

Review of the Neotropical genera *Aparilocoris* KORMILEV, 1983 and *Neoaparilocoris* gen.n. (Hemiptera: Heteroptera: Aradidae: Carventinae), with description of six new species

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Abstract

The Neotropical fauna of the flat bug subfamily Carventinae USINGER, 1950 is still insufficiently studied. Most taxa are apterous and expected to be narrowly endemic. Of the apterous genus *Aparilocoris* KORMILEV, 1983 two species have been described to date, *A. mexicanus* (KORMILEV, 1982) from Mexico and *A. venezuelanus* KORMILEV, 1983 from Venezuela. In the present paper, the following apterous Carventinae taxa are described and illustrated: *Aparilocoris bulbosus* sp.n. (Costa Rica), *Aparilocoris caraboboensis* sp.n. (Venezuela), *Aparilocoris chiapasus* sp.n. (Mexico), *Aparilocoris hispaniolus* sp.n. (Dominican Republic), *Neoaparilocoris* gen.n., *Neoaparilocoris dominicanus* sp.n. (Dominican Republic; type species), and *Neoaparilocoris costaricensis* sp.n. (Costa Rica).

Key words: Hemiptera, Heteroptera, Aradidae, Carventinae, apterous, new genus, new species, Caribbean, Neotropical.

Zusammenfassung

Die neotropische Fauna der Rindenwanzen-Unterfamilie Carventinae USINGER, 1950 ist noch ungenügend erforscht. Die meisten Arten sind apter und zeigen eine enge endemische Verbreitung. Von der apteren Gattung *Aparilocoris* KORMILEV, 1983 sind bisher zwei Arten bekannt geworden: *A. mexicanus* (KORMILEV, 1982) aus Mexiko und *A. venezuelanus* KORMILEV, 1983 aus Venezuela. Nachstehend werden eine neue Gattung und sechs neue Arten beschrieben und abgebildet: *Aparilocoris bulbosus* sp.n. (Costa Rica), *Aparilocoris caraboboensis* sp.n. (Venezuela), *Aparilocoris chiapasus* sp.n. (Mexiko), *Aparilocoris hispaniolus* sp.n. (Dominikanische Republik), *Neoaparilocoris* gen.n., *Neoaparilocoris dominicanus* sp.n. (Dominikanische Republik; Typusart); *Neoaparilocoris costaricensis* sp.n. (Costa Rica).

Introduction

The most recent comprehensive catalogue of the flat bug family Aradidae BRULLÉ, 1836 from the Neotropical Region was published by COSCARON & CONTRERAS (2012) who recorded 80 genera and 509 species, including the subfamily Carventinae USINGER, 1950 represented by 28 genera and 84 species. Later published additional descriptions of new genera and species, mostly by the author, raised the number of Carventinae to 42 genera and 102 species (HEISS 2013, 2017, 2018, 2019, 2020, 2021, LOPEZ & COSTAS 2018).

In the Neotropics, Carventinae are the second largest subfamily after Mezirinae OSHANIN, 1908, and predominantly represented by apterous taxa with very limited distribution ranges which can be assumed to be locally endemic.

Only two species of the apterous genus *Aparilocoris* KORMILEV, 1983, *A. mexicanus* (KORMILEV, 1982) from Mexico (based on two females) and *A. venezuelanus* KORMILEV, 1983 from Venezuela (based on one male) have been previously described. Examination of six specimens from the authors collection originating from Mexico, Venezuela, Costa Rica, and the Dominican Republic are recognized as members of different new taxa, which are described and illustrated herein.

Material and methods

The material upon which this study is based is temporarily kept in the collection of the author (CEHI) which will be deposited at the Zoologische Staatssammlung Munich (ZSM), Germany. As apterous aradid specimens collected from plant litter are usually covered by incrustation obscuring the body structures, they were cleaned and remounted for the study of the ventral side bearing arrangements of glandular tubercles essential for taxonomy.

Photos were taken with a Nikon Coolpix 300 camera and processed with paint.net software. Arrows on imaged specimens indicate the position of glandular structures on male sternite VII.

When citing the text on the labels of a pin attached to the specimens, / separates the lines and // different labels.

Measurements were taken with a micrometre eyepiece (20 units = 1 mm), then converted, and are given in millimetres.

Abbreviations used: deltg = dorsal external laterotergite (connexivum), mtg = mediotergite, vltg = ventral laterotergite, ptg = paratergite.

Depositories:

CEHI Collection E. Heiss, Innsbruck, Austria (ZSM Munich, Germany).

UGA University of Georgia, Athens, USA.

UNAM Instituto de Biología, Universidad Nacional Autónoma de México, Mexico.

