TWO NEW SPECIES OF ARADIDAE FROM BRASIL (HEMIPTERA, HETEROPTERA)

By Nicholas A. KORMILEV and Ernst HEISS

During the last 30 years a number of known species of the Neotropical Aradidae has more than doubled, but still many areas, particularly the basin of Amazonas, are not sufficiently explored.

In February 1977, the junior author made a trip to South America, where he collected a certain amount of Aradidae, among which two species resulted to be new and are described in this paper.

All measurements were taken by micromillimeter eyepiece 25 units = 1 mm. In ratios the first figure represents the length and the second the width of measured portion. The length of abdomen, for convenience, was taken from the tip of scutellum to the tip of segment IX.

Subfamily MEZIRINAE Genus Notapictinus Usinger and Matsuda, 1959

Notapictinus testaceus n.sp.

Figs. 1 - 2

Female. Elongate ovate; head, pronotum and clavus granulate.

Head as long as its width across eyes (18:18); anterior process with parallel sides, enlarged posteriorly; genae thin, parallel, narrowly cleft, much longer than clypeus, reaching 2/3 of antennal segment I. Antenniferous tubercles with subparallel outer borders. Eyes protuding. Postocular tubercles subacute, reaching outer borders of eyes. Vertex raised and granulate. Antennae thin, almost twice as long as width of head across eyes (35:18); relative length of antennal segments I to IV are: 9:6:12:8. Labium reaching hind border of labial groove, which is closed posteriorly.

Pronotum trapezoidal, half as long as its maximum width (20:41). Collar granulate, truncate anteriorly; anterolateral angles slightly expanded, rounded and produced forward slightly beyond collar. Lateral borders subparallel, slightly rounded at humeri, converging anteriorly; lateral notch barely noticeable. Hind border twice shallowly sinuate. Fore disc with 2(1+1) semiobliterated callouses and median depression between them; 2(1+1) semiobliterated, curved ridges laterad of them. Hind disc granulate.

Scutellum shorter than its basal width (15:22); lateral borders carinate, tip not carinate. Disc with cross-shaped median ridge, transversely rugose laterad of it.

Hemelytra nearly reaching hind border of tergum VII, corium reaching 1/2 of connexivum III; its basolateral border reflexed, apical angle acute, apical border twice sinuate.

Abdomen ovate, longer than its maximum width across segment IV (65:51); connexiva II and III semifused together; posteroexterior angles II to IV not protruding, V slightly protruding, VI more protruding, VII slightly expanded and rounded. Paratergites triangular, blunt at tips, reaching 1/2 of tricuspidate segment IX. Spiracles II to V ventral, VI to VIII lateral and visible from above.

Color: uniformly testaceous; membrane light brown, transparent.

Total length 4.80 mm; width of pronotum 1.64 mm; width of abdomen 2.04 mm.

Holotype 9, Brasil, Rio de Janeiro, Corcovado, 17.II.77, leg. et coll. Heiss.

Notapictinus testaceus n.sp. is related to N. derivatus KORMILEV, 1959, also from Brasil, but may be separated from it by head as long as its width across eyes, antennal segment I one half longer than II, and III twice as long as II.

Genus Mezira Amyot et Serville, 1843

Mezira oblonga n.sp.
Figs. 3-4

Female. Elongate ovate; head, pronotum, scutellum, corium and connexivum, covered with setigerous granulation, setae very short, golden and curled.

Head shorter than its width across eyes (20:22). Anterior process constricted laterally, rounded and incised apically, reaching almost to tip of antennal segment I. Antenniferous tubercles acute, diverging. Eyes strongly protruding. Postocular tubercles acute, reaching outer border of eyes; vertex raised and granulate. Antennae 1.5 × as long as width of head across eyes (33.5:22); relative length of antennal segments I to IV are: 9:5.5:12:7. Labium not reaching base of head.

