955, E. I. Schlinger, E. S. Ross.

Paratype: 1 male, collected with holotype (Kormilev collection).

Genus *COLOBORHINUS* Bergroth

Coloborrhynchus Champion, 1898, p. 105 (preoccupied).
Coloborhinus Bergroth, 1906, p. 202.
Halaszfya Kormilev, 1960b, p. 210.
Coloborhinus Kormilev, 1974, p. 245.

Coloborhinus ovatus (Kormilev).

Halaszfya ovata Kormilev, 1960b, p. 213.
Coloborhinus ovatus Kormilev, 1974, p. 245.

Two females: Peru, Monson Valley, Tingo Maria, 26 October 1954 and 10 November 1954, E. I. Schlinger, E. S. Ross.

Coloborhinus peruvianus Kormilev, new species.

FEMALE. Closely related to *Coloborhinus pumilio* (Champion) and *C. ovatus* (Kormilev); all three species are very similar but may be separated by the position of the spiracles: *C. peruvianus* with spiracle V ventral, somewhat

remote from margin, though nearer to it than is spiracle IV; *C. pumilio* with spiracle V sublateral, though not visible from above; and *C. ovatus* with spiracle V lateral and visible from above.

Measurements: head shorter than its width across eyes (21:23); relative lengths of antennal segments I to IV: 11.5:7.5:11:9; pronotum shorter than its maximum width (23:47); scutellum shorter than its basal width (19:26); abdomen longer than its maximum width across segment IV (72:60).

Anterior process of head reaching middle of antennal segment I; postocular tubercles by far not reaching outer borders of eyes; labium not reaching hind border of labial groove, which is closed posteriorly. Hemelytra reaching middle of tergum VII, corium reaching middle of connexivum III, its apical angle acute. Postero-exterior angles of connexiva II to VI not protruding, VII rounded; paratergites small, rounded, reaching basal 1/3 of tricuspidate segment IX. Spiracles II to V ventral, VI and VII lateral and visible from above, VIII terminal.

Color testaceous, lighter on connexiva and pleurae because of a thin layer of white incrustation.

Total length 5.40 mm.; width of pronotum 1.88 mm.; width of abdomen 2.40 mm.

Holotype: female (CAS), Peru, Monson Valley, Tingo Maria, 10 October 1954, E. I. Schlinger, E. S. Ross.

Genus *NEUROCTENUS* Fieber

Neuroctenus trigonus Bergroth.

Neuroctenus trigonus Bergroth, 1894, p. 114.

One female: Mexico, Chiapas, Cerro Huepetec, W. of San Cristobal de las Casas, 2591 m., 23 May 1972, D. E. Breedlove.

Neuroctenus centralis (Berg).

Brachyrhynchus centralis Berg, 1879, p. 139.
Neuroctenus centralis Bergroth, 1887a, p. 284.

One female: Argentina, Tucuman, Cerro San Xavier, 11 February 1951, E. S. Ross, A. E. Michelbacher.

Neuroctenus uhleri Bergroth.

Neuroctenus uhleri Bergroth, 1895, p. 169.

Seven males, 9 females: Mexico, Michoacan, 15 mi. (24 km.) S. Carapan, 7 December 1948, E. S. Ross.

Neuroctenus amplus Champion.

Neuroctenus amplus Champion, 1898, p. 112.

Two females: Mexico, Tres Marias, Wickham coll. (*ex* Van Duzee collection).

Neuroctenus chilensis Kormilev, new species.
(Figure 3.)

In my key to the Neotropical *Neuroctenus* species (1973, p. 736), this species runs to *Neuroctenus amplus* Champion, but it is much smaller, with first two antennal segments equal in length, labial groove open posteriorly (closed in *N. amplus*), apical border of corium deeply sinuate interiorly, shallow exteriorly (shallow exteriorly and interiorly in *N. amplus*). All spiracles ventral and not visible from above.

MALE. Elongate ovate, finely granulated.

Anterior process of head produced beyond tip of antennal segment I; postocular tubercles produced beyond outer border of eyes; labium reaching hind border of labial groove. Anterolateral angles of pronotum angularly rounded, very slightly produced anteriorly; lateral borders of pronotum barely sinuate; corium slightly produced beyond fore border of connexivum III; postero-exterior angles of connexiva II to VI not protruding. Paratergites small, clavate, reaching 2/3 of hypopygium; the latter short and wide, rounded posteriorly and with a triangular depression at base medially.

Measurements: head shorter than its width across eyes (20:22.5); relative lengths of antennal segments I to IV 7.5:7.5:8.5:8; pronotum less than half as long as its maximum width (18:44); scutellum shorter than its basal width (21:26); abdomen longer than its maximum width across segment IV (68:55); hypopygium short and wide (12:20).

