

*OCYS PHOCEUS* N. SP., A NEW INTERESTING OROPHILOUS  
SPECIES OF CENTRAL GREECE  
(Coleoptera, Carabidae) (\*)

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INTRODUCTION

The genus *Ocys* Stephens, 1828 in Greece appears, at the present state, relatively poor in species. In fact, apart from *O. harpaloides* (Audinet-Serville, 1821) and *O. quinquestriatus* (Gyllenhal, 1810), both widely distributed species showing, respectively, European-Mediterranean and European chorotypes (Vigna Taglianti et al. 1993; Vigna Taglianti 2005), only two other species are known from Greece: *O. pecoudi* Colas, 1957 of Oros Taygetos and *O. rotundipennis* Marggi & Huber, 2001 of Oros Parnassos (Löbl & Smetana 2003, Marggi 2011).

In the material collected by means of traps placed in the Superficial Subterranean Habitat (or MSS) using the technique showed by Giachino & Vailati (2010), a single specimen of an orophilous *Ocys*, belonging to a new species, was collected. The description of this new species is the subject of this contribution.

**MATERIALS AND METHODS.** The detailed examination of the specimen required, for the drawing, the making of microscopic preparation of male genitalia with inclusion in Canada balsam. The drawing of genitalia was made using a camera lucida applied to a Leitz Dialux microscope; the drawing of the habitus was made using a micrometric ocular applied to a stereomicroscope Wild M3. For the measurements, the following acronyms are used: L = the overall length from the tip of mandibles to the end of elytra; PL = length of pronotum; PW = width of pronotum; EL =

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length of elytra; EW = width of elytra. The terms used for geographical names are those of Euro Atlas (1990/ 91).

### **Ocys p h o c e u s** n. sp. (figs 1-2)

DIAGNOSIS. *Ocys phoceus* n. sp. is similar, in the shape of the median lobe of the aedeagus and in the general shape of the copulatory piece, to *O. rotundipennis* Huber and Marggi, 2001, of Oros Parnassós. However, it differs from *O. rotundipennis* in the bigger size, the narrower elytra, the rounded apex of the median lobe of the aedeagus, and the different shape of the copulatory piece. It differs from the other known *Ocys* from Greece, *O. pecoudi* Colas, 1957 of the Oros Taigetos, in the smaller size, the longer and different shape of the median lobe of the aedeagus, and the different and more complex shape of the copulatory piece.

LOCUS TYPICUS. Greece, nom. Fokída, Ori Vardoússia, O. Kokkiniás, W slope, 1930 m.

TYPE SERIES. HT ♂, “Grecia, nom. Fokída, Ori Vardoússia, O. Kokkiniás, ghiaioni sul vers. W, m 1930, 22.VI.2000/13.VI.2002, P.M. Giachino & D. Vailati leg.” (Coll. Giachino).

DESCRIPTION OF THE ♂ HOLOTYPUS. Brachypterous, L = 5.32 mm. Body (fig. 1) wide and stout, slightly depigmented, entirely brownish-testaceous; glabrous and shiny integuments, with a microsculpture having an isodiametric mesh.

Head robust, but not hypertrophic, narrower than the pronotum, eyes reduced. Antennae long, reaching the anterior 3<sup>rd</sup> of the elytron when stretched backwards. Fronto-clypeal furrow distinct; anterior margin of the epistome subrectilinear. Two supraorbital setae on each side, on lines neatly divergent backwards. Mandibles simple, short and stout; anterior margin of the labrum provided with 6 anterior marginal setae.

Pronotum transverse (PW/PL = 1.32), with the maximum width at the base of the anterior third. Sides gently curved and strictly sinuate before the basal angles. Base significantly wider than the anterior edge, strongly emarginate laterally before the basal angles (fig. 1). Anterior angles rounded, slightly prominent; basal ones right and marked. Disc convex, glabrous; median groove shallow. Marginal groove wide and flattened, enlarged near the base; anterior marginal setae inserted inside the marginal groove, at the level of the base of the anterior third; basal setae inserted slightly before the posterior angles.

