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Largidae and Pyrrhocoridae collected by Alexander Riedel in Irian Jaya (New Guinea) from 1990 up to 1996 (Heteroptera)

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Abstract: Largidae and Pyrrhocoridae of Irian Jaya (results of Alexander Riedel's expeditions). *Limadindymus* subgen.novus, *Cornidindymus* subgen.novus both of *Dindymus* STÅL 1861 (Pyrrhocoridae) and the species *Dindymus* (*Limadindymus*) *brunneus* spec.nova, *Dindymus* (*Limadindymus*) *kotheae* spec.nova, *Dindymus* (*Limadindymus*) *montanellus* spec.nova, *Dindymus* (*Limadindymus*) *fulvus* spec.nova, *Dindymus* (*Limadindymus*) *schoenitzeri* spec.nova, and *Sincrotus* (*Syncrotellus*) *fulvus* spec.nova are new for science. The species *Delacampius militaris* DISTANT 1919 of Largidae is synonymised with *Delacampius pyrrhocorides* (BERGROTH 1894).

Key words: Taxonomy, distribution, Pyrrhocoroidea, Pentatomomorpha, Heteroptera, Irian Jaya.

Introduction

New Guinea is the world's second largest island. Its fauna is, as far as Pyrrhocoroidea are concerned, insufficiently known. It can be assumed that some less accessible areas will remain so for a rather long future period.

The following authors have contributed most to our knowledge of this group in New Guinea: H.C. Blöte, W.L. Distant, P. Freeman, M.S.K. Ghauri, H. Schouteden, C. Stål, and F. Walker.

The eastern part of New Guinea belongs to Indonesia; part of it are the following larger islands: Biak, Misool, Numfoor, Salawati, Waigeo, and Yapen.

The material collected by Alexander Riedel in Irian Jaya and on the adjacent islands (Biak, Waigeo, Yapen) includes one species of Largidae and 15 species of Pyrrhocoridae (of those 6 new for science).

From this part of the island 2 species of Largidae and 14 species of Pyrrhocoridae have been known up to now. An increase in the number of species can be expected particularly in the genus *Dindymus* STÅL, which is represented by many species in New Guinea. The fauna of Pyrrhocoroidea of Papua is even less known than that of Irian Jaya.

As the former (colonial) territorial arrangement in New Guinea (at the time when most finds were published) was different from now, it is useful to sort out which records come from Irian Jaya.

Overview of species of Pyrrhocoroidea so far published from Irian Jaya

Largidae

Physopeltinae

Delacampius pyrrhcorides (BERGROTH) 1894 (as *Delacampius militaris* DISTANT 1919, syn.novum¹)
Physopelta gutta famelica STÅL 1863 (by DISTANT 1914)

Pyrrhocoridae

Antilochus reflexus STÅL 1863 (by DISTANT 1911, 1914, SCHOUTEDEN 1933)
Dindymus (Dindymus) croesus DISTANT 1914 (by DISTANT 1914, SCHOUTEDEN 1933)
Dindymus (Dindymus) decius WALKER 1873 (by DISTANT 1911, 1914)
Dindymus (Dindymus) decolor BREDDIN 1900 (by DISTANT 1914)
Dindymus (Dindymus) flavipennis BLÖTE 1931 (by BLÖTE 1931)
Dindymus (Dindymus) pyrochrous (BOISDUVAL 1835) (by DISTANT 1911, 1914, BLÖTE 1931)
Dindymus (Cornidindymus) abdominalis DISTANT 1914 (by DISTANT 1914)
Dindymus (Cornidindymus) straeleni SCHOUTEDEN 1933² (SCHOUTEDEN 1933)
Dynamenais venusta (WALKER 1893) (by DISTANT 1914)
Dysdercus (Paradysdercus) cingulatus cingulatus (FABRICIUS 1775) (by BLÖTE 1931, FREEMAN 1947)
Dysdercus (Paradysdercus) sidae MONTROUZIER 1861 (by BLÖTE 1931, SCHOUTEDEN 1933)
Dysdercus (Leptophthalmus) fuscomaculatus STÅL 1863 (by BLÖTE 1931, SCHOUTEDEN 1933, FREEMAN 1947)
Ectatops gracilicornis STÅL 1863 (by SCHOUTEDEN 1933)
Stictaulax circumsepta STÅL 1870 (by WALKER 1873, SCHOUTEDEN 1933)

Misool I.

Antilochus reflexus STÅL 1863 (by STÅL 1863)
Dindymus (Dindymus) pyrochrous (BOISDUVAL 1835) (by STÅL 1863)
Ectatops gracilicornis STÅL 1863 (by STÅL 1863)
Stictaulax circumsepta STÅL 1870 (by WALKER 1873)
Paraectatops costalis (WALKER 1873) (by BLÖTE 1931, SCHOUTEDEN 1933)

¹ The description of *Delacampius militaris* DISTANT 1919 coincides with that of *Physopelta pyrrhcorides* BERGROTH 1894 (now *Delacampius*). Therefore I have asked M.D. Webb of the Natural History Museum in London to compare the type of *D. militaris*, deposited in the collection of the given institution, with *D. pyrrhcorides*, the latter being rather common in New Guinea. He confirmed my opinion that the two are synonymous.

² When describing *Dindymus straeleni* SCHOUTEDEN (1933) unfortunately omitted to give the localities where the type material had been collected and any details on its character.

Thanks to J. Constant (Bruxelles) I have been able to study this material and to assign the lectotype and paralectotypes. All given localities are situated in southern Irian Jaya.

Lectotype female: (Nouvelle Guinée) [Irian Jaya], Moemi, 5.III.1929, Prince Leopold, *Dindymus straeleni* sp.n., Dr. H. Schouteden det. 1933.

Paralectotypi: (Nouvelle Guinée) [Irian Jaya], Siwi, Forêt, 6.III.1929, Prince Leopold, *Dindymus straeleni* sp.n., Dr. H. Schouteden det., 1 female: (Nouvelle Guinée) [Irian Jaya], Sakoemi, 11.III.1929, Prince Leopold, *Dindymus straeleni* sp.n., Dr. H. Schouteden det. 1 male (genital capsule absent), 1 female (very defected).

Biak I.

Antilochus reflexus STÅL 1863 (by BLÖTE 1931)

Dindymus (Dindymus) pyrochrous (BOISDUVAL 1835) (by BLÖTE 1931)

Salawati I.