Taxonomy

Carventinae USINGER, 1950

Of the six specimens available for this study, two of them differed in structure of head, the position of spiracles and the position and size of glandular structures, all recognized characters to distinguish genera of Carventinae (e.g., by USINGER & MATSUDA 1959, HEISS 2020), from the other four specimens representing *Aparilocoris*. Therefore, they are assigned to a closely related but different new genus, *Neoaparilocoris* gen.n. which can be separated as follows:

- 1 Eyes small, laterally hardly protruding (Fig. 27). Postocular lobes of head sinuately converging posteriorly. Spiracles II ventral, II–IV subventral and scarcely visible from above, V–VII lateral and visible from above. *Aparilocoris*
- 2 Eyes large, laterally protruding (Fig. 26). Postocular lobes behind eyes subparallel then angular and narrowed. All spiracles lateral and visible from above.
..... *Neoaparilocoris* gen.n.

***Aparilocoris* KORMILEV, 1983** (Figs. 1–20, 27)

Type species: *Hybocoris mexicanus* KORMILEV, 1982a.

Notes: This genus was originally described as *Hybocoris* KORMILEV, 1982 but later replaced by *Aparilocoris* KORMILEV, 1983 because of the homonymy with *Hybocoris* KIRITSHENKO, 1914 (Hemiptera: Pentatomidae). As the type specimens of *A. mexicanus* (holotype, female in UNAM, one paratype female in coll. Kormilev) and *A. venezuelanus* (holotype male in UNAM) were not available for re-examination to determine differences to new species, the images of dorsal and lateral view of these holotypes were obtained for comparison.

KORMILEV (1982b) described a male from Costa Rica as the opposite sex of *A. mexicanus*. This specimen is deposited at UGA. Images of this specimen and of a previously unreported female from the same locality were kindly supplied for study.

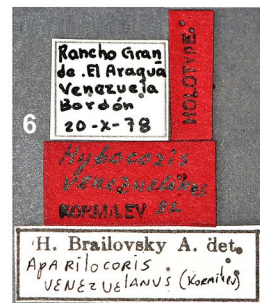
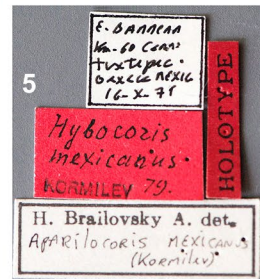
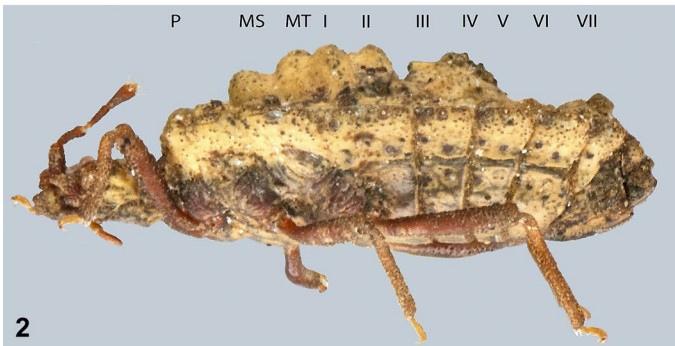
Aparilocoris seems to have an extended distribution in the Caribbean and adjacent continental areas of Central and South America, where due to suitable habitat conditions and parapatric distribution ranges species-specific differentiation of body structures occurred. Species can be most easily distinguished by the dorsal outline of the thoracic and abdominal ridges in lateral view, as explained below. *Aparilocoris* seems to be rare and underrepresented even in main museum collections.

