Ochthebius (Asiobates) remotus REITTER, 1885 (Coleoptera: Hydraenidae) in Latvia, with Selected General Information on this Species

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Abstract: Information on the hydraenid species *Ochthebius (Asiobates) remotus* REITTER, 1885 in the Baltic States is presented. Global distribution and ecological information on this poorly known species are also discussed.

Key words: *Ochthebius (Asiobates) remotus*, distribution, ecology, Latvia.

Introduction

Ochthebius (Asiobates) remotus Reitter, 1885 (Hydraenidae) is a poorly known species, with its main area of distribution in the Near East and Caucasus. Recently, some specimens of this species were caught in few sites in Latvia and N Russia. The available ecological information from N Europe is presented here, together with ecological information.

Taxonomy and morphology

Ochthebius LEACH, 1815

The subgenus *Asiobates* (= *Homalochthebius* KUWERT, 1887) of *Ochthebius* was first erected by THOMSON (1859). It differs from other subgenera by the shape of the pronotum and the form of the aedeagus. Lateral margins of the pronotum are pronouncedly excised in the basal half; with the anterior (convex) lobe always longer than the excised (concave) lobe (Jäch 1990). The parameres are distinctly divergent from main piece at their bases.

Ochthebius (A.) remotus REITTER

Orig.: *O. remotus* REITTER, 1885: 361 [*Ochthebius*]

Species have no known synonyms.

Locus typicus: Caucasus sensu lato (without precise locality).

Lectotypus: designated by Jäch (1990: 47).

O. (A.) remotus is a broad species between other *Asiobates*. Body is on average 2.20-2.50 mm long and 1.0-1.10 mm broad, pronotum and elytra are uniformly brown, head black, body surface shining and glossy, pronotum with scarce large punctures. Aedeagus rather long (about 0.35-0.41 mm), lateral sclerites not well developed, the apex of tegmen inconspicuous, apical tube widened apically.

According to Kasapoúlu and Erman (2002), Turkish specimens of *O. (A.) remotus* closely resemble the *minimus* species-group of same subgenus. Thus, internal and external morphological characters of the Turkish specimens are the same as in typical *O. remotus* as it is given above. However, they differ by their longer body size (2.30-2.50 mm) and shorter (0.35 mm) aedeagus.

Known specimens are measured as follows (specimen collected in the River Pededze in E Latvia was not measured):

1) Lectotypus: 2.20 mm long (Jäch 1990).
2) specimens from Turkey, Erzurum: 2.20 mm long (Kasapoúlu, Erman 2002).
3) specimens from Liepāja district: 2.25-2.30

mm long, 1.0-1.05 mm broad (fig. 4).
4) specimens from Rīga district, Murjāņi env.: 2.30 mm long, 1.10 mm broad (fig. 1).

Aedeagus of one specimen from Liepāja district is 0.39 mm in length, and is shown in fig. 2. Aedeagus of the from Erzurum (E Turkey) is 0.41 mm long (Kasapoúlu, Erman 2002).

