## Review of the Genus *Priopus* Castelnau (Coleoptera, Elateridae, Melanotinae) from the Philippine Islands

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Abstract—This is a partial revision of *Priopus* in which we treat the Philippine archipelago. We include 34 species, of which 19 are proposed as new. Thirty-two of these 34 are endemic to the archipelago. Of the 2 extralimital species, *P. erythronotus* (Candèze) is also known from Sulawesi and *P. consanguineus* (Candèze) also ranges through Sulawesi to New Guinea and Solomon Islands.

### Introduction

Von Hayek (1990) fixed the priority of *Priopus* Castelnau, 1840 (type species *Priopus frontalis* Castelnau) for the species until then assigned first to *Diploconus* Candèze, 1860 and later to *Neodiploconus* Hyslop, 1921. *Priopus* occurs in the Indo-malayan region with few species from India to the numerous species from Malaysia, Indonesia, and the Philippines.

The Philippines components of *Priopus* are nearly all endemic and in the past were described by only two authors, Candèze and Fleutiaux. Upon examining material from various museums (listed below), including type material of the 13 described species endemic to the Philippines, we now recognize 34 species, of which 32 are endemic; 19 of these are described as new. These species may be divided into two groups by the shape of the last abdominal segment. Members of Species Group I (12 species) have the outline of the last abdominal segment with a sharp projection on each side in both sexes; this character is exclusive to these Philippines species, but members of Species group II (22 species) lack this character. In the key, the characters we have used to separate species are: body color (very stable in several species), the shape of anterior margin of frons, the ratio of antennal segments II, III and IV, the shape of the pronotum with puncture size and interval size on the central disk, apex of elytra, and the prosternal process. The male genitalia are not always useful to separate these species, and they show variation in the shape of apical expansions of the paramera. No biological data

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are known to date on the Philippines members, and no larvae have been associated. We do know that several species from mountainous areas were collected in light traps. Further species probably await discovery, particularly from the southern islands, especially Mindanao.

## **Material and Methods**

Body measurements. Body length is measured along the midline from the anterior margin of frons to the apex of the elytra; the width is measured across the broadest part.

Pronotal measurements. The pronotal length is measured along the midline; the width at the broadest part, usually at the hind angles.

Pronotal punctures. The shape of the punctures and their density are referred to the median part of the disk.

Description of species. Many of these species have similar characters; generally we have described only those useful to separate the different species.

Abbreviations. The names of institutions, museums and collections containing study material are abbreviated as follows:

BMNH	London, The Natural History Museum
BPBM	Honolulu, Bishop Museum
CCW	Wien, Cate coll.
CPG	Gatteo, Platia coll.
CRG	Genova, Riese coll.
CSV	Vinningen, Schimmel coll.
DEI	Eberswalde, Deutsches Entomologisches Institut.
IRSNB	Bruxelles, Institut Royal des Sciences Naturelles de Belgique
IZW	Warszawa, Institut de Zoologie
MNHN	Paris, Muséum National d'Histoire Naturelle
MNHU	Berlin, Museum fur Naturkunde der Humboldt Universitat
NHMB	Basel, Naturistorisches Museum
RNH	Leiden, Rijksmuseum van Natuurlijke Historie
SMTD	Dresden, Staatliches Museum fur Tierkunde
TM	Budapest, Termeszettudomany Museum

## Key to Philippines species of Priopus

ent with a small pointed projection on	Outline of the last abdominal segment
Species Group I	each side in both sexes (Fig. 13)
ent lacking a small pointed projection	Outline of the last abdominal segmen
38) Species Group II	on each side in both sexes (Fig. 38)

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1.

# **Species Group I**

1.	Fourth tarsal segment distinctly smaller than third (in dorsal view), this segment dilated (Fig. 15)2
	Fourth tarsal segment not much smaller than third, this segment not di-
2(1).	lated (Fig. 14)
2(1).	Prosternal process immediately bent inwards behind procoxae
3(2).	Body surfaces blackish color except for antenna and legs; pronotum more
5(2).	convex, base strongly declivous
	Body surface ferruginous color; pronotum less convex, base gradually
	declivous
4(2).	Body ferruginous color with black shading on head, and on margins and
	apex of elytra
	Body normally bicolorous; pronotum red-orange with black elytra to
	darkened pronotum with brown elytra
5(1).	Second and third antennal segments together clearly shorter than fourth
-(-).	in male, but subequal at best in female
	Second and third antennal segments together just shorter than fourth in
	male, but longer in female
6(5).	Antennae longer: exceeding hind angles of pronotum by 2 segments in
- (- )-	male, but only reaching hind angles in female
	Antennae shorter: exceeding hind angles of pronotum by 1.5 segments at
	most in male, but not reaching hind angles in female
	4. <i>fuscus</i> (Fleutiaux)
7(6).	Size averaging larger: body length 10-14.3 mm; width 2.5-3.8 mm; cari-
	nae on hind angles of pronotum equally developed
	Size averaging smaller: body length 7.8-10.5 mm; width 1.8-2.2 mm; inner
	carina on hind angles of pronotum scarcely visible
	1. angustus (Fleutiaux)
8(7).	Antennae longer: exceeding hind angles of pronotum by 4 segments in
	male, but by 1 segment in female; pronotum rather depressed near
	base9. longicornis n. sp.
	Antennae shorter: exceeding hind angles of pronotum by 2 or 3 segments
	at most in male, but only reaching hind angles in female; pronotum
	regularly convex
9(5).	Body entirely ferruginous10
	Body not entirely ferruginous11
10(9).	Size averaging larger: body length 11–14 mm; width 3–3.7 mm
	5. <i>hayekae</i> n. sp.
	Size averaging smaller: body length 8–12 mm; width 2.2–3 mm
11(0)	12. politus (Candèze)
11(9).	Body ferruginous with lateral margins of elytra blackish; pronotal punc-
	tures less robust with intervals larger than 1-puncture diameter
	10. marginatus (Fleutiaux)

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Body fuscous; pronotum punctures denser	with intervals of less than 1-
puncture diameter	

# **Species Group II**

1.	Anterior margin of frons not projecting horizontally; elytral apex variable in outline
	Anterior margin of frons thickened, projecting horizontally; elytral apex emarginate
2(1).	Prosternal process more or less emarginate at apex; elytral apex emargi- nate (Fig. 43) or simply truncate
	Prosternal process not emarginate at apex (Fig. 42); elytral apex entire
3(2).	Prosternal process deeply emarginate at apex (Fig. 39, 40)4 Prosternal process scarcely emarginate at apex (Fig. 41)8
4(3).	Prosternal process more or less bent inwards after the middle (Fig. 40)
	Prosternal process nearly horizontal (Fig. 39)7
5(4).	Body bicolorous: pronotum red-orange, elytra black; antennae longer: reaching or exceeding hind angles of pronotum
	Body color variable: fulvous with blackish shades to black; antennae
	shorter: not reaching hind angles of pronotum
	20. consanguineus (Candèze)
6(5).	Body shape elongate; antennae longer in male with 2 segments exceeding
	hind angles of pronotum 25. haddeni (Fleutiaux)
	Body shape stout; antennae shorter the male, only reaching hind angles of pronotum15. <i>bicolor</i> n. sp.
7(4).	Body bicolorous: pronotum red-orange, elytra black
/(4).	30. schadenbergi n. sp.
	Body unicolorous: yellow-ferruginous
8(3).	Pronotum as long as broad
0(5).	Pronotum clearly broader than long
9(8).	Size smaller: body length 9.3–9.4 mm; width 2.5 mm; body color shining
,(0),	black
	Size larger: body length 12–12.5 mm; width 2.9–3 mm; body color
	fuscous
10(8).	Body color brown-ferruginous; pronotal punctures denser, separated by
	intervals smaller than their diameters
	Body color variable, yellow-testaceous to ferruginous to bicolored; pron- otal punctures sparser, separated by intervals equal or more than their
	diameters
11(10)	Body broader: width 2.7–3 mm; antennae shorter, scarcely reaching hind
11(10).	angles of pronotum; second and third antennal segments together
	longer than fourth in male 17. <i>brunneus</i> n. sp.

<ul> <li>Body narrower: width 2.1–2.7 mm; antennae longer, exceeding pronotal hind angles of pronotum by 1 segment; second and third antennal segments together as long as fourth in male</li></ul>
Pronotal sides more or less arcuate narrowing in anterior half
13(12). Pronotal punctures stronger, sparse but quite visible
Pronotal punctures feebler, very sparse and scarcely visible
<ul> <li>14(13). Antennae shorter: not or exceeding pronotal hind angles by 1 segment at most in male, not reaching hind angles in female; pronotal hind angles with carinae well developed</li></ul>
reaching hind angles in female; pronotal hind angles with outer carina scarcely visible
15(2,14)Size averaging larger: body length 11–17 mm; width 3–5 mm
<ul> <li>16(15). Antennal segments from fourth with median longitudinal carina</li> <li>17 Antennal segments from fourth without median longitudinal carina</li> <li>19. cervinus (Candèze)</li> </ul>
17(16). Pronotum regularly convex without median longitudinal furrow; sides more arcuate
Pronotum with feeble median longitudinal furrow in the basal declivity often extending to middle, sides less arcuate
<ul> <li>18(15). Size averaging larger: body length 7.5–12 mm; width 1.8–3 mm; intervals of the pronotal punctures shining</li></ul>
vals of the pronotal punctures shagreened 14. <i>bakewelli</i> (Fleutiaux) 19(18). Antennal segments from fourth with median longitudinal carina 20 Antennal segments from fourth without median longitudinal carina 21. <i>coxalis</i> (Fleutiaux)
20(19). Pronotal punctures denser, nearly contiguous
<ul> <li>21(20). Pronotum more convex, with trace of median longitudinal furrow; basal area strongly declivous</li></ul>

## **Species Group I**

1. Priopus angustus (Fleutiaux), comb. nov. (Figures 8, 44) Neodiploconus angustus Fleutiaux, 1934: 485; Van Zwaluwenburg, 1936: 421.

Material examined. Holotypus &, Philippines: Luzon, Mountain Prov: Mt Data, 5000 ft, 16.III.1931 (F. C. Hadden) (Fleutiaux coll., MNHN). Other spec-

imens, Mountain Prov: Abatan, Buguias 60 km S of Bontoc, 1800–2000 m, light trap (H. M. Torrevillas, BPBM); Mountain Prov: Camp 82, 6000 ft, 7.V.1931 (Hadden, BPBM); Ifugao Prov: Jacmal Bunhian, 24 km E of Mayoyao, 800–1000 m, 28–30.IV.1967, light trap, (Torrevillas, BPBM); Benguet Prov: Baguio (M. C. F. Baker, MNHN).

REDESCRIPTION. Male. Body color testaceous to ferruginous covered with yellow-golden vestiture.

Head: frons with anterior margin thickened, arcuate, scarcely protruding above clypeus; punctures robust, umbilicate, nearly contiguous. Antennae exceeding hind angles of pronotum by 2–3 segments; segments II and III together clearly shorter than IV; IV–X subtriangular much longer than broad, longitudinally carinate; XI subellipsoidal.

Pronotum: as long as broad, slightly convex, sides moderately arcuate with posterior angles long, acuminate, divergent, bicarinate; the inner carina generally more feeble and scarcely visible, the outer very close to lateral margin; punctures deep, simple to slightly umbilicate with intervals shining; punctures commonly subequal to their interspaces.

Elytra: 3.4–3.5 times as long as pronotum and 3 times as long as broad; sides subparallel for basal 2/3, then gradually tapering to feebly mucronate apex; striae very light from base to apex, punctured; interstriae flat with smaller punctures.

Aedeagus as in Fig. 8.

Female. Generally more convex and larger; antennae shorter attaining or surpassing hind angles of pronotum by 1 segment.

Body length (both sexes): mm 7.8–10.5 mm; width 1.8–2.1 mm.