Color ferruginous; membrane whitish, infuscate in middle.

Total length 5.20 mm.; width of pronotum 1.76 mm.; width of abdomen 2.20 mm.

Holotype: male (CAS), Chile, W. of Angol, crest of Sierra Nahuelbuta, 1200 m., 3 January 1951, E. S. Ross, A. E. Michelbacher.

Neuroctenus robustus Kormilev.

Neuroctenus robustus Kormilev, 1973, p. 739.

Thirty-six specimens from Colombia (13 mi. [21 km.] W. Cali Valley, 20 March 1955) and Peru (Monson Valley, Tingo Maria, 3 November 1954), E. I. Schlinger, E. S. Ross; Panama, Gatun Lake, Tres Rios Plantation.

Neuroctenus rubiginosus Bergroth.

Neuroctenus rubiginosus Bergroth, 1887b, p. 184.

Later Bergroth synonymized this species with *N. punctulatus* (Burmeister), but the latter is a different species, distributed in southeastern Brazil, northeastern Argentina, and Paraguay, whereas *N. rubiginosus* is distributed in Central America and northern South America.

Numerous specimens from Mexico, Colombia, and Peru.

Neuroctenus longulus Bergroth.

Neuroctenus longulus Bergroth, 1898a, p. 151.

A fairly rare species, previously recorded only from French Guiana.

One female: Peru, Monson Valley, Tingo Maria, 12 October 1954, E. I. Schlinger, E. S. Ross.

Neuroctenus niger Bergroth.

Neuroctenus niger Bergroth, 1895, p. 170.

One female: Guatemala, San Jose, 16 May 1951, E. S. Ross.

Neuroctenus papyrinus Bergroth.

Neuroctenus papyrinus Bergroth, 1895, p. 170.

One male, 1 female: Mexico, Tepic, 24 June 1940, L. W. Saylor.

Neuroctenus punctulatus (Burmeister).

Brachyrhynchus punctulatus Burmeister, 1835, p. 254.

One female: Colombia, 5 mi. (8 km.) E. Villavicencio, Meta, 410 m., 11 March 1955, E. I. Schlinger, E. S. Ross.

This specimen, which I have tentatively identified as *N. punctulatus*, was found far out of the known area of distribution for this species. It is not impossible that it was imported from southeastern Brazil.

Neuroctenus schlingeri Kormilev, new species.
(Figure 4.)

In my key to the Neotropical *Neuroctenus* species (1973, p. 736), this species runs to *Neuroctenus punctulatus* (Burmeister), but may be separated at once by the short and wide paratergites (female) which are truncated posteriorly, reaching only to the middle of the posteriorly rounded segment IX.

FEMALE. Elongate ovate; lateral borders of pronotum and abdomen very finely crenulate.

Anterior process of head not reaching tip of antennal segment I; postocular tubercles serrate, reaching outer border of eyes; antennae thin, first three segments subequal in length; labium short, reaching line connecting hind borders of eyes; labial groove closed posteriorly. Anterolateral angles of pronotum angularly rounded and produced anteriorly beyond collar, the latter deeply sinuate anteriorly. Hemelytra (female) not reaching hind border of tergum VI; corium slightly produced beyond fore border of connexivum III; its apical angle acute, apical border twice sinuate, more deeply interiorly. Abdomen long and strongly rounded laterally; postero-exterior angles of connexiva II to VI barely protruding. Spiracles II to VII ventral, placed far from border, VIII lateral and visible from above.

Measurements: head shorter than its width across eyes (22:24); relative lengths of antennal segments I to IV 10:10:10.5:9; pronotum less than half as long as its maximum width (20:47); scutellum shorter than its basal width (25:31); abdomen longer than its maximum width (93:61).

Color ferruginous, partially infuscate; membrane hyaline, with black anastomosed veins.

Total length 6.52 mm.; width of pronotum 1.88 mm.; width of abdomen 2.44 mm.

Holotype: female (CAS), Peru, Monson Valley, Tingo Maria, 18 September 1954, E. I. Schlinger, E. S. Ross.

Paratype: 1 female, Ecuador, 2-8 mi. (3-13 km.) N. Puyo, Napo-Paztaza, 953 m., 9 February 1955, E. I. Schlinger, E. S. Ross (collection of the author).

It is a pleasure to dedicate this species to Dr. E. I. Schlinger, who collected specimens of so many species in this lot.

Neuroctenus bergrothi Champion.

Neuroctenus bergrothi Champion, 1898, p. 107.

