

A NEW GENUS AND FOUR NEW SPECIES OF ON MIRIDAE FROM OCEANIA (HEMIPTERA)¹

JOSÉ C. M. CARVALHO*

National Museum, Rio de Janeiro

(With 15 text figures)

Studying specimens of Miridae (Hemiptera) from Oceania, mainly from Papua New Guinea and Australia, the author recognized a new genus and four new species which are described and figured in this paper. *Araspus bicolor* Distant, 1912, found to belong to genus *Imogen* Kirkaldy, 1905 is also redescribed and figured. Illustrations in the text were prepared by Luiz Antonio Alves Costa and Paulo Roberto Nascimento under author's supervision.

Imogen bicolor (Poppius, 1912) n. comb.

Araspus bicolor Poppius, 1912: 227

(Figs. 1 - 4)

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

Male: Length 6.6 mm, width 3.0 mm. *Head*: Length 0.3 mm, width 1.4 mm, vertex 0.84 mm. *Antenna*: Segment I, length 0.5 mm; II, 2.2 mm; III, 0.7 mm; IV, 0.6 mm. *Pronotum*: Length 1.4 mm, width at base 2.2 mm. *Cuneus*: Length 0.92 mm, width at base 0.80 mm (lectotype).

General coloration black metallic with reddish lutescent areas; head, pronotum and scutellum (except apical portion), basal portion of hemelytra until apical third of scutellum reddish lutescent. In some specimens the head has two black fasciae, jugum and paex of clypeus black, eyes and antenna

brownish to fuscous; extreme base of segment I reddish, segments I and II of rostrum black, membrane fuscous with apical portion pale.

Underside of body, esternal area coxae and femora reddish lutescent, abdomen metallic, hind tibiae infuscate apically, in some specimens the middle and hind femora have a median black fasciae, apical portion dark separated by a pale yellow ring, tibiae with subbasal and median black rings, abdomen with segments II-VII reddish.

Rostrum reaching apex of mesosternum, anterior portion of pronotum strongly narrowed, anterior portion with calli prominent, ocellate laterally, eyes prominent, slightly pedunculate, pronotum and scutellum smooth, clavus, endocorium and embolium coarsely punctate on basal portion, exocorium finely punctate, cuneal fracture deep and wide, segment II of antenna about four times as long as first, cylindrical, slightly incrassate towards apex, densely pilose, segment I shorter than width of vertex, segments III and IV about as long as first.

Genitalia: penis (Fig. 2) with membranous vesica, secondary gonopore distinct. Left paramere (Fig. 3) curved, pointed apically, with many dorsal setae. Right paramere (Fig. 4) simple, curved.

Female: Similar to male but with reddish color of hemelytra restricted to basal portion in level with mesoscutum.

Specimens studied: Male, Lectotype (10021), New Guinea, Ighibirei, Loria, VII-VIII, 1800, Museo Civico de Genova; Mus. Zool. H: fors,

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*National Research Council Fellow.

