A new *Orphinus* Motschulsky, 1858 from Sumatra (Coleoptera: Dermestidae: Megatominae)

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Abstract. Orphinus (Orphinus) barriesi sp. nov. from Sumatra is described, illustrated and compared with related species.

INTRODUCTION

During the examination of some of the numerous unidentified material deposited in the collection of the first author, a new species of the genus *Orphinus* Motschulsky, 1858 belonging to the subgenus *Orphinus* s. str. has been recently detected. The genus *Orphinus* Motschulsky, 1858 includes roundabout 120 valid species worldwide, 110 of them being members of the subgenus *Orphinus* s. str. (Háva 2015a-c, 2016a-e, 2017a-b, 2018, Háva & Kadej 2016, Herrmann & Háva 2015, 2018, Kadet et al. 2015, Kadej & Háva 2015, Kitano & Háva 2018). Although the genus is mainly spread in Asia, only five species of this genus have been recorded from Sumatra up to now, all of them members of the subgenus *Orphinus* (s. str.). Thus, the species *Orphinus barriesi* sp. nov. becomes the sixth member of the subgenus known to occur in Sumatra.

MATERIAL AND METHODS

The specimen was stored for 5 days in a solution of 1% pepsin in hydrochloric acid to roughly remove protein tissues and make the extremities moveable. The abdomen was disconnected from the body and glued upside-down onto the same cardboard plate, just behind the beetle. Before this, the genitals were excluded and then cleaned with a fine needle in a drop of 99% glycerol. Afterwards, they were also glued onto the plate behind the beetle, firmly embedded in a drop of a solution consisting of polyvinylpyrrolidone, aqua demineralisata and diglycerin (the liquid solution becomes permanently solid after a few minutes). Photos of the body and abdomen were taken with a digital SLR camera Sony alpha 35, connected with an objective Nikon CF N Plan Achromat 4x 160/- and extension rings; for the photos of the genitalia and antenna a Bresser Junior USB-Handmikroskop at 200x magnification was used. Because of the low depth of field all photos were taken as layered images, afterwards combined on a PC by using the stacking program CombineZP. The nomenclature and systematics employed in the present paper follow Háva (2015a).

The type specimen is provided with a red, printed label showing the text: "HOLOTYPUS Orphinus (s. str.) barriesi sp. n., A. Herrmann & J. Háva det. 2019".

DESCRIPTION

Orphinus (Orphinus) barriesi sp. nov.

(Figs. 1-3)

Type material. Holotype (\mathfrak{P}) labelled: "SUMATRA, Toba-area, Simarjarunjung, 30.5.1994 leg. Barries". The holotype specimen is deposited in the collection of the first author.

Remark. The holotype specimen is missing the left middle leg and tarsi of both front legs.

Description. Body measurements (in mm): Total length 2.7, pronotal length 0.6, pronotal width 1.5, elytral length 2.2, elytral width 1.9, body longish oval (Fig. 1). Head shiny black with sparse and fine punctuation, covered by a few suberect bright hairs, slightly broader than long; eyes provided with erect and distinctly visible microsetae. Palpi light brown to yellow, ocellus distinctly present on frons. Antennae with 11 antennomeres each; entirely light yellow, all segments sparsely covered with erect bright setation, the first two antennomeres of the shaft provided with a few strong erect setae; the club consists of two segments, somewhat shorter than the shaft, with quite dense setation and light yellow too, the last segment roughly seen twice as long as the preceding one (Fig. 2). Pronotum black to darkish brown, sparsely and finely punctuated, shiny, covered with a bright, quite long and suberect hairs, which are concentrated mainly towards the lateral margins, much broader than long, narrowed anteriorly, broadest at the apical end, the hind edges nearly rectangular, its lateral margins not visible from above. Elytra with coarse and dense punctuation, space between punctures equal to puncture diameter, cuticle black except the red apical fifth, covered by short darkish and longer bright suberect hairs. The bright hairs build a broad transverse fascia located at the first third of the elytra, and also cover the red apical part (Fig. 1). Scutellum small and roughly triangular, shiny black, without any puncture or setation. Colour, setation and punctation of the underside similar to that of the elytra. The five visible abdominal sternites are entirely dark brown and have the same punctuation as the elytra, they are covered by finer, denser and recumbent light brown setation (Fig. 3). Leas and tarsi entirely light brown, tibiae each with a row of a few brown short and erect setae on their edges. Tibiae roughly as long as tarsi.



Figs. 1-3. Orphinus barriesi sp. nov. (holotype, female): 1-habitus, dorsal aspect; 2-antenna; 3-abdomen, ventral aspect.

