

New Buprestid Beetles from the Philippines¹⁾

By

Yoshihiko KUROSAWA

Department of Zoology, National Science Museum, Tokyo

In the present paper, the author is going to describe four new forms of buprestid beetles belonging to the genera *Chrysochroa* and *Iridotaenia*, all of which were recently discovered in the Philippine Islands. The type materials used for preparing this paper are deposited in the collection of the National Science Museum (Nat. Hist.), Tokyo.

Chrysochroa agusanensis sp. nov.

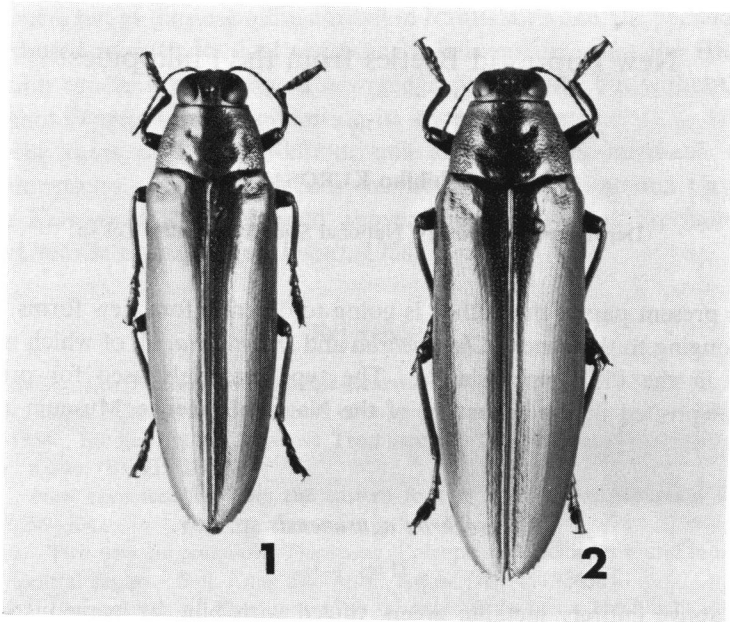
(Figs. 1-3)

Body above entirely metallic green, tinged with blue or cyaneous according to the difference of view, with the exception of the elytral apices narrowly and faintly tinged with golden red; body beneath metallic green, more strongly shining than above, with the exception of the apical two sternites which are golden or golden-red; legs metallic green, with the upper surface somewhat tinged with golden or aeneous; antennae black, with the exception of the first segment concolorous with the body above.

Head deeply sulcate between eyes, with the median groove narrow and deep from vertex to just above clypeus; surface irregularly and coarsely covered with irregular-sized punctures, and the punctuation denser and confluent anteriorly along clypeal suture and finer and sparser on vertex; clypeal suture transversely carinate; clypeus thin and depressed, with the anterior margin triangularly and deeply emarginate; antennal cavities large, each situated posteriorly in a large subtriangular depression; antennae long and lax, serrate from the fourth segment, extending to near basal angle of pronotum, the first segment the longest, arcuately subfusiform, the second subglobular, the shortest, the third slightly shorter than the first though longer than any of the following segments, the fourth elongate subtriangular, about $3/4$ as long as the third, but distinctly longer than the fifth, the following segments from fifth to eleventh dilated exteriorly, but always longer than wide.

Pronotum transverse, subtrapezoidal, about 1.5 times as wide as long, and widest at the base; sides oblique and arcuately, sometimes rather straightly, attenuate from base to front; anterior angles acute and slightly pointed in dorsal aspect, but they

1) This study is supported by the Grant-in-aid for Scientific Research (Overseas) No. 304319 from the Ministry of Education, Japan.



Figs. 1-2. *Chrysochroa agusanensis* Y. KUROSAWA, nov. — 1. Male (holotype). — 2. Female (allotype).

are abased and ill-defined in lateral aspect; anterior margin slightly bisinuate, but the median lobe is very obsolete, sometimes almost absent; posterior angles somewhat arcuate or subrectangular; base bisinuate, with the median lobe broad and arcuately produced; marginal carinae slightly abased anteriorly or slightly sinuate basally, and sharply defined in basal 3/5, but become obsolete and vanished in anterior 2/5; disc uneven, often adorned with two or four round foveae; surface irregularly punctate, but the punctures are irregular and round, and the punctuation becomes sparser and finer on the disc, denser, coarser and confluent towards the sides.