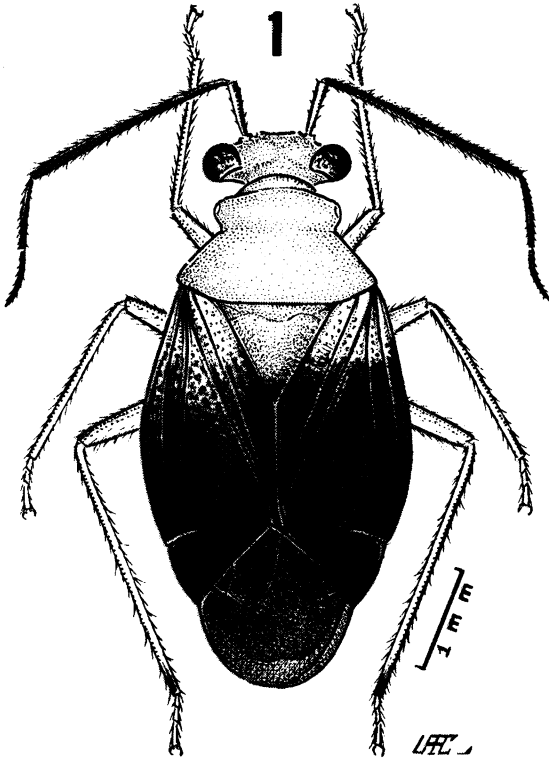
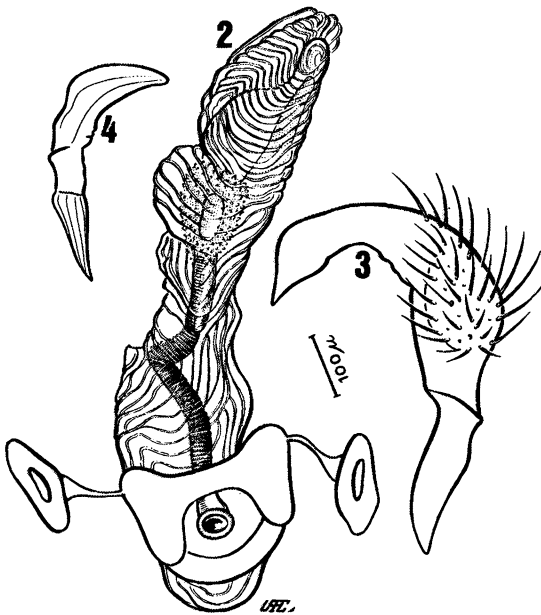


Fig. 1 - *Imogen bicolor* (Poppius), lectotype.



Imogen bicolor (Poppius): Fig. 2 - Penis; Fig. 3 - Left paramere; Fig. 4 - Right paramere.

Spec. Typ. n° 10021, 10023, 10024, 10022, Paralectotypes; 4 males, New Guinea, NE, Wau, 1200-1500 m, 30.VIII.1965, J. Sedlacek col.; New Guinea Papua, Owen Stanley Range, Goilala, Loloipa, XII. 21-31.1957, W. W. Brandt; 2 females, New Guinea, NE, Waris, s. of Hollandia, 450-500 m, VIII.1-7.1959, T. C. Maa; Madang District, Wanuma, 600-720 m, VIII.1968, N. L. H. Kraus.

This species was described by Poppius (1912) and included in the genus *Araspus* Distant, 1904. It differs from others by the color of the hemelytra and by the structure of male genitalia.

***Imogen fasciatus* n. sp.**

(Fig. 5)

Characterized by the transverse fascia of hemelytra.

Female: Length 5.8 mm, width 2.6 mm. *Head*: Length 0.3 mm, width 1.4 mm, vertex 0.72 mm. *Antenna*: Segment I, length 0.4 mm; II, 2.1 mm; III, 0.6 mm; IV, 0.6 mm. *Pronotum*: Length 1.2 mm, width at base 1.9 mm. *Cuneus*: length 0.72 mm, width at base 0.72 mm (holotype).

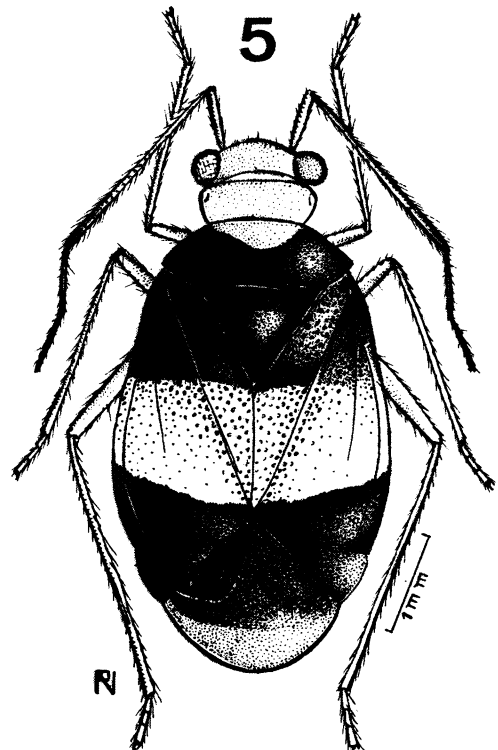


Fig. 5 *Imogen fasciatus* n. sp., holotype.