Antilochus reflexus STÅL 1863 (by BLÖTE 1931)

**Overview of species of Pyrrhocoroidea so far published
from New Guinea without further locality**

***Dindymus nigellus* DISTANT 1888**

DISTANT (1888) described *Dindymus nigellus* from New Guinea, without giving any further information of the locality.

***Antilochus coloratus* (WALKER 1872)**

BLÖTE (1931) gave a unspecific record [New Guinea (or N. Celebes?)] of *Antilochus coloratus* (WALKER 1872). From the information given it is not clear if the typical subspecies or the subspecies *scutifer* (WALKER 1873) was concerned. I can however confirm the occurrence of *A. coloratus scutifer* (WALKER) on New Guinea based on a specimen deposited in the collection of the Hungarian Natural History Museum in Budapest. Unfortunately, the label of this specimen does not include any closer location.

New records of Pyrrhocoridae from Irian Jaya collected by A. Riedel

The families and species listed below are in alphabetical order in this paper. For each species, its distribution, based on the published records, is given (OR = Oriental region, PA = Palaeartic region, A = Australian region).

L a r g i d a e

P h y s o p e l t i n a e

***Physopelta gutta famelica* STÅL 1863**

M a t e r i a l : Irian Jaya, Waigeo I., Saporkren, 0-200 m, 12.-13.XI.1996, 1 ♀. Irian Jaya, Biak I., 3 km S Korim, Wouna, 100 m, 21.-22.IV.1993, 1 ♀.

D i s t r i b u t i o n of ssp.: OR: Buru I., Seram I., Aru Isl., Irian Jaya, Woodlark I., New Britain I., Solomon Isl. (Malaita I.) A: N.S. Wales, Queensland. New for Waigeo I. and Biak I.

P y r r h o c o r i d a e

***Antilochus reflexus* STÅL 1863**

M a t e r i a l : Irian Jaya, Paniai Prov., Nabire Pemukiman, ca. 200 m, 17.VIII. 1991, 1♂. Irian Jaya, Manokwari Prov., Ransiki, Mayuby-Benyas, 300-500 m, 27.-28.IX.1990, 1♀. Irian Jaya, Jayapura, Sentani, Cyclops Mts., 300 m, 19.-21.IX. 1990, 1♂. Irian Jaya, Japen I., Serui, Ambaidiru, 800-1100 m, 8.IX.1991, 1♂. Irian Jaya, Biak I., 3 km S Korim, Wouna, 100 m, 21.-22.IV.1993, 2♂♂.

D i s t r i b u t i o n : OR: New Guinea, Misool, Solomon Isl. (Ysabel I., Guadalcanal I.), Salawati I., Biak I. New for Japen I.

***Dindymus* STÅL 1861**

For the time being the following three subgenera, the two new ones probably restricted to the area of New Guinea, can be separated in New Guinea. The nominal subgenus (is obviously in need of a revision).

***Dindymus* STÅL (s. str.)**

***Dindymus (Dindymus) croesus* DISTANT 1914**

M a t e r i a l : Irian Jaya, Manokwari Prov., Ransiki, Membey, 800-1200 m, 31.VIII. 1991, 1♂ 1♀; ditto, Iba, 1.300 m, 7.-8.IV.1993, 1♂ 1♀; ditto, Warmare, 200-700 m, 22.VIII.1991, 1♀; ditto, Kosmena, Anggi, Tetaho-area, 1400-1750 m, 26.-27.III.1993, 1♂ 4♀ 1 nymph (V. instar); ditto, Testega, 1100-1300 m, 30.III.-12.IV.1993, 1♂ 2♀; ditto, Testega, 1100-1200 m, 11.IV.1993, 2♂♂ 1♀ ditto, Meydoudga, 1100-1400 m, 5.IV. 1993, 7♂♂ 9♀♀. Irian Jaya, Japen I., Serui, Ambaidiru, 800-1100 m, 8.IX.1991, 1♀. Papua, Harawaka Prov., Eastern Highlands, Womenata, 2150 m, 8.IV.1972, 1♀.

D i s t r i b u t i o n : OR: Irian Jaya, New for Japen I. and Papua.

***Dindymus (Dindymus) flavipennis* BLÖTE 1931**

M a t e r i a l : Irian Jaya, Manokwari Prov., Ransiki, Mayuby, 300 m, 26.-30.IX. 1990, 1♂ 3♀♀.

D i s t r i b u t i o n : OR: Endemit. Irian Jaya (Manokwari Prov.).

N o t e : The species was described based on a male, the female which has not been previously known. It fully resembles its male, only substantially differing by its larger size. Body length 16-17.5 mm, width of pronotum 5 mm.

V a r i a b i l i t y : While in most specimens only the posterior pleural flanges II and III of the thoracic sternum are black, in one female also the posterior pleural flange I is black.

As the genitalia of neither sex had been described, I am giving their brief description.

G e n i t a l c a p s u l e : Ventral rim medially with rounded indentation, on both sides with one black denticle, lateromedially again indented, laterally elevated and with hairs. Ventral wall in lateral view concave under the ventral rim.

F e m a l e o u t e r g e n i t a l i a : Both sides of valvifer I on their base parallel, not touching each other, upper rim with large, deep indentation directed towards the sides and with rounded ending. Valvifer II fused.

***Dindymus (Dindymus) pyrochrous* (BOISDUVAL 1835)**

M a t e r i a l : Irian Jaya, Manokwari Prov., Gn. Meja, ca. 300 m, 23.-24.IX.1990, 2♂♀; ditto, Gn. Meja, ca. 200 m, 19.IV.1993, 1♀. Irian Jaya, Jayawijaya Prov., Samboka, upper Kolff River, ca. 200 m, 10.-14.X.1996, 2♂♀.

D i s t r i b u t i o n : OR: Irian Jaya, Papua, Biak I., Misool I., Waigeo I., Key Isl., Aru Isl., ? Alor I.

***Cornidindymus* subgen.novus**

Typus subgeneris: *Dindymoides abdominalis* DISTANT

D i a g n o s i s : Species of this subgenus are slender and of medium body size, with a head of limited width, elongate anterior and posterior of the eyes. Eyes convex as usual, far from pronotum. Head evenly narrowing from the eyes towards the pronotum. In lateral view the ventral side of the head is only slightly rounded. Lateral margin of pronotum and costal margins are rather narrow. As mentioned above, the strong anteromedial indentation of the callar lobe with a protuberance (of variable size) on both sides of it, is particularly characteristic of this subgenus. In females, valvifer II medially with a furrow, rounded laterally, but not divided.

