# A REVISION OF THE GENUS *PRIOCNEMICORIS* COSTA WITH THE DESCRIPTION OF EIGHT NEW SPECIES (HEMIPTERA: HETEROPTERA: COREIDAE: CLORESMINI)

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Abstract.—The genus Priocnemicoris Guérin-Méneville of the tribe Cloresmini (Coreidae) is revised. Prior to this work only one species, P. flaviceps (Guérin-Méneville), was known. Eight new species from Irian Jaya and Papua New Guinea are described (P. antennatus, P. bicoloripes, P. cyclops, P. doesburgi, P. kiungensis, P. morobe, P. nigrellus, and P. papuensis), and the species P. diversipes (Fallou) is resurrected from the synonymy of P. flaviceps; new records for the previously known species are added; habitus illustrations and drawings of the male genital capsule and parameres, as well as female genital plates are provided; and a key to the known species is presented.

Key Words: Hemiptera, Heteroptera, Coreidae, Cloresmini, revision, Priocnemicoris, new species, Irian Jaya, Papua New Guinea

The tribe Cloresmini, restricted to the Eastern Hemisphere (China, India, Philippine Republic, Malaysia, Indonesia, and Papua New Guinea), is characterized by having the body more or less shining, usually with green metallic iridescence, the abdomen almost parallel-sided, not dilated laterally; abdominal sterna III and IV lacking tubercles; the male hind femora not curved or curved only at the very basal third and ventrally armed with long spines; the hind tibiae not expanded; the head short, shorter than width and abruptly bending downward at the antenniferous tubercle level; rostrum not extending to base of abdomen; and antenniferous tubercle protruding forward.

The genus *Priocnemicoris* was proposed by Costa (1863) to include only the species *P. refulgens* Costa ("Patria

Ignota"). Stål (1873) transferred the species Nematopus flaviceps (Guérin-Méneville 1832) described from Papua New Guinea to Priocnemicoris, and synonymyzed P. refulgens with P. flaviceps. In the same paper, Stål transferred the species Nematopus albithorax Boisduval (1835), described from New Guinea, to Priocnemicoris. Fallou (1891) described a new species Notobitus diversipes from New Britain (Papua New Guinea), and a year later Bergroth (1892) synonymized it with Priocnemicoris flaviceps. Lethierry and Severin (1894) in their catalogue considered albithorax, diversipes, and refulgens synonyms of Priocnemicoris flaviceps. Blöte (1936) reported P. flaviceps from New Guinea and included several new localities.

Previously, only one species of *Prioc*nemicoris, *P. flaviceps*, was known. In this contribution, the genus is redescribed, one species, *P. diversipes* (Fallou) is resurrected from the synonymy of *P. flaviceps*, new records for *P. diversipes* and *P. flaviceps* are given, and eight new species from Irian Jaya and Papua New Guinea are described.

The following abbreviations indicate institutions where specimens are deposited or from where they were generously lent: American Museum of Natural History, New York (AMNH): Australian National Insect Collection, Canberra (ANIC); The Natural History Museum, London (BMNH); Bernice P. Bishop Museum, Honolulu. Hawaii (BPBM); Brigham Young University, Monte L. Bean Life Sciences Museum, Provo, Utah (BYU); California Academy of Sciences, San Francisco (CAS); Field Museum of Natural History, Chicago, Illinois (FMNH); Institut Royal des Sciences Naturelles, Bruxelles, Belgium (IRNB); Natural History Museum of Los Angeles County, California (LACM); Queensland Museum, Brisbane, Australia (QMBA); South Australian Museum, Adelaide (SAMA); Texas A & M University, College Station (TAMU); University of California, Davis (UCDA); University of Minnesota, Insect Collection, St. Paul (UMSP); Colección Entómologica, Instituto de Biología, Universidad Nacional Autónoma de México (UNAM); National Museum of Natural History, Smithsonian Institution, Washington D. C. (USNM); Zoological Institute, St. Petersburg, Russia (ZMAS); Zoologische Staatssammlung Münich, Germany (ZSMC).

All measurements are given in millimeters.

#### Priocnemicoris Costa

Priocnemicoris Costa 1863: 253–254; Stål 1873: 66; Lethierry and Severin 1894: 41.

Type species: *Nematopus flaviceps* Guérin-Méneville 1832: 177. Designated by Stål 1873.

Myrsilus Stål 1865: 3; Walker 1871: 75.

The tribe Cloresmini contains four genera: *Cloresmus* Stål (1859), *Notobitus* Stål (1859), *Notobitella* Hsiao (1963), and *Priocnemicoris* Costa (1863).

The genus Priocnemicoris contains several of the most brightly colored species of Coreidae. It is characterized by having the fore femora ventrally unarmed or with one subapical spine; abdominal sternite VII of the female is complete, lacking plica or fissura; the post-tylar depression deep, forming a single sulcus; the middle third of the pronotal disk with a low, longitudinal groove, running behind the calli laterally to the posterior margin; the mesosternum with a median sulcus at the anterior third; and the buccula situated after the insertion of antenna and not produced anteriorly.

For the other three genera, the fore femur is armed with two rows of ventral spines; abdominal sternite VII of female has a plica and fissura; the post-tylar depression is absent, or weakly impressed; the middle third of the pronotal disk lacks a median groove; and the buccula is situated before the antennal insertions of the antennae, and clearly produced anteriorly.

According to the characters discovered in this study, Priocnemicoris can be divided into two groups of species. The first group, characterized by having the propleura, mesopleura, and metapleura clothed with numerous very short yellowish-white sericeous hairs a woolly appearance, includes six species: P. antennatus, P. cyclops, P. diversipes, P. flaviceps, P. nigrellus, and P. papuensis. The second group includes four species P. bicoloripes, P. doesburgi, P. kiungensis, and P. morobe, all of which lack yellowish-white sericeous setae on

the propleura, mesopleura, and metapleura.

Redescription.—Head: Wider than long, shorter than pronotal length, dorsally flat, declivant, suddenly bending downward at antenniferous tubercles level; tylus blunt, rounded, unarmed, thickened, slightly exceeding juga; antenniferous tubercles protruding forward, widely separated, unarmed, inner margins with large lobe apically rounded; post-tylar depression deep, forming a single median longitudinal sulcus; antennal segment IV longer than head and pronotum combined; antennal segment I slender, thicker than succeeding segments and slightly curving; segments II and III cylindrical, IV fusiform; antennal segment IV longest, III shortest, and I longer than II; preocellar pit deep, nearly circular; ocelli prominent, not raised; eyes hemispherical, conspicuously prominent and clearly removed from anterior pronotal angles; buccula short, elevated, situated after insertion of antennae, not produced anteriorly; rostrum reaching anterior or middle third of mesosternum; rostral segment III shortest, I and IV subequal, and II shorter than I and IV; rostral segment I reaching hind margin of eyes; neck short; postocular tubercle absent; mandibular plate unarmed.

Thorax: Pronotum wider than long, trapeziform, gradually declivant; collar wide; anterolateral border obliquely straight, smooth: frontal angles blunt; humeral angles obtuse or slightly exposed; posterolateral borders sinuate, entire; posterior border entire, concave or straight across base of scutellum; triangular process absent; calli weakly and uniformly elevated, separated along midline by a longitudinal mesial furrow; middle third of pronotal disk with low longitudinal groove running behind calli until posterior margin; posterior margin with low transverse carina; prosternum with deep excavation; mesosternum with median sulcus at anterior third, and deep longitudinal groove reaching middle third of the sternum; posterior border of metasternum straight, slightly sinuate, or conspicuously concave; anterior lobe of metathoracic peritreme elongate, raised, located far apart from the anterior margin of metapleura, posterior lobe auriculiform. Legs of male with coxae and trochanters unarmed; distance between procoxae and mesocoxae two times diameter of mesocoxae; distance between mesocoxae and metacoxae one times diameter of mesocoxae; fore and middle femora slender, unarmed, or with short single subapical spine; hind femur not curved, relatively incrassate, conspicuously exceeding apex of abdomen, ventrally with two large acute spines, one near middle third, second one subdistal, and two rows of short spines running from middle third to apex; fore and middle tibiae sulcate, unarmed; hind tibia curved at very basal third, sulcate, inner face with one row of short stout spines, or very stout spines; length of tarsal segment I longer than total length of segments II and III together. Female legs similar to male except hind femur not curved, less incrassate than male, reaching but not exceeding apex of abdomen, ventrally with one large acute subdistal spine, and two rows of short spines running from middle third to apex; hind tibia not curved, unarmed, sulcate.

Scutellum: Triangular, flat, longer than wide, apically subacute.

Hemelytra: Macropterous, extending beyond apex of last abdominal segment; apical margin weakly concave; apical angle narrowed, long, extending beyond middle third of hemelytral membrane.

Abdomen: Almost parallel-sided, not dilated laterally; posterior angle of connexival segments III to VII extended into large, acute spine; abdominal spiracle closer to anterior border; distance between spiracle and upper margin of abdomen greater than distance between spiracle and anterior margin of sternum.

Integument: Body surface shining, with or withtout green metallic iridescence: head, calli, connexivum, prosternum, mesosternum, metasternum, anterior and middle third of mesopleuron and metapleuron, abdominal sterna, male genital capsule, and female genital plates smooth, impunctate; pronotal disk transversely striated, with few tiny punctures at humeral angles; scutellum transversely striated, with one row of punctures along lateral margins; clavus and corium densely punctate, punctures larger than those of pronotum and scutellum; propleuron, and posterior margin of mesopleuron and metapleuron striated, and weakly to coarsely punctate; vellowish longitudinal stripe on propleura, mesopleura and metapleura clothed with numerous very short yellowish-white sericeous setae, giving a clearly woolly appearance (sometimes lacking); surface clothed with short decumbent to erect silver or golden bristlelike pilosity; abdominal sterna with few moderately long and conspicuous silver to golden bristle like setae; pubescence of antennae and femora short, mainly suberect; pubescence of tibiae and tarsi longer and rather dense; abdominal sterna III to VII usually with an ovate or obovate patch of silver to golden bristle like hairs located below each abdominal spiracle.

