NEW GENERA AND NEW SPECIES OF MIRIDAE FROM PAPUA NEW GUINEA(HEMIPTERA)

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(With 36 figures)

RESUMO

Novos Gêneros e Novas Espécies de Mirídios de Papua Nova Guiné (Hemiptera)

Este trabalho contêm descrições de novos mirídeos (Hemiptera) de Papua Nova Guiné como segue: Bomberia n. gen., B. foliacea n. gen.; Dimifacoris n. sp., D. fasciatus n. sp.; Jimia n. gen., J. bimaculata n. sp.; Kraussella n. gen., K. albomaculata n. sp.; Morobea n. gen., M. longipes n. sp.; Neoloxops n. gen., N. rubrosignatus n. sp.; Urapura n. gen., U. antennata n. sp.; Wauella n. gen., W. squamata n. sp., Wumea n. gen., W. clypealis n. sp.

Palavras-chave: Descrições novos mirídeos (Hemiptera) de Papua Nova Guiné, figuras.

ABSTRACT

This paper deals with descriptions of Miridae (Hemiptera) from Papua New Guinea as follows:

Bomberia n. gen., B. foliacea n. sp; Dimifacoris n. gen., D. fasciatus n. sp.; Jimia n. gen., J. bimaculata n. sp.; Kraussella n. gen., K. albomaculata n. sp.; Morobea n. gen., M. longipes n. sp.; Neoloxops n. gen., N. rubrosignatus n. sp.; Urapura n. gen., U. antennata n. sp.; Wauella n. gen., W. squamata n. sp.; Wumea n. gen., W. clypealis n. sp.

Illustrations of habitus and male genitalia are included.

Key-words: Descriptions new Miridae (Hemiptera) Papua New Guinea, figures.

INTRODUCTION

This paper deals with new genera and new species of Mirinae, Orthotylinae, Orthotylini, based on collections assembled by the Bernice P. Bishop

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Museum, Honolulu, Hawaii, where the holotypes are to be found.

Illustrations were made by Paulo Roberto Nascimento and Lilia Maria Gomide da Silva, under the author's supervision.

Descriptions are as follows:

Bomberia n. gen.

Orthotylinae, Orthotylini. Size small, body compact, inclined towards head and membrane, covered by long semierect or erect pubescence.

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Head short, wide, inclined, vertex smooth, convex, marginate and slightly carinate, eyes elongate, depressed, contiguous with pronotum, frons rounded, clypeus proeminent, side of head wide; rostrum reaching hind coxae; antenna with segment I cylindrical, incrassate towards apex, segment II foliaceus, widest at middle, with long, fine and erect hairs, segments III and IV lost.

Pronotum about twice as wide as long, calli obsolete, collar depressed, lateral margins carinate, hind margim widely rounded; mesoscutum exposed, scutellum wide, flat.

Hemelytra rounded posteriorly, falling off towards sides, clavus large, cuneus longer than wide at base, membrane biareolate.

Underside of body with ostiolar peritreme proeminent, legs of moderate size, hind femur incrassate.

Type species of genus: Bomberia foliacea n. sp.

Differs from others in the tribe by the distinctly foliaceus second antennal segment.

Bomberia foliacea n. sp. (Figs. 1-5)

Characterized by its size and coloration.

Male: Length 2.6 mm, width 1.3 mm. Head: Length 0.1 mm, width 0.8 mm, vertex 0.42 mm. Antenna: Segment I, length 0.4 mm; II, 1.3 mm, largest width 0.22 mm; segments III and IV lost. Pronotum: Length 0.4 mm, width at base 1.0 mm. Cuneus: Length 0.50 mm, width at base 0.40 mm (holotype).

General coloration brown; radial nervure reddish, exocorium, embolium and cuneus castaneous, membrane fuscous, nervure reddish apically; antenna with segment I pale, segment II castaneous to reddish, extreme apex pale, eyes castaneous.

Underside of body pale yellow.

Morphological characters as for genus.

Genitalia: Penis (Figs. 2, 3, 4) broken during dessication, as seen in figures. Left paramere (Fig. 5) complex, with four sclerotized branches. Right paramere (Fig. 6) small, simple, with several setae dorsally.

Female: Unknown.

Holotype: Male, NEW GUINEA, NETH. Vogelkop, Bomberi, 700-900 m, VI.16?58, J.L. Gressitt, in the collection of the Bernice P. Bishop Museum, Honolulu, Hawaii.

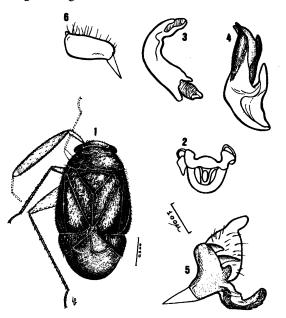
The specific name is allusive to the foliaceus second antenna segment.

