# *Micrambe micoae* sp. n. (Coleoptera: Cryptophagidae) from the Iberian Peninsula

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Otero, J. C. & Johnson, C. 2010: *Micrambe micoae* sp. n. (Coleoptera: Cryptophagidae) from the Iberian Peninsula. — Entomol. Fennica 21: 58–60.

*Micrambe micoae* sp. n. (Coleoptera: Cryptophagidae) from the Iberian Peninsula, the Cabañeros National Park, Ciudad Real, Spain, is described. Differential diagnosis with *M. ulicis* (Stephens, 1830) is established.

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Received 15 December 2008, accepted 27 November 2009

## 1. Introduction

Cryptophagidae is a small family of beetles with 51 genera and over 600 described species worldwide (Leschen 1996). The cryptophagid fauna of the Palaearctic is currently known to contain a few hundred species, including about 19 species from the genus *Micrambe*, of which 4 species are distributed in the Iberian Peninsula.

As a result of sampling conducted in the Cabañeros National Park by the CIBIO entomology group of the University of Alicante, we found a new species of *Micrambe*, which is described in this paper.

## 2. Methods

Terminology and measurements for the new species follow Otero (2001, 2002). Structures were measured under an Olympus SZX12 stereomicroscope equipped with an image analysis system (MicroImage Version 4.0 for Windows).

A total of 49 window traps (Ranius & Jansson 2002) were used in order to collect saproxylic

beetles in Cabañeros National Park. They were placed near the trunk (< 1 m), at the hight of 1.5-2m from the ground and beside or in front of trunk cavities when possible. Ethylene glycol was used as the preservative in the traps. They were checked monthly from April 2004 to September 2005, but they were inactive during two nonsampling periods, June to September 2004 and December 2004 to February 2005.

### 3. Micrambe micoae sp. n.

*Type material.* Holotype (  $\bigcirc$  ). Cabañeros National Park, Gargantilla, Ciudad Real, Spain; 39°23' 47" N; 4°29' 14" W, altitude 816 m a.s.l.; 1.IX.2004–2.X.2004; Leg. E. Micó. Holotype in Coll. J. C. Otero, Department of Zoology and Physical Anthropology, University of Santiago de Compostela, Spain.

*Diagnosis*. Similar to *Micrambe ulicis* (Stephens) (for nomenclature see Johnson, Otero & Leschen 2007); however, there are some differences, described in Table 1.

Description. Length (L) of body: 1.8 mm.

M. micoae	M. ulicis
Eyes prominent (E = 0.95) Third antennomere equal to the second Aedeagus with two strong endophallic spines Fourth basal of the margins of aedeagus with a pronounced callosity	Eyes normal (E = 0.80) Third antennomere longer than the second Aedeagus without endophallic spines Margins of aedeagus without callosity

Table 1. Differences between *Micrambe micoae* sp. n. and *M. ulicis* Stephens. E = eccentricity (width / 0.5 \* length).

Body oval, moderately convex. Colour yellowish brown, simple pubescence (L = 49–51.88  $\mu$ m). Metathoracic wings fully developed.

Eyes (Fig. 1 a) large (L = 106.33  $\mu$ m), prominent (E = eccentricity = width / 0.5 \* L = 0.95), with facets (Fig. 1 c) of the same size as the punctures of the head (Ø = 8.23–8.84  $\mu$ m) (Fig. 1 d). Antennae (Fig. 1 b) (L = 1,400 mm.) delicate, long, surpassing the posterior margin of the pronotum. First antennomere rounded and wide; second antennomere of equal length as the first and narrower; third equal to the second; fifth antennomere is 0.8 times shorter than the third; sixth and eighth equal; the last three antennomeres forming a long club.

Pronotum (Fig. 1 a) transverse (WL = width/ length = 1.85). Large anterior callosities (L = onethird of the length of the side) and surpassing slightly the lateral margin of pronotum. Margins of the callosities well-pronounced; surface of the callosities hardly visible dorsally, pitted at centre. Callosity forms an obtuse angle posteriorly, and an angle of 25.09 ° with the axis of the body. The sides of the pronotum converge in a straight line from the callosity to the base. Basal furrow and fovea present. Straight posterior angles. Punctures (Fig. 1 e) well-marked and dense, separated by a distance lower than their diameter ( $\emptyset$  = 12.99–15.78 µm).

Elytra 2.5 times longer than pronotum and 1.2 times wider. Punctures (Fig. 1 f) as marked as those of pronotum and separated by a distance larger than their diameter ( $\emptyset = 12.99-15.78 \,\mu$ m).

Aedeagus (Fig. 1 h) (L = 0.208  $\mu$ m) with endophallic orifice visible. Margin with a wellmarked callosity in the fourth baseline. Two long rods (L = 79.05  $\mu$ m) around the endophallic orifice. Parameres (Fig. 1 g) (L = 48.47  $\mu$ m) small and very narrow. Two apical setae (L=49.63  $\mu$ m) longer than paramere. Pores without setae along the paramere and a few pores with setae in the apical side, on the line that divides it.

Distribution. Centre of the Iberian Peninsula.

*Habitat*. The park where the species was collected from consists of about 40,000 ha well-preserved Mediterranean ecosystems including a range of woodland types (Vaquero 1977). For the framework of the study of the saproxylic fauna of the park, a total of five sampling plots were established that characterized the main forest habitats of the sclerophyllus Mediterranean forest with cork oak (*Quercus suber*), deciduous forests (*Quercus pyrenaica, Quercus faginea*), as well as a typical riparian forest chararacterized by *Fraxinus angustifolia*.

Biology. Unknown.

*Etymology*. This species is named in honour of Dra Estefania Micó of the University of Alicante, Spain.

Acknowledgements. We would like to express our gratitude to the CIBIO entomology group (University of Alicante, Spain), for providing the type material which is the subject of this paper. Financial support was provided by the Spanish "Ministerio de Ciencia e Innovación" (project CGL 2008-04472) and "Generalitat Valenciana" (GV04/A576).

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