Male genital capsule: Posteroventral edge with lateral angles exposed into large, and broad arms, or large and subacute to subtruncate arms, between them with deeply U-shaped concavity with large, stout mesial projection or short, slender mesial projection or lacking a median projection; the latter condition with the mesial concavity wide open or clearly angulate, V-shaped.

Female genitalia: Abdominal sternite VII complete, without plica or fissura; gonocoxae I broad, enlarged anteroposteriorly with inner margins contiguous; upper border wide, straight, truncate, and outer border weakly convex, or upper border rounded, and outer border obliquely straight or upper border short, straight and truncate, and outer border obliquely straight; paratergite VIII triangular, with spiracle visible, and larger than paratergite IX; paratergite IX squarish, not overlapping at middle third, with posterior third angulate, exposed and directed backward.

### KEY TO SPECIES OF PRIOCNEMICORIS

	KEY TO SPECIES OF PRIOCNEMICORIS
1.	Fore and middle legs entirely dark reddish
1.	brown to black P. nigrellus, n. sp.
	Fore and middle legs entirely yellow or pale
	yellowish orange
2	Corium bicolorous, yellowish, with costal
2.	contain bicolorous, yellowish, with costai
	and apical margins dark castaneus orange;
	abdominal sterna tricolorous
	P. bicoloripes, n. sp.
-	Corium concolorous; abdominal sterna
	bicolorous, yellowish with pale castaneus
	marks below abdominal spiracle 3
3.	Upper margin of propleuron, and posterior
	third of mesopleuron and metapleuron
	with a green metallic iridescence 4
-	Upper margin of propleuron, and posterior
	third of mesopleuron and metapleuron
	lacking a green metallic iridescence 6
4.	Pronotal disk clothed with short, dense
	erect setae P. flaviceps (Guérin-Méneville)
_	Pronotal disk clothed with short, sparse
	almost, decumbent setae 5
5.	Anterior lobe of pronotal disk pale casta-
	neus orange, and posterior lobe shiny
	reddish castaneus; posteroventral edge of
	male genital capsule without mesial pro-
	jection (Figs. 5, 10) P. cyclops, n. sp.
_	Pronotal disk uniformly reddish castaneus;
	posteroventral edge of male genital with
	short and stout or acute mesial projection
	(Figs. 3, 6) P. diversipes (Fallou)
6.	Propleuron, mesopleuron, and meta-
0.	pleuron clothed with numerous very short,
	yellowish-white sericeous setae giving
	a clear woolly appearance
	Propleuron, mesopleuron, and meta-
	pleuron clothed with fine and sparse de-
	cumbent setae, lacking yellowish-white
	sericeous setae
7	Antennal segment I shiny reddish orange,
1.	with basal third black; antennal segment I
	relatively slender <i>P. papuensis</i> , n. sp. (in part)
	Antennal segment I entirely reddish orange;
-	antennal segment I robust
	P. antennatus, n. sp.

8. Antennal segment I shiny reddish orange, with basal third black ........ ..... P. papuensis, n. sp. (in part) Antennal segment I entirely shiny reddish 9. Posterior margin of metapleuron conspicuously concave; propleuron entirely pale yellow; mesopleuron and metapleuron entirely castaneus orange ...... ..... P. doesburgi, n. sp. Posterior margin of metapleuron straight or slightly sinuate; propleuron, mesopleuron, and metapleuron uniformly shiny 10 10. Male genital capsule trilobate (Fig. 11); pronotal disk clothed with short and sparse almost decumbent setae . . P. morobe, n. sp. Male genital capsule with V or U opening (Fig. 2); pronotal disk clothed with short, dense erect setae . . . . . P. kiungensis, n. sp.

> Priocnemicoris flaviceps (Guérin-Méneville) (Figs. 4, 9, 21, 35–37)

Nematopus flaviceps Guérin-Méneville 1832: 177.

Nematopus albithorax Boisduval 1835: 635. Priocnemicoris refulgens Costa 1863: 254. Myrsilus flaviceps: Walker 1871: 75. Myrsilus albithorax: Walker 1871: 75. Priocnemicoris flaviceps: Stål 1873: 66. Priocnemicoris flaviceps: Lethierry and Severin 1894: 41.

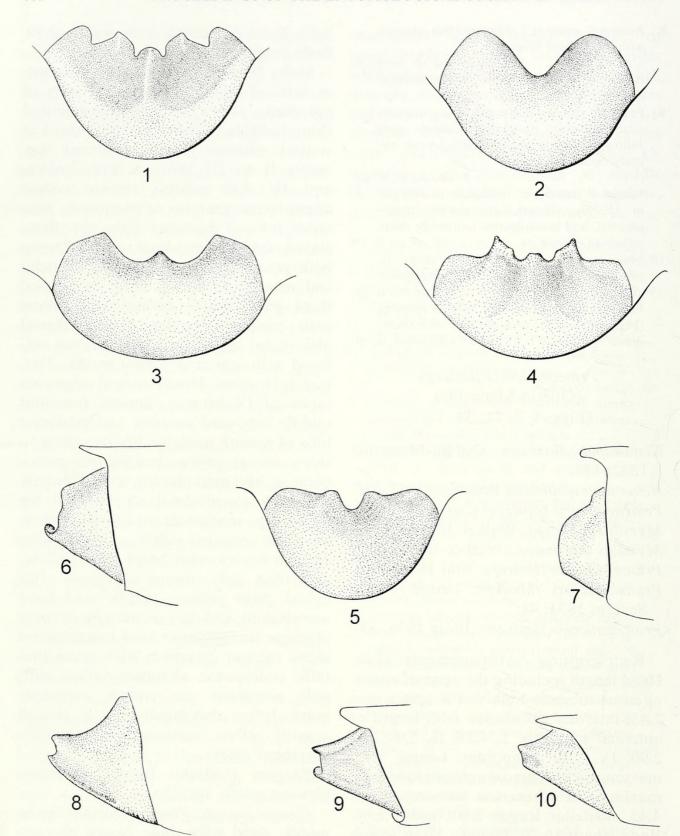
Priocnemicoris flaviceps: Blöte 1936: 53.

Redescription.—Measurements: Male: Head length including the apex of antenniferous tubercle 1.80; width across eyes 2.45; interocular distance 1.10; length of antennal segments: I, 4.25; II, 3.90; III, 2.90; IV, 7.40. Pronotum: Length 3.45; maximum width across anterior lobe 2.75; maximum width across humeral angles 4.45. Scutellar length 2.60; width 2.08. Body length 16.70. Female: Head length including the apex of antenniferous tubercle 2.00; width across eyes 2.67; interocular distance 1.15; length of antennal segments: I, 4.50; II, 4.10; III, 3.11; IV, 7.65. Pronotum: Length 4.00; maximum width across anterior lobe 3.10; maximum width across humeral angles 5.15. Scutellar length 2.75; width 2.30. Body length 18.90.

Male: Dorsal coloration: Head, anterior lobe of pronotal disk, and apex of scutellum vellow; antennal segment I shiny reddish brown with basal third at ventral surface yellow; antennal segments II to III shiny reddish brown, and IV dull reddish brown; collar, anterolateral margins of pronotum, posterior lobe of pronotal disk, scutellum, clavus, and corium shiny reddish brown with green metallic iridescence; hemelytral membrane dark yellow with basal third pale brown; connexivum yellow with posterior angles brown; dorsal abdominal segments reddish orange suffused with scattered yellow marks. Ventral coloration: Head, rostral segments (apex of IV brown), thorax, fore and middle legs, and anterior and posterior lobe of metathoracic peritreme yellow to shiny orange yellow; propleuron, mesopleuron, and metapleuron with wide pale yellowish longitudinal stripe; hind leg with coxa, trochanter and tarsus yellow to shiny orange yellow, femur shiny reddish brown with basal third yellow, and tibia pale orange castaneus with apical third yellow; middle and hind acetabulum and upper margin of propleuron, mesopleuron, and metapleuron shiny reddish castaneus with green metallic iridescence; abdomen yellow with pale castaneus or reddish castaneus marks below abdominal spiracle; genital capsule yellow, scattered with reddishcastaneus marks.

Thorax: Posterior border of metapleuron nearly straight.

Genital capsule: Posteroventral edge at middle third with some degree of variability, and frequently concave and trilobate, with lateral arms short and rounded to subtruncated, and mesial projection short, stout, truncate or slightly triangular (Fig. 4), and eventually bilobate with lateral arms subtruncate (Fig. 9). Parameres, Figs. 35, 36.



Figs. 1–10. *Priocnemicoris* spp., male genital capsule. 1–5, Caudal view. 1, *P. papuensis*. 2, *P. kiungensis*. 3, *P. diversipes*. 4, *P. flaviceps*. 5, *P. cyclops*. 6–10, Lateral view. 6, *P. diversipes*. 7, *P. kiungensis*. 8, *P. papuensis*. 9, *P. flaviceps*. 10, *P. cyclops*.

Integument: Pronotal disk clothed with short, dense, clearly erect, silvery, bristlelike pilosity; yellowish longitudinal stripe on propleuron, mesopleuron and metapleuron clothed with numerous very short yellowish-white sericeous hairs, giving a clearly woolly appearance.

Female: Color similar to male. Connexival segments VIII and IX shiny dark reddish brown with posterior angle black; dorsal abdominal segments VIII and IX shiny dark reddish brown; genital plates dark yellow with orange reflections.

