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Revision of the Palearctic species of the genus *Ochthebius* LEACH, 1815 XXXII. *Ochthebius* (*Cobalius*) *biltoni* sp.n. from Sicily (Italy) (Coleoptera: Hydraenidae)

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Abstract

Ochthebius (*Cobalius*) *biltoni* (Coleoptera: Hydraenidae) is described from Sicily (Italy).

Key words: Coleoptera, Hydraenidae, new species, taxonomy, *Ochthebius*, *Cobalius*, Italy, Sicily.

Introduction

The subgenus *Cobalius* REY, 1886 is found mainly in marine rock pools of the Mediterranean Sea, the Black Sea and some Atlantic islands) (JÄCH 1989)[1]. Although *Cobalius* was treated as a synonym of *Ochthebius* (s.str.) LEACH, 1815 by JÄCH & SKALE (2015), recent DNA analyses have revealed that this monophyletic group probably deserves subgeneric status (see SABATELLI et al. 2016). It presently contains eight recognized species. However, according to recent studies by the authors (unpubl.) there are definitely more species than currently recognized (see also SABATELLI et al. 2016). Several subspecies and synonyms obviously deserve specific status. A similar situation was found in the *O.* (s.str.) *vandykei* group, which was originally thought to contain only two species. The *O. vandykei* group is found in East Asia and western North America exclusively on rocky sea shores; although some species can be found in marine rock pools, there is a clear tendency toward a more terrestrial way of life than in *Cobalius* (JÄCH & DELGADO 2014, PROKIN et al. 2016); meanwhile this group contains eight species (JÄCH & DELGADO 2014), with several new ones yet to be described.

Most of the new (or unrecognized) species of *Cobalius* are very similar to already described ones. But the new species from Sicily (Italy) described herein differs significantly in external and aedeagal characters from all other species of the subgenus known so far.

Ochthebius (*Cobalius*) *biltoni* sp.n.

TYPE LOCALITY: Rocky shore at Cefalù, ca. 38°2'28"N 14°1'16"E, ca. 60 km E Palermo, north-western Sicily, Italy.

TYPE MATERIAL: **Holotype** ♂ (NMW – Naturhistorisches Museum Wien, Austria): "ITALY: Sicily Cefalù 10.IV.2012", "marine rockpools below old town leg. D. Bilton". **Paratypes**: 1 ♀ (Coll. Bilton, Plymouth, UK), same locality data as holotype; 4 ♀♀ (CAR-MZUR – Coll. Audisio, Museo di Zoologia, Università degli Studi di Roma "La Sapienza", Italy; NMW): Italy, Sicily, Agrigento Province, ca. 200 m W of Porto Palo, 37°34'28"N 12°54'03"E, ca. 3 m a.s.l., marine rockpools, 5.XI.2015, leg. P. Audisio & S. Sabatelli (two of these females were used for a molecular analyses (Sabatelli et al., in prep.)); 1 ♂, 1 ♀ (CAR-MZUR): Italy, Sicily, Trapani Province, ca. 5 km SE Mazara del Vallo, end of "via Azzurra" (= Azzurra road), 37°36'13"N 12°37'41"E, ca. 3 m a.s.l., marine rockpools, 8.V.2016, leg. M.A. Bologna.

DESCRIPTION: Habitus as in Fig. 1. Length: 1.60 mm (holotype), 1.66 mm (paratype); width: 0.58–0.60 mm; body form slender. Dark brown to almost black; palpi brown, antennae yellowish except brown club, legs yellowish-brown, knees and apical tip of tarsi darker brownish.

[1] The record from the Indian Ocean (Andaman Islands) (JÄCH 1989) might be based on wrong locality data.

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Fig. 1: *Ochthebius biltoni*, holotype. Scale bar: 0.5 mm.