One female: Mexico, Chiapas, Oaxaca border, 21 km. W. Rizo de Oro, SE. Cerro Baul, 1615 m., 6-8 September 1972, C. Mullinex, D. E. Breedlove. One male, 1 female: Peru, E. side Carpish Mountains, 2800 m., 40 mi. (64 km.) SW. Tingo Maria, 17 October 1954, E. I. Schlinger, E. S. Ross.

Neuroctenus amazonicus Kormilev.

Neuroctenus amazonicus Kormilev, 1960a, p. 91.

The male was not previously known, so I am giving its measurements: head as long as its width across eyes (22:22); relative lengths of antennal segments I to IV 9:8:10:8; pronotum short and wide (20:47); scutellum shorter than its basal width (22:30); abdomen longer than its maximum width across segment V (83:60).

Seventeen specimens: Venezuela, Guanare, Estado Portuguesa, 10-13 September 1957, B. Malkin. Twelve specimens: Colombia, 5 mi. (8 km.) E. Villavicencio, Meta, 410 m., 11 March 1955, E. I. Schlinger, E. S. Ross. One female: Peru, E. side Carpish Mountains, 2800 m., 40 mi. (64 km.) SW. Tingo Maria, 17 October 1954, E. I. Schlinger E. S. Ross.

Neuroctenus rossi Kormilev, new species.
(Figure 5.)

In my key to the Neotropical *Neuroctenus* species (1973, p. 736), this species runs to *Neuroctenus insignis* Kormilev, from southeastern Brazil, to which it is closely related, but it is smaller and lacks the narrow median sulcus on the hypopygium, typical for *N. insignis*.

MALE. Elongate ovate, finely granulate.

Anterior process of head reaching 3/4 of antennal segment I; postocular tubercles not reaching outer borders of eyes; pronotum slightly sinuate laterally, anterolateral angles angularly produced anteriorly beyond collar; abdomen ovate, postero-exterior angles of connexiva II to VI slightly protruding; paratergites clavate, reaching 2/3 of a widely rounded hypopygium posteriorly, which is not sulcate medially. Spiracles II to VII ventral, placed far from border, VIII lateral and visible from above.

Measurements: head almost as long as its width across eyes (20:21); relative lengths of antennal segments I to IV 8:8:9:8; pronotom short and wide (16:38); scutellum shorter than its basal width (20:25); abdomen much longer than its maximum width (70:48); hypopygium half as long as its maximum width (12:20).

Color yellow brown, partially infuscate.

Total length 5.12 mm.; width of pronotum 1.52 mm.; width of abdomen 1.92 mm.

Holotype: male (CAS), Ecuador, 2-8 mi. (3-13 km.) N. Puyo, Napo-Paztaza, 953 m., 9 February 1955, E. I. Schlinger, E. S. Ross.

It is a pleasure to dedicate this species to Dr. E. S. Ross, who collected specimens of so many species in this lot.

Neuroctenus longiventris Kormilev.

Neuroctenus longiventris Kormilev, 1960c, p. 15.

Three males, 1 female: Colombia, 10 mi. (16 km.) W. Ibague, Tolima, 9 March 1955, E. I. Schlinger, E. S. Ross. Four males, 4 females: Colombia, 32 mi. (51 km.) N. La Union, Narino near Sambino, 4 March 1955, E. I. Schlinger, E. S. Ross. One female: Panama, Gatun Lake, Tres Rios Plantation, T. O. Zschokke (*ex* Van Duzee collection).

Neuroctenus vanduzeei Kormilev, new species.
(Figures 6-7.)

In my key to the Neotropical *Neuroctenus* species (1973, p. 736), this species runs to *N. longulus* Bergroth, from the Guianas, but is relatively shorter and is widened posteriorly in both sexes; abdomen more evenly rounded from segment V; paratergites (female) very short and evenly rounded posteriorly, reaching the middle of a short and also rounded posteriorly segment IX (paratergites subangular, rounded apically, reaching almost to the tip of a tricuspidate segment IX in *N. longulus*). Spiracle VIII ventral and not visible from above (sublateral and visible from above in *N. longulus*).

MALE. Elongate ovate, slightly widening posteriorly; granulation rather rough.

Anterior process of head short, rounded anteriorly, reaching to 2/3 of antennal segment I; antenniferous tubercles very short, truncated; postocular tubercles minute, acute, by far not reaching outer borders of eyes. Labium reaching hind border of labial groove, which is opened posteriorly. Anterolateral angles of pronotum rounded, produced forward as far as collar; lateral borders slightly sinuate; fore disc with 4 (2+2) low elevations. Corium slightly produced beyond fore border of connexivum III, its apical angle acute, apical border twice sinuate, sinuses are shallow. Posteroexterior angles of connexiva barely protruding; paratergites clavate, reaching middle of a subtriangular, rounded posteriorly hypopygium, which is with an X-shaped depression in the middle of disc.