Dimifacoris n. gen.

Orthotylinae, Orthotylini. Body noticeably

elongate, sides hemelytra with sides parallel, with adpressed pubescence, disc and scutellum smooth.

Head with vertex thickly carinate, frons somewhat pointed in front, eyes rounded, contiguous with pronotum, not reaching gula inferiorly, clypeus proeminent, rostrum reaching hind coxae, antenna cylindrical, slender, hairs shorther than thickness of segments, segment I about as long as width of head, segment II twice as long as I, segments III and IV mutilated.



Bomberia foliacea n. sp.: Fig. 1 – Male, holotype; Fig. 2 – Basal plate; Fig. 3 – Distal portion of seminal tube; Fig. 4 – Theca; Fig. 5 – Left paramere; Fig. 6 – Right paramere.

Pronotum with depressed calli, collar flat, levelled with surface of disc, lateral margins somewhat convex, hind margin broadly rounded, scutellum flat.

Hemelytra smooth, translucid, embolium narrow, cuneus about two and half times as long as wide at base, membrane long, biareolate.

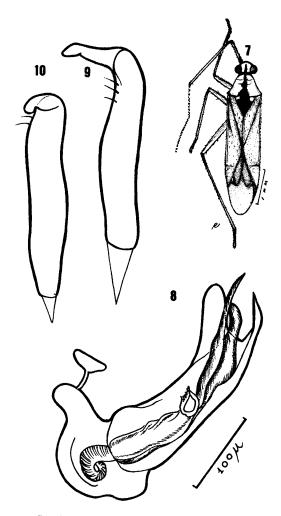
Underside of body with long as slender legs, ostiolar peritreme well marked, pygophore with a characteristic prong or spine inferiorly at distal portion.

. Type species of genus: Dimifacoris fasciatus n. sp.

With fascies of *Morobea* n. gen. but differs by the flat colli, long cuneus and by the prong of the pygophore.

Dimifacoris fasciatus (Figs. 7-10)

Characterized by its coloration and by the morphology of the male genitalia.



Dimifacoris fasciatus n. sp.: Fig. 7 – Male, holotype; Fig. 8 – Penis; Fig. 9 – Left paramere; Fig. 10 – Right paramere.

Male: Length 4.8 mm, width 1.2 mm. Head: Length 0.3 mm, width 0.6 mm, vertex 0.24 mm. Antenna: Segment I, length 0.6 mm; II, 3.2 mm; III and IV mutilated. Pronotum: Length 0.6 mm, width at base 1.0 mm. Cuneus: Length 0.80 mm, width at base 0.30 mm (holotype).

General coloration pale to straw with a longitudinal reddish fascia running from head to scutellum (widening towards scutellum which is almost totally covered by it); frons, eyes and sides of propleura brown.

Morphological characters as given for genus.

Genitalia: Penis (Fig. 8) with two sclerotized spiculi and membranous lobes. Left paramere (Fig. 9) elongate and curved apically, with short setae. Right paramere (Fig. 10) also elongate and curved apically, with short setae. *Female:* Similar to male in general aspect and coloration, vertex 0.30 mm, cuneus: Length 0.60 mm, width at base 0.30 mm.

Holotype: Male, NEW GUINEA, NE, Moife, 2.100 m, 15 km NW Okapa, Oct. 7-14, 1959, in the collection of the Bernice P. Bishop Museum, Honolulu, Hawaii. *Paratype:* Female, New Guinea, Net. S. Highlands, Dimifa, SE Mt. Giluwe, 2.200 m, X.10.1958, J.L. Gressitt; 2 males, same data as type, in the collections of the Bishop Museum and of the author.

The generic name is allusive to Dimifa a locality SE of Mount Giluwe and the specific name allusive to the longitudinal reddish fascia along head, pronotum and scutellum.

Jimia n. sp.

Orthotylinae, Orthotylini. Species of small size, body elongate oval, smooth, covered by pruinosity and long, fine and erect hairs.

Head vertical, wider than long, vertex marginate, frons depressed, rounded in front, eye large, contiguous with pronotum, occupying sides of head, seen from side larger on top, compressed inferiorly, not reaching gula below, clypes flat, jugum and lorum small; rostrum reaching the middle coxae; antenna cylindrical, with segment I thicker than II, incrassate subbasaly, segments II, III and IV slender, hairs about as long as thickness of segments. with depressed Pronotum collar, calli proeminent and fused at middle, with a transverse row of puctures behind, lateral margins convex at middle, hind margin broadely and humeral angles broadly rounded; mesoscutum broadly exposed, scutellum proeminent, with a row of punctures latarally.