2. Priopus bakeri Platia & Schimmel, n. sp. (Figure 10)

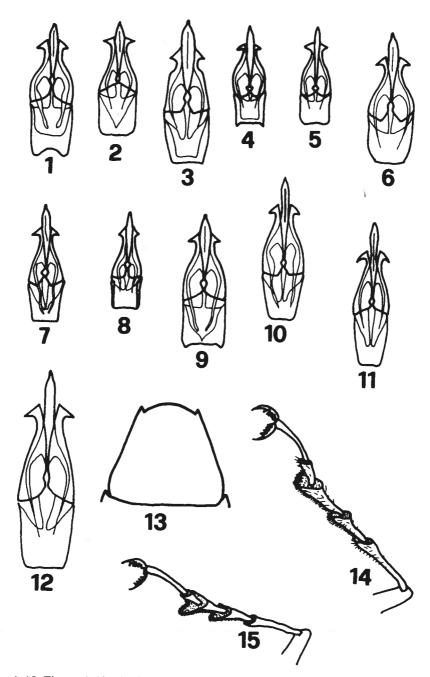
DIAGNOSIS. Similar to *P. nigripes* (Fleutiaux), distinct from it by the entirely ferruginous body color.

Material examined. Holotypus  $\mathcal{S}$ , Philippines: Luzon, Benguet Prov: Baguio (M. C. F. Baker) (Fleutiaux coll., MNHN). 2 Paratypes ( $\mathcal{S} \& \mathcal{P}$ ), Philippines: North Luzon; Mountain Prov., XI.1987 (CPG).

DESCRIPTION. Male. Body color entirely ferruginous with head, margins and apex of elytra blackish; covered with yellowish vestiture.

Head: frons convex above, slightly impressed near anterior margin; anterior margin arcuate, moderately thickened and scarcely protruding above clypeus; punctures robust, umbilicate, with very close, shining, intervals. Antennae exceeding hind angles of pronotum by 2 segments; segment II cylindrical, just longer than broad; III subconical a little longer than II; II and III together shorter than IV; IV-X subtriangular, much longer than broad, longitudinally carinate; XI ellipsoidal.

Pronotum: a little broader than long, moderately convex; gradually declivitous at base with trace of median longitudinal depression; sides slightly and reg-



Figures 1-15. Figures 1-12. Male genitalia in dorsal view: Figure 1. Priopus ciprinus (Candèze).
Figure 2. P. hayekae n. sp. Figure 3. P. politus (Candèze). Figure 4. P. hiekei n. sp. Figure 5. P. inflammatum n. sp. Figure 6. P. nigripes (Fleutiaux). Figure 7. P. fuscus (Fleutiaux). Figure 8. P. angustus (Fleutiaux). Figure 9. P. longicornis n. sp. Figure 10. P. bakeri n. sp. Figure 11. P. marginatus (Fleutiaux). Figure 12. P. inflammatum n. sp. Figure 13. Outline of last abdominal visible segment, P. inflammatum n. sp. Figures 14-15. Tarsi: Figure 14. P. longicornis n. sp. Figure 15. P. inflammatum n. sp.

ularly arcuate; posterior angles elongate, acuminate, bicarinate; carinae equally developed; punctures simple, feeble, sparse, with intervals larger than their diameters.

Elytra: 3.5 times as long as pronotum and 2.8 times as long as broad; sides base slightly and regularly narrowing from base to apex; apex entire and crenulate; striae feeble, punctured; interstriae flat, roughly punctured.

Prosternal process not bent inwards immediately behind the procoxae.

Aedeagus as in Fig. 10.

Female. Body more arcuate and convex; antennae shorter exceeding hind angles of pronotum by only 1 segment.

Body length (both sexes): 12.8–14 mm; width 3.1–3.4 mm.

3. Priopus ciprinus (Candèze) (Figure 1)

Diploconus ciprinus Candèze, 1865: 47; 1875: 125; 1891: 140; Schwarz, 1906: 185; Fleutiaux, 1916: 230; Schultze, 1916: 64.

Neodiploconus ciprinus. Schenkling, 1927:266; Van Zwaluwenburg, 1936: 422. Priopus ciprinus. Hayek, 1990: 81.

Material examined. Lectotype  $\delta$ , (des. Platia, 1993), Philippines: Luzon (Janson coll. ex Candèze, BMNH). Many specimens, Philippines: Mountain Prov: Abatan, Buguias, 60 km S of Bontoc, 1800–2000 m, 25.V.1964 (H. M. Torrevillas, BPBM); Ifugao Prov: Mayoyao, 1200–1500 m, 19–21.VII.1966 (Torrevillas, BPBM); Ifugao Prov: Liwo, 8 km E of Mayoyao, 1000–1300 m, 29–31.V.1967 (Torrevillas, BPBM); Jacmal, Bunhian, 24 km E of Mayoyao, 800–1000 m, 7–8.IV.1967; 9–10.V.1967 (Torrevillas, BPBM); Camarines Sur Prov: Mt Isarog, 20 km E of Naga, 750–1500 m, 23–29.IV.1963, 13–18.V.1967 (Torrevillas, BPBM); Albay Prov: Mayon, 16 km NW of Lagaspi, m 900–1000, 6.V.1962 (Torrevillas, BPBM); Laguna Prov: Mt Banahao (M. C. F. Baker, MNHN); Pangil, 14.V.1931 (F. C. Hadden, MNHN); Imugan; Engano; Manilla (ex Schwarz coll., DEI); Romblon Is.VII.1987.

REDESCRIPTION. Male. Body entirely ferruginous covered with dense yellow-fulvous vestiture.

Head: frons feebly convex on vertex, a little depressed near anterior margin, later regularly arcuate, just thickened and protruding above clypeus. Antennae surpassing hind angles of pronotum by 2–3 segments; II antennal segment cylindrical as long as broad, III subconical a little longer than II; II and III together clearly shorter than IV; IV–X subtriangular very longer than broad and median longitudinally carinate; XI ellipsoidal narrowing near apex.

Pronotum: slightly broader than long, regularly and moderately convex; sides regularly arcuate, sometimes from base to apex nearly regularly narrowing; posterior angles acuminate, bicarinate; carinae equally developed, directed inside; punctures deep, slightly umbilicate with intervals variable smaller than their diameters.

Elytra: 2.9–3 times as long as pronotum and 2.6–2.7 times as long as broad; sides subparallel, only narrowing near apex; apex entire or scarcely emarginate, crenulate; striae feeble, punctured; interstriae flat, densely punctured.

Aedeagus as in Fig. 1.

Female. Body more convex; antennae shorter, only reaching hind angles of pronotum.

Body length (both sexes): 11.5–14.3 mm; width 2.8–3.8 mm.

## 4. Priopus fuscus (Fleutiaux) comb. nov. (Figure 7)

Neodiploconus fuscus Fleutiaux, 1932: 569; Van Zwaluwenburg, 1936: 423.

Material examined. Holotypus  $\mathcal{P}$ , Philippines: Luzon, Laguna Prov: Mt Makiling, 4000 ft, 19.VI.1931 (F. C. Hadden) (Fleutiaux coll., MNHN). Other specimens, Philippines: Ifugao Prov: Jacmal, Bunhian, 24 km E of Mayoyao, m 800–1000, 4–6.V.1967 (H. M. Torrevillas, BPBM); Liwo, 8 km E of Mayoyao, m 1000–1300, 30.V.1967 (Torrevillas, BPBM).

REDESCRIPTION. Male. Body entirely ferruginous sometimes with blackish shadings; covered with dense yellow-fulvous vestiture.

Head: frons flat or slightly convex with anterior margin subarcuate and just projecting above clypeus; punctures robust, umbilicate, with close, shining, intervals. Antennae exceeding hind angles of pronotum by 1 segment; II antennal segment cylindrical, as long as broad, III subconical a just longer than II; II and III together slightly shorter than IV; IV–X subtriangular, much longer than broad, median longitudinally carinate; XI ellipsoidal.

Pronotum: a little broader than long, convex, abruptly declivous at base and with vestige of median longitudinal depression in the basal declivity; sides moderately arcuate, posterior angles acuminate, bicarinate; carinae equally developed, sometimes the inner carina is more feeble; punctures simple, deep, with intervals equal to their diameters.

Elytra: 3.2–3.3 times as long as pronotum and 2.7 times as long as broad; sides subparallel, only near the apex narrowing; apex entire, crenulate; striae feeble, punctured; interstriae flat, densely punctured.

Aedeagus as in Fig. 7.

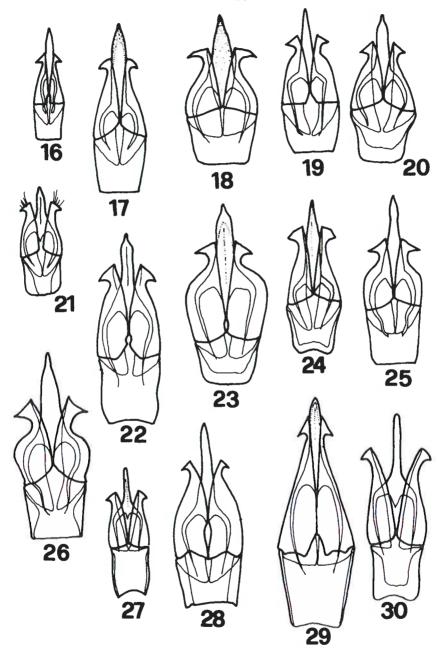
Female. Similar to male with antennae shorter not reaching hind angles of pronotum.

Body length (both sexes): 11-12 mm; width 2.9-3.2 mm.

5. Priopus hayekae Platia & Schimmel n. sp. (Figures 2, 45)

DIAGNOSIS. In the general shape and color very similar to *politus* (Candèze) but separated for the size larger; the male genitalia are very different (Fig. 2).

Material examined. Holotypus &, Philippines: Luzon, Laguna Prov: Agr. college, 19.V.1931 (F. C. Hadden (Fleutiaux coll., MNHN). 10 Paratypi (4 & 8



Figures 16-30. Male genitalia in dorsal view: Figure 16. P. brunneus n. sp. Figure 17. P. girardi n. sp. Figure 18. P. oberthueri n. sp. Figure 19. P. erythronotus (Candèze). Figure 20. P. whiteheadi n. sp. Figure 21. P. samuelsoni n. sp. Figure 22. P. haddeni (Candèze). Figure 23. P. consanguineus (Candèze). Figure 24. P. bicolor n. sp. Figure 25. P. torrevillasi n. sp. Figure 26. P. bolmi n. sp. Figure 27. P. crassiusculus n. sp. Figure 28. P. coxalis (Fleutiaux). Figure 29. P. carinatus n. sp. Figure 30. P. cervinus (Candèze).

and  $6 \ \varphi \ \varphi$ ), Philippines: North Luzon (J. Whitehead); Laguna Prov: Mt Banahao, 14.IV.1914; Camarines Sur Prov: Mt Isarog, Pili, m 800, 27.IV.1965, light trap (H. M. Torrevillas); Albay Prov: Mt Mayon, 16 km NW of Lagaspi, 900–1000 m, 9.V.1962 (Torrevillas); Panay, Antique Prov: Culasi, 24.V.1918 (R. C. Mc-Gregor); Mindanao, Surigao Prov. (MNHN, BPBM, MNHN, CPG).

DESCRIPTION. Male. Body entirely ferruginous; covered with dense yellow-fulvous vestiture.

Head: frons convex on vertex, slightly depressed near anterior margin; later arcuate, thickened, just projecting above clypeus; punctures robust, superficial, strongly umbilicate with close, shining, intervals. Antennae reaching or exceeding hind angles of pronotum; II antennal segment cylindrical, as long as broad, III subconical, as long as second, together as long as IV; IV-X triangular, longer than broad; XI ellipsoidal.

Pronotum: as long as broad, regularly convex, with feeble median longitudinal depression in the basal declivity; sides moderately and regularly arcuate; posterior angles acuminate, bicarinate; carinae equally developed, sometimes the inner carina more light, directed inside; punctures robust, deep, simple to scarcely umbilicate, with close intervals sometimes feebly shagreened.

Elytra: 2.7–2.8 times as long as pronotum and 2.5 times as long as broad; sides subparallel in the first half then regularly narrowing towards apex; apex entire, slightly crenulate; striae superficial, punctured; interstriae flat, punctured.

Aedeagus as in Fig. 2.

Female. Body more convex and larger; antennae shorter not reaching segments hind angles of pronotum.

Body length (both sexes): 11.5–14 mm; width 3.1–3.7 mm.