Color ferruginous, partially infuscate; corium fuscus membrane black.

Measurements: head shorter than its width across eyes (male - 25:27.5, female - 28:30), relative length of antennal segments I to IV: male - 14:12:13:13, female - 14:13:15:14; pronotum half as long as its maximum width (male - 26:55, female - 32:63); scutellum shorter than its basal width (male - 27.5:36, female - 30:39); abdomen longer than its maximum width across segment IV (male - 85:66; female - 101:76); hypopygium shorter than its maximum width (17:24).

Total length: male - 7.08, female - 7.52 mm.; width of pronotum: male - 2.20, female - 2.52 mm.; width of abdomen:

male - 2.64, female - 3.04 mm.

Holotype: male (CAS), Panama, Gatun Lake, Tres Rios Plantation, T. O. Zschokke (*ex* Van Duzee collection).

Allotype: female (CAS), collected with the holotype (*ex* Van Duzee collection).

Paratypes: 3 males, collected with holotype, CAS and Kormilev collections (*ex* Van Duzee collection).

This species is dedicated to the memory of the eminent American hemipterologist E. P. Van Duzee, from whose collection came described specimens.

Neuroctenus substitutus Kormilev, new species.
(Figure 8.)

Closely related to *N. papyrinus* Bergroth and confused with the latter, but may be separated from *N. papyrinus* by: longer anterior process of head, slightly produced beyond tip of antennal segment I (not reaching tip in *N. papyrinus*); postocular tubercles distinctly produced beyond outer borders of eyes (reaching, or only slightly produced in *N. papyrinus*); antennae more slender and relatively shorter, less than 1.5 times as long as width of head across eyes (more than 1.75 times in *N. papyrinus*); pronotum relatively wider, ratio of length/maximum width as 20:45 (20:40 in *N. papyrinus*); lateral borders of pronotum evenly rounded (slightly sinuate in *N. papyrinus*); apical border of corium with both sinuses shallow (interior sinus deep in *N. papyrinus*); hypopygium larger, almost as wide as width of head across eyes (21:22)(in *N. papyrinus*, it is distinctly narrower - 18:20.5); body relatively longer and narrower, ratio of length/maximum width as 2.27:1 (2.03:1 in *N. papyrinus*). All spiracles ventral and not visible from above.

MALE. Ovate, finely granulate.

Measurements: head slightly shorter than its width across eyes (21:22); relative lengths of antennal segments I to IV 8:8:9:7.5; pronotum short and wide (20:45); scutellum shorter than its basal width (22:30); abdomen longer than its maximum width (73:60)(70:64 in *N. papyrinus*); hypopygium shorter than its maximum width (13:21).

Color ferruginous, partially infuscate; membrane infuscate with black veins.

Total length 5.44 mm.; width of pronotum 1.80 mm.; width of abdomen 2.40 mm.

Holotype: male (CAS), Mexico, Chihuahua, 24 June 1940, L. W. Saylor (*ex* Van Duzee collection).

Neuroctenus aztequi Kormilev, new species.
(Figures 9-10.)

In my key to the Neotropical *Neuroctenus* species (1973, p. 736), this species runs to *N. bergrothi* Champion, but is much smaller, connexivum VI (male) not produced posterolaterally, connexivum VII with a transverse fold.

MALE AND FEMALE. Ovate in both sexes, very finely granulate.

Anterior process of head reaching 3/4 of antennal segment I; postocular tubercles crenulate, reaching outer border of eyes. Antennae relatively stout, width of segments diminishing from I to IV. Pronotum with anterolateral angles rounded and slightly produced anteriorly; lateral borders of pronotum slightly sinuate on fore lobe, rounded on hind lobe. Scutellum with a thin median ridge on hind half of disc. Corium reaching hind border of connexivum II, its apical angle acute; apical border twice sinuate, interior sinus deeper. Abdomen ovate, postero-exterior angles of connexiva not protruding; paratergites (male) small, clavate, reaching 4/5 of hypopygium; the latter small, narrower than head across eyes, depressed medially; paratergites (female) rounded, reaching 3/4 of a truncate segment IX. Spiracles II to VII ventral, placed far from border; VIII sublateral, but not visible from above.

Measurements: head as long as its width across eyes (male - 20:20, female - 22:23); relative lengths of antennal segments I to IV are: male - 8:9:10:9, female - 9:9:11:8; pronotum short and wide (male - 17:40, female - 19:44); scutellum shorter than its basal width (male - 20:28, female - 22:31); abdomen longer than its maximum width (male - 80:62 across segment V, female - 92:70 across segment IV), hypopygium shorter than its maximum width (11:17).