Variation.—1, Head dorsally with two dark to pale brown longitudinal stripes. 2, Ocelli surrounded by a pale brown halo. 3, Shiny metallic green iridescense in pronotal disk, scutellum, clavus and corium, sometimes difficul to see. 4, Lateral margins of mesosternum with dark brown longitudinal stripes. 5, Fore acetabulum pale orange castaneus. 6, Hind femur uniformly pale orange yellow. 7, Hind tibia yellow with basal joint reddish brown to black. 8, Posterior margin of connexivum dark brown.

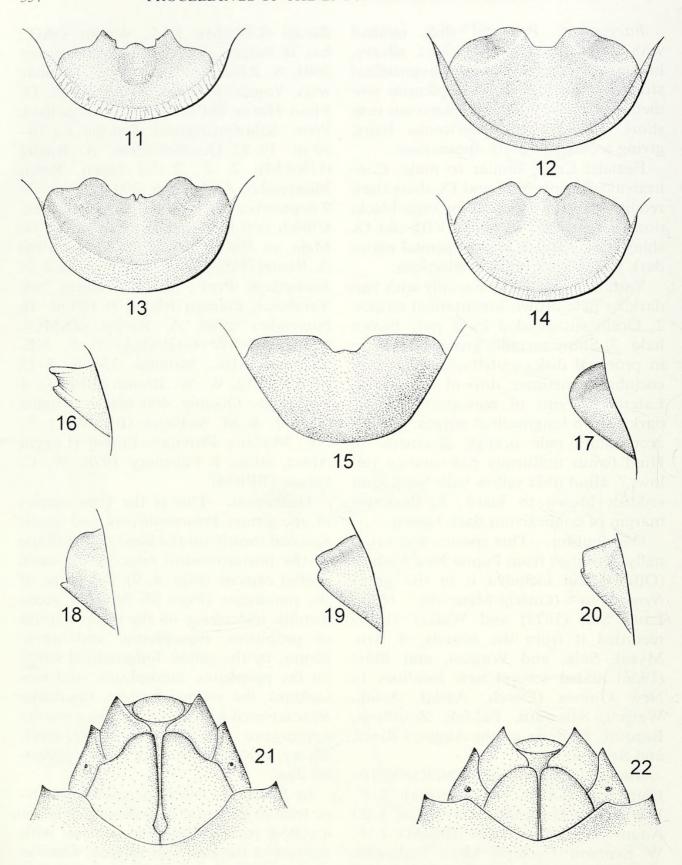
Distribution.—This species was originally described from Papua New Guinea (Offak), and included it in the genus Nematopus (Guérin-Méneville 1832). Later Stål (1873) and Walker (1871) recorded it from the Islands of Aru, Mysol, Sula, and Wagiou, and Blöte (1936) added several new localities to New Guinea (Doreh, Andai, Arfak, Waigeu, Salawatti, Fakfak, Zoutbron, Begoure, Kaiserin on the Augusta River, and Sentani).

Material examined.—INDONESIA: Irian Jaya (Dutch New Guinea): 2 ♂, Waris, S. of Hollandia, 450–500 m, 8–23 August 1959, T. C. Maa (BPBM); 1 ♂, W Sentani, Cyclops Mts., Hollandia Area, 150–250 m, 17 April 1959, J. L. Gressitt (BPBM); 2 ♂, 2 ♀, Hollandia, 10 November 1944, 2 April 1945, 4 May 1945, H. Hoogstraal (FMNH); 1 ♀, Waigeo Island, Urbinas Pen., G. N. Susu, 0–450 m, 25 January 2001, A.

Riedel (UNAM); 1 &, Wasior DMP, km 38 Sararti, 100-200 m, 7-9 January 2001, A. Riedel (UNAM); 1 &, Manokwari, Vogelkop, 75 m, 23 July 1957, D. Elmo Hardy (BPBM); 2 &, Jayawijaya Prov., Salawatti Island, Kalobo, ca 10-30 m. 19-22 October 1996, A. Riedel (UNAM); 2 &, 2 ♀, Japen, Servi, Mantembo, Ambaiditu, 200-1150 m, 7-9 September 1991, A. Riedel (USNM ex. Ullrich coll.); 1 ♀, Manokwari, G. N. Meja, ca 300 m, 23-24 September 1990 A. Riedel (USNM, ex Ullrich coll.); 2 ♀, Jayawijaya Prov., Kec., Waigeo, Sel. Yembeser, Gaman Island, 0-100 m, 16 November 1996, A. Riedel (ZSMC). PAPUA NEW GUINEA: 1 3, NE, Torricelli Mts., Mobitei, 750 m, 5-15 March 1959, W. W. Brandt (BPBM); 1 3, Fly R., Olsobip, 400-600 m, August 1969, J. & M. Sedlacek (BPBM); 1 ♀, NE, Madang Province, Gogol (Loggin Area), 80 m, 8 February 1978, W. C. Gagne (BPBM).

Discussion.—This is the type species of the genus *Priocnemicoris* and is diagnosed mostly on the basis of the shape of the posteroventral edge of the male genital capsule (Figs. 4, 9), the shape of the parameres (Figs. 35, 36), the green metallic iridescence on the upper margin of propleura, mesopleura, and metapleura, by the yellow longitudinal stripe on the propleura, mesopleura, and metapleura, the yellowish-white, bristlelike setae covered with wax, that give a woolly appearance, and the short, dense, erect, silvery, bristlelike pilosity on the pronotal disk.

In *Priocnemicoris flaviceps*, the anterior lobe of pronotal disk usually exhibits a yellow pattern clearly in contrast with the rest of the pronotal surface, whereas the other species of the genus have an almost uniformly-colored pronotum, with sparse decumbent pilosity on the disk, and the shape of posteroventral edge of male genital capsule is distinct (Figs. 1–3, 11–15).



Figs. 11–22. *Priocnemicoris* spp., male genital capsule. 11–15, Caudal view. 11, *P. morobe*. 12, *P. nigrellus*. 13, *P. doesburgi*. 14, *P. bicoloripes*. 15, *P. antennatus*. 6–10, Lateral view. 16, *P. morobe*. 17, *P. nigrellus*. 18, *P. doesburgi*. 19, *P. antennatus*. 20, *P. bicoloripes*. 21–22, *Priocnemicoris* spp., female genital plates. 21, *P. flaviceps*. 22, *P. morobe*.

### Priocnemicoris cyclops Brailovsky and Barrera, new species

(Figs. 5, 10, 23-24, 38)

Description.—Measurements: Male: Head length including apex of antenniferous tubercle 1.75; width across eyes 2.65; interocular distance 1.32; length of antennal segments: I, 5.35; II, 5.10; III, 3.65; IV, 6.90. Pronotum: Length 4.25; maximum width across anterior lobe 3.25; maximum width across humeral angles 5.80. Scutellar length 2.65; width 2.40. Body length 19.95. Female: Head length including apex of antenniferous tubercle 2.05; width across eyes 2.77; interocular distance 1.25; length of antennal segments: I, 5.35; II, 5.10; III, 3.65; IV, 7.90. Pronotum: Length 4.40; maximum width across anterior lobe 3.25; maximum width across humeral angles 5.80. Scutellar length 2.65; width 2.40. Body length 20.00.

Male: Dorsal coloration: Head pale orange yellow; ocelli surrounded by reddish halo; antennal segments I to III shiny reddish orange, and IV dull reddish orange; anterior lobe of pronotal disk pale castaneus orange, and posterior lobe shiny reddish castaneus with green metallic iridescence; scutellum (apex yellow or pale orange), clavus and corium shiny reddish castaneus with green metallic iridescence; hemelytral membrane dark yellow, with basal third pale brown; connexivum yellow with posterior angles of each segment brown; dorsal abdominal segments shiny, pale, reddish orange. Ventral coloration: Head, rostral segments (apex of IV brown), prosternum, mesosternum, and metasternum, fore and middle legs, abdominal sterna, rim of abdominal spiracles, and genital capsule pale orange yellow; anterior and posterior lobe of metathoracic peritreme yellow; propleuron, mesopleuron, and metapleuron with a wide, pale, yellowish, longitudinal stripe; hind acetabulum pale reddish castaneus; hind leg

with coxae, trochanters and tarsi pale orange yellow, femur reddish orange with basal joint pale orange yellow, and tibia pale orange yellow with basal joint darker; mesosternum laterally pale brown; upper margin of propleuron, mesopleuron and metapleuron shiny reddish castaneus with green metallic iridescence; abdominal sterna laterally and below abdominal spiracles irregularly pale castaneus.

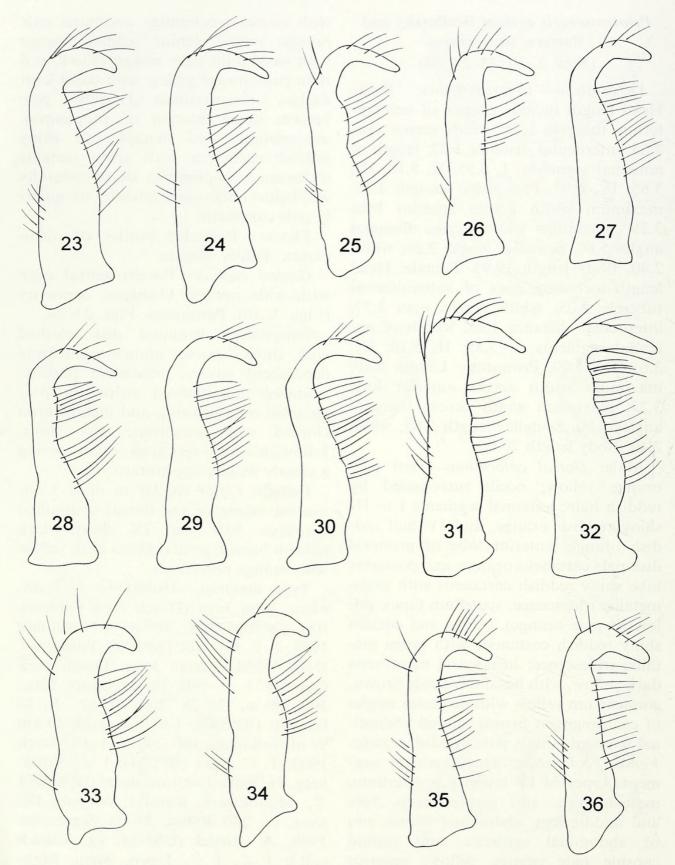
Thorax: Posterior border of metapleura slightly sinuate.