Pronotum trapezoidal, 1/2 as long as its maximum width (22:43); collar sinuate anteriorly, granulate; anterolateral angles moderately expanded and rounded, produced forward as far as collar. Lateral borders of hind lobe subparallel, slightly rounded, converging anteriorly; lateral notch shallow; hind border evenly sinuate. Fore disc with 4 (2+2) moderately high ridges; hind disc with dispersed granulation.

Scutellum shorter than its basal width (21:24); lateral borders carinate on basal half, sinuate in the middle and rounded on apical-half; tip rounded. Median ridge cross-shaped, moderately high; disc granulate laterad of it.

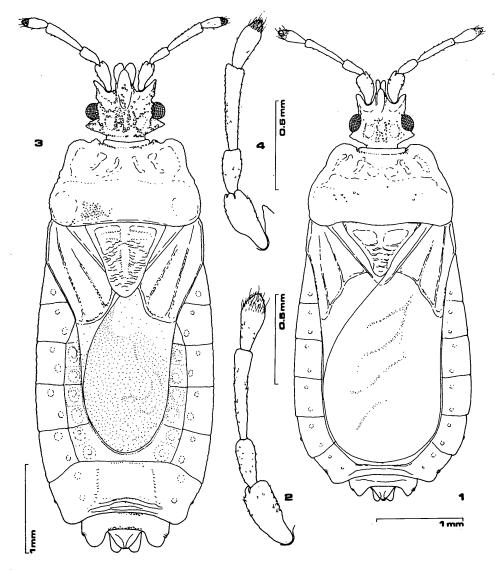
Hemelytra not reaching hind border of tergum VI; basolateral border of corium straight and carinate; apical angle rounded, apical border also rounded.

Abdomen elongate ovate, longer than its maximum width across segment IV (71:51); lateral borders evenly rounded and finely crenulate; posteroexterior angles of connexiva II to VI not protruding, VII forming small rounded lobes. Tergum VII raised and depressed in the middle; tergum VIII is distinctly wider than head across eyes (25:22). Paratergites large, rounded, reaching 3/4 of a deeply incised segment IX. Spiracles II to V ventral, progressively nearing to margin, VI and VII sublateral, the latter slightly visible from above; VIII lateral.

Legs unarmed, granulate.

Color: testaceous; membrane infuscate, whitish at base.

Total length 5.48 mm; width of pronotum 1.72 mm; width of abdomen 2.04 mm.



Figs. 1 + 2: Notapictinus testaceus n.sp.; 1: Holotype 9; 2: right antenna. Figs. 3 + 4: Mezira oblonga n.sp.; 3: Holotype 9; 4: right antenna.

Holotype 9, Brasil, Rio de Janeiro, Tijuca-forest, 17. II. 77, leg. et coll. Heiss.

Mezira oblonga n.sp. is related to M.angustata (CHAMPION, 1898), but anterior process of head is longer, almost reaching tip of antennal segment I; antennal segment IV is distinctly longer than II (7:5.5); pronotum less constricted laterally; spiracles VI and VII sublateral and the latter slightly visible from above; membrane not reaching segment VII and without whitish base; lateral borders of tergal plate not raised, the latter visible between connexiva and membrane.

Summary

Allthough the number of known species of Aradidae in the neotropical region has doubled in the past 30 years, some areas are still not sufficiently explored. Among the material collected by the junior author in Brasil were two new species, which are described as *Notapictinus testaceus* n.sp. and *Mezira oblonga* n.sp.

Zusammenfassung

In den letzten 30 Jahren hat sich die Anzahl der bekanntgewordenen Aradidae der neotropischen Region mehr als verdoppelt. Trotzdem bleiben weiterhin einige Gebiete noch ungenügend erforscht. Die anläßlich einer Studienreise des Zweitautors nach Südamerika gesammelten Aradidae enthielten zwei bisher unbekannte Arten, welche als Notapictinus testaceus n.sp. und Mezira oblonga n.sp. beschrieben werden.

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