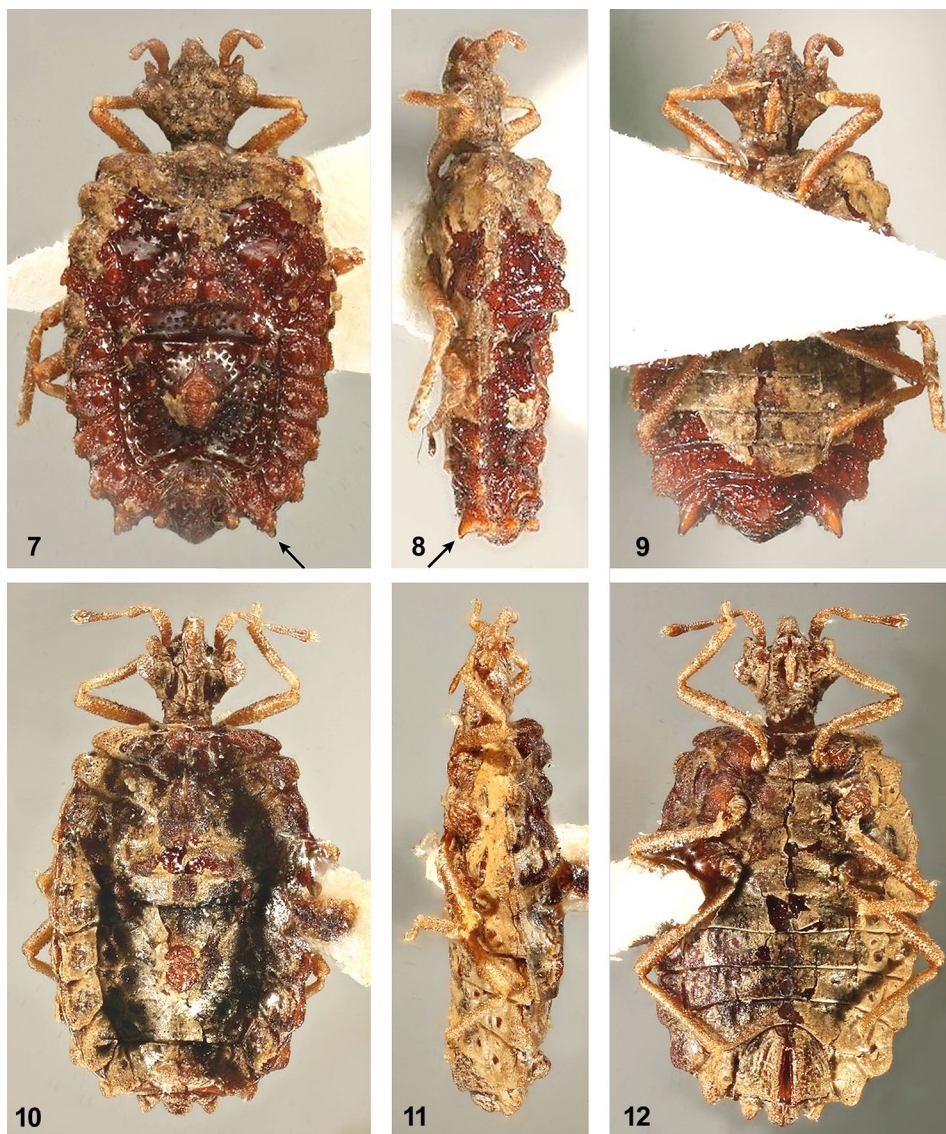
Redescription: Apterous, small species. Body length 4.1–5.2 mm. Body stout, elongate oval. Cleaned surface beneath waxy incrustation glabrous, with rugosities and punctures, without pilosity. Colouration reddish-brown to piceous.

Head about as long as wide. Clypeus with a round apical tubercle, reaching half length of antennal segment I. Genae slightly produced over clypeus, cleft anteriorly. Antenniferous lobes triangular, divaricating. Antennae about 1.3 times as long as width of head; segment I longest and thickest, II–IV thinner and nearly of equal length. Eyes not or only slightly stalked. Postocular lobes conically diverging to the constricted collar and neck. Rostrum arising from a slit-like atrium, shorter than head.

Thorax: Pronotum strongly transverse, truncate anteriorly, collar distinct, ring-like; lateral margins granulate and angularly produced laterally consisting of a raised upper and a lower sclerite separated by a longitudinal furrow; surface of disc with irregular rugosities, at middle with a large triangular, medially split elevation anteriorly, followed posteriorly by a deep cleft into which the apex of the fused triangular ridge is produced; posterior margin bisinuate. Mesonotum, metanotum, and mtg I+II fused to a triangular, posteriorly widening and raised ridge, usually highest on mtg I, medially split by a longitudinal sulcus; fusion lines marked by transverse impressions; structure of lateral margins of meso- and metanotum as of pronotum; surface lateral of median ridge with ovate callosities. Legs unarmed. Claws with thin parempodia.

Abdomen: Tergal plate shorter than wide, medially strongly elevated, highest on mtg III–IV, lateral parts depressed and rugose; deltg II+III fused, triangularly produced anteriorly reaching to metanotum; deltg III–VII separated by sulci, lateral margins granulate and thickened; laterally visible dorsally reflexed parts of vltg II–VII increasing posteriorly in size bear the spiracles; tergite VII raised medially for the reception of the globular pygophore in male, or posteriorly inflated in female; male apex of triangular sclerite of vltg VII ventrally bearing a conical glandular tubercle directed downward (in *A. venezuelanus*). Spiracles II ventral far from lateral border, III–IV sublateral, V–VII lateral, VIII terminal on ptg VIII.





Figs. 1–6 (opposite page): (1, 2) *Aparilocoris mexicanus*, holotype female, dorsal (1), lateral (2); (3, 4) *Aparilocoris venezuelanus*, holotype male, dorsal (3), lateral (4), arrows indicate knob like glandular tubercles; (5, 6) type labels: *A. mexicanus* (5), *A. venezuelanus* (6). Abbreviations for structures of the thoracic and abdominal ridges in lateral view: P – pronotum; MS – mesonotum; MT – metanotum; I, II, III, IV, V, VI – mediotergites I–VI; VII – tergite VII. © UNAM.

