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# NEOTROPICAL MIRIDAE, CCXI: ANTENNOMIRIS BRASILIENSIS, AN UNUSUAL NEW GENUS AND SPECIES FROM BRAZIL (ORTHOTYLINI, HEMIPTERA)<sup>1</sup>

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(With 5 text-figures)

This paper is concerned with a new unusual orthotyline genus and species which was included in material collected by Mr. Fritz Plaumann. The illustrations were prepared by Mr. Paulo Wallerstein.

### Antennomiris n. gen.

Orthotylinae, Orthotylini. Characterized by the greatly incrassate first antennal segment which is longer than the second segment and grooved longitudinally along inner and outer margins; by the slightly declivous head in which the frons projects noticeably in front of the antennal sockets; by the presence of both flattened scale-like hairs and regular hairs; and by its smooth pronotum and hemelytra.

Head smooth, somewhat declivous, vestiture consisting of erect and semierect hairs interspersed with a few scattered decumbent flattened scalelike hairs near eyes; eyes located at posterior margin of head, almost touching pronotum, ventral margin not reaching gula, inner margin slightly emarginate and contiguous with antennal socket, scattered short hairs arising between facets; vertex rounded, distinctly margined posteriorly; frons broadly rounded, projecting anteriorly beyond point of antennal insertion especially as seen from above; clypeus prominent, compressed laterally forming median carina, weakly delimited from frons, recurved apically; jugum flattened; lorum normal; genal area reduced; buccula narrow; gula about as long as diameter of apex of first rostral segment; first antennal segment (fig. 2) greatly incrassate, with concave groove on lower outer margin and another along inner margin, both running almost length of segment, segment somewhat triangular in cross section, diameter greater than that of eye, longer than head width or length, most hairs semierect, short, fairly dense, second antennal segment cylindrical, shorter than first, segments III and IV shorter than II, vestiture of 3 apical segments decumbent to semierect; rostrum not surpassing apices of midcoxae.

Pronotum more or less triangular, somewhat declivous, smooth, vestiture consisting of semierect hairs and scattered small patches of flattened scalelike hairs; region of calli not delimited; disk rounded laterally; lateral margins rounded, posterior margin straight, posterior corners rounded. Mesoscutum narrowly exposed. Scutellum only slightly convex, vestiture as on pronotum. Hemelytra smooth, turned downward along costal margin; embolium narrow, not delimited apically; vestiture consisting of both types of hairs with small patches of scale-like hairs concentrated about midway along claval suture; cuneus longer than wide, deflected downward and with outer portion turned slightly forward, both types of vestiture present, cuneal fracture prominent. Pleural region of thorax and lateral areas of underside of abdomen

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with both types of vestiture, midventral area of abdomen with only semierect hairs. Tibiae with short decumbent hairs and several rows of semierect hairs with lengths not exceeding diameter of tibia; claws thickened basally; pseudarolia conspicuous, converging at apices.

## Type species: Antennomiris brasiliensis n. sp.

The enlarged first antennal segment is the most striking feature of this insect. Its incrassate condition with concave sides combined with the relative length of the segment make it unlike any other member of the subfamily Orthotylinae known from the Western Hemisphere. The antennae cause it to superficially resemble the genera *Neurocolpus* and *Lampethusa* of the subfamily Mirinae.

In many respects the genus resembles Excentricus which occurs in the same geographical area. The first antennal segment of Excentricus is distinctly incrassate but short whereas the second antennal segment is incrassate, grooved and clearly the longest of the four segments whereas in Antennomiris the first antennal segment is the longest and largest segment and the second antennal segment is not incrassate. Antennomiris can also be readily separated from Excentricus by the presence of the prominent scale-like hairs which Excentricus lacks and by the broader body shape which includes having a much more triangular shaped pronotum than Excentricus. Both have heads which are similar in shape and the clypeus of each tends to be at least somewhat compressed laterally. Both forms have the same body color, have a more or less flattened pronotum on which the area of the calli is not delimited. Also in both the mesoscutum is exposed and the outer margins of the wings are turned downward.

### Antennomiris brasiliensis n. sp.

Characterized by its color, dimensions and structure of the male genitalia.