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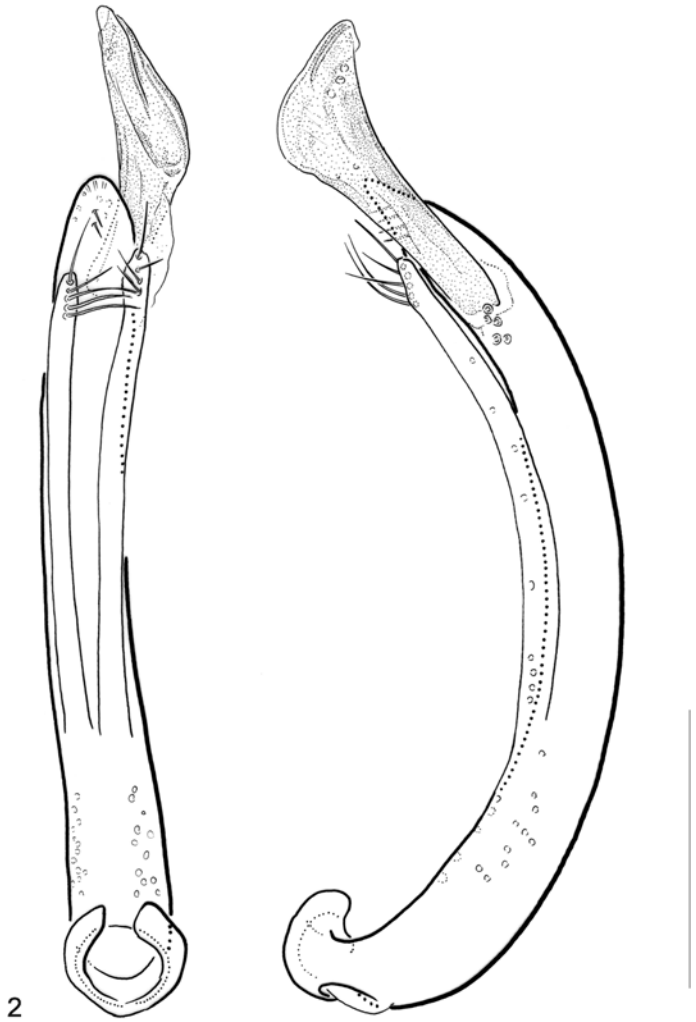

Fig. 2: Aedeagus of *Ochthebius biltoni* in ventral and lateral view. Scale bar: 0.1 mm.

Upper surface of head moderately densely covered with short pale semi-erect, distinctly curved setae. Labrum transverse, anteriorly gently rounded. Clypeus rugosely microreticulate. Fronto-clypeal suture distinct, strongly arched. Frons rugosely microreticulate, with some more or less distinct punctures, partly glabrous between punctures. Ocular grooves small, deeply impressed. Ocelli very small, closer to middle of frons than to inner margin of eyes. Eyes rather small. Maxillary palpi comparatively small.

Pronotum subcordiform, wider than long (length/width ratio: 0.8); surface covered with same type of setae as on head; anterior margin slightly emarginate; anterior angles rounded; lateral margin serrate in middle. Hyaline membrane rather narrow, confined to anterior margin and posterior margin. Surface very densely punctate; interstices very narrow, partly glabrous; disc without median groove, but with very shallow median impressions behind anterior margin and before posterior margin; lateral furrows rather shallow.

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Elytra elongate (length/width ratio: ca. 1.7), subparallel-sided, strongly convex in cross section. Disc with five regular rows of punctures between suture and inner margin of weakly developed shoulder; punctures large, deeply impressed and densely arranged, each with one rear-facing short pale semi-erect, distinctly curved seta; intervals very slightly convex and smooth. Lateral elytral gutter very narrow; lateral rim strongly serrate.

Hypomeral antennal grooves deep. Metaventral disc pubescent. Ventrites I–V pubescent, ventrites VI–VII glabrous. Legs rather short.

Aedeagus (Fig. 2): Main piece ca. 300 µm long, rather evenly curved, with two short ventral subapical setae. Distal lobe flattened, moderately long, in apical half strongly widened ventrally, apically rather acuminate. Parameres inserted near basal third; with 4–5 moderately long, subapical setae.

DIFFERENTIAL DIAGNOSIS: The new species deviates considerably from all other species of *Cobalius*: 1) small size; 2) dorsal surface more dull and rugose due to dense punctation; 3) semi-erect setae of dorsal surface stronger; 4) labrum distinctly transverse; 5) small eyes; 6) lateral margin of pronotum more regularly rounded, without subbasal excision; 7) legs rather short, with very short spines; 8) aedeagus ventrally widened and apically acuminate.

DISTRIBUTION: So far known only from Sicily, Italy.

ETYMOLOGY: Named for Prof. Dr. David T. Bilton (Plymouth University, UK), who collected the holotype.

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