Figs. 7–12: *Aparilocoris* cf. *venezuelanus*, male (coll. UGA): dorsal (7), lateral (8), ventral (9), arrows indicate acute glandular tubercles; female, dorsal (10), lateral (11), ventral (12). © Rick Hoebeke.

Comparative notes: KORMILEV (1982a) compared *Aparilocoris mexicanus* to *Glyptocoris* HARRIS & DRAKE, 1944 from Brazil, but it differs from this genus and all apterous Neotropical Carventinae by the following set of characters: habitus; structure of head and antennae; in particular by the prominent triangular median ridge of thorax and abdomen longitudinally split by a sulcus; the conical ventral glandular tubercle of male (as of *A. venezuelanus*); and the position of spiracles.

***Aparilocoris mexicanus* (KORMILEV, 1982) (Figs. 1, 2)**

Hybocoris mexicanus KORMILEV, 1982a (descr., female holotype, Mexico, fig. 9).

Hybocoris mexicanus: KORMILEV 1982b (descr. male, Costa Rica, fig. 3).

Aparilocoris mexicanus: KORMILEV & FROESCHNER 1987 (listed).

Aparilocoris mexicanus: COSCARON & CONTRERAS 2012 (catalogue).

Type material: Holotype (female, UNAM) labelled: E. Barrera / km. 60 Carr. [Kormilev indicated 10km] / Tuxtepec / Oaxaca Mexic / 16.X.71 // Holotype // *Hybocoris / mexicanus / Kormilev 79* // H. Brailovsky A. det. / *Aparilocoris / mexicanus / (Kormilev) //*. Paratype (female; coll. Kormilev, not seen) from same locality, leg. Brailovsky.

Notes: Measurements of holotype (female): body length 4.84; width of pronotum 2.16; width of abdomen 2.88. The redescription of *Aparilocoris* (above) was based on both species (*A. mexicanus*, *A. venezuelanus*) and therefore is not repeated here.

The original description was based on two females (incrustation not removed), but the body structures cannot be recognized from the given figure. Images of the holotype now available from UNAM (Fig. 2) show the dorsal outline of the thoracic-abdominal ridge in lateral view, the main character for distinguishing *A. mexicanus* from *A. venezuelanus* and other congeners.

KORMILEV (1983) described a male and assigned it to *A. mexicanus*. However, according to images kindly supplied by UGA (Fig. 8), the dorsal outline of this specimen does not correspond to that of the holotype of *A. mexicanus*, but resembles *A. venezuelanus* (Fig. 4). An additional female specimen (not reported by Kormilev) of the same collection shares an identical outline (Fig. 11). As this male shares prominent (although with acute apex) glandular tubercles on vltg VII with the holotype of *A. venezuelanus*, these two specimens supposedly belong either to this taxon (to which they are tentatively transferred) or to a new species. This can only be ascertained after examination of these specimens.

***Aparilocoris venezuelanus* KORMILEV, 1983 (Figs. 3, 4)**

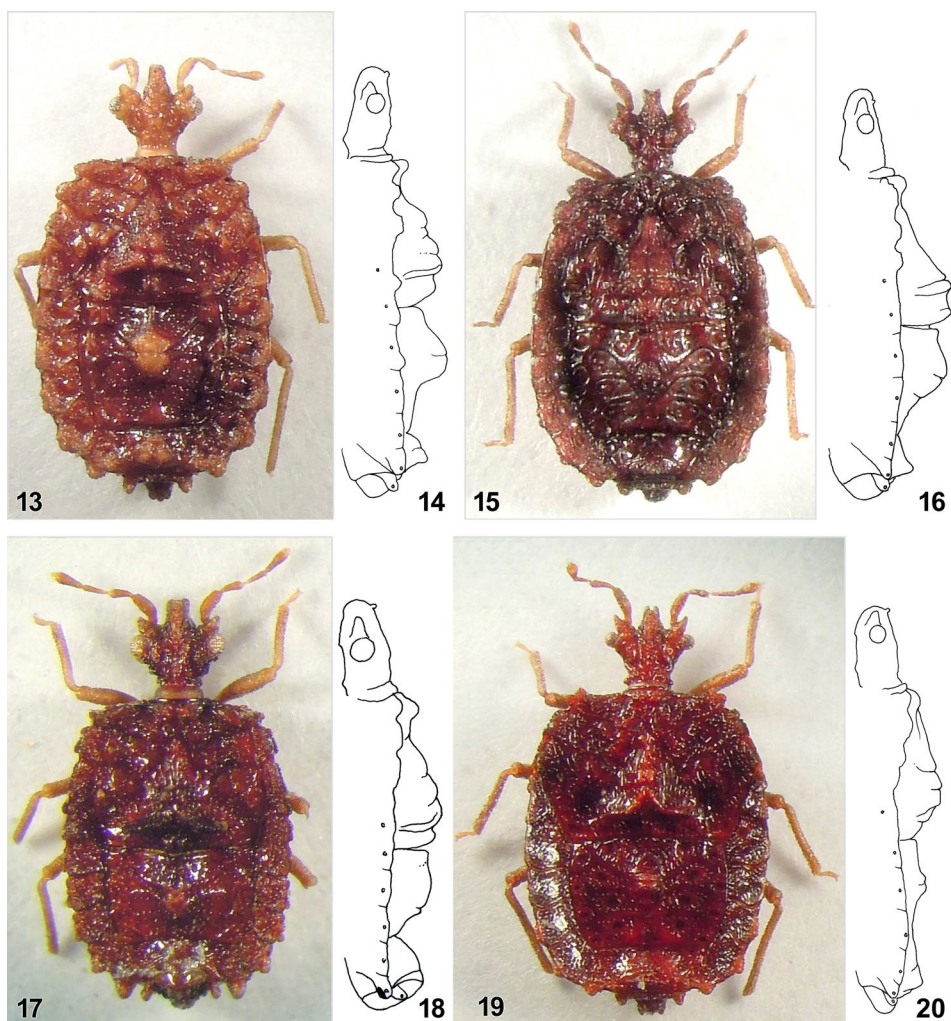
Aparilocoris venezuelanus KORMILEV, 1983b (descr. male holotype, Venezuela, figs. 1–3).