D i s c u s s i o n : With the exception of *D. abdominalis* (DISTANT) and *D. straeleni* SCHOUTEDEN, this subgenus is present in New Guinea with several undescribed species. Some of these I will present in another paper that is being prepared.

E t y m o l o g y : The subgeneric name is a composite of the Latin noun cornu, -us, n. (horn, see callar lobe of pronotum) and name *Dindymus*.

***Limadindymus* subgen.novus**

Typus subgeneris: *Dindymus (Limadindymus) riedeli* spec.nova

Body of medium width, corium and abdomen usually with a rounded widening behind the claval apex.

Head small, narrow, frons little convex, head anterior of eyes distinctly elongate, much more than basal part, from eye towards pronotum almost not narrowing at all. Eyes little convex, distant from the pronotum. Callar lobe without anteromedial protuberances. Lateral margin of pronotum strong but narrow, anterior almost lacking. Costal margin of corium also strong but narrow, in basal part with strigil in form of a serrate edge. A similar strigil is in some species also present on the edge of the pronotal lateral margin, usually behind the transversal furrow. Plectrum (lima) on distal end of meso- and meta-femora dorsally; developed as a elongate, shallow depression with protuberances or small furrows.

D i s c u s s i o n : This is the first mention of stridulation organs in the genus *Dindymus* STÅL. The length of the strigil in the new species is variable and is present in both sexes. The venter in the females strongly convex, therefore the narrowing of the abdomen is created by ventrite VII being somewhat inserted in ventrite VI like in a telescope; sometimes the slightly jutting intersegmental membrane is visible, this is probably lacking in the other segments. In gravid females a very wide membrane can be observed between the mesotergites and the lateral laterotergites, less often also between the individual dorsal laterotergites. The morphological differentiation of female outer genitalia

and the shape of ventrite VII show in many cases greater differences than in males and can be used as good characters for identification.

Based on the data available to the author, the species of this subgenus seem associated with higher altitudes. Some of them have apparently only small ranges of distribution.

E t y m o l o g y : The subgeneric name is a composite of the Latin noun lima - file and the name of the genus *Dindymus*.

***Dindymus brunneus spec.nova* (photo 1, fig. 1)**

Holotype female: Irian Jaya, Monokwari Distr., Kosmona, Anggi, Tetaho-area, 1400-1750 m, 26.-27.III.1993, leg. A. Riedel.

Head and callar lobe brownish black. Pronotal lobe and scutellum dark brown. Antennae dark, labium, femora and thoracic sternum glossy black with reddish touch. Epicoxal lobes dark red. Clavus and corium plain brown, lighter than pronotal lobe, dull, only edge of costal margin glossy. Membrane brown, veins dark brown. Ventrites glossy black. Large yellow spot medially on ventrites IV and V and on more than half of ventrite VI. Outer female genitalia black except first valvifers, these light brown.

Rather small species. Antennae slender, segments II, III and IV almost of equal width. Segment II with abrupt but slight widening on apex, segment III as well and with short black hairs. Lateral margin on level of transversal furrow sinuate, pronotum widening more distinctly towards base. Pronotal lobe little convex, anteromedially and posteromedially with depression. Profemora apical with two larger denticles and behind these towards the apex with another small one. Venation on corium standing out, radius somewhat bent only behind the claval apex, media and radius distally more separated (than for instance in *D. riedeli*). Little distinct strigil only present on edge of costal margin of corium. Membrane rather small, venation standing out, primary and secondary cell small, short. Thoracic sternum smooth, ventrites with distinct depressions laterally. Surroundings of spiraculæ on ventrites III - V form somewhat protruding, rounded. Furrow reaches from distal margin under the spiraculum up to the trichobothria on anterior margin of ventrite V and on ventrite VI from postspicular trichobothria to the antespicular ones. Ventrite VII medially as wide as laterally.

F e m a l e g e n i t a l i a : Valvifer I large, both sides diverge evenly from base, upper margin almost horizontal, only slightly concave. Valvifer II with strongly convex protuberance. Laterotergite IX not exceeding ventral margin of anal tube.

Puncturation in transversal furrow very pronounced and dense so that individual punctures are only separated by small partitions. Pronotal lobe with distinct puncturation up to basal margin. Puncturation on corium even, dense and black, on clavus somewhat sparser than on corium. Punctures along the outer side of radius in basal part bigger.

M e a s u r e m e n t s (mm) : Female. Head: width (including eyes) 1.84, interocular width 1.03; antenna: I 2.43, II 1.84, III 1.54, IV 2.27; pronotum: length 2.32, width 3.40; scutellum: length 1.40, width 1.84; corium: length 4.97, width 2.16; body length 11.99.

E t y m o l o g y : The specific epithet is the Latin adjective brunneus, -a, -um (brown).

D i a g n o s i s : The female of *D. brunneus* resembles most the female of *D. schoenitzeri* by having a single-coloured dark (brown to black) clavus and corium. However, both species can be easily discriminated by the shape of the pale spot on the ventral side of the abdomen. In *D. brunneus* there are no lines of light colour running from this spot towards the sides as is the case in *D. schoenitzeri*. Also, in *D. brunneus*

the outer margins of valvifer I diverge gradually from its base and do not cover laterotergite IX. In contrast to that, in *D. schoenitzeri* valvifer I is extraordinarily big, its outer margins are diverging only just before the apex and are fully covering laterotergite IX (a unique feature in this genus). The females of *D. riedeli*, *D. kotheae*, and *D. montanellus* differ from the female of *D. brunneus* by their light clavus and corium (besides – to a variable extent – the base and distal margin of corium).

***Dindymus kotheae* spec.nova (fig. 2)**

Holotype female: Irian Jaya, Jayawijaya Prov., Wamena, Ilugwa, Melanggama, 1800-2200 m, 9.-10. 1990, leg. A. Riedel.

Head, antennae (except segment IV, which is reddish), labium, pronotum, scutellum, clavus, and corium up to the level of two thirds of scutellum, apical part of corium, thoracic sternum, legs and abdomen (except medial yellow spot) black. Corium pale yellow. Large black spot (darkest at distal margin of corium) changes gradually into light coloration and reaches claval apex. Membrane hyaline, transparent. Orange spot on zygosternites IV-VI (laterally not prolonged into ray-like lines). Laterotergites black. Female genitalia brownish black.

