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A new species of the genus *Coryphium* Stephens, 1834 (Coleoptera: Staphylinidae: Omaliinae: Coryphiini) from Eastern Siberia

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Coryphium enushchenkoi sp. n. from Eastern Siberia (North Cisbaikalia, Baikalskiy Mts.) is described and illustrated.

Key words: Coleoptera, Staphylinidae, Omaliinae, Coryphiini, Coryphium, Palaearctic, Baikal region, taxonomy, new species.

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INTRODUCTION

The genus *Coryphium* Stephens, 1834 of the tribe Coryphiini currently includes 21 species and is distributed in the Palaearctic and Nearctic regions (Zerche, 1990, 1993; Herman, 2001; Smetana, 2004:254; Li & al., 2007:89).

The species of the genus in Siberia are poorly known. Presently, only one species, *Coryphium nataliae* Shavrin, 2000, was described from South Cisbaikalia (Khamar-Daban Mts.).

During recent field trips (July 2010) in North Cisbaikalia with my colleagues from the Limnological Institute of Irkutsk, me and Dr. Ilya Enushchenko found a new species of the genus *Coryphium* at high altitude at the Baikalskiy Mountains. The description of this second species for the fauna of Siberia is presented in this paper.

MATERIAL AND METHODS

The examined material is deposited in the private collection of the author and in the beetle collection of the Institute of Systematic Biology (DUBC, Daugavpils, Latvia).

The following measurements are used in this paper and are abbreviated as follows: WH - maximum width of head including eyes; WP - maximal width of pronotum; LA - length of antenna; LE - longitudinal length of eye; LT - length of temple (from posterior margin of eye to neck constriction); LH - length of head (from base of labrum to neck constriction along the head midline); LP - length of pronotum; LES - sutural length of elytra (length of elytra from apex of scutellum to posterior margin of sutural angle); WE - maximal width of elytra; WA - width of segment IV of abdomen; LAE - length of aedeagus.

The measurements of LA and LAE were made for the holotype only. All measurements of the entire lengths of the beetles are given in millimeters. Measurements of body parts were taken with a stereoscopic microscope using an ocular

micrometer. The length of the body was measured from the base of the labrum to the apex of the abdomen. Preparation techniques for the genitalia and terminalia follows the procedure described by Makranczy (2006).

The morphological studies were carried out using *Zeiss Discovery V8* and *Zeiss Discovery V12* stereomicroscopes. All figures were enhanced using Adobe Photoshop software.

RESULTS

Coryphium enushchenkoi **Shavrin, sp.n.**
(Figs. 1-9)

Type material. Holotype: M, East Siberia, Republic of Buryatia, Baikalskiy Mts., upper reach of Kurkula river, Gitara lake, near waterfalls, 21-25.07.2010, A. Shavrin (DUBC).

Paratypes: 2 M, 3 F, same data as the holotype except 1 M collected by I. Enushchenko (CS, DUBC).

Description. Measurements (holotype): WH: 0.54; LH: 0.4; LA: 1.1; LE: 0.16; LT: 0.08; LP: 0.4; WP: 0.54; LES: 0.9; WE: 0.82; WA: 0.88; LAE: 0.5. Body length: 2.6–2.9 (holotype – 2.8).

Body (Fig. 1) glossy, black; ocelli and legs dark brown, mandibulae yellowish brown; covered by fine white setae.

Head as wide as pronotum, 1.3 times wider than long, gradually convex posteriorly. Eyes large and convex, twice longer than temples (in lateral view). Temples slightly narrowing to neck constriction. Clypeus not punctate, smooth, glossy; anterior margin of clypeus straight. Ocelli distinct, distance between ocelli 2.5 times as the distance between ocellus and posterior margin of eye. Punctation relatively coarse and dense; interstices 1.5 times as broad as diameter of a puncture, without microsculpture, glossy. Antennae (Fig. 2) short, reaching the anterior fourth of elytra; segment I twice as long as wide, segments IV–V and VII–X with identical proportions, segments VI–X slightly transverse. Length/width of antennomeres are: I: 0.12 × 0.06; II: 0.08 × 0.05; III: 0.09 × 0.04; IV–V: 0.08 × 0.04; VI: 0.06 × 0.06; VII–X: 0.08 × 0.06; XI: 0.14 × 0.06. Labrum (Fig. 3) broadly transverse, anterior margin in the middle with indistinct emargination, and with 14 sensillae. Mandibulae strongly incurved, with acute tooth in the middle of inner side. Maxilla as in Fig. 4. Maxillary palpi long; length/width of II-IV segments are: II: 0.12 × 0.04; III: 0.14 × 0.06; IV: 0.03 × 0.01. Mentum (Fig. 5) transverse. Labial palpi (Fig.5) short; length/width of segments are: I: 0.04 × 0.02; II: 0.02 × 0.01; III: 0.01 × 0.008.

Pronotum transverse, convex, 1.35 times wider than long, wider in anterior third; lateral margins slightly bordered; pubescence similar to those of head; interstices between punctures without microsculpture, glossy.