Aparilocoris venezuelanus: KORMILEV & FROESCHNER 1987 (listed).

Aparilocoris venezuelanus: COSCARON & CONTRERAS 2012 (catalogue).

Type material: Holotype (male, UNAM) labelled: Rancho Gran / de. El Araguá / Venezuela / Bordón / 20-10-78 // Holotype // *Hybocoris [sic] / venezuelanus / Kormilev 82* // H. Brailovsky A. det. / *Aparilocoris / venezuelanus (Kormilev) //*.

Additional material (preliminary identification; see above): 1 male (UGA; described as *Hybocoris mexicanus* by KORMILEV 1983) and 1 female collected with this male, recorded from Costa Rica, Mt. Bordo, 2. XI.1965, leg. M.V. Truitt.



Figs. 13–20: (13, 14) *Aparilocoris bulbosus* sp.n., holotype female, dorsal (13), lateral (14); (15, 16) *Aparilocoris caraboensis* sp.n., holotype female, dorsal (15), lateral (16); (17, 18) *Aparilocoris chiapasus* sp.n., holotype male, dorsal (17), lateral (18); (19, 20) *Aparilocoris hispaniolus* sp.n., holotype female, dorsal (19), lateral (20).

Notes: Measurements of holotype (male): Body length 4.12; width of pronotum 1.80; width of abdomen 2.40. Male from Costa Rica: Body length 4.16; width of pronotum 1.72; width of abdomen 2.20. The redescription of *Aparilocoris* (above) was based on both species (*A. mexicanus*, *A. venezuelanus*) and therefore is not repeated here.

KORMILEV (1983b) stated in his description of *A. venezuelanus* that it can be separated from *A. mexicanus* by “the shape of the median ridge on the meso- and metanotum and on terga I and II and the metanotum being lower than tergum I”. However his line-drawings presented with the description are misleading, as the images of the lateral view and dorsal outline of both holotypes (Figs. 2, 4) better show the differences in height of the ridges.

***Aparilocoris bulbosus* sp.n.** (Figs. 13, 14)

Type material: Holotype (female; CEHI) labelled: San Vito / Costa Rica / 18.2.65 / N.V. Truitt // *Hybocoris / venezuelanus* / det. Kormilev 82 / N. Kormilev //; designated and provided with a type label.

Etymology: The epithet refers to the large bulbous elevation on tergal disc.

Diagnosis: Distinguished from other congeners by the different outline of elevated body structures (Fig. 14). Kormilev's identification as *H. venezuelanus* corresponds neither to the description nor to the dorsal outline of the holotype of that species.

Description: Measurements: Body length 5.2; head length 1.10, width 1.10; pronotum length 0.45, width 1.90; abdomen width 2.30.

Colouration light reddish-brown. Outline of median body elevations in lateral view as in Figure 14. Head as wide as long. Antenna short, 1.16 times as long as width of head; length of antennal segments I / II / III / IV = 0.425 / 0.275 / 0.25 / 0.30. Antenniferous lobes with blunt apex. Eyes oval, granulate.

Thorax: Pronotum anteromedially with a triangular elevation, divided by a longitudinal furrow. Posteriorly raised and widening triangular ridge of fused median parts of meso-metanotum and mtg I+II reaching from pronotal furrow to tergal disc; it is highest on mtg I; mtg I forming an oblique laterally sloping ridge; sclerites of lateral margins of pro-, meso-, and metanotum strongly raised and granulate.