Genital capsule: Posteroventral edge with wide opened U-shaped concavity (Figs. 5, 10). Parameres. Figs. 23–24.

Integument: Pronotal disk clothed with short, sparse, almost exclusively decumbent silvery, bristlelike pilosity; yellowish longitudinal stripe on propleuron, mesopleuron, and metapleuron clothed with numerous, very short, yellowish-white sericeous setae, giving a clearly woolly appearance.

Female: Color similar to male. Connexival segments and dorsal abdominal segments VIII and IX shiny, dark reddish brown; genital plates dark yellow with orange reflections.

Type material.—Holotype: ♂, Indonesia: Irian Jaya (Dutch New Guinea): Ifar, Cyclops Mts., 300 m, 4 November 1958, J. L. Gressitt (BPBM). Paratypes: INDONESIA: Irian Jaya (Dutch New Guinea): 1 &, NW Ifar, Cyclops Mts., 300-500 m, 26-28 June 1962, J. L. Gressitt (BPBM); 1 &, Genjam, 40 km W of Hollandia, 100-200 m, 1-10 March 1960, T. C. Maa (BPBM); 1 ♂, Sattelberg, H. Rolle (whitout date) (IRNB); 1 3, Manokwari, Ransiki, Mayuby-Benyas, ca 200-400 m, 27-28 September 1990, A. Riedel (USNM, ex. Ullrich coll.); 1 ♂, 1 ♀, Japen, Serui, Mantembo, 200-700 m, 6 September 1991, A. Riedel (USNM, ex. Ullrich coll.); 1 2, Jayawijaya Prov., angguruk Membahan, c 1700 m, 23 September 1991, A. Riedel (USNM, ex. Ullrich coll.);  $4 \delta$ ,  $3 \circ$ ,



Figs. 23–36. *Priocnemicoris* spp., paramere. 23–24, *P. cyclops*. 25–26, *P. bicoloripes*. 27–28, *P. morobe*. 29–30, *P. papuensis*. 31–32, *P. diversipes*. 33–34, *P. kiungensis*. 35–36, *P. flaviceps*.

Waena Bakair (Water Res.), Cyclops Mts., 18 km W Jayapura, 300 ft, 1-2 November 1990, P. J. Clausen (UMSP): 1 &, Lae, December 1944, W. Harden (LACM); 1 2, Jayawijaya Prov., Bime, 1600-2000 m, 10 September 1993, A. Riedel (ZSMC). Papua New Guinea: 1 3, Morobe Province, Ana-Pose, 21 October 1987, G. P. Lifsey (TAMU); 2 8, Morobe District, Wau, 1050 m, 5 January 1961, G. Monteith (QMBA), 6 October 1969, J. E. Tobler (CAS); 1 2. Wau, 1200 m, 10 November 1972, Tawi Bukman (BPBM) (collected on Erodia sp.); 1 &, NE Torricelli Mts., Mobiiei, 750 m, 16-31 March 1959, W. W. Brandt (BPBM); 1 &, Torricelli, Gebirge, Kais Wilhelmslandt (ZMAS); 1 ♂, NE Torricelli Mts., Sugoitel, 900 m, 6-9 February 1959, W. W. Brandt (BPBM); 1 ♂, 1 ♀, Finisterre Range, Saidor, Gabumi, 11 June- 1-21 July 1958, W. W. Brandt (BPBM); 1 &, Owen Stanley Range, Goilala, Loloipa, 25 November-10 December 1975, W. W. Brandt (BPBM); 1 <sup>♀</sup>, Samoro Area Rd., 850 m, 12 May 1975, J. L. Gressitt (BPBM); 1 ♀, 1500 ft., October-November Koitaki, 1928, Pemberton (ANIC);  $1 \delta$ ,  $2 \circ$ , Gulf Ivinka Res., Station, Lake Lakekamu, 07°44′S-146°30′E, 120 m, 1-10 March 2000, 6 April 2000, 19-25 November 2000, T. A. Sears (UCDA); 1 9, Kakoro, 07°51′S-143°31′S, 24 April 2000, T. Sears & Binatung Brigade (UCDA); 1 &, Morobe Province, Gulf, Lakekamu Basin, 23 March-5 April 2000, T. Sears & Binatung Brigade (UCDA);  $1 \delta$ ,  $3 \circ$ , Morobe Province, Tekadu, 07°38'S-146°34'E, 25 March 2000, 1-20 April 2000, T. A. Sears & Binatung Brigade (UCDA); 1 9, Anglican Mission, Agenehambo via Popondetta, April (without date), A. Chillleborough (SAMA); 1 &, 1 \, Aru Island, 1911, Elzner (Froggatti coll.) (CSIRO); 2 &, 1 \, \text{rossell Island, Abaleti, 2} October-2 November 1963, W. W. Brandt (CSIRO);  $1 \delta$ ,  $1 \circ 1$ , Rossell

Island, Abaleti, Fifth Archbold Expedition to New Guinea, 2–11 October 1956, L. J. Brass (AMNH).

Distribution.—Irian Jaya, Indonesia.

Discussion.—This species is similar to *P. flaviceps* with the yellowish, longitudinal stripe on the propleuron, mesopleuron, and metapleuron clothed with yellowish-white sericeous setae, giving it a clearly woolly appearance, the upper margin of the propleura, mesopleura, and metapleura with green metallic iridescence, the anterior lobe of the pronotal disk usually paler than posterior pronotal disk, and the pronotum, scutellum, clavus, and corium with green metallic iridescence.

Priocnemicoris cyclops is recognized by having the pronotal disk clothed with sparse, almost decumbent pilosity, the shape of posteroventral edge of male genital capsule simple with a wide open U-shaped concavity (Figs. 5, 10), and the shape of the parameres (Figs. 23, 24). Priocnemicoris flaviceps has the pronotal disk clothed with dense, erect pilosity, the posteroventral edge of male genital capsule with some of variabily, but never with a wide open concavity (Figs. 4, 9), and the parameres are distinct (Figs. 35, 36).

Etymology.—Named for the Cyclops Mts., in Irian Jaya; a noun in apposition.

Priocnemicoris diversipes (Fallou),

New combination

(Figs. 3, 6, 31–32)

(Figs. 3, 6, 31–32)

Notobitus diversipes Fallou 1891: 7. Notobitus diversipes: Bergroth 1892: 262–264.

Redescription.—Measurements: Male: Head length including apex of antenniferous tubercle 1.90; width across eyes 2.60; interocular distance 1.07; length of antennal segments: I, 4.85; II, 4.35; III, 2.95; IV, 7.25. Pronotum: Length 3.95; maximum width across anterior lobe 2.85; maximum width across humeral

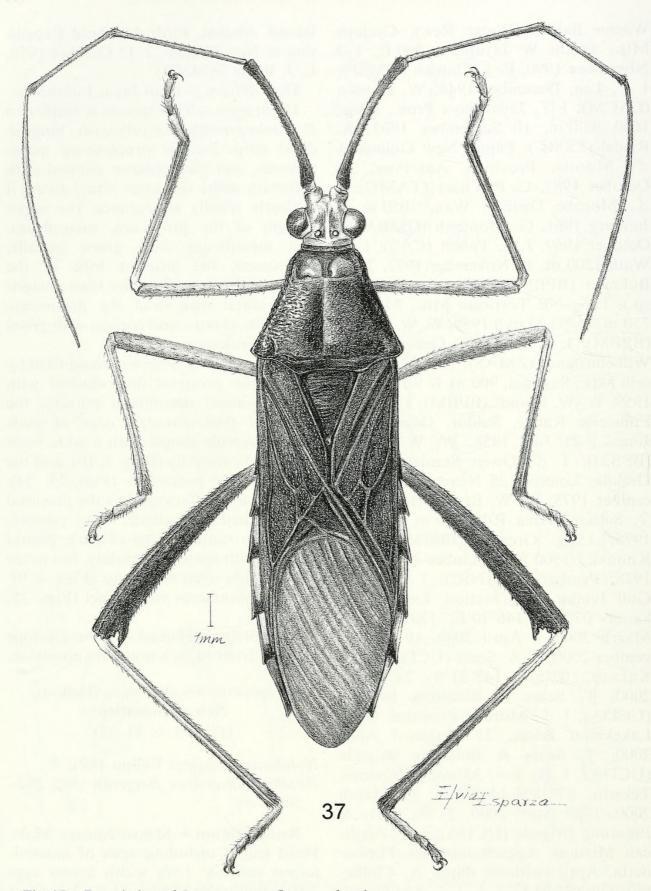


Fig. 37. Dorsal view of Priocnemicoris flaviceps, female.