General coloration black metallic with reddish lutescent areas; head, anterior half of pronotum, a wide transversal fascia on corium (between apex of scutellum and apex of clavus) reddish lutescent, hind portion of pronotum, base (up to level of apex of scutellum) and apical portion (beyond apex of clavus) of corium black metallic, membrane fuscous at the intrareolar portion, pale beyond apex of cuneus.

Underside of body with apex of clypeus, base of rostrum, meso and metapleurae and coxae black, first coxae and legs lutescent, abdomen reddish lutescent.

Body glabrous, pronotum strongly constricted at middle, calli prominent, ocellate laterally, rostrum reaching the middle coxae, segment II of antenna incrassate on apical portion.

Male: unknown.

Holotype: female, Finschafen, NEW GUINEA, V.4.'44, E. S. Ross col., in the collection of the autor. *Paratypes*: 4 females: New Guinea, NE. E. Highlands, Purosa, 1700 m, 17-25. V.1966, Grssit & Tawi; Wau, Bulolo R. 850-950 m, 4.II.1966, J. Sedlacek; Papua, Owen Stanley Range, Goilala, Tapini, 975 m, XI.16-25.1957, W.W.Brandt; New Guinea Neth. Kulima, 1400 m, II.19-22.1960, T.C.Maa col., in the collection of the Bernice P. Bishop Museum and the author.

Differs from other species by the transverse fascia of the hemelytra.

Imogen papuensis n. sp.

(Fig. 6)

Characterized by its color and size.

Female: Length 6.4 mm, width 3.2 mm. *Head*: Length 0.6 mm, width 1.3 mm, vertex 0.72 mm. *Antenna*: Segment I, length 0.6 mm; II, 1.9 mm; III, 0.6 mm; IV; 0.6 mm. *Pronotum*: Length 1.4 mm, width at base 2.1 mm. *Cuneus*: Length 0.60 mm, width at base 0.60 mm (holotype).

General coloration black, shining, with lutescent areas; head and anterior half of pronotum lutescent, frons anteriorly, clypeus and spot on lorum black; antenna lutescent, apex of first segment, base and apical third of second segment fuscous to black, last two segments fuscous: eyes silvery (brown when alive?); membrane fuscous, apex pale.

Underside of body black, propleura superiorly, xyphus of prosternum and inferior side of head lutescent; abdomen black, reddish on apical third,

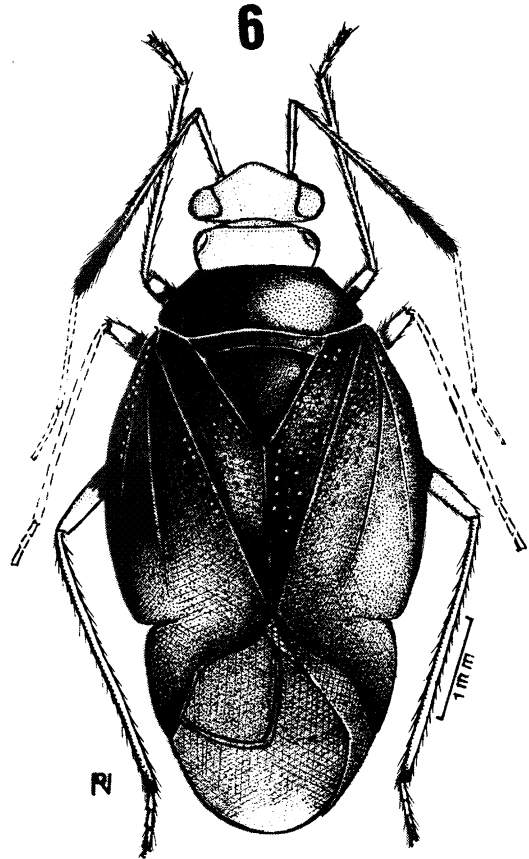


Fig. 6 - *Imogen papuensis* n. s., holotype.

coxae and basal half of femora black, apical portion and tibiae (except dark extreme end) and tarsi whitish.

