

Four new species and lectotype designation of some neotropical Aradidae

(Insecta, Heteroptera)

von Nicholas A. Kormilev and Ernst Heiss

By the kind offices of Dr. U. Göllner-Scheiding, Museum für Naturkunde der Humboldt-Universität Berlin, we got a privilege to study Aradidae from the Burmeister-collection and specimens described by Bergroth in 1886. A small lot from the Museu Nacional, Rio de Janeiro, contained a new species, another is from the collection of the junior author. We express our sincere gratitude to Dr. U. Göllner-Scheiding and J. C. M. Carvalho (Rio), for the interesting material.

Neither Burmeister, nor Bergroth have selected the type specimens, so we are designating the lectotypes, from original series, for the following species: *Aneurys subdipterus* Burmeister, 1835, *Neuroctenus punctulatus* (Burmeister), 1835, *Aneurys burmeisteri* Bergroth, 1886, *Aneurys westwoodi* Bergroth, 1886, and *Mezira reuteri* (Bergroth), 1886. *Aneurys subdipterus* Burmeister, 1835, *Aneurys sahlbergi* Bergroth, 1886, and *A. westwoodi* Bergroth, 1886, belong to the subgenus *Iralunelus* Štys, 1974. The type-specimen of Bergroth's "*Pictinus pilosus*", 1886, is conspecific with *Aphleboderrhis pubescens* (Walker), 1873 (= *Aradus pubescens* Walker, 1873) and should go into synonymy of the latter.

There were a few specimens from Rio de Janeiro and São Paulo, belonging to *Aneurys sahlbergi* Bergroth, but as they were not from original lot, the lectotype could not be designated.

Four species are new and described further below: *Notoplocoris usingeri*, n. sp., from Sao Paulo, Brasil; *Notapictinus similis*, n. sp., from Rio, D. F., Corcovado, Brasil; *Notapictinus dissimilis*, n. sp., from Guanabara, Brasil; and *Mezira paraensis*, n. sp., from Para, Brasil.

It is significant, that in the most older collections Carventinae rarely can be found, probably because of their habitat and camouflage, they are covered with sticky incrustation and accumulated dirt, escaping convenient collecting methods.

All measurements were taken with micromillimeter eyepiece, 25 units = 1 mm.; for convenience, the length of abdomen was taken from the tip of scutellum to the tip of hypopygium, or segment IX in the females respectively.

Subfamily Aneurinae

Genus *Aneurus* Curtis, 1825

Among neotropical *Aneurus* species rather considerable number belong to the subgenus *Iralunelus* Štys, 1974.

***Aneurus burmeisteri* Bergroth, 1886**

1886, *Aneurus burmeisteri* Bergroth, Verh. Zool. Bot. Ges., Wien; 36: 58

Figs. 1—3

Female. Elongate, with subparallel sides; shiny.

Head shorter than its width across eyes (15:17); anterior process conical, rounded anteriorly, genae being much shorter than clypeus, reaching tip of antennal segment I. Antenniferous tubercles blunt. Eyes large, semiglobose. Postocular borders angularly rounded, not reaching outer borders of eyes. Vertex with a few, short, transverse sulci; infraocular callosities large, ovate. Antennae more than $1\frac{1}{2}\times$ as long as width of head across eyes (28.5:17); antennal segment I barrel-shaped, II and III tapering toward base, IV fusiform; relative length of antennal segments I to IV are: 5:6.5:7:10. Labium reaching line connecting hind borders of eyes; labial groove wide, transversely rugose, open posteriorly.

Pronotum $\frac{1}{2}$ as long as its maximum width (17:35); collar sinuate anteriorly; anterolateral angles rounded and granulate, lateral borders of fore lobe converging; lateral borders of hind lobe parallel, strongly converging anteriorly; lateral notch forming an obtuse angle; hind border slightly sinuate medially. Fore disc with a median sulcus, flanked by 4 (2+2) callosities; interlobal depression transversely striate; hind disc finely punctured medially, transversely striate along hind border.

Scutellum long, but shorter than its basal width (16:22), rounded posteriorly; lateral borders also rounded; disc strongly, transversely rugose and with a trace of a fine median carina on basal half.

Hemelytra reaching $\frac{2}{3}$ of tergum VII; corium reaching $\frac{1}{2}$ of scutellum exteriorly; membrane finely punctured.

Abdomen with subparallel sides, slightly rounded; postero-exterior angles not protruding from II to VI, rounded on VII. Tergum VII without additional sclerites = paratergites of Štys, 1974 (*Aneurus* s. str.). Spiracles II, VII and VIII lateral and visible from above; III to VI ventral. Paratergites = ventral laterotergites VIII sensu Štys (VLTG VIII), small, rounded, reaching hind border of truncate segment IX.

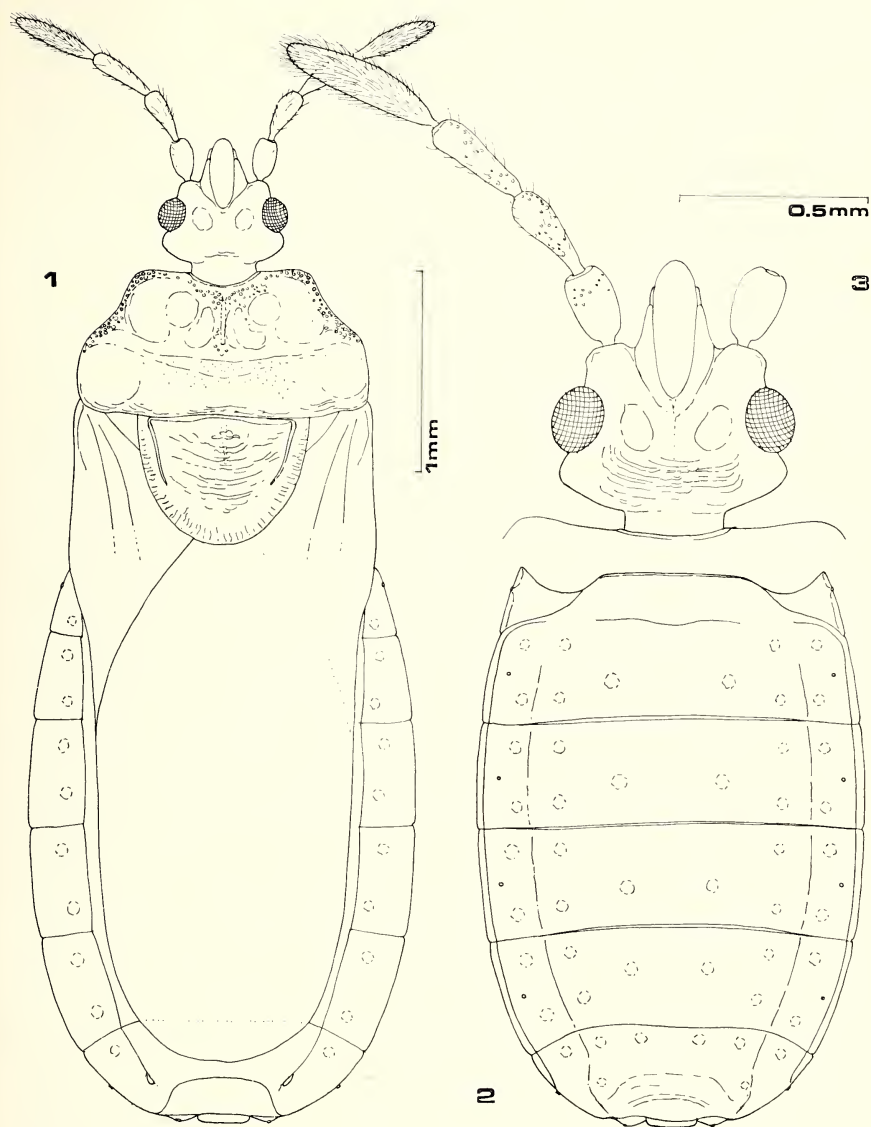


Fig. 1—3: *Aneurus burmeisteri* Bergroth: 1. Lectotype ♀, dorsal, 2. dto. venter, 3. dto. head.

C o l o r : brown to piceous; labium and tarsi yellow brown.

Total length 4.80 mm; width of pronotum 1.40 mm; width of abdomen 1.88 mm.