6. Priopus hiekei Platia & Schimmel n. sp. (Figure 4)

DIAGNOSIS. Similar to *P. inflammatum* n. sp. but separated for the color blackish and the disk of pronotum at base strongly declivous.

Material examined. Holotypus ♂, Philippines: Luzon, Fagor (MNHU, 39294). 1 Paratypus ♀, Albay Prov: Mt Mayon, 16 km NW of Lagaspi, 1200–1800 m, 12.V.1962 (H. M. Torrevillas) (BPBM).

DESCRIPTION. Male. Body entirely blackish, shining; covered with dense fulvous vestiture.

Head: frons convex, just depressed near anterior margin; later slightly thickened and just projecting above clypeus; punctures robust, umbilicate, with close, shining, intervals. Antennae exceeding hind angles of pronotum by 1 segment; II antennal segment cylindrical, as long as broad, III subconical, just longer than second, together shorter than IV; IV-X triangular, longer than broad, median longitudinally carinate; XI ellipsoidal. Pronotum: just broader than long, moderately and regularly convex, at base abruptly declivous; sides regularly arcuate, posterior angles elongate, acuminate, just divergent, bicarinate; carinae feeble, directed inside; punctures deep, simple with intervals equal on average to their diameters.

Elytra: 2.8–2.9 times as long as pronotum and 2.7 times as long as broad; sides moderately and regularly arcuate, towards apex narrowing; apex entire, crenulate; striae feeble, scarcely punctured; interstriae flat with smaller punctures.

Aedeagus as in Fig. 4.

Female. Similar to male with shorter antennae only reaching hind angles of pronotum.

Body length (both sexes): 10–10.2 mm; width 2.5–2.6 mm.

7. Priopus inflammatum Platia & Schimmel n. sp. (Figures 5, 13, 15, 46)

DIAGNOSIS. Similar to *P. hiekei* n. sp. but different for the ferruginous color and the pronotal disk at base gradually declivous.

Material examined. Holotypus  $\delta$ , Philippines: Luzon, Albay Prov: Mt Mayon (volcano), 16 km NW of Lagaspi, 1900–2000 m, 13.V.1962 (H. M. Torrevillas) (BPBM). 17 Paratypi (9  $\delta \delta$  and 8  $\Im \Im$ ), same data as Ht, 5–15.V.1962 (BPBM, CPG, CSV).

DESCRIPTION. Male. Body yellow-ferruginous; covered with dense yellow-fulvous vestiture.

Head: frons feebly convex, anterior margin more or less regularly arcuate, just thickened and projecting above clypeus; punctures robust, umbilicate, with close and shining intervals. Antennae exceeding hind angles of pronotum by 2.5 segments; II antennal segment cylindrical, III subconical a little longer than II, together shorter than IV; IV-X subtriangular, much longer than broad, longitudinally slightly carinate; XI ellipsoidal.

Pronotum: as long as broad, moderately convex, at base gradually declivous; sides more or less regularly arcuate, posterior angles elongate, acuminate, just divergent, bicarinate; carinae feeble, directed inside; punctures deep, simple to slightly umbilicate, intervals on average equal to their diameters or more.

Elytra: 3.1–3.2 times as long as pronotum and 2.6–2.7 times as long as broad; sides subparallel in the first half then narrowing towards apex, this entire, slightly crenulate, suture with vestige of spine; striae superficial, punctured; interstriae flat, densely punctured.

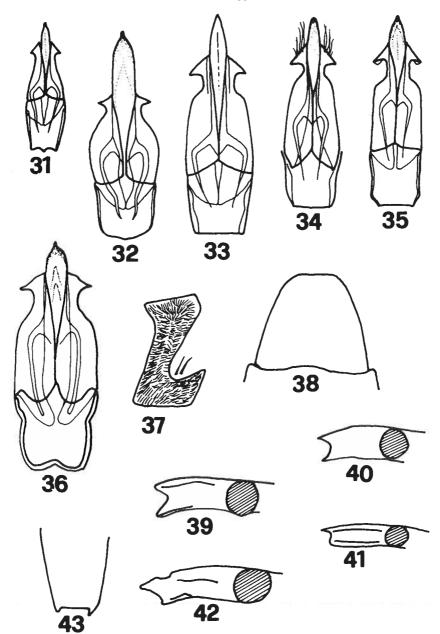
Aedeagus as in Fig. 5.

Female. Similar to male with shorter antennae just exceeding hind angles of pronotum.

Body length (both sexes): 9-10 mm; width 2.3-2.5 mm.

8. Priopus infuscatus Platia & Schimmel n. sp. (Figure 12)

DIAGNOSIS. Very similar to *P. marginatus* (Fleutiaux) but different for the color body uniformly fuscous and pronotal punctures denser and broader.



Figures 31-43. Figures 31-36. Male genitalia in dorsal view: Figure 31. P. bakewelli (Fleutiaux).
Figure 32. P. nitens (Fleutiaux). Figure 33. P. angusticollis (Candèze). Figure 34. P. zwaluwenburgi n. sp. Figure 35. P. umbilicatus (Candèze). Figure 36. P. schadenbergi n. sp. Figure 37.
Structure of copulatrix bursa, P. merkli n. sp. Figure 38. Outline of last abdominal segment, P. bolmi n. sp. Figures 39-42. Prosternal processes in lateral view: Figure 39. P. samuelsoni n. sp. Figure 40. P. haddeni (Fleutiaux). Figure 41. P. brunneus n. sp. Figure 43. Elytral apex emarginate, P. haddeni (Fleutiaux).

Material examined. Holotypus  $\delta$ , Philippines: Luzon, Mountain Prov: Abatan, Buguias, 60 km S of Bontoc, 1800–2000 m, 24.IV.1964 (H. M. Torrevillas) (BPBM). 19 Paratypi (4  $\delta \delta$  and 15  $\Im \Im$ ), same data as Ht, 1.IV., 4.VI.1964; Benguet Prov: Baguio, 6000 ft, 27.III.1931 (F. C. Hadden); Baguio (M. C. F. Baker); Laguna Prov: Mt Banahao (ex coll. Le Moult) (BPBM, IRSNB, MNHN, CPG, CSV).

DESCRIPTION. Male. Body fuscous with ferruginous shadings; covered with yellow-fulvous vestiture.

Head: frons convex on vertex, anterior margin just thickened, arcuate and a little protruding above clypeus; punctures robust, umbilicate, with close and shining intervals. Antennae exceeding hind angles of pronotum by about 2 segments; II antennal segment cylindrical as long as broad, III subconical a little longer than II, together about as long as IV; IV–X triangular, longer than broad, longitudinally carinate; XI ellipsoidal.

Pronotum: just broader than long, moderately convex, gradually declivous at base, with trace of median longitudinal depression in the declivity; sides from base to apex nearly regularly narrowing; punctures deep, simple with close intervals.

Elytra: 3.1–3.2 times as long as pronotum and 2.7–2.8 times as long as broad; sides subparallel for about two third of its length, narrowing near apex; apex entire, crenulate; striae very superficial, scarcely visible; interstriae flat, with smaller punctures.

Aedeagus as in Fig. 12.

Female. Body larger and more convex; antennae shorter nearly attaining hind angles of pronotum.

Body length (both sexes): 8.3–12.5 mm; width 2.3–3.5 mm.

9. Priopus longicornis Platia & Schimmel n. sp. (Figures 9, 14, 47)

DIAGNOSIS. Species very similar in the size and color to P. *ciprinus* but with longer antennae.

Material examined. Holotypus  $\delta$ , Philippines: Luzon, Laguna Prov: Mt Makiling, 9.V.1931 (F. C. Hadden) (Fleutiaux coll., MNHN). 12 Paratypi ( $4 \delta \delta$ and  $8 \varphi \varphi$ ), same data as Ht, 21–26.IV.1931, 3–9.V.1931 (M. C. F. Baker) (MNHN, CPG, CSV).

DESCRIPTION. Male. Body ferruginous; covered with dense yellow-fulvous vestiture.

Head: frons flat, just depressed near the anterior margin; later arcuate, just thickened and protruding above clypeus; punctures superficial, umbilicate, with close, subshining, intervals. Antennae exceeding hind angles of pronotum by 4 segments; II antennal segment cylindrical, III subconical a little longer than II,

together much shorter than IV; IV-X subtriangular to subparallel very longer than broad, longitudinally carinate; XI long ellipsoidal.

Pronotum: just broader than long, moderately and regularly convex, at base gradually declivous; sides subparallel, posterior angles elongate, acuminate, divergent, bicarinate; carinae feeble, subparallel, directed inside; punctures slight, deep; simple with shortest and shining intervals.

Elytra: 3.1–3.2 times as long as pronotum and 2.7–2.8 times as long as broad; slightly but regularly narrowing from base to apex; apex entire, crenulate; striae at base scarcely visible, then more marked with light punctures; interstriae flat with rough surface.

Aedeagus as in Fig. 9.

Female. Body larger and more convex; pronotal sides more arcuate; antennae exceeding hind angles of pronotum by 1-1.5 segments, II and III together just shorter than IV.

Body length (both sexes): 10–14 mm; width 2.5–3.7 mm.

10. Priopus marginatus (Fleutiaux) comb. nov. (Figure 11) Neodiploconus marginatus Fleutiaux, 1932: 49; Van Zwaluwenburg, 1936: 423.

Material examined. Holotypus &, Philippines: Luzon, Benguet Prov: Bagyio, VI.1917 (F. X. Williams) (Fleutiaux coll., MNHN). 1 Paratypus, same data as Ht. Other specimens, Benguet Prov: Baguio (M. C. F. Baker, MNHN); Baguio, 5000 ft, V.1907 (C. S. Betton, BMNH); Romblon Prov., VII.1987.

REDESCRIPTION. Male. Body fuscous-ferruginous with elytral margins darkened; covered with dense and fulvous vestiture.

Head: frons convex on vertex, flat to just depressed near anterior margin; later regularly arcuate, a little thickened and projecting above clypeus; punctures strong, superficial, umbilicate with close and shining intervals. Antennae exceeding hind angles of pronotum by nearly 2 segments; II antennal segment cylindrical, III subconical a little longer than II, together as long as IV; IV–X triangular, longer than broad, longitudinally carinate; XI ellipsoidal.

Pronotum: slightly broader than long, moderately convex, gradually declivous near base; sides from bae to apex gradually but regularly narrowing; posterior angles acuminate, not divergent, bicarinate; carinae equally developed, directed inside; punctures light, deep, simple, with intervals on average equal to their diameters or more.

Elytra: 3.4–3.5 times as long as pronotum and 2.8–2.9 times as long as broad; sides subparallel for about two third of its length then narrowing to apex; apex entire, crenulate; striae at base just visible, then superficial but more evident, punctured; interstriae flat with smaller punctures.

Aedeagus as in Fig. 11.

Female. Body more convex; pronotal sides more arcuate; antennae shorter nearly reaching hind angles of pronotum.

Body length (both sexes): 9,8–12 mm; width 2.5–3 mm.

11. Priopus nigripes (Fleutiaux) comb. nov. (Figures 6, 48) Neodiploconus nigripes Fleutiaux, 1932: 568; Van Zwaluwenburg, 1936: 423.

Material examined. Holotypus &, Philippines: Luzon, Mountain Prov: Mt Data, 5000 ft, 9.III.1931 (F. C. Hadden) (Fleutiaux coll, MNHN). 1 Paratypus, same data as Ht. Other specimens, Mountain Prov: Abatan, Buguias, 60 km S of Bontoc, 1800–2000 m, 4.VI.1964 (H. M. Torrevillas, BPBM); Abatan, 13.VI.1964 (Torrevillas, BPBM); Mt St. Tomas, 6000 ft, 27.III.1931 (BMNH).

REDESCRIPTION. Male. Body bicolorous, blackish with pronotum and propleura red-sanguineous (typ. form.), more rarely pronotal sides darkened and elytra brown; covered with dense, yellowish, vestiture.

Head: frons convex on vertex, just depressed near anterior margin; later arcuate, just protruding above clypeus; punctures strong, umbilicate with close and shining intervals. Antennae exceeding hind angles of pronotum by 2.5 segments; II antennal segment cylindrical, III subconical just longer than II, together clearly shorter than IV; IV–X subtriangular much longer than broad, longitudinally carinate; XI ellipsoidal.

