

ZOOLOGISCHE MEDEDELINGEN

UITGEGEVEN DOOR HET

RIJKSMUSEUM VAN NATUURLIJKE HISTORIE TE LEIDEN
(MINISTERIE VAN CULTUUR, RECREATIE EN MAATSCHAPPELIJK WERK)

Deel 52 no. 1

28 juni 1977

A NEW GENUS AND A NEW SPECIES OF THE CARVENTINAE FROM SURINAM (HEMIPTERA, ARADIDAE)

by

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With four text-figures and one plate

The junior author has collected in Surinam at night on a dead log, a few specimens of a very interesting new aradid species representing a new genus in the subfamily Carventinae, which we propose to name *Apterocoris surinamensis*.

All measurements were taken with a micrometer eyepiece, 25 units = 1 mm.

Apterocoris Kormilev et Van Doesburg, new genus

Ovate, more tapering anteriorly; first three antennal segments, femora, tibiae and lateral borders of the body, with erect, stiff bristles; entire body, with exception of apical half of antennal segment IV, labium and tarsi, covered with red brown incrustation. Apterous.

Head longer than width across eyes; anterior process deeply cleft anteriorly, not reaching basal $\frac{1}{4}$ of antennal segment I. Antenniferous tubercles stout, conical, diverging. Eyes large, almost globose. Postocular borders unarmed, long and converging backward, at $\frac{2}{3}$ of their length with 2 (1 + 1) hook-like tubercles. Vertex raised longitudinally and flanked by 2 (1 + 1) large, ovate infraocular callosities. Antennae about 3 × as long as width of head across eyes; antennal segment I fusiform, stout, longer than head; II half as long as III and subequal to IV. Labial atrium closed, labium subapical;

labial groove large, wide and shallow; labium by far not reaching hind border of labial groove, which is open posteriorly.

Pronotum trapezoidal, about half as long as its maximum width, separated from mesonotum by deep, angular depression. Disc with a deep median sulcus flanked by 6 (3 + 3) longitudinal ridges; collar sinuate anteriorly, with 2 (1 + 1) spines laterally; just behind collar a transverse ridge; lateral borders of pronotum raised and granulate.

Mesonotum 3 × wider than its median length. Disc with a stout median ridge flanked by 6 (3 + 3) longitudinal ridges; lateral borders raised and granulate. Mesonotum separated from metanotum by 2 (1 + 1) deep, transverse depressions laterally, and by shallow, transverse sulcus medially.

Metanotum 5 × wider than its median length. Disc with short median ridge flanked by a few irregular ridges laterally; lateral borders raised and granulate. Metanotum separated from tergum I by 2 (1 + 1) transverse sulci and behind them by 2 (1 + 1) transverse, thin carinae.

Abdomen ovate, longer than its maximum width across segment III. Terga I and II semifused together and strongly raised medially. Median elevation with median depression on each segment and with transversal depression between segments, so that it is separated into four parts. Surface of terga I and II uneven, with various raises and depressions and short carinae. Tergum II separated from central dorsal plate, consisting of terga III to VI fused together, by a deep transverse sulcus. Central dorsal plate separated from connexivum and tergum VII by similar sulci, and strongly raised medially and with a usual pattern of carinae and callous spots. Callous spots on tergum III much larger than on terga IV to VI. Tergum VII strongly raised medially for the reception of subcordate hypopygium, caudal in position. Spiracles II to VII actually ventral in position, placed on high tubercles and visible from above; spiracles VIII lateral. Tergum VII in males with 2 (1 + 1) flattened tubercles, similar as in *Acaricoris*, *Colpodaptera*, or Oriental *Carventus* species. Femora and tibiae with stiff, erect bristles, somewhat finer on tibiae; tarsi with arolias.

Female similar to male, but abdomen more ovate, paratergites triangular, reaching middle of segment IX.