Hemelytra very minute and finelly punctate, translucid, embolium wide, flat, cuneus longer than wide at base, membrane biareolate, areola long and narrow.

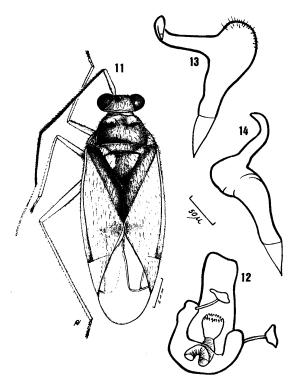
Underside of body with pleura showing a depression posteriorly, ostiolar peritreme well marked, legs slender, femora with long setae inferiorly, tibiae with spiny hairs and minute sclerotized tubercles, parempodia of the Orthotyline type.

Type species of genus: Jimia bimaculata n. sp.

This genus approaches *Neoloxops* n. gen. but differs from it by the long and erect pubescence, morphology of membrane cells and by the more extensive puncturation behind calli and at sides of scutellum.

The generic name is allusive to the Jimmi Valley where many species of mirids have been collected.

Jimia bimaculata n. sp. (Figs. 11-14)



Jimia bimaculata n. sp.: Fig. 11 – Male, holotype; Fig. 12 – Penis; Fig. 13 – Left paramere; Fig. 14 – Right paramere.

Characterized by the color of scutellum and by the morphology of male genitalia.

Male: Length 3.6 mm, width 1.2 mm. Head: Length 0.2 mm, width 0.7 mm, vertex 0.20 mm. Antenna: Segment I, length 0.4 mm; II, 1.3 mm; III, 0.8 mm; IV, 0.8 mm. Pronotum: Length 0.4 mm, width at base 1.0 mm. Cuneus: Length 0.50 mm, width at base 0.32 mm (holotype).

General coloration pale with brown to dark brown areas; head and antenna brown, segment I pale; pronotum (except pale area between calli), mesoscutum and scutellum brown (basal angles of the later with two characteristic pale spots); hemelytra pale, clavus and extreme outer margin of embolium brown, membrane fuscous.

Underside of body with esternal area and abdomen brown to dark brown, coxae and legs pale.

Morphological characters as mentioned for genus.

Genitalia: Penis (Fig. 12) as seen in figure, Orthotylini type. Left paramere (Fig. 13) larger, strongly globose at middle, with several dorsal setae. Right paramere (fig. 14) smaller, also globose at middle and curved apically.

Female: Unknown.

Holotype: Male, NEW GUINEA, NE, Tsenga, 1.200 m, Upper Jimmi Valley, July 13, 1955, J.L.

Gressitt, in the collection of the Bernice P. Bishop Museum, Honolulu, Hawaii.

The specific name is allusive to the two pale and characteristic spots on the scutellum.

Kraussella n. gen.

Orthotylinae, Orthotylini. Body elongate, hemelytra noticeable narrowed level with apical third of clavus, smooth, glabrous, brilliant.

Head vertical, wider than long, vertex thickly marginate, frons rounded in front, eyes compressed, contiguous with pronotum, reaching about middle of lateral side of head, clypeus flat, lorum proeminent, buccula large, occupying about half of segment I of rostrum, the later reaching hind coxae; antenna cylindrical, slender, segment I thickest subbasally, narrowed to extremities, pubescence shorter than thickness of segments.

Pronotum with proeminent calli fused at middle, reaching lateral sides and with a furrow behind, on lateral margins with a characteristic fossa, calli depressed, hind margin widely rounded, with a convexity at middle, scutellum long and proeminent, with a row of punctures laterally.

Hemelytra noticeably narrowed at middle, embolium narrow, cuneus longer than wide at base, somewhat rounded externally, membrane long, biareolate.

Underside of body brilliant, smooth, ostiolar peritreme shagrine, ostiolus small, abdomen with short hairs, legs long and slender, femora with setae inferiorly, tibiae with delicate spines and fine hairs.

Type species of genus: Kraussella albomaculata n. sp.

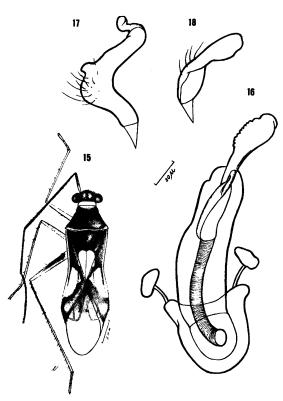
Aproaches *Morobea* n. gen. and Giluwea n. gen. but differs by the glabrous, brilliant body: by the fossa on lateral side of calli; by the large buccula, reaching about middle of segment I of rostrum and by the hemelytra noticeably narrowed at middle.

