

THREE NEW GENERA AND SPECIES OF MIRIDAE FROM MALAYSIA AND COSTA RICA (HEMIPTERA)¹

JOSÉ C.M. CARVALHO*

Museu Nacional, Rio de Janeiro

(With 6 text figures)

Studying some miscellaneous mirids in the author's collection, three new genera and species of exotic mirids were found and are herewith described.

The illustrations of the text were prepared by Luiz Antonio Alves Costa and Paulo Roberto Nascimento under the author's supervision.

Muirmiris n. gen.

Dicyphinae. Body elongate, slender, approximately four times as long as wide, sides parallel, smooth, covered with decumbent and erect hairs.

Head twice as wide as long, with a distinct neck, vertex noticeably narrow, smooth, eyes strongly granulose, situated far in front of head, frons, clypeus, jugum, lorum, gena and buccula without special features, portion of head in front of eyes narrowed towards apex, about as long as neck; antenna with segment I cylindrical, about as long as width of head, remaining segments mutilate; rostrum reaching the hind coxae.

Pronotum with a distinct collar, calli fused and large, foveate at middle, reaching lateral margin, lateral margins broadly rounded, hind

margin noticeable emarginate; mesoscutum large and widely exposed; scutellum flat, elongate.

Hemelytra translucent, nervures obsolete, embolium a little narrower than first antennal segment, with long hairs on outer margin; membrane translucent, with a single cell, cuneus about twice as long as wide at base.

Underside of body with ostiolar peritreme presenting a median vertical ostiolus; legs long and slender.

Type species of genus: *Muirmiris borneensis* n.sp.

The genus differs from others in the subfamily by the morphology of head, inclusive the very narrow vertex.

Muirmiris borneensis n.sp.

(Fig. 1)

Characterized by the coloration of the body.

Female: Length 3.0 mm, width 0.8 mm. *Head*: Length 0.2 mm, width 0.4 mm, vertex 0.10 mm. *Antenna*: segment I, length 0.3 mm, remaining segments mutilate. *Pronotum*: Length 0.6 mm, width at base 0.6 mm. *Cuneus*: Length 0.56 mm, width at base 0.20 mm (holotype).

General coloration ochraceous mixed with brown; head, collar, pronotum (except longitudinal median pale vitta near hind margin of disc), brown; eyes reddish; antenna pale, mesoscutum brown with lateral angles and a median vitta pale;

¹ Accepted for publication March 4, 1982.

Distributed August 19, 1983.

* Research Fellow of the National Council for Development of Science and Technology (CNPq), Brasília.

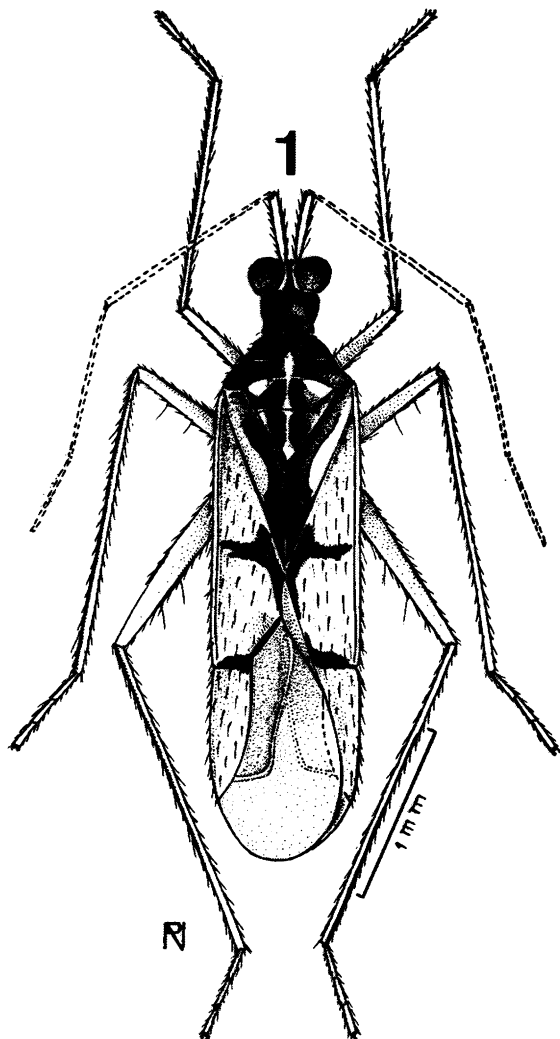


Fig. 1 — *Muirmiris borneensis* n. gen., n.sp., holotype.

scutellum brown with lateral margins, median longitudinal vita and apex pale.

Male: Unknown.

Holotype: Female, Mowong, W. BORNEO, F. Muir, Sept. 1907, in the collection of the British Museum of Natural History, London.

