

A New Genus and Species of Carabid Beetle Allied to
Damaster (Coleoptera, Carabidae) from
Yunnan, Southwest China

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Abstract A new genus of the subtribe Carabina belonging to the group Multistriati is established under the name of *Protodamaster*, with the new type species, *Protodamaster aesculapius*, from Yunnan, Southwest China.

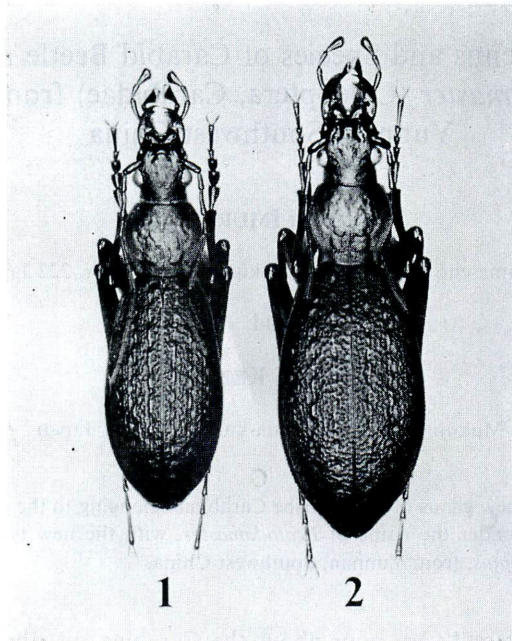
Our knowledge is still very poor about the Carabina distributed in China, with the exception of a few famous groups such as *Coptolabrus*. Recently, we had an opportunity to examine very unique carabid beetle collected at Tali, Yunnan, Southwest China. Judging from the genitalic features, it belongs to the group Multistriati, and is closely allied to the genus *Damaster* KOLLAR (sensu ISHIKAWA, 1986). In this paper, it will be described as a new genus and new species. It bears not a few primitive characters regarded as plesiomorphic conditions of the Carabina, and is considered to be an ancestral form of *Damaster*.

Before going further, we wish to express our deep gratitude to Dr. Shun-Ichi UÉNO of the National Science Museum (Nat. Hist.), Tokyo, for reviewing the original manuscript. Thanks are also due to Mr. Yoshiaki FURUMI for his kind help.

Genus *Protodamaster* IMURA et KEZUKA, nov.

Type species: *Protodamaster aesculapius* IMURA et KEZUKA, gen. et sp. nov.

The present new genus belongs to the group Multistriati and is closely allied to the genus *Damaster* KOLLAR (sensu ISHIKAWA, 1986), but is discriminated from the latter by the following characters: 1) apical segments of galeae moderately concave above, but not so conspicuously as in *Damaster*, with the dorsal margins not emarginate in apical halves nor sharply edged; 2) penultimate segments of labial palpi multisetose, with 5–7 setae on each segment; 3) apical margin of labrum only feebly emarginate in ♂, though moderately so in ♀; 4) pronotum uneven and scabrous on the surface, and scattered with rather dense granules except for the centre; 5) preapical emargination of elytra faintly recognised in both sexes; 6) striae between elytral in-



Figs. 1-2. *Protodamaster aesculapius* IMURA et KEZUKA, gen. et sp. nov., from Yunnan, Southwest China; 1, ♂ (holotype); 2, ♀ (allotype).

tervals composed of deep, irregularly shaped foveoles which are contiguous with one another to form unusually rough elytral surface, and intervals irregularly scattered with rather dense granules as a whole; 7) prepisterna impunctate, sparsely scattered with microgranules.

Protodamaster aesculapius IMURA et KEZUKA, sp. nov.

(Figs. 1-7)

Length (from apical margin of labrum to apices of elytra): 27.1-30.8 mm.
Width: 8.7-10.7 mm.

Black, mat; pronotum with weak blue-purplish lustre; bottoms of elytral foveoles and elytral margins partly with faint green-purplish lustre.

Head excepting mandibles ca. 1.1 times as long as wide; apical margin of labrum feebly emarginate in ♂, moderately so in ♀; frontal impressions shallowly recognised in ♂, rather deeply concave in ♀; frons feebly convex above, with surface foveolate and irregularly wrinkled; dorsal surface of head behind eyes irregularly and densely scattered with punctures and microgranules; retinaculum of right mandible well developed, its posterior tooth being larger than the anterior; apical segments of galeae moderately concave above, though not so conspicuously as in *Damaster*, with dorsal margins not emarginate in apical halves nor sharply edged; apical hooks of laciniae

