

Article

First record of *Hypophyes hyalinus* (Zherichin, 1972) (Coleoptera, Brentidae) from Altaiskii Krai, Western Siberia

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Abstract

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The first record of *Hypophyes hyalinus* (Zherichin, 1972) (Brentidae: Nanophyinae: Corimaliini) from Altaiskii Krai is given. It is the most north-eastern find of this species in Siberia. The distribution map, illustrations and redescription of *Hypophyes hyalinus* are presented.

Key words: Biodiversity, Curculionoidea, Nanophyinae, Corimaliini, weevil, fauna, new findings, Siberia.

Introduction

The genus *Hypophyes* Reitter, 1916 includes six species distributed in the Western and Central Palaearctic (Alonso-Zarazaga et al. 2017; Košťál 2017). This genus differs from the genus *Corimalia* Gozis, 1885 in the four-segmented antennal funicle (Alonso-Zarazaga 1989). The tribe Corimaliini is presented by two species in Siberia (Zherikhin 1981; Krivets and Korotyaev 1998; Legalov 2020). The distribution of *Hypophyes hyalinus* (Zherichin, 1972) from Russia was considered in Korotyaev et al. (1993), Krivets and Korotyaev (1998), Makarov et al. (2009), Arzanov (2013, 2018), Ismailova et al. (2015), Sazhnev et al. (2019), Legalov (2020, 2021) and Dedyukhin (2021).

It is the first record of *Hypophyes hyalinus* from Altaiskii Krai and the most north-eastern find of this species in Siberia.

Material and methods

Studied specimens are kept in the ISEA – Institute of Systematics and Ecology of Animals (Russia: Novosibirsk) and CSRN – the private collection of S.V. Reshetnikov (Novosibirsk).

Descriptions and body measuring were performed using a Zeiss Stemi 2000-C dissecting stereomicroscope. The photographs were taken with a camera Fujifilm X-T10.

FIRST RECORD HYPOPHYES HYALINUS FROM ALTAISKII KRAI

The terminology of weevil body is according to Lawrence et al. (2010) and Alonso-Zarazaga (1989). The systematics of studied taxa are based on Alonso-Zarazaga et al. (2017) and Legalov (2018).

Systematics

Insecta: Coleoptera: Curculionoidea: Brentidae: Nanophyinae: Corimaliini

Genus: Hypophyes Reitter, 1916

Species: *Hypophyes hyalinus* (Zherichin, 1972) (Figs. 1, 3)

Material: RUSSIA, 38 ex. (ISEA), 13 ex. (CSRN), Altaiskii Krai, Klyuchevsky District, 4.2 km NW of Petukhi, S shore of Petukhovo lake, 52.25002° N, 79.48652° E, on *Tamarix gracilis*, 17.VI.2022, A. & V. Legalov, S. Reshetnikov; 8 ex. (ISEA), Altaiskii Krai, Kulundinsky District, 10 km SW of Orlean, S shore of Dzhira lake, 52.65980° N, 79.43857° E, on *Tamarix gracilis*, 17.VI.2022, A. & V. Legalov, S. Reshetnikov.

Description. Length of body: 1.5-2.0 mm. Body yellow, covered with narrow piliform white appressed scales. Rostrum, head, pronotum, antennal club, some scales on elytra and legs, apices of tibiae and tarsi brownish. Metaventrite, femora teeth, and tarsal claws black.

Male: Rostrum slightly curved, subcylindrical, apically subglabrous, punctuate-carinate in middle and at base, about 6.7 times as long as wide at apex and in middle, slightly longer than pronotum or equal to it. Antennal scrobes shallow. Forehead flattened, very narrow. Eyes large, rounded, not protruding from contour of head. Vertex densely punctate. Temples shorter than eye. Antennae geniculate, inserted laterally in middle of rostrum. Funicle 4-segmented. Antennomere 1 elongate-trapezoidal, curved in apical one third, about 6.0-7.0 times as long as wide at apex, reaching eye. Antennomeres 2-4 conical. Antennomere 2 about two as long as wide, about 0.4 times as long as and slightly wider than antennomere 1. Antennomere 3 about 1.6 times as long as wide at apex, about 0.6 times as long as and about 0.7 times as narrow as antennomere 2. Antennomere 4 about 1.4 times as long as wide at apex, slightly shorter and subequal in width to antennomere 4. Antennomere 5 subequal in length and width, slightly shorter and wider than antennomere 4. Club compact, about 2.7 times as long as wide in middle, slightly shorter than antennomeres 2-5 combined. Pronotum almost campaniform, slightly longer than wide at apex, about 0.8 times as long as wide in middle and about 0.7 times as long as wide at base. Sides almost straight. Disk densely punctate. Greatest width at base. Base of pronotum with granulate carina. Scutellum very small, concealed. Elytra suboval, strongly convex, about 1.7 times as long as base width, about 1.3 times as long as wide in middle, about 2.2 times as long as wide in apical quarter, about 2.9-3.0 times as long as pronotum. Greatest width in middle. Base of elytra with granulate carina. Humeri flattened. Striae distinct. Interstriae wide, slightly convex, densely punctate. Pre- and postcoxal portions of prosternum short. Pro- and mesocoxal cavities rounded. Procoxal cavities contiguous. Mesocoxal cavities separated. Metacoxal cavities transversely extended. Metaventrite shorter than metacoxa. Andomen convex. Ventrites 1 and 2 fused. Ventrite 1 shorter than metacoxal length. Ventrite 2 slightly shorter than ventrite 1. Ventrite 3 about 0.3 times as long as ventrite 2. Ventrites 4 and 5 fused. Ventrite 4 about two times as long as ventrite 3. Ventrite 5 slightly longer than ventrite 4. Legs long. Procoxae conical. Meso- and metacoxae convex. Trochanters elongate. Femora slightly clavate, separated from coxae, with small tooth. Tibiae almost straight, rather thick, with apical thickened setae. Tarsi long, with sparse erect setae dorsally. Tarsomeres 1 and 2 elongate-conical. Tarsomere 3 small, bilobed. Tarsomere 5 long-conical. Claws relatively large, free, without teeth.

