

# New species of Cryptocephalinae from the Philippine and Fiji Islands (Coleoptera: Chrysomelidae)

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12 new species of Cryptocephalinae (1 species of *Melixanthus*, 1 of *Adiscus*, 1 of *Cryptocephalus* and 9 of *Coenobius*) are described, all from the Philippine Islands, except for one species of *Coenobius* from Fiji. A key to the species of *Coenobius* from the Philippine Islands is given.

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In 1995 I had an opportunity to work for two months in the Coleoptera collection of the Systematic Entomology Laboratory USDA (housed in the National Museum of Natural History, Washington, D.C.), examining Oriental Chrysomelidae. The present paper comprises the descriptions of new species from this collection. Holotypes of the new species are preserved in the mentioned collection.

## *Melixanthus notabilis* sp. n. (Figs 1-2)

*Holotype*. ♂, **Mindanao Isl.**, Province Zambales, C.F. Baker.

*Description*. Length 3.2 mm, breadth at shoulders 1.9 mm. Fulvous, head and pronotum paler; occiput, a spot on frons, two arcuate spots on pronotum, scutellum, basal band and postmedian spot on each elytron black. Ventral surface and legs fulvous; metathorax with large spots; pygidium narrowly bordered with black. Antenna with last 6 segments reddish brown. Frons finely punctured. Apical six segments of antennae distinctly widened, each 1.5 times as long as wide. Pronotum twice as wide as long, with lateral margins nearly straight, narrowed in front; disc convex, finely punctured, at base with two slight depression. Scutellum triangular, rounded apically. Elytra 2.5 times as long as pronotum and 1.25 times as long as wide in shoulders, slightly narrowed posteriorly, with 10 rows of deep close punctures slightly weakened posteriorly; interstices on

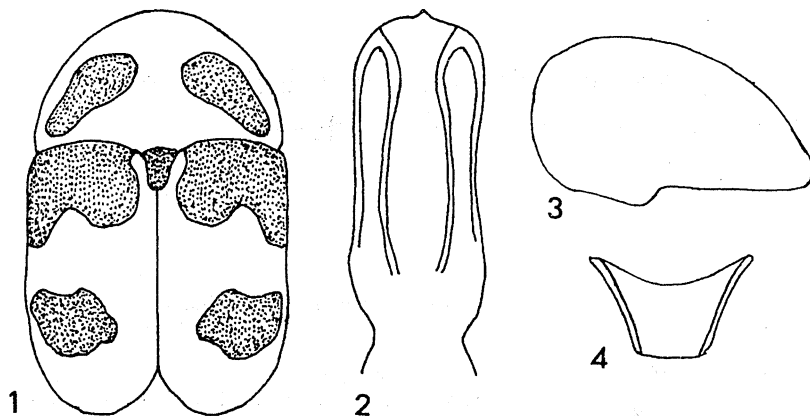
disc feebly and on the side much more convex, very finely wrinkled. Abdomen finely and closely punctured, finely pubescent; last sternite near apex with oval concave depression. Aedeagus (Fig. 2) with lateral and central ridges.

*Comparison*. This species can be easily distinguished by the black pattern of upperside.

## *Cryptocephalus samuelsoni* sp. n.

*Holotype*. ♀, **Negros Isl.**, V.1911.

*Description*. Length 8 mm, breadth in shoulders 5 mm. Fulvous; head, antennae, ventral surface and legs yellow; basal margin of elytra, humeral spot and scutellum black. Antennae long, segment 2 very short, 3 times shorter than segment 1, segment 3 twice as long as 2, segments 5-11 long, at least twice as long as broad. Pronotum strongly convex, at base 1.9 times as broad as long, narrowed anteriorly; lateral border narrow, gradually dilated backwards; posterior angle distinctly produced; disc of pronotum smooth, laterally very sparsely and finely punctured, with two slight depressions at base. Scutellum elongate-triangular, truncate apically. Elytra 2.2 times as long as pronotum and 1.2 times as long as broad, with distinct rows of punctures, 4th-7th and 5th-6th rows connected posteriorly; additional points disposed between 3rd and 8th rows on apices of elytra. Pygidium produced, very finely punctured and shortly pubescent. Prosternum short, its posterior margin broadly emarginate.



Figs 1-4. 1-2, *Melixanthus notabilis* sp. n.: 1, pattern of upper surface; 2, aedeagus from above; 3-4, *Adiscus philippinensis* sp. n.: 3, elytra in profile; 4, prosternum.

