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Helophorus schoedli sp.n., a further American species with nine-segmented antennae (Coleoptera: Helophoridae)

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Abstract

Helophorus (*Rhopalohelophorus*) *schoedli* sp.n. (Coleoptera: Hydraenidae) is described from Ithaca, New York. It was mentioned by d'ORCHYMONT (1945) as a male "*H. granularis* Richmond" (*H. orientalis* MOTSCHULSKY).

Key words: Coleoptera, Helophoridae, *Helophorus*, new species, America.

Introduction

In his discussion of North American *Helophorus*, d'ORCHYMONT (1945) mentioned the species then known as "*H. granularis* sensu RICHMOND", and stated that his material comprised 30 specimens, 29 females and one male which he had taken in Fall Creek, Ithaca, New York. He questioned whether Richmond's *H. granularis* was the same as the true Linnaean species. Later, ANGUS (1970) showed that this species is in fact *H. orientalis* MOTSCHULSKY, widely distributed over Siberia and North America, and parthenogenetic over most of its range. The only males known to me and to SMETANA (1985) were from the Rocky Mountains. ANGUS (1992) recorded male *H. orientalis* from the Vladivostok area of the Russian Far East, and reported that d'Orchymont's single Ithaca male was a different, unknown, species. This species is here described as *H. schoedli* sp.n.

Helophorus (*Rhopalohelophorus*) *schoedli* sp.n.

Type locality: USA., New York State, Ithaca, lower course of Fall Creek, Stewart Park.

Type material: **Holotype** ♂: "U.S.A (N.Y.). Ithaca 20.viii.1928. Stat. 11. A. d'Orchymont", "Ant 9-art. Comparable à ♀ Canada Peschet leg. *H. granularis* L. det. d'Orch.". Deposited in the Musée Royal d'Histoire Naturelle de Belgique, Brussels.

Head and pronotum: Fig. 1; antenna: Fig. 2; maxillary palp: Fig. 3; aedeagophore: Fig. 4.

Head pitchy with green-bronze reflections, Y-groove with stem narrow, parallel-sided, deep, arms narrower; surface closely granulate; granules flattened, with small median punctures. Antennae pale brown, 9-segmented, with three small segments between pedicel and cupule (Fig. 2). Maxillary palpi (Fig. 3) pale brown, rather short, apical segment clearly asymmetrical.

Pronotum pitchy bronze, marginal grooves bronze-brown. Moderately and evenly arched, widest just in front of middle; sides evenly curved to front and hind angles. Intervals granulate as head; granules flattened over middle third of internal intervals. Grooves narrow; mid-groove straight, tapered anteriorly, open posteriorly; submedians angled outwards medially, reflexed (sinuate) a quarter of the way from each end; submarginals with a pit a quarter of the way from base,

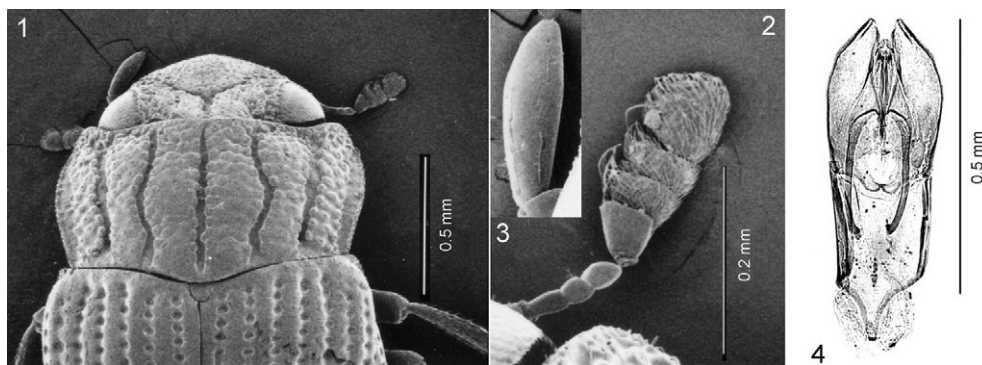
otherwise slightly wider than medians, more or less straight, slightly divergent anteriorly; marginals wider over most of length of pronotum, effaced a quarter of the way from front angles, narrowed at base. Raised lateral margin very fine, weakly serrate, same colour as marginal grooves.

Elytra mid brown, fairly strongly striate, interstices convex, slightly wider than striae punctures. Elytra with a V-shaped impression over suture and interstices 1–4, a third of the way from base. Ground colour dull brown, with a darker Λ -shaped mark two thirds of the way from base. Elytral flanks only narrowly visible from below. Widest part of elytra opposite Λ -mark, apex tapered.

Legs fairly short, same colour as elytra.

Aedeagophore (Fig. 4) pale brown, about 0.6 mm long; parameres pointed apically, with a subapical sinuation on outer margin. Struts fairly long.

Etymology. The species is named in honour of the late Dr. Stefan Schödl of the Naturhistorisches Museum Wien, Austria.



Figs. 1–4: *Helophorus schoedli* sp.n.; 1) head and pronotum, scanning electron micrograph (SEM), 2) antenna, SEM, 3) maxillary palp, SEM, 4) aedeagophore, photomicrograph.

Discussion

The recognition of *H. schoedli* brings the number of Nearctic species of *Helophorus*, subgenera *Rhopalohelophorus* and *Atractohelophorus*, with nine-segmented antennae, to six. Apart from *H. schoedli* only one of these, *H. lineatus* SAY, is exclusively Nearctic. All other Nearctic species of these subgenera have eight-segmented antennae, with only two small segments between the pedicel and the cupule. This species is known only from the holotype, and is very distinct from any known North American species because of the nine-segmented antennae and the aedeagophore. At a glance it is more similar to Palearctic species such as *H. flavipes* F. and *H. discrepans* REY, but in both these species the aedeagal struts are distinctly longer. Otherwise the aedeagophore could be compared with *H. (Atractohelophorus) korotyaevi* ANGUS and *H. (A.) lewisi* ANGUS, but in these species the aedeagal struts are shorter and the apical segment of the maxillary palpi is nearly symmetrical oval. Thus, although the belated recognition of an old specimen, apparently from a well-studied area, as a new species, invites some doubt about the labelling, there is at present no strong argument for regarding the data as wrong. However, this species should be borne in mind if similar material is encountered in the Palearctic.

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