L e c t o t y p e ♀ (glued on triangular label): "alutaceus N., Colomb. Mor." (green handwritten label)/"2463" (printed on white label)/"*Aneurus Burmeisteri* Bergroth" (Bergroth's handwriting)/"Lectotype"/"*Aneurus burmeisteri* Bergroth, 1886, des. Kormilev et Heiss 1977"./ In the Museum für Naturkunde, Berlin.

Bergroth indicated "Nova Granada" as type locality, which was the common name for Colombia in the early 19th century.

***Aneurus (Iralunelus) subdipterus* Burmeister, 1835, n. comb.**

1835, *Aneurus subdipterus* Burmeister, Hand. Ent.; 2 (1): 252.

Figs. 4—7

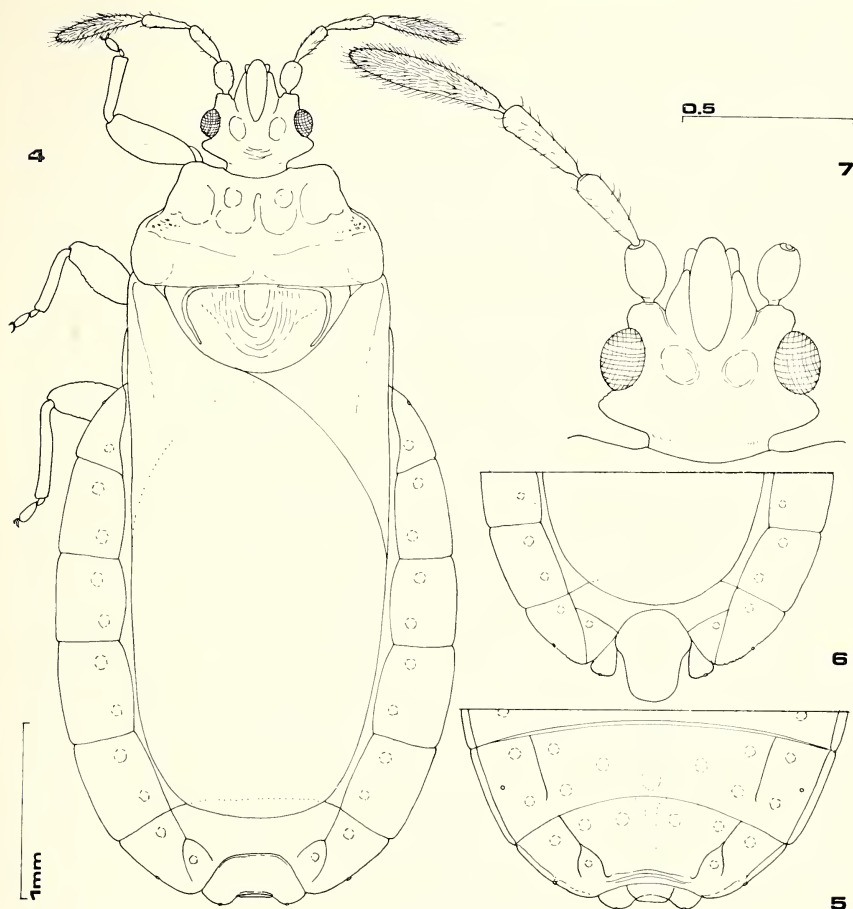
Male. Elongate ovate; vertex transversely rugose, connexivum scabrous.

H e a d as long as its width across eyes (16.5:16.5). Anterior process tapering at basal $\frac{2}{3}$, with parallel sides at apical $\frac{1}{3}$; tip tricuspidate: genae, seen from above, forming small lobes laterad and slightly behind tip of clypeus; the latter produced beyond tip of antennal segment I. Antenniferous tubercles short and rounded at tips. Eyes semiglobose, protruding. Postocular tubercles rectangular, angular or blunt, slightly reaching outer borders of eyes. Vertex sharply, transversely rugose; infraocular callosities large, ovate. Antennae slightly less than twice as long as width of head across eyes (31:16.5); antennal segment I barrel-shaped; II tapering toward base; III also tapering toward base and slightly petiolate; IV elongate fusiform. Relative length of antennal segments I to IV are: 4.5:6.5:7:13. Labium slightly produced beyond line connecting hind borders of eyes.

P r o n o t u m less than half as long as its maximum width (16:35); fore lobe narrower than hind lobe (25:35); collar sinuate; anterolateral angles rectangular, but rounded at tips; lateral borders of fore lobe straight, diverging backward; lateral notch forming an obtuse angle; lateral borders of hind lobe sharply granulate, parallel at humeri, arcuate and converging anteriorly; hind border sinuate. Fore disc with a thin median sulcus, flanked by 2 (1+1) curved callosities, and further laterad scabrous. Interlobal depression transversely striate; hind disc transversely rugose.

S c u t e l l u m crashed by pin, evenly rounded posteriorly.

H e m e l y t r a reaching hind border of tergum VII; corium very short, reaching basal $\frac{1}{3}$ of scutellum.



Figs. 4—7: *Aneurys subdipterus* Burmeister: 4. Paralectotype ♀, dorsal, 5. dto. ventral terminal segments, 6. Lectotype ♂, dorsal terminal segments, 7. head.

Abdomen ovate, longer than its maximum width across segment IV (67.5:50.5). Lateral borders evenly rounded and finely crenulate; PE-angles not protruding, PE-VII rounded. Lobes of tergum VIII (paratergites) triangular, truncate apically, reaching $\frac{2}{3}$ of hypopygium; the latter large, acorn-shaped, longer than its maximum width at basal $\frac{1}{3}$ (12:10). Spiracles II, VII and VIII lateral; III to VI ventral, placed far from border.

Legs: femora inflated and sharply granulate.

Color: red brown, head darker; labium and tarsi yellow.

Total length 4.68 mm; width of pronotum 1.40 mm; width of abdomen 2.02 mm.

Female. Similar to male, but larger; VLTG VIII rounded posteriorly, twice as long as slightly sinuate posteriorly segment IX.

M e a s u r e m e n t s : head 18:18.5; relative length of antennal segments I to IV are: 5:7.5:8:15; pronotum 17.5:42.5; ratio width of fore lobe: width of hind lobe as 31:42.5; scutellum 18:27; abdomen 83:66; width of tergum VIII 18.

Total length—5.40 mm; width of pronotum—1.70 mm; width of abdomen—2.64 mm.

L e c t o t y p e ♂ (pinned specimen): “Caassapava Sellow Nr. 2451” (green label) / “2451” (white label) / “*subdipterus* Burm.” (possibly Burmeister’s handwriting) / “Lectotype” / “*Aneurus (Iralunelus) subtipterus* Burm., 1835, des. Kormilev et Heiss 1977” / In the Museum für Naturkunde, Berlin.

P a r a l e c t o t y p e s : 1♂, 3♀♀ with the same green label and number. Museum f. Naturk., Berlin and Coll. Heiss.

1 ♀ belongs to the same species, but is not from the type-series: “Columb. Mor.” / “4232” / *Aneurus subdipterus* Burm., rev. Bergroth” (handwritten) and therefore no Paralectotype. Burmeister wrote: “von Cassapava im südlichen Brasilien”, but all labels are written “Caassapava”.