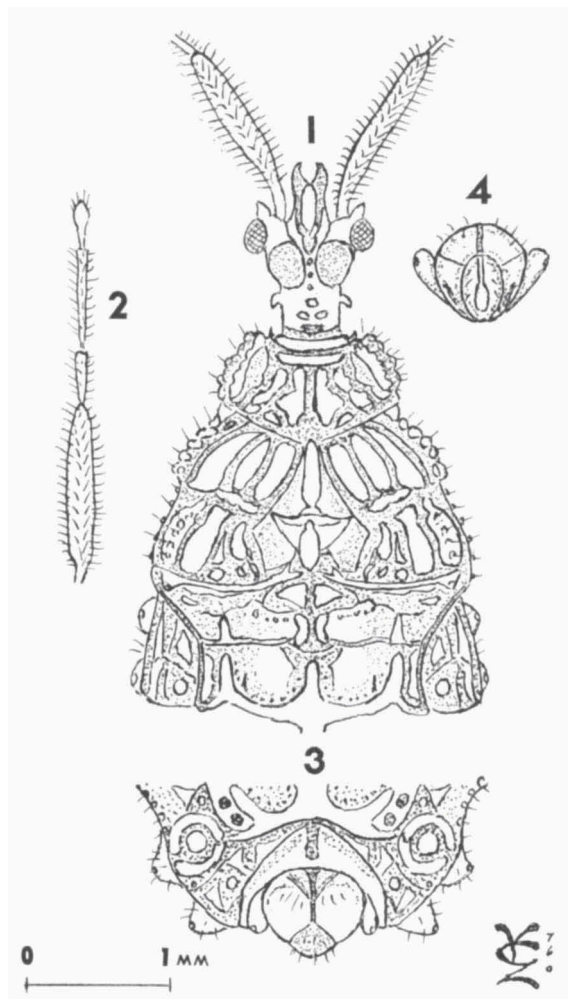
Type species: *Apterocoris surinamensis* Kormilev et Van Doesburg, n.sp.

Apterocoris n.g. is related to *Rhysocoris* Usinger & Matsuda, 1959, but terga I and II are separated from metanotum by a distinct depression, and median ridges of meso- and metanotum are split into two portions, one on meso- and another on metanotum. It is also somewhat related to *Glyptocoris* Harris & Drake, 1944, but the general shape of the body is more similar to *Rhysocoris*.

Apterocoris surinamensis Kormilev et Van Doesburg, new species
(figs. 1-4, pl. 1)

Male. Elongate ovate; first three antennal segments, lateral borders of notum and abdomen, femora and tibiae, with stiff, erect bristles. Body covered with red brown incrustation.

Anterior process of head constricted laterally, deeply cleft anteriorly, genae much longer than clypeus and curved, reaching basal $\frac{1}{4}$ of antennal segment I. Vertex with longitudinal row of granules between large, ovate



Figs. 1-4. *Apterocoris surinamensis* n.g., n. sp. 1, head, pro-, meso-, metanotum and terga I to III; 2, antenna; 3, tip of abdomen from above; 4, hypopygium seen from behind.

and convex callosities; neck with 3 tubercles and a small pit behind them. Lateral borders of pro-, meso- and metanotum convex, raised and granulate. Hypopygium cordate, with a thin median sulcus on upper surface, and with a thin median ridge on hind surface. Paratergites clavate, reaching $\frac{2}{3}$ of hypopygium. Paratergites (♀) triangular, reaching middle of segment IX.

Measurements (in ratios the first figure represents the length, and the second the width of measured portion). Head ♂-28:22, ♀-32:24; relative length of antennal segments I to IV are: ♂-32:8:17:8, ♀-34:9:18:8.5; pronotum ♂-18:35, ♀-18:38; mesonotum ♂-14:45, ♀-15:53; metanotum ♂-10:56, ♀-12:64; abdomen (across segment III) ♂-73:60, ♀-93:80, hypopygium seen from above 15:18, seen from behind 20:18; width of tergum VIII 26.

Colour. Under incrustation brown and shiny; tarsi yellow brown; incrustation red brown.

Total length: ♂-5.92, ♀-7.00 mm; width of pronotum: ♂-1.40, ♀-1.52 mm; width of abdomen: ♂-2.40, ♀-2.56 mm.

Holotype ♂ (Museum Leiden): Suriname, Brokopondo distrikt, Brownsberg (500 m), 20.vii.1975, P. H. van Doesburg leg. Allotype ♀ (Museum Leiden) collected with holotype. Paratypes: 3 ♂, 2 ♀, collected with holotype (Museum Leiden, and collection of the senior author (1 ♂, 1 ♀)).

Because the key to the genera of Carventinae given by Usinger & Matsuda (1959: 103) is already out of date, an improved one is here given.