Body rather large. Antennae slender. Segment II on apex thicker, segment III only with very few black hairs. Lateral margin of pronotum at level of callar lobe almost missing, at level of transversal furrow only very slightly concave. Pronotal lobe little convex. Profemora apically with two denticles. Lateral margin of pronotal lobe and edge of costal margin of corium with strigil on base. Veins, particularly distally protruding. Radius somewhat bent only behind claval apex. Radius and media distally conspicuously separate. Membrane normally developed. Primary and secondary cells long. Thoracic sternum smooth. Dorsal laterotergites narrow. Abdomen laterally with very pronounced depressions. Spiraculæ situated on rounded protuberances that are limited by rounded depressions. Ventricle VII medially and laterally of approximately same width.

Female genitalia: In lateral view, outer female genitalia exceed by far ventrite VII. Valvifer I large, reaching almost the anus. Outer margins of both sides of valvifer I parallel, slightly overlapping, medially slightly depressed, upper margin almost horizontal, slightly bend inwards, in the middle feebly wrinkled. Valvifer II almost entirely covered by valvifer I. Laterotergite IX reaches only level of lower margin of anal tube.

Pronotal lobe rather densely punctured, clavus and corium with fine puncturation.

Measurements (mm): Female. Head: width (including eyes) 1.88, interocular width 1.03; antenna: I 2.70, II 1.97, III 1.62, IV 2.35; pronotum: length 2.59, width 4.02; scutellum: length 1.40, width 1.89; corium: length 5.67, width 2.16; body length: 12.91.

Derivation nominis: The species is dedicated to Tanja Kothe of the Zoologische Staatssammlung, Munich.

Diagnosis: The female of *D. kotheae* differs from female of *D. riedeli* by the distal margin of its corium bearing a large black spot of diffuse outline instead of thin black band as in the latter species, and by having black ventrites with a medial orange spot, while the venter is yellow or reddish in the compared species. From the females of *D. brunneus* and *D. schoenitzeri* it differs by its larger size, wider pronotum, yellowish white clavus and corium (except the bases of both). By the coloration of its clavus and

corium it resembles most *D. montanellus*, in which, however, the ventrites are light reddish, and the female genitalia are entirely different, being low and with a very much reduced valvifer I.

Dindymus (Limadindymus) montanellus spec.nova (fig. 3)

Holotype female: Irian Jaya, Jayawijaya Prov., Galbok (W Nalca), 3. 10. 1993, leg. A. Riedel.

Head, labium, pronotum, scutellum, thoracic sternum, clavus, and corium up to scutellar apex (on the costal margin somewhat more), bow-like spot on distal margin of corium, and basal spot on ventrite III black. Antennal segments I and II, base of segment III, and legs dark red. Antennal segments III (except base) and IV black. The last one lighter on its base, this part is not clearly limited. Apical part of clavus and corium pale yellow, membrane light grey. Abdomen light (reddish), including laterotergites and female genitalia. Pronotal lobe semi-glossy, head and callar lobe dull.

Species of medium body size. Head rather wide, frons evenly convex, eyes little convex. Antennal segment III only little thicker than segment II, evenly widening. Pronotum towards base little widening. Lateral margin narrow, in anterior part slightly rounded, medially almost not sinuate. Pronotal lobe towards base evenly elevated. Edge of costal margin of corium on base with little distinct strigil, lateral margin of pronotum without strigil. Profemora with 2 denticles in apical part. Sides of abdomen slightly rounded (not distinctly convex behind apex of clavus). Laterotergites erect. Membrane not reaching beyond genitalia. Primary and secondary cell large, elongate.

Spiraculæ on ventrite V and VI on elongate protuberances, these separated from zygosternites by elongate depressions. Ventrite VII medially of substantial width, probably because of that tergite VIII present at level of VII, distally bent downwards more distinctly.

Female genitalia: very small and situated low. Anal tube wide but bent downwards. Valvifer I very much reduced, position oblique (not erect), by far not reaching margin of ventrite VII. Valvifer II hardly visible, short, in almost horizontal position.

Puncturation on pronotal lobe only in anterior part. Puncturation on clavus and corium very fine.

Measurements (mm): Female (holotype). Head: width (including eyes) 2.02, interocular width 1.08; antenna: I 2.97, II 2.00, III 1.75, IV 2.65; pronotum: length 2.59, width 3.78; scutellum: length 1.46, width 1.89; length of corium 5.56, width 2.05; length of ventrite VII laterally 0.65, medially 1.24; body length 12.69.

Etymology: The specific epithet is the Latin adjective *montanellus*, -a, -um, i.e. living in the mountains.

Diagnosis: The female of this new species resembles most the female of *D. riedeli*. The latter can be separated from *D. montanellus* most easily because the distal margin of its corium bears a thin black band, while in *D. montanellus* there is a bow-like spot. Also the pronotum is narrower on its base and the body shorter than in *D. riedeli*. The female genitalia look entirely different. Also discrimination from the female of *D. kothæae*, which has also a pale yellow distal part of clavus and corium is easy. While this species has a similar spot on the distal margin of the corium, its ventrites, including the

genitalia, are not of light colour but black with a medial orange spot on ventrites III - VI. Also the female genitalia are dark, valvifer I is not reduced (reaching up to the anal tube), the base of pronotum is much wider in the *D. kotheae* female than in *D. montanellus*.

***Dindymus riedeli* spec.nova (photos 2, 3; fig. 4)**

Holotype male: Irian Jaya, [note: Jayawijaya Prov.], Wamena, Ilugwa, Melanggama, 1800-2200 m, 9.-12.IX.1990, leg. A. Riedel.

Paratypes: Irian Jaya, [note: Jayawijaya Prov.], Wamena, Ilugwa, Melanggama, 1800-2200 m, 9.-12.IX.1990, leg. A. Riedel, 2 ♀♀; Irian Jaya, [note: Jayawijaya Prov.], Wamena, Melanggama - Pass-Valley, 2000-2300 m, 9.-10.IX.1990, leg. A. Riedel, 1 ♀; Irian Jaya, [note: Jayawijaya Prov.], Wamena, Pass-Valley, c. 1900 m, leg. A. Riedel, 10 ♀♀; Irian Jaya, Jayawijaya Prov., Wamena, Prongolli, 2100-2400 m, 17.-19.IX.1991, leg. A. Riedel, 1 ♂, 2 ♀♀; New Guinea [note: Papua], Morobe Prov., Edie Creek, 7000 ft, Stn. No 6, 21.IX.1964, M.E. Bacchus, 1 ♂, 2 ♀♀ (BMNH); New Guinea [note: Papua], Morobe Prov., Mt. Kainde, 8,000 ft, Stn. 20, 22.IX.1964, M.E. Bacchus, 2 ♂♂ 6 ♀♀ (BMNH).