**Comparison.** This species differs from *C. gestroi* Jac. from Burma in having the body much larger, antennae paler and puncture rows of elytra of different size.

**Etymology.** The species is named after Dr. G. Allan Samuelson in recognition of his efforts in research of the Chrysomelidae of Oceania.

***Adiscus philippinensis* sp. n.**  
(Figs 3-4)

**Holotype.** ♀, **Mindanao Isl.**, Zamboanga.

**Description.** Length 3.6 mm. Reddish fulvous, basal margin of elytra narrowly black, labrum, antennae, legs, prosternum and abdomen yellow. Body broadly oval, 1.27 times as long as broad, strongly convex. Frons closely but not deeply punctured. Clypeus arcuately emarginate, very finely punctured. Antennae reaching base of elytra, 6 apical segments dilated, not longer than broad, segments 3 and 4 short and slender, segment 5 rather long and feebly dilated to apex. Pronotum short, at base broad, arcuately narrowed anteriorly, basal lobe acute, surface rather closely and superficially punctured, interspaces as broad as diameter of punctures. Elytra 4 times as long as pronotum and 1.3 times as long as broad, with regular rows of punctures which are much weaker in their hind part; interstices broad, smooth, finely and sparsely punctured; epipleural lobe (Fig. 3) obtuse. Prosternum (Fig. 4) without median ridge; metasternum strongly and closely punctured.

**Comparison.** The species is close to *A. mouhoti* Baly, but has the prosternum without median ridge and epipleural lobe short.

***Coenobius stoneri* sp. n.**

**Holotype.** ♂, **Fiji Islands**, Tamavua, June 1929, A. Stoner.

**Description.** Length 1.9 mm. Head, pronotum, antennal segments 1-5, prosternum and legs yellow; elytra, metasternum and abdomen pitchy black. Eyes touching above; frons smooth; clypeus convex with depression along the middle. Antennae long, reaching to just behind middle of elytra, segment 1 robust, as long as segments 2 and 3 combined, segments 6-11 much longer and broader. Pronotum at base 1.5 times as broad as long, strongly narrowed to apex, with collar on anterior margin; disc smooth and shining, with lateral grooves. Scutellum narrowed posteriorly. Elytra 2.3 times as long as pronotum, with distinct rows of punctures; interspaces between the punctures smaller than diameter of punctures; apex of elytra impunctate. Interstices broad, weakly convex, two external interstices prominent. Thorax shining, sparsely punctured. Abdomen more closely punctured. Pygidium strongly narrowed to apex.

**Comparison.** The new species differs from all other species from Fiji in the peculiar coloration of upperside.

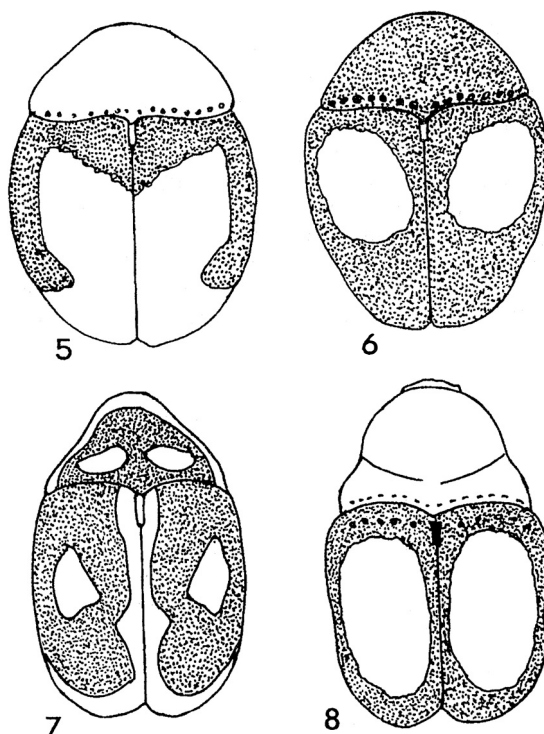
***Coenobius melanoxanthus* sp. n.**

**Holotype.** ♂, **Mindanao Isl.**, Dapitan, C.F. Baker.

**Paratype.** ♀, same data.

**Description.** Length 2.3 mm. Upperside bi-coloured: head, pronotum and scutellum pitchy black, elytra fulvous; underside pitchy black, apical part of last sternite of abdomen and legs fulvous; antennae black, five basal segments fulvous. Frons and clypeus strongly and closely punctured. Eyes touching