Pronotum: 1.2 times broader than long, moderately convex with slight median longitudinal depression in the basal declivity; sides arcuate, from behind the middle to apex, narrowing; posterior angles acuminate, divergent, bicarinate; inner carina just longer than outer, directed inside; punctures light, deep, simple, with intervals on average larger than their diameters.

Elytra: 3.1-3.2 times as long as pronotum and 2.6-2.7 times as long as broad; from base to apex gradually but regularly narrowing; apex entire to subtruncate, crenulate; striae at base scarcely evident, then more visible but superficial, simply punctured; interstriae flat with smaller punctures.

Aedeagus as in Fig. 6.

Female. Body more convex and arcuate; antennae shorter only attaining hind angle of pronotum.

Body length (both sexes): 10,9–13,5 mm; width 2,8–3,6 mm.

12. Priopus politus (Candèze) comb. nov. (Figures 3, 49)

- Diploconus politus Candèze, 1875: 126; 1891: 140; Schwarz, 1906: 185; Fleutiaux, 1914: 447; Schultze, 1916: 64.
- Neodiploconus politus. Schenkling, 1927: 267; Van Zwaluwenburg, 1936: 424; 1959: 394.
- Diploconus philippinensis Fleutiaux, 1914: 447 (holotypus ♂, examined, in Fleutiaux coll., MNHN) (Luzon, Mt Makiling).

Material examined. Lectotypus & (des. Van Zwaluwenburg), Philippines: Luzon, Quezon Prov: Alabat I. (Candèze coll., IRSNB). Many specimens, Laguna Prov: Mt Makiling, 4.IV.1931, 16.VI.1932 (F. C. Hadden, BPBM); Mt Banahao (M. C. F. Baker, MNHN); Mountain Prov: Abatan, Buguias, 60 km S of Bontoc,

1800–2000 m, 31.V.1964 (H. M. Torrevillas, BPBM); Albay Prov: Mt Mayon (volcan), 16 km NW of Lagaspi, 900–1000 m, 18.VI.1962 (Torrevillas, BPBM); Libon, Caguscos, 200 m, 9.V.1965 (Torrevillas, BPBM); Ifugao Prov: Jacmal, Bunhian, 24 km E of Mayoyao, 800–1000, 9–12.V.1967 (Torrevillas, BPBM); Camarines Sur Prov: Mt Isarog, 750–850 m, 13–18.V.1962, 1963 (Torrevillas, BPBM); 20 km E of Naga, 1000–1500 m, 23.IV.1963 (Torrevillas, BPBM); Mt Iriga, 900 m, 2.V.1962 (Torrevillas, BPBM); Iriga, 30 m, 7.VI.1952 (M. Caneda); Romblon Prov: Sibuyan I. (Baker, MNHN); Negros I, Cuernos Mts (Baker; J. Whitehead, BMNH, MNHN); Mindanao, Surigao Prov. (Baker, MNHN).

REDESCRIPTION. Male. Body color variable; yellow-ferruginous to darkferruginous, sometimes with pronotum lighter than elytra; covered with dense, yellow-fulvous vestiture.

Head: frons slightly convex, anterior margin regularly arcuate, just thickened and projecting above clypeus; punctures superficial, umbilicate, with short intervals. Antennae exceeding hind angles of pronotum about 1 segment; II antennal segment cylindrical, III subconical just longer than II, together as long as IV; IV– X triangular, longer than broad, longitudinally carinate; XI ellipsoidal.

Pronotum: just broader than long, convex, at base strongly declivous with trace of median longitudinal depression; sides a little arcuate to nearly and regularly narrowing from base to apex; posterior angles slightly divergent, bicarinate; carinae equally developed, directed inside; punctures deep, simple to feebly umbilicate, with close and shining intervals.

Elytra: about 3 times as long as pronotum and 2.7 times as long as broad; from base to apex nearly and regularly narrowing; apex entire, crenulate; striae normally impressed, punctured; interstriae flat, with rough surface, punctured.

Aedeagus as in Fig. 3.

Female. Body larger and more convex; antennae shorter not reaching hind angles of pronotum.

Body length (both sexes): 8–12 mm; width 2.2–3 mm.

### **Species Group II**

13. Priopus angusticollis (Candèze) comb. nov. (Figure 33)

Diploconus angusticollis Candèze, 1875: 126; 1891: 140; Schwarz, 1906: 185; Fleutiaux, 1916: 230.

Neodiploconus angusticollis. Schenkling, 1927: 268 (as synonym of umbilicatus Candèze).

Material examined. Lectotypus &, (des. Platia, 1993), Philippines: without any data (Candèze coll., IRSNB). Other specimens all males, Luzon, Laguna Prov: Mt Banahao (MNHN); Ifugao Prov: Jacmal, Bunhian, 24 km E of Mayoyao, 800–1000 m, 27–29.IV.1967 (H. M. Torrevillas, BPBM); Mindanao.

REDESCRIPTION. Male. Body color variable, from yellowish to ferruginous to fuscous; covered with white-yellowish vestiture. Head: frons flat with anterior margin arcuate, thickened, shining, protruding above clypeus; punctures strong, superficial, umbilicate, nearly contiguous. Antennae exceeding hind angles of pronotum by 1 segment; II antennal segment cylindrical, III subconical, together just longer than IV; IV-X very longer than broad, longitudinally subcarinate; XI ellipsoidal.

Pronotum: as long as broad, moderately convex, on the disk rather depressed; sides nearly subparallel; posterior angles short, acuminate, divergent, bicarinate; carinae feeble, equally developed, directed inside; punctures uniform, strong, deep, simple to a little umbilicate, with close intervals slightly shagreened.

Elytra: 3.2–3.3 times as long as pronotum and 2.7–2.8 times as long as broad; sides more or less subparallel in the first half, then narrowing; apex entire; striae well marked, punctured; interstriae feebly convex, densely punctured.

Aedeagus as in Fig. 33. Female unknown.

Body length (male): 8,3-10.2 mm; width 2-2,5 mm.

14. Priopus bakewelli (Fleutiaux) comb. nov. (Figures 31, 50) Diploconus bakewelli Fleutiaux, 1914: 447; Schultze, 1916: 64. Neodiploconus bakewelli. Schenkling, 1927: 266; Van Zwaluwenburg, 1936: 421.

Material examined. Holotypus ♂, Philippines: Luzon, Laguna Prov: Mt Makiling (M. C. F. Baker) (Fleutiaux coll., MNHN). 3 specimens ♂♂, Laguna Prov: Los Banos (Baker, MNHN); Benguet Prov: Baguio (Baker, MNHN).

REDESCRIPTION. Male. Body fuscous to ferruginous; covered with dense, yellow-fulvous vestiture.

Head: frons flat, anterior margin arcuate, a little thickened, shining, just projecting above clypeus; punctures broad, superficial, strongly umbilicate, with close and shagreened intervals. Antennae exceeding hind angles of pronotum by two segments; II and III antennal segments subequal, cylindrical, together shorter than IV; IV-X triangular, longer than broad, longitudinally carinate; XI ellipsoidal.

Pronotum: as long as broad, subtrapezoidal, regularly convex, at base abruptly declivous; posterior angles acuminate, not or just divergent, bicarinate; carinae equally developed, directed inside; punctures strong, deep, slightly umbilicate, intervals variable on average smaller than their diameters, shagreened.

Elytra: 2.8 times as long as pronotum and 2.6 times as long as broad; sides from base to apex slightly but regularly narrowing; apex entire; striae normally impressed, punctured; interstriae flat to subconvex, roughly punctured.

Aedeagus as in Fig. 31.

Female unknown.

Body length: 5.7-6.4 mm; width 1,5-1,6 mm.

## 15. Priopus bicolor Platia & Schimmel n. sp. (Figure 24)

DIAGNOSIS. For the bicolorous body the species is allied to *P. haddeni* (Fleutiaux) but is essentially separated by the stouter shape of body; the male genitalia are clearly different (Fig. 24).

Material examined. Holotypus  $\Im$ , Philippines: Luzon, Laguna Prov: Mt Makiling, 14.V.1931 (F. C. Hadden) (Fleutiaux coll., MNHN). 4 Paratypes (1  $\Im$ and 3  $\Im$   $\Im$ ), same data as Ht, 21.VI.1931; Laguna Prov: Pangil, 6.VI.1931 (Hadden); Philippines, without any data (BMNH, MNHN, CPG).

DESCRIPTION. Male. Body bicolorous; head and elytra black to blackish, pronotum and under body red-orange; covered with yellow-fulvous vestiture.

Head: frons convex, anterior margin arcuate, feebly thickened and just projecting above clypeus; punctures strong, deep, simple to slightly umbilicate with close intervals. Antennae just reaching hind angles of pronotum; II antennal segment cylindrical, III subconical a little longer than II, together as long as IV; IV– X triangular, longer than broad, longitudinally carinate; XI ellipsoidal.

Pronotum: just broader than long, convex, with trace of median longitudinal depressed line from base to middle; sides regularly arcuate; posterior angles acuminate, a little divergent, bicarinate; carinae equally developed, parallel, directed inside; punctures light, deep, simple, intervals on average equal to their diameters.

Elytra: 2.8 times as long as pronotum and 2.5 times as long as broad, slightly but regularly narrowing from base to apex; apex emarginate; striae feeble, punctured; interstriae flat, with smaller punctures.

Aedeagus as in Fig. 24.

Female. Body larger and more convex; antennae shorter not attaining hind angles of pronotum.

Body length (both sexes): 9.5–10.2 mm; width 2.5–2.8 mm.

16. Priopus bolmi Platia & Schimmel n. sp. (Figures 26, 38)

DIAGNOSIS. Similar to P. torrevillasi n. sp. but separated for the greater size and the body color fuscous; the male genitalia is clearly different with the sides of paramera strongly sinuate (Fig. 26).

Material examined. Holotypus  $\delta$ , Philippines: Mindanao, Bukidnon Prov: 30 km W of Maramag, 28–30.XII.1990 (Bolm) (NHMB). 14 Paratypes (10  $\delta \delta$  and 4  $\Im \Im$ ), same data as Ht (NHMB, CCW, CSV, CPG).

DESCRIPTION. Male. Body entirely fuscous-ferruginous; covered with dense, yellow-fulvous vestiture.

Head: frons convex on vertex, slightly depressed near the anterior margin; later thickened, shining, regularly arcuate, just projecting above clypeus; punctures strong, umbilicate with close and shining intervals. Antennae exceeding hind angles of pronotum by 1–1.5 segments; II antennal segment cylindrical, III subconical a little longer than II, together as long as IV; IV–X triangular, much longer than broad, longitudinally carinate; XI ellipsoidal.

Pronotum: as long as broad, moderately convex, at base gradually declivous; sides feebly and regularly arcuate; posterior angles acuminate, bicarinate; carinae equally developed, directed inside; punctures slight, deep, simple, with intervals on average equal to their diameters or more.

Elytra: 3–3.2 times as long as pronotum and 2.8–2.9 times as long as broad; sides parallel for two third of its length, then slightly narrowing; apex scarcely emarginate; striae light, but well visible, punctured; interstriae flat with smaller punctures.

Aedeagus as in Fig. 26.

Female. Similar to male; antennae shorter reaching hind angles of pronotum. Body length (both sexes): 12–12.5 mm; width 2.9–3.1 mm.

17. Priopus brunneus Platia & Schimmel n. sp. (Figures 16, 41, 51)

DIAGNOSIS. Species allied to *P. girardi* n. sp., but separated for the larger body and the shorter antennae; the male genitalia are clearly different (Fig. 16).

Material examined. Holotypus ♂, Philippines: Luzon, 1889 (MNHN). 1 Paratypus ♀, Luzon, Laguna Prov: Mt Banahao (MNHN).

DESCRIPTION. Male. Body fuscous with ferruginous shadings; covered with dense yellow-fulvous vestiture.

Head: frons convex above, just depressed near anterior margin; later arcuate, just protruding above clypeus; punctures broad, strongly umbilicate, nearly contiguous. Antennae nearly reaching hind angles of pronotum; II antennal segment cylindrical, III subconical, a little longer than II, together slightly longer than IV; IV-X triangular, longer than broad, longitudinally carinate; XI ellipsoidal.