Coloration in both sexes almost identical. Head, antennae, labium, pronotum, scutellum, corium, and clavus up to level of scutellar apex, very thin band on distal margin of corium (narrowing towards apices), thoracic sternum, legs, and basal spot on ventrites II - V in males and ventrites II-III, proximally also on IV in females, black. Thin band on distal margin of corium can also be brownish and less conspicuous than in holotype. Head and callar lobe semi-glossy (more so in females), pronotal lobe conspicuously glossy. Clavus and corium whitish, with yellowish tinge. Outer dorsal and ventral laterotergites light orange. Membrane light grey. Zygosterna, pygophore including hairs and female outer genitalia yellow.

Species of rather large size (particularly females), body elongate. Antennae thicker (compared to species of this subgenus described in the present work). Antennal segment II in males slightly thicker on its very apex, in females gradually widening, in females of pronounced somewhat spindle-like shape (slightly narrowing at apex) with black hairs (more conspicuous than in males), much stronger than segments II and IV. Pronotum towards base conspicuously widening in females, in males less so. Lateral margin at level of transversal furrow in males almost not concave, in females very feebly sinuate. Pronotal lobe with depression in front of humeral protuberances. Profemora with 1-2 denticles. Only costal edge with strigil. Veins on corium little protruberant. Membrane fully developed, cells substantially elongate. Thoracic sternum smooth. Ventrites in females with rather pronounced but irregular depressions laterally (less pronounced than and different from those in other species of this genus).

Genital capsule: Ventral rim medially with only slight, rather rounded, indentation; laterally of this indentation depressed to lateral rim. Ventral wall in upper part somewhat protruding, medially under ventral rim forming slight, rounded keel; depressed on both sides. Parameres slender, reaching up to half of anal tube, which is vertically bent up.

Female genitalia: Outer margin of valvifer in its basal half parallel, in the middle horizontally indented, indentation large, laterodorsal margin elevated and ending horizontally. Valvifer II short, medially depressed vertically. In lateral view only anal tube exceeds ventrite VII.

Measurements (mm): Males. Head: width (including eyes) 1.68 (1.51-1.78),

interocular width 0.87 (0.76-0.96), antenna: I 2.29 (2.11-2.43), II 1.64 (1.40-1.84), III 1.41 (1.30-1.51), IV 2.24 (2.21-2.29); pronotum: length 1.88 (1.73-2.00), width 2.91 (2.65-3.29); scutellum: length 1.06 (0.84-1.19), width 1.42 (1.19-1.57); corium: length 4.38 (3.73-4.97), width 1.66 (1.40-1.94); body length: 9.80 (8.59-10.80).

Females: head: width (including eyes) 1.98 (1.95-2.01), interocular width 1.08 (1.05-1.11); antenna: I 3.01 (2.97-3.02), II 2.06 (2.00-2.11), III 1.88 (1.73-2.00), IV 2.72 (2.65-2.83); pronotum: length 2.70 (2.65-2.75), width 4.18 (4.10-4.29); scutellum: length 1.46, width 1.97 (1.89-2.11); corium: length 6.31 (6.16-6.48), width 2.31 (2.27-2.35); body length 13.58 (13.39-14.04).

Note: Males from Jayawijaya Prov. (Irian Jaya) are somewhat smaller than those from Morobe Prov. (Papua).

Derivation nominis: Species named in honour of A. Riedel, who contributed substantially to our knowledge of the Oriental Region by his collecting expeditions.

Diagnosis: Males of this species are similar to *D. schoenitzeri* by their dorsal side and body shape except the pronotum, which gets wider towards its base in the compared species. The coloration of the abdominal ventral side is completely different, which is also true for the morphology of the genital capsule. In *D. riedeli* the genital capsule is smaller, the upper part of the ventral wall is not conspicuously leaning outwards and protruding, the medial indentation on the ventral rim is much smaller. In females the body is the most elongate of all here described species of the given subgenus. However, by its shape it comes close to females with partially yellowish white clavus and corium, i.e. *D. kotheae* and *D. montanellus*. It can be easily told apart from these two species as the black band on the distal margin is very narrow, not substantially widening medially.

***Dindymus schoenitzeri* spec.nova (photos 4, 5; fig. 5)**

Holotype male: Irian Jaya, Jayawijaya Prov., Wamena, Pronggoli, 2100-2400 m, 17.-19.IX.1991.

Paratype: ditto, 1 ♀.

Sexual dimorphism developed both in coloration and morphology.

In both sexes head, pronotum, antennae (only last segment in basal part red), labium, scutellum, thoracic sternum, femora, and partially ventrites black. Body dull, femora glossy.

In males clavus and corium up to level of scutellar apex black. Distal margin of corium narrowly dark. Tibiae black with reddish tinge. Membrane grey. Ventrites black including laterotergites. Medial yellow spot from distal margin of ventrite IV, reaching up to posterior margin of ventrite VI. From this spot ray-like lines run laterad on ventrites IV-VI (longest ones on ventrite IV). Genital capsule black with reddish tinge, particularly on its protruding ventral rim.

In females, clavus and corium black, claval commissure, anal margin of clavus and corium and also costal margin narrowly grey, the latter with reddish tinge. Tibiae black. Membrane pale smokey greyish brown. Ventrites black. Large red spot medially, reaching from base of ventrite IV to distal margin of ventrite VI. From this spot ray-like lines run laterad on ventrites IV-V. Outer dorsal laterotergites and outer female genitalia dark reddish brown.

Species of rather small size. Antennae slender, particularly in males. Segment II slender,

segment III slightly widening distally towards apex, segment IV in males thicker than the others.

Pronotum in males dull, towards base widening rather substantially. Pronotal lobe in males with posterolateral depression. Costal margin only slightly widening behind scutellar apex. Venation on corium not standing out, membrane normally developed. In females pronotum thin, only little wider towards base. Pronotal lobe medially rather convex, laterally with depression. Costal margin behind scutellar apex distinctly widening. Conspicuous strigil (especially in females) present both on the edge of costal margin and on lateral margin of pronotum where it stretches from the base almost along entire length of margin. Abdomen in females substantially laterally widening in a bow, dorsal laterotergites concave, strongly chitinized. Venation on corium standing out, radius a little bent far behind claval apex. Media and radius distally substantially diverging. Membrane rather small, primary and secondary cells long, venation on membrane little standing out.

Strigil in both sexes present both on pronotum and on costal margin. Pronotal one reaches up to base of callar lobe, on costal margin substantially exceeding apex of scutellum. Strigil more pronounced in females, particularly on costal margin. Ventricle VII laterally wider than medially.