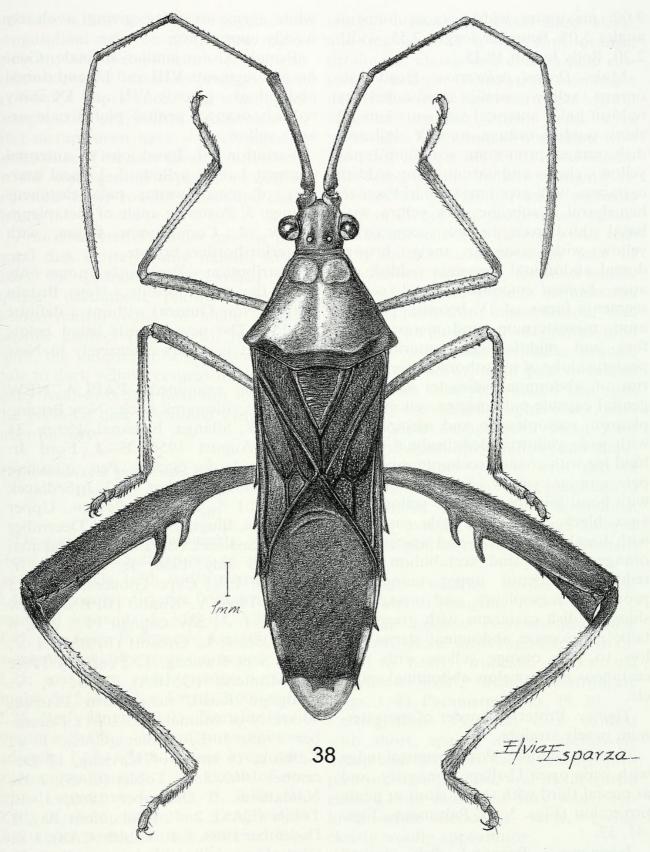


Fig. 38. Dorsal view of Priocnemicoris cyclops, male.

angles 5.00. Scutellar length 2.45; width 2.10. Body length 18.43. Female: Head length including apex of antenniferous tubercle 1.90; width across eyes 2.60;

interocular distance 1.10; length of antennal segments: I, 4.50; II, 4.20; III, 3.05; IV, 6.95. Pronotum: Length 3.90; maximum width across anterior lobe

3.00; maximum width across humeral angles 5.05. Scutellar length 2.55; width 2.20. Body length 18.15.

Male: Dorsal coloration: Head pale orange yellow; ocelli surrounded by reddish halo; antennal segments I to III shiny reddish orange, and IV dull reddish orange; pronotum, scutellum (apex yellow), clavus and corium shiny reddish castaneus with green metallic iridiscence; hemelytral membrane dark yellow with basal third pale brown; connexivum yellow with posterior angles brown; dorsal abdominal segments reddish orange. Ventral coloration: Head, rostral segments (apex of IV brown), prosternum, mesosternum, and metasternum, fore and middle legs, anterior and posterior lobe of metathoracic peritreme, rim of abdominal spiracle, and male genital capsule pale orange yellow; propleuron, mesopleuron and metapleuron with wide yellowish longitudinal stripe; hind leg with coxae, trochanter and tarsi pale orange yellow, femur shiny red with basal joint pale orange yellow, and apex black, and tibiae pale castaneus with basal joint black, and apical third orange yellow; hind acetabulum shiny reddish castaneus; upper margin of propleura, mesopleura, and metapleura shiny reddish castaneus with green metallic iridescence; abdominal sterna yellow to pale orange yellow with pale castaneus marks below abdominal spiracle.

*Thorax:* Posterior border of metasternum nearly straight.

Genital capsule: Posteroventral edge with wide open U-shape concavity, and at mesial third with short, stout or acute projection (Figs. 3, 6). Parameres, Figs. 31, 32.

Integument: Pronotal disk clothed with short, sparse, almost exclusively decument silvery bristlelike pilosity; yellowish longitudinal stripe on propleuron, mesopleuron, and metapleuron clothed with numerous, very short, yellowish-

white sericeous setae giving a clearly woolly appearance.

Female: Color similar to male. Connexival segments VIII and IX and dorsal abdominal segments VIII and IX shiny reddish orange; genital plates pale orange yellow.

Variation.—1, Basal joint of antennal segment I dark yellow. 2, Lateral margins of mesosternum pale castaneus orange. 3, Posterior angle of metapleura yellow. 4, Connexivum yellow with posterior borders brown.

Distribution.—Previously known only from the type locality, New Britain (Papua New Guinea) without a definite locality. The new records listed below show that it occurs extensively in New Guinea.

Material examined.—PAPUA NEW GUINEA: Bismarck Arch.: New Britain: 1 ♂, 2 ♀, Silanga, Nakanai, 150 m, 31 July 2 August 1956, E. J. Ford Jr. (BPBM); 1 &, Gazelle Pen., Gaulim, 140 m, 21-26 October 1962, J. Sedlacek (BPBM); 1 &, 1 ♀, Gazelle Pen., Upper Warangoi, Illugi, 230 m, 8-11 December 1952, J. Sedlacek (BPBM); 1 <sup>♀</sup>, Nakanai Mts., 28 July 1956, E. J. Ford Jr. (BPBM); 1 2, Cape Gloucester, 14-15 August 1966, Y. Kondo (BPBM); New Ireland: 1 &, SW Gilingil Pl'c, 2 m, 6 July 1956, J. L. Gressitt (BPBM); 1 ♀, 30 mi S of Kavieng, 12 February 1966, G. Monteith (QMBA); 2 &, 4, Knogogo Road, near Karu Plateau, 40 km N of Mamatanai, 10-11 December 1969, J. E. Tobler (CAS); 1 ♀, Kaselok, 16 km S of Kavieng, 17 December 1969, J. E. Tobler (CAS); 1 &, Namatanai, 5 December 1969, J. E. Tobler (CAS); 2 ♂, 1 Jacquinot Bay, 1 December 1969, J. E. Tobler (CAS); 1 ♀, Oast First Village, along trail from Danum to Lelet Plateau, 14 December 1969, J. E. Tobler (CAS).

Discussion.—This species is nearly identical in coloration with *P. flaviceps*, and the two were considered conspecific

until now. Both species have a yellowish longitudinal stripe on propleuron, mesopleuron, and metapleuron clothed with yellowish-white sericeous setae giving it a woolly appearance, and the upper margin of propleuron, mesopleuron, and metapleuron have a green metallic iridescence. There are distinct differences in the male genital capsule, as well as a several fairly consistent somatic characters.

Priocnemicoris diversipes has the pronotal disk entirely shiny reddish castaneus, the pronotal disk clothed with sparse, decumbent pilosity, and the posteroventral edge of male genital capsule distinct (Figs. 3, 6). In *P. flavipes*, the anterior lobe of pronotum is pale to dark yellow, contrasting with the shiny reddish-brown posterior lobe, and the pronotal disk is clothed with dense, erect pilosity.

# Priocnemicoris papuensis Brailovsky and Barrera, new species

(Figs. 1, 8, 29-30)

Description.—Measurements: Head length including apex of antenniferous tubercle 1.70; width across eyes 2.45; interocular distance 0.98; length of antennal segments: I, 4.00; II, 3.85; III, 2.47; IV, 6.68. Pronotum: Length 3.70; maximum width across anterior lobe 2.75; maximum width across humeral angles 5.25. Scutellar length 2.60; width 2.25. Body length 17.05. Female: Head length including apex of antenniferous tubercle 1.65; width across eyes 2.40; interocular distance 1.12; length of antennal segments: I, 4.30; II, 4.10; III, 2.90; IV, 6.65. Pronotum: Length 4.00 maximum width across anterior lobe 3.25; maximum width across humeral angles 5.80. Scutellar length 2.80; width 2.55. Body length 19.03.

Male: Dorsal coloration. Head pale castaneus orange, with two dark brown longitudinal stripes; antennal segment I

reddish brown with basal third black, and segments II to IV dark orange; pronotum, clavus and corium pale castaneus orange; hemelytral membrane dark yellow with basal third pale brown; scutellum reddish brown with apex yellowish white; connexivum yellow with posterior margin black; dorsal abdominal segments shiny reddish orange. Ventral coloration: Head, rostral segments (apex of IV brown), prosternum, mesosternum, metasternum (laterally pale reddish), anterior and posterior lobe of metathoracic peritreme, fore and middle legs, and posterior angle of metapleuron yellow; propleuron, mesopleuron, and metapleuron pale castaneus orange; hind leg with coxa pale castaneus orange, trochanter yellow, femur pale castaneus orange with basal joint yellow and apex including the subapical spine black, tibia pale reddish orange with basal joint black and apical third yellow, and tarsus yellow; abdomen yellow with rim of abdominal spiracles, two longitudinal and irregular stripes lateral to midline, posterior margin of abdominal sternite VII, and genital capsule pale castaneus orange.

Thorax: Posterior border of metapleura almost straight.

Genital capsule: Posteroventral edge trilobate, lateral arms exposed, subtriangular to nearly truncate, and mesial projection stout, weakly subtruncate (Figs. 1, 8). Parameres, Figs. 29, 30.

Integument: Pronotal disk clothed with short, sparse, almost exclusively decumbent silver bristlelike pilosity; propleuron, mesopleuron, and metapleuron clothed with numerous very short, yellowish-white sericeous setae, giving clearly woolly appearance.

Female: Color similar to male. Connexival segments VIII and IX shiny reddish orange, with posterior spinelike projections, black; abdominal segments VIII and IX shiny reddish orange with posterior margin black; genital plates

dark yellow with inner margin of gonocoxae I and paratergite IX pale brown.

Variation.—1, Apex of antenniferous tubercles yellow with green metallic iridescence. 2, Humeral angles and tarsi with green metallic iridescence. 3, Hind tibia pale castaneus orange with basal joint black, and apical third yellow with green metallic iridescence. 4, Rim of abdominal spiracles yellow.