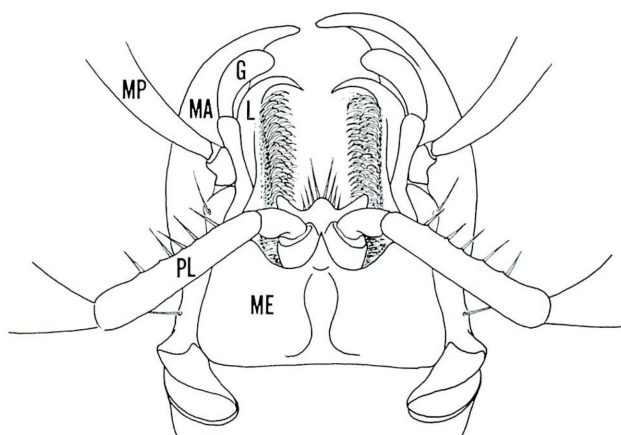
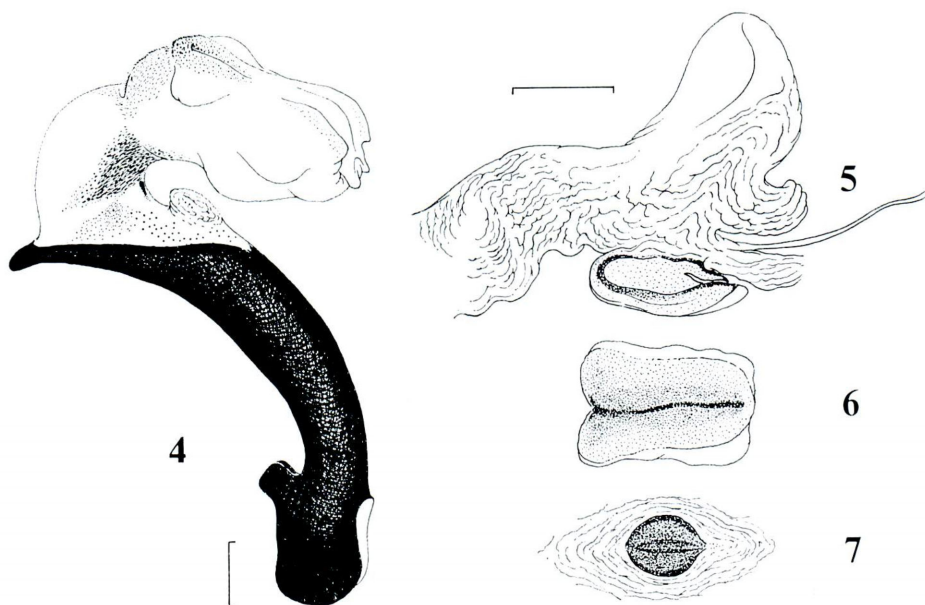


Fig. 3. Apical part of head (♂, ventral view) of *Protodamaster aesculapius* IMURA et KEZUKA, gen. et sp. nov., from Yunnan, Southwest China; MA, mandible; G, apical segment of galea; L, lacinia; MP, maxillary palpus; PL, penultimate segment of labial palpus; ME, mentum.

strongly bent inwards, obviously extending beyond galeal apices, more conspicuously in ♂; apical segments of palpi triangularly dilated, more widely in ♂; penultimate segments of labial palpi multisetose, with 5–7 setae on each segment; median tooth of mentum sharply pointed, rather distinctly extending antieriad; antennae barely reaching middle of elytra in ♂ and slightly extending to basal third in ♀, without hairless ventral depressions.

Pronotum subcordate, ca. 0.9 times as long as wide, widest a little before the middle; apical margin roundly emarginate; front angles obtuse, becoming a little pointed in ♂, gently rounded in ♀; sides gently arcuate in front, rather weakly sinuate behind, then almost parallel or slightly dilated before hind angles; lateral margins clearly bordered, becoming narrower towards front angles, with a pair of marginal setae on the centre; hind angles rather sharply protrudent postero-laterad, with the apices obliquely bent ventrad; basal margin evenly bisinuate; disc slightly convex above, with irregular wrinkles and foveoles to form uneven and scabrous surface, which is scattered with rather dense granules except for the centre; median longitudinal line very narrow and shallowly impressed, partly becoming unclear; basal foveae deep.

Elytra elongate-oval, ca. 1.8 (♀)–2.0 (♂) times as long as wide, widest a little behind the middle, strongly convex above especially in ♀; preapical emargination faintly recognised in both sexes; primary intervals indicated by weakly raised narrow costae frequently interrupted by relatively large, deep foveoles, each usually with a small granular projection at its centre; secondary intervals barely recognised as irregular rows of small callosities; tertiary intervals much weaker than secondaries or hardly recognisable; each interval irregularly scattered with rather dense granules as a whole; striae between intervals composed of deep, irregularly shaped foveoles which are con-



Figs. 4–7. Genital organ of *Protodamaster aesculapius* IMURA et KEZUKA, gen. et sp. nov., from Yunnan, Southwest China; 4, male genitalia (right lateral view); 5, female genitalia (right lateral view); 6, outer plate of vaginal apophysis (ventral view); 7, inner plate of vaginal apophysis. Scale: 1 mm.

tiguous with one another to form unusually rough elytral surface; granules of umbilicate series sparsely set in a single row barely reaching elytral apices.

Prepisterna impunctate, sparsely scattered with microgranules; sides of sternites granulate and asperous; sternal sulci completely and strongly carved; metacoxa trisetose in a male paratype and at the right side of the holotype, but bisetose (without anterior seta) in a female paratype (allotype) and at the left side of the holotype; legs slender and very long; basal three segments of male foretarsi dilated, with hair pads on the ventral surface.

Male genitalia with unilobate ostium lobe and less developed aggonoporus, bearing a close resemblance to those of the genus *Damaster*, especially to those of *Damaster* (s. str.) or of *Acoptolabrus*. Female genitalia with inner plate of vaginal apophysis well developed, walnut-shaped, and strongly sclerotized; outer plate subquadrate, with anterior margin gently rounded, sides gradually dilated posteriad, posterior margin subtriangularly re-entrant at middle.

Holotype: ♂, near Tali, Yunnan Prov., Southwest China, 11~17-VI-1987.

Paratypes (including allotype): 1 ♂, 1 ♀, the same data as for the holotype.

The holotype is preserved in the collection of the National Science Museum (Nat. Hist.), Tokyo. The paratypes are preserved in the private collection of H. KEZUKA, the junior author.

要 約

井村有希・毛塚尚利：中国雲南省より発見されたマイマイカブリ属に近縁なオサムシの1新属新種。
——中国雲南省大理付近で発見されたオサムシの1種を新属新種として記載した。本種は多条オサムシ群に属し、マイマイカブリ属にきわめて近縁で、とくに雄交尾器の構造はマイマイカブリ亜属およびクビナガオサムシ亜属のものに近く、これらの祖先型に近い形態を有するものと思われる。

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