Male. Unknown.

Differential diagnosis. The new species looks similar to *O. baliensis* Háva, 2016 but differs from it by the structure of antennae and orange apical elytral part; from other similar species as *O. horaki* Kitano & Háva, 2013, *O. jurciceki* Háva, 2013 and *O. viktorai* Herrmann & Háva, 2015 it differs by the structure of the antennae and elytral spots.

Name derivation. The name is dedicated to the entomologist Wolfgang Barries from Austria, the collector of the new species.

REFERENCES

HÁVAJ. 2015a: World Catalogue of Insects. Volume 13. Dermestidae (Coleoptera). Leiden/Boston: Brill, xxvi + 419 pp. HÁVAJ. 2015b: Three new species of Orphinus Motschulsky, 1858 from Thailand (Coleoptera: Dermestidae: Megatominae). Arquivos Entomolóxicos 13: 225-229.

HÁVA J. 2015c: A contribution to knowledge of the genus *Orphinus* Motschulsky, 1858 from the Philippines (Coleoptera: Dermestidae: Megatominae). Folia Heyrovskyana, Series (A) (2014), 22 (2): 1-8.

HÁVA J. 2016a: Descriptions of two new *Orphinus* Motschulsky, 1858 species from China (Coleoptera: Dermestidae: Megatominae). *Folia Heyrovskyana* (2015) 23(2): 1-4.

HÁVA J. 2016b: Orphinus (Orphinus) saundersi sp. nov. from Singapore (Coleoptera: Dermestidae: Megatominae). Folia Heyrovskyana (2015) 23(2): 5-6.

HÁVA J. 2016c: Contribution to the knowledge of genus *Orphinus* Motschulsky, 1858 from India (Coleoptera: Dermestidae: Megatominae). *Arquivos Entomolóxicos* 15: 377-382.

HÁVA J. 2016d: Orphinus (Orphinus) baliensis sp. nov., a new species from Bali Isl. (Coleoptera: Dermestidae: Megatominae). Arquivos Entomolóxicos 16: 421-424.

HÁVA J. 2016e: Contribution to the knowledge of Dermestidae (Coleoptera) from Australia - Part. 1. Genus Orphinus - new faunistics records. Acta Biologica Universitatis Daugavpiliensis 165: 135-137.

HÁVA J. 2017a: Orphinus (Orphinus) pulupulu sp. nov., a new species from Sulawesi (Coleoptera: Dermestidae: Megatominae). Folia Heyrovskyana, Series A 25(1): 5-7.

HÁVA J. 2017b: Contribution to the knowledge of Dermestidae (Coleoptera) from the Maluku Islands (Indonesia), part 2. Description of four new species of Orphinus Motschulsky, 1858. Pp. 317-321. In: TELNOV D., BARCLAY M. V. L. & PAUWELS O. S. G. (eds): Biodiversity, biogeography and nature conservation in Wallacea and New Guinea. Volume III. Riga: The Entomological Society of Latvia.

HÁVA J. 2018: A new Orphinus species from Nepal (Dermestidae: Megatominae). Acta Biologica Universitatis Daugavpiliensis 18(2): 199-201.

HÁVA J. & KADEJ M. 2016: A new species of *Orphinus Motschulsky*, 1858 (Coleoptera, Dermestidae, Megatominae), with a key to species from India. *Journal of Asia-Pacific Entomology* 19: 525-529.

HERRMANN A. & HÁVA J. 2015: Orphinus (Orphinus) viktorai sp. nov., a new beetle species from Malaysia (Coleoptera: Dermestidae: Megatominae). Folia Heyrovskyana, series A 23: 18-20.

HERRMANN A. & HÁVA J. 2018: Description of a new *Orphinus* Motschulsky, 1858 from India (Coleoptera: Dermestidae: Megatominae). *Studies and Reports, Taxonomical Series* 14(1): 77-79.

KADEJ M., ASTON P., HÁVA J. & HERRMANN A. 2015: A contribution to the knowledge of Dermestidae (Insecta, Coleoptera) of Hong Kong with description of a new species of *Orphinus*. *Journal of Asia-Pacific Entomology* 18: 683-686.

KADEJ M. & HÁVA J. 2015: Description of a new species of *Orphinus* Motschulsky, 1858 from Pakistan (Coleoptera: Dermestidae: Megatominae), with a key of known Himalayan species. *Florida Entomologist* 98(3): 939-942.

KITANO T. & HÁVA J. 2018: A new species of the genus *Orphinus* Motschulsky, 1858 (Coleoptera: Dermestidae) from Japan. Studies and Reports, Taxonomical Series 14(2): 397-400.

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