***Aneurus (Iralunelus) westwoodi* Bergroth, 1886, n. comb.**

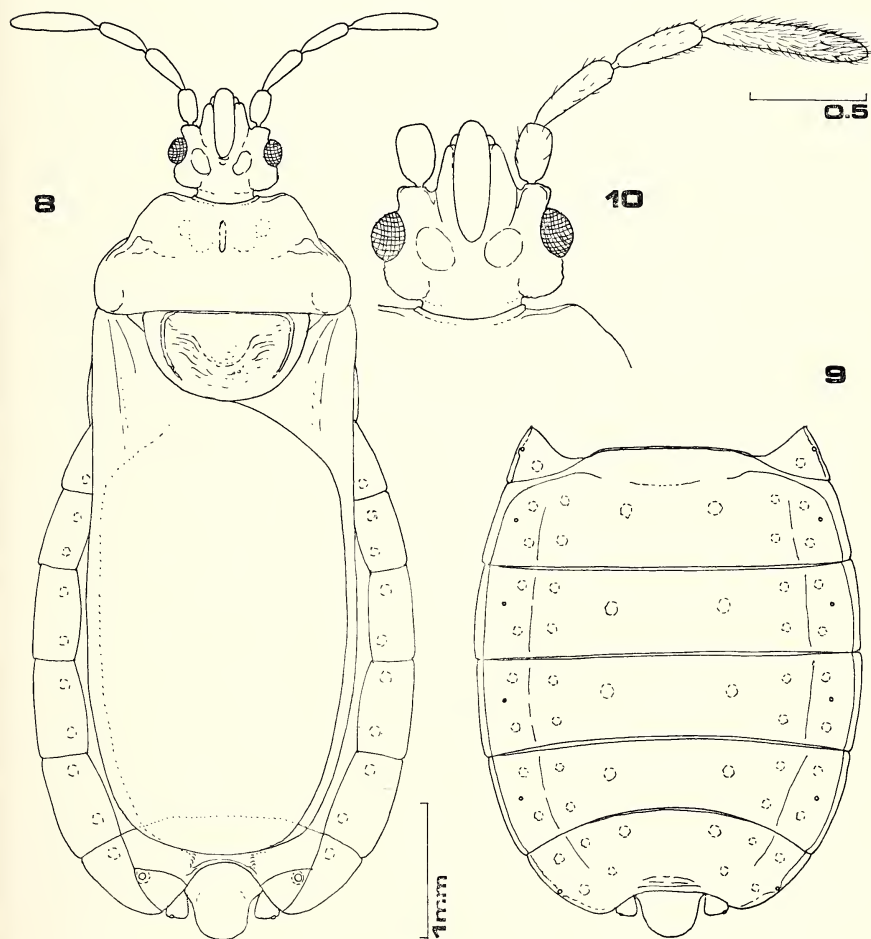
1886, *Aneurus westwoodi* Bergroth, Verh. Bot. Zool. Ges., Wien; 36: 58.

Figs. 8—10

Male. Ovale, shiny.

H e a d shorter than its width across eyes (20:21.5); anterior process conical, rounded anteriorly, genae are shorter than clypeus, the latter reaching slightly beyond tip of antennal segment I. Antenniferous tubercles truncate anteriorly, acute anterolaterally. Eyes semiglobose, protruding. Postocular borders subrectangular, rounded apically, by far not reaching outer borders of eyes. Vertex transversely striate; infraocular callosities narrowly ovate and oblique. Antennae twice as long as width of head across eyes (43:21.5), segments II to IV finely pilose; relative length of antennal segments I to IV are: 6:10:9.5:17.5; antennal segment I subcylindrical, strongly tapering at base; II and III slightly tapering toward base, IV subcylindrical. Labium reaching line connecting middle of eyes; labial groove wide and shallow, open posteriorly.

Pronotum short and wide (20:47.5); fore lobe much narrower than hind lobe (35:47.5); collar thin, sinuate anteriorly; anterior borders laterad of collar obliquely truncate; anterolateral angles slightly produced beyond collar; rounded; lateral borders of fore lobe converging in a weak arc; lateral notch sinuate; lateral borders of hind lobe rounded, strongly converging anteriorly. Fore disc with a thin median sulcus and 4 (2+2) obliterated callosities; hind disc transversely rugose anteriorly.



Figs. 8—10: *Aneurys westwoodi* Bergroth, 8. Lectotype ♂, dorsal, 9. dto. venter, 10. dto. head.

Scutellum semicircular, shorter than its basal width (17?:28), tip is crushed by pin; disc longitudinally striate medially, transversely at basolateral angles.

Hemelytra reaching $\frac{1}{2}$ of tergum VII; corium reaching $\frac{1}{2}$ of scutellum.

Abdomen ovate, longer than its maximum width across segment IV (95:71); lateral borders evenly rounded, posteroexterior angles not protruding. Tergum VII with 2 (1+1) triangular paratergites. Lobes of tergum VIII subtriangular, truncate posteriorly, reaching $\frac{2}{3}$ of acornshaped hypopygium, the latter shorter than its maximum width across basal half (12:13), its anterior half enlarged and rounded laterally, posterior half is much narrower (9:13) than anterior; disc with semiobliterated median ridge almost reaching tip of hypopygium. Spiracles II sublateral, but not visible from above, III to VI ventral, placed far from border, VII sublateral, but slightly visible from above, VIII terminal.

Legs: femora finely serrate on upper surface, stronger on lower.

Color: yellow brown, partially darker.

Total length 6.28 mm; width of pronotum 1.90 mm; width of abdomen 2.84 mm.

Lectotype ♂ (pinned specimen): "Columbien Moritz" (green label)/"2463" (white handwritten label)/"10 652" (printed)/"*Aneurys Westwoodi* Bergr." (Bergroth's handwriting)/"Lectotype"/"*Aneurys (Iralunelus) westwoodi* Bergroth, 1886, des. Kormilev et Heiss 1977"/In the Museum für Naturkunde, Berlin.

Bergroth's type-locality is cited as: "Nova Granada" = Colombia.

***Aneurys (Iralunelus) sahlbergi* Bergroth, 1886, n. comb.**

1886, *Aneurys sahlbergi* Bergroth, Verh. Bot. Zool. Ges., Wien; 36: 58.

Description of *Aneurys sahlbergi* Bergroth, 1886, is too short, so we are giving a redescription. Figs. 31—35.

Male. Elongate, abdomen with evenly rounded lateral borders, shiny.

Head shorter than its width across eyes (13:14); anterior process conical, rounded anteriorly, genae slightly shorter than clypeus, reaching tip of antennal segment I. Antenniferous tubercles truncate anteriorly. Eyes large, semiglobose. Postocular borders rectangular with rounded tip, not reaching, or reaching, outer borders of eyes. Vertex transversely striate, infraocular callosities large, ovate. Antennae thin, twice as long as width of

head across eyes (29:14); antennal segment I barrelshaped, II and III tapering toward base, IV fusiform; relative length of antennal segments I to IV are: 4.5:6:6:12.5. Labium reaching line connecting hind borders of eyes, labial groove open posteriorly.

Pronotum short and wide (12:29), fore lobe narrower than hind lobe (21:29); collar sinuate anteriorly, anterior borders laterad of collar truncate, anterolateral angles rounded; lateral borders of fore lobe slightly converging, lateral notch obtuse, lateral borders of hind lobe parallel, strongly converging anteriorly and crenulate; hind border sinuate medially. Fore disc with a median sulcus, flanked by 4 (2+2) large, low callosities, semifused together in pairs; interlobal depression transversely rugose; hind disc glabrous.

Scutellum $1\frac{1}{2}$ as long as its basal width (10:18); lateral and hind borders forming together an arc; disc with narrow median callosity, extending from base to $\frac{2}{3}$ of disc, flanked by longitudinal striation; along borders concentric striation.

Hemelytra reaching hind border of tergum VII; corium reaching $\frac{1}{2}$ of scutellum; membrane finely wrinkled.

Abdomen longer than its maximum width across segment IV (63:39); lateral borders evenly rounded, posteroexterior angles not protruding. Tergum VII with 2 (1+1) triangular paratergites. Lobes of tergum VIII subtriangular, rounded posteriorly and reaching $\frac{3}{4}$ of acornshaped hypopygium, which is as long as its maximum width (7:7). Spiracles II, VII and VIII lateral and visible from above, III to VI ventral.

Color: yellow brown, partially infusate; membrane blackish.

Female. Similar to male, but larger; VLTG VIII small, subtriangular, reaching hind border of sinuate segment IX.

Measurements: head 16:17; relative length of antennal segments I to IV are: 5:6.5:6.5:14; pronotum 14:37; scutellum 12.5:24; abdomen 75:47, width of tergum VIII—16.

Total length: ♂-4.10, ♀-4.80 mm; width of pronotum: ♂-1.16, ♀-1.48 mm; width of abdomen: ♂-1.56, ♀-1.88 mm.

Females from São Paulo are slightly larger: total length 5.44 mm (Bergroth indicated for his specimen 5.00 mm.)

The original material was from Brasília, Petropolis (Coll. Sahlberg). We have now topotypical material before us: 4♂♂, 1♀, Petropolis E. Rio, Alto Mosella 1100 m, 5. IX. 1956, lg. D'Albuquerque; further 1♂, 1♀ Rio

D. F., 1. 7. 47 Wygodzinsky leg., in Coll. Heiss; 1 ♀ Sao Paulo, Dr. J. Mraz, Mus. f. Naturkunde, Berlin; 2 ♀♀, Brasil, Est. Sao Paulo, Campos de Jordão, 1600 m., III. 1945, P. Wygodzinsky leg., in Coll. Heiss.

1 ♀, Brasil, Para, 22. XII. 1893, Schulz leg, probably belongs to the same species, but shows slightly differences.

