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## *Phradonoma charon* n. sp. from Greece (Coleoptera: Dermestidae: Megatomini)

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ABSTRACT. *Phradonoma charon* n. sp. from Greece is described, illustrated and compared with related species.

Key words: entomology, taxonomy, new species, Coleoptera, Dermestidae, *Phradonoma*, Greece.

### INTRODUCTION

The genus *Phradonoma* JACQUELIN DU VAL, 1859 contains 40 species distributed in Palaearctic and Afrotropical regions (MROCKOWSKI 1968, HARNEY 1992, HÁVA 2003, 2004, 2008, HÁVA & KADEJ 2006a, b, HERRMANN & HÁVA 2005). The genus is divided into four species-groups defined by HERRMANN & HÁVA (2005) and HÁVA (2006). New species from Greece is described below.

### MATERIAL AND METHODS

The following acronyms refer to the collections, in which the examined materials are deposited:

ZIUW Department of Biodiversity and Evolutionary Taxonomy, Zoological Institute, University of Wrocław;

JHAC Private Entomological Laboratory & Collection, Jirí HÁVA, Prague-west, Czech Republic;

JVAC Private coll. Jiří VÁVRA, Ostrava, Czech Republic;  
KORC Private coll. Kamil ORSZULIK, Frýdek-Místek, Czech Republic;  
MKC Marcin KADEJ collection, Poland;  
ZMUC Zoologisk Museum, Kopenhag, Denmark.

Acronyms of measurements:

AFL antennal fossa length (measured along the antennal fossa).  
BL body length (measured from the anterior head margin to the apex of elytra).  
BW body width (measured between two anterolateral humeral calli).  
LMP length of lateral margin of pronotum (measured as a distance between interior part of pronotum and exterior angle).  
PL pronotum length (measured from the top of the anterior margin to scutellum).  
PW pronotum width (measured between the two posterior angles of pronotum).

All measurements are given in millimeters. The morphological structures were observed under phase contrast microscope Nikon Eclipse E 600 with drawing attachment in transparenting light in glycerin. All morphological structures were put into plastic micro vials with glycerin under proper specimens. Photos were taken with the camera Nikon Coolpix 4500.

All type specimens were labelled with red, printed labels bearing the text as follows: "HOLOTYPE [or PARATYPE, respectively] *Phradonoma charon* sp. n. J. HÁVA & M. KADEJ det. 2007".

DESCRIPTION

***Phradonoma charon* n. sp.**

(Figs. 1-6)

TYPE MATERIAL

Holotype (male): „Rhodes (Greece), Marmari, Lindos env., 29.6.2007, Orszulik lgt.“, (ZIUW). Paratypes (48 spec.): the same data as holotype (1 MKC, 29 KORC, 17 JHAC, 2 JVPC); (1 female): „Hellas, Peloponisos, Yithion 30.viii.1983, Zool. Mus. Copenh. Exped.“, (ZMUC); (1 male): Greece, Peloponnesos, 5 km S of Astros, 24.vi.2003, I. Gyulai & A. Garai lgt., (JHAC).