Color testaceous; membrane black, whitish at base.

Total length: male - 5.60, female - 6.20 mm.; width of pronotum: male - 1.60, female - 1.76 mm.; width of abdomen: male - 2.48, female - 2.80 mm.

Holotype: male (CAS), Mexico, Tepic, 24 June 1940, L. W. Saylor.

Allotype: female (CAS), collected with holotype.

Paratype: 1 male, Mexico, Nayarit, 20 mi. (32 km.) NW. Tepic, 27 November 1948, H. B. Leech (Kormilev collection).

Neuroctenus subandinus Kormilev.

Neuroctenus subandinus Kormilev, 1953, p. 249.

Forty-two specimens: Argentina, 30 mi. (48 km.) S. Jujuy, and Tucuman, Cerro San Xavier, 11-14 February 1951, E. S. Ross, A. E. Michelbacher.

Genus *MEZIRA* Amyot and Serville

Mezira formosa Kormilev.

Mezira formosa Kormilev, 1953, p. 243.

One male: Brazil, Reserva Ducke, 25 km. N. Manaus, 23 March 1964, C. E. and E. S. Ross.

Mezira kjellanderi Kormilev.

Mezira kjellanderi Kormilev, 1963, p. 265.

One male, 1 female: Colombia, Buenaventura, 4 November 1950, E. S. Ross.

Mezira vulcanica Kormilev, new species.
(Figure 11.)

Mezira vulcanica is related to *M. yucatana* (Champion), but is much larger; antennae relatively more slender, with segments II and III tapering toward base; postocular tubercles stout, acute, but not reaching outer borders of eyes; anterolateral angles of pronotum rounded and produced anteriorly as far as collar laterally; subtriangular paratergites reaching only middle of a tricuspidate segment IX.

FEMALE. Elongate ovate, granulate; body covered with sparse, decumbent, curled, yellow hairs.

Anterior process of head stout, reaching 2/3 of antennal segment I; labium not reaching hind border of labial groove. Lateral borders of pronotum distinctly sinuate, fore disc with 4 (2+2) stout ridges, hind disc densely granulate. Scutellum with a stout transverse ridge at base and with a thin median ridge; lateral borders of scutellum sinuate, tip rounded. Corium reaching middle of connexivum III, its apical border rounded, apical angle also rounded. Abdomen ovate; postero-exterior angles of connexiva III to VI slightly protruding, VII rounded. Spiracles II to VI ventral, placed far from border; VII ventral, but placed close to border; VIII lateral and visible from above.

Measurements: head shorter than its width across eyes (28:32.5); relative lengths of antennal segments I to IV 9:11:15:12; pronotum less than half as long as its maximum width (31:70); scutellum shorter than its basal width (31:39); abdomen longer than its width across segment IV (108:88).

Legs unarmed.

Color dark ferruginous; tarsi yellow brown, membrane dark brown, lighter at base.

Total length 8.00 mm.; width of pronotum 2.80 mm.; width of abdomen 3.52 mm.

Holotype: female (CAS), Ecuador, SW. of Alansi, Chimborazo, 2500 m., 14 February 1955, E. I. Schlinger, E. S. Ross.

Mezira arnaudi Kormilev, new species.
(Figure 12.)

Mezira arnaudi is related to *M. handlirschi* (Bergroth), but is smaller and very sharply granulate, granules bearing short, curled hairs (granules are smooth in *M. handlirschi*); head as long as its width across eyes; antennal segment II equal in length to IV; tergum VII raised and depressed in middle of elevation.

FEMALE. Elongate ovate; very sharply granulate, granules with very short, curled, rusty hairs; connexiva and the whole ventral side of the body covered with whitish incrustation.

Anterior process of head reaching middle of antennal segment I; postocular tubercles minute, by far not reaching outer borders of eyes; labium not reaching hind border of a deep labial groove, which is closed posteriorly. Antero-lateral angles of pronotum rounded and produced anteriorly slightly beyond collar, crenulate. Lateral notch rather deep; lateral borders of hind lobe rounded; fore disc with 4 (2+2) high, granulate ridges. Lateral borders of scutellum sinuate, tip rounded, median carina thin. Hemelytra reaching hind border of tergum VI; corium reaching middle of connexivum III, its apical border rounded, apical angle narrowly rounded. Abdomen ovate; postero-exterior angles of connexiva III to VI slightly protruding. Paratergites subtriangular, reaching basal 1/3 of a slightly notched segment IX. Spiracles II to VII ventral, placed far from border, VIII lateral and visible from above. Legs unarmed.

Measurements: head as long as its width across eyes (30:30); relative lengths of antennal segments I to IV 16:12:17:12; pronotum less than half as long as its maximum width (32:70); scutellum shorter than its basal width (31:36); abdomen longer than its maximum width across segment IV (110:82).