Abdomen: Tergal plate with large bulbous median elevation on mtg III+IV; surface of deltg II–VI depressed, posterolateral angles raised; spiracles II–IV ventral, not visible from above, V–VII lateral, on dorsally reflexed rim of vltg V–VII, VIII on ptg VIII.

***Aparilocoris caraboboensis* sp.n.** (Figs. 15, 16, 27)

Type material: Holotype (female, CEHI) labelled: Venezuela Carabobo / Cerro de Paja Mts. / 1500m / F. Wachtel 16.11.05 //; designated and provided with a type label.

Etymology: Named after the Carabobo Mountains where it was collected.

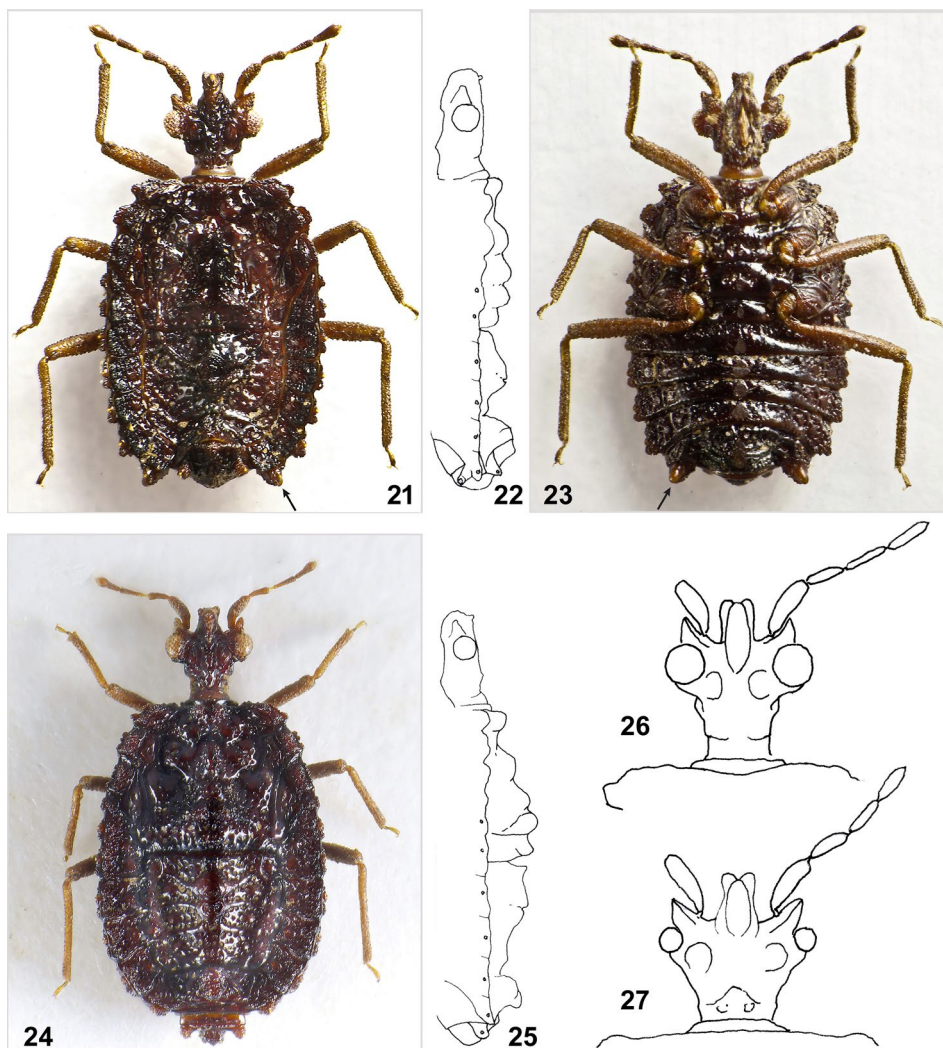
Diagnosis: The lateral outline of the body elevations is distinctive for *A. caraboboensis* sp.n. and differs from that of *A. venezuelanus* and other congeners.

Description: Measurements: Body length 4.50; head length 0.95, width 0.975; pronotum length 0.18, width 0.40; width of abdomen 2.65.

Colouration reddish-brown; surface of triangular median ridge longitudinally striate. Head slightly shorter than wide. Antennae 1.29 times as long as width of head; length of antennal segments I / II / III / IV = 0.425 / 0.25 / 0.25 / 0.30. Antenniferous lobes with acute apex. Eyes globular, slightly stalked.

Thorax: Triangular elevation of pronotum medially split. Triangular fused median ridge of meso-metanotum and mtg I+II with a median sulcus, highest on mtg I, evenly sloping anteriorly.

Abdomen: Median elevation highest on mtg III of tergal plate; tergite VII with a triangular elevation along posterior margin. Spiracles II–IV ventral and not visible from above, V–VII lateral on small projections of vltg V–VII rim.



