Elytra, *Tokyo*, **29** (1): 175–179, June 15, 2001

A New Species of the Genus *Derops* (Coleoptera, Staphylinidae) on the Island of Iriomote-jima, Southwest Japan

Toshio KISHIMOTO

Laboratory of Insect Resources, Tokyo University of Agriculture,
Funako, Atsugi, Kanagawa, 243–0034 Japan

Abstract A new species of the staphylinid genus *Derops* is described from the Island of Iriomote-jima of the southwestern Ryukyu Islands. It is related to *D. okinawanus* WATANABE, but readily distinguished by the differences in the male genitalia and the 8th abdominal segment in the female. The new name given is *Derops yaeyamanus*.

Since the genus *Derops* was described by SHARP (1889), its systematic status in the Staphylinidae has been repeatedly disputed. Some authors placed it in the subfamily Phloeocharinae, while others placed it in the subfamily Oxytelinae. SMETANA (1983) regarded it as a member of the Tachyporinae and erected the tribe Deropsini. He also pointed out that the disjunctive type of its distributional pattern is unique in the order Coleoptera. According to his revision, the genus *Derops* was represented at that time by one species from the Ozarks of North America and four species from East Asia. After that, WATANABE (1985) revised the Japanese species of the genus, describing a new species from Okinawa-hontô Island of the Ryukyus, and his subsequent works (WATANABE, 1993, 1996, 1999) recorded three new species: one from the Russian Far East, another from Jiangsu, East China, and the other from northern Vietnam.

Two years ago, I found specimens of a *Derops* species collected by M. SATÔ on Iriomote-jima Island of the same archipelago in the collection of Nagoya Women's University, but unfortunately all of those specimens were females. I suspended determination of the specimens till discovery of the male. Fortunately, I was able to examine in this spring a series of specimens of this beetle including males through the courtesy of T. WATANABE (Fujisawa, Kanagawa). After a careful examination, it has become clear that the species must be new to science in view of disagreement with the possible nearest species, *D. okinawanus* WATANABE described from Okinawa-hontô Island, in the configuration of the male genital organ and the secondary sexual character of the female. I am going to describe it in the present paper as a tenth species of the genus.

Derops yaeyamanus KISHIMOTO, sp. nov.

(Figs. 1–8)

Body length: 4.0–4.4 mm (from front margin of head to anal end); 2.6–2.8 mm (from front margin of head to elytral apices).

Subcylindrical and nearly parallel-sided, moderately shining, black to blackish brown, with mouth parts and legs reddish testaceous; antennae somewhat paler.

Male. Head subquadrate, evidently broader across eyes than long (width/length=1.50), postocular region gently arcuate, about a half as long as longitudinal diameter of an eye, the latter relatively large and slightly convex laterad; surface densely and coarsely covered with punctures, and provided with a vague depression on each side of the middle. Antennae filiform and elongate though not extending beyond the posterior margin of elytra, hardly thickened towards apical segment, proximal two segments polished, remaining segments opaque, 1st segment robust, about twice as long as broad, 2nd the shortest, 3rd 1.6 times as long as 2nd, 4th to 6th subequal in length to one another, 7th slightly longer than 6th (7th/6th=1.04), 7th to 10th gradually decreasing in length, 11th the longest, a little longer than 10th (11th/10th=1.35), about 2.3 times as long as broad and somewhat excavated at the apex.

