

Two New *Apotomopterus* (Coleoptera, Carabidae) from Southwestern Hubei, China

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Abstract Two new subspecies of the subgenus *Apotomopterus* (genus *Carabus* s. lat.) are described from southwestern Hubei, China, under the names *Carabus (Apotomopterus) arrowi kurosawaianus* subsp. nov. and *C. (A.) cyanopterus kanekoi* subsp. nov.

The carabid fauna of the southwestern part of Hubei Province in Central China has been known only fragmentarily. Through the courtesy of Mr. Jun-Ichiro KANEKO (Gunma), we recently had an opportunity to examine a short series of carabid beetles collected from Xianfeng Xian near the southwestern end of the same province. The series contained two species belonging to the subgenus *Apotomopterus* of the genus *Carabus* (s. lat.). They have been identified as *C. (A.) arrowi* HAUSER and *C. (A.) cyanopterus* HAUSER, though readily discriminated from all the hitherto known races of each species. We are going to describe them as new subspecies in the following lines. A new race of *arrowi* is dedicated to the late Dr. Yoshihiko KUROSAWA, who has been well-known as an eminent specialist of the Buprestidae, and also an enthusiast for all sorts of large and beautiful insects including *Carabus*.

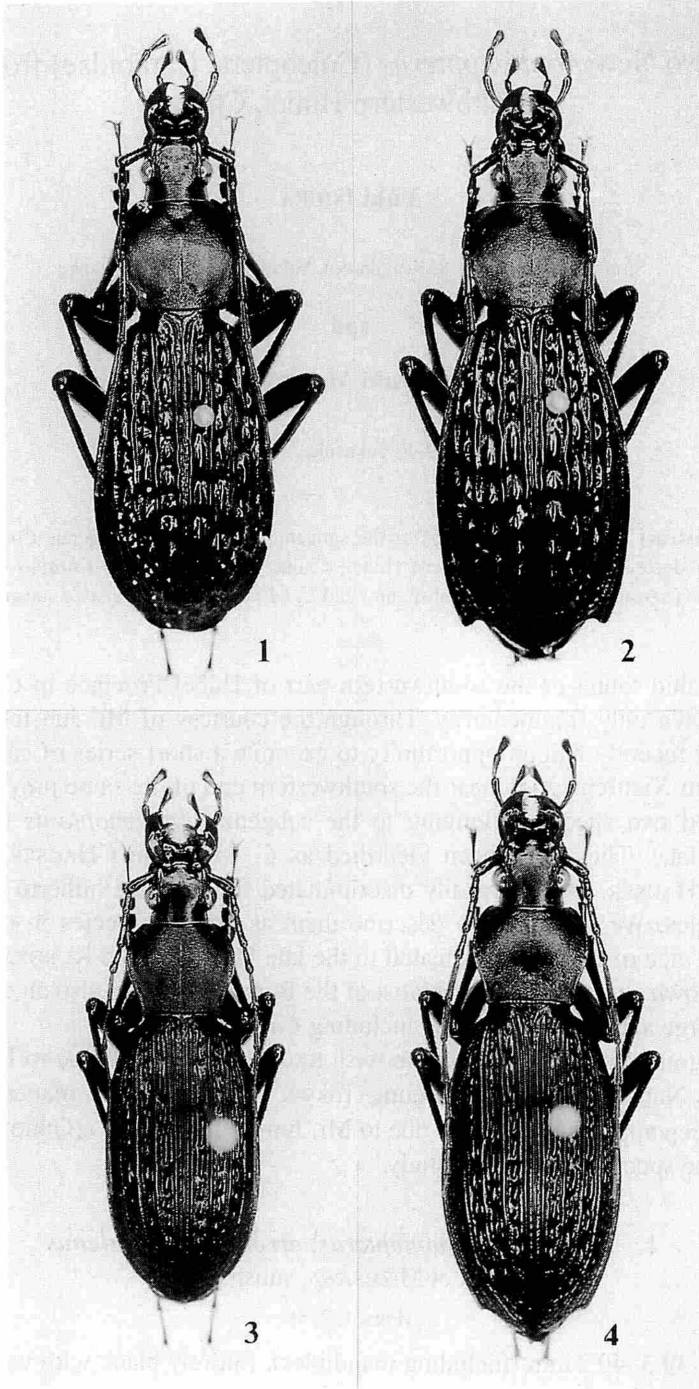
Before going into descriptions, we wish to express our gratitude to Dr. Shun-Ichi UENO of the National Science Museum, Tokyo, for revising the manuscript of this paper. Our deep appreciation is also due to Mr. Jun-Ichiro KANEKO (Gunma) for kindly submitting the specimens to us for study.