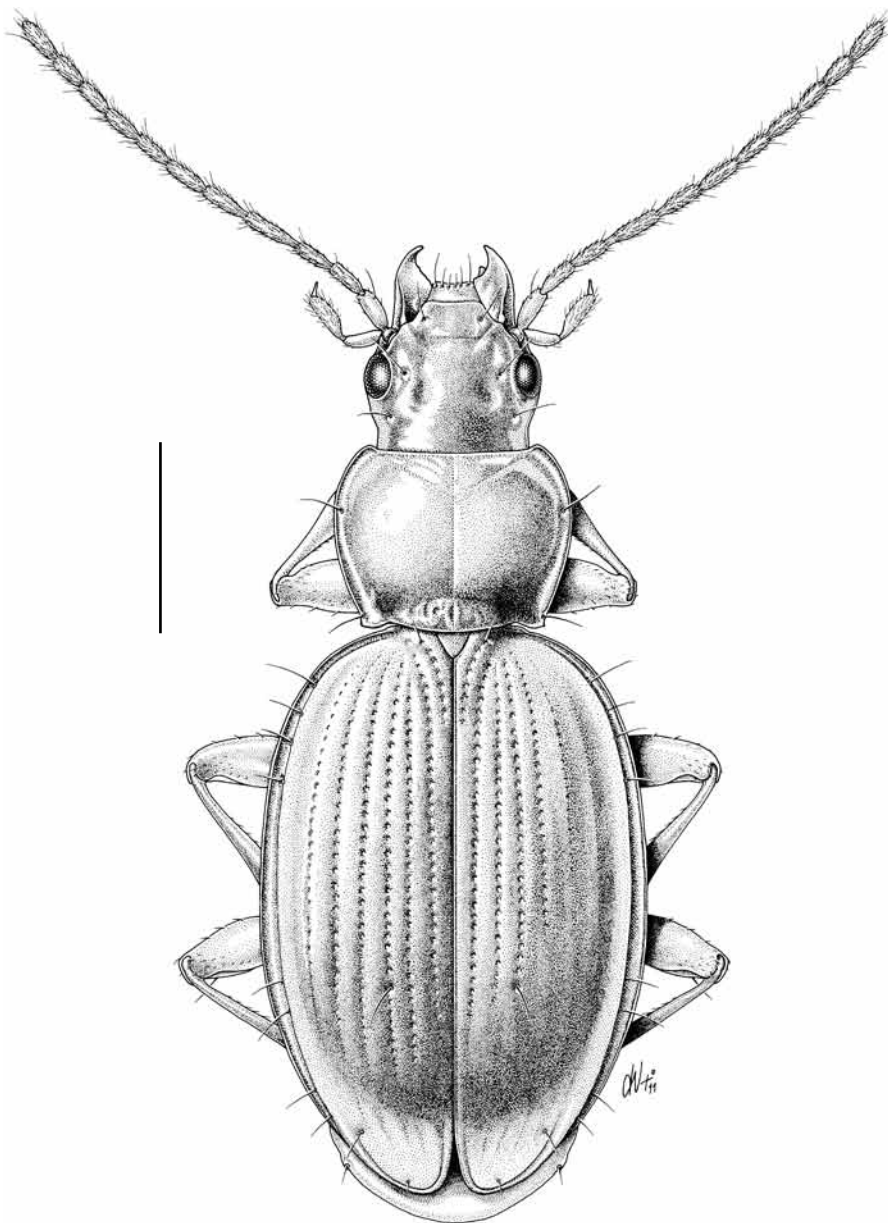


Fig. 1 – *Ocys phoceus* n. sp.: habitus of the ♂ HT. Scale bar: 1 mm.

Elytra oval, very enlarged (EL/EW = 1.45), with the maximum width at the centre, not emarginate, broadly rounded externally in the preapical area; elytral apices separately rounded. Humeri not marked, totally rounded, post-humeral margins smooth, not denticulate. Marginal groove very wide and evident up to the height of the 8<sup>th</sup> pore of the umbilicate series. Disc convex, with seven dotted striae: the first two complete, the 7<sup>th</sup> one poorly evident, the other incomplete towards the apex. Intervals flattened, apical carina well marked. Two discal setae, the first one placed on the 3<sup>rd</sup> stria well after the elytron middle, the second one (or anterior seta of the apical triangle) placed near the end of the apical carina. Umbilicate series: four setae, almost equidistant, on the humeral series, two median setae placed after the middle of the elytra and two subapical setae placed before the posterior discal seta.