Pronotum: just broader than long, convex, at base strongly declivous, with slight median longitudinal depression from base to middle or more; sides subparallel, narrowing only in the anterior third; posterior angles just divergent, acuminate, bicarinate; carinae equally developed, directed inside; punctures strong, deep, slightly umbilicate, intervals very close, shining.

Elytra: 2.6 times as long as pronotum and 2.3 times as long as broad, ovate, with the greater width near the middle; apex scarcely emarginate; striae light, superficial, punctured; interstriae flat, with smaller punctures.

Aedeagus as in Fig. 16.

Female. Similar to male; antennae a little shorter.

Body length (both sexes): 10–10.2 mm; width 2.7–3 mm.

18. Priopus carinatus Platia & Schimmel n. sp. (Figures 29, 42)

DIAGNOSIS. Species extremely similar to *P. cervinus* (Candèze) but immediately separated for the antennal segment from fourth longitudinally carinate.

Material examined. Holotypus  $\eth$ , Philippines: Luzon, Camarines Sur Prov: Mt Iriga, 500–600 m, 28.IV.1962 (H. M. Torrevillas, BPBM). 26 Paratypes (22  $\eth$   $\eth$  and 4  $\Im$   $\Im$ ), same data as Ht, 26.IV.1962; Iriga, 7.VI.1952 (M. Caneda); Mt Isarog, 500–600 m, 11.IV.1963; 800–850 m, 25.IV.1963; 1600 m, 21–22.V.1963 (Torrevillas); Mt Isarog, 20 km E of Naga, 500–600 m, 5.IV.1963, light trap (Torrevillas); Mt Isarog, Pili, 800 m, 30.IV.1965, light trap; Mt Isarog Fagor. (BPBM, MNHN, MNHH, CPG, CSV).

DESCRIPTION. Male. Body color fuscous light or fuscous darkened with ferruginous shadings; covered with dense yellow-fulvous vestiture.

Head: frons flat with anterior margin regularly arcuate, just thickened and projecting above clypeus; punctures broad, strongly umbilicate, nearly contiguous. Antennae nearly reaching hind angles of pronotum; II antennal segment cylindrical, III subconical, a little longer than II, together as long as IV; IV-X triangular, longer than broad, longitudinally carinate; XI ellipsoidal.

Pronotum: broader than long, moderately convex, with trace of median longitudinal depression in the basal declivity, sometimes extending to middle; sides feebly and regularly arcuate; posterior angles acuminate, just divergent, bicarinate; carinae feeble, equally developed, directed inside; punctures uniform, deep, slightly umbilicate, with close intervals, nearly contiguous.

Elytra: 2.7–2.8 times as long as pronotum and 2.4–2.5 times as long as broad; from base to apex just but regularly narrowing; apex entire, suture sometimes with trace of spine; striae well marked, punctured; interstriae convex, densely and roughly punctured.

Aedeagus as in Fig. 29.

Female. Body larger and more convex; antennae shorter not reaching hind angles of pronotum.

Body length (both sexes): 11–17 mm; width 3–4.5 mm.

19. Priopus cervinus (Candèze) comb. nov. (Figures 30, 52)

Diploconus cervinus Candèze, 1875: 125; 1891: 140; Schwarz, 1906: 185; Schultze, 1916:64.

Neodiploconus cervinus. Schenkling, 1927: 266; Van Zwaluwenburg, 1936: 422; 1959: 392.

Neodiploconus surdus Fleutiaux, 1934: 484 (syn. nov.) (holotypus & examined in Fleutiaux coll., MNHN).

Material examined. Lectotypus  $\delta$ , (des. Van Zwaluwenburg), Philippines: Mindanao (Candèze coll., I RSNB). Many specimens, Philippines: same data as Ht; Mindanao, 1903–4 (J. Waterstradt); Surigao Prov. (M. C. F. Baker, MNHN); Davao Prov. (Baker, MNHN); Misamis Or., Mt Empagatao, camp II, 1200 m, 19–30.IV.1961, 2.V.1961 (H. M. Torrevillas, BPBM); Mt Balatukan, 15 km SW of Gingoog, 1000–2000 m, 21.IV.1960 (Torrevillas, BPBM); Dinawihan Gingoog, 26 km E of Gingoog City, 100–300 m, 25.VII.1965 (Torrevillas, BPBM); Hindangan, 20 km S of Gingoog, 600–700 m, 20–24.IV.1960 (Torrevillas, BPBM); Hindangan, 20 km S of Gingoog, 600–700 m, 20–24.IV.1960 (Torrevillas, BPBM); Bukidnon Prov: Tangcolan, (Baker, MNHN) (typ. loc. of *surdus* Fleutiaux); Impalutao, IV.1984; Leyte Prov: Palo, 24.III.1957; Dagami Mt, 29.VII.1957; St Bernard, VII.1991 (Kinci); Luzon, Camarines Sur Prov: Mt Isarog, 750–900 m, 8– 12.V.1963, 12.IV.1965, light trap (H. M. Torrevillas, BPBM); Mt Iriga, 500–600 m, 3.IV.1962 (Torrevillas, BPBM); Samar I; Babuyanes. REDESCRIPTION. Male. Body entirely ferruginous sometimes with blackish shadings; covered with yellow vestiture.

Head: frons depressed in the anterior half, anterior margin arcuate, slightly thickened and projecting above clypeus; punctures broad, umbilicate, nearly contiguous. Antennae reaching hind angles of pronotum; II antennal segment cylindrical, III subconical, a little longer than II, together as long as IV; IV-X triangular, longer than broad, not carinate; XI ellipsoidal.

Pronotum: a little broader than long, moderately but regularly convex, sometimes with trace of a median longitudinal depression in the basal declivity; sides regularly arcuate; posterior angles just divergent, not acuminate, bicarinate; outer carina a little longer, directed inside; punctures uniform, deep, slightly umbilicate, with close intervals or contiguous.

Elytra: 2.8–2.9 times as long as pronotum and 2.4–2.5 times as long as broad; from base to apex feebly but regularly narrowing; apex entire, subtruncate, sometimes crenulate; striae well marked, punctured; interstriae subconvex, densely punctured.

Aedeagus as in Fig. 30.

Female. Body larger and more convex; antennae shorter, not reaching hind angles of pronotum.

Body length (both sexes): 13-19 mm; width 3.5-5 mm.

- 20. Priopus consanguineus (Candèze) (Figure 23)
- Diploconus consanguineus Candèze, 1860: 293; 1875: 126; 1891: 140; Schwarz, 1906: 184; Schultze, 1916: 64.
- Neodiploconus consanguineus. Schenkling, 1927: 293; Van Zwaluwenburg, 1936: 422.

Priopus consanguineus. Hayek, 1990: 81.

- Diploconus erythropus Candèze, 1865: 46 (syn. nov.) (lectotypus  $\mathcal{P}$ , des Van Zwaluwenburg, not examined, RNH) (Ternate I.) (paralectotype  $\mathcal{P}$ , des. von Hayek, BMNH, examined a specimen compared with it).
- Diploconus cantharus Candèze, 1893: 48 (syn. nov.) (lectotypus ♂, des. Van Zwaluwenburg, examined, in Candèze coll., IRSNB) (Philippines: Babuyanes).
- Diploconus nigrifrons Schwarz, 1902: 272 (syn. nov.) (holotypus 9, in Schwarz coll., DEI) (Gardner Is.) (Bismarck Archipelago).
- Diploconus lateralis Schwarz, 1902: 273 (syn. nov.) (lectotypus ♂, des. Platia, 1993, in Schwarz coll., DEI) (Sulawesi).
- Diploconus nitidus Schwarz, 1902: 274 (syn. nov.) (lectotypus ♂ + 2 paralectotypes, des. Platia, 1993, in Schwarz coll., DEI) (New Britain; Bismarck Archipelago).
- Neodiploconus niger Van Zwaluwenburg, 1934: 596 (syn. nov.) (holotypus in BMNH not examined; examined other specimens det. Van Zwaluwenburg from typical localities) (Solomon Is).
- Priopus schwarzi Hayek, 1990: 84 (n. name for nitidus Schwarz, 1902, nec Candèze, 1860).

Material examined. Syntype  $\delta$ , Malaisie, without any data (BMNH). Many specimens from Sulawesi to New Guinea to Solomon Is. From the Philippines:

Luzon, Albay Prov: Libon Caguscos, 200 m, 18–19.V.1965, light trap (H. M. Torrevillas, BPBM); Camarines Sur Prov: Mt Isarog, 20 km E of Naga, 500–600 m, 16.IV.1963 (Torrevillas, BPBM); Luzon (J. Whitehead); Romblon Prov: Sibuyan Is.; Negros Prov: Cuernos Mts (M. C. F. Baker, MNHN); Panay, Antique Prov: Culasi, 18.V.1918 (B. C. Mc Gregor, BMNH); Babuyanes (typ. locality of *cantharus*); Mindanao.

REDESCRIPTION. Male. Body color extremely variable; from entirely ferruginous with intermediate forms to completely black; covered with yellow-fulvous vestiture.

Head: frons flat to convex with anterior margin more or less regularly arcuate, just projecting above clypeus; punctures variable, generally umbilicate, intervals variable. Antennae not reaching the hind angles of pronotum by 1.5–2 segments; II and III antennal segments subequal, together as long as IV or a little longer; IV–X triangular, longer than broad, longitudinally carinate; XI ellipsoidal.

Pronotum: as long as broad to a little broader, convex, at base strongly declivous, often with trace of median longitudinal line from base to middle; sides regularly arcuate; posterior angles acuminate more or less divergent, bicarinate; carinae directed inside, inner carina often more prominent; punctures of different size, deep, simple to feebly umbilicate; intervals too variable, generally equal to their diameters or more.

Elytra: 2.5–2.6 times as long as pronotum and 2.3–2.5 times as long as broad; sides generally subparallel for half of its length then narrowing, sometimes narrowing from base to apex; apex clearly emarginate; striae well marked, punctured; interstriae flat with smaller punctures.

Aedeagus as in Fig. 23.

Female. Similar to male but with body generally larger and more arcuate. Body length (both sexes): 9.5–15 mm; width 2.5–4 mm.

Notes. The species is very variable in size and in many other characteristic. After examination of the type- material of some species described from Sulawesi to Solomon Is., (see the synonimies), we have concluded that they are conspecific with *consanguineus* because we have not found constant morphological characters; also the examination of male and female genitalia are not useful because the degree of variability is high.

21. Priopus coxalis (Fleutiaux) comb. nov. (Figure 28) Neodiploconus coxalis Fleutiaux, 1932: 568; Van Zwaluwenburg, 1936: 422.

Material examined. Holotypus  $\mathcal{P}$ , Philippines: Luzon, Laguna Prov: Mt Makiling, 4000 ft, 19.VI.1931 (F. C. Hadden) (Fleutiaux coll., MNHN). 1 specimen  $\mathcal{J}$ , Philippines: without any data (CPG).

DESCRIPTION. Male. Body from blackish to ferruginous; covered with yellow-fulvous vestiture.

Head: frons slightly depressed above, anterior margin regularly arcuate, thickened, projecting above clypeus; punctures broad, strongly umbilicate, with variable, generally close and shagreened intervals. Antennae exceeding hind angles of pronotum by 1 segment; II antennal segment cylindrical, III subconical, a little longer than II, together as long as IV; IV-X triangular, longer than broad, longitudinally with slight carina; XI ellipsoidal.

Pronotum: as long as broad, regularly convex; sides arcuate; posterior angles acuminate, bicarinate; carinae equally developed, directed inside; punctures deep, simple to slightly umbilicate with short intervals on average half than their diameters, shining.

Elytra: 2.9 times as long as pronotum and 2.5 times as long as broad; sides with the greater width behind the middle, then strongly narrowing towards apex; apex entire; suture with trace of spine; striae just evident, punctured; interstriae flat with smaller punctures.

Aedeagus as in Fig. 28.

Female. Similar to male with shorter antennae not reaching hind angles of pronotum.

Body length (both sexes): 10-11 mm; width 2.9-3 mm.

## 22. Priopus crassiusculus Platia & Schimmel n. sp. (Figure 27)

DIAGNOSIS. Species similar to smaller specimens of P. carinatus n. sp.; different for pronotal sides more arcuate and the disk regularly convex; the male genitalia are very different (Fig. 27).

