Ochthebius (Asiobates) figueroi n. sp. in the north of Spain (Col., Hydraenidae).

by J. Garrido, L. F. Valladares & J. A. Régil

Abstract: Ochthebius (Asiobates) figueroi n. sp. is described and illustrated. It is found in two localities in the Cantabrian Mountains, Northern Spain. Notes on its ecology are provided.

Key words: Ochthebius (Asiobates) n. sp. – taxonomy – Coleoptera – Hydraenidae.

Introduction

There are some 35 species of the genus Ochthebius Leach, 1815 in the Iberian Peninsula. Of these the subgenus Asiobates (Thomson, 1859) has 6 species mainly belonging to the montanus Frivaldszky and bicolon Germar groups. A new species collected in the Cantabrian Mountains is described here and it is included with the other two species of the group bicolon found in the Iberian Peninsula: Ochthebius (Asiobates) dilatatus Stephens, 1829 found all over the Iberian Peninsula and Ochthebius (Asiobates) striatus Castelnau, 1840 found in Andalusia.

Ochthebius (Asiobates) figueroi n. sp. Figs 1-8.

This species belongs to the bicolon Germar group. It is characterized as having the apical lobe of the aedeagus ending in a short low-cut tubular appendix.


Oval form in general (Figs 1,2). Body length (labrum-apex of elytra): Male (1.73 mm.). Female (1.88 mm.).
Figs 1 – 4: *Ochthebius (Asiobates) figueroi* n. sp.: 1, Habitus of the male. 2, Habitus of the female. 3, Head of male. 4, Head of female.

General colour: Dorsal and ventral surface shining black, with bronze reflections; legs, antennae and maxillary palps brown; the latter being much darker.
Head (Figs 3,4): Triangular form with a non low-cut labrum. The mandibles of the male have an outer fringe of tough spines on both sides; the female lacks these. The frontal-clipeal suture is more pronounced in the male. The fossae intraocular are large and deep in the male; in the female they are bigger, though not so pronounced.

Pronotum (Figs 5, 6):

Male: Transverse form. Discal punctuation not very compact with two pairs of fossae and a very pronounced half longitudinal rut. The front fossae are round and small and the hind ones are bigger in size, oval and divergent. The medium rut is broad and deep coming to a point at the ends. The lateral expansions of the pronotum have two deep depressions which mark out the disc. Narrow outer membrane with two hind lateral translucent expansions.

Female: Fossae and ruts wider and not as deep. Outer expansions have a rough aspect. Puntuation and microscultura are similar to those of the male.

Elytra: Very similar in both sexes. The maximum width is localized towards the middle of the length. The short juxtascutellar series between the first and second series is made up of 4-5 points.

Legs: Testaceans and slightly graciles.

Abdomen: The last tergite of the female is surrounded by testaceans laminated spines which the male does not have, a characteristic pointed out by D'ORCHYMONT (1941) in some species Asiobates and Homalocthebius.

Aedeagophore (Figs 7,8): proximal lobe normally arched and slightly sinuous in the centre of the inner face. The distal lobe has a semicircular form terminating in a short indented tubular appendix. The parameres do not reach the end of the proximal lobe.

Discussion

Ochthebius (Asiobates) figueroi n. sp., is included in the bicolon Germar group as it has smooth and shining areas between the markings of the pronotum disc. Eventhough the shape of the apical lobe of the aedeagophore may be similar to that of other species in the montanus Frivaldszy group, these areas do not exist in this one and the markings are rough and confluent. The obvious spines, which are common in males of the bicolon group (D'ORCHYMONT, 1941) almost always found in the greater part of the species of this group
Figs 5 – 6: Ochthebius (Asibates) figueroi n. sp.: 5, Pronotum of the male. 6, Pronotum of the female.
and also in *figueroi*, never appear on the outer edges of the mandibles.

With regard to its external morphology, it is classified with a group of species whose fore tarsus gradually broaden towards the base, the last right tarsomere and the presence of a strip of mandible spines.

Within these species it is closet to *Ochthebius* (*Asiobates*) *dilatatus* Stephens, because of its similar size although slightly smaller, short juxta-scutelar series (from 1 to 7 points) and with wide and slightly convex interstriae elytrals (D'Orchymont, 1937). These characteristics are not present in *Ochthebius* (*Asiobates*) *striatus* Castelnau, the other species of the *bicolon* group cited in the Iberian Peninsula.
The morphology of the apical lobe of the aedeagophore in this new species is clearly different from that of *Ochthebius (Asiobates) dilatatus*, as its lobe is tubular and lacking in apendicular structure (D'Orchymont 1940, fig. 8). On the other hand the mountain habitat associated with running waters of the *Ochthebius (Asiobates) figueroi* n.sp. contrasts with the flat stagnant environment in which *Ochthebius (Asiobates) dilatatus* in usually found.

**Ecological Notes**

This new species has been collected at the source of the river Ebro and from one of its tributaries (a stream coming from high mountains) both enclaves having abundant light and vegetation though with little water volume. Its habitat is localized in small pools or shallow stagnant banks with gravel and sand which has to be moved so that the specimens surface. They occupy altitudes of between 800 and 965 m.

*Ochthebius (Asiobates) figueroi* n.sp. has been collected together with *Ochthebius (Enicocerus) excsculptus* Germar, 1824 and *Ochthebius (Asiobates) heydeni* Kuwert, 1877.

Derivatio nominis: The especies is named after José y David Figueroa (father and son).

**Resumen**

Se describe una nueva especie del género *Ochthebius* (Coleoptera, Hydraenidae): *Ochthebius (Asiobates) figueroi* n. sp., que ha sido capturada en dos localidades de la Cordillera Cantábrica (Norte de España). Datos complementarios de índole ecológico son comentados.

**Acknowledgements**

We wish to thank Dr. Manfred Jäch of the Naturhistorisches Museum (Vienna) for his help in the confirmation of this new species and also to Dra. Carmen Elisa Sainz-Cantero of the University of Granada (Spain) for her help in developing the electronic microscope photographs.
Literature


Author's addresses:
Josefina Garrido
Juan Antonio Régil
Departamento de Biologia Animal
Facultad de Biologia
Universidad de León
24071 León (Spain)
Luis Felipe Valladares
Departamento de Ciencias y Tecnología Agrarias. Zoología.
E.U. Politécnica Agraria
Universidad de Valladolid
34071 Palencia (Spain)