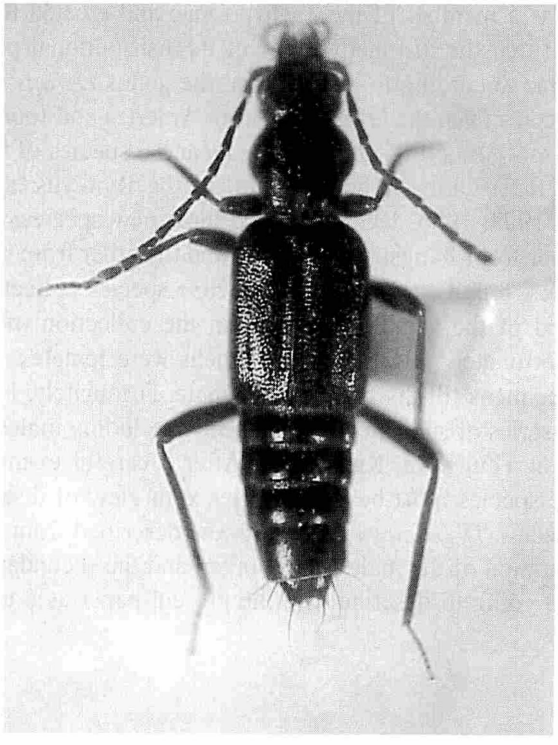
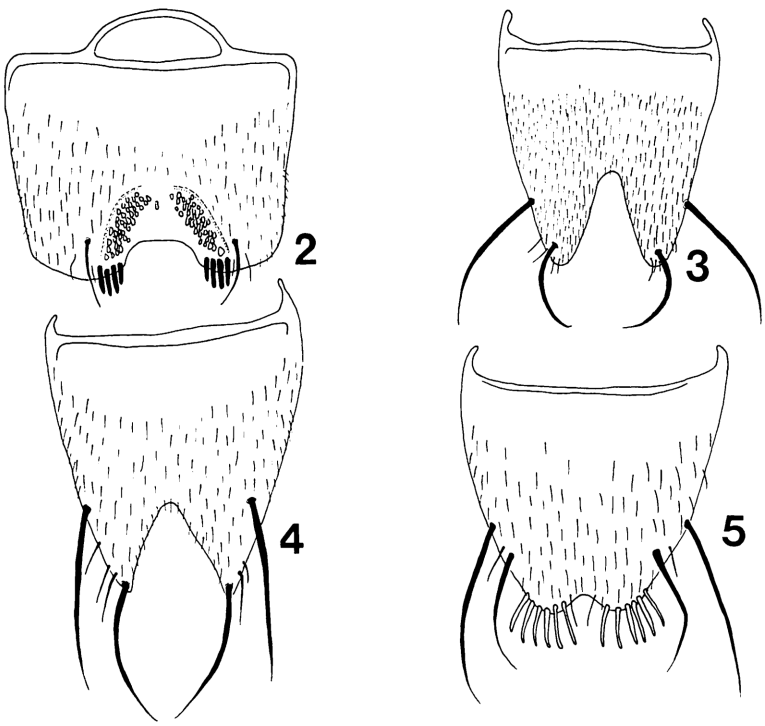
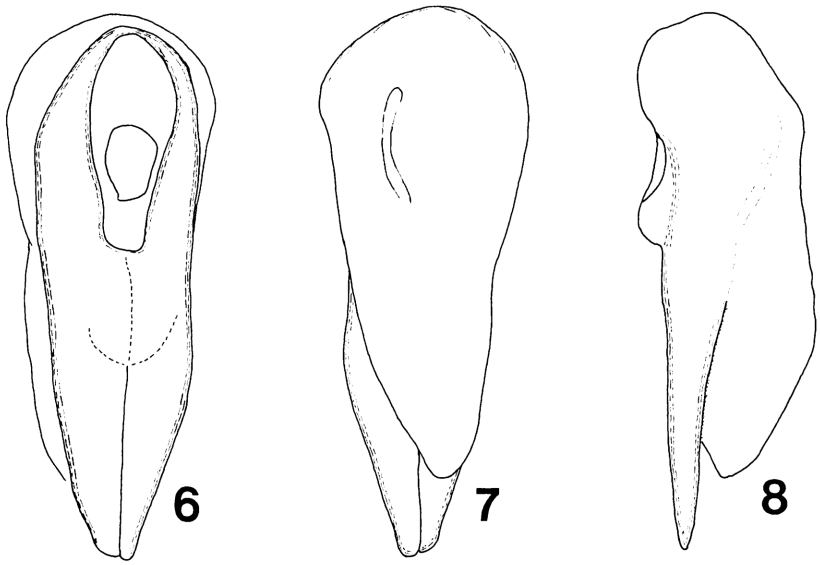


Fig. 1. Habitus of *Derops yaeyamanus* sp. nov., male.

Pronotum obcordate, convex above, broader than head (width/length=1.22), broader than long (width/length=1.11), widest at anterior third, with lateral sides arcuate and remarkably expanded in anterior two-thirds, constricted in posterior third and gradually convergent posteriad; posterior angles nearly rectangular though narrowly rounded at the corners; anterior angles bluntly angulate though invisible from above; anterior margin feebly arcuate and practically not bordered, posterior margin almost straight, finely bordered throughout; surface densely and coarsely punctured and covered with fine brownish pubescence, with vague longitudinal depression along median line, which is indistinct behind anterior margin. Scutellum lingulate, densely and coarsely punctate and pubescent. Elytra parallel-sided, much longer (elytra/pronotum=1.70) and somewhat broader than pronotum (elytra/pronotum=1.34) and a little longer than broad; surface densely and somewhat coarsely punctured, and covered with brownish pubescence, which is longer, sparser and coarser than that of pronotum, with a longitudinal depression on each side of suture; humeral angles relatively salient, lateral sides almost straight, posterior margin somewhat emarginate. Legs moderately elongate; protarsi slightly dilated, posterior tarsi elongate, basal segment long, nearly three times as long as 2nd, 2nd to 4th segments gradually decreasing in length, apical segment twice as long as 4th.