The trivial name is given in allusion to Borneo.

Harrisia n.gen.

Orthotylinae, Orthotylini. Body compact, opaque, somewhat shagreen, smooth, covered by decumbent hairs.

Head strongly pointed, horizontal, vertex smooth, not marginate, frons with a longitudinal superficial sulcus, clypeus visible from above, eyes prominent, slightly removed from pronotum; antenna characteristic, segment I noticeably incrassate to apex, somewhat compressed, segment II typical, flattened and widest at middle, narrowing to extremities, segments III-IV very slender, pubescence dense and bristle like; seen from side with sutures between parts obsolete; rostrum reaching the middle coxae, segment I of rostrum as long as buccula.

Pronotum strongly narrowed towards head, collar depressed, calli large, flat, sulcate at middle, lateral margins rounded, hind margin straight, humeral angles rounded; mesoscutum widely exposed, scutellum flat, small.

Hemelytra widest before cuneal fracture, pubescent, embolium widened towards apex, cuneus small, rounded externally, longer than wide at base, fracture deep; membrane biareolate.

Underside of body with distinct ostiolar peritreme, legs short and stout, parempodium of the Orthotylini type.

Type species of genus: *Harrisia brailovskyi* n.sp.

Differs from other genera by the characteristic antenna and length of head.

Harrisia brailovskyi n.sp.

(Fig. 2)

Characterized by its coloration and dimensions.

Female: Length 3.4 mm, width 1.4 mm. *Head*: Length 0.5 mm, width 0.6 mm, vertex 0.32 mm. *Antenna*: Segment I, length 0.3 mm; II, 0.6 mm; III, 0.3 mm; IV, 0.3 mm. *Pronotum*: Length 0.5 mm, width at base 1.0 mm. *Cuneus*: Length 0.40 mm, width at base 0.28 mm (holotype).

General coloration black, opaque; segment I of antenna with a narrow sub-basal ring or spot, segment II pale at distal end; scutellum pale apically; cuneus with an oblique basal pale spot; membrane fuscous.

Male: Unknown.

Holotype: Female, COSTA RICA, Puntarenas, Monteverde, 6 June-14 June, 1973, 1400-1700 meters, Erwin and Hevel Central American Expedition, in the collection of the author.

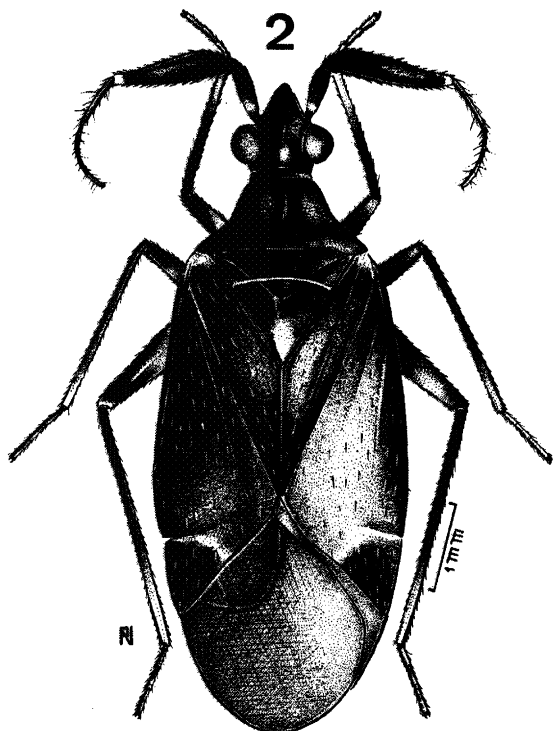


Fig. 2 — *Harrisia brailovskyi* n.gen., n.sp., holotype.

The generic and specific name is in homage to my colleague Harrys Brailovsky, hemipterist of the National University of Mexico in recognition for his work on the hemiptera.

Adfalconisca n.gen

Orthotylinae, Orthotylini. Characterized by the position of eyes on head and by the length of cuneus. Species of small size, body elongate, densely and deeply sulcate, with abundant pubescence, silvery when seen with incident light.

Head vertical, rounded in front, vertex emarginate, slightly carinate, eyes contiguous to pronotum; seen from side head fairly high, jugum long, lorum wide; rostrum reaching the middle coxae; antenna cylindrical, shortly pubescent.

Pronotum with hind portion prominent, inclined towards head, calli distinct, collar depressed, hind margin slightly emarginate, humeral angles rounded; mesoscutum covered by pronotum, scutellum small, rugose punctate.

Hemelytra punctate, densely pubescent, basal portion somewhat falling down to sides,

middle portion rounded, embolium very narrow, cuneus very small, fracture oblique, nervure with a small tooth on apical third; membrane very long with the small areola obsolete. Legs short, slender.