Aedeagus (fig. 2) medium-sized; median lobe almost straight, not curved at the base. Apex, in lateral view, rounded and not bent downwards. Endophallus bearing a sclerified complex copulatory piece formed by overlapping folds slightly sclerotized, sometimes striped. Parameres elongated, bearing 2 apical setae each.

Female unknown.

ETYMOLOGY. From the Greek region of Phocis (currently the Prefecture of Fokída) where the type locality is situated.

DISTRIBUTION AND ECOLOGY. *O. phoceus* n. sp. is currently known only from the type locality, the W slope of O. Kokkiniás in the Vardoússia massif, where, at 1930 m a.s.l., it was collected by means of traps placed

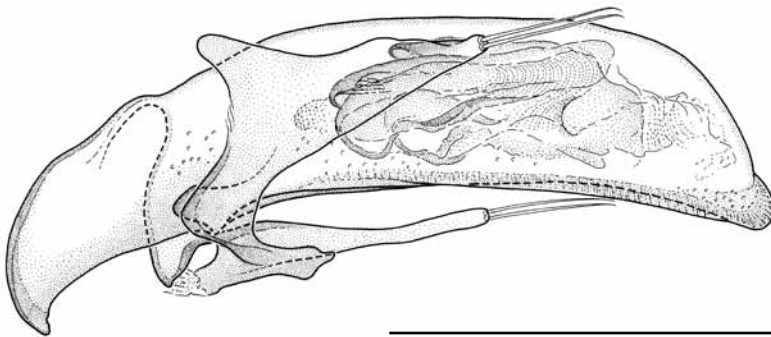


Fig. 2 – *Ocys phoceus* n. sp.: aedeagus in lateral view of the ♂ HT. Scale bar: 0.5 mm.

in the Superficial Subterranean Habitat (or MSS) using the technique showed by Giachino & Vailati (2010).

REMARKS. *O. phoceus* n. sp. is the Western vicariant of *O. rotundipennis* Marggi & Huber, 2001 of Oros Parnassós and, with *O. pecoudi* Colas, 1957 of Oros Taigetos, the third orophilous species known from Greece. As already noted in the introduction, the genus *Ocys* in Greece shows, at the moment, few species; only three orophilous species, characterized by short range distributions, are known. This situation is very unusual in the Balkan Peninsula, an area considered as a biodiversity hotspot (Gaston & David 1994; Martínez-Rica 1998), also if compared with the Italian fauna where are known 11 species (Magrini & Degiovanni 2010) and where, only between the brachypterous taxa with a short range distribution, there are five different species: *O. tassii* Vigna Taglianti, 1995, *O. pennisii* Magrini & Vanni, 1989, *O. angelae* Magrini & Vigna Taglianti, 2006, *O. monzini* Magrini & Vigna Taglianti, 2006, and *O. gubellini* Magrini & Vigna Taglianti, 2006 (Magrini & Vigna Taglianti 2006). Another macropterous species with a short range distribution (*O. berbecum* Magrini & Degiovanni, 2010) is known from Gennargentu Mt. (Sardinia). This situation is probably due to the scarcity of specialized investigations conducted so far in Greece, especially with regard to taxa, such as the orophilous species of the genus *Ocys*, characterized by a poorly known bionomy. This assumption is supported by the richness of species, found in Greece, in other groups of Carabidae Trechinae (sensu Lorenz 2005) subjected to recent investigations, such as Anillina (Giachino & Vailati 2011) or the genus *Duvalius* Delarouzée, 1859 (Casale et al. 1996a, 1996b).

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#### SUMMARY

A new species of Trechinae ground beetles (Coleoptera, Carabidae), *Ocys phoceus* n. sp., is described from Kokkiniás Mt. in the Vardoússia Mts. (Prefecture of Fokída, Greece). *Ocys phoceus* n. sp. is strictly related, and represents the Western vicariant, of *O. rotundipennis* Huber and Marggi, 2001, of the Parnassós Mt.

## RIASSUNTO

*Ocys phoceus* n. sp., una nuova interessante specie orofila della Grecia centrale (Coleoptera, Carabidae).

Gli autori descrivono *Ocys phoceus* n. sp., del monte Kokkiniás, nel massiccio montuoso del Vardoússia (Prefettura di Fokída, Grecia), specie strettamente affine a *O. rotundipennis* Huber e Marggi, 2001, del monte Parnassós, del quale rappresenta il vicariante occidentale.

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