

Koleopterologische Rundschau	76	75–78	Wien, Juli 2006
------------------------------	----	-------	-----------------

Limnebius hieronymi, a new species from Central Italy (Coleoptera: Hydraenidae)

O. VORST

Abstract

Limnebius hieronymi sp.n. (Coleoptera: Hydraenidae) is described from Pescasseroli, Abruzzo, Italy. The species belongs to the *L. nitidus* (MARSHAM) species group.

Key words: Coleoptera, Hydraenidae, *Limnebius*, taxonomy, new species, Europe.

Introduction

The genus *Limnebius* LEACH forms a distinctive group of small (0.8–2.8 mm) water beetles. The rather homogeneous external morphology is characterized by the continuous body outline. Several species can be reliably distinguished on the basis of the aedeagi only. Since the publication of a revision of the Palearctic species of *Limnebius* by JÄCH (1993) – treating 86 species – several additional species have been described from the western Palearctic Realm: *Limnebius aguilerai* RIBERA & MILLÁN, 1998, *L. alibei* HERNANDO, AGUILERA & RIBERA, 1999 (Morocco), *L. millani* RIBERA & HERNANDO, 1998, *L. minoricensis* JÄCH, VALLADARES & GARCÍA-AVILÉS, 1996, *L. monfortei* FRESNEDA & RIBERA, 1998, *L. ordunyai* FRESNEDA & RIBERA, 1998 (Spain). *Limnebius rishwani* MAKHAN, 1998 recently described from Turkey is a junior synonym of *L. rubropiceus* KUWERT (JÄCH 2000). A clear division in subgenera is currently lacking, but JÄCH (1993) tentatively recognized six species groups within the Palearctic fauna.

In the course of a survey of the water beetle fauna of the Abruzzi Mountains (Central Italy) a small series of an undescribed species of *Limnebius* was collected from the Fiume Sangro near Pescasseroli. The species can be readily recognized by the structure of the aedeagus. It is described below.

Acronyms:

cVU coll. O. Vorst, Utrecht
 NMW Naturhistorisches Museum Wien
 RMNH Nationaal Natuurhistorisch Museum Naturalis, Leiden

Limnebius hieronymi sp.n.

TYPE MATERIAL: **Holotype** ♂ (RMNH): “Italy: Abruzzo: Pescasseroli \ 25.V.2003, leg. O.Vorst \ UTM 33T UG9969731506, Ab65L”, “Holotypus \ *Limnebius* \ *hieronymi* Vorst” [red]. **Paratypes:** 1 ♂, 1 ♀ (RMNH), 5 ♂♂, 2 ♀♀ (cVU), 1 ♂, 1 ♀ (NMW), same locality data as holotype.

DIAGNOSIS: 1.30–1.45 mm (males), 1.40–1.60 mm (females) long, 0.75–0.80 mm wide. Black to dark brown, with elytral and particularly pronotal side and hind margins paler. Head and pronotum with rather sparse and distinctive punctation, smooth and glabrous between the punctures, pronotum with more or less distinctly developed shagreen towards the sides. Elytra with a more dense and finer punctation, shagreened entirely. Legs, antennae and palpi testaceous. Elytral apices rounded, not truncate.



Fig. 1: Type locality of *Limnebius hieronymi* sp.n., Fiume Sangro 2 km N of Pescasseroli.

Aedeagus (Fig. 2) of a rather simple type. Main piece slender, flattened, not twisted, with a few subapical setae on left side. Left paramere short, flat and distinctly separate from the main piece, provided with a single row of ca. 10 setae, and a few apical setae. Pseudoparamere absent, but ventral pleat present. Flagellum clearly visible.

TYPE LOCALITY: The type series was collected along the borders of a small mountain stream, Fiume Sangro, 2 km N of Pescasseroli (UTM UG9969731506, Euro 50), which at this point is about three m wide and 40 cm deep, at 1,180 m above sea level. The stream is heavily shaded by a corridor of bushes (*Salix* sp.). The stream bed is formed by small stones and sand, the embankment shows a mosaic of pebbles, sand and more silty pockets, and is partly covered with grasses (Fig. 1). The accompanying hydraenid fauna includes *Limnebius papposus* MULSANT, eight species of *Hydraena* KUGELANN and one species of *Ochthebius* LEACH.

DISTRIBUTION: So far only known from the type locality: Fiume Sangro, Pescasseroli, Abruzzo, Italy.

ETYMOLOGY: Named after my friend Jeroen D. Fokker, who patiently accompanied me on many collecting trips; genitive case of Hieronymus, the Latin equivalent of Jeroen.

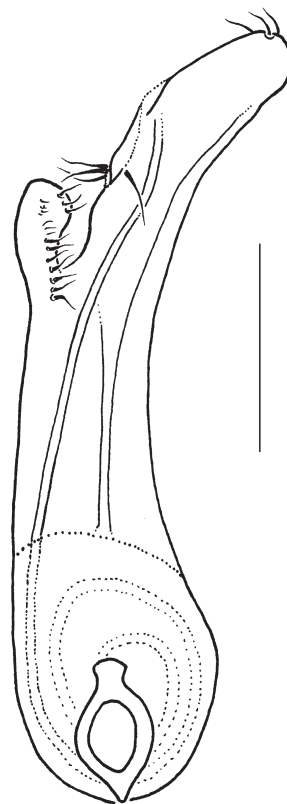


Fig. 2: Ventral aspect of the aedeagus of *Limnebius hieronymi*, holotype. Scale = 100 μ m.