Figs. 2–5. *Derops yaeyamanus* sp. nov.; 2, 7th sternite of male; 3, 8th sternite of male; 4, 8th tergite of female; 5, 8th sternite of female.



Figs. 6–8. Male genitalia of *Derops yaeyamanus* sp. nov.; 6, ventral view; 7, dorsal view; 8, lateral view.

Abdomen elongate, subcylindrical and gradually narrowed posteriad; abdominal tergites 3rd to 5th each apparently and transversely depressed along base; surface of each tergite covered with extremely fine punctures and similar pubescence to that of pronotum; 7th sternite broadly and semicircularly excised at middle of posterior margin, and armed with four or five rigid blackish cilia on each side of the excision, with a large and semicircular depression in front of the excision, surface of the depression flat and impunctate in the median area, but closely covered with pubescence, closely and coarsely asperate; 8th sternite deeply emarginate at the middle of postrior margin.

Genital organ long oval, moderately sclerotized except for the dorsal side of median lobe. Median lobe gradually narrowed posteriad, curved to the right in posterior half. Fused paramere almost symmetrical, apparently longer than median lobe, apex narrowly truncate, without dorsal or ventral projection in profile.

Female. Eighth abdominal tergite deeply and subtriangularly excised at the middle of posterior margin; 8th abdominal sternite broadly emarginate at the middle of posterior margin and fringed with six or rarely five yellowish cilia at the latero-posterior parts.

Type series. Holotype: male, Iriomote-jima Is., near Kanbire Fall, southwestern Ryukyus, Southwest Japan, 25–II–2001, T. WATANABE leg. Paratypes: [Japan: Ryukyus] 5♂♂, 6♀♀, same data as for the holotype; 1♀, Iriomote-jima Is., Ôtomi-rindô, 13–III–1993, M. SATÔ leg.; 2♀♀, Iriomote-jima Is., Nishifunatsuki-gawa Riv., 21–III–1996, M. SATÔ leg. The holotype is preserved in the collection of the Laboratory of Insect Resources, Tokyo University of Agriculture, and some paratypes are preserved in the collection of the Biological Laboratory, Nagaya Women's University.

Distribution. Japan: Yaeyama group of the Ryukyu Islands (Iriomote-jima Is.).

Remarks. Though similar to *D. okinawanus* in general appearance, particularly in the relatively short antennae, the present new species can be distinguished from it by the following points: paramere of male genital organ with narrowly truncate apex, without dorsal or ventral projection in profile (cf. NAOMI, 1986, p. 20, fig. 5), 8th tergite of abdomen in the female deeply and subtriangularly excised at the middle of posterior margin, and 8th sternite of female abdomen fringed with six or rarely five yellowish cilia at the latero-posterior parts. The type specimens were collected in the proximities of running waters early in the spring.

Acknowledgement

I wish to express my cordial thanks to Dr. Shun-Ichi UÉNO and Professor Yasuaki WATANABE of Tokyo University of Agriculture for their continuous guidance. Special thanks are due to Professor Masataka SATÔ and Mr. Takashi WATANABE for their kind offer of interesting material.

要　　約

岸本年郎：西表産ヒゲナガミズギワハネカクシ属の1新種．—— ヒゲナガミズギワハネカクシ属は，北米東部に1種と東アジアに8種が記載されていて，その顕著な隔離分布が注目されている特異なハネカクシである．今回，琉球列島の西表島より得られた本属の標本を検討した結果，未記載種であることが判明したので，ヤエヤマヒゲナガミズギワハネカクシ *Derops yaeyamanus* と命名して記載した．

References

NAOMI, S., 1986. On the genus *Derops* SHARP (Staphylinidae) and its systematic position. *Nat. & Ins., Tokyo*, **21**(8): 17–22. (In Japanese.)

SHARP, D., 1889. The Staphylinidae of Japan. *Ann. Mag. nat. Hist.*, (6), **3**: 463–476 [Part 3].

SMETANA, A., 1983. The status of the staphylinid genera *Derops* SHARP and *Rimunincola* SANDERSON (Coleoptera). *Ent. scand.*, **14**: 269–279.

WATANABE, Y., 1985. A revision of the Japanese species of *Derops* (Coleoptera, Staphylinidae). *Kontyû, Tokyo*, **53**: 436–451.

——— 1993. A new species of the genus *Derops* (Coleoptera, Staphylinidae) from the Russian Far East. *Jpn. J. Ent.*, **61**: 557–561.

——— 1996. A new species of the genus *Derops* (Coleoptera, Staphylinidae) from northern Vietnam. *Ibid.*, **64**:145–149.

——— 1999. Two new subterranean staphylinids (Coleoptera) from East China. *Elytra, Tokyo*, **27**: 249–257.