Subfamily Mezirinae

Genus *Notoplocoris* Usinger, 1941

Notoplocoris usingeri Kormilev et Heiss, new species

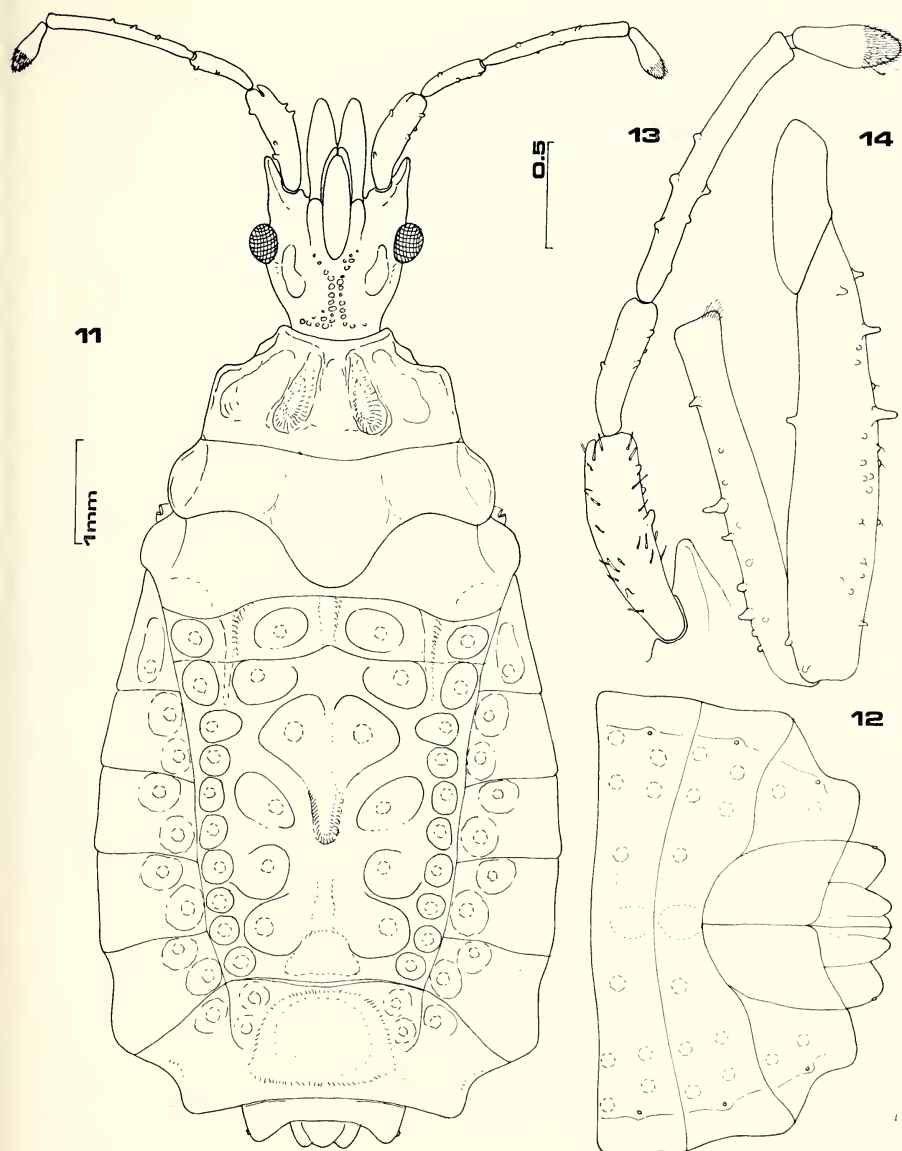
Figs. 11—14

Female. Apterous. Ovate; antennal segment I covered with short bristles, II to IV naked. Body partially covered with short, curled, rusty hairs.

Head longer than its width across its eyes (55:43); anterior process strong, with subparallel sides, deeply cleft anteriorly, genae much longer than clypeus, reaching $\frac{3}{4}$ of antennal segment I. Antenniferous tubercles strong, tapering, diverging, blunt apically, reaching basal $\frac{1}{4}$ of antennal segment I. Eyes semiglobose, protruding. Postocular borders nearly straight, carinate and strongly converging backward. Vertex moderately raised, with 2 (1+1) rows of strong granules. Infraocular callosities long and narrow. Antennae long, more than twice as long as width of head across eyes (93:43); antennal segments I to III with dispersed, partly pointed granules; I stout, clavate, others much thinner; II slightly tapering toward base and curved; III cylindrical, slightly enlarged at tip; IV pyriform; relative length of antennal segments I to IV are: 27:18:35:13. Labium subapical, short, not reaching hind border of head and also labial groove, which is closed posteriorly; labial atrium split-like.

Pronotum half as long as its maximum width (30:60); collar thin, sinuate anteriorly; anterior borders laterad of collar sinuate and strongly receding; anterolateral angles slightly expanded and rounded, forming small, reflexed lobes; lateral borders slightly sinuate and subparallel; hind border slightly convex medially. Disc with a deep median depression, flanked by 2 (1+1) strong, longitudinal ridges, and further laterad by 2 (1+1) callosities mesad of anterolateral angles.

Mesonotum angularly produced backward medially, wider than pronotum (77:60); lateral borders forming small, reflexed, rounded lobes.



Migs. 11—14: *Notoplocoris usingeri* n. sp.: 11. Holotype ♀ dorsal, 12. ventral terminal segments, 13. right antennal, 14. hind femur and tibia from below.

Disc triangularly raised medially, with a low median ridge; flattened and forming small, rounded lobes laterally.

Metanotum consisting of 2 (1+1) large plates; wider than mesonotum (93:77); roundly inflated laterad of median promontory of mesonotum, flattened and forming small, rounded lobes laterally.

Abdomen subrectangular, longer than its maximum width across segments III, IV, or V (133:114); lateral borders diverging on II and III, subparallel from IV to V, with sinuate borders on each segment; sinuate and slightly converging on VI; stronger converging and deeper sinuate on VII. Posteroexterior angles II not protruding, III to V slightly protruding and rounded, more protruding and rounded on VI, forming rounded, diverging lobes on VII. Tergum I with a stout, but low median ridge, flanked by 2 (1 + 1), large callosities, and further laterad with 2 (1 + 1) thin, longitudinal ridges. Terga II to VI fused together into rectangular central dorsal plate, which is raised medially on II, widely flattened on III, and raised medially again on IV to VI, forming saddle-like median ridge. Laterad of it with 4 (2+2) rows of large, round, callous spots. Similar callous spots are on interior half of connexiva. Tergum VII raised and depressed on elevation medially, laterad of elevated portion with 4 (2+2) round, callous spots. Tergum VIII is narrower than width of head across eyes (40:43), its lobes triangular, reaching $1\frac{1}{2}$ of a tricuspidate segment IX.

Prosternum twice depressed between acetabulae; mesosternum fused with metasternum, both slightly depressed medially. Metathoracic scentgland openings long and narrow, gaping, slightly visible from above. Spiracles II to VII ventral, placed far from border, VIII lateral and visible from above.

Legs: femora and tibiae granulate.

Color: black; apical half of antennal segment IV, round, callous spots on central dorsal plate and connexivum, terga I and VII, are reddish brown; tibiae with subbasal and subapical yellow rings; labium and tarsi yellow.

Total length 10.00 mm; width of pronotum 2.40 mm; width of abdomen 4.64 mm.

Holotype ♀ (pinned specimen, right antennal segments II to IV glued on label): "Sao Paulo, Brs. Mráz"/"Holotype"/"Notoplocoris usingeri n. sp. Kormilev et Heiss 77". In the Museum für Naturkunde, Berlin.

Paratype ♀: same data as Holotype, in Coll. Heiss.

The new species is dedicated to the memory of the late Dr. Robert L. Usinger, who described this genus.

Notoplocoris usingeri, n. sp., is related to *N. montei* Usinger, 1941, but anterior process of head is relatively longer, reaching $3/4$ of antennal segment I; pilosity of antennal segment I is shorter and not so conspicuous; postocular borders straight, not rounded; antennae relatively shorter, $2.16\times$ as long as width of head across eyes ($2.52\times$ in *N. montei*); antennal segment I distinctly shorter than III (as long in *N. montei*); abdomen the widest across segment V (across VI in *N. montei*).

Genus *Neuroctenus* Fieber, 1861

Neuroctenus punctulatus (Burmeister), 1835

1835, *Brachyrrhynchus punctulatus* Burmeister, Hand. Ent.; 2 (1): 254.