Female: Rostrum thinner and longer, about 7.7 times as long as wide at apex and in middle, about 1.4 times as long as pronotum. Antennomere 1 about 6.6 times as long as wide at apex. Antennomere 2 about 1.8 times as long as wide, 0.3 times as long as and wider than antennomere 1. Antennomere 3 about 2.0 times as long as wide at apex, shorter and about 0.6 times as narrow as antennomere 2. Antennomere 4 about 1.5 times as long as wide at apex, slightly shorter and wider than antennomere 4. Antennomere 5 subequal in length and width, about 0.8 times as long as and about 1.2 times as wide as antennomere 4. Club about 3.1 times as long as wide in middle, slightly longer than antennomeres 2-5 combined. Pronotum slightly longer than wide at apex, about 0.7 times as long as wide in middle and about 0.6 times as long as wide at base. Elytra about 1.6 times as long as base width, about 1.3 times as long as wide in middle, about 1.7 times as long as wide in apical quarter, about 3.2 times as long as pronotum. Ventrite 1 subequal in length to

metacoxal length. Ventrite 2 subequal in length to ventrite 1. Ventrite 3 about 0.4 times as long as ventrite 2. Ventrite 4 about 1.5 times as long as ventrite 3. Ventrite 5 about 1.8 times as long as ventrite 4.

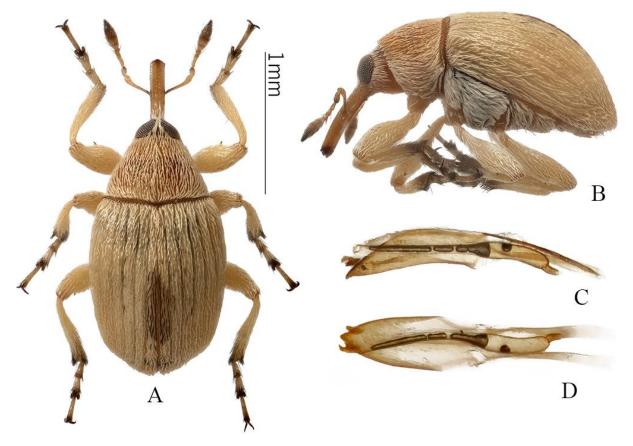


Figure 1. *Hypophyes hyalinus*, Altaiskii Krai: A – habitus, dorsal view, B – habitus, lateral view, C – aedeagus, lateral view, D – aedeagus, dorsal view.



Figure 2. Host plant *Tamarix gracilis* on shore of Petukhovo lake.



Figure 3. Hypophyes hyalinus on Tamarix gracilis.

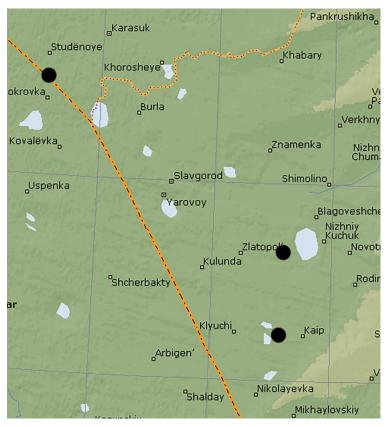


Figure 4. Distribution of *Hypophyes hyalinus* in Siberia.

Remarks. *Hypophyes hyalinus* was collected from *Tamarix gracilis* Willd. (fig. 2). Many specimens were teneral. The outlet holes from the fruits of *Tamarix* were found.

This species was described from south-western Mongolia (Zherikhin 1972).

Distribution. Southeast of the European part of Russia (Astrakhan, Volgograd, Saratov regions, Republic of Kalmykia), Eastern Caucasus (Republic of Dagestan), Southern Ural (Orenburg Region), South-Western Siberia (Novosibirsk Region and Altaiskii Krai (fig. 4)), Kazakhstan (West Kazakhstan Region, Mangystau Region, Kyzylorda Region, Karaganda Region, Almaty Region), Tajikistan, Turkmenistan, China (Gansu) and Mongolia (Khovd Province, Govi-Altai Province, Övörkhangai Province, Bayankhongor Province) (fig. 5).



Figure 5. Distribution of *Hypophyes hyalinus*.

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FIRST RECORD HYPOPHYES HYALINUS FROM ALTAISKII KRAI

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