> Kraussella albomaculata n. sp. (Figs. 15-18)

Characterized by its coloration and by the morphology of male genitalia.

Male: Length 3.6 mm, width 0.9 mm. *Head:* Length 0.2 mm, width 0.6 mm, vertex 0.32 mm. *Antenna:* Segment I, length 0.4 mm; II, 1.4 mm; III, 0.8 mm; IV, 0.8 mm. *Pronotum:* Length 0.6 mm, width at base 0.9 mm. *Cuneus:* Length 0.60 mm, width at base 0.26 mm (holotype).

General coloration black, brilliant, with whitish areas; head black, two oblique spots on frons, lorum and anterior half of buccula whitish (posterior half black), eyes brown; antenna black, segment I fuscous to pale, rostrum pale.



Kraussella albomaculata n. sp.: Fig. 15 – Male, holotype; Fig. 16 – Penis: Fig. 17 – Left paramere; Fig. 18 – Right paramere.

Pronotum black, collar, anterior portion and area between calli, hind margin of disc pale; scutellum black.

Hemelytra black with a large triangular spot on clavus and two others on outer apical portion of corium whitish, translucid, cuneus black with pale middle portion, membrane with areolar area dark, extrareolar portion fuscous.

Underside of body black, brilliant, a spot on abdomen (inferiorly), coxae and legs pale, hind femur dark at middle, hind tibiae fuscous to black.

Morphological characters as given for genus.

Genitalia: Penis (Fig. 16) with membranous lobes and a large spicular formation beyond the secondary gonopore. Left paramere (Fig. 17) noticeable curved, with a pronglike formation dorsally and several long setae. Right paramere (Fig. 18) weakly sclerotized, slender and with dorsal setae.

Female: Similar to male in general aspect, with paler segment I of antenna, cuneus and abdomen.

Holotype: Male, NEW GUINEA, NE, Wau, 1.200-1.500 m, VII.1968, W.L.H. Krauss, in the collection of the Bernice P. Bishop Museum, Honolulu, Hawaii. Paratypes: Female, Wau, Kunai Ck, 1.200-1.250 m, 15.V.1965, J. Sedlacck; 3 males, Swart Valley Karubaka, 1.500 m, XI.20.1958; 1.450 m, XI.7.1958; 1.300 m, XI.12.1958, J.L. Gressitt; male, Wau, Nani Ck, 1.700 m, 2.VIII.'65, J. Sedlacek; male, New Guinea, Neth, Vogelkop, Pak Pak, S costa Bomberi, 10-100 m, VI.3.1959, T.C. Maa; NEW BRITAIN, Vunabakan, 180 m, 10 km Kemvat, Nov. 16-20, 1959, T.C. Maa, in the collection of the Bishop Museum and of the author.

The specific name is allusive to the whitish spots of the hemelytra.

Morobea n. gen.

Orthotylinae, Orthotylini. Body parallel, very long, covered by short, erect and sparse pubescence, legs and antenna long and slender.

Head sulcate longitudinally on vertex, hind margin carinate, a short neck may be present (when not stretched eyes contiguous with pronotum), frons rounded, clypeus proeminent, rounded above, side of head (jugum, lorum and gena) normal, gula long; antenna very long, segment I three times shorter than II which is about twice as long as III, pubescence short, cylindrical, segment I slightly incrassate towards base; rostrum long, reaching slightly beyond hind coxae, segment I reaching about base of coxae I.

Pronotum punctate, narrowed at middle, calli very large occupying approximately the anterior half of pronotum, collar wide and flat, hind margin slightly convex at middle, scutellum long, flat.

Hemelytra slightly rugouse, claval nervure proeminent, embolium narrow, cuneus about three times as long as wide at base, membrane translucid, areolae long and narrow.

Underside of body with distint ostiolus, coxae short, legs long and slender, pygophore large, about as long as one third of abdomen.

Type species of genus: Morobea longipes n. sp.

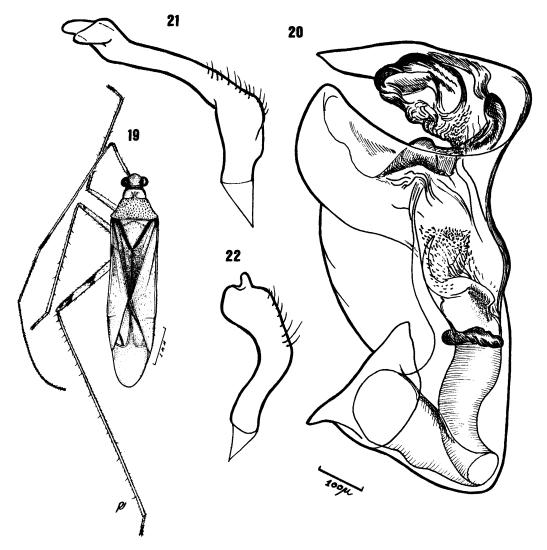
Differs from other genera of Orthotylini by the long body, slender legs and antenna, shallowly punctate pronotum. Its name is allusive to the District of Morobe where many species of Miridae have been collected.