1. *Carabus (Apotomopterus) arrowi kurosawaianus*

IMURA et MIZUSAWA, subsp. nov.

(Figs. 1, 2, 5)

Length: 39.3–40.2 mm (including mandibles). Entirely black with weak dark purplish tinge along the elytral margins.



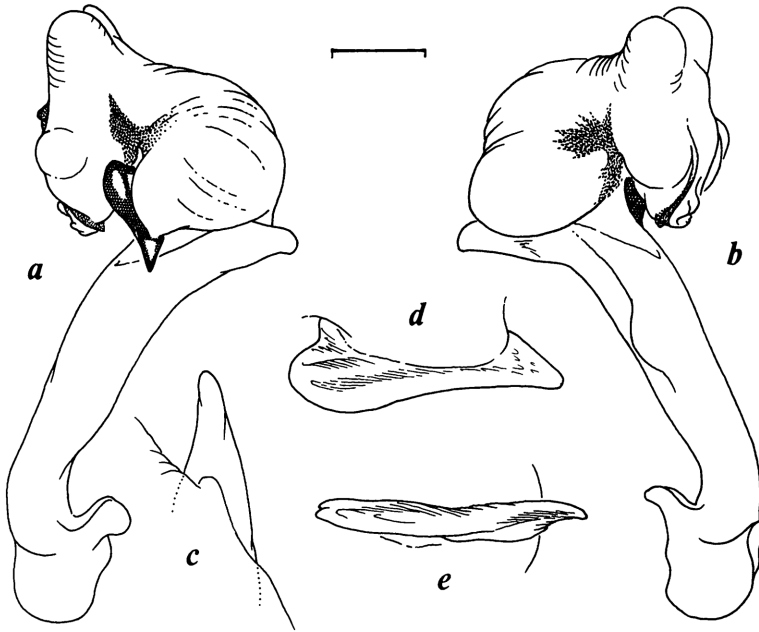


Fig. 5. Male genital organ of *Carabus (Apotomopterus) arrowi kurosawaianus* subsp. nov. — a, Aedeagus with fully everted endophallus in left lateral view; b, ditto in right lateral view; c, apical part of aedeagus in dorsal view; d, spinula in dorsal view; e, ditto in basal lateral view. Scale: 2 mm for a & b; 1 mm for c–e.

This new subspecies is most closely allied to subsp. *hector* HAUSER described from “Liang-tow-tang” (=Liangshizhen [两市镇] in Shaodong Xian [邵东县]) of Central Hunan, but is distinguishable from HAUSER’s race by differently colored dorsal surface, more transverse pronotum with scarcely protrudent hind angles, shorter and robuster elytra, longer and a little more strongly convex primary callosities, and a little more deeply emarginate preapical part of female elytra. From subsp. *arrogantior* DEUVE of northeastern Guangxi, the new race is discriminated by much differently colored dorsal surface, shorter antennae, larger primary callosities of elytra, less remarkably meandering secondary carinae of elytra, a little robuster aedeagus, etc. Male genital organ as shown in Fig. 5.

Type series. Holotype: ♂, Laoyan [老岩], in Xianfeng Xian [咸丰县] of southwestern Hubei, China, 8~22-VI-2000, in coll. Department of Zoology, National Science Museum (Nat. Hist.), Tokyo. Allotype: ♀, same data as for the holotype, in coll. K. MIZUSAWA.

Figs. 1–4. *Carabus (Apotomopterus)* spp. from southwestern Hubei, China. — 1–2, *Carabus (Apotomopterus) arrowi kurosawaianus* subsp. nov. (♂, holotype, ♀, allotype); 3–4, *C. (A.) cyanopterus kanekoi* subsp. nov. (♂, holotype, ♀, allotype).