Mesoscutellum in both sexes almost on entire surface wrinkled. Profemur in males with one denticle in apical part, in females with two (always?).

Genital capsule: Large. Ventral wall in upper half strongly protruding; in lateral view substantially exceeding ventrite VII. Protruding part medially almost keel-like, edge adjacent to conspicuous indentation of triangular shape on ventral rim. Laterally deflected upper part of ventral wall pointing upwards under an angle of ca. 45°. Ventral wall laterally of above-mentioned keel with rounded depression. Ventral rim and lateral rim with hairs. Extended part of ventral rim set off from lower part by well-rounded transversal furrow.

Female genitalia: Tergite VIII large, wide. Valvifer I large, reaching up to anal tube and fully covering laterotergite IX., which is situated behind valvifer II (unusual). Outer margins of valvifer I parallel (only little overlapping ventrally) and only at the tip diverging; thus valvifer II almost invisible. Valvifer I at outer margin medially with slight depression, upper margin medially straight, lateromedially with small wrinkle and laterally elevated. Elongate depression under upper margin. In lateral view valvifer I exceeds ventrite VII.

Measurements (mm): Male. Head: width (including eyes): 1.54, interocular width 0.73; antenna: I 2.05, II 1.35, III 1.19, IV 1.84; pronotum: length 1.73, width 2.81; scutellum: 0.92, width 1.19; corium: length 4.05, width 1.67, body length: 9.18.

Female. Head: width (including eyes) 1.88, interocular width 1.00; antenna: I 2.43, II 1.84, III 1.59, IV 2.38; pronotum: length 2.43, width 3.59; scutellum: length 1.35, width 1.78; corium: length 5.18, width 2.00; length of ventrite VII: laterally 0.81, medially 0.49; width of dorsal outer laterotergite: 0.65; body length: 12.31.

Derivation nominis: The species is dedicated to Prof. Dr. Klaus Schönitzer of the Zoologische Staatssammlung, Munich, who is a renown specialist in Hymenoptera (*Andrenidae: Andrena, Ichneumonidae: Alomini*) and whom I am indebted to for lending me the material on which the present study is based.

D i a g n o s i s : The dorsal coloration of the male of *D. schoenitzeri* is very similar to that of *D. riedeli*. Although in *D. schoenitzeri* the pronotum gets wider towards the base than in the compared species. However, the sides of their abdomina allow to distinguish them easily. In the described species these are black (including the laterotergites and genital capsule) with a yellow spot from which ray-line lines run towards the sides) while in *D. riedeli* they are predominantly pale orange (including laterotergites and genital capsule). In the male of *D. schoenitzeri* the genital capsule is larger and of different shape. The female of *D. schoenitzeri* resembles most the female of *D. brunneus* (for their discrimination see the diagnosis of *D. brunneus*). From the females of *D. riedeli*, *D. kotheae* and *D. montanellus* it differs for instance by its somewhat smaller size, the narrower pronotum, the bow-like widening of the abdomen, the partially yellowish white clavus and corium, and the shape of genitalia.

***Dynamenais venusta* (WALKER 1873)**

M a t e r i a l : Irian Jaya, Manokwari Prov., Gn. Meja, ca. 300 m, 23.-24.IX.1990, 2 ♀; ditto, Gn. Meja, ca. 200 m, 19.IV.1993, 1 ♀. Irian Jaya, Jayapura, Sentani, Cyclops Mts., 300 m, 19.-21 IX.1990, 1 ♀.

D i s t r i b u t i o n : OR: New Guinea. Endemit.

Dynamenais venusta (WALKER) is a polytypical species, forming in New Guinea various local populations, which differ partially in terms of morphology as well as size. The population in Manokwari Province is comprised of small specimens, that in the Cyclops Mountains of large ones. The lectotype of this species (the species description does not include details on the collection site) is of medium size.

***Dysdercus (Paradysdercus) cingulatus cingulatus* (FABRICIUS 1775)**

M a t e r i a l : Irian Jaya, Japen I., Serui, Ambaidiru, 800-1100 m, 8.IX.1991 1 ♂ 1 ♀ .

D i s t r i b u t i o n : OR: India, Nepal, Laos, Thailand, Myanmar, Vietnam, Malaysia, Philippines. Indonesia (Sumatra, Java, Bali, Kilimantan, Banggi, Balabac, Pulo Laut. Sulawesi, Talaud Isl., Banda, Ternate, Obi, Seram, Ambon, Teninbar, Halmahera, Kei Isl., Irian Jaya), Papua, New Britain, New Ireland, Solomon Isl. (excl. Vella Lavella I. - ssp. *nigriventris* STEHLÍK 1965). New Caledonia, Viti Isl. A: Australia. PA: China, Taiwan, Japan (Ryukyu Isl.).

N o t e : The given specimens are distinctive in having a black callar lobe, their ventrites (except white bands) black and the black medial bands on the corium are very wide.

***Dysdercus (Leptophthalmus) fuscomaculatus* STÅL 1863**

M a t e r i a l : Irian Jaya, Paniai Prov., Nabire Pemukiman, ca. 200 m, 17.VIII.1991, 2 ♂ 1 ♀ .

D i s t r i b u t i o n : OR: Sri Lanka, Thailand, Malaysia (West, Sarawak), Philippines, Indonesia (Sulawesi, Sumatra, Nias, Lombok, Timor, Leti, Kalimantan, Banggi, Salayar, Banda, Ambon, Halmahera, Irian Jaya), Papua, Solomon Isl. PA: China, Japan.

***Ectatops gracilicornis* STÅL 1863**

M a t e r i a l : Irian Jaya, Manokwari Prov., Gn. Meja, ca. 300 m, 23.-24.IX.1990, 3♂♂ 5♀♀; ditto, Ransiki, Mayuby, ca. 300 m, 26.-30.IX.1990, 3♂♂ 2♀♀; ditto, Ransiki, Mayuby-Benyas, 300-500 m, 27.-28.IX.1990, 2♂♂ 4♀♀; ditto, Ransiki, Membey, 800-1200 m, 31.VIII.1991, 1♀; ditto, Meydoudga, 1200-1.400 m, 5.IV. 1993, 1♂ 1♀; ditto, Testega, 1100-1200 m, 11.IV.1993, 1♀. Irian Jaya, Jayapura, Sentani, Cyclops Mts., 300 m. 19.-21.IX. 1990 2♀♀. Irian Jaya, Jayawijaya Prov., Borne (to Omban), 1,000-1.300 m, 3.IX.1993, 1♂. Irian Jaya, Biak I., 3 km S Korim, Wouna, 100 m, 21.-22.IV.1993, 3♀♀.

