

A New Genus and Species of Melolonthine Beetle (Coleoptera, Melolonthidae) from Borneo

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Abstract A new melolonthid beetle, *Wadaia kaorui* gen. et sp. nov. is described from Borneo. It belongs to the tribe Melolonthini and is somewhat related to *Stephanopholis melolonthoides* (BRENSKE, 1892) from the Philippines.

Recently, I had an opportunity to examine an interesting melolonthine beetle from the northern and western areas of Borneo. After a careful study, I have come to the conclusion that it should belong to a new species of a new genus, though it is rather allied to *Stephanopholis melolonthoides* (BRENSKE, 1892). In this paper, I am going to describe it under the name of *Wadaia kaorui* T. ITOH, gen. et sp. nov.

Before going further, I would like to express my hearty gratitude to Prof. Masataka SATÔ for his critical advice on the manuscript of this paper, and also to Messrs. Kaoru WADA, Atsushi KATOH and Masamichi YAGI for their kindness in offering invaluable materials.

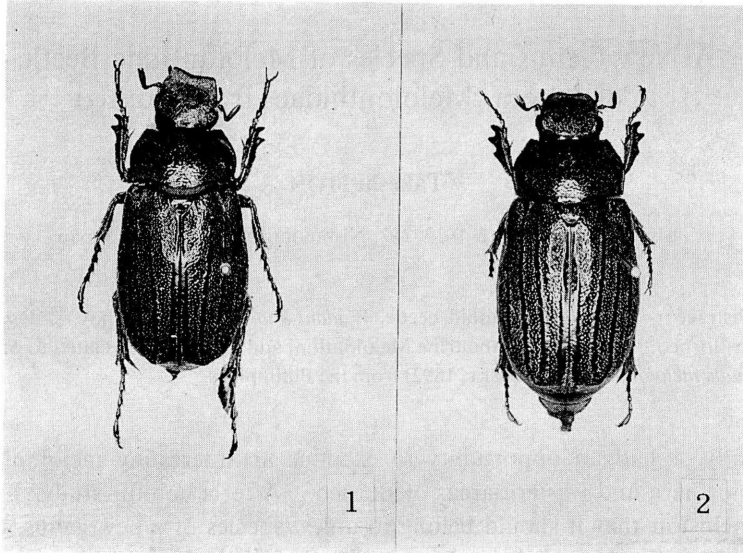
Wadaia T. ITOH, gen. nov.

Male. Body elongate oval and convex. Dorsal surface relatively densely and regularly covered with thin creamy brown scales. Clypeus strongly narrowed anteriorly and remarkably reflexed like a screen in apical half. Antenna 9-segmented, the club composed of 3 segments. Menum trapezoidal, bluntly produced at the centre of anterior margin. Each elytron bearing a developed marginal membrane from lateral margin to sutural edge.

Ventral surface hairy except for abdomen. Mesosternum without a produced process. Abdomen also relatively densely and regularly covered with thin creamy brown scales except for the medio-basal area of 2nd sternite and just along sutures; lateral side generally devoid of creamy brown maculations composed of scales but rarely with obscure ones.

Legs relatively slender. Protibia tridentate, the basal denticle obtuse. Longer one of the two apical spines of metatibia much longer than the 1st tarsal segment. The 1st to 4th segments of each tarsus provided with tufts beneath. Metatarsus slender, a little longer than metatibia. Claw with an apical, an obliquely directed median and a very small basal teeth.

Parameres of male genitalia composed of a pair of outer larger and a pair of inner



Figs. 1–2. *Wadaia kaorui* gen. et sp. nov.; 1, habitus (male); 2, ditto (female).

smaller branches.

Female. Clypeus less reflexed, bilobate and clearly emarginate at the centre of anterior margin. Legs more robust, metatarsus about as long as metatibia. Claw with a more strongly bent apical and a vertical median teeth.

Type species: *Wadaia kaorui* T. ITOH, sp. nov.

This genus is distinguishable from *Stephanopholis* BRENSKE and *Rhabdopholis* BURMEISTER by the 9-segmented antenna, longer metatarsus, tridentate protibia, branched parameres of male genitalia, obliquely directed median tooth of male claw, and so on.

***Wadaia kaorui* T. ITOH, sp. nov.**

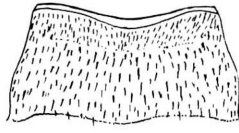
(Figs. 1–10)

Body length: 22.7–29.6 mm.

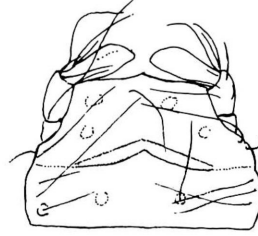
Male. Body blackish brown to rufous blackish brown.

Clypeus strongly reflexed at apex and gently emarginate at the anterior margin, fronto-clypeal suture clear and biarcuate. Frons wide and sparsely punctate. Interval between eyes 0.70–0.73 (0.72 on an average) times as broad as head width. Occipital

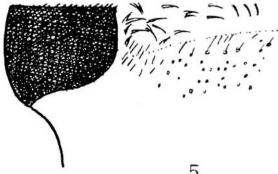
Figs. 3–10. *Wadaia kaorui* gen. et sp. nov. — 3, Male clypeus; 4, mentum; 5, occipital area; 6, right maxilla in lateral view (a), and maxillary galea in dorsal view (b); 7, membrane of elytral margin (El: elytron, Pyg: pygidium); 8, left metatibia and metatarsus in male; 9, male genitalia in dorsal view (a), and lateral view (b) (scale: 1 mm); 10, claw of fore leg in male (a) and female (b).