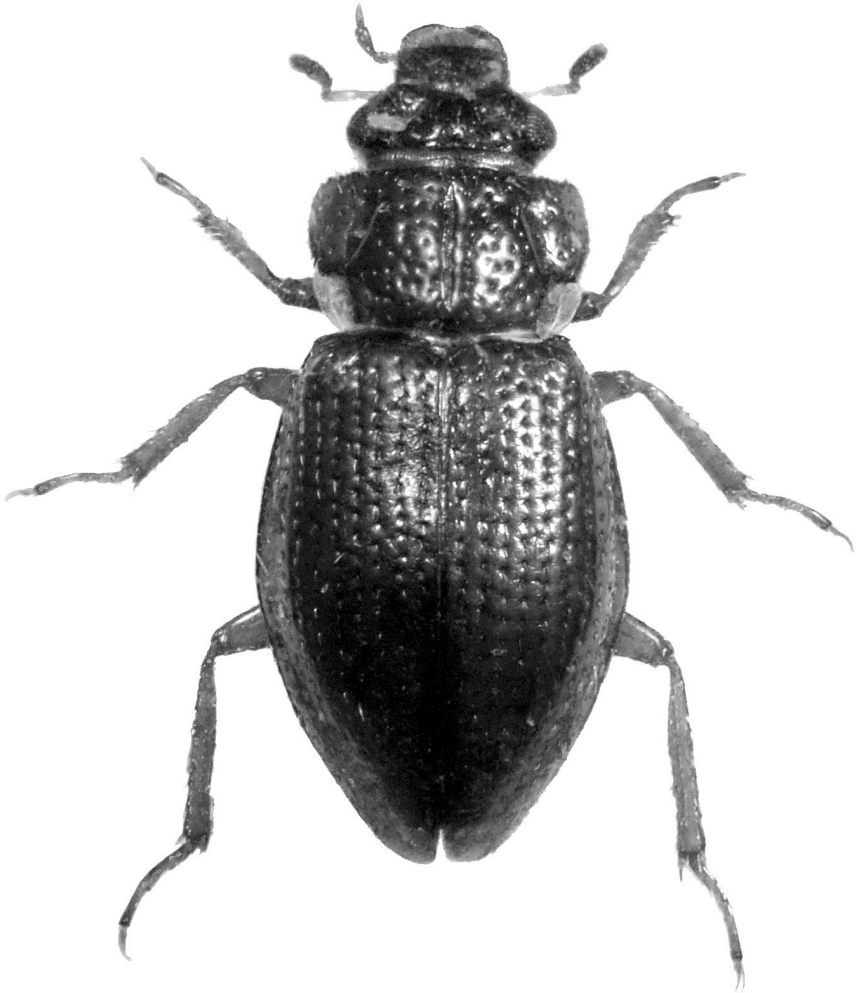

Figure 1. *Ochthebius (A.) remotus* REITTER (♀ from LV, River Durbe) (foto: Ch.Fägerstöm).

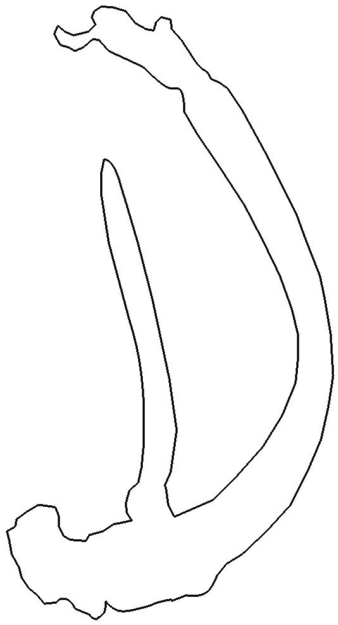

Figure 2. *Ochthebius (A.) remotus* REITTER (♂ from LV, River Durbe): aedeagus (orig. by Ch.Fägerstöm).

Distribution

O. (A.) remotus is known from the following countries, as listed in the Fauna Europaea www.faunaeur.org website:

Distribution: "Caucasus" (original description), North Caucasus (Kirejtshuk, Shatrovskiy 2001), Turkey, Latvia, North (European) Russia - Arkhangel'sk area (Jäch 1998).

The known sites in the Baltic region are (fig. 3): Latvia (Central part), Rīga district, River Gauja at the bridge between Murjāņi and Krustiņi ("Sēnīte"), 05.05.1998 (1♂) (Telnov, Kalniņš 2003); Latvia (W), Liepāja district, Pāvilosta SE env., River Durbe, 18.05.2005 (1♂, 3♀), leg. C.Fägerström (new data). Latvia (Central part), Rīga district, Gaujas NP, Sigulda, River Gauja at sleighing road, 11.06.2005 (1) running water, leg. A. van Nieuwenhuijuzen (new data); Latvia (central), Rīga district, River Gauja at the bridge between Murjāņi and Krustiņi ("Sēnīte"), 13.06.2005 (1♀), leg. J.Geijer, C.Fägerström (new data); Latvia (Central part), Rīga district, Gaujas NP, Sigulda, River Gauja at the bridge (way from Sigulda to Turaida), 13.06.2006 (1) running water, leg. A. van Nieuwenhuijuzen (new data); Latvia (E)