Figs 5-8, pattern of upper surface: 5-6, *Coenobius bipustulatus* sp. n.; 7, *C. maculipennis* sp. n.; 8, *C. circumductus* sp. n.



above. Antennae rather short, 6 apical segments widened, each 1.4-1.5 times as long as broad. Pronotum with collar, at base as broad as elytra, 1.6 times as broad as long, without lateral grooves, with sparse small punctures; lateral margin at base widened. Scutellum strongly narrowed to apex. Elytra 2.8 times as long as pronotum and 1.27 times as long as broad, slightly narrowed behind the middle, with fine and sparse punctures arranged in rows; interstices flat, but convex at the sides.

♀. Length 2.5 mm. Last abdominal sternite deeply excavated, smooth.

*Comparison.* The new species differs from other species from Philippines in having pronotum black and elytra fulvous.

***Coenobius bipustulatus* sp. n.**

(Figs 5-6)

*Holotype.* ♀, **Mindanao Isl.**, Surigao, C.F. Baker.

*Paratype.* ♀, same data.

*Description.* Length 2.5 mm, breadth at shoulders 1.7 mm. Reddish fulvous, basal and lateral borders of elytra broadly pitchy black, also triangular spot near scutellum pitchy black (Fig. 5). Abdomen reddish fulvous, meso- and metasternum pitchy black. Frons and antennae fulvous, labrum yellow. Body broadly oval, strongly shining,

more narrowed anteriorly than posteriorly. Eyes touching above. Frons rugose-punctate. Pronotum widest at base and strongly rounded anteriorly, without lateral grooves; a row of punctures before base deep; anterior half of pronotum smooth, posterior irregularly, fairly strongly punctured. Scutellum with parallel lateral margins, twice as long as broad. Elytra 2.2 times as long as pronotum, from shoulders backwards gradually narrowed, evenly and strongly punctate-striate; punctures deep at base and smaller apically. Pygidium rugose-punctate. Abdomen finely punctured and very shortly pubescent.

Paratype (Fig. 6) pitchy black with spots on disc of elytra and their apical part reddish fulvous.

*Comparison.* The species is close to *C. bakeri* Wse., but can be easily distinguished by the smaller, more strongly punctured body and lacking lateral grooves of pronotum.

***Coenobius maculipennis* sp. n.**

(Fig. 7)

*Holotype.* ♂, **Mindanao Isl.**, Dapitan, C.F. Baker.

*Paratypes.* 15 specimens, same data.

*Description.* Reddish brown with unclear yellow marking as figured. Pronotum with borders and two spots at base yellow; elytra

with a spot on the disc, longitudinal band near suture and apical band contiguous on lateral margin. Frons and clypeus testaceous; breast and abdomen brown; lateral border of last sternite and pygidium, also antennae and legs fulvous; last 6 segments of antennae partly darkened. Frons deeply rugose-punctate. Eyes touching above. 2nd and 3rd segments of antennae as long as broad, 6 apical segments 1.5 times as long as broad. Pronotum smooth, strongly narrowed from base to apex, with well developed collar and lateral grooves; a row of punctures before base deep. Scutellum narrow, pointed at apex. Elytra 2.3 times as long as pronotum and 1.3 times as long as broad, very slightly and broadly rounded on sides. Punctures arranged in rows, very fine, only at base and near lateral margins deep and large; discal interstices flat, at side convex. Abdomen very closely and finely punctured.

*Comparison.* This species differs from all other species from Philippines in the peculiar coloration of the upperside.

***Coenobius circumductus* sp. n.**

(Fig. 8)

*Holotype.* ♂, Mindanao Isl., Zamboanga, 1927, C.F. Baker.

*Paratype.* ♂, Mindanao Isl., Dapitan, C.F. Baker.

*Description.* Length 2.2-2.6 mm. Testaceous; elytra bordered all round with pitchy black; underside pitchy brown; prosternum fulvous. Antennae fulvous, segments 6-11 pitchy black. Frons deeply rugose-punctate. Eyes touching above. Antennae long, extending to middle of elytra, segments 6-11 1.5 times as long as broad. Pronotum at base 1.2 times as long as broad, broadly rounded apically, with strong oblique grooves on sides; anterior half of disc smooth and lustrous, posterior portion distinctly sparsely punctured; posterior margin with a row of punctures. Scutellum small, dilated backwards and narrowly rounded at apex. Elytra 1.6 times as long as pronotum and barely longer than their breadth at humeri, punctate-striate, first punctures at base very deep, the rest fine; interstices smooth, at side convex.