Figs. 15—18

Male. Elongate ovate; granulation rough.

Head shorter than its width across eyes (22:24); anterior process constricted laterally, rounded and incised anteriorly, reaching $3/4$ of antennal segment I; antenniferous tubercles acute, diverging; postocular short, granulate, reaching outer border of eyes; posterior border subtruncate. Antennae strong, $1.64\times$ as long as width of head across eyes; relative length of antennal segments I to IV are: 12:9:11:9. Labium reaching hind border of labial groove, which is closed posteriorly.

Pronotum less than $1/2$ as long as its maximum width (23:51); collar sinuate; anterolateral angles produced forward slightly beyond collar and rounded; lateral borders of fore lobe slightly rounded; lateral notch weak; lateral borders of hind lobe rounded, converging anteriorly; hind border evenly sinuate. Fore disc with 4 (2+2) small callosities, granulate around them; interlobal depression weak; hind disc roughly and densely granulate.

Scutellum shorter than its basal width (25:35); lateral borders slightly sinuate, tip angularly rounded; disc with moderate median ridge, granulate laterad of it.

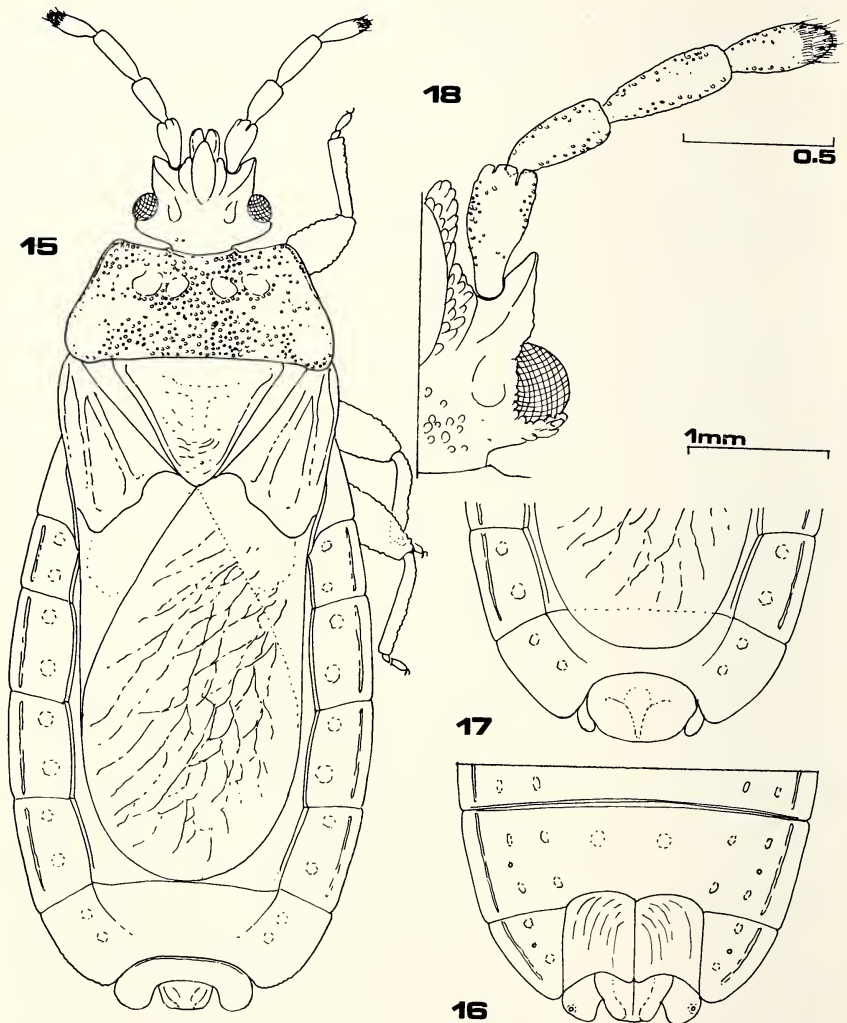
Hemelytra reaching $1/2$ of tergum VII (only fore border of VII in ♀); corium reaching basal $1/3$ of connexivum III; apical angle of corium subacute, apical border twice sinuate.

Abdomen ovate, longer than its maximum width across segment IV (80:63); lateral borders rounded; posteroexterior angles III to VI slightly

protruding; VII angularly rounded. Lobes of tergum VIII small, clavate, reaching $\frac{2}{3}$ of hypopygium; the latter subtriangular, rounded posteriorly and depressed on disc, narrower than width across eyes (20:24); Spiracles II to VIII ventral and not visible from above.

C o l o r : piceous to ferrugineous; membrane brown, whitish at base.

Total length 6.20 mm; width of pronotum 2.04 mm; width of abdomen 2.52 mm.



Figs. 15—18: *Neuroctenus punctulatus* Burmeister: 15. Paralectotype ♀, dorsal, 16. dto. ventral terminal segments, 17. Lectotype ♂, dorsal terminal segments, 18. head.

Lectotype ♂ (pinned specimen): "2446"/"punctulatus N. Caassap. Sellow" (white handwritten label)/"Neuroctenus punctulatus Burm." (handwriting of Bergroth)/"Caassapava Sello. Nr. 2446" (green label)/"Lectotype"/"Neuroctenus punctulatus (Burmeister) 1835, des. Kormilev et Heiss 1977". In the Museum für Naturkunde, Berlin.

Paralectotypes: 1 ♂, 2 ♀♀, with the same green label as Lectotype, Mus. f. Naturk. Berlin; 1 ♂ Coll. Heiss.

1 ♀ from the same lot has more pointed anterolateral angles of pronotum and obliterated granulation on hind disc of pronotum and is therefore not considered as Paralectotype.

Genus *Notapictinus* Usinger and Matsuda, 1959

Notapictinus similis Kormilev et Heiss, new species

Figs. 19—21

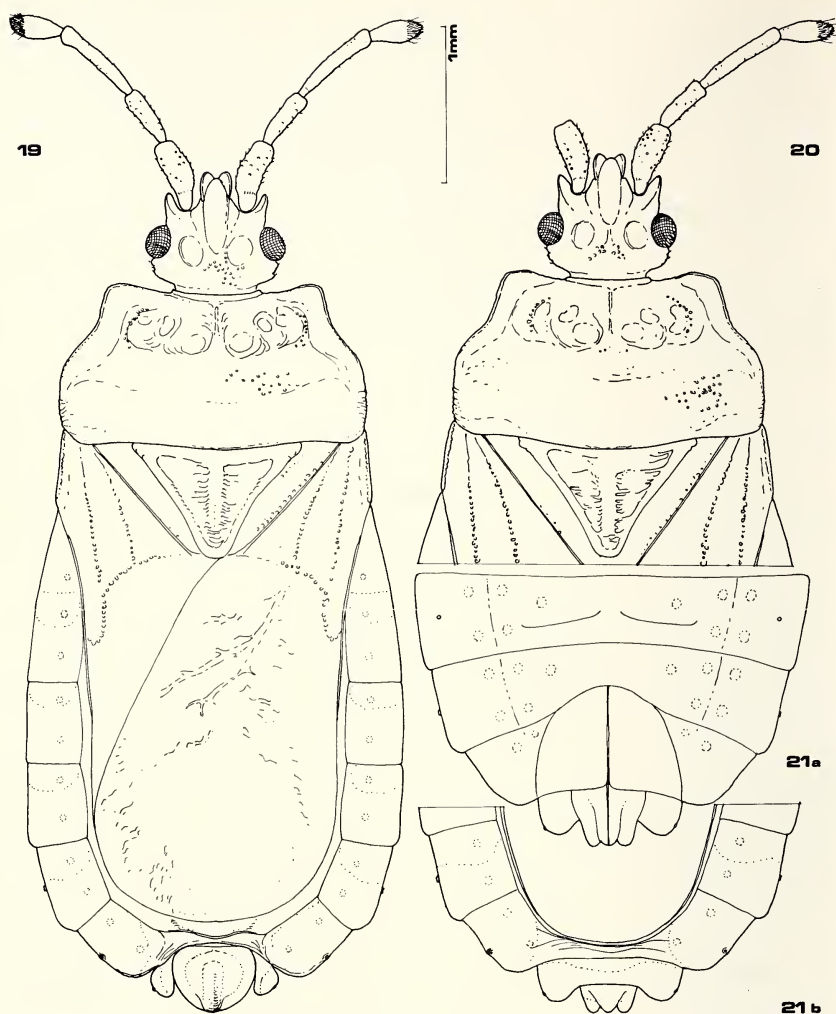
Male. Elongate ovate, pronotum granulate.