*Male* (measurements of holotype given first followed by those of paratype): Length, 4.40 and 4.14 mm; width, 1.90 and 1.88 mm. Head length, 0.54 and 0.52 mm; width through eyes, 0.82 and 0.84 mm; vertex width, 0.38 and 0.40 mm. Length of antennal segment I, 1.02 and 0.98 mm; II, 0.82 and 0.86 mm; III, 0.56 and 0.58 mm; IV, 0.42 and 0.48 mm. Pronotal length, 0.74 and 0.72 mm;

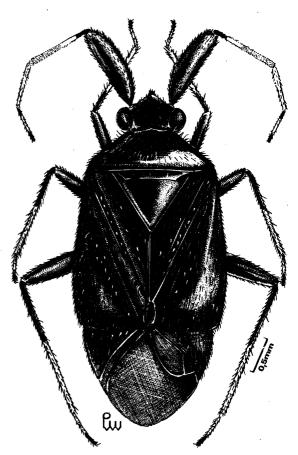
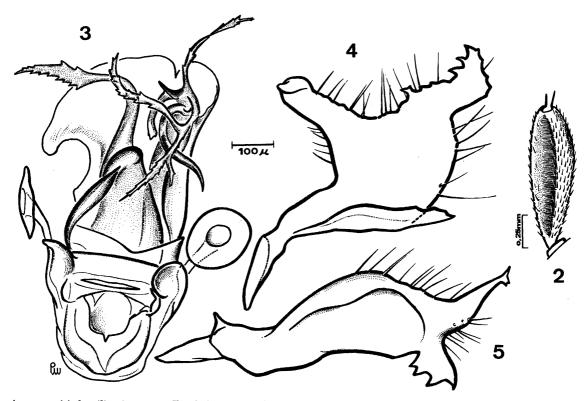


Fig. 1 – Antennomiris brasiliensis n. sp., male holotype.

width, 1.36 and 1.48 mm. Cuneal length, 0.70 and 0.74 mm; width, 0.62 and 0.58 mm.

General coloration dark fuscous to almost black with light areas on antennae, rostrum and legs. Head dark fuscous to black with region of jugum reddish fuscous, ventral margin of buccula pale; antennal segment I uniformly dark fuscous to black; segment II dark fuscous or black at base, abruptly becoming light yellowish brown, apical half brown, segment III uniformly light brown, segment IV brown; rostrum pale, almost white, apex dark fuscous. Remainder of body dark fuscous to black with extreme base of wings reddish. Coxae, trochanters and femora dark fuscous to black; basal 1/3 to 2/5 of tibiae dark fuscous to black, remainder pale; basal two tarsal segments pale, third dark fuscous apically. Erect and semierect hairs dark fuscous to black, flattened hairs appearing golden under reflected light.

Morphological characters as given for genus. Genitalia: penis (fig. 3) with a conspicuously branched vesica, as seen in illustration. Left



Antennomiris brasiliensis n. sp. - Fig. 2: Segment I of antenna; fig. 3: penis; fig. 4: left paramere; fig. 5: right paramere.

paramere (fig. 4) with sclerotized teeth apically. Right paramere (fig. 5) characteristic, branched at distal extremity, as seen in figure.

*Female* (allotype): Length, 4.60 mm (estimate, membrane of wing damaged); width, 2.26 mm. Head length, 0.64 mm; width through eyes, 0.86 mm; vertex width, 0.46 mm. Length of antennal segment I, 1.10 mm; II, 0,86 mm; III, 0.62 mm; IV, 0.48 mm. Pronotal length, 0.78 mm; width, 1.48 mm. Cuneal length, 0.84 mm; width, 0.70 mm.

Similar to male in color and structure.

Holotype: male, Brazil: Nova Teutonia, Santa Catarian, 27° 11'N, 52° 23'W, Nov., 1974, Fritz Plaumann. Deposited in the J. C. M. Carvalho collection, Rio de Janeiro, Brazil. *Allotype*: female, same data as holotype. Deposited in the J. C. M. Carvalho collection. *Paratype*: male, deposited in the J. C. Schaffner collection, College Station, Texas, U.S.A.

## **SUMMARY**

The genus Antennomiris and the species brasiliensis from Santa Catarina, Brazil are described as new. Illustrations of the holotype are included.