Figs. 21–27: (21–23) *Neoparilocois dominicanus* gen.n., sp.n., holotype male, dorsal (21), lateral (22), ventral (23); arrows in 21 and 23 indicate conical glandular tubercles; (24–26) *Neoparilocois costaricensis* gen.n., sp.n., holotype female, dorsal (24), lateral (25), head (26); (27) *Aparilocois caraboboensis* sp.n., head.

***Aparilocois chiapasus* sp.n.** (Figs. 17, 18)

Type material: Holotype (male, CEHI) labelled: Mexico: Chiapas / 6.3 km SW Ocosingo / 1070 m, July 29, 1983 / S & J Peck, R. Anderson / oak pine forest //; designated and provided with a type label.

Etymology: The species epithet refers to the Chiapas Province where the type specimen was collected.

Diagnosis: As the dorsal outline of the body elevations (lateral view) differs from all congeners, the holotype of *A. chiapasus* sp.n. is not considered to be the unknown male of *A. mexicanus*. The oval glandular structure on vltg VII is unknown from congeners.

Description: Measurements: Body length 3.65; head length 0.75, width 0.825; pronotum length 0.40, width 1.55; width of abdomen 2.05.

Colouration reddish-brown. Head slightly wider than long. Antennae 1.24 times as long as width of head; length of antennal segments I / II / III / IV = 0.30 / 0.225 / 0.225 / 0.275. Eyes granulate, not stalked. Postocular lobes granulate.

Thorax: Pronotal median elevation distinctly developed. Fused triangular ridge with a median sulcus and ill defined transverse depressions marking meso-, metanotum, and mtg I which is highest.

Abdomen: Median elevation on mtg III–IV well developed; tergite VII raised for the reception of the conical pygophore; ptg VIII clavate directed upward. Spiracles II–IV ventral, V–VII lateral, placed on triangular projections of vltg V–VII; apex of vltg VII bearing an oval shiny glandular structure.

***Aparilocoris hispaniolus* sp.n.** (Figs. 19, 20)

Type material: Holotype (female, CEHI) labelled: Dom.Rep. / La Vega, 20 / km SW Piedra Blanca / May 29, 1978 CW & LB / O'Brien & Marshall //; designated and provided with a type label.

Etymology: Refers to the Island of Hispaniola, its eastern part belonging to the Dominican Republic.

Diagnosis: *Aparilocoris hispaniolus* sp.n. differs from other congeners by the wide habitus, a smooth surface, a tuberculate collar, and the dorsal outline of thoracic and abdominal elevations in lateral view.

Description: Measurements: Body length 5.10; head length 0.85, width 1.05; pronotum length 0.55, width 1.90; width of abdomen 2.90.

Colouration reddish-brown; surface of body smooth and shiny. Head wider than long. Antennae 1.33 times as long as width of head; length of antennal segments I / II / III / IV = 0.425 / 0.35 / 0.325 / 0.30. Antenniferous lobes with acute apex. Eyes globular, slightly stalked. Postocular lobes straight, diverging posteriorly; collar ring-like, beset with smooth, round tubercles.

Thorax: Anterolateral angles of pronotum angularly produced; median elevation weakly developed. Fused triangular ridge continuously raised to mtg I; meso- and metanotum marked by transverse furrows.

Abdomen: Median elevation of tergal plate shallow; surface of deltg II–VII smooth, tergite VII triangularly elevated posteriorly. Spiracles II ventral, III–IV subventral and slightly visible from above, V–VII lateral.

***Neoaprillocoris* gen.n.** (Figs. 21–26)

Type species: *Neoaprillocoris dominicanus* sp.n.

Etymology: Combination of the Greek word “neo” for new and the name of the closely related genus *Aparilocoris*.