Head shorter than its width across eyes (19.5:21); anterior process incised anteriorly, genae slightly longer than clypeus, reaching 1/2 of antennal segment I; antenniferous tubercles with subparallel outer borders, blunt apically; postocular borders obtuse-angled and not reaching outer borders of eyes; the latter semiglobose; vertex with M-shaped rows of granules. Antennae twice as long as width of head across eyes (43.5:21); relative length of antennal segments I to IV are: 11:9:14.5:9; Labium reaching hind border of labial groove, which is open posteriorly.

Pronotum less than 1/2 as long as its maximum width (25:48); collar truncate anteriorly, granulate; anterolateral angles expanded forward and sideways, forming subangular lobes with rounded tips, distinctly produced beyond collar; lateral notch obtuse; lateral borders of hind lobe subparallel, slightly rounded, converging anteriorly; hind border slightly convex medially and at hind angles. Fore disc with 4 (2+2) callosities; hind disc with dispersed granulation.

Scutellum shorter than its basal width (17:27); lateral borders carinate and sinuate before tip; disc with strong median carina, roughly, transversely rugose laterad of it.

Hemelytra reaching 2/3 of tergum VII, corium reaching 1/2 of connexivum III; its apical angle produced into a point, apical border widely sinuate.



Figs. 19—21: *Notapictinus similis* n. sp.: 19. Holotype ♂, dorsal, 20. Allotype ♀, head and pronotum, 21a. dto. ventral terminal segments, 21b. dto. dorsal terminal segments.

Abdomen ovate, longer than its maximum width across segment V (71:58); lateral borders rounded; connexiva II and III fused together posteroexterior angles of connexiva III to VI progressively protruding, PE-VII rounded. Lobes of tergum VIII subtriangular, reaching $\frac{3}{4}$ of hypopygium, the latter wider than long (13:10.5); disc with an elevated

ridge, laterad of it depressed. Spiracles II to V ventral, placed far from border, VI to VIII lateral and visible from above.

Color: ferrugineous; connexivum bicolor with yellow spots on anterior half of connexiva III to VI. connexivum VII nearly complete yellow, also tips of segment VIII.

Female: Similar to male, but larger, PE-angles V and VI less projecting and more rounded, lobes of tergum VIII subtriangular, reaching $1/2$ of tricuspidate segment IX. Tergum VIII wider than width across eyes (23:22).

Measurements: Female, head 46:22, relative length of antennal segments I to IV are 12:10:15:9; pronotum 28:49; scutellum 19:29; abdomen 75:64 (across segment IV).

Total length: ♂ 5,32 mm, ♀ 5,68 mm; width of pronotum: ♂ 1,92, ♀ 1,96 mm; width of abdomen: ♂ 2,32, ♀ 2,56 mm.

Holotype: ♂, Brasil, Rio de Janeiro, Corcovado-forest 17. 2. 77 lg. et coll. Heiss.

Allotype: ♀, Rio, Corcovado, 25. 8. 49, lg. Wygodzynski, in coll. Mus. Nac. Rio.

Paratypes: 2 ♂ ♂, 2 ♀ ♀ collected with holotype in coll. Heiss and Mus. Nac. Rio.

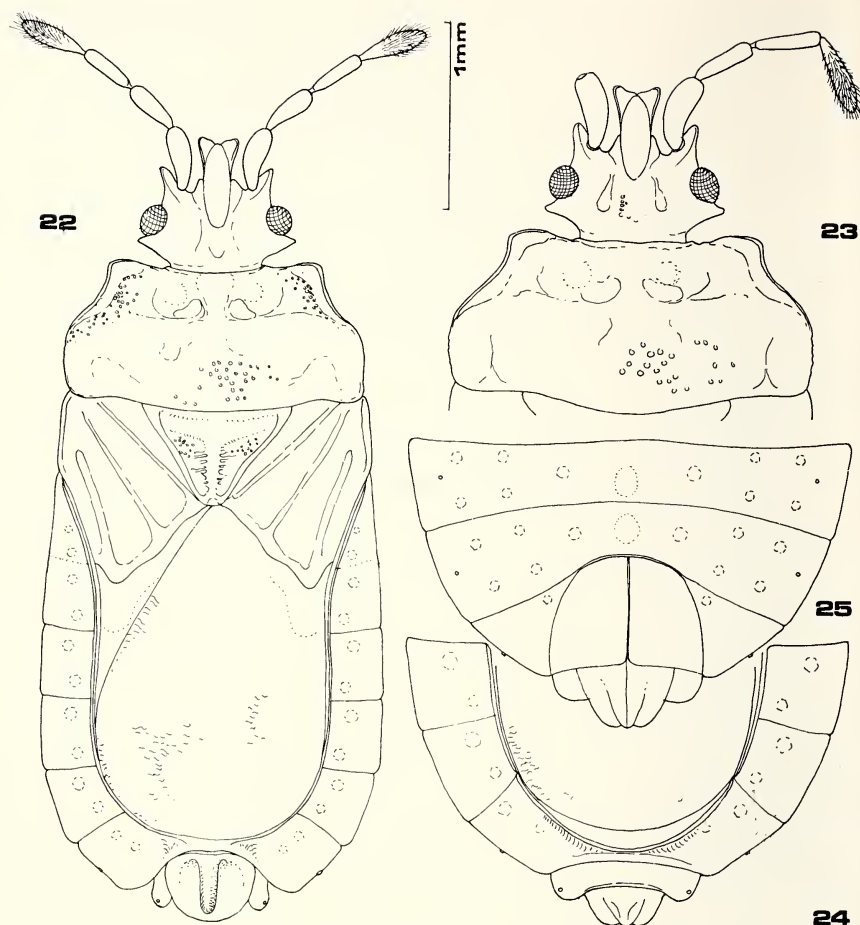
Notapictinus similis n. sp. is related to *N. dyscritus* Kormilev, 1960, from Peru, but may be separated from it by: relatively shorter antennae, $2\times$ as long as width of head across eyes ($2.4\times$ in *N. dyscritus*), by relatively shorter antennal segment III, by longer corium, reaching $1/2$ of connexivum III, and by slightly festooned lateral borders of abdomen.

Notapictinus dissimilis Kormilev et Heiss, new species

Figs. 22—25

Male. Elongate ovate, pronotum granulate.

Head shorter than its width across eyes (15:18); anterior process constricted laterally, cleft with diverging genae, which are longer than clypeus, reaching $3/4$ of antennal segment I; antenniferous tubercles acute, with parallel outer borders; postocular minute, slightly produced beyond outer borders of eyes; eyes semiglobose; vertex with 2 longitudinal rows of granules. Antennae thin, $1\frac{1}{2}\times$ as long as width of head across eyes (27.5:18); relative length of antennal segments I to IV are: 5:7:7.5:8. Labium slightly produced beyond hind border of labial groove, which is deep and widely open posteriorly.



Figs. 22—25: *Notapictinus dissimilis* n. sp.: 22. Holotype ♂ dorsal, 23. Allotype ♀, head and pronotum, 24. dto. dorsal terminal segments, 25. dto. ventral terminal segments.

Pronotum less than $\frac{1}{2}$ as long as its maximum width (17.5:37); collar truncate and granulate; anterolateral angles expanded and produced sideways, reaching fore border of collar anteriorly; lateral borders strongly rounded at humeri, converging and sinuate anteriorly, then parallel at fore lobe; hind border convex medially and at hind angles. Fore disc with 2 (1+1) wide ridges, depressed between them; hind disc dispersely granulate.

Scutellum much shorter than its basal width (11:18); lateral borders carinate and sinuate before apex; disc with a strong, T-shaped median ridge; granulate laterad of it.

Hemelytra reaching hind border of tergum VII; corium reaching basal 1/3 of connexivum III; its apical angle acute, apical border slightly sinuate interiorly, almost straight; basolateral border straight and reflexed.

Abdomen longer than its maximum width across segment IV (50:41); lateral borders subparallel; connexiva II and III fused together; posteroexterior angles of connexiva III to VI slightly protruding; PE-VII angularly rounded. Lobes of tergum VIII clavate, reaching 3/4 of hypopygium; the latter rounded posteriorly and with T-shaped median ridge, almost reaching hind border of disc. Spiracles II to VI ventral, placed far from border, VII lateral and visible from above, VIII dorsal.

Color: ferrugineous; connexivum yellow brown.