Type material.—Holotype: ♂, Papua New Guinea: Morobe, Tekadu, 07°38'S-146°34′E, 26 April 2000, T. Sears & T. David (UCDA). Paratypes: PAPUA NEW GUINEA: 1 ♂, 2 ♀, same data as for holotype (UCDA, UNAM); 1 ♂, Gulf, Ivimka Res. Station, Lakekamu, 120 m, 07°44′S-146°30′E, March-April 2000, T. Sears & Binatung Brigade (UCDA); 1 ♀, SE: S. Highlands District, Pimaga, 900 m, (on Ficus sp.), 9-10 February 1978, J. L. Gressitt (BPBM); 1 ♀, Kerema, Brown River, Central District, 09°12′S-147°14′E, 24 April 1971, Balderson & Baker, trip 171, stop 27961.2 (UCDA); 1 ♂, Daradae nr., Javarere, Musgrove R., 100 m, 2 October 1958, J. L. Gressitt (BPBM); 1 ♂, 1 9, Owen, Stanley Range, Goilala, Tapini, 975 m, 16-25 November 1957, W. W. Brandy (BPBM); 1 ♂, Rigo District, September 1928, Pemberton (ANIC).

Distribution.—Widespread in Papua New Guinea.

Discussion.—Like *P. flaviceps* (Guérin-Méneville) the propleuron, mesopleuron and metapleuron has a fine set of yellowish-white sericeous setae occurring in large numbers, forming a woolly longitudinal stripe, the fore and middle legs are yellow, and the male genital capsules are similar (Figs. 1, 4, 8, 9).

Priocnemicoris papuensis has antennal segment I reddish brown with basal third black, the pronotal disk clothed with short almost exclusively decumbent silvery bristlelike setae, and the pronotum (some specimens with green metallic iridescence at humeral angles), clavus,

corium, scutellum, upper margin of propleura, and posterior margin of mesopleura and metapleura lacking green metallic iridescence, similar to *P. flaviceps* which has antennal segment I reddish brown with basal third at ventral face yellow, and pronotal disk clothed with short, clearly erect, silvery, bristle-like setae.

Etymology.—Named for its occurrence in New Guinea.

# Priocnemicoris antennatus Brailovsky and Barrera, new species

(Figs. 15, 19)

Description.—Measurements: Male: Head length including apex of antenniferous tubercle 1.70; width across eyes 2.45; interocular distance 1.12; length of antennal segments: I, 4.30; II, 4.00; III, 2.85; IV, 7.50. Pronotum: Length 4.10; maximum width across anterior lobe 3.00: maximum width across humeral angles 5.25. Scutellar length 2.70; width 2.30. Body length 17.30. Female: Head length including apex of antenniferous tubercle 1.72; width across eyes 2.47; interocular distance 1.15; length of antennal segments: I, 4.45; II, 3.90; III, 2.70; IV, 7.10. Pronotum: Length 4.12; maximum width across anterior lobe 3.50; maximum width across humeral angles 5.70. Scutellar length 2.85; width 2.50. Body length 19.17.

Male: Dorsal coloration: Head yellowish-orange with two dark brown, diffused, longitudinal stripes; ocelli surrounded by pale brown halo; antennal segments I to IV reddish orange; pronotum, clavus, and corium shiny, pale, castaneus orange; scutellum reddish castaneus with apex yellow; hemelytral membrane dark yellow with basal third pale brown; connexivum yellowish orange with posterior margins brown; dorsal abdominal segments shiny orange with pale brown marks. Ventral coloration: Head, rostral segments (apex of IV

brown), prosternum, mesosternum, fore acetabulum, fore and middle legs, and abdominal sterna pale yellowish orange; anterior and posterior lobe of metathoracic peritreme yellow; metasternum pale yellowish orange, and laterally pale reddish orange; propleuron, mesopleuron, and metapleuron with wide, pale, yellowish longitudinal stripe; upper margin of propleuron, mesopleuron, and metapleuron and middle and hind acetabulae castaneus orange; hind leg with coxa, trochanter, and tarsi pale yellowish orange, femur dark castaneus orange with basal third pale yellowish orange and tibia dark castaneus orange with apical third pale yellowish orange; abdominal sterna with two longitudinal and irregular stripes pale castaneus orange below abdominal spiracles.

Thorax: Posterior border of metapleuron slightly sinuate.

Genital capsule: Posteroventral edge trilobate, lateral arms broad and exposed, mesial projection wide and truncated (Figs. 15, 19).

Integument: Pronotal disk clothed with short, sparse, almost exclusively decumbent, silvery, bristlelike pilosity; yellowish longitudinal stripe on propleuron, mesopleuron, and metapleuron clothed with numerous very short, yellowish white, sericeous setae, giving a clearly woolly appearance.

Female: Color similar to male. Connexival segments VIII and IX dark reddish orange with posterior angles black; dorsal abdominal segments VIII and IX dark reddish orange; genital plates pale yellow with inner margin of gonocoxae I pale brown, and posteior angle of paratergite VIII and IX reddish.

Variation.—1, Fore acetabulum pale castaneus. 2, Dorsal abdominal segments shiny reddish orange. 3, Middle third of abdominal sternite III reddish orange.

Type material.—Holotype: &, Papua New Guinea: Middlefly, 250–300 m, July-August 1928, Pemberton (ANIC).

Paratypes: PAPUA NEW GUINEA: 1 \$\delta\$, same data as for holotype (UNAM); 1 \$\delta\$, SE: S Highlands District, Pimaga, 900 m, 9–10 February 1978, J. L. Gressitt (BPBM); 1 \$\delta\$, 1891, Finschhafen (without data) (IRNB). INDONESIA: Irian Jaya (Dutch New Guinea): 1 \$\delta\$, Lae, December 1944, W. Harden (LACM). Indonesia: Dutch East Indies: 1 \$\delta\$, Molucca Island: Morotai, 1944, E. Reimschiissel (BYU).

Distribution.—Only known from New Guinea.

Discussion.—This species is recognized by the dimensions of antennal segment I and IV which are always longer than 4.20 (male), 4.40 (female) and 7.40 (male) 7.00 (female) respectively. Like P. papuensis with a yellowish longitudinal stripe on the propleura, mesopleura, and metapleura clothed with yellowish-white sericeous setae giving a clearly woolly appearance, and with the upper margin of propleura, mesopleura, and metapleura lacking a green metallic iridescence. Priocnemicoris antennatus has antennal segment I entirely shiny reddish orange whereas in P. papuensis it is shiny reddish orange with the basal third black, and always shorter than 4.05 (male), 4.30 (female) and more slender, and antennal segment IV shorter than 6.70 (male), 6.75 (female).

The posteroventral edge of the male genital capsule is similar to *P. morobe* (Figs. 11, 15, 16, 19) and in both species the propleura, mesopleura and metapleura lack a sericeous setae.

Etymology.—Named for the shape of antennal segment I.

# Priocnemicoris bicoloripes Brailovsky and Barrera, new species

(Figs. 14, 20, 25-26, 39)

Description.—Measurements: Male: Head length including apex of antenniferous tubercle 1.92; width across eyes

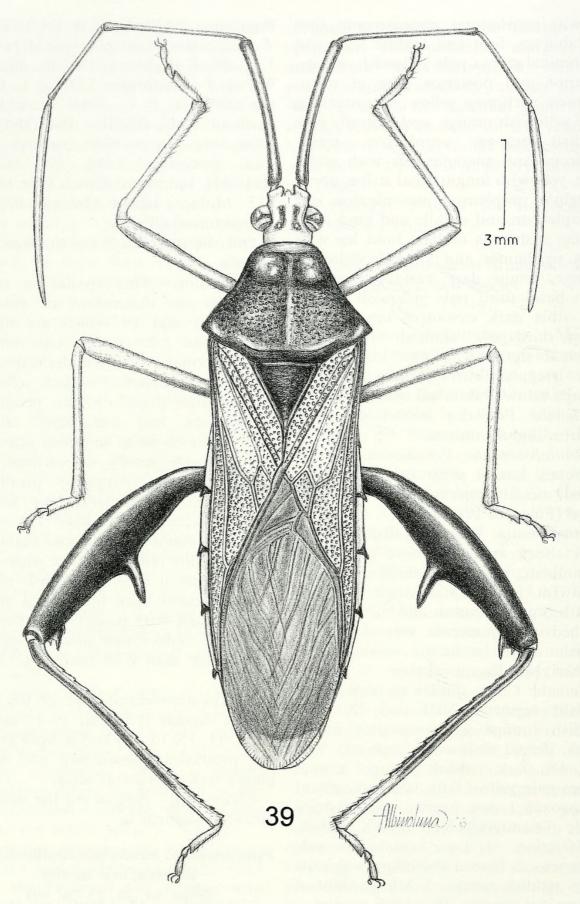


Fig. 39. Dorsal view of Priocnemicoris bicoloripes, male.

2.40; interocular distance 1.17; length of antennal segments: I, 4.65; II, 4.20; III. 3.00; IV, 7.15. Pronotum: Length 4.00; maximum width across anterior lobe 3.30; maximum width across humeral angles 5.70. Scutellar length 2.75; width 2.40. Body length 18.67. Female: Head length including apex of antenniferous tubercle 1.85; width across eye 2.45; interocular distance 1.10; length of antennal segments: I, 4.32; II, 3.85; III, 2.70; IV, 7.80. Pronotum: Length 4.15; maximum width across anterior lobe 3.55: maximum width across humeral angles 5.95. Scutellar length 2.85; width 2.60. Body length 19.38.

