

## NOTA CIENTÍFICA

## First record of *Ochthebius (Ochthebius) judemaesi* Delgado & Jäch, 2007 in Northern Africa (Coleoptera: Hydraenidae)

### Primera cita de *Ochthebius (Ochthebius) judemaesi* Delgado & Jäch, 2007 en el Norte de África (Coleoptera: Hydraenidae)

The group *Ochthebius (Ochthebius) metallescens*, proposed by ORCHYMONT (1942), currently includes more than 50 species found in small headwaters in the occidental Palearctic region. All species of this group are basically characterized by having a clearly excised labrum, the anterior angles of the pronotum never ending with a spiniform process, black colour, usually with soft metallic reflections, and male aedeagus with a short distal lobe, flat and curved (JÄCH, 1989).

In the north of Africa, this group comprises at least 8 species: *O. metallescens* Rosenhauer 1847 (BENAMAR *et al.*, 2011), *O. poweri* Rye 1869, *O. griotes* Ferro 1985, *O. kieneri* Jäch, 1999 (JÄCH, 2004) and four more still undescribed species (JÄCH, 2001). From the later, two are strongly related to *O. griotes* ("*O. cf. griotes* 1" and "*O. cf. griotes* 2" *sensu* JÄCH, 2001), one with the Iberian endemism *O. gayosoi* Jäch 2001 ("*O. sp. 4*" *sensu* JÄCH, 2001) and, finally, another is closely related to the Italian species *O. gestroi* Gridelli 1926 ("*O. sp. 3*" *sensu* JÄCH, 2001).

To all these species, we can now add *O. judemaesi* Delgado & Jäch, 2007. This species was considered endemic of the southeast of the Iberian Peninsula but our record extends its distribution area to the occidental Rif region (Morocco). Data on the new record is: Oued Beni M'Hammed, U.T.M. 30 X 306250 Y 3892767, 1274 m.a.s.l., Adelma, Rif (Morocco), 29-05-2008, 1 male.

This species was captured in a mountain stream site with a very low discharge (1.27 l/s), with a 4.6 m maximal width and 26 cm mean depth. The site has an abundant riparian vegetation cover (*Salix*, *Juglans regia*, *Acer*, *Ficus carica*, *Cannabis sativa*) and a heterogeneous substrate composed mainly by cobbles, gravels, sand, and silt. Both, the organic particulate matter and algal/moss cover were very low (5 and 10%, respectively). This observation differs whit that recorded by DELGADO & JÄCH (2007). Water temperature was 13.1°C during the sampling date, pH of 9.16, conductivity

of 463 µS/cm, and oxygen concentration of 10.65 mg/l (105.2% of saturation). Other physico-chemical parameters recorded during the sampling date were potassium (3.33 mg/l), magnesium (24 mg/l), calcium (52 mg/l), DOC (51 mg/l), chloride (8.64 mg/l), N-nitrate (3.98 mg/l) and sulphates (8.78 mg/l).

*O. judemaesi* is easily distinguished from the rest of North African species of the group by the morphology of the distal lobe of the aedeagus (DELGADO & JÄCH, 2007: Fig. 1). This lacks of the conspicuous tooth in the dorsal margin of distal lobe, characteristic of *O. gayosoi* and closely related species (JÄCH, 2001: Fig. 5), and is strongly curved like a claw, character that is not present in *O. gestroi*, *O. griotes* (JÄCH, 2001: Figs. 12 d, i) or other closely related species. Finally, the pointed and thin tip allows to separate this species from *O. metallescens*, *O. poweri* y *O. kieneri*, where it is clearly thick (JÄCH, 1999: Figs. 3, 10, 12).

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## BIBLIOGRAPHY

- BENAMAR, L., N. BENNAS & A. MILLÁN, 2011. Les coléoptères aquatiques du Parc Nacional de Tassèmtnane (Nord-Ouest du Maroc). Biodiversité, degré de vulnérabilité et état de conservation. *Boletín de la Sociedad Entomológica Aragonesa* (S.E.A.), 49: 231-242.
- DELGADO, J.A. & M.A. JÄCH, 2007. Revision of the Palearctic species of the genus *Ochthebius* Leach XXII. Description of a new species of the *O. metallescens* group from Spain (Coleoptera: Hydraenidae). *Koleopterologische Rundschau*, 77: 97-100.
- JÄCH, M.A., 1989. Revision of the Palearctic species of the genus *Ochthebius* Leach III. The *metallecsens*-group (Hydraenidae, Coleoptera). *Linzer biologische Beiträge*, 21(2): 315-390.
- JÄCH, M.A., 1999. Revision of the Palearctic species of the genus *Ochthebius* Leach XVI. Additional notes on the *metallecsens* group. *Koleopterologische Rundschau*, 69: 83-98.
- JÄCH, M.A., 2001. Revision of the Palearctic species of the genus *Ochthebius* Leach. XVIII. The European species of the *O. semiserriceus* complex (Coleoptera: Hydraenidae). *Entomological Problems*, 32(1): 45-53.
- JÄCH, M.A., 2004. Hydraenidae. In LÖBL, I. & A. SMETANA (Eds): *Catalogue of Palaearctic Coleoptera Volume 2 Hydrophiloidea – Histeroidea – Staphylinoidea*

102-122: Apollo Books, Stentrup. ORCHYMONT, A. d', 1942. Le groupe de l'*Ochthebius* (*Hymenodes*) *metallescens* Rosenhauer (Coleoptera, Palpicornia, Hydraenidae). *Bulletin du Musée royal d'Histoire naturelle de Belgique*, 18(51): 1-16.

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