Female. Similar to male, but much larger, abdomen more rounded laterally; lobes of tergum VIII small, subtriangular, reaching basal 1/3 of segment IX, which is incised posteriorly; tergum VIII narrower than width of head across eyes (17.5:21).

Measurements: head 18:21; relative length of antennal segments I to IV are: 9:7.5:8.5:10; pronotum 22:43; scutellum 15:25; abdomen 63:54 (across segment IV).

Total length: ♂-3.76, ♀-4.80 mm; width of pronotum: ♂-1.48, ♀-1.72 mm; width of abdomen: ♂-1.64, ♀-2.16 mm.

Holotype: ♂, Brasil, Guanabara, Paineiros, 3. III. 1957; Carvalho and Becker leg. in the Mus. Nac. Rio.

Allotype: ♀, collected with holotype, in Heiss coll.

Notapictinus dissimilis n. sp. is related to *N. christae* Kormilev 1967, but differs from it by larger size (♀), different relative length of antennal segments, and by spiracles VIII being dorsal.

Genus *Aphleboderrhis* Stål, 1860

Aphleboderrhis pubescens (Walker), 1873

1873, *Aradus pubescens* Walker, Cat. Hem. Het. VII: 38 (7)

1886, *Pictinus pilosus* Bergroth, Verh. Zool. Bot. Ges. Wien, 36: 57, **nov. syn.**

1896, *Pictinus pubescens* Leth. et Severin, Cat. Hem. Het. III: 44

1898, *Aphleboderrhis pubescens*, Champion, Biol. Centr. Am. II: 79, T. V, figs. 26, 27

The type-specimen of Bergroth is female and bears the following labels: "Colombien Tropisches Land Dr. Thieme" (green label, handwriting)/ "110" (green label in handwriting)/ "10655" (white label, printed)/ "*Pictinus pilosus* Bergr." (Bergroth's handwriting).

As the type locality mentioned by Bergroth "Nova Granada" is the old name of the south-american state of Colombia, there is no doubt, that the specimen in the Berlin-museum is that of Bergroth's description and therefore to be considered as Holotype.

Genus *Mezira* Amyot and Serville, 1843

Mezira reuteri (Bergroth), 1886

1886, *Brachyrrhynchus reuteri* Bergroth, Verh. Bot. Zool. Ges., Wien; 36: 56.

Figs. 26—29

Female. Elongate ovate, with subparallel lateral borders; pronotum without lateral notch; body partially covered with thin, white incrustation.

Head shorter than its width across eyes (20:22.5); anterior process with subparallel sides, notched anteriorly, genae much longer than clypeus and contiguous in front of it, reaching $\frac{2}{3}$ of antennal segment I; antenniferous tubercles acute, with subparallel outer borders. Eyes moderately large, semiglobose. Postocular tubercles acute, reaching outer borders of eyes. Vertex granulate. Antennae $1\frac{1}{2} \times$ as long as width of head across eyes; relative length of antennal segments I to IV are: 10:7,5:10,5:9. Labium reaching hind border of labial groove, which is closed posteriorly.

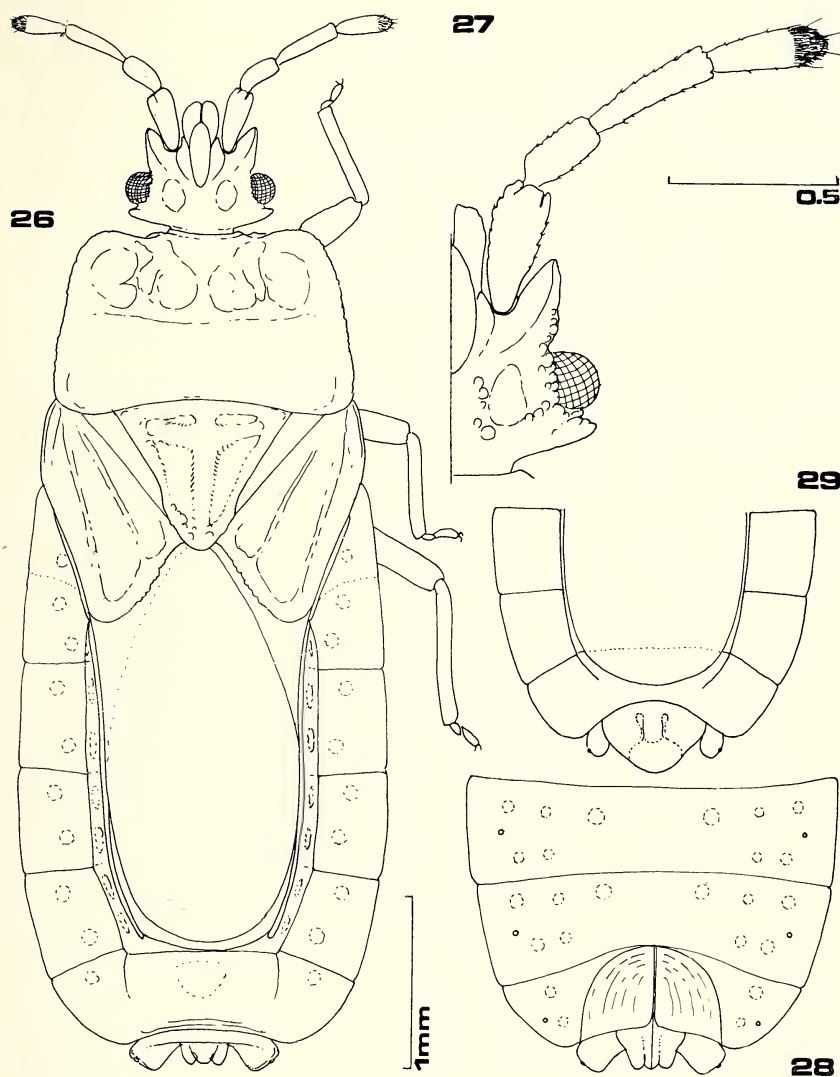
Pronotum about half as long as its maximum width (25:48); collar sinuate anteriorly; anterolateral angles rounded and produced forward as far as collar; lateral borders converging in uninterrupted arc, crenulate; hind border weakly sinuate. Fore disc with 4 (2+2) low, granulate, almost obliterated ridges; hind disc granulate.

Scutellum shorter than its basal width (21:27), disc with a median ridge (crushed by pin).

Hemelytra reaching hind border of tergum VI; corium reaching $\frac{1}{2}$ of connexivum III, its apical angle rounded, apical border convex exteriorly, sinuate interiorly.

Abdomen ovate, longer than its maximum width across segment IV (80:57); lateral borders slightly rounded; posteroexterior angles of connexiva II to VI not protruding, VII rounded. Connexiva II and III semifused together; lobes of tergum VIII triangular, not reaching tip of tricuspidate segment IX. Spiracles II to VII ventral, VIII lateral and visible from above.

Legs: unarmed.



Figs. 26—29: *Mezira reuteri* Bergroth: 26. Lectotype ♀ dorsal, 27. dto. head, 28. dto. ventral terminal segments, 29. Paralectotype ♂, dorsal terminal segments.

C o l o r : ferrugineous, tergum testaceous, membrane ochraceous.

Total length 6.00 mm; width of pronotum 1.92 mm; width of abdomen 2.28 mm.

Male: Similar to female, but smaller; lobes of tergum VIII clavate, reaching 3/4 of cordate hypopygium.

Total length 5.76 mm; width of pronotum 1.76 mm; width of abdomen 2.04 mm.

Lectotype ♀ (pinned specimen): "2449"/"Cassapava" (sic!)/"*Brachyrhynchus Reuteri* Bergr." (in Bergroth's handwriting)/"Lectotype"/"*Mezira reuteri* (Bergroth), des. Korm. et Heiss 1977" (Museum f. Naturkunde, Berlin).

Paralectotype ♂ (pinned specimen): "2449"/"Caassapava, Sellow 2449" (handwritten label)/"Paralectotype"/"*Mezira reuteri* (Bergr.), des. Korm. et Heiss 1977".

***Mezira paraensis* Kormilev et Heiss, new species**

Fig. 30

Male. Elongate ovate, with subparallel sides.

H e a d shorter than its width across eyes (16:18); anterior process constricted at base, enlarged and slightly notched anteriorly, almost reaching tip of antennal segment I; antenniferous tubercles acute, strongly diverging; postocular minute, almost reaching outer borders of eyes. Eyes semiglobose. Vertex with V-shaped rows of granules. Antennae slender, relative length of antennal segments I to IV are: 7:5:-:- (two apical are missing). Labium reaching hind border of labial groove, which is closed posteriorly.