KEY TO THE GENERA OF THE NEOTROPICAL CARVENTINAE

1. Body thickly incrustate, except some bare areas; incrustation forming characteristic grooves, lobes and processes on head, pronotum and scutellum; the edge of connexivum usually appearing double. Macropterous 2
- Body thinly incrustate, incrustation following the basic contours of the surfaces of head, pronotum and scutellum; edge of connexivum not usually appearing double. Macropterous and apterous 3
2. Genae reaching apex of first antennal segment. Membrane with several distinct veins. Body very long and slender, about 4 × as long as wide. (Panama, Brasil) *Psorosoma* Champion, 1898
- Genae not reaching apex of first antennal segment. Membrane with ill defined wrinkles, but without veins. Body less than 3 × as long as wide. (Tropical America) *Proxius* Stål, 1873
3. Hemelytra complete, or rarely brachypterous, scutellum fully formed, 2 or 3 × as broad as long. Thoracic segments separate. (Mexico, Colombia) *Carventus* Stål, 1865

- Hemelytra and hind wings absent; thorax variously fused, without a separate scutellar plate 4
- 4. Labial atrium open; connexiva II extending forward to hind angles of pronotum. (Brasil) *Dihybogaster* Kormilev, 1953
- Labial atrium closed; connexiva II not extending to hind angles of pronotum 5
- 5. Body very thick, broadly ovate, strongly longitudinally convex and hunchbacked; pleurae deeply excavated for the reception of femora; abdomen cordate. (Peru) *Reeceicus* Drake, 1956
- Body not so convex and hunchbacked; pleurae never deeply excavated for reception of femora, abdomen not cordate 6
- 6. Fused terga I and II separated from metanotum by a distinct suture 7
- Terga I and II more or less fused with metanotum forming a continuous plate, at least medially 8
- 7. Antennal segment I shorter than head; pro-, meso- and metanotum with lateral processes; sternum VII in males without a pair of glabrous tubercles. (Brasil) *Glyptocoris* Harris & Drake, 1944
- Antennal segment I as long as head; pro-, meso- and metanotum convex laterally, but without processes; sternum VII in males with a pair of glabrous tubercles. (Surinam) *Apterocoris* n.g.
- 8. Connexiva II and III separated by a distinct suture 9
- Connexiva II and III completely fused 11
- 9. Thoracic segments completely fused, with a single median longitudinal elevation extending from pronotum to central dorsal plate. (Panama) *Peggycoris* Drake, 1956
- Pronotum separated from mesonotum by a distinct, transverse suture 10
- 10. Antennal segments I to III with short, inconspicuous hairs; antennal segment I shorter than head. (Haiti, Jamaica)
- *Rhysocoris* Usinger & Matsuda, 1959
- Antennal segments I to III with stiff, erect bristles, almost as long as segment wide; antennal segment I longer than head. (Jamaica) *Atactocoris* Kormilev, 1964
- 11. Eyes usually briefly to distinctly stalked; body usually with short, stiff hairs, which are most conspicuous on appendages. Sternum VII in males with a pair of glabrous tubercles 12
- Eyes not stalked; body nearly naked; sternum VII in males without a pair of glabrous tubercles 13
- 12. Head strongly narrowed behind eyes. (West Indies)
- *Eretmocoris* Harris & Drake, 1944