Body glabrous, pronotum strongly constricted at anterior half, calli prominent, hemelytra noticeably rounded and punctate, membrane narrowed to apex, second antennal segment incrassate at apical portion, rostrum reaching middle coxae.

Male: Similar to female in color and size.

Holotype: Female, Mt. Lamington Distr., Northern Division, PAPUA, C. T. McNamara col., in the collection of the author. *Paratypes*: 3 males, Papua, Kokoda, Pitoki, 450 m, III.24.1956, J.L. Gressit; New Guinea NE, Wau, 1250m, 24.III.1966, J. Sedlacek; Garaina, 880 m, 13-15.I.1968, J. Sedlacek; 5 females, Garaina, Saureli, 9-1400 m, 5.I.1968, J. & M. Sedlacek; Busu River, 12 km, Sept.21, 1956, E. J. Ford; Kalalo, 750 m, 20-30.VIII.1966, O.R. Wilkes; Waris, s. of Hollandia, 450-500 m, VIII.1-18.1959, T.C. Maa, in the collections of the Bernice P. Bishop Museum and of the author.

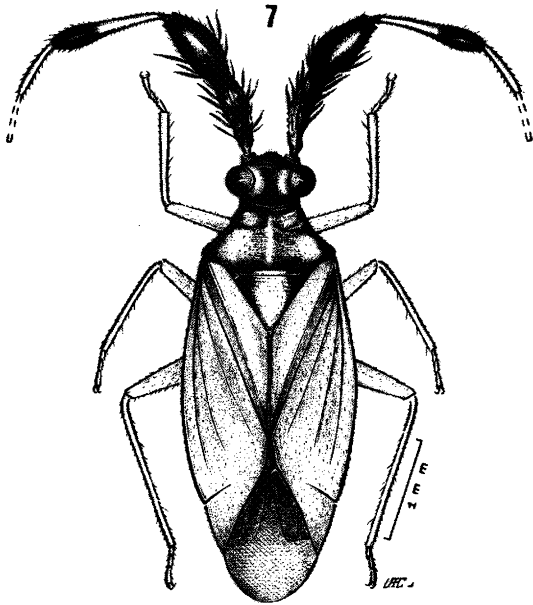


Fig. 7 - *Irianocoris australicus* n. sp., holotype.

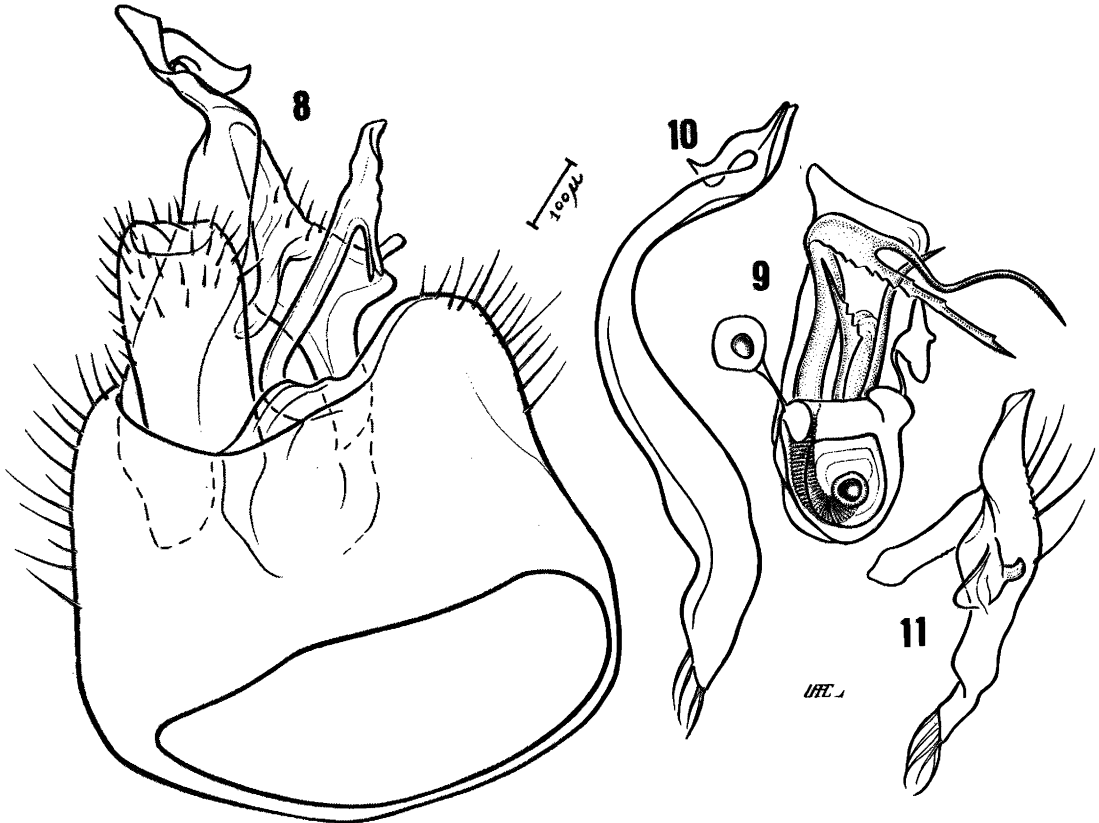
Differs from others known species by the color of the anterior half of the pronotum and color of femora.