P r o n o t u m $1\frac{1}{2}$ as long as its maximum width (17:35); collar sinuate anteriorly; anterolateral angles slightly expanded and rounded, reaching fore border of collar anteriorly; lateral borders crenulate and slightly rounded at humeri, converging anteriorly; lateral notch weakly sinuate. Hind border evenly sinuate. Fore disc with transverse row of granules along collar and with 4 (2+2) moderately high ridges behind that row of granules. Interlobal depression moderately deep; hind disc granulate and transversely depressed along hind border.

S c u t e l l u m shorter than its basal width (16:20); lateral borders sinuate, tip angularly rounded. Disc with a thin median carina, granulate laterad of it.

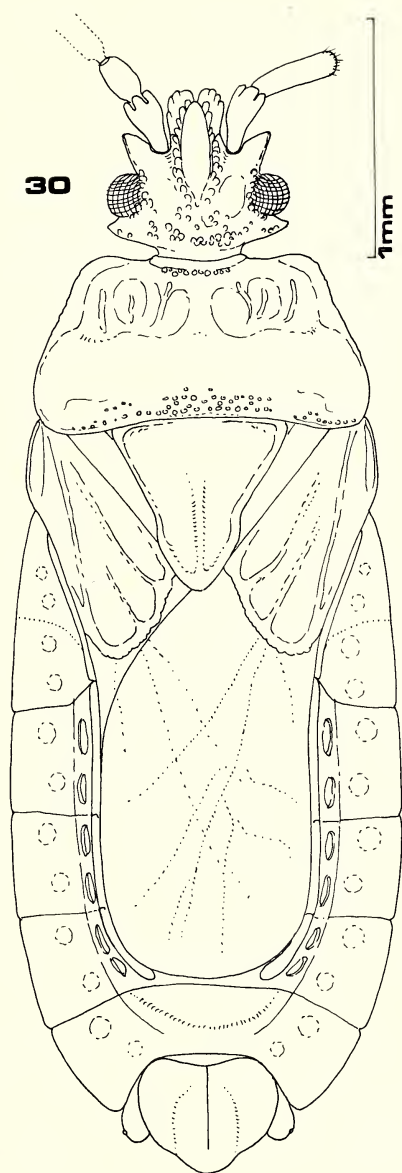


Fig. 30: *Mezira paraensis* n. sp., Holotype ♂, dorsal. Right antennal segment II shows teratological deformation.

Hemelytra reaching hind border of tergum VI; corium reaching $\frac{1}{2}$ of connexivum III, its apical angle rounded, apical border rounded; basolateral border rounded exteriorly and slightly reflexed.

Abdomen ovate, longer than its maximum width across segment IV (60:41); lateral borders rounded; connexiva II and III semifused together; posteroexterior angles of connexiva III to VI barely protruding, PE-VII angularly rounded. *Paratergites* clavate, reaching $\frac{2}{3}$ of hypopygium; the latter cordate, flat; disc with median ridge widening from base to tip, which is rounded, reaching tip of disc. *Spiracles* II to VII ventral, placed far from border, VIII lateral and visible from above.

Legs: unarmed, but granulate.

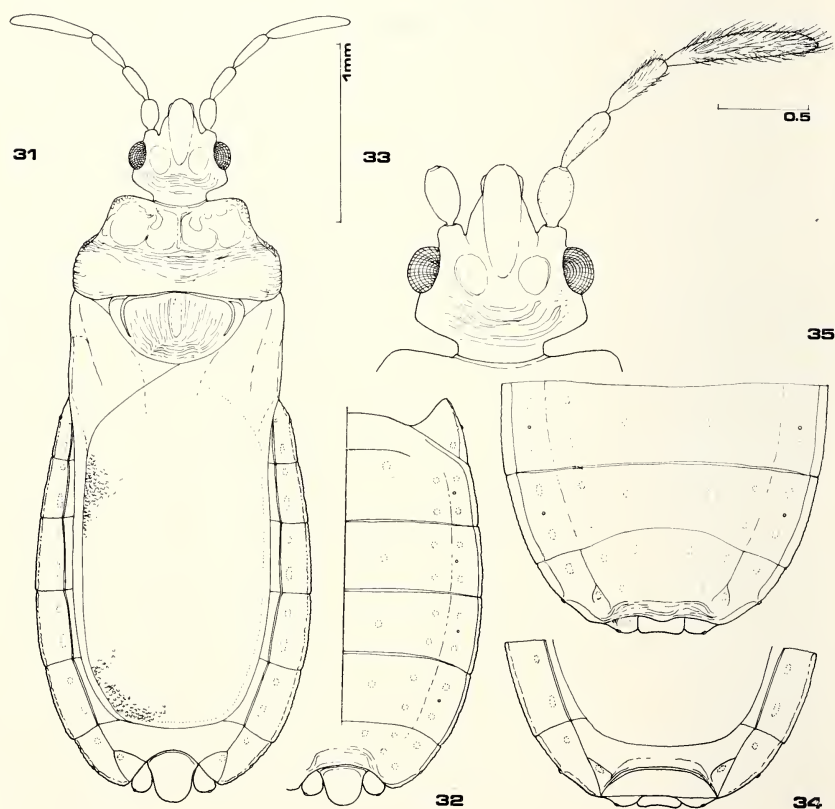


Fig. 31—35: *Aneurys sahlbergi* Bergroth topotypical material: 31. dorsal, 32. ♂, venter, 33. ♂, head, 34. ♀ dorsal terminal segments, 35. ♀, ventral terminal segments.

C o l o r : uniformly testaceous; membrane white.

Total length 4.48 mm; width of pronotum 1.40 mm; width of abdomen 1.64 mm.

H o l o t y p e : ♂, Brasil, Para; 21. III. 1893; Schulz leg. (Museum für Naturkunde, Berlin).

Mezira paraensis n. sp. is one of the smallest species in this genus; in the key for American *Mezira* species of the senior author (1971: 283) it runs to *M. dybasi* Kormilev, 1968, but is smaller; anterolateral angles of pronotum more angular, basolateral border of corium rounded (straight in *dybasi*); hypopygium relatively shorter with median ridge widening from base to tip and reaching tip of disc.

Abstract

The authors selected lectotypes for the following species: *Aneurur subdipterus* Burmeister, 1835, *Aneurur burmeisteri* Bergroth, 1886, *Aneurur tinus similis*, n. sp., *Notapictinus dissimilis*, n. sp. and *Mezira paraensis*, n. sp., all from Brasil. *Aneurur sahlbergi* Bergroth, *Aneurur subdipterus* (Burmeister) *westwoodi* Bergroth, 1886, *Neuroctenus punctulatus* (Burmeister), 1835, and *Mezira reuteri* (Bergroth), 1886, and give redescriptions for them. They also propose the following new taxa: *Notoplocoris usingeri*, n. sp., *Notapictus* and *Aneurur westwoodi* Bergroth belong to the subgenus *Iralunelus* Štys, 1974. *Pictinus pilosus* Bergroth, 1886, is conspecific with *Aphleboderhis pubescens* (Walker), 1873, and should go into synonymy of the latter.

Zusammenfassung

Das uns freundlicherweise von Frau Dr. U. Göllner-Scheiding zugänglich gemachte alte Sammlungsmaterial neotropischer Aradidae aus dem Museum für Naturkunde der Humboldt-Universität Berlin, ermöglichte die Festlegung von Lectotypen für nachstehende Arten: *Aneurur subdipterus* Burmeister, 1835, *Aneurur burmeisteri* Bergroth, 1886, *Aneurur westwoodi* Bergroth, 1886, *Neuroctenus punctulatus* (Burmeister), 1835 und *Mezira reuteri* (Bergroth), 1886. Davon gehören *A. subdipterus* Burm., *A. westwoodi* Bergr., und der nach topotypischem Material ebenfalls wiederbeschriebene *A. sahlbergi* Bergr. in die Untergattung *Iralunelus* Štys, 1974.

Neu beschrieben werden *Notoplocoris usingeri* n. sp., *Notapictinus simi-*

lis n. sp., *Notapictinus dissimilis* n. sp. und *Mezira paraensis* n. sp., alle von Brasilien.

Pictinus pilosus Bergroth, 1886, ist artgleich mit *Aphleboderrhis pubescens* (Walker), 1873, und muß dazu synonym gestellt werden.

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