Male: Dorsal coloration: Head yellow with two dark brown longitudinal stripes; ocelli surrounded by dark brown halo; antennal segment I dark reddish brown, segments II and III dark reddish orange, and IV pale orange; pronotum shiny dark reddish brown, with green metallic iridescence; scutellum dark reddish brown with apex yellow and lateral margins with green metallic iridescence; clavus yellow with green metallic iridescence; corium yellow, costal and posterior margins dark castaneus orange, and punctures tinged with green metallic iridescence; hemelytral membrane dark vellow with basal third brown; connexivum yellow with posterior border, including spine dark brown; dorsal abdominal segments dark reddish brown. Ventral coloration: Head and rostral segments (apex of IV brown) yellow; prosternum, mesosternum, metasternum, and fore and middle legs pale yellowish orange; anterior and posterior lobe of metathoracic peritreme yellow; fore and middle acetabulum, and space between them black; propleuron, mesopleuron, and metapleuron dark reddish brown with green metallic iridescence; hind leg with coxa, trochanter, and tarsus pale castaneus orange, femur shiny reddish brown with basal joint pale yellowish orange, and tibia pale castaneus orange with basal third shiny reddish brown, and apical third pale yellowish orange; abdominal sterna tricolorous, midline shiny yellowish orange, pleural margins pale yellow and in between a shiny dark reddish-brown longitudinal stripe running below abdominal spiracles; genital capsule dark castaneus orange.

Thorax: Posterior border of metapleuron slightly sinuate.

Genital capsule: posteroventral edge trilobate, lateral arms exposed and rounded, and mesial projection short and subtruncate (Figs. 14, 20). Parameres, Figs. 25, 26.

Integument: Pronotal disk clothed with short, sparse, almost exclusively decumbent silvery, bristlelike setae; propleuron, mesopleuron and metapleuron clothed with very fine, sparse, decumbent setae.

Female: Color similar to male. Connexival segments and dorsal abdominal segments VIII and IX dark reddish brown; genital plates dark reddish brown with outer margin of gonocoxae I and inner margin of paratergite VIII and IX shiny orange.

Variation.—1, Antennal segments II and III dark reddish brown. 2, Dorsal and ventral surface lacking the green metallic iridescence.

Type material.—Holotype: ♂, Indonesia: Irian Jaya (Dutch New Guinea): Jayawijaya Province, Bommela, ca 1700–1900 m, 4 October 1996, A. Riedel (ZSMC). Paratypes: INDONESIA: Irian Jaya (Dutch New Guinea): 3 ♂, 1 ♀, Sama date as for holotype (UNAM, USNM ex. Ullrich coll.).

Distribution.—Known only from the type material.

Discussion.—This is the only known species in the genus *Priocnemicoris* with the corium bicolorous, the clavus entirely yellow, and the abdominal sterna tricolorous. For the other species the corium and clavus are usually dark reddish brown to black, and the abdominal

sterna yellow with an irregular, castaneus-orange longitudinal stripe running below each abdominal spiracle. Additionally, the propleura, mesopleura, and metapleura of *P. bicoloripes* lacks a wide, yellowish, longitudinal stripe clothed with sericeous setae.

Etymology.—Named for bicolored of corium.

### Priocnemicoris morobe Brailovsky and Barrera, new species

(Figs. 11, 16, 22, 27-28)

Male: Description.—Measurements: Head length including apex of antenniferous tubercle 1.75; width across eyes 2.40; interocular distance 1.08; length of antennal segments: I, 4.25; II, 4.10; III, 2.75; IV, 7.45. Pronotum: Length 3.88; maximum width across anterior lobe 2.75; maximum width across humeral angles 4.90. Scutellar length 2.30; width 2.20. Body length 16.95. Female: Head length including apex of antenniferous tubercle 1.80; width across eyes 2.30; interocular distance 0.97; length of antennal segments: I, 3.75; II, 3.50; III, 2.40; IV, 6.15. Pronotum: Length 3.90; maximum width across anterior lobe 3.00; maximum width across humeral angles 5.55. Scutellar length 2.60; width 2.30. Body length 18.70.

Male: Dorsal coloration: Head dark yellow; ocelli surrounded by dark brown halo; antennal segments I to III shiny reddish orange, and IV dull orange; pronotum dark castaneus orange with anterolateral margins and humeral angles dark yellow; scutellum shiny reddish orange, and apex yellow; clavus and corium pale to dark castaneus orange; hemelytral membrane dark yellow with basal third pale brown; connexivum yellow with posterior margin dark brown; dorsal abdominal segments dark yellow with shiny reddish-orange marks. Ventral coloration: Head, rostral segments (apex of IV brown), prosternum,

mesosternum, metasternum, anterior and posterior lobe of metathoracic peritreme, fore and middle acetabulae, fore and middle legs, and posterior angle of metapleuron yellow; propleuron, mesopleuron, metapleuron, and hind acetabulum pale castaneus orange; hind femur with coxae pale castaneus orange with yellow marks, trochanter yellow, femur reddish orange with basal joint dark yellow, lateral and apical angles, and subdistal spine dark brown to black, tibia pale castaneus orange with basal joint shiny reddish orange, and tarsus pale castaneus orange; abdominal sterna dark yellow with two longitudinal and irregular reddish-orange stripes lateral to midline; rim of abdominal spiracle yellow; genital capsule pale castaneus orange.

Thorax: Posterior border of metapleuron nearly straight.

Genital capsule: Middle third of posteroventral edge trilobate, with lateral arms broad and exposed, and mesial projection wide and truncate or bilobate, lacking mesial projection (Figs. 11,16). Parameres, Figs. 27, 28.

Integument: Pronotal disk clothed with short, sparse, almost exclusively decumbent, silvery, bristlelike pilosity; propleuron, mesopleuron, and metapleuron clothed with very fine, sparse, decumbent setae.

Female: Color similar to male. Connexival segments VIII and IX shiny reddish orange, with posterior angle black; dorsal abdominal segments VIII and IX shiny reddish orange with posterior margin darker; genital plates dark yellow with reddish reflections on paratergite VIII and IX (Fig. 22).

Variation.—1, Head dorsally with two pale brown longitudinal stripes. 2, Dorsal surface of hind femur pale castaneus orange and ventrally, including the basal joint yellow.

Type material.—Holotype: ♂, Papua New Guinea: NE Wau, 1200 m, 7 March

1968, J. & M. Sedlacek (BPBM). Paratypes: PAPUA NEW GUINEA: 4 8, 1 9, NE Wau, 18 December 1965, G. Monteith (QMBA), 7 March 1968, J. & M. Sedlacek (UNAM), 3 July 1971, J. Sedlacek (BPBM), 6-13 March 1974, on Hibiscus sp., Szent-Ivany (BPBM); 1 ♀, Wau, Ecology Center, 17 February 1978, E. I. Schlinger (CAS); 1 <sup>♀</sup>, Morobe District, Wau, Big Wau Creek, 1400 m, 15 September 1979, P. J. Shanahan (CAS); 2 ♂, 3 ♀, Morobe District, Wau, 3-4 February 1966, G. Monteith (QMBA), 23 October 1969, J. E. Tobler (UNAM), 9 August 1972, G. G. E. Scudder (BPBM), 22 January 1974, G. Otaweto (BPBM); 1 &, NE Boana Mission, Huon Pen., 900 m, 4-5 September 1956, E. J. Ford Jr. (BPBM); 1 <sup>♀</sup>, NE Huon Pen., Pindiu, 600-850 m, 19 April 1963, J. Sedlacek (BPBM); 1 <sup>♀</sup>, SE Mt. Lamington, Amboga R.,500 m, April 1966, P. Shanahan (BPBM); 1 &, Morobe Province, Wau, Wau Ecol. Inst., 1200 m, 1-10 August 1983, S. E. & P.M. Miller (USNM).

Distribution.—Widespread in Papua New Guinea.

Discussion.—This species resembles *P. papuensis* in lacking green metallic iridescence on the pronotum, scutellum, clavus, corium, upper margin of propleura and posterior margin of mesopleura and metapleura. The pronotal disk is clothed with short, sparse, almost exclusively decumbent pilosity, the anterior lobe of pronotal disk is dark castaneus orange, not yellow, and connexivum is bicolored.

Priocnemicoris morobe is characterized by having the antennal segment I entirely shiny reddish orange, the anterolateral margins of pronotum dark yellow, clearly in contrast with the dark castaneus orange disk, and the propleuron, mesopleuron, and metapleuron lack a yellowish longitudinal stripe clothed and numerous very short yellowish-white sericeous setae giving a clearly woolly appearance. In contrast, *P. papuensis* has antennal segment I reddish brown, with basal third black, the anterolateral margins pale castaneus orange, and a uniformly colored pronotal disk.

Etymology.—Named for Morobe Province, Papua New Guinea; a noun in apposition.

### Priocnemicoris doesburgi Brailovsky and Barrera, new species

(Figs. 13, 18)

Description.—Measurements: Male: Head length including apex of antenniferous tubercle 1.95; width across eyes 2.60; interocular distance 1.17; length of antennal segments: I, 3.70; II, 3.80; III, 2.75; IV, 7.82. Pronotum: Length 4.40; maximum width across anterior lobe 3.30; maximum width across humeral angles 5.70. Scutellar length 2.75; width 2.43. Body length 19.32. Female: Head length including apex of antenniferous tubercle 1.92; width across eyes 2.62; interocular distance 1.18; length of antennal segments: I, 3.85; II, 3.81; III, 2.77; IV, 7.83. Pronotum: Length 4.42; maximum width across anterior lobe 3.30; maximum width across humeral angles 5.73. Scutellar length 2.76; width 2.45. Body length 19.50.