Color dark ferruginous; venter and basal segments of tarsi yellow brown; membrane brown, whitish at base.

Total length 8.28 mm.; width of pronotum 2.80 mm.; width of abdomen 3.28 mm.

Holotype: female (CAS), Peru, Monson Valley, Tingo Maria, 3 December 1954, E. I. Schlinger, E. S. Ross.

It is a pleasure to dedicate this species to Dr. Paul H. Arnaud, Jr., Chairman of the Department of Entomology, California Academy of Sciences, by whose kind office I had the privilege to study this interesting lot of Aradidae.

Mezira barberi Kormilev.

Mezira barberi Kormilev, 1964, p. 256.

Two males: Venezuela, San Esteban, P. J. Anduze. One male: Peru, 24 mi. (39 km.) E. Yurac, Huanuco, 4 October 1954, E. I. Schlinger, E. S. Ross. One female: Peru, Yurac, 67 mi. (108 km.) E. Tingo Maria, 11 December 1954, E. I. Schlinger, E. S. Ross.

Mezira regularis (Champion).

Brachyrhynchus regularis Champion, 1898, p. 99.
Mezira regularis Usinger and Matsuda, 1959, p. 381.

Five males, 8 females: Mexico, Vera Cruz, El Fortin, 14 December 1948, H. B. Leech.

Mezira laeviventris (Champion).

Brachyrhynchus laeviventris Champion, 1898, p. 94.
Mezira laeviventris Usinger and Matsuda, 1959, p. 380.

One female: Ecuador, 2-8 mi. (3-13 km.) N. Puyo, Napo-Paztaza, 953 m., 9 February 1955, E. I. Schlinger, E. S. Ross.

Mezira sanmartini Kormilev.

Mezira sanmartini Kormilev, 1968b, p. 9.

Three females: El Salvador, Quezaltepeque, 15 July 1965, M. Irwin, D. Q. Cavagnaro. Three males, 3 females: Peru, Yurac, 67 mi. (108 km.) E. Tingo Maria, and 1 male, Peru, Monson Valley, Tingo Maria, 26 October and 11 December 1954, E. I. Schlinger, E. S. Ross.

Mezira paraangustata Kormilev.

Mezira paraangustata Kormilev, 1968a, p. 282.

One female: Mexico, San Luis Potosi, Palitla, 5 mi. (8 km.) N. Tamazunchale, 22 December 1948, H. B. Leech.

Mezira maculata Kormilev, new species.
(Figures 13-14.)

Mezira maculata is related to *M. punctiventris* (Stål), but is smaller, dark brown, with red-brown round spots on

connexivum and mid-lateral areas, not so clearly limited as in *M. punctiventris*, and has membrane without V-shaped white spot at base.

MALE. Ovate; body granulate, connexivum finely punctured; granules with extremely short bristles.

Anterior process of head almost reaching tip of antennal segment I; postocular tubercles rather variable, not reaching, reaching, or even produced beyond outer border of eyes; antennae long, 1.7 times as long as width of head across eyes; labium reaching hind border of labial groove, which is opened posteriorly. Anterolateral angles of pronotum widely rounded, produced anteriorly as far as collar; lateral notch shallow; lateral borders subparallel at humeri, strongly converging on fore lobe; fore disc with 4 (2+2) granulate ridges. Median ridge of scutellum moderately high. Hemelytra reaching (male), or almost reaching (female), fore border of tergum VII; corium reaching middle of connexivum III; its apical border rounded, apical angle narrowly rounded. Abdomen ovate; postero-exterior angles of connexivum VI slightly protruding; VII rounded, reaching middle of hypopygium. Paratergites (male) clavate, reaching 2/3 of hypopygium; the latter cordate, its median ridge fusiform, reaching tip of disc. Paratergites (female) large, rounded posteriorly, reaching slightly over middle of segment IX, which is truncate posteriorly. Spiracles II to VIII ventral, placed far from border.

Measurements: head shorter than its width across eyes (male - 28:30, female - 30:32); relative lengths of antennal segments I to IV male - 13:10:17.5:11, female - 14:12:19:12; pronotum shorter than its maximum width (male - 30:65, female - 32:71); scutellum shorter than its basal width (male - 28:37, female - 31:40); abdomen longer than its maximum width (male - 100:85, female - 115:94), both across segment IV; hypopygium shorter than its maximum width (24:28).

Color piceous; mid-lateral areas and connexivum black with red-brown, round callous spots; venter red-brown. Sometimes abdomen is dark with contrasting red-brown hind borders and callous spots of connexiva.