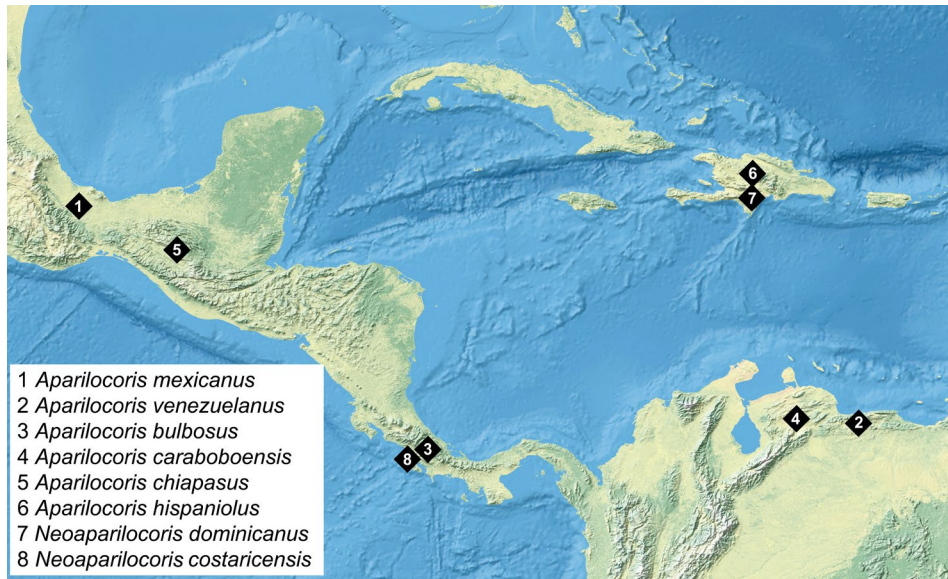


Fig. 28: Distribution of *Aparilocoris* and *Neoaparilocoris* species. Made with Natural Earth.

Diagnosis: The type species shares the ventral glandular tubercles on vltg VII with *Aparilocoris venezuelanus*. However, differences in size and shape, a different structure of the head and the lateral position of all spiracles justifies the erection of a new genus, *Neoaparilocoris* gen.n.

Description: Size of 3.85–4.50 mm. Head about as long wide. Antennae 1.3 times as long as width of head; segment I longest and club shaped. Antenniferous lobes angularly produced, then constricted to a narrow collar. Eyes large, laterally protruding. Rostrum arising from a slit-like atrium, shorter than head.

Thorax: Anterolateral angles of pronotum angularly produced; median split elevation prominent. Triangular fused ridge with deep longitudinal furrow and distinct transverse impressions marking thoracic segmentation. Oblique ridges of mtg I directed laterally.

Abdomen: Median ridge roundly elevated about as high as that of thorax, highest on mtg III–IV; deltg II+III fused to a triangular plate anteriorly reaching to metanotum. Tergite VII strongly raised medially for the reception of the pygophore; ptg VIII clavate directed upward. Pygophore with rugose surface, sloping posteriorly. Spiracles II–VII lateral and visible from above, placed on dorsally reflexed elongate sclerites of vltg II–VII; sclerite triangular on deltg VII and bearing ventrally a conical glandular tubercle directed posterolaterally.

***Neoaparilocoris dominicanus* sp.n.** (Figs. 21–23)

Type material: Holotype (male, CEHI) labelled: Dominican Rep. / Barahona, 200 m / 20 III 1991 E.Heiss //; designated and provided with a type label.

Etymology: The species epithet refers to the Dominican Republic where this new species was found.

Diagnosis: Differing from *N. costaricensis* sp.n. by the lesser developed median elevations of thorax and abdomen and its dorsal outline in lateral view (comp. Figs. 22 and 25).

Description: Measurements: Body length 3.85; head length 0.975, width 0.925; pronotum length 0.35, width 1.50; width of abdomen 2.05.

Colouration piceous. Head slightly longer than wide. Antennae 1.3 times as long as width of head; segment I longest and club-shaped; length of antennal segments I / II / III / IV = 0.40 / 0.25 / 0.25 / 0.30. For further characters see description of genus.

Neoaparilocoris costaricensis sp.n. (Figs. 24–26)

Type material: Holotype (female, CEHI) labelled: Costa Rica: Puntaren. / Osa Pen. Fund. Neotrop. / 10km W Rincon, 100m // 08,43.30 N, 83,31.30 W / lowland leaf litter 97-023 / 21 VI 97 R.S. Anderson //; designated and provided with a type label.

Etymology: Named after Costa Rica where this new species was discovered.

Diagnosis: It is recognized and differs from *N. dominicanus* sp.n. by the size and lateral outline of body elevations.

Description: Measurements: Body length 4.50; head length 1.00, width 0.90; pronotum length 0.40, width 1.65; width of abdomen 2.40.

Colouration piceous; surface shiny, beset with fine granulation and rugosities. Head slightly longer than wide. Antennae 1.36 times as long as width of head; length of antennal segments I / II / III / IV = 0.40 / 0.225 / 0.275 / 0.275. Antenniferous lobes subparallel, apex acute. Eyes large, oval and granulate, not stalked. Postocular lobes subparallel and angularly produced, then restricted to a narrow collar.

Thorax: Pronotal elevation developed and split into two large rounded lobes. Fused triangular ridge with a longitudinal median furrow; transverse depressions marking mesonotum, metanotum, mtg I, and II; posteriorly separated from tergal plate by a deep furrow.

Abdomen strongly raised along median ridge. Tergite VII with a prominent elevation split by a median furrow. Spiracles II–VII lateral and visible from above, placed on small projections of reflexed vltg II–VII.

Notes: Surprisingly, this species shares the essential features of *Neoaparilocoris* (structure of head, large eyes, all spiracles lateral), although it originates from the Mesoamerican mainland not from a Caribbean Island as the type species.

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