***Irianocoris australicus* n. sp.**
(Figs. 7 - 11)

Characterized by the structure of the antennae and male genitalia.

Male: Length 4.0 mm, width 1.5 mm. *Head*: Length 0.4 mm, width 0.8 mm, vertex = .36 mm. *Antennae*: Segment I length 1.4 mm; II, 1.0 mm; III, 0.4 mm. *Pronotum*: Length 0.6 mm, width at base 1.1 mm. *Cuneus*: Length 0.40 mm, width at base 0.40 mm.

General coloration light brown mixed with red and pale yellow; head brown, sides of vertex paler, antennae brown to red, segment II at two basal third pale, segment III pale, hairs of segment I dark, eyes brown, clypeus reddish, rostrum pale (apex fuscous).



Irianocoris australicus n. sp.: Fig. 8 - pygophore; Fig. 9 - Penis; Fig. 10 - Left paramere; Fig. 11 - Right paramere.

Pronotum brown, paler at central portion of disc, with a pale longitudinal fascia and a light orange color one at each side, area of calli and lateral anterior portion darker; mesoscutum and scutellum brown tending to reddish, middle and apical portion pale.

Hemelytra pale yellow with orange or reddish shade, nervures and embolium pale, hairs silvery under incident light, membrane fuscous, nervures reddish.

Underside of body brown, mesoscutum darker, coxae and legs pale yellow.

Antenna characteristic (Fig. 7), segment I with dark and foliaceous hairs, vertex sulcate, frons striate, body smooth or slightly shagrine, scutellum slightly rugose, body pubescence very short.

Genitalia: pygophore (Fig. 8) followed by a short anal tube. Penis (Fig. 9) with multibranching vesica divided in four parts, two with toothed margins. Left paramere (Fig. 10) elongate, with a characteristic apex. Right paramere (Fig. 11) shorter, also complex, as shown in illustration.

Female: Similar to male in coloration, dimensions and general aspect.

Holotype: female (AUSTRALIA), Coen, N. Q. (Northern Queensland), 27.5.51, C. Oke, in the Australian National Insect Collection (ANIC), Division of Entomology, CSIRO, Canberra, Australia. *Paratypes*: 1 male and 1 female, British Museum of Natural History, Division of Insects, Hemiptera and author's collection; same data as type.

This species differs from *Irianocoris italae* Carvalho, 1971 from West Irian, by the structure of the antenna and male genitalia.

The specific name is allusive to the country of origin.

Linacoris n. gen.

Orthotylinae, Orthotylini. Body elongate, smooth, dense and shortly pilose.

Head vertical, frons prominent, rounded anteriorly, vertex smooth, moderately carinate, eyes of medium size, clypeus flat, jugum small, lorum large, somewhat prominent, gena long, rostrum reaching the apex of hind coxae; antenna cylindrical segment I thicker than others, with long and erect setae, segment II slender, with pubescence very short, segments III and IV very slender.