Morobea longipes (Figs. 19-22)

Characterized by its coloration and morphology of the male genitalia.

Male: Length 5.8 mm, width 1.2 mm. Head: Length 0.4 mm, width 0.8 mm, vertex 0.36 mm. Antenna: Segment I, length 0.9 mm; II, 3.0 mm; III, 1.8 mm; IV, 1.7 mm. Pronotum: Length 0.9 mm, width at base 1.1 mm. Cuneus: Length 0.90 mm, width at base 0.36 mm (holotype).

General coloration pale or straw with pronotum, scutellum and exocorium somewhat



Morobea longipes n. sp.: Fig. 19 - Male, holotype; Fig. 20 - Penis; Fig. 21 - Left paramere; Fig. 22 - Right paramere.

greenissh; neck, base of hemelytra, inner margin of clavus, apex, margins of cuneus and paracuneus reddish, membrane fuscous, base of antenna III whitish, base of rostrum and jugum also reddish.

Morphological characters as given for genus.

Genitalia: Penis (Fig. 20) with a peculiar structure, as seen in illustration, seminal tube with a characteristic ring, large. Left paramere (Fig. 21) long, slender, branched apically. Right paramere (Fig. 22) also elongate, curved, widest near apex, ended by a point.

Female: Unknown.

Holotype: Male, NEW GUINEA, NE, Morobe District, nr, Kaindi, 2.350 m, 9.XI.1979, W.C. Gagné, in the collection of the Bernice P. Bishop Museum, Honolulu, Hawaii. The specific name is allusive to its long and slender legs.

Neoloxops n. gen.

Orthotylinae. Orthotylini. Body elongate oval, smooth, with long, fine and erect hairs (more noticeably on head).

Head vertical, shorter than wide, vertex marginate, frons rounded in front, together with vertex sulcate longitudinally, eyes very large, contiguous with pronotum, compressed, wide above and narrowing to gula, frontal area head small; rostrum reaching middle coxae; antennal with segment I short and thick, segment two long and more slender, segments III and IV slender than II, both covered by short hairs (except segment I which has longer hairs but even so shorter than width of segment).

Pronotum wider than long, collar depressed, calli small, oblique, with a row of punctures behind, hind margin convex in all extension of mesoscutum (which is widely exposed), lateral margins thickly carinate, humeral angles rounded; scutellum short and proeminent.

Hemelytra with embolium thick at external margin, cuneus about as long as wide at base, membrane biareolate.

Underside of body with weill marked ostiolar peritreme, legs slender, femora and tibiae with short hairs.

Type species of genus: *Neoloxops* rubrosignatus n. sp.

The genus has the general fascies of *Pseudoloxops* Kirkaldy, 1905 but differs by the short hairs of tibiae; segment II of antenna with only short hairs; head short and rounded in front; hairs of body shorter and fine. In *Pseudoloxops* Kirkaldy the head is somewhat protruding between the basis of the antennae, which has many erect bristles and some erect setae; segment I of antenna has also erect bristles and segment II has common hairs and a few erect setae at base; hind tibiae with very long spines. It shows also similarity with *Aserymus* Distant, 1904 but differs by the erect pubescence of the body and by the very short head.

The generic name is allusive to its similarity with *Pseudoloxops* Kirkaldy.

Neoloxops rubrosignatus n. sp. (Figs. 23-25)

Characterized by the color of the hemelytra and by the morphology of the male genitalia.

Male: Length 3.0 mm, width 1.4 mm. Head: Length 0.2 mm, width 0.6 mm, vertex 0.16 mm. Antenna: Segment I, length 0.3 mm; II, 0.9 mm; III, 0.7 mm; IV, 0.7 mm. Pronotum: Length 0.3 mm, width at base 1.1 mm. Cuneus: Length 0.44 mm, width at base 0.24 mm (holotype).

General coloration reddish with pale yellow and light brown areas; head light brown to pale on vertex, eyes castaneous, clypeus and segment I of antenna reddish, segment II pale, fuscous towards apex, segments III and IV fuscous to dark brown, rostrum pale.

Pronotum reddish on disc, collar, small area behind calli and a median longitudinal fascia pale, surface of calli and humeral angles dark brown to black; mesoscutum brown, scutellum pale with two large median reddish to brown spots (one each side).