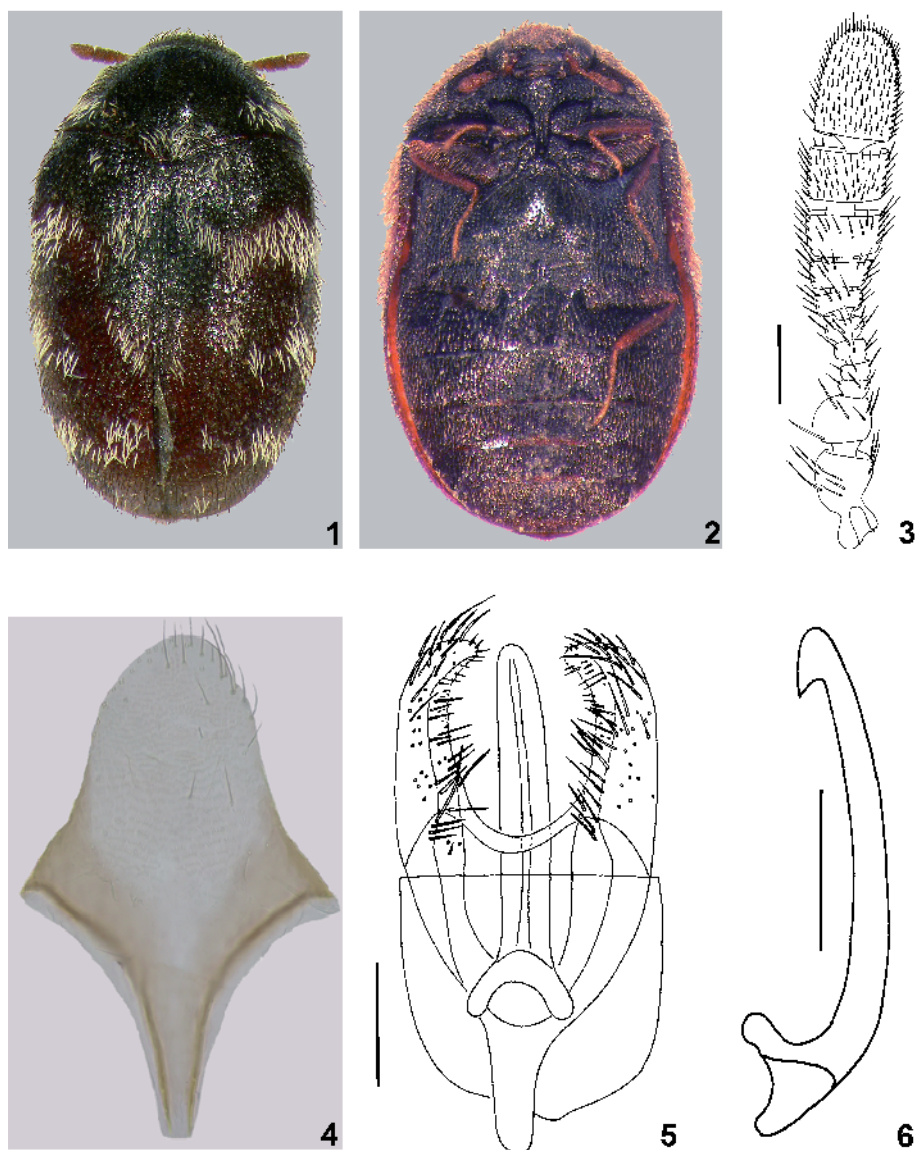
ETYMOLOGY

The species is named after Cháron, ferryman on the river Styx in Greek mythology.

DIAGNOSIS

The new described species belongs to the „*Phradonoma nobile* species group“. The species group contains 16 species known from Palaearctic region (11 species) and Afrotropical region (5 species). The new species is externally very similar to *Phrado-*

*noma cercyonoides* (REITTER, 1887), *Phradonoma jelineki* HÁVA, 2006, *Phradonoma trizonatum* (FAIRMAIRE, 1883) and *Phradonoma nobile* (REITTER, 1881), but differs from them by the following characters:



1-6. *Phradonoma charon* n. sp.: 1 – habitus (dorsal aspect); 2 – habitus (ventral aspect); 3 – antenna of male; 4 – ninth abdominal sternite; 5 – male genitalia; 6 – median lobe (lateral view). Scale bar: 0.1 mm (Figs. 3, 5-6)

- 1(4) Antennal club with 4 segments; pronotum with white pubescence on sides
- 2(3) terminal antennal segment approximately as long as wide; pronotum on lateral sides with only small patch with white pubescence ..... *Phradonoma charon* n. sp.
- 3(2) terminal antennal segment triangular, 2x long as wide; pronotum on lateral sides with white pubescence ..... *Phradonoma trizonatum*
- 4(1) Antennal club with 3 segments; pronotum without white pubescence on sides
- 5(6) Integument on elytra brownish-orange with only one black, transverse, narrow band from humera to scutellum; on each elytron three narrow, transverse fasciae with white pubescence ..... *Phradonoma cercyonoides*
- 6(5) Integument on elytra black with three or two transverse reddish or orange bands
- 7(8) Terminal antennal segment oval; elytra black except for three reddish, transverse bands and reddish apex ..... *Phradonoma jelinek*
- 8(7) Terminal antennal segment triangular; elytra brownish-black except for three (sometimes only two) reddish or orange, transverse bands .... *Phradonoma nobile*

#### DESCRIPTION

Body strongly convex, elongate, covered with white and dark brown pubescence (BL: 2.6; BW: 1.5) (Fig. 1-2).