Pronotum trapezoidal, lateral margins straight, hind margin sinuate inwards, mesoscutum exposed, scutellum prominent.

Hemelytra with setose, semierect hairs, embolium distinct, cuneus as long as wide at base, membrane long, biareolate.

Legs long and slender, tibiae with numerous spines and hairs.

Types of genus: *Linacoris viridescens* n.sp.

This genus has the general fascies of *Orthotylus* Fieber, 1858 but differs by the relative length of segments II and III of antenna, by the type of vesica of penis, by the length of the rostrum and carena of vertex.

Linacoris viridescens n.sp.

(Figs. 12 - 15)

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

Male: Length 3,4 mm, width 1.3 mm. *Head*: Length 0.3 mm, width 0.8 mm, vertex 0.44 mm. *Antenna*: Segment I, length 0.3 mm; II, 0.9 mm; III, 0,8 mm; IV, 0,8 mm. *Pronotum*: Length 0.4 mm, width at base 1.0 mm. *Cuneus*: Length 0.44 mm, width at base 0.44 mm (holotype).

General coloration pale green tending to straw when dried: carena of vertex, clavo-emboliar and claval suture fuscous to black, cuneus slightly infuscate at middle on full grown specimens, tibial spines pale.

Morphological characters as for genus.

Genitalia: penis (Fig. 13) long, vesica with an elongate and slender spiculum. Left paramere (Fig. 14) with a large basal lobe, situated at the middle portion, main branch narrowed to apex. Right paramere (Fig. 15) small, enlarged apically, with pointed extremity.

Female: Similar to male in coloration, slightly more robust.

Holotype: Male, NEW GUINEA, SE, Western Distr., Oriomo R., 3 m, 4.VIII.1964, H. Clissold, in the collection of the Bernice P. Bishop Museum, Honolulu, Hawaii. *Paratypes*: 485 males and females New Guinea, SE, Ruka, 9 m, 12.VIII.1964, H. Clissold, lighth trap; New Guinea, Papua, Oriomo R. 13 m, 1.VIII.1964, H. Clissold; New Guinea, NE, Huon Peninsula, Finschafen, 10 m, 0-16.IV.1963, J. Sedlacek; Korop, Upper Jimmi R. 1300 m, VII.12.1955, J. L. Gressitt; NETH, Sarni, July, 20-30, 1959, T. C. Maa; NEW BRITAIN, Gazelle

Pen. Upper Warangoi, Illugi, 230 m, 25-26.XI.1962 J. Sedlacek; Volupai, Willamez Pen, 100 m, IV.16.1956, J. L. Gressitt; New Guinea, NE, Wau, 1200 m, 30.XII.1964, J. & M. Sedlacek; West Distr, Oriomo, 3 m, 6.VII.1964, H. Clissold, SE, Western Distr. Oriomo R. 3 m, 4.VIII.1964, H.

Karubaka, 1400-1600 m, XI.9.1958, J. L. Gressitt; NETH, Boden, 100 m, 11 km Se of Oerberfaren, July, 7-17, 1959, T. C. Maa; New Britain, Keravat, 30 m, V.29.1956, J. L. Gressitt. Linga Linga Pl'n, W of Willamez Pen. 1 m, IV.14.1956, J. L. Gressitt; Malmalwan Vunakanau, Gazelle Pen. V.5-12.1956, J. L. Gressitt; Gazelle Pen. Kurawat, 60 m, IX.10.1955, J. L. Gressitt; Gazelle Pen.