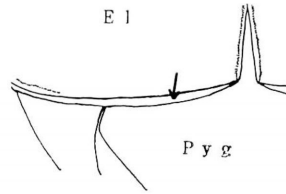
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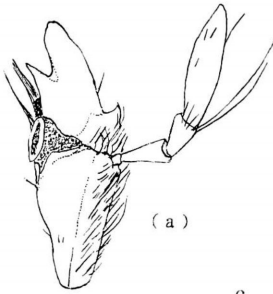
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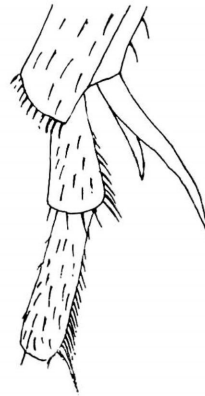


(a)

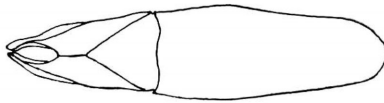


(b)

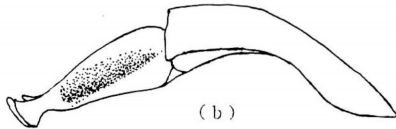
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8



(a)



(b)

9



(a)



(b)

10

area covered sparsely with fine punctures behind vertex. Antennal club nearly as long as footstalk and also 1.7–2.1 (1.9 on an average) times as long as 4 preceding segments combined. Maxillary galea provided with 4 denticles and the last segment of maxillary palpus spindle-shaped.

Pronotum convex, 0.59–0.62 (0.60 on an average) times as long as broad; anterior margin rimmed only near anterior angles; lateral margin very gently curved a little behind the middle, antero-lateral margin and postero-lateral one straight; anterior angle rectangular, posterior one clearly obtuse; disc sparsely punctate, with an obscure groove along the median line. Scutellum triangular in outline and rounded at the apical margin. Each elytron with 4 costae and a sutural one, 3rd one sometimes obscure.

Prosternal keel triangular and convex. Metasternum sparsely punctate in the median area and densely so at the lateral sides, and more densely hairy at the lateral sides. Metasternal median line evident. Sixth abdominal segment wholly furnished with short thinner scales than the other segments and with long brown pubescence near the apical margin. Pygidium flat and rounded at apical margin.

Metafemur convex, moderately swollen at the middle and 0.30–0.31 (0.30 on an average) times as wide as long. Metatibia moderately swollen at the apex and provided with a row of relatively long bristles along the inner margin as in mesotibia.

Female. Dorsal and ventral surfaces covered with thicker scales than in male. Interval between eyes 0.72 times as broad as head width. Antennal club shorter, 1.6 times as long as the 4 preceding segments combined. Pronotum 0.61 times as long as broad. Each elytron with 4 clear costae and a sutural one. Scales on abdominal sternites thicker than in male, each similar to a rice grain. Metafemur more swollen, 0.43 times as broad as long.

Distribution. Borneo.

Holotype: 1 ♂, Mt. Kinabalu, N. Borneo, 21–IV–1988. Allotype: 1 ♀, near Keningau, N. Borneo, 13–IV–1988. Paratypes: 1 ♂, same data as for the holotype; 1 ♂, Kimanis Road, Keningau, N. Borneo, 2–V–1988, M. YAGI leg.; 1 ♂, Crocker Range, Sabah, N. Borneo, 29–III–1989; 2 ♂♂, Mt. Bawang, West Kalimantan, Borneo, III–1990, N. NISHIKAWA leg.

The holotype and allotype are deposited in the collection of the Department of Zoology, National Science Museum (Nat. Hist.), Tokyo, 2 paratypes are in the collection of the Zoological Museum (Natural History) of Humboldt University, Berlin, and the others are in my collection and in Professor SATÔ's.

Remarks. Judging from reflexed clypeus in the male, antennal club composed of 3 lamellate segments in both sexes, mesosternite without a process, abdomen without obscure maculations of scales at the sides, and so on, the present new species is rather similar to *Stephanopholis melolonthoides* (BRENSKE) from the Philippines.

The new species is dedicated to Mr. KAORU WADA.

要 約

伊藤 武: ボルネオ島のコフキコガネ科の1新属新種. — ボルネオ島北部と西部で得られたコフキコガネ族に属する1新属新種を記載し, *Wadaia kaorui* という新名を与えた. 本種は, 強く反り返った雄の頭盾, 雄雌とも触角葉片節が3節からなること, 中胸腹板突起が不明瞭であること, 腹側部に鱗片からなる明瞭な白斑がないことなどから, *Stephanopholis* 属に近縁であると考えられ, また, アフリカの *Rhabdopholis* 属にも近似しているが, 触角が9節であること, より長い後付節, 前脛節に3外歯が存在すること, 雄交尾器の枝分かれした側片や雄の爪の中央歯がやや斜めを向いている構造などの特徴から, 別属とするのがよいと考え, 新属を設定した. 種名は, 和田 薫氏に献名した.

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