*Comparison.* The species is close to *C. bipustulatus* sp. n., but the pronotum has lateral grooves and the coloration of elytra very peculiar.

***Coenobius weisei* sp. n.**

*Holotype.* ♂, Mindanao Isl., Zamboanga, 1927, C.F. Baker.

*Description.* Length 2 mm. Black; frons, clypeus, and collar of pronotum fulvous; labrum yellow; legs and antennae fulvous; apical segments of antennae slightly darkened; abdomen pitchy black, the last sternite fulvous apically. Body shortly oval, 1.6 times as long as broad. Eyes touching above. Frons and clypeus closely rugose-punctate. Segment 2 of antennae very short, globose, 3rd and 4th equal, slightly longer than 2nd segment. Pronotum without lateral grooves, evenly convex, roundly narrowed from base to apex; posterior margin with a row of close punctures; entire surface of pronotum finely punctured; interspaces flat and lustrous, a little broader than diameter of punctures. Scutellum in apical third narrowed. Elytra 1.9 times as long as pronotum, but not longer than their breadth at humeri, up to apex finely and distinctly punctate-striate; interstices smooth, feebly convex, at sides much more convex.

*Comparison.* The species is close to *C. ingenuus* Wse. from Palawan, but lacks the lateral grooves of pronotum and has short antennal segments.

***Coenobius niger* sp. n.**

*Holotype.* ♂, Mindanao Isl., Davao, C.F. Baker.

*Description.* Length 2.3 mm. Black, lacquer lustrous. Frons and clypeus pitchy brown; labrum yellow. Basal 5 segments of antennae and legs fulvous. Underside and pygidium black. Frons and clypeus closely rugose-punctate. Eyes touching above. Antennae long, segments 2 and 3 equal in length, 6-11 twice as long as broad. Pronotum trapezoidal, strongly convex, 1.5 times as broad as long; disc with a transverse sulcus near middle, with deep oblique grooves on sides; surface in anterior half finely and sparsely, in posterior half much coarser, but also sparsely punctured. Scutellum narrow, dilated backwards and rounded at apex. Elytra twice as long as pronotum, 1.4 times as long as broad, slightly narrowed posteriorly, strongly punctate-striate up to apex; first punctures at base very deep. Interstices convex, smooth, at side subcostate.

*Comparison.* The new species differs from *C. ingenuus* Wse. in having a deep sulcus and different punctuation on pronotum, and convex interstices of elytra.

***Coenobius curtipennis* sp. n.**

*Holotype.* ♂, Mindanao Isl., Zamboanga, 1927, C.F. Baker.

*Paratypes.* 2 ♂, 5 ♀, same data as holotype.

*Description.* Length 2.3-2.5 mm. Fulvous; pronotal and elytral base finely bordered with black; antennae fulvous, 6 apical segments pitchy black. Eyes touching above. Frons and clypeus deeply but not closely punctured. Antennae long, segment 3 twice longer than 2 and slightly longer than 4, segments 6-11 each twice as long as broad. Pronotum 1.25 times as broad as long, strongly constricted behind the middle; lateral grooves deep, oblique, dividing the pronotum into 2 convexities; disc distinctly punctured, punctation anteriorly fine, posteriorly much more deep and coarse, sides impunctate. Scutellum narrow, lanceolate. Elytra short, only 1.5 times longer than pronotum and not longer than broad; first punctures in striae at base very deep, then considerably finer but up to preapical swelling distinct; interstices on disc slightly raised, at side strongly convex, with a row of fine punctures.

*Comparison.* The species differs from *C. gilvus* Wse. from Palavan in the coarse and deep punctation of pronotum and a single row of punctures on the interstices of elytra.

### ***Coenobius puncticollis* sp. n.**

*Holotype.* ♀, **Isl. Basilan**, Baker.

*Paratypes.* 1 ♀, same data as holotype; **Isl. Mindanao**: 1 ♀, Davao, Los Banos, Baker.