Total length: male - 7.48, female - 8.52 mm.; width of pronotum: male - 2.60, female 2.84 mm.; width of abdomen: male - 3.40, female - 3.76 mm.

Holotype: male (CAS), Mexico, Laguna Balderama, 25 mi. (40 km.) W. Fresnillo, Zacatecas, 6800 ft. (2100 m.), 21 June 1954, R. H. Brewer.

Allotype: female (CAS), collected with holotype.

Paratypes: 1 male, 6 females, collected with holotype (CAS and Kormilev collections).

Mezira americana (Spinola).

Brachyrhinchus americanus Spinola, 1852, p. 202.
Brachyrhynchus chilensis Stål, 1854, p. 237.
Mezira americana Signoret, 1863, p. 576.

Mezira americana (Spinola) is a very common species in southern Chile and Patagonia. It was found in large series under bark of *Nothofagus* species.

Two hundred and twenty-one specimens, males, females, and nymphs, Chile: Los Muermos Forest; Osorno, Puehue, Purranque; 12 km. NE. Pucon, 380 m.; El Abanico, Bio Bio, Lago Llanquihue, and Sierra de Nahuelbuta, W. of Angol, 12-24 January 1951, E. S. Ross, A. E. Michelbacher.

Mezira argentinensis Kormilev.

Mezira argentinensis Kormilev, 1953, p. 228.

One male, 1 female: Argentina, Tucuman, Cerro San Xavier, 11 February 1951, E. S. Ross, A. E. Michelbacher. One female: Peru, Monson Valley, Tingo Maria, 20 November 1954, E. I. Schlinger, E. S. Ross.

Mezira neotropicalis (Champion).

Brachyrhynchus neotropicalis Champion, 1898, p. 99.
Mezira neotropicalis Usinger and Matsuda, 1959, p. 380.

One male, 3 females, 1 nymph: Mexico, Chiapas, Laguna Chamula, microwave tower, 20 August 1972, Carolyn Mullinex. Two males, 2 females: Mexico, Michoacan, 15 mi. (24 km.) S. Carapan, 7 December 1948, E. S. Ross. One male, 1 female: Mexico, Juan Manuel, El Salto, Durango, 2 July 1934, E. Embury.

Mezira nasalis Kormilev.

Mezira nasalis Kormilev, 1968a, p. 286.

One female: Colombia, Coyaima, 450 m., Tolima, November 1944, R. A. Stirton.

Mezira occidentalis Kormilev.

Mezira occidentalis Kormilev, 1968a, p. 287.

One hundred and fourteen specimens, males, females, and nymphs: Mexico, Vera Cruz, NE. of Citlaltepetl, 12000 ft. (3700 m.), 27 June 1964, L. W. Swan.

Mezira occidentalis appendiculata Kormilev.

Mezira occidentalis forma *appendiculata* Kormilev, 1968a, p. 288.

Twenty-six females: Mexico, Vera Cruz, 7 km. SE. Las Vigas, 18 December 1948, 9500 ft. (2900 m.), H. B. Leech, and previous locality and collector.

Mezira mexicana Kormilev.

Mezira mexicana Kormilev, 1964, p. 252.

One male, 1 female: Mexico, Nuevo Leon, 20 mi. (32 km.) W. Linares, 8 November 1946, E. S. Ross. One female: Mexico, Vera Cruz, 13 mi. (21 km.) WNW. Potrero, 16 December 1948, H. B. Leech.

Mezira lobata (Say).

Aradus lobatus Say, 1831, p. 354.
Brachyrhynchus lobatus Stål, 1873, p. 145.
Mezira lobata Usinger, 1936, p. 509.

One female: Mexico, Chiapas, Oaxaca border, 21 km. W. Rizo de Oro, along ridge SE. Cerro Baul, 6-8 September 1972, C. Mullinex, D. E. Breedlove. One female: Mexico, Chiapas, Selva de Ocote, 32 km. NW. Ocozocoautla, 762 m., 27 August 1972, C. Mullinex, D. E. Breedlove.

Mezira rugicornis (Champion).

Brachyrhynchus rugicornis Champion, 1898, p. 103.
Mezira rugicornis Usinger and Matsuda, 1959, p. 381.

Five females: Mexico, Oaxaca, Monte Alban, 11 December 1948, E. S. Ross.

Mezira neonigripennis Kormilev.

Mezira neonigripennis Kormilev, 1953, p. 238.

One male: Venezuela, Guanare, Estado Portuguesa, 10-13 September 1951, B. Malkin. One male, 1 female: Peru, Monson Valley, Tingo Maria, 2 December 1954, E. I. Schlinger, E. S. Ross.

Mezira proseni Kormilev.

Mezira proseni Kormilev, 1953, p. 235.