Head with big, convex, oval eyes. Frons with punctation, covered with black pubescence which might seem to be grey in transparent light. Antenna of both sexes brown, 11-segmented, antennal club three-segmented, covered densely with dark brown pubescence (Fig. 3). Antenna occupies the whole cavity of antennal fossa. Antennal fossa (AFL: 0.25) open completely along whole length (LMP: 0.5) of lateral margin of pronotum.

Pronotum (PL: 0.65; PW: 1.25) and elytra dark-brown almost black, gently but densely punctate, covered with black or dark brown pubescence, which might seem to be grey in transparent light. Three (one on the apex of pronotum, two on the angles) distinct white spots on the pronotum. On the elytra five transverse bands formed by white pubescence – one, very short close to anterior margin of elytra, three others long under the first one and one very short on the posterior margin of the elytra, near apex. Prosternum and mesosternum punctuated on disc. Abdominal sternite (SL: 1.2; SW: 1.25) dark brown, almost black, gently but densely punctate, covered with black pubescence which might seem to be grey in transparent light (Fig. 2).

Legs brown, covered with pubescence on dorsal surface. Trochanter and femur with black-brown coloration, tibia and tarsus brown. Male genitalia as in figure 5. Median lobe as in figure 6. 9-th abdominal sternite as in figure 4.

#### VARIABILITY

Body measurements of paratypes (mm): BL: 2.35-4.21; BW: 1.32-2.57.

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## REFERENCES

- HARNEY, M., 1992. Occurrence and Identification of species of *Trogoderma* and *Phradonoma* (Coleoptera: Dermestidae) in stored Grain in the Transvaal and Orange Free State, South Africa. *Phytophylactica*, **24**: 15-23.
- HÁVA, J., 200. World Catalogue of the Dermestidae (Coleoptera). Studie a Zprávy Oblastního Muzea Praha-východ v Brandýse nad Labem a Staré Boleslavi, Supplementum 1: 1-196.
- , 2004. A new *Phradonoma* species and new distributional notes on some dermestid species from Yemen (Coleoptera: Dermestidae). *Mitt. Mus. Naturk. Berlin, D. Entomol. Zeitschr.*, **51**: 77-79.
- , 2006. Notes on the genus *Phradonoma* from the Middle East with description of nine new species (Coleoptera: Dermestidae: Megatominae). *Genus, Wrocław*, **17**: 79-94.
- HÁVA, J., KADEJ, M., 2006 a. Description of a new species of *Phradonoma* JACQUELIN DU VAL, 1859 from South Africa. *Genus, Wrocław*, **17**: 343-350.
- , 2006 b. Redescription of *Phradonoma albonotata* (PIC, 1927), new combination, from Madagascar (Coleoptera: Dermestidae, Megatomini). *Entomol. Zeitschr., Stuttgart*, **116**: 216-218.
- HÁVA, J. 2008. Dermestidae World (Coleoptera). Permanent World Wide Web electronic publication: <http://www.dermestidae.wz.cz>
- HERRMANN, A., HÁVA, J., 2005. A contribution to the genus *Phradonoma* JACQUELIN DU VAL, 1859 from South Africa (Coleoptera: Dermestidae: Megatomini). *Genus, Wrocław*, **16**: 183-191.
- MROCZKOWSKI, M., 1968. Distribution of the Dermestidae (Coleoptera) of the world with a catalogue of all known species. *Ann. Zool. Warszawa*, **26**: 15-191.