Material examined. Holotypus &, Philippines: Leyte Prov: Palo, 17.VIII.1957 (R. H. Van Zwaluwenburg) (BPBM).

DESCRIPTION. Male. Body entirely ferruginous; covered with dense, yellow-fulvous vestiture.

Head: frons flat, anterior margin subarcuate, just protruding above clypeus; punctures superficial, strongly umbilicate with close intervals. Antennae nearly attaining hind angles of pronotum; II antennal segment cylindrical, as long as broad, III subconical a little longer than II, together as long as IV; IV-X triangular, a little longer than broad, longitudinally carinate; XI ellipsoidal.

Pronotum: as long as broad, regularly convex, at base abruptly declivous with trace of median longitudinal depression; sides moderately and regularly arcuate; posterior angles short, acuminate, not divergent, bicarinate; carinae equally developed, directed inside; punctures deep, slightly umbilicate, intervals close and shining.

Elytra: 2.6 times as long as pronotum and 2.3 times as long as broad; sides ovate; apex entire; striae slight, punctured; interstriae flat, roughly punctured.

Aedeagus as in Fig. 27.

Female unknown.

Body length: 10.5 mm; width 3.3 mm.

## 23. Priopus erythronotus (Candèze) comb. nov. (Figure 19)

Diploconus erythronotus Candèze, 1865: 46; 1875: 125; 1891: 140; Schwarz, 1906: 185; Fleutiaux, 1914: 447; Schultze, 1916: 64.

Neodiploconus erythronotus. Schenkling, 1927: 266; Van Zwaluwenburg, 1936: 422.

Diploconus nitidus Fleutiaux, 1916: 231 (syn. nov.) (holotypus  $\delta$  + paratypus, examined, in Fleutiaux coll., MNHN) (Mt Banahao).

Neodiploconus fleutiauxi Van Zwaluwenburg, 1934: 596 (n. name for nitidus Fleutiaux, nec Candèze, nec Schwarz).

Material examined. Holotypus Q—Philippines: Luzon (Dorn coll., IZW). Many other specimens, Philippines: Luzon, Laguna Prov: Mt Banahao; Mt Makiling, 1.VI.1932, 16.VI.1932 (F. C. Hadden, BPBM, MNHN); Albay Prov. (M. C. F. Baker, MNHN)); Ifugao Prov: Mayoyao, 1000–1500 m, 27.VI.1966 (H. M. Torrevillas, BPBM); Negros Prov: Cuernos Mts (Baker, MNHN); Los Banos (Baker, MNHN); Mindanao, Davao Prov. (Baker, MNHN). Sulawesi (BMNH, CPG).

REDESCRIPTION. Male. Body color variable; bicolorous with red-orange pronotum and blackish elytra (typ. form.) or completely yellow-ferruginous, sometimes with blackish shadings; covered with yellow-fulvous vestiture.

Head: frons flat to slightly convex, anterior margin arcuate, just thickened and projecting above clypeus; punctures variable, deep, simple to umbilicate with close intervals. Antennae exceeding hind angles of pronotum by 1–1.5 segments; II antennal segment cilyndrical, III subconical, a little longer than II, together as long as IV; IV-X triangular, longer than broad, longitudinally carinate; XI ellipsoidal.

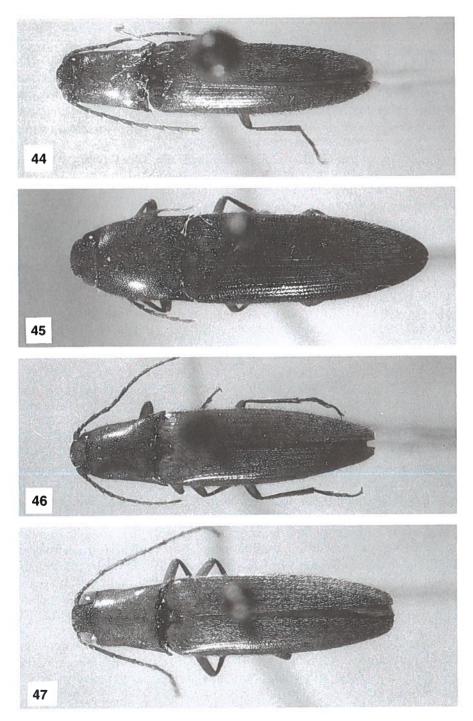
Pronotum: broader than long, convex, at base more or less strongly declivous, with trace of median longitudinal depression in the basal declivity often reaching the middle; sides subparallel, strongly narrowing in the anterior third; posterior angles acuminate, not to slightly divergent, bicarinate; carinae generally equally developed, sometimes the inner is more evident, directed inside; punctures generally light, deep, simple, more or less sparse, on average larger than their diameters.

Elytra: about 3 times as long as pronotum and 2.5 times as long as broad; sides generally subparallel for the two third of its length, then feebly narrowing; apex slightly emarginate; striae light, punctured; interstriae flat to subconvex with smaller punctures.

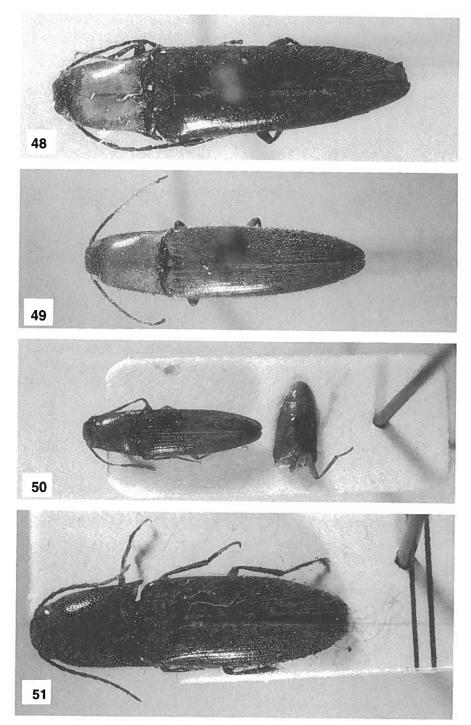
Aedeagus as in Fig. 19.

Female. Similar to male but generally more convex; antennae shorter not or just attaining hind angles of pronotum.

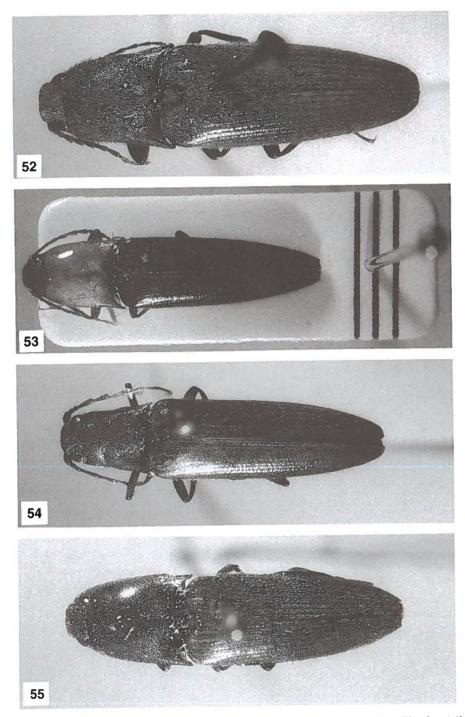
Body length (both sexes): 8-9.5 mm; width 2.1-2.6 mm.



Figures 44-47. Photos of specimens. Figure 44. P. angustus (Fleutiaux) (10 mm). Figure 45. P. hayekae n. sp. (holotypus 3) (11 mm). Figure 46. P. inflammatum n. sp. (paratypus 3) (10 mm). Figure 47. P. longicornis n. sp. (paratypus 3) (10.1 mm).



Figures 48-51. Photos of specimens. Figure 48. P. nigripes (Fleutiaux) (11.2 mm). Figure 49. P. politus (Candèze) (9 mm). Figure 50. P. bakewelli (Fleutiaux) (5.6 mm). Figure 51. P. brunneus n. sp. (holotypus  $\delta$ ) (10 mm).



Figures 52-55. Figure 52. P. cervinus (Candèze) (15.3 mm). Figure 53. P. haddeni (Fleutiaux) (11.8 mm). Figure 54. P. nitens (Fleutiaux) (12.8 mm). Figure 55. P. oberthueri n. sp. (paratypus  $\delta$ ) (10.5 mm).

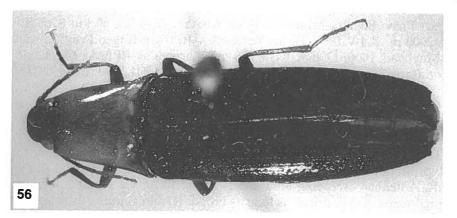


Figure 56. P. schadenbergi n. sp. (holotypus d) (16 mm).

## 24. Priopus girardi Platia & Schimmel n. sp. (Figure 17)

DIAGNOSIS. Species allied to *P. brunneus* n. sp., distinct for the narrower body and longer antennae.

Material examined. Holotypus &, Philippines: Luzon, Laguna Prov: Mt Banahao (Fleutiaux coll. MNHN).

DESCRIPTION. Male. Body color with head and pronotum blackish and elytra lighter, fuscous; covered with yellow vestiture.

Head: frons flat, feebly depressed near anterior margin; later arcuate, just thickened and projecting above clypeus; punctures broad, strongly umbilicate with shortest intervals. Antennae exceeding hind angles of pronotum by 1.5 segments; II antennal segment cylindrical, III subconical, longer than II, together as long as IV; IV-X triangular, much longer than broad, longitudinally carinate; XI ellipsoidal.

Pronotum: a little broader than long, convex, abruptly declivous at base with trace of median longitudinal depression; sides subparallel, narrowing only near apex; posterior angles acuminate, just divergent, bicarinate; carinae equally developed, directed inside; punctures strong, deep, simple or slightly umbilicate, with intervals on average equal to half than their diameters.

Elytra: 2.9 times as long as pronotum and 2.7 times as long as broad; sides from base to apex gradually but regularly narrowing; apex scarcely emarginate; striae light, feebly punctured; interrstriae flat, roughly punctured.

Aedeagus as in Fig. 17.

Female unknown.

Body length: 8.3 mm; width 2.1 mm.

25. Priopus haddeni (Fleutiaux) comb. nov. (Figures 22, 40, 53) Neodiploconus haddeni Fleutiaux, 1932: 48; Van Zwaluwenburg, 1936: 423.

Material examined. Holotypus 9, Philippines: Luzon, Baguio, VI.1917 (F. X. Williams) (Fleutiaux coll., MNHN). Other specimens, Philippines: Luzon, Benguet Prov: Baguio; Mountain Prov: Abatan, Buguias, 60 km S of Bontoc, 1800–2000 m, 2–4.V.1964 (H. M. Torrevillas, BPBM); Ifugao Prov: Liwo, 8 km E of Mayoyao, 1000–1300 m, 8–13.VI.1967 (Torrevillas, BPBM); Mindanao, Bukidnon Prov: 30 km W of Maramag, 1600 m, 28–30.XII.1990 (Bolm, NHMB).

**REDESCRIPTION.** Male. Body bicolorous; pronotum, underbody, antennae and legs, red-orange; head and elytra black; covered with yellow-fulvous vestiture.

Head: frons slightly depressed near anterior margin; later arcuate, just thickened, projecting above clypeus; punctures umbilicate with short and shining intervals. Antennae exceeding hind angles of pronotum by about 2 segments; II antennal segment cylindrical, as long as broad, III subconical a little longer than II, together shorter than IV; IV-X triangular, longer than broad, longitudinally carinate; XI ellipsoidal.

Pronotum: 1,1–1,2 times broader than long; moderately convex, at base gradually declivous with feeble median longitudinal depression extending nearly to the middle; sides from base to apex nearly regularly narrowing; posterior angles elongate, acuminate, just divergent, bicarinate; carinae well evident, equally developed, directed inside; punctures light, deep, simple, sparse, with intervals on average twice than their diameters.

Elytra: 3.2–3.3 times as long as pronotum and 2.8–2.9 times as long as broad; sides from base to apex regularly narrowing; apex emarginate; striae superficial, punctured; interstriae flat with smaller punctures.