Gulbene district, Pededzes lejtece protected nature area, River Pededze at the bridge (way from Lubāna to Balvi), 14.06.2006 (1) running water, leg. A. van Nieuwenhuijuzen (new data). So the species is known from Latvia from 4 sites and by 9 specimens in total. The population in the River Gauja seems quite large and stable, as the species has been recorded from the more than 10 km long river section and several specimens have been collected in the area between 1998 and 2006.

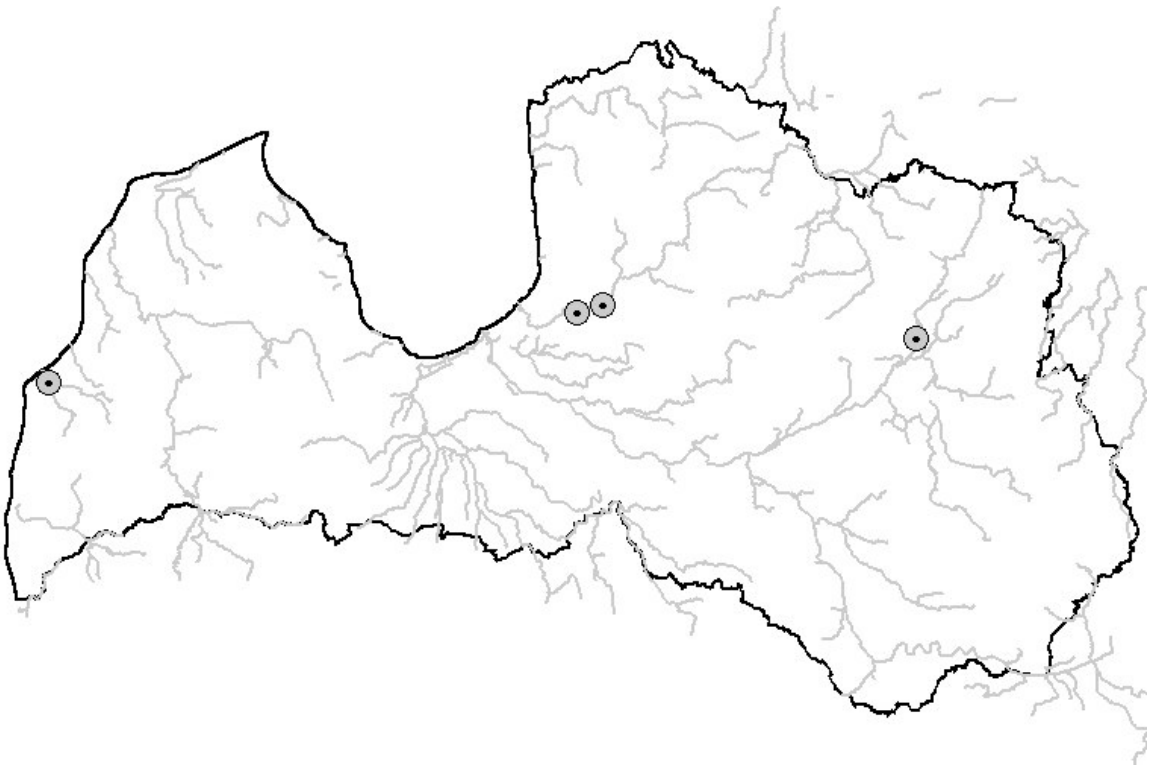

Figure 3. Map of known localities with *Ochthebius (A.) remotus* REITTER in Latvia.