Hemelytra pale yellow, a basal transverse band, clavus (with a median light brown area), an apical transverse irregular band (roundish and with a median pale area on both sides of corial commissure), apex of cuneus and nervures of membrane reddish, the later fuscous.

Underside of body dark brown, coxae, ostiolar peritreme and legs pale yellow, hind femur reddish apically.

In some specimens pronotum is light brown, the spot on cuneus fuses at middle and the large spot level with corial commissure has narrow margin.

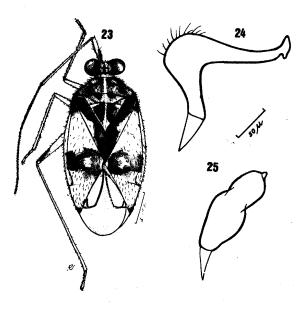
Morphological characters as given for genus.

Genitalia: Penis very small and delicate, lost during dessication. Left paramere (Fig. 24) characteristic, long and curved, with a dilated apex and dorsal setae. Right paramere (Fig. 25) smaller, somewhat narrowed at middle, with an apical point.

Female: Similar to male in general aspect and coloration.

Holotype: Male, NEW GUINEA, NE, Morobe District, Mt. Amingwiwa, 1.200-1.800 m, 10.IV.1970, J.L. Gressitt, in the collection of the Bernice P. Bishop Museum, Honolulu, Hawaii. *Paratypes:* female, NEW BRITAIN, Gazelle Pen. Mt. Sinewit, 900 m, 7-16.XI.1962, J. Sedlacek; 2 males, UMBOI ISLAND, 1 km N Awelkom, 600 m, 21-28.II.1967, C.A. Samueslson; SE, Koroba, 40 km W Tari, 1.650 m, 19.IX.1963, R. Straatman, in the collections of the Bishop Museum and of the author.

The specific name is after its peculiar reddish markings.



Neoloxops rubrosignatus n. sp.: Fig. 23 – Male, holotype; Fig. 24 – Left paramere; Fig. 25 – Right paramere.

Urapura n. gen.

Orthotylinae, Orthotylini. General fascies of *Pseudoloxops* Kirkaldy, 1905, body smooth, pubescence short and semiadpressed, size small.

Head semihorizontal, pointed in front, vertex smooth, hind margin straight, eyes elongate, contiguous with pronotum, clypeus flat, jugum, lorum, gena and gula very small; rostrum short, reaching slightly beyond apex of coxae I, segment I nor reaching xyphus of prosternum; antenna with segment I very short, thick, globose, segment II twice as long as first, also thick, cylindrical, narrowed at middle; segments III and IV very short, slender, pubescence short.

Pronotum flat, lateral margins somewhat carinate, calli flat, collar not visible from above, hind margin convex; mesoscutum largely exposed, scutellum flat.

Hemelytra with very narrow embolium, cuneus slightly longer than wide at base; membrane biareolate.

Underside of body with distinct ostiolar peritreme, femora III large, tibiae with pale spines.

Type species of genus: Urapura antennata n. sp.

Differs from *Pseudoloxops* Kirkaldy, 1905 by the morphology of the antenna and very small size.

Urapura antennata n. sp. (Fig. 26)

Characterized by its coloration.

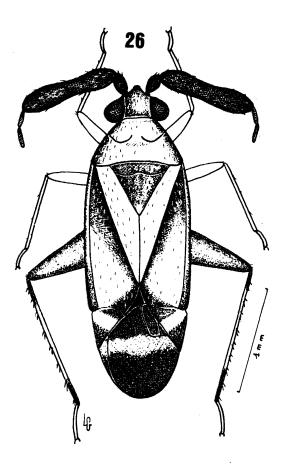
Female: Length 2.6 mm, width 0.9 mm. *Head:* Length 0.2 mm, width 0.5 mm, vertex 0.28 mm. *Antenna:* Segment I, length 0.14 mm; II, 0.8 (thickest portion 0.14) mm; III, 014 mm; IV, 0.14 mm. *Pronotum:* Length 0.4 mm, width at base 0.7 mm. *Cuncus:* Length 0.34 mm, width at base 0.24 mm (holotype).

General coloration pale yellow to lutescent with reddish and brown areas.

Head brown, margin of vertex pale, eyes castaneous, portion of head anterior to eyes reddish (except gula which is pale); antennal segment I and II brown at base, reddish apically, segments III and IV reddish; rostrum pale.

Pronotum lutescent at middle, reddish brown laterally, mesoscutum and scutellum brown.