Elytra moderately convex, subcylindrical, about 2.5 times as long as wide, about 4.7 times as long as pronotum, and widest at humeri or the part just behind the middle; sides obliquely truncate to humeri, which are angulate but not so strongly expanded, subparallel from the part just behind humeri to near the middle, then gradually and arcuately attenuate to apices, which are dentato-serrate and sharply dentate at the tips; disc with four faint and obsolete costae, which are almost effaced in the basal parts and faintly elevated in apical third; surface irregularly punctured, the punctures being relatively small, rounded and arranged to form striae and becoming denser and coarser towards the sides.

Body beneath punctate hardly at the middle, densely at the sides and closed with semirecumbent silver-greyish hairs at the sides, but the hairs become inconspicuous in certain aspects. Prosternum somewhat rugose around prosternal process, which is

defined from the other parts, almost impunctate, smooth, subparallel or slightly constricted between anterior coxae, sharply produced and pointed laterally just behind them and triangularly produced into mesosternum at the apex. Metasternum narrowly flattened at the middle, with the median line very slightly impressed. Abdomen beneath punctate by fine round punctures, but the punctuation becomes denser in the large obsolete depression on each side at the latero-anterior part; first sternite evenly but slightly convex between posterior coxae; apex of the last sternite broadly and triangularly emarginate (male) or rounded with the extreme tip narrowly subtruncate (female), but sometimes the apical truncated margin in female is obsolete denticulate.

Legs normal.

Length: 34.3–45.0 mm; width: 9.3–13.2 mm.



Fig. 3. *Chrysochroa agusanensis*
Y. KUROSAWA, nov., male
genital apparatus.

Holotype: ♂, Agusan, Northern Mindanao, Philippines, v. 1977.

Allotype: ♀, Agusan, Northern Mindanao, Philippines, v. 1977.

Paratypes: 25 ♂♂, 24 ♀♀, Agusan, N. Mindanao, Philippines, v. 1977; 1 ♀, Agusan, N. Mindanao, 14. v. 1958, OCHOTORENA lgt.

Range. Philippines (Mindanao).

The present new species stands closely near *C. praelonga* WHITE, 1843, known from Luzon of the Philippines. However, it differs from the latter in the following points: 1) entirely bright metallic green without golden or reddish shimmer; 2) pronotum entirely concolorous, without bluish median line; 3) legs concolorous with the body above, never tinged with red or golden-red; 4) sides of pronotum oblique and arcuate, not sinuously attenuate anteriorly; 5) elytra subparallel, not attenuate from the part just behind humeri to apices.

It may be related also to *C. kaupii* H. DEYROLLE, 1864, known from the South Moluccas in its structure and coloration, but differs from it in the following points:

1) pronotum concolorous, without bluish median line; 2) body above bright metallic green, instead of dull metallic green in *kaupii*; 3) apical red of elytra fainter or almost absent, while, in *kaupii*, it is broader, stronger and more distinct as in *C. fulminans* FABRICIUS; 4) pronotum broader, with the sides arcuate or rarely oblique, but they are never sinuate anteriorly.

Iridotaenia cupreopurpurea sp. nov.

(Fig. 4)

Body moderate, attenuate anteriorly and posteriorly; body above entirely dull purple, with a slight bronzy shimmer at the base of elytra according to the difference of view, but there is a narrow obscure golden-bronzy line, individually variable, in the lateral impression on each side of pronotum; body beneath brighter than above, entirely golden-bronzy or greenish golden-bronzy; legs dark metallic green or greenish bronzy above, and concolorous with the body beneath on the under surface; antennae dark bronzy-green, gradually becoming black towards the apex.

Head moderate, excavated between eyes, with a deep, narrow median groove, which runs from vertex to anterior third of frons, though not extending into vertex and the anterior third of frons; surface punctate irregularly, sparsely and finely on vertex, densely and rather coarsely on frons; clypeal suture very obsolete, almost absent; clypeus thin, slightly broader at base than twice the length, with the anterior margin arcuately emarginate; antennal cavities moderate, situated at the centre of large triangular depression, the posterior margin of which is elevated and subcarinate; antennae compact, short, not reaching the middle of pronotum, serrate from the fourth segment, the first segment stout, subfusiform, the longest, the second sub-

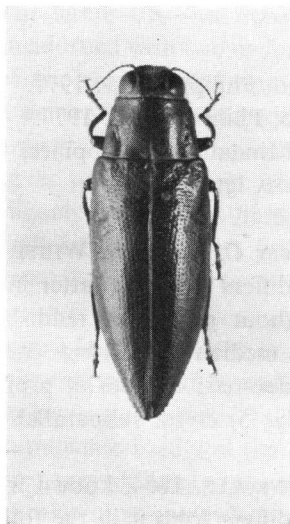


Fig. 4. *Iridotaenia cupreopurpurea*
Y. KUROSAWA, nov., female
(paratype).

globular, the shortest, the third about 1.5 times as long as the second, the fourth about as long as the third and slightly longer than the fifth, which is about as long as the sixth.