Ecology

The ecology of this species is largely unknown (Jäch, pers. comm.). Some data on specimens collected in Latvia are summarized below.

The collection in the Liepāja district was made in a small marsh in the close vicinity of the Durbe River, but from which it has no connection. The small marsh, at the time of collection had water standing in an area of about 10x20 meters, and was located at the end of a meadow that was sloping towards its western side. It was located immediately next to a ridge, on which the Liepaja-Pavilosta road runs. Vegetation within the marsh indicates that it does not dry out completely later in summer, and it is therefore likely that the marsh was supplied by water from within the ridge. The ridge was covered with pine forest, giving the marsh plenty of shade. Along the sides of the marsh grew *Salix* sp., and in the shallow parts of the marsh near the meadow *Iris pseudacorus*. The bottom was covered with plenty of detritus from grass growing in the meadow, as well as leaves from *Salix* and other bushes overgrowing the marsh (figs. 4-5).

One collection from the Rīga district was made in a backwater of the River Gauja, in the outflow of a smaller stream. At the time of collection, in 2005, the water was still or very slow flowing, and the bottom was covered with fine, muddy sediments, with little detritus. Along the sides of this stream grew deciduous trees, of which some had been cut by beavers (figs. 6-7). Another collection from the same place was made directly in River Gauja (a big, rhitral river), in an area of sandy ground with a small layer of mud.

The finding in the River Pededze is from running water near a small muddy marsh. At the time of collection, in 2006, the water level was very low, water was slow flowing, and the

bottom was covered with fine, muddy sediments, with little detritus.

There are some similarities between the localities. They are both standing waters in the close vicinity of major rivers, respectively the Durbe and Gauja. There is also plenty of vegetation along the sides, as well as trees, giving the water lot of shade. The third locality seems to be a little different, as the beetles were collected directly in the river, and not in standing water.

Figure 4. Latvia, Liepāja district, the River Durbe S of Pāvilosta, ~25 m from the marsh where the specimens were collected (not the species microhabitat!) (foto: Ch.Fägerstöm).

Figure 5. Latvia, Liepāja district, the River Durbe S of Pāvilosta, the marsh where *O. (A.) remotus* was collected (the ridge in the background) (foto: Ch.Fägerstöm).

Figures 6-7. Latvia, Rīga district, River Gauja between Murjāņi and Krustiņi ("Sēnīte"), the backwater where *O. (A.) remotus* was collected in 2005 (foto: Ch.Fägerstöm).

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References

Jäch M.A., 1990. Revision of the Palearctic Species of the Genus *Ochthebius* LEACH V. The Subgenus *Asiobates* (Coleoptera:

Hydraenidae). – Koleopterologische Rundschau 60: 37–105.

Jäch M.A., 1998. Revision of the Palearctic Species of the Genus *Ochthebius* LEACH XX. The *O*. (*Asiobates*) *rugulosus* WOLLASTON Species Complex (Coleoptera: Hydraenidae). – Koleopterologische Rundschau 68: 175–187.

Kasapoúlu A., Erman O., 2002. A Faunistic Study on *Asiobates* THOMSON, 1859 (Hydraenidae, Polyphaga, Coleoptera) Species. - Turkish Journal of Zoology 26: 363-366.

Kirejtshuk A.G., Shatrovskiy A.G., 2001. Fam. Hydraenidae (keys: 270-277; checklist, 794-796; figures: 660-671). In: Tsalolikhin S.J. (ed.). Key to the Freshwater Invertebrates of Russia and Adjacent Lands. St. Petersburg. Nauka. Vol. 5: 1-836 [in Russian].

Reitter, E. 1885: Neue Coloeopteren aus Europa und den angrenzenden Ländern, mit Bemerkungen über bekannte Arten. Theil 1. - Deutsche Entomologische Zeitschrift 29: 353-392.

Telnov D., Kalniņš M., 2003. To the Knowledge of Latvian Coleoptera. 3. – Latvijas entomologs 40: 21-33.

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