Hemelytra pale lutescent on clavus and apical half of exocorium, endocorium narrowing towards apex, a small transverse fascia formed by paracuneus and corium, outer end of corium and embolium, apical half of cuneus reddish, embolium brown, a subbasal oblique pale fascia on cuneus, membrane fuscous with a transverse pale fascia level with apex of cuneus.



Urapura antennata n. sp.: Fig. 26 - Female, holotype.

Underside of body reddish, coxae, femora and tibiae I and II pale, femora III reddish brown, tibiae III with pale spines and reddish brown apically, tarsi pale.

Morphological characters as mentioned for genus.

Male: Unknown.

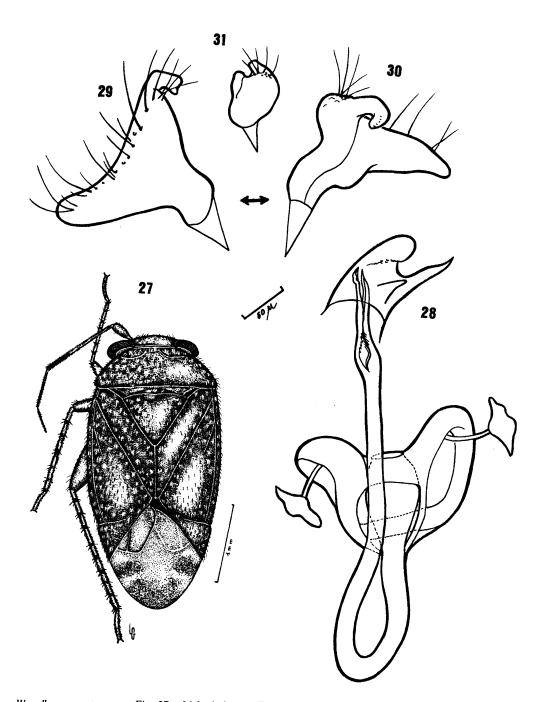
Holotype: Female, NEW GUINEA, Neth. Wisselmeren, 1.530 m, Urapura, Kamo Valley, Aug. 16, 1955, J.L. Gressitt, in the collection of the Bernice P. Bishop Museum, Honolulu, Hawaii.

The specific name is after Urapura where the specimen was collected.

Wauella n. gen.

Phylinae, Pilophorini. Body elongate, inclined towards head and cuneus, smooth, with normal black, short hairs and dense scale-like silvery pubescence.

Head vertical, pointed below, much wider than long, vertex convex, marginate, frons rounded in front, eyes strongly compressed, contiguous with



Wauella squamata n. sp.: Fig. 27 – Male, holotype; Fig. 28 – Penis; Figs. 29, 30 – Left paramere; Fig. 31 – Right paramere.

pronotum, reaching below approximately level of antennal peduncle, clypeus flat, gena with a group of long and fine setae; rostrum reaching middle coxae; antenna cylindrical, segment I thicker than others, very short, about three times shorter than width of

vertex, with three erect spine-like setae internally, segment II slender than I, almost five times longer, covered by very short pubescence, segments III and IV very slender.

Pronotum with depressed collar, calli flat with

same level as surface of isc, hind margin convex; mesoscutum widely exposed, scutellum short and flat.

Hemelytra with narrow embolium, cuneal fracture well marked, cuneus foliaceus (apex blunt), membrane translucid, biareolate, large areola rounded.

Underside of body with well ostiolar peritreme, two velvety, smooth areas (on mesosternum and metapleura), femmora with fine setae inferiorly, tibiae with spines and hairs.

Type species of genus: Wauella squamosa n. sp.

This genus according parempodium and male genitalia should be included in the tribe Pilophorini (convergent membranous parempodium). It is well characterized by the long setae on the gena and by its two types of pubescence.

Wauella squamata n. sp. (Figs. 27-31)

Characterized by its coloration and by the morphology of male genitalia.

Female: Length 3.4 mm, width 1.8 mm. *Head:* Length 0.2 mm, width 1.1 mm, vertex 0.60 mm. *Antenna:* Segment I, length 0.2 mm; II, 0.9 mm; III, 0.4 mm; IV, 0.3 mm. *Pronotum:* Length 0.4 mm, width at base 1.6 mm. *Cuneus:* Length 0.50 mm, width at base 0.34 mm (holotype).

General coloration brown to dark brown, with short black hairs and silvery scale-like ones; head reddish in front, surface of calli dark, exocorium darker than endocorium, cuneus reddish brown, membrane fuscous with two pale spots: contiguous to cuneus and at middle of outer margin.

Underside of body dark brown with silvery scales, velvety spots of mesosternum and metapleura darker, abdomen pale inferiorly reddish apically, hind femora with some pale small spots inferiorly, tibiae with black spines having dark spots at base, tarsi pale.