One female: Peru, Yurac, 67 mi. (108 km.) E. Tingo Maria, 11 December 1954, E. I. Schlinger, E. S. Ross.

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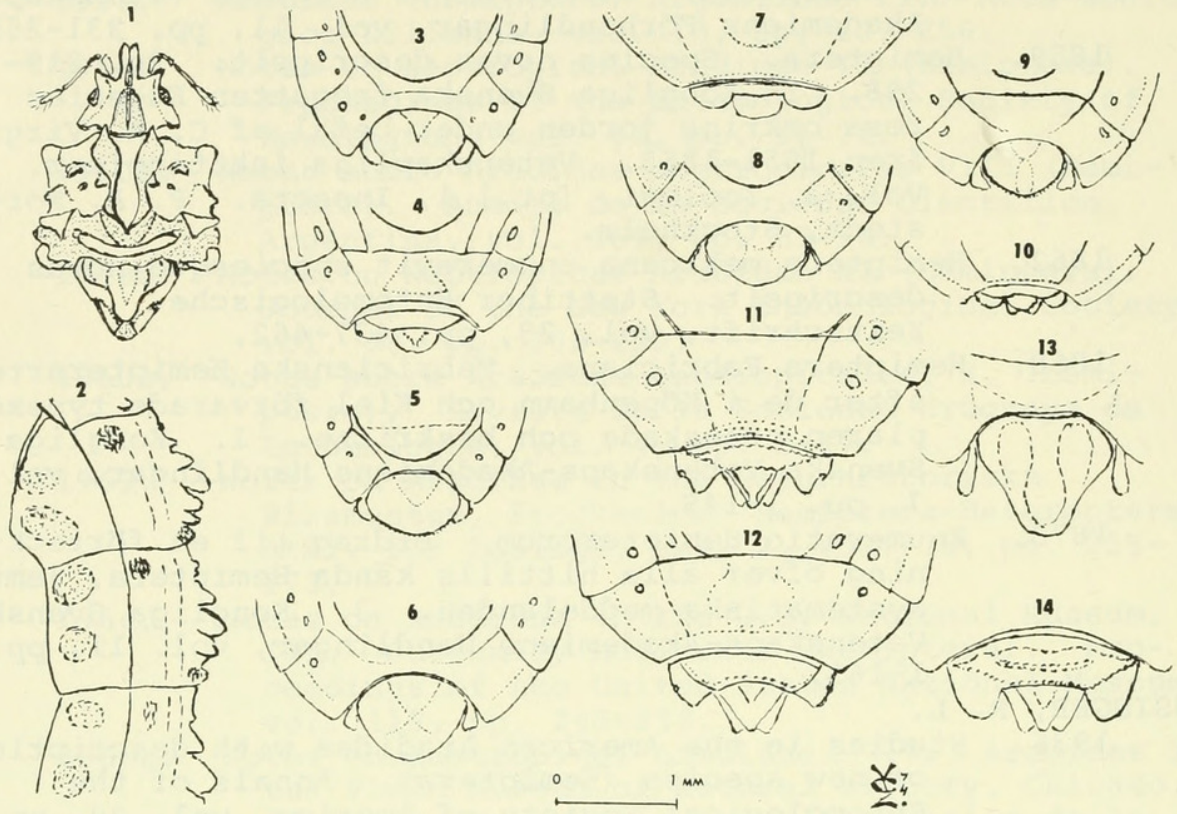

FIGURES 1 to 14. FIGURE 1. *Proxius (Neoproxius) peruvianus*, new species, female, head, pronotum, and scutellum. FIGURE 2. *Dysodius equatorianus*, new species, male, right connexiva III to V. FIGURE 3. *Neuroctenus chilensis*, new species, male, tip of abdomen from above. FIGURE 4. *Neuroctenus schlingeri*, new species, female, tip of abdomen from above. FIGURE 5. *Neuroctenus rossi*, new species, male, tip of abdomen from above. FIGURES 6-7. *Neuroctenus vanduzeei*, new species. FIGURE 6. Male, tip of abdomen from above. FIGURE 7. Female, tip of abdomen from above. FIGURE 8. *Neuroctenus substitutus*, new species, male, tip of abdomen from above. FIGURES 9-10. *Neuroctenus aztequi*, new species. FIGURE 9. Male, tip of abdomen from above. FIGURE 10. Female, tip of abdomen from above. FIGURE 11. *Mezira vulcanica*, new species, female, tip of abdomen from above. FIGURE 12. *Mezira arnaudi*, new species, female, tip of abdomen from above. FIGURES 13-14. *Mezira maculata*, new species. FIGURE 13. Male, tip of abdomen from above. FIGURE 14. Female, tip of abdomen from above.