D i s t r i b u t i o n : OR: Irian Jaya, Papua, Misool I., Gebe I. New for Biak I.

***Sincrotus (Syncrotellus) fulvus* spec.nova (photo 6, fig. 6)**

H o l o t y p e , male: Irian Jaya, Jayawijaya - Prov., Angguruk-Tanggeam, 1500-1800 m, leg. A. Riedel. Head black, glossy, its anterior part white (clypeus, paraclypeus, bucculae). Antennae black, on segment I short most proximal part white, last segment ventrally black except its base, dorsally white approximately up to the half of the segment. Labial segments I, III and IV blackish, segment II lighter. Pronotum, scutellum and clavus light cocoa brown. Corium a little darker. Pronotal collar, pleurae I, II and III, pronotal epipleuron and epicoxal lobes white, ventrites II-V yellow, ventrites VI and VII and genital capsule black. Posterior pleural flange I, II, III and basisternum glossy black.

Body rather large and wide. Head much narrower than base of pronotum. Shape of head similar as in *S. madanganus* GHAURI. Eyes not conspicuously directed upwards as in *S. confusus* GHAURI. Pronotum wide. Pronotal collar distinct, lateral margin of pronotum well developed, at the level of transversal furrow not concave.

Callar lobe on anterior and posterior margin with pronounced but irregular and sparse black punctures. Black punctures also on base of scutellum. Clavus lined along upper and lower margin by line of more marked punctures, fine puncturation also in distal half of clavus. Corium with a row of marked punctures along claval suture and costal margin. Surface of corium covered by very fine and partially colourless puncturation.

Genital capsule wider than long, rounded, ventral and dorsal rim straight, ventral rim and ventral rim infolding medially with semi-circular indentation (space for parameres), lateral rim adjacent to ventral rim almost semi-circular with edge and a few blunt and short spines; adjacent part of lateral rim infolding concave with smaller spikes or rather protuberances. Lateral rim behind this depression not separated from lateral rim infolding by edge, dorsal rim skirts anal tube with some 5 larger denticles. Anal tube tapering towards apex, slightly bent upwards, with semi-circular ending. Paramere ending in point, which is roundedly bent and not furcate at its end.

E t y m o l o g y : The specific epithet is the Latin adjective *fulvus*, -a, -um (light brown).

M e a s u r e m e n t s (mm): Male (holotype): head: width (including eyes) 1.96, interocular width 0.92; antenna: I 2:38, II 1.16, III 0.89, IV 1.89; pronotum: length 1.40, width 2.27; scutellum: length 0.89, width 1.19; corium: length 3.67, width 1.24; body length 7.18.

D i a g n o s i s : The species differs from all others described so far (*S. confusus* GHAURI 1972; *S. similis* GHAURI 1972; *S. madanganus* GHAURI 1972; *S. kokodanus* GHAURI 1972) by not having a black callar lobe but a light brown one.

***Syncrotus (Syncrotellus) similis* GHAURI 1972**

M a t e r i a l : Irian Jaya, Manokwari Prov., Testega, 1100-1200 m, 11.IV.1993, 1 ♂.

D i s t r i b u t i o n : OR: Papua. New for Irian Jaya. Endemite on New Guinea.

N o t e : While the dorsal side of the given male is in full compliance with the instructive figure of GHAURI (1972), this is not the case for the ventral side of the specimen caught. In this the ventrites II-V are cream white, the bases of ventrites III-V bear laterally a thin black stripe. On ventrite V this black coloration stretches almost to the middle of the ventrite. The above-mentioned ventrites lack red coloration. Ventrites VI and VII and the genital capsule are pronouncedly black. As GHAURI (1972) drew a profile of the abdomen of *S. similis* in which ventrites VI and VII are light, it was necessary to confirm the identity of the specimen in the British Museum (Nat. Hist.), London. Dr. M. D. Webb was so kind to confirm that the determination had been correct.

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All type material, as well as the other material from A. Riedel's expeditions to New Guinea, is deposited in the Zoologische Staatssammlung, Munich (ZSM).

Zusammenfassung

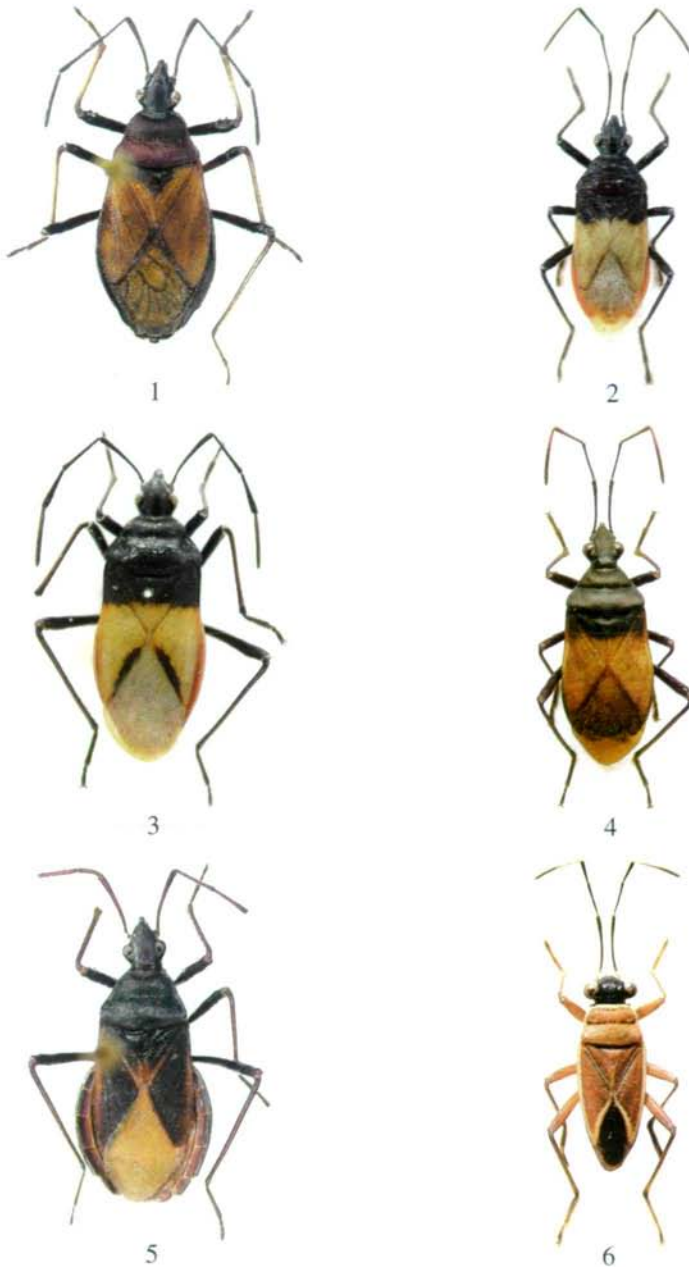
Aus dem indonesischem Teil von Neu Guinea Irian Jaya sind bisher 2 Arten aus der Familie Largidae und 22 Arten aus der Familie Pyrrhocoridae bekannt. Wir können annehmen, dass sich diese Zahl durch weitere Durchforschungen beträchtlich erhöhen wird.