Morphological characters as given for genus.

Genitalia: Penis (Fig. 28) with large basal plate and long aedeagus, as seen in illustration. Left paramere (Figs. 29, 30) with two branches, typical of the Phylinae, with long dorsal setae. Right paramere (Fig. 31) very small, globose, with dorsal setae and pointed apex.

Female: Similar to male in general aspect and coloration, vertex 0.60 mm, cuneus: length 0.50 mm, width at base 0.34 mm.

Holotype: Male, NEW GUINEA, NE, Sepalakambang, Salawaket Range, 1.920 m, IX.12, '56, M. Sedlacek, in the collection of the Bernice P. Bishop Museum, Honolulu, Hawaii. Paratypes: males and females, New Guinea, NE, Wau, Morobe District, 1.200 m, 23-27, VII.1962, M. Sedlacek.

The specific name is allusive to the body covered with silvery scale hairs.

Wumea n. sp.

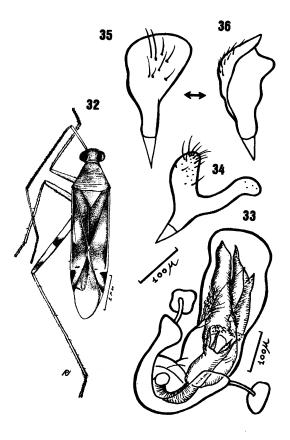
Orthotylinae, Orthotylini. Body very long, smooth, glabrous (scantly pilose).

Head semihorizontal, vertex marginate, frons sulcate, eyes contiguous to pronotum, clupeus proemient, jugum and lorum flat, rostrum reaching hind coxae; antenna cylindrical, slender, segment I thicker subbasaly, segments II, III and IV becoming gradually slender to apex, pubescence very short.

Pronotum with depressed collar, calli flat, smooth, fused at middle, disc rugouse, hind margin convex at middle; scutellum flat, excavate basally.

Hemelytra with narrow embolium, cuneus very long, about three times as long as wide at base, membrane biareolate.

Underside of body with proeminent ostiolar peritreme, legs very long and slender, femora with



Wunea clypealis n. sp.: Fig. 32 – Female, holotype: Fig. 33 – Penis; Fig. 34 – Left paramere; Figs. 35, 36 – Right paramere.

setae inferiorly, tibiae with fine spines and minute sclerotized tubercles in rows.

Type species of genus. Wumea clypealis n. sp.

Approaches *Morobea* n. gen. but difers by the rugouse surface of disc, by the long semihorizontal head and by the body almost glabrous body.

Wumea clypealis n. sp. (Figs. 32-36)

Characterized by the color of the hind femur and by the morphology of male genitalia.

Female: Length 5.2 mm, width 1.0 mm. *Head:* Length 0.4 mm, width 0.7 mm, vertex 0.32 mm. *Antenna:* Segment I, length 0.8 mm; II, 2.2 mm; III, 1.5 mm; IV, 0.6 mm. *Pronotum:* Length 0.7 mm, width at base 1.0 mm. *Cuneus:* Length 0.90 mm, width at base 0.30 mm (holotype).

General coloration brown to light brown; clypeus and two rings on hind femur: median and subapical, margins and apex of cuneus and paracuneus reddish, humeral angles narrowly dark brown to black, embolium, antenna and legs pale yellow to light brown, apical portion of antennal segment II dark.

Underside of body with sternum, pleurae and abdomen dark brown, coxae and legs pale yellow.

Body almost glabrous, pronotum and scutellum rugouse remaining characters as for genus.

Male: General aspect and coloration as in female, vertex 0.28 mm.

Genitalia: Penis (Fig. 33) with four sclerotized spiculi, as seen in illustration, secondary gonopore with membranous fringe, membranous lobe visible. Left paramere (Fig. 34) with two distinct arms, the larger one with several setae. Right paramere (Figs. 35, 36) globose, as seen in figures.

Holotype: Female, NEW GUINEA, NE, Wum, Upper Jimmi Valley, 840 m, VI.16.55, J.L. Gressitt, in the collection of the Bernice P. Bishop Museum, Honolulu, Hawaii. *Paratypes:* 19 males and females, 1.450 m, XI.12.'58; 1.300 m, XI.7.'58; 1.400 m, XI.6.'58; 1.450 m, XI.12.'58; 1.400-2.000 m, XI.19.'58, Swart Valley, Karubaka, New Guinea, J.L. Gressitt, in the collections of the Bishop Museum and of the author.

Differs from *Morobea longipes* n. sp. by the color of the hind femur, rugouse pronotum and by the morphology of the male genitalia.

The specific name is allusive to the reddish clypeus.

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