*Description.* Length 1.8-2 mm. Brown, shining; labrum, first 5 segments of antennae and legs fulvous. Eyes touching above. Frons and clypeus closely rugose-punctate. Pronotum 1.7 times as broad as long, with puncture row before base; collar at anterior margin broad; entire surface distinctly punctured, interspaces between punctures on disc equal to diameter of punctures and at side posteriorly much greater; lateral grooves oblique, not deep. Scutellum lanceolate. Elytra twice as long as pronotum and 1.13 times as long as broad; rows of punctures distinct to apex; interstices on disc moderately and on sides much more convex.

*Comparison.* The new species differs from *C. minutus* L. Medv. in having pronotum distinctly punctured and with lateral grooves, and interstices of elytra convex.

### **Key to species of *Coenobius* from the Philippine Islands**

1(6). Body length in females 3-4 mm. Upperside entirely or partly metallic blue or violaceous; elytra sometimes with fulvous pattern.

2(5). Elytra unicolorous.

3(4). Pronotum without a row of punctures before base. Body black; basal segments of antennae and legs pitchy brown. Pronotum smooth; basal lobe before scutellum strongly prominent; lateral grooves deep. Length 3 mm. Luzon Isl. . . . .

. . . . . ***C. coerulescens*** Wse.

4(3). Pronotum with a row of punctures before base. Upperside bicolorous: pronotum fulvous or black, elytra blue. Punctuation of pronotum deep; basal lobe before scutellum slightly prominent; lateral grooves strong. Length 3.4-4 mm. Islands Mindanao and Luzon . . . . .

. . . . . ***C. metallescens*** L. Medv.

5(2). Pronotum and elytra fulvous, the latter with bluish black anterior and posterior transverse bands connected along lateral margins. Pronotum in apical half very finely punctured. Interstices on the disc of elytra almost flat. Length 3 mm. Islands Palavan and Negros . . . . .

. . . . . ***C. bakeri*** Wse.

6(1). Body length in females not more than 2.5-2.6 mm. Upperside without metallic lustre.

7(8). Punctuation of pronotum very dense and deep; interspaces narrower than diameter of punctures. Elytra with narrow, costate interstices, alutaceous. Pitchy black, labrum and 5 basal segments of antennae fulvous. Length 2.1 mm. Isl. Luzon . . . . .

. . . . . ***C. costatus*** L. Medv.

8(7). Not with above combination of characters.

9(12). Pronotum and elytra of different colour, the latter unicolorous.

10(11). Pronotum reddish yellow; elytra black. Underside black; legs and basal 5 segments of antennae reddish yellow. Apical 6 segments of antennae more than twice as long as broad. Lateral grooves of pronotum strong, oblique; disc smooth. Interstices of puncture rows on disc of elytron flat. Length 2.3 mm. Isl. Luzon . . . . .

. . . . . ***C. bicolor*** Wse.

11(10). Head, pronotum and scutellum pitchy black; elytra fulvous. Underside pitchy black; legs yellow. Frons and clypeus strongly and closely punctured. Pronotum without lateral grooves, sparsely punctured. Elytra with fine and sparse punctures arranged in rows; interstices flat, on the sides convex. Length 2.5 mm. Isl. Mindanao . . . . .

. . . . . ***C. melanoxanthus*** sp. n.

12(9). Upperside unicolorous or with spots of different colour, but not such a combination as in 9.

13(38). Upperside unicolorous.

14(23). Upperside yellow, fulvous or brown.

15(18). Upperside brown.

16(17). Eyes divided by a rather broad interspace, which is almost as broad as the length of the first antennal segment. Pronotum impunctate, without lateral grooves. Body shortly oval, sides of pronotum strongly rounded. Elytral interstices flat, impunctate. Length 1.6-1.7 mm. Samar and Panaon Islands . . . . .

. . . . . ***C. minutus*** L. Medv.

17(16). Eyes touching above. Pronotum entirely or partly punctured, with oblique groove on pronotal sides. Interstices on disc of elytra distinctly or strongly convex. Length 1.8-2 mm. Isl. Mindanao . . . . .

. . . . . ***C. puncticollis*** sp. n.

18(15). Upperside yellow or fulvous.