Pronotum transverse, subtrapezoidal, about 1.6 times as wide as long, and widest at the base; sides obliquely attenuate from base to front; anterior angles acute and produced anteriorly in dorsal aspect, abased but ill-defined in lateral aspect; anterior margin bisinuate, with the median lobe broad and slightly lobed; posterior angles subrectangular, not produced; base slightly or feebly bisinuate, with the median lobe obsolete and somewhat angulate at the scutellar part; marginal carinae rather straight posteriorly, slightly arcuate anteriorly and extending from base to near the anterior third, but suddenly vanished there; disc uneven, with an arcuate longitudinal impression on each side at the interior side of posterior angle, the impression extending from base to the middle and somewhat open anteriorly; median line slightly impressed and somewhat foveolate just before scutellum; surface sparsely and irregularly scattering fine round punctures, but the punctuation becomes denser and coarser towards the sides and in the impressions. Scutellum subtrapezoidal, longer than wide, and slightly but longitudinally impressed at the middle.

Elytra moderately convex, slightly broader at the base than the base of pronotum, about 2.1 times as long as wide, about 4 times as long as pronotum, and widest at humeri or the part just behind humeri; sides slightly expanded and rounded at humeri, slightly sinuate just behind them, subparallel to the middle, where they are arcuate, then obliquely attenuate to apices, which are conjointly rounded and denticulate, though each of them is acute and dentate at the tip; lateral margins narrowly reflexed from humeri to near apex and dentato-serrate in the apical fifth; disc evenly convex; surface punctate, but the punctures are arranged regularly to form punctostriae on the sutural part, irregularly at the sides and apices, and somewhat rugose at the base.

Body beneath punctate sparsely at the middle, densely at the sides and clothed laterally with very inconspicuous, short, recumbent, silver-greyish hairs. Prosternum transversely impressed between the anterior margin and the process, with the anterior margin bisinuate, that is, broadly and arcuately emarginate between two broad obsolete lobes; prosternal process deplanate, smooth and almost impunctate, with the sides arcuately constricted by anterior coxal cavities, dilated and acutely produced laterally just behind them, and narrowly lobed and produced at the apex. Metasternum almost impunctate at the middle, with the median line not impressed. Abdomen beneath finely but densely punctate, with the first sternite flattened, impunctate and inclined anteriorly between posterior coxae; last sternite attenuate posteriorly and narrowly truncate at the apex (female).

Legs normal.

Male unknown.

Length: 23.3–24.0 mm; width: 7.8–8.0 mm.

Holotype: ♀, Inagauan, Central Palawan, Philippines, vii. 1978.

Paratype: 1 ♀, Palawan, iv. 1978.

Range. Palawan.

The present species somewhat resembles *I. violacea* KERREMANS, 1896, from Borneo, Sumatra and the Malay Peninsula. It is, however, distinguished from the latter by its robuster body, weaker elytral punctures and less prominent shoulders. In these points, the present species may stand closer to the following Philippine species than to *violacea* and its relatives from Borneo.

***Iridotaenia cupreomarginata* E. SAUNDERS, 1874**

Iridotaenia cupreomarginata E. SAUNDERS, 1874, Trans. ent. Soc. London, 1874, p. 304.

The coloration of the body above in the original description of this species is "head bronzy black, thorax bronzy on the disk, coppery on the sides, elytra bronzy-green, the shoulders of each coppery, the coppery colour extending, but gradually narrowing, to about three-quarters of the length of the elytra." Fifteen males and twenty females examined from Surigao del Norte of Mindanao are almost identical in the colour pattern with the original description cited above, though some individual variations are observed.

Length: 19.5–30.2 mm; width: 6.2–10.3 mm.

Specimens examined. 15 ♂♂, 20 ♀♀, Surigao del Norte, Mindanao, Philippines, v. 1977, Y. NISHIYAMA lgt.; 1 ♀, Surigao del Sur, Mindanao, Philippines, viii. 1977; 5 ♀♀, Bislig, Surigao del Sur, Mindanao, Philippines, 3–7. vii. 1977, Y. KUROSAWA lgt.

