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### Orphinus (Orphinus) linki sp. nov., a new dermestid species from China (Coleoptera: Dermestidae: Megatominae: Megatomini)

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#### Taxonomy, new species, Coleoptera, Dermestidae, Megatominae, Orphinus, China

Abstract. A new species, Orphinus (Orphinus) linki sp. nov., is described, illustrated and compared with other species of that genus occurring in China. Furthermore a list of all Orphinus species recorded from China is provided.

#### INTRODUCTION

The genus *Orphinus* Motschulsky, 1858 consists of somewhat more than 200 different species, so far only 16 of those are recorded from China, whereas 15 of those species belong to the subgenus *Orphinus* (s. str.) Háva (2021, 2023). Recently a new species was collected in that country, and is described in this paper. It was detected among unidentified dermestids sent by the entomologist Andreas Link (Austria) to the first author.

### MATERIAL AND METHODS

The specimen was stored for 7 days in a solution of 1% pepsin in hydrochloric acid to free it roughly from protein tissues and making the extremities of the body moveable. The abdomen was disconnected from the body and glued upside-down onto the cardboard plate, just behind the beetle. Before this the genitalia was extracted and then cleaned with a fine needle in a drop of 99% glycerol. Afterwards it was 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 the 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. Nomenclature and systematics in this paper follow Háva (2023).

The following measurements were made:

a) total length (TL) - linear distance from anterior margin of pronotum to apex of elytra.

- b) pronotal length (PL) maximal length measured from anterior margin to posterior margin.
- c) pronotal width (PW) maximal linear transverse distance.
- d) elytral length (EL) linear distance from shoulder to apex of elytron.
- e) elytral width (EW) maximal linear transverse distance.

The specimen of the species described here is provided with a red, printed label with text as follows: "HOLOTYPE, *Orphinus (Orphinus) linki* sp. nov., A. Herrmann & J. Háva det. 2023".

#### TAXONOMY

### Orphinus (Orphinus) linki sp. nov.

(Figs. 1-5)

**Type material.** Holotype (♂): CHINA, Jilin pr., Jiaone env., 95km NEE Jilin, 43°57'N 127°42'E, 500m, 14.12.2019 E. Jendek leg. (holotype deposited in the collection of the first author).

Remark. The holotype is missing on its right side the antenna, the middle and the hind leg.

**Description.** Holotype male body measurements (mm): TL 1.9, PL 0.5, PW 1.0, EL 1.4, EW 1.2; color of the body black, longish oval, head sparsely and finely punctured, shiny, with a few bright? long setae. Eyes large with hardly visible microsetae. Ocellus distinctly present on frons. Pronotum two times broader than long, narrowed from the apical to the anterior edges, margins untoothed and visible from above, punctation fine and sparse as on the head, covered also by some slightly erect bright? setae; the distance between the setae increases towards the lateral margins. Scutellum small, triangular, glabrous and without any punctation. Elytra dense and much more coarsely punctured, pubescense as on the pronotum. Each elytron with a transverse orange fascia on the anterior half and an orange spot apically, the fascia reaches the epileuron, fasciae as well as the spots are distinctly separated by the suture (Figs. 1-2). Antennae consist of 11 antennomeres; light reddish brown with a somewhat darker basal segment; antennal club large and oval to longish circular (Fig. 3). Sternites I-V darkish brown to black, with similar punctation and pubescense as on the elytra (Fig. 5). Legs thin and yellow-brown, with a single row of light brown setae at their lateral edges, tarsi almost as long as the tibiae. Aedeagus as in Fig. 4.

Female. Unknown.

**Differential diagnosis.** Because of the morphological characters the new species belongs to the subgenus *Orphinus* Motschulsky, 1858. It differs from all other *Orphinus* species known from China by the structure of the antennae, male genitalia and arrangement of elytral patterns; habitually it looks similar to *Orphinus xianae* Herrmann, Háva & Zhang, 2011, but differs from it also by these characters.

Etymology. The species is dedicated to the entomologist Andreas Link from Austria.



Figs. 1-5. *Orphinus linki* sp. nov. (holotype): 1- habitus, dorsal aspect; 2- habitus, lateral aspect; 3- antenna; 4- genitalia; 5- abdomen.

Distribution. So far known only from China: Jilin province.

## LIST OF CHINESE ORPHINUS SPECIES

# Subgenus Curtophinus

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Orphinus bicolor (Pic, 1954)

### Subgenus Orphinus

Orphinus barthelemyi Kadej, Aston, Háva & Herrmann, 2015 Orphinus beali Herrmann, Háva & Zhang, 2011 Orphinus chinensis Háva, 2004 Orphinus fulvipes (Guérin-Méneville, 1838) Orphinus japonicus Arrow, 1915 Orphinus kaliki Háva, 2022 Orphinus linki sp. nov. Orphinus ludmilae Háva, 2021 Orphinus meiyingae Herrmann, Háva & Zhang, 2011 Orphinus ornatus Háva, 2015 Orphinus ovalis (Arrow, 1915) Orphinus petri Háva, 2013 Orphinus pseudoovalis Háva, 2004 Orphinus turnai Háva, 2021 Orphinus xianae Herrmann, Háva & Zhang, 2011 Orphinus yunnanus Háva, 2004

**Note.** The species *Orphinus japonicus* Arrow, 1915 was mentioned by Hua (2002) from Beijing and Yunnan, but the records should be revised since a similar species was recently described from China, therefore *O. japonicus* probably does not occur in China.

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