2. *Carabus (Apotomopterus) cyanopterus kanekoi*

IMURA et MIZUSAWA, subsp. nov.

(Figs. 3, 4, 6)

Length: 26.0–29.0 mm (including mandibles). Entirely black though dimly tinged with brown purplish lustre along elytral margins.

Rather small-sized race for the species, with heterodyname elytral sculpture. Distinguishable at a glance from such subspecies with homodyname elytral sculpture as nominotypical *cyanopterus* HAUSER, *dabamontanus* IMURA and *melandetos* IMURA et MIZUSAWA. From subsp. *shanliangensis* IMURA et SU, which bears heterodyname elytral sculpture, the new form is discriminated by a little smoother pronotal surface, longer and less strongly convex elytra with weaker preapical emargination in female, and larger primary foveoles which invade the adjacent tertiary intervals more prominently. Male genitalia as shown in Fig. 6, with the apical lobe narrower and less strongly bent ventrad than in the nominotypical subspecies

Type series. Holotype: ♂, Laoyan [老岩], in Xianfeng Xian [咸丰县] of southwestern Hubei, China, 8~22-VI-2000, in coll. Department of Zoology, National Science Museum (Nat. Hist.), Tokyo. Allotype: ♀, same data as for the holotype, in coll. K. MIZUSAWA.

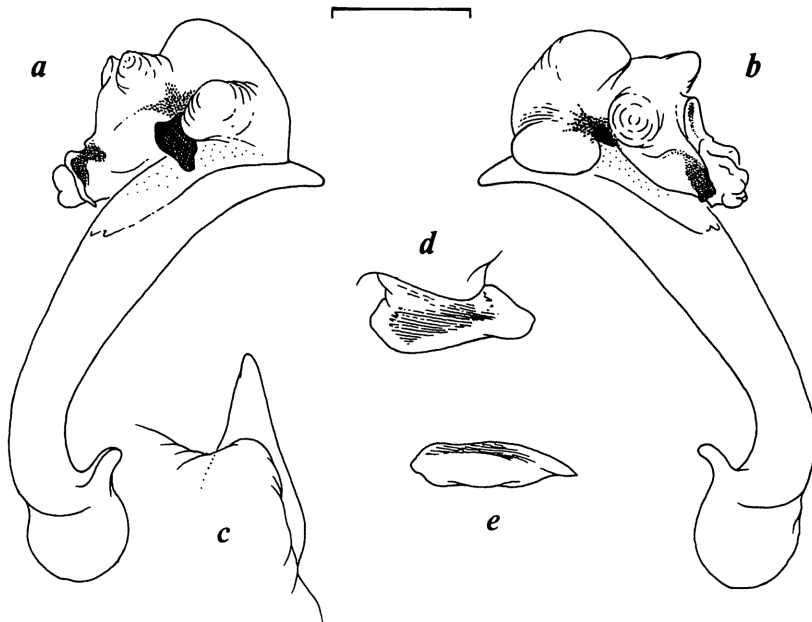


Fig. 6. Male genital organ of *Carabus (Apotomopterus) cyanopterus kanekoi* subsp. nov. — a, Aedeagus with fully everted endophallus in left lateral view; b, ditto in right lateral view; c, apical part of aedeagus in dorsal view; d, spinula in dorsal view; e, ditto in basal lateral view. Scale: 2 mm for a & b; 1 mm for c–e.

Derivatio nominis. This new subspecies is named after Mr. Jun-Ichiro KANEKO (Gunma).

要 約

井村有希・水沢清行：中国湖北省南西部におけるトゲオサムシの2新亜種。—— 中国湖北省南西部から得られたアロウトゲオサムシとアオバネトゲオサムシを新亜種と認め、それぞれに subsp. *kurosawaianus* nov. および subsp. *kanekoi* nov. という名を与えて記載した。いうまでもなく前者は、ご専門のタマムシのみならずオサムシを含む大型美麗昆虫をこよなく愛された、故・黒澤良彦博士に捧げたものである。

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