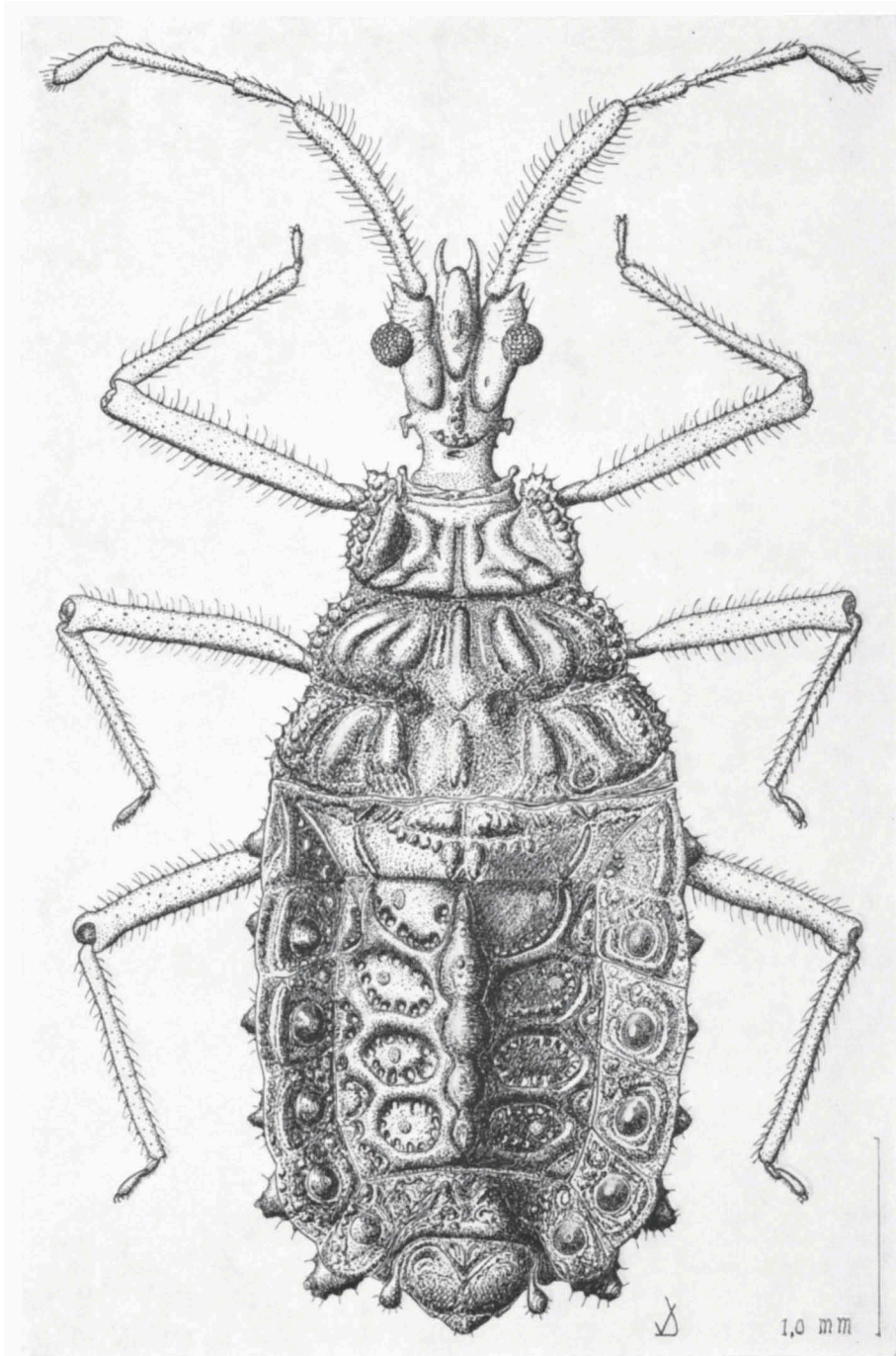
- Head with a prominent setigerous lobe behind eyes. (West Indies)
 *Aglaocoris* Drake & M. Capriles, 1955
13. Spiracles of anterior segments ventral; males with segment VII not
 produced posteriorly into rounded lobes. (SE USA)
 *Acaricoris* Harris & Drake, 1944
- Spiracles of all segments usually lateral; males with segment VII
 produced posteriorly into rounded lobes. (Central America and West
 Indies) *Kolpodaptera* Usinger & Matsuda, 1959
- Note. *Psorosoma forficulinum* Champion, 1898, known only from Panama
 (single ♀), was more recently found in Brasil, Goias, Jatai, also a single
 female (Collections of the American Museum of Natural History, New
 York, N.Y.).

ACKNOWLEDGEMENTS

The junior author is indebted to the Treub Maatschappij, Koninklijke Akademie van Wetenschappen, Amsterdam for a grant enabling him to visit Surinam. The company of Prof. L. H. Rolston, Baton Rouge, and Dr. R. D. Engleman, Coco Solo, during this visit is here most pleasingly acknowledged. He wishes also to express his appreciation and thanks to Dr. J. P. Schulz of the STINASU, Paramaribo, for his valuable help in organising several collecting trips.

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Apterocoris surinamensis n.g., n. sp., paratype ♂ (Museum Leiden).