

**A new species of the genus *Orphinus* Motschulsky, 1858
(Coleoptera: Dermestidae) from Japan**

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Abstract. A new species *Orphinus (Orphinus) kamezawai* sp. nov. is described from Japan and compared with related species, and its pictures are presented.

INTRODUCTION

The first author received living dermestid adults and larvae from Hiromu Kamezawa. He found some larvae feeding on a dead moth under a bridge near the river. They were reared with dead insects and dried fishes and adults were hatched. They should belong to the genus *Orphinus* Motschulsky, 1858 by having important diagnoses pointed out by Beal (1961) and be distinguished from any other species in that genus. The genus recently contains 123 species worldwide (Háva 2015).

MATERIALS AND METHODS

Photos in this article were taken with a digital camera, Stylus TG4, Olympus through the microscope, SMZ 745, Nikon and GR-D8T2, Shodensha.

The type material is deposited in the following collections:

AHAC Andreas Herrmann, private collection, Stade, Germany;

JHAC QPrivate Entomological Laboratory & Collection, Jiří Háva, Prague-west, Czech Republic;

OMNH Osaka Museum of Natural History, Japan;

TKPC Takanobu Kitano, private collection, Surugaku, Shizuoka Prefecture, Japan.

The type specimens of the described species are provided with a red, printed label showing the following text: „HOLOTYPUS [respectively PARATYPUS], *Orphinus kamezawai* n. sp., Kitano & Háva det. 2018”.

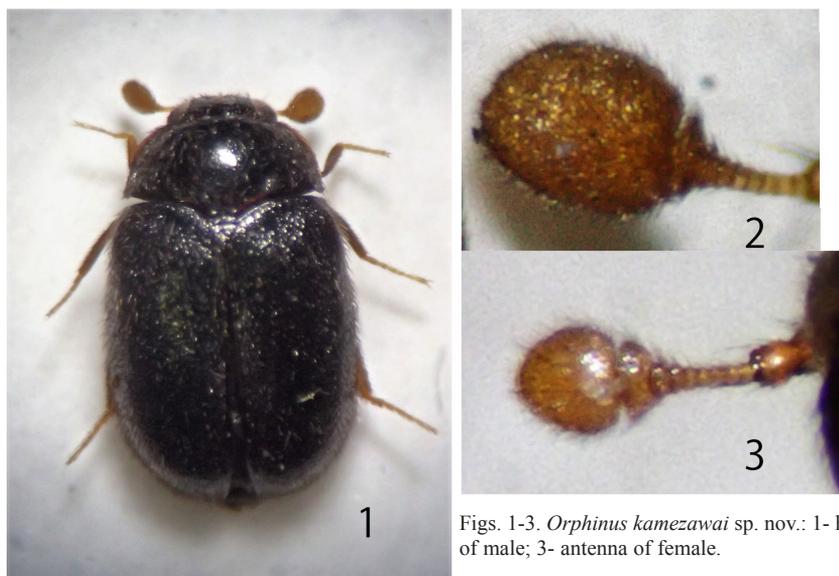
TAXONOMY

Orphinus (Orphinus) kamezawai sp. nov.

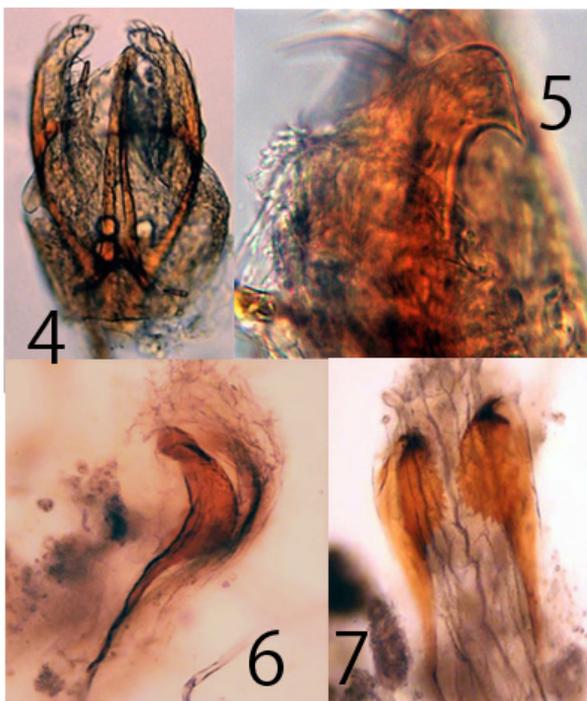
(Figs. 1-7)

Type material. Holotype (♂): Japan, Honshu, Teshigawara, Kamisatomachi, Kodama-gun, Saitama-ken, larva, 4. II. 2017, em. 15. IV. 2017, 36.266681, 139.122663. Kamezawa Hiromu leg., (OMNH). Paratypes (3 spec. TKPC, 2 spec. JHAC, 2 spec. AHEC): the same date as holotype.