Type species of genus: *Adfalconisca javanica* n.sp.

This genus has the general fascies of *Falconiodes* Reuter, 1905 and *Bunsua* Carvalho, 1951, but differs by the position of eyes on head and by the length of the cuneus.

Adfalconisca javanica n.sp.

(Fig. 3)

Characterized by the color of the body and structure of the male genitalia.

Male: Length 2.8 mm, width 0.8 mm. *Head*: Length 0.6 mm, width 0.6 mm, vertex 0.24 mm. *Antenna*: Segment I, length 0.4 mm; II, 0.8 mm; III, 0.7 mm; IV, 0.1 mm. *Pronotum*: Length 0.5 mm, width at base 0.8 mm. *Cuneus*: Length 0.28 mm, width at base 0.08 mm (holotype).

General coloration black; antenna with basal portion of segment I pale, rostrum, femora

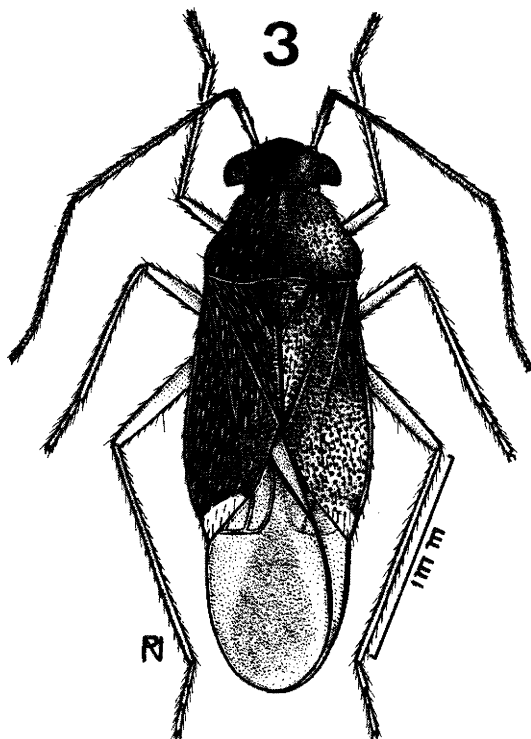
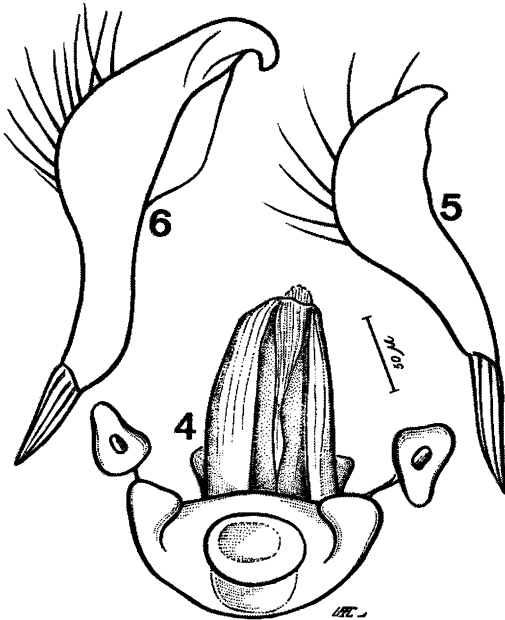


Fig. 3 — *Adfalconisca javanica* n.gen., n.sp., holotype.



Adfalconisca javanica n.sp.: Fig. 4 – Penis; Fig. 5 – Left paramere; Fig. 6 – Right paramere.

and tibiae pale yellow, membrane pale, fuscous at middle.

Morphological characteristics as given for genus.

Genitalia: Penis (Fig. 4) simple, basal plate large. Left paramere (Fig. 5) Curved, enlarged subapically. Right paramere (Fig. 6) curved apically, as seen in illustration.

Female: With general aspect, color and dimensions of male.

Holotype: Male, Java, Pakalongao, F. Muir, col., in the collection of the British Museum of Natural History, London. **Paratypes:** 2 males and 1 female same data as type and 1 male and 9 females, Singapore, Baker, 1926, in the above collection and author's collection.

This species has the general fascies of the *Falconia*-complex and some resemblance also with the Bryocorini.

The trivial name is given in allusion to the Island of Java where the species was collected.

SUMMARY

The present paper deals with three new genera and species of Miridae, Hemiptera, as follows: *Muirmiris* n. gen., *M. borneensis* n.sp., Mowong, W. Borneo; *Harrisia* n.gen., *H. brailovskyi* n.sp., Puntarenas, Costa Rica; *Adfalconisca* n.gen., *A. javanica* n.sp., Pakalongao, Java. Illustrations of the species are included.