Aedeagus as in Fig. 22.

Female. Similar to male with pronotal sides more arcuate; antennae shorter nearly reaching hind angles of pronotum; II and III antennal segments together as long as IV.

Body length (both sexes): 10.5–13 mm; width 2.6–3.3 mm.

26. Priopus merkli Platia & Schimmel n. sp. (Figure 37)

DIAGNOSIS. Among the Philippine species it is immediately recognizable by the front porrect and strongly protruding above clypeus; it is the only species very close to some species from Malaysia and Indonesia.

Material examined. Holotypus  $\Im$ , Philippines: Luzon, Quezon Prov: NE of Famy, 14° 30' N 121° 31' E, 11.XII.1986 (G. Hangay) (TM). 3 Paratypes (1  $\Im$  and 2  $\Im$   $\Im$ ), Mindanao, Bukidnon Prov: 30 km W of Maramag, 1600 m, 28.30.XII.1990 (Bolm) (NHMB, CPG).

DESCRIPTION. Female. Body entirely ferruginous (holotypus) or bicolorous, blackish except pronotum and propleure red-sanguineous; covered with yellow vestiture.

Head: frons slightly depressed in the middle, anterior margin thickened, shining, arcuate and strongly protruding above clypeus; punctures broad, strongly

umbilicate with short intervals. Antennae not reaching hind angles of pronotum by about 1–1.5 segments; II antennal segment cylindrical, III subconical a little longer than II, together just longer than IV; IV–X triangular, longer than broad, longitudinally carinate; XI ellipsoidal.

Pronotum: as long as broad, convex, abruptly declivous at base, with clear and narrow median longitudinal channel, deeper in basal declivity; sides feebly and regularly arcuate; posterior angles acuminate, just divergent, bicarinate; carinae equally developed, directed inside; punctures deep, simple to slightly umbilicate, with intervals on average equal to their diameters or more.

Elytra: 2.9–3 times as long as pronotum and 2.7 times as long as broad; sides subparallel for the first half then narrowing; apex scarcely emarginate; striae well marked and punctured; interstriae flat, with smaller punctures.

Copulatrix bursa as in Fig. 37.

Male. Very similar to the female but with antennae a little longer. Male genitalia with acuminate apical expansions of paramera.

Body length (both sexes): 14–14.5 mm; width 3.2–3.3 mm.

27. Priopus nitens (Fleutiaux) comb. nov. (Figures 32, 54) Neodiploconus nitens Fleutiaux, 1934: 484; Van Zwaluwenburg, 1936: 423.

Material examined. Holotypus &, Philippines: Luzon, Mountain Prov: Camp 82, 6000 ft, 7.V.1931 (F. C. Hadden) (Fleutiaux coll., MNHN). Other specimens, Philippines: Mountain Prov: Abatan Buguias, 60 km S of Bontoc, 1800–2000, 5.VI.1964, light trap (H. M. Torrevillas, BPBM); Benguet Prov: Baguio (M. C. F. Baker, MNHN).

REDESCRIPTION. Male. Body fuscous to ferruginous; covered with yellowish vestiture.

Head: frons slightly depressed near anterior margin; later narrowly arcuate, thickened, shining, just projecting above clypeus; punctures robust, superficial, strongly umbilicate, nearly contiguous. Antennae exceeding hind angles of pronotum by about 4 segments; II and II antennal segments small, subequal, together very shorter tha IV; IV-X subtriangular, very longer than broad, longitudinally carinate; XI ellipsoidal.

Pronotum: about 1,2 times broader than long, moderately convex, flattened at sides and at base; sides more or less regularly arcuate from middle to apex; posterior angles strongly divergent, acuminate, bicarinate; inner carina very light, just visible; outer carina longer, very near and parallel to lateral margin; punctures strong, more or less clearly umbilicate with intervals on average equal to half than their diameters.

Elytra: elongate, about 4 times as long as pronotum and 2.8 times as long as broad; sides parallel for about two third of its length then feebly narrowing; apex entire; striae well marked, punctured; interstriae flat to subconvex, punctured.

Aedeagus as in Fig. 32.

Female. Body larger and more convex; pronotum more convex; antennae shorter only attaining hind angles of pronotum.

Body length (both sexes): 11–13 mm; width 3–3.5 mm.

Notes. Species very particular and immediately recognizable among the philippine species for the very longer antennae and above all the structure of carinae on hind angles of pronotum.

#### 28. Priopus oberthueri Platia & Schimmel n. sp. (Figures 18, 55)

DIAGNOSIS. Species similar to *P. erythronotus* (Candèze), separated essentially by pronotal sides more or less arcuate; the male genitalia are very different (Fig. 18).

Material examined. Holotypus  $\mathcal{J}$ , Philippines: Mindanao, Misamis Or., Mt Empogatao, camp II, 1100 m, 21.IV.1961, light trap (H. M. Torrevillas) (BPBM). 33 Paratypes (3  $\mathcal{J}$   $\mathcal{J}$  and 30  $\mathcal{P}$   $\mathcal{P}$ ), Mindanao, Misamis Or., Pigtibiran, 600 m, 1– 13.V.1961 (Torrevillas); Minalwang, 1050 m, 24.III-4.IV.1961 (Torrevillas); Mt Balatukan, 15 km SW of Gingoog, 1000–2000 m, 27–30.IV.1960, light trap (Torrevillas); Mt Kibungol, 20 km SE of Gingoog, 700–800 m, 9–18.IV.1960 (Torrevillas); Bukidnon Prov: Tangcolan (M. C. F. Baker); Kalmbugan; Dapitan; Surigao (Baker); Davao (Baker); Zamboanga Prov: Kabasalan, 4.IV.1932 (II. C. Muzzal); Agusan Prov: Esperanza, 4–11.XI.1959 (C. M. Yoshimoto); Luzon, Camarines Sur Prov: Mt Iriga, 500–600 m, 1.IV.1962 (Torrevillas); Negros Prov: Cuernos Mts (Baker); Samar I, (Baker); Romblon Prov: Sibuyan I. (Baker); (BPBM, MNHN, IRSNB, CPG, CSV).

DESCRIPTION. Male. Body entirely ferruginous more or less darkened; covered with yellow-fulvous vestiture.

Head: frons slightly convex above, just depressed near anterior margin; later arcuate, just thickened and projecting above clypeus; punctures strong, umbilicate, with close and shining intervals. Antennae not reaching hind angles of pronotum by about 1 segment; II antennal segment cylindrical, III subconical, a little longer than II, together as long as IV; IV-X triangular, longer than broad, longitudinally carinate; XI ellipsoidal.

Pronotum: a little broader than long, convex, abruptly declivous at base, with light but clear median longitudinal impressed line, deeper in basal declivity; sides feebly but regularly arcuate; posterior angles acuminate, just divergent, bicarinate; carinae equally developed and directed inside; punctures small, deep, simple, with intervals on average equal to their diameters or more.

Elytra: 2.7–2.8 times as long as pronotum and 2.3–2.4 times as long as broad; sides subparallel in the first half, then narrowing; apex scarcely emarginate; striae superficial, punctured; interstriae flat, densely punctured.

Aedeagus as in Fig. 18.

Female. Similar to male with shorter antennae.

Body length (both sexes): 9.3-11.5 mm; width 2.5-3.2 mm.

### 29. Priopus samuelsoni Platia & Schimmel n. sp. (Figures 21, 39)

DIAGNOSIS. Similar to *P. schadenbergi* n. sp., different for the smaller size and the unicolorous body; for the prosternal process deeply emarginate and horizontal the species is easily distinct.

Material examined. Holotypus & —Philippines: Luzon, Ifugao Prov: Liwo, 8 km E of Mayoyao, 1000–1300 m, 30–31.V.1967 (H. M. Torrevillas) (BPBM). 4 Paratypes (1 & and 3  $\Im$  ), Luzon, Ifugao Prov: Jacmal Bunhian, 24 km E of Mayoyao, 800–1000 m, 4–6.V.1967 (Torrevillas); Camarines Sur Prov: Mt Isarog, Pili, 800–900 m IV.1965 (BPBM; CPG).

DESCRIPTION. Male. Body yellow-ferruginous, sometimes with pronotal disk darkened; covered with dense yellow-fulvous vestiture.

Head: frons slightly convex, anterior margin arcuate, just thickened and projecting above clypeus; punctures strong, superficial, umbilicate with variable intervals on average less half than their diameters. Antennae shorter, not reaching hind angles of pronotum by about 1.5 segments; II and III antennal segments subequal, together a little longer than IV; IV–X triangular, a little longer than broad, longitudinally feebly carinate; XI ellipsoidal.

Pronotum: just broader than long, feebly convex, gradually declivous at base; sides arcuate in the anterior third then subparallel and slightly sinuate before the posterior angles, these acuminate, bicarinate; inner carina a little more prominent, directed inside; punctures light, deep, simple, sparse, with intervals on average 2 to 3 times their diameters.

Elytra: 3.1–3.2 times as long as pronotum and 2.7–2.8 times as long as broad; sides subparallel in the first half, then gradually narrowing; apex emarginate with trace of spine on outer side; striae well marked and punctured; interstriae subconvex with smaller punctures.

Prosternal process nearly horizontal behind the procoxae, at apex emarginate.

Aedeagus as in Fig. 39. Female. Very similar to male with antennae just shorter. Body length (both sexes): 12-15 mm; width 3.1-3.7 mm.

30. Priopus schadenbergi Platia & Schimmel n. sp. (Figures 36, 56)

DIAGNOSIS. Very similar to *P. samuelsoni* for the characters of prosternal process: separated essentially by the bicolorous and larger body.

Material examined. Holotypus  $\delta$ , Philippines: without any data (Schadenberg) (SMTD).

DESCRIPTION. Male. Body bicolorous; head, borders of scutellum and elytra black: pronotum, underbody, antennae and legs red-orange; covered with fulvous vestiture. Head: frons slightly depressed near anterior margin; later substraight at middle, projecting above clypeus; punctures strong, umbilicate, intervals equal about to half than their diameters. Antennae just surpassing hind angles of pronotum; II antennal segment cylindrical, III subconical a little longer than II, together just shorter than IV; IV–X triangular, much longer than broad, longitudinally carinate; XI ellipsoidal.

Pronotum: 1.2 times as broad as long, moderately and regularly convex, gradually declivous at base; sides from base to apex nearly regularly narrowing; posterior angles elongate, bicarinate; inner carina more robust directed inside, outer carina more feeble, short and subparallel to lateral margin; punctures light, simple, deep, sparse, with intervals variable, 2–4 times larger than their diameters.

Elytra: 3.3 times as long as pronotum and 2.7 times as long as broad; sides from base to apex gradually and regularly narrowing; apex scarcely but clearly emarginate; striae superficial, slightly punctured; interstriae flat with smaller punctures.

Prosternal process subhorizontal behind the procoxae, at apex emarginate. Aedeagus as in Fig. 36.

Female unknown.

Body length: 16 mm; width 3.9 mm.

## 31. Priopus torrevillasi Platia & Schimmel n. sp. (Figure 25)

DIAGNOSIS. Species allied with *P. bolmi* n. sp.; separated by the smaller and blackish body. The sides of paramera in male genitalia are slightly sinuate (Fig. 25).

Material examined. Holotypus &, Philippines: Mindanao, Misamis Or., Mt Balatukan, 15 km SW of Gingoog, 1000–2000 m, 27–30.IV.1960 (H. M. Torrevillas) (BPBM). 1 Paratypus  $\mathcal{P}$ , same data as Ht (BPBM).

DESCRIPTION. Male. Body entirely blackish with antennae and legs ferruginous; covered with dense yellow-fulvous vestiture.

Head: frons convex on vertex, slightly depressed near anterior margin; later arcuate, just projecting above clypeus; punctures strong, deep, umbilicate with close and shining intervals. Antennae just exceeding hind angles of pronotum; II antennal segment cylindrical, III subconical as long as II, together as long as IV; IV-X triangular, longer than broad, longitudinally carinate; XI ellipsoidal.

Pronotum: as long as broad, moderately convex, at base gradually declivous with trace of median longitudinal depression in the declivity; sides regularly arcuate, posterior angles acuminate, feebly divergent, bicarinate; carinae equally developed, directed inside; punctures light, deep, simple to slightly umbilicate, with intervals on average equal to half than their diameters or more.