Description of holotype. Male. Body ovate (Fig. 1), weakly convex above, 1.8 times as long as wide, 2.25 mm in length, 1.25 mm in width. Colour black; femora and tibiae dark brown; antennae, mouth parts, and tarsi brown. Integument covered with fine and brownish pubescence. Head broad, finely punctate, moderately large, wider than half pronotum width, with one ocellus; interval of eyes half times as wide as head; inner margin of eyes simple, not sinuate. Eyes covered with dark, short, erect setae. Antenna (Fig. 2) 11- antennomered: terminal antennomere enlarged, occupying most part of epipleuron depression, 1.09 times as long as wide, broadly rounded at apex. Pronotum transverse, finely punctate, bluntly pointed at corners, widest at base; one pair indistinct depressions present before scutellum. Scutellum triangular, longer than wide, scarcely punctate. Elytra conspicuously and densely punctate, subparallel-sided, rounded at apex, not covering apical part of abdomen, without striae; elytral epipleuron narrow as wide as middle tibiae, not reaching to posterior margin of metasternum. Prosternum rugosely punctate; epipleuron with depression to receive antennae; posterior margin of epipleuron without carina. Metasternum finely punctate. Metaepimeron rather densely punctate. Claws simple, without inner appendices. Abdomen densely punctate. Male genitalia: median lobe with sharp apex directed toward base; sides of tegmen arcuate.



Figs. 1-3. *Orphinus kamezawai* sp. nov.: 1- habitus; 2- antenna of male; 3- antenna of female.



Figs. 4-7. *Orphinus kamezawai* sp. nov.: 4- male genitalia, ventral view; 5- tip of median lobe of male genitalia, lateral view; 6, 7- female, sclerites in bursa copulatrix.

Females. Similar to male. Females have smaller antennal clubs (Fig. 3), and unique sclerites in bursa copulatrix (Figs. 6-7).

Differential diagnosis. The new species resembles *O. fulvipes* (Guérin-Méneville, 1838) in the appearance, which has been known from Honshu, Japan. It has the elongate terminal segments of antennae, while *O. fulvipes* has the circular ones. Furthermore this species resembles *O. beali* Herrmann, Háva & Zhang, 2011 by the black body, but has more elongate male antennae. The first author asked A. Herrmann who is one of the authors of *O. beali* to compare these two species. He pointed out that *O. beali* has finer punctures on pronotum, more elongate pronotum, and different male genitalia.

Etymology. The specific epithet is derived from the collector's name.

KEY TO SPECIES BELONGING TO THE GENUS *ORPHINUS* OCCURRING
WITHIN HONSHU, JAPAN

- 1. Elytra with red maculation.2
- Elytra entirely black.3
- 2. Elytra with 4 maculae. *O. (F.) quadrimaculatus* (Matsumura & Yokoyama, 1928)
- Elytra with 2 maculae. *O. (O.) japonicus* Arrow, 1915
- 3. Terminal segment of male antennae distinctly longer than wide. *O. (O.) kamezawai* sp. nov.
- Terminal segment of male antennae almost as long as wide. *O. (O.) fulvipes* (Guérin-Méneville, 1838)

There are two uncertain records from Honshu, Japan. Kamiya (1933) recorded *Orphinus pedestris* Motschulsky, 1858 from Honshu based on one specimen. According to the drawing, the specimen was female. It should be difficult to identify and nobody else has recorded the species since his record. Hirao et Sugimoto (1992) recorded an entirely black species of *Orphinus* from Honshu and Hokkaido, and stated that it should be distinguishable from any other species occurring within Japan.

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REFERENCES

- BEAL R. S. 1961: Coleoptera: Dermestidae. *Insects of Micronesia* 16(3): 109-131.
HÁVA J. 2015: *World Catalogue of Insects. Volume 13. Dermestidae (Coleoptera)*. Leiden/Boston: Brill, xxvi + 419 pp.
HIRAO M. & SUGIMOTO K. 1992: Trapping of *Trogoderma* beetle with pheromone trap. *Pest Control Research* 7(1): 4-8. (in Japanese).
KAMIYA K. 1933: Note on the *Orphinus pedestris* Motschulsky. *Konchû* 7(3): 125-126. (in Japanese)

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