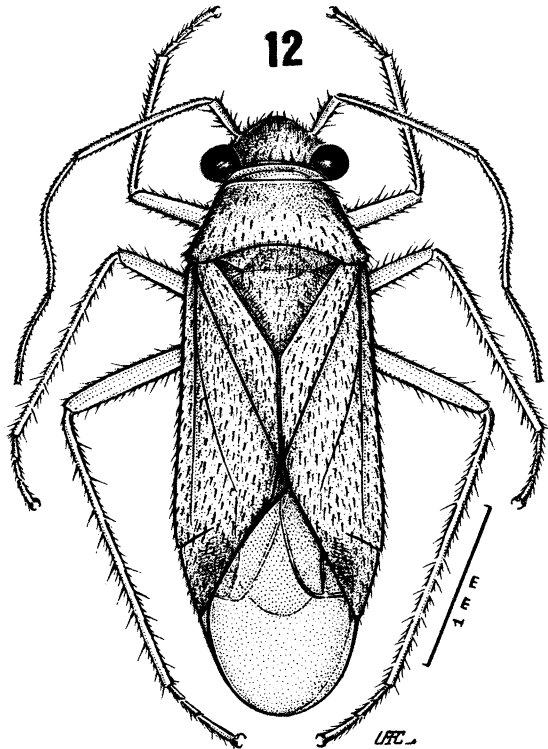
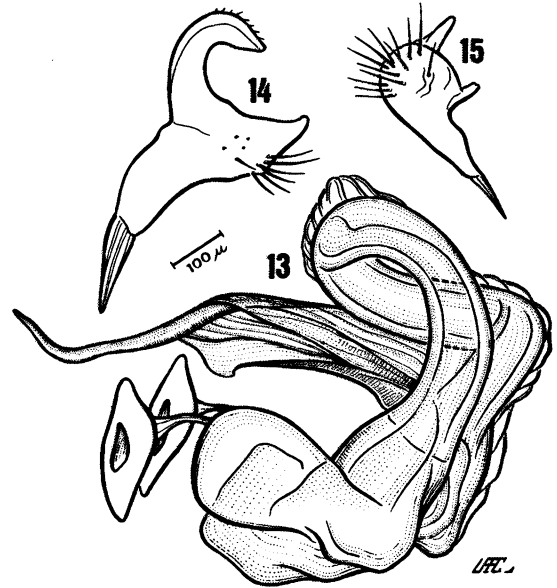


Fig. 12 - *Linacoris viridescens* n. sp., holotype.

Clissold; NW, Nabire, S. Gulvink Bay, 10.40 m, 26.X.1962, H. Holtman; NW, Japon I, SSE Sumberbaba, Dawai R. 30.X.1962, H. Holtman; SE, Kokoda, 400 m, 15-20.XI.1965, J. & M. Sedlacek; NE, Garaina, 800 m, 10.I.1968, J. & M. Sedlacek; NE, Wum, Upper Jimmi V, 840 m, VII.17.1955, J. L. Gressitt; NE, Tsenga, 1200 m, Upper Jimmi V. July, 13, 1955, J. L. Gressitt; NETH, Hollandia Area, W. Sertani, Cyclops Mts. 50-100 m, June 22-24, 1959, Gressitt & Maa; NE, Finisterre Range, Saidor, Gabumi Vill. VII-1-21, 1958, W. W. Brandt; NE, Torricelli Mts. Mobitei, 750 m, III.5-15, 1959, W. W. Brandt; NETH, River Tor (mouth), 4 km E of Hollandia, Maffen, VII.1.1959, T. C. Maa; NE, Swart Val.



Linacoris viridescens n. sp.: Fig. 13 - Penis; Fig. 14 - Left paramere; Fig. 15 - Right paramere.

Bainings, St. Pauls, 350 m, Sept. 6, 1955, J. L. Gressitt; Papua, Owan Stanley Range, Goilala, Tapini, 975 m, XI.6-25, 1957, W. W. Brandt, in the collections of the Bernice P. Bishop Museum, Honolulu, Hawaii; British Museum of Natural History, London; National Museum of Natural History, National Museum, Rio de Janeiro, and in the collection of the author.

SUMMARY

The present paper deals with genera and species of Miridae (Hemiptera) from Oceania, as follows: *Linacoris* n. gen., *L. viridescens* n. sp., Papua New Guinea; *Irianocoris australicus* n. sp., from Northern Australia; *Imogen fasciatus* n. sp. and *Imogen papuensis* n. sp. from Papua New Guinea. *Araspus bicolor* Poppius, 1912 is transferred to *Imogen* Kirkaldy. Illustrations of habitus and male genitalia are included.

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