- 19(20). Pronotum without a row of distinct punctures before basal margin, nearly smooth, behind the middle, especially on the sides with deep transverse furrow dividing it in two halves. Bright yellow, lustrous, pronotum and femora fulvous. Antennae yellow, segments 7-9 apically, 10-11 in half of their length darkened. Punctures in rows of elytra fine, external 2 rows more excavated. Length 2.5 mm. Isl. Luzon . . . *C. monticola* Wse.
- 20(19). Pronotum with distinct row of punctures before base and deeply grooved laterally. Last 6 segments of antennae darkened.
- 21(22). Pronotum smooth, behind the middle very finely and sparsely punctured. Middle rows of punctures on disc of elytron posteriorly feeble, interstices smooth, internal ones feebly and external distinctly convex. Upperside yellow. Length 2 mm. Isl. Palawan . . . *C. gilvus* Wse.
- 22(21). Pronotum deeply and closely punctured on the disc. Middle rows of punctures on disc of elytron posteriorly distinct, interstices with a row of fine punctures. Length 2.5 mm. Isl. Mindanao . . . *C. curtispennis* sp. n.
- 23(14). Upperside black.
- 24(25). Antennae very short, reaching posterior angle of pronotum. The latter rather closely punctured; lateral groove oblique, not deep. Interstices of elytra broad, hardly convex, smooth. Length 1.8 mm. Isl. Luzon . . . *C. brevicornis* Wse.
- 25(24). Antennae long, reaching distinctly beyond posterior angle of pronotum.
- 26(27). Abdomen and legs yellow. Elytra scarcely tinged with blue. Pronotum at sides with deep oblique grooves, posterior half, with exception of middle line and sides, heterogeneously remotely punctured. Puncture rows on elytron posteriorly very fine, interstices broad, flat, the inner with a single row of punctures, the external irregularly punctured. Length 2.6 mm. Isl. Luzon . . . *C. flaviventris* Wse.
- 27(26). Abdomen black.
- 28(29). Legs black; fore legs, the ends of middle and hind legs and tarsi yellow brown. Length 2 mm. Isl. Luzon . . . *C. manilensis* Wse.
- 29(28). Legs entirely yellow.
- 30(31). Head light yellow. Posterior part of pronotum in middle finely and sparsely punctured; lateral groove deep. Lateral interstices of elytra convex, the other flat, each with a single row of very fine punctures. Length 2.5 mm. Isl. Luzon . . . *C. fulvifrons* Wse.
- 31(30). Head dark, labrum yellow, clypeus reddish brown.
- 32(33). Pronotum glabrous, before basal margin in middle with single obsolete punctures, at each side with rather short, moderately deep, oblique groove. Puncture rows of elytra very fine; interstices smooth, flat, the 3 external convex. Length 1.8 mm. Isl. Luzon . . . *C. pusillus* Wse.
- 33(32). Pronotum distinctly, finely and sparsely punctured.
- 34(37). Pronotum with transverse sulcus.
- 35(36). Transverse sulcus of pronotum at sides deep, dividing it into two convexities. Interstices of elytra convex, smooth. Upperside lacquer shining black; underside entirely black. Frons and clypeus pitchy brown; labrum yellow. Antennal segments 6-11 twice as long as broad. Length 2.3 mm. Isl. Mindanao . . . *C. niger* sp. n.
- 36(35). Transverse sulcus of pronotum very fine, at sides slightly deepened and deflexed in front. Interstices of elytra hardly convex. Upperside black, shining. Labrum and legs yellow. Length 2 mm. Isl. Palawan . . . *C. ingenuus* Wse.
- 37(34). Pronotum without transverse sulcus on disc and at sides, entirely covered with close fine punctures; interspaces flat. Interstices of elytra smooth, slightly convex. Black, clypeus and legs fulvous. Length 2 mm. Isl. Mindanao . . . *C. weisei* sp. n.
- 38(13). Upperside bicoloured, at least elytra with spots or more or less broadly margined with pitchy black.
- 39(40). Rusty brown with indistinct yellow pattern of spots and bands on upperside. Breast and abdomen brown; last sternite of abdomen, pygidium and legs fulvous. Length 2 mm. Isl. Mindanao . . . *C. maculipennis* sp. n.
- 40(39). Elytra bicoloured; pronotum fulvous, reddish fulvous or pitchy black.
- 41(42). Pronotum at sides deeply grooved. Elytra fulvous, circularly bordered with pitchy black. Underside pitchy brown, abdomen sometimes much paler, prosternum fulvous. Length 2.2-2.6 mm. Isl. Mindanao . . . *C. circumductus* sp. n.
- 42(41). Pronotum without lateral grooves, reddish fulvous or pitchy black. Elytra reddish fulvous with laterobasal borders broadly pitchy black, sometimes pitchy black with reddish fulvous spot on the disc of each elytron. Length 2.5 mm. Isl. Mindanao . . . *C. bipustulatus* sp. n.

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