Male: Dorsal coloration. Head pale orange yellow; ocelli surrounded by pale brown halo; antennal segment I pale castaneus orange, segments II and III shiny dark castaneus orange, and IV dull castaneus orange; pronotum shiny pale orange yellow with posterior margin shiny reddish orange; humeral angles with green metallic iridescence; scutellum shiny reddish orange with apex yellow; clavus and corium shiny castaneus orange with green metallic iridescence; hemelytral membrane dark yellow with basal third pale brown; connexivum yellow with posterior third reddish brown; dorsal abdominal segments shiny

dark reddish orange with yellow marks and laterally as well as the posterior margin of abdominal segment VII almost black. Ventral coloration: Head, rostral segments (apex of IV black), prosternum, propleuron, middle third of mesosternum, fore and middle acetabulae, fore and middle legs, and posterior margin of metapleuron pale yellow; anterior and posterior lobe of metathoracic peritreme dark yellow; lateral surface of mesosternum pale brown; mesopleuron, metapleuron, metasternum, and hind acetabulae shiny reddish castaneus; hind leg with coxa yellow with castaneus reflections, trochanter yellow, femur reddish orange with basal third yellow, tibia yellow with basal third reddish orange, and tarsus yellow; abdominal sterna yellow with two irregular, longitudinal, reddish orange stripes lateral to midline, behind each abdominal spiracle; rim of abdominal spiracle yellowish orange; genital capsule pale castaneus and laterally yellow.

Thorax: Posterior border of metapleuron strongly concave.

Genital capsule: Posteroventral edge with wide open U-shaped concavity, laterally rounded (Figs. 13, 18).

Integument: Pronotal disk clothed with short, clearly erect, silvery, bristle-like pilosity; propleuron, mesopleuron, and metapleuron with very fine, sparse decumbent hairs.

Female: Color similar to male. Connexival segment VIII yellow with posterior third reddish brown, and IX reddish brown; dorsal abdominal segments VIII and IX reddish brown; genital plates pale orange yellow with inner margin of gonocoxae I pale brown.

Variation.—1, Antenniferous tubercle, tibiae and tarsi with green metallic iridescence.

Type material.—Holotype ♂, Papua New Guinea: Western District, Rouku, Morehead River, 19 March–28 May 1962, W. W. Brandt (BPBM). Paratype: PAPUA NEW GUINEA:  $1^{\circ}$ , same data as for holotype (UNAM).

Distribution.—Only recorded from the type locality.

Discussion.—Priocnemicoris doesburgi is the only known species in the genus with the posterior border of metapleura strongly concave. In the other species, the metapleura are straight or slightly sinuate. In P. morobe and P. doesburgi, the propleura, mesopleura, and metapleura lack a woolly longitudinal stripe of sericeous setae, and lack a green metallic iridescence. In P. morobe, the posteroventral edge of male genital capsule is trilobate (Figs. 11, 16), and the propleura, mesopleura, and metapleura exhibit a pale castaneus orange color. In P. doesburgi, the posteroventral edge of male genital capsule has a wide, open U-shaped concavity (Figs. 13, 18), and the mesopleura and metapleura are shiny reddish castaneus, contrasted with the pale yellow propleura.

Etymology.—Named in honor of the distinguished Dutch heteropterist Pieter H. van Doesburg Jr.

# Priocnemicoris kiungensis Brailovsky and Barrera, new species

(Figs. 2, 7, 33–34)

Description.—Measurements: Male: Head length including apex of antenniferous tubercle 1.80; width across eyes 2.40; interocular distance 1.07; length of antennal segments: I, 4.00; II, 3.75; III, 2.65; IV, 7.65. Pronotum: Length 4.00; maximum width across anterior lobe 2.80; maximum width across humeral angles 4.90. Scutellar length 2.50; width 2.25. Body length 17.85.

Male: *Dorsal coloration*: Head shiny pale orange with two pale brown longitudinal stripes; antennal segments I to III shiny reddish orange, and IV dull orange; pronotum dark castaneus orange, with green metallic iridescence at humeral angles; scutellum shiny reddish brown

with apex yellow; clavus and corium dark castaneus orange with green metallic iridescence; hemelytral membrane dark yellow with basal third pale brown; connexivum yellow with posterior margin dark brown; dorsal abdominal segments shiny reddish orange suffused with irregular brown marks. Ventral coloration: Head, rostral segments (apex of IV brown), prosternum, mesosternum, metasternum, and fore and middle legs pale orange yellow; anterior and posterior lobe of metathoracic peritreme, and posterior angle of metapleuron yellow; propleuron, mesopleuron, metapleuron, and hind acetabula shiny castaneus orange; hind leg with coxa shiny castaneus orange, trochanter pale orange yellow, femur shiny reddish orange with basal joint pale orange yellow, tibia pale orange yellow with basal joint reddish orange, and tarsus pale orange yellow; abdominal sterna, pale orange yellow with two longitudinal, irregular stripes pale to dark castaneus orange lateral to midline; rim of abdominal spiracle, and genital capsule pale orange yellow.

Thorax: Posterior border of metapleuron nearly straight.

Genital capsule: Posteroventral edge with wide, open U-shaped concavity, laterally convex (Figs. 2, 7). Parameres, Figs. 33, 34.

Integument: Pronotal disk clothed with short, clearly erect, silvery, bristle-like hairs; propleuron, mesopleuron, and metapleuron clothed with very fine, sparse decumbent setae.

Variation.—1, Green metallic iridescence at humeral angles, clavus, and corium sometimes difficult to see.

Female: Unknown.

Type material.—Holotype: ♂, Papua New Guinea: Kiunga Fly River, 11–13 August 1957, W. W. Brandt (BPBM). Paratypes: PAPUA NEW GUINEA: 1 ♂, Kiunga Fly river, 11–13 August 1957, W. W. Brandt (UNAM); 2 ♂, Amazon Bay Area, Deria, 700 ft, 11 Dic 1962–9

Jan 1963 W. W. Brandt (ANIC); 1 ♂, Morobe District, Tekadu, 07°36′S– 146°34′E, 18 March 2000, T. Sears & Binatung Brigade (UCDA).

Distribution.—Only known from the type material.

Discussion.—This species appears to be most closely related to *P. morobe*, in having the propleura, mesopleura, and metapleura clothed with very fine, sparse, decumbent setae, in lacking yellowish-white, sericeous setae, and lacking a green metallic iridescence on the upper margin of propleura, and posterior margin of mesopleura and metapleura.

Priocnemicoris kiugensis has the pronotal disk clothed with short, clearly erect, silvery, bristlelike setae, the pronotum, clavus and corium have a green metallic iridescence, and the posteroventral edge of male genital capsule has a wide opened U-shaped concavity (Figs. 2, 7). Priocnemicoris morobe has the pronotal disk clothed with short and almost decumbent bristlelike pilosity, the pronotum, clavus and corium lack a green metallic iridescence, and the posteroventral edge of male genital capsule is trilobate (Figs. 11,16).

Etymology.—Named for its occurrence in Kiunga, Papua New Guinea; a noun in apposition.

# Priocnemicoris nigrellus Brailovsky and Barrera, new species

(Figs. 12, 17)

Description.—Measurements: Male: Head length including apex of antenniferous tubercle 2.15; width across eyes 2.75; interocular distance 1.25; length of antennal segments: I, 4.70; II, 4.65; III, 3.50; IV, 8.50. Pronotum: Length 4.50; maximum width across anterior lobe 3.55; maximum width across humeral angles 5.70. Scutellar length 2.95; width 2.60. Body length 20.00. Female: Head

length including apex of antenniferous tubercle 1.95; width across eyes 2.70; interocular distance 1.27; length of antennal segments: I, 4.40; II, 4.30; III, 3.35; IV, 8.00. Pronotum: Length 4.40; maximum width across anterior lobe 3.25; maximum width across humeral angles 5.35. Scutellar length 2.85; width 2.35. Body length 19.20.

Male: Dorsal coloration: Head dark castaneus orange with vertex and frons dark brown; antennal segments I to III shiny dark reddish brown, and IV dull dark reddish brown; pronotum dark reddish brown; humeral angles tinged with green metallic iridescence; scutellum dark reddish brown with apex yellow; clavus and corium dark reddish brown; hemelytral membrane dark yellow with basal third dark brown; connexivum yellow with posterior margin dark reddish brown; dorsal abdominal segments dark reddish brown. Ventral coloration: Head dark castaneus orange with pale yellowish longitudinal stripe near eyes; rostral segments dark castaneus orange; thorax, including anterior and posterior lobe of metathoracic peritreme, acetabulae, and legs dark reddish brown; acetabulae, propleuron, and posterior margin of mesopleuron and metapleuron tinged with green metallic iridescence: prosternum and mesosternum at midline yellow; propleuron, mesopleuron, and metapleuron with wide, yellowish, longitudinal stripe; abdominal sterna and genital capsule dark reddish brown; pleural margins yellowish with posterior border pale to dark reddish brown.

Thorax: Posterior border of metapleuron slightly concave.

Genital capsule: Posteroventral edge with wide open U-shaped concavity (Figs. 12, 17).

Integument: Pronotal disk clothed with short, dense, clearly erect, silvery, bristlelike pilosity; yellowish longitudinal stripe on propleuron, mesopleuron and metapleuron clothed with numerous,

very short, yellowish-white sericeous setae, giving a woolly appearance.

Female: Color similar to male. Connexival segments, dorsal abdominal segments VIII and IX, and genital plates black to dark reddish brown, with inner angle of paratergite VIII yellow.

Variation.—1, Dark reddish-brown color of dorsal and ventral surface replaced by ashiny black tint. 2, Pleural abdominal margin yellow with posterior margin reddish brown to black.

Type material.—Holotype: ♂, Indonesia: Irian Jaya (Dutch New Guinea): Japen, Servi, Mantembo, 200–700 m, 6 September 1991, A. Riedel (UNAM). Paratype: INDONESIA: Irian Jaya (Dutch New Guinea): 1 ♀, same data as for holotype (ZSMC).

Distribution.—Only recorded from the type localities.

Discussion.—Priocnemicoris nigrellus is the only known species in the genus with the fore and middle legs including the acetabulum entirely dark reddish brown to black. In other species, the fore and middle legs are always pale yellow to pale yellowish orange.

Etymology.—From the Latin *nigra*, meaning black, referring to the color of the body.

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