Range. Philippines (Mindanao).

Though five females mentioned above from Bislig, Surigao del Sur, northeastern Mindanao, have darker body above, they may belong to the nominotypical race.

***Iridotaenia cupreomarginata fuscicolor* subsp. nov.**

Six males and ten females from Bansalan and Agusan, both at the northern part of central Mindanao and three females from southern Leyte, are differently coloured. They have dark body above without greenish tinge, and the bronzy tinge is very faint and sometimes entirely absent.

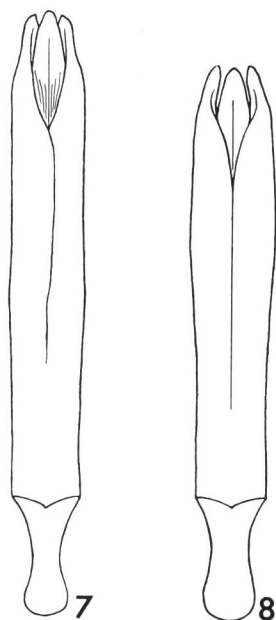
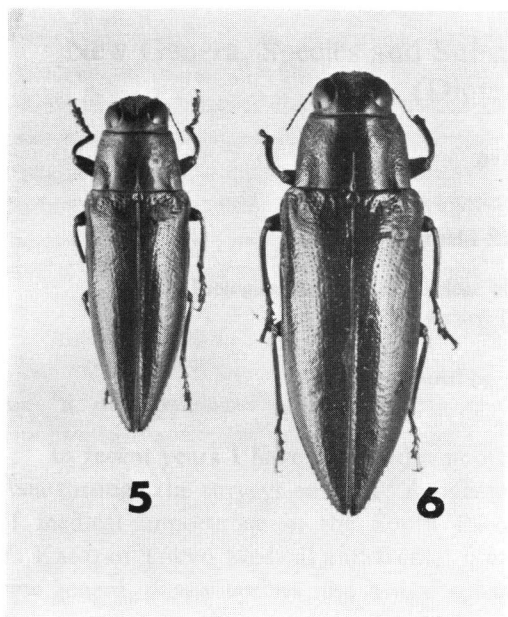
Length: 17.5–29.0 mm; width: 5.2–9.5 mm.

Holotype: ♂, Agusan, Mindanao, Philippines, iv. 1977.

Allotype: ♀, Agusan, Mindanao, Philippines, iv. 1977.

Paratypes: 3 ♂♂, 1 ♀, Bansalan, Mindanao, 1976; 2 ♂♂, 8 ♀♀, Agusan, Mindanao, iv. 1977; 1 ♀, St. Bernard, Southern Leyte, 5. vi. 1976, M. MEDICIELO lgt.; 1 ♀, Tungunan, Ormoc, Southern Leyte, 21. xi. 1966, M. MEDICIELO lgt.; 1 ♀, Southern Leyte, ii. 1977.

Range. Philippines (Leyte, Mindanao).



Figs. 5-6. *Iridotaenia cupreomarginata marinduquensis* Y. KUROSAWA, nov. — 5. Male (holotype). — 6. Female (allotype).

Figs. 7-8. Male genital apparatus of *Iridotaenia cupreomarginata*. — 7. *I. c. cupreomarginata* E. SAUNDERS, 1874. — 8. *I. c. marinduquensis* Y. KUROSAWA, nov.

Iridotaenia cupreomarginata marinduquensis subsp. nov.

(Figs. 5-8)

Closely allied to the nominotypical race from northern Mindanao, but differs from it in the coloration of the body above darker, purpurascens, viz., head blackish, partly with cyaneous or violaceous shimmer, pronotum black at the middle, cupreo-aeneous at the sides, with the bordering parts between discal black and lateral bronzy tinged with greenish bronzy, elytra entirely aeneo-purpureous or cupreo-purpureous with the basal half tinged with greenish bronzy, but not tinged with green, without golden or golden-bronzy marginal band running from humeri to near the apical fourth.

Length: 22.4-29.8 mm; width: 6.9-9.5 mm.

Holotype: ♂, Marinduque Island, Philippines, x. 1976.

Allotype: ♀, Marinduque Island, Philippines, 1974.

Paratypes: 2 ♀♀, Marinduque Island, Philippines, 1974 & 1976.

Range. Philippines (Marinduque).