Elytra: 2.7 times as long as pronotum and 2.5 times as longer as broad; ovate with the great width near the middle, then narrowing; apex emarginate; striae well marked and punctured; interstriae flat, densely punctured.

Aedeagus as in Fig. 25.

Female. Similar to male with a little shorter antennae. Body length (both sexes): 9.3–9.4 mm; width 2.5 mm.

32. Priopus umbilicatus (Candèze) comb. nov. (Figure 35)

Diploconus umbilicatus Candèze, 1875; 1891: 140; Schwarz, 1906: 185; Fleutiaux, 1914: 446; 1916: 230; Schultze, 1916: 64.

Neodiploconus umbilicatus. Schenkling, 1927: 268; Van Zwaluwenburg, 1936: 424; 1959: 394.

Diploconus obscurus Fleutiaux, 1914: 447; 1916: 230 (holotypus 9, examined) (Luzon, Mt Makiling, in Fleutiaux coll., MNHN).

Material examined. Lectotypus  $\delta$ , des. Van Zwaluwenburg, Philippines: Ile de Panaon (Candèze coll., IRSNB). Many other specimens. Luzon, Laguna Prov: Mt Makiling, 26.IV.1931, 3.V.1931 (F. C. Hadden; M. C. F. Baker, BPBM, MNHN); Mt Makiling, 12.IV.1984 (G. Hangay, TM); Mt Banahao (Baker, MNHN); Laguna Prov: Agr. College, 19.V.1931 (Hadden, MNHN); Benguet Prov: Baguio (Baker, MNHN); Quezon Prov: Park Tayabas, 1.V.1931 (Hadden, MNHN); Malinao, Tayabas (Baker, MNHN); Camarines Sur Prov: Mt Isarog, 750–800 m, 22.IV.1963 (H. M. Torrevillas, BPBM); Mt Isarog, Pili, m 700–900, 12–25.IV.1965 (Torrevillas, BPBM); Mt Isarog, 20 km E of Naga, 500–600 m (Torrevillas, BPBM): Ifugao Prov: Jacmal, Bunhian, 24 km E of Mayoyao, 800– 1000 m, 27–29.IV.1967 (Torrevillas, BPBM); Negros Or. Prov: Mt Talinas, 900– 1020 m, 28–29.VI.1958, in rain forest (H. E. Milliron, BMNH); Cuernos Mts (Baker, MNHN); Samar I. (Baker, MNHN); Romblon Prov: Sibuyan I. (Baker, MNHN).

REDESCRIPTION. Male. Body color variable; entirely ferruginous with blackish shadings on pronotum (typ. form.) to entirely blackish (*P. obscurus* Fleutiaux) with intermediate forms; covered with dense yellowish vestiture.

Head: frons flat with broad anterior margin, arcuate and just projecting above clypeus; punctures strong, superficial, umbilicate, nearly contiguous. Antennae reaching and generally exceeding by 0.5–1 segments hind angles of pronotum; II antennal segment cylindrical a little longer than broad, III subconical as long as II, together as long as IV; IV–X triangular, longer than broad, longitudinally carinate; XI ellipsoidal.

Pronotum: a little broader than long, regularly and strongly convex, at base with feeble median longitudinal depression; sides moderately and regularly arcuate; posterior angles acuminate, just divergent, bicarinate; carinae short, feeble, directed inside; punctures strong, deep more or less clearly umbilicate, intervals close, shining or a little shagreened.

Elytra: 2.9–3.0 times as long as pronotum and 2.6–2.7 times as long as broad; sides from base to apex gradually but regularly narrowing; apex entire scarcely emarginate near suture; striae well marked, punctured; interstriae subconvex, roughly punctured.

Aedeagus as in Fig. 35.

Female. Body more convex and parallel; antennae shorter not reaching hind angles of pronotum.

Body length (both sexes): 7.5–12.5 mm; width 1,8–3 mm.

## 33. Priopus whiteheadi Platia & Schimmel n. sp. (Figure 20)

DIAGNOSIS. Very similar to the ferruginous specimens of *P. erythronotus* (Candèze); separated essentially by the stronger pronotal punctures.

Material examined. Holotypus  $3^{\circ}$ , Philippines: Luzon, Ifugao Prov: Jacmal Bunhian, 24 km E of Mayoyao, 800–1000 m, 28–30.IV.1967, light trap (H. M. Torrevillas) (BPBM). 34 Paratypes (18  $3^{\circ}3^{\circ}$  and 16  $9^{\circ}9^{\circ}$ ), same data as Ht, 1–10.V.1967, 30.V.1967; Liwo, 8 km E of Mayoyao, 1000–1300 m, 7.VI.1967 (Torrevillas); Mayoyao, 1200–1500 m, 17–18.VIII.1966 (Torrevillas); Mountain Prov: Abatan, Buguias, 60 km S of Bontoc, 800–2000 m, 23.IV, 19.V, 31.V–2.VI, 15.VI.1964, light trap (Torrevillas) (BPBM, CPG, CSV).

DESCRIPTION. Male. Body entirely yellow-ferruginous with head and elytral borders blackish; covered with yellow-fulvous vestiture.

Head: frons convex, just depressed near anterior margin; later a little thickened and projecting above clypeus; punctures robust, deep, umbilicate, with close and shining intervals. Antennae exceeding hind angles of pronotum by 1 segment; II antennal segment cylindrical, III subconical just longer than II, together as long as IV; IV-X triangular, much longer than broad, longitudinally carinate; XI ellipsoidal.

Pronotum: broader than long, moderately convex, abruptly declivous at base with trace of median longitudinal depression in the declivity; sides subparallel only narrowing near apex; posterior angles acuminate, just divergent, bicarinate; inner carina more feeble, outer more prominent, directed inside; punctures light, deep, simple to slightly umbilicate, sparse, with intervals equal or larger than their diameters.

Elytra: 3.1–3.2 times as long as pronotum and 2.5–2.6 times as long as broad; sides subparallel for the first half then narrowing; apex entire to scarcely truncate; striae superficial, punctured; interstriae flat with smaller punctures.

Aedeagus as in Fig. 20.

Female. Similar to male with antennae shorter not reaching hind angles of pronotum.

Body length (both sexes): 9–9.5 mm; width 2.3–2.5 mm.

34. Priopus zwaluwenburgi Platia & Schimmel n. sp. (Figure 34)

DIAGNOSIS. Species allied with *P. angusticollis* (Candèze) and *P. umbilicatus* (Candèze); different for the shorter antennae and the pronotal punctures less dense.

Material examined. Holotypus  $\delta$ , Philippines: Luzon, Laguna Prov: Mt Makiling, 1.VI.1932 (F. C. Hadden) (Fleutiaux coll., MNHN). 7 Paratypes (5  $\delta \delta$  and 2  $\Im$   $\Im$ ), same data as Ht, 19–24.VI.1931 (MNHN, CPG).

DESCRIPTION. Male. Body color variable; entirely ferruginous to fuscous with antennae and legs lighter; covered with a dense yellow-fulvous vestiture.

Head: frons flat with anterior margin arcuate, just thickened and projecting above clypeus; punctures strong, superficial, umbilicate, with close and shining intervals. Antennae reaching hind angles of pronotum; II antennal segment cylindrical, III subconical, as long as II, together just longer than IV; IV-X triangular, longer than broad, longitudinally with feeble carina; XI ellipsoidal.

Pronotum: as long as broad, moderately and regularly convex; sides feebly arcuate; posterior angles short, acuminate, just divergent, bicarinate; carinae equally developed, directed inside; punctures uniform, deep, umbilicate, with close intervals.

Elytra: 2.6 times as long as pronotum and 2.4 times as long as broad; ovate, with the greater width in the first half; apex entire, suture with a trace of spine; striae deep and punctured; interstriae subconvex, densely and roughly punctured.

Aedeagus as in Fig. 34.

Female. Similar to male with antennae a little shorter not reaching hind angles of pronotum.

Body length (both sexes): 8.5-10 mm; width 2.4-2.6 mm.

## List of known Philippine Priopus

SPECIES GROUP I

- 1. angustus (Fleutiaux)
- 2. bakeri new species
- 3. ciprinus (Candèze)
- 4. *fuscus* (Fleutiaux)
- 5. hayekae new species
- 6. hiekei new species
- 7. inflammatum new species
- 8. *infuscatus* new species
- 9. longicornis new species
- 10. marginatus (Fleutiaux)
- 11. *nigripes* (Fleutiaux)
- 12. politus (Candèze)

SPECIES GROUP II

- 13. angusticollis (Candèze)
- 14. *bakewelli* (Fleutiaux)
- 15. *bicolor* new species
- 16. *bolmi* new species
- 17. brunneus new species

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- 18. carinatus new species
- 19. cervinus (Candèze)
- 20. consanguineus (Candèze)
- 21. coxalis (Fleutiaux)
- 22. crassiusculus new species
- 23. erythronotus (Candèze)
- 24. girardi new species
- 25. haddeni (Fleutiaux)
- 26. merkli new species
- 27. nitens (Fleutiaux)
- 28. oberthueri new species
- 29. samuelsoni new species
- 30. schadenbergi new species
- 31. torrevillasi new species
- 32. *umbilicatus* (Candèze)
- 33. whiteheadi new species
- 34. zwaluwenburgi new species

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#### References

- Candèze, E. 1860. Monographie des Elatérides. 3. Mémoires de la Société Royale des Sciences de Liège. 15. 512 pp.
- Candèze, E. 1865. Elatérides nouveaux. 1. Mémoires Couronnés et autres Mémoires publiés par l'Académie Royale des Sciences, des Lettres et de Beaux-Arts de Belgique. 17(1). 63 pp.
- Candèze, E. 1875. Relevè des Elatérides des Iles Philippines avec les diagnoses de quelques espèces inedites. Annales de la Société Entomologique de Belgique. 18: 118–127.
- Candèze, E. 1891. Catalogue Methodique des Elatérides Connus en 1890. Liège. 264 pp.
- Candèze, E. 1893. Elatérides nouveaux. 5. Mémoires de la Société Royale des Sciences de, Liège. 18: 1–76.
- Fleutiaux, E. 1914. Elateridae des Iles Philippines. Philippine Journal of Science. Section D, 9: 441–449.
- Fleutiaux, E. 1916. Elateridae des Iles Philippines. Philippine Journal of Science. Section D, 11: 219–233.

- Fleutiaux, E. 1932. Melasidae et Elateridae nouveaux des Iles Philippines. Philippine Journal of Science. Section D, 49: 565–569.
- Fleutiaux, E. 1932. Descriptions d'Elateridae nouveaux des Iles Philippines provenant des collections de la "Experiment Station of the Hawaiian Sugar Planters Association". Proceedings of the Hawaiian Entomological Society. 8(1): 47-49.
- Fleutiaux, E. 1934. Elatérides nouveaux des Iles Philippines. Proceedings of the Hawaiian Entomological Society. 8(3): 477–486.
- Schenkling, S. 1927. Coleopterorum Catalogus, Auspiciis et Auxilio, pars 88, Elateridae. 2: 265–636. W. Junk, The Hague.
- Schultze, W. 1916. Philippine Coleoptera. Philippine Journal of Science. Section D, 11: 59–66.
- Schwarz, O. 1902. Neue Elateriden. Stettiner Entomologische. Zeitschrift, 2: 194–316.
- Schwarz, O. 1906. In—Wytsman, Genera Insectorum. Fascicles 46A and 46B. Bruxelles. 224 pp.
- Van Zwaluwenburg, R. H. 1934. New records and new species of Elaterid beetles from Melanesia. Annals and Magazine of Natural History, 13: 591–597.
- Van Zwaluwenburg, R. H. 1936. The Elaterid beetles of the Philippine Islands. Philippine Journal of Science. Section D, 59: 393–432.
- Van Zwaluwenburg, R. H. 1959. Some type designations with notes on pacific Elateridae (Coleoptera). Pacific Insects, 1(4): 347–414.
- von Hayek, C. M. F. 1990. A reclassification of the *Melanotus* group of genera (Coleoptera: Elateridae). Bulletin of the British Museum of Natural History (Entomology). 59(1): 37–115.