Discussion

Although several Mediterranean *Limnebius* species have been described in recent years, the discovery of an undescribed species from Italy, a country with a relatively well studied water beetle fauna, came as a surprise.

Based on the structure of the aedeagus and the absence of modifications of the male ventrite VI, *Limnebius hieronymi* should be placed in the *L. nitidus* (MARSHAM) group sensu JÄCH (1993). The overall aedeagal structure points to the *L. cordobanus* d'ORCHYMONT subgroup, of which however all but one of the known representatives are provided with a pseudoparamere.

Within the *L. cordobanus* subgroup *L. hieronymi* geographically links the two disjunct distribution areas of this subgroup, that in the west is represented by *L. bacchus* BALFOUR-BROWNE (S Spain), *L. cordobanus* d'ORCHYMONT (S Spain), *L. grandicollis* WOLLASTON (Madeira), *L. ibericus* BALFOUR-BROWNE (Portugal, NW Spain) and *L. minoricensis* (Balearic Islands) and in the east by *L. corfidius* d'ORCHYMONT (Turkey) and *L. corybus* d'ORCHYMONT

(Greece, W and N Turkey) (JÄCH 1993). None of the 16 species of *Limnebius* known to occur in mainland Italy (AUDISIO et al. 1995) seem to be closely related to *L. hieronymi*. The only other Italian representatives of the *L. nitidus* group are the common and widespread *L. aluta* BEDEL and *L. nitidus*, which can be easily separated.

References

- AUDISIO, P., DE BIASE, A., FERRO, G., MASCAGNI, A., PENATI, F., PIRISINU, Q. & VIENNA, P. 1995: Coleoptera Myxophaga, Polyphaga I (Hydrophiloidea, Histeroidea). – Checklist delle specie della fauna Italiana 46: 1–19.
- FRESNEDA, J. & RIBERA, I. 1998: Revision of the *Limnebius nitidus* (Marsham) subgroup (Coleoptera: Hydraenidae), with description of two new species and comments on their phylogeny and biogeography. – Entomologica Scandinavica 29: 395–409.
- HERNANDO, C., AGUILERA P. & RIBERA, I. 1999: *Limnebius alibei* sp.n. (Coleoptera: Hydraenidae) from Morocco. – Aquatic Insects 21 (2): 141–145.
- JÄCH, M.A. 1993: Taxonomic revision of the Palearctic species of the genus *Limnebius* Leach, 1815 (Coleoptera: Hydraenidae). – Koleopterologische Rundschau 63: 99–187.
- JÄCH, M.A. 2000: On two Hydraenidae described by Makhan (1998). – Latissimus 12: 15.
- JÄCH, M.A., VALLADARES, L.F. & GARCÍA-AVILÉS, J. 1996: *Limnebius minoricensis* sp.n. (Coleoptera: Hydraenidae) from the Balearic Islands, Spain. – Aquatic Insects 18: 113–116.
- KUWERT, A. 1890: Bestimmungs-Tabellen der europäischen Coleopteren. XIX. Heft. Enthaltend die Familie der Hydrophilidae. I. Abtheilung: Hydrophilini. – Brünn: Reitter, 121 pp.
- MAKHAN, D. 1998: A new *Limnebius* and a new *Hydraena* for Turkey (Coleoptera: Hydraenidae). – Phegea 26 (4): 151–154.
- MARSHAM, T. 1802: Coleoptera Britannica, sistens Insecta Coleoptera Britanniae indigena secundum methodum Linnæanam disposita. – Londini: J. White, iii-xxxii, 548 pp., 30 pls.
- RIBERA, I. & HERNANDO, C. 1998: Description of *Limnebius millani* sp.n. (Insecta: Coleoptera: Hydraenidae) from the Sierra de Alcaraz (southeast Spain). – Annalen des Naturhistorischen Museums in Wien 100B: 199–202.
- RIBERA, I. & MILLÁN, A. 1998: *Limnebius aguilerai* sp. nov. from south Morocco (Coleoptera: Hydraenidae). – Entomological Problems 29 (2): 109–110.

Dr. Oscar VORST

National Museum of Natural History Naturalis, PO Box 9517, NL – 2300 RA Leiden, The Netherlands

ZOBODAT - www.zobodat.at

Zoologisch-Botanische Datenbank/Zoological-Botanical Database

Digitale Literatur/Digital Literature

Zeitschrift/Journal: [Koleopterologische Rundschau](#)

Jahr/Year: 2006

Band/Volume: [76_2006](#)

Autor(en)/Author(s): Vorst Oscar

Artikel/Article: [Limnebius hieronymi, a new species from Central Italy \(Coleoptera: Hydraenidae\) 75-78](#)