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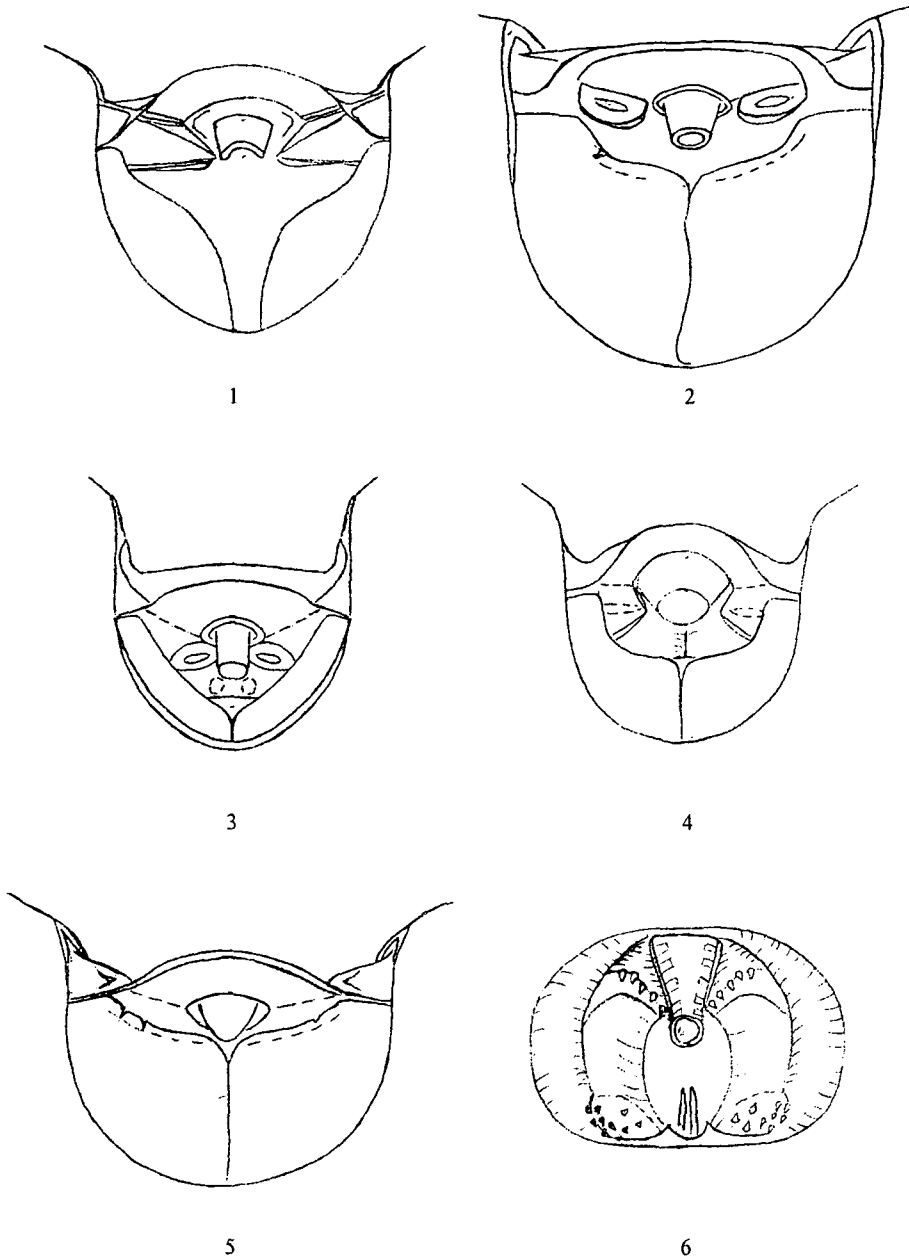
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Photos 1-6: (1) *Dindymus (Limadindymus) brunnens* spec.nova, holotype female; (2) *Dindymus (Limadindymus) riedeli* spec.nova, holotype male; (3) *Dindymus (Limadindymus) riedeli* spec.nova, paratype female; (4) *Dindymus (Limadindymus) schoenitzeri* spec.nova, holotype male; (5) *Dindymus (Limadindymus) schoenitzeri* spec.nova, paratype female; (6) *Sincrotus fulvus* spec.nova, holotype male.



Figs 1-5: Outer female genitalia. (1) *Dindymus* (*Limadindymus*) *brunnens* spec.nova; (2) *Dindymus* (*Limadindymus*) *kotheae* spec.nova; (3) *Dindymus* (*Limadindymus*) *montanellus* spec.nova; (4) *Dindymus* (*Limadindymus*) *riedeli* spec.nova; (5) *Dindymus* (*Limadindymus*) *schoenitzeri* spec.nova; (6) *Sincrotus fulvus* spec.nova, genital capsule, dorsal view.

Tab 1. lectotype New Guinea (1); Monokwari Prov. (2); Cyklops Mts. (3)

locality No.	sex	width of head	interocular width	antenna				pronotum		scutellum		corium		body length
				I	II	III	IV	length	width	length	width	length	width	
1	f	2.27	1.16	1.84	1.84	1.40	—	2.00	3.24	1.57	1.84	5.02	1.89	10.42
2	f	2.54	1.40	1.94	1.84	1.94	—	2.38	3.59	1.57	2.00	5.62	2.16	11.56
3	f	2.32	1.13	1.62	1.84	—	—	1.94	2.97	1.46	1.62	4.86	1.94	10.10
3	f	2.25	1.08	1.62	1.70	—	—	1.89	2.86	1.35	1.46	4.32	1.73	9.56
3	f	2.32	1.19	1.67	1.73	1.46	2.00	2.00	2.94	1.40	1.62	4.70	1.78	10.26

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