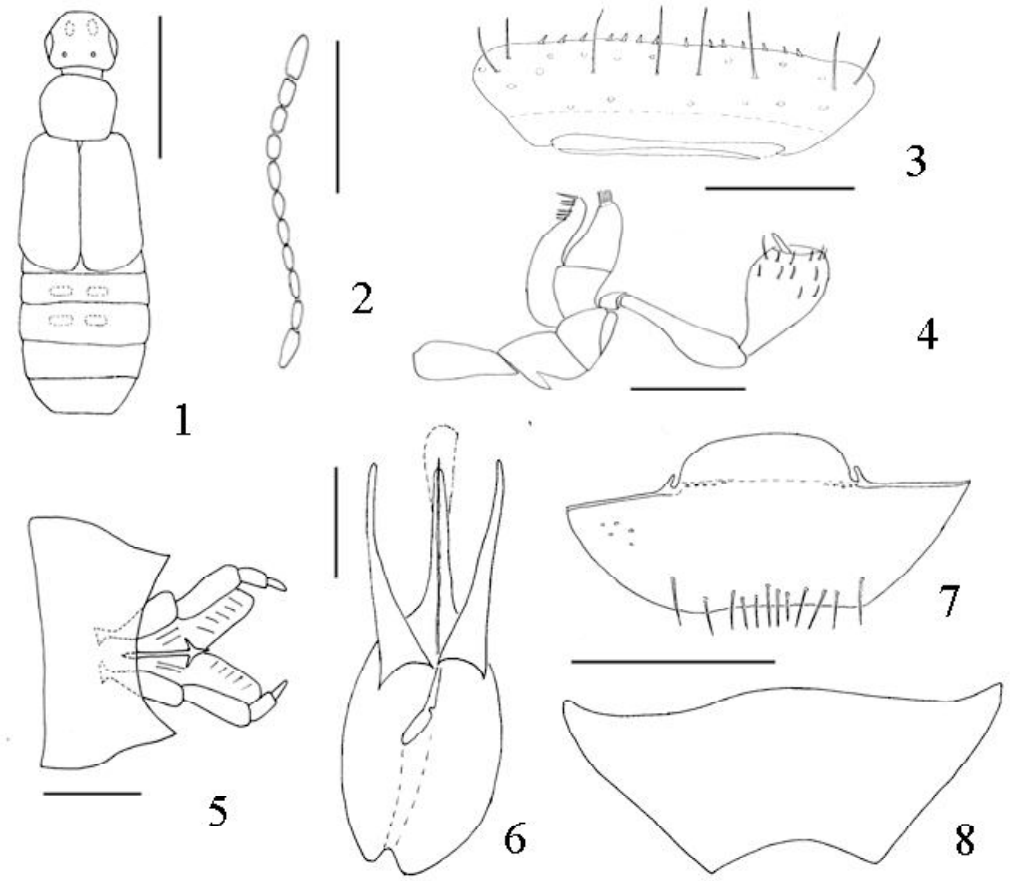
Scutellum short, triangular, without punctures and microsculpture, glossy.

Elytra large, long, about parallel-sided, slightly flattened, approximately as long as wide, approximately twice longer and 1.5 times wider than pronotum. Punctation larger, coarser than those on pronotum, distance between punctures as diameter of a puncture.

Abdomen appoximately as wide as width of elytra; slightly widened from IV to V tergite, and gradually tapered toward apex; tergites IV and V with a pair of tomentose spots; without distinct punctation, with isodiametric microsculpture.

Male. Tarsomeres of protarsi dilated; pronotum relatively wider. Aedeagus (Fig. 6) symmetrical, with large elongate basal part, median lobe very thin, tapering and slightly rounded apically; parameres elongate and narrow, reaching apex of aedeagus; internal sac with elongate sclerotized structure. Sternite VIII (Fig. 7) with apical emargination. Tergite VIII as in Fig. 8.

Female. Tarsomeres of protarsi less dilated; pronotum narrower; sternite VIII without apical emargination, straight.



Figs. 1-8. *Coryphium enushchenkoi* Shavrin, sp.n. (holotype, male). 1 – shape of body; 2 – antenna; 3 – labrum; 4 – maxilla; 5 – mentum and labial palpi; 6 – aedeagus; 7 – sternite VIII, 8 – tergite VIII. Scale bar: 1.0 mm (Fig. 1), 0.5 mm (Fig. 2), 0.1 mm (Figs. 3-6), 0.3 mm (Figs. 7-8).

Comparative notes. Based on the type of the aedeagus, the new species is closely related to *C. nataliae* Shavrin (Eastern Siberia, Khamar-Daban Mts.), from which it differs by slender and narrower body, longer elytra, smaller punctation, shape and proportions of antennae, morphology of mouthparts, and shape of aedeagus (aedeagus of the new species is narrower, with apex and parameres more slender).

Remarks. Based on the morphology of the aedeagus and the shape of the labium *G. enushchenkoi* sp.n. belongs to the *atratum* species group, which was defined by Zerche (1990).

Bionomics. The type specimens were collected at high altitude (hH”1400 m) near waterfalls - Nitka, Bolshoy Kaskad and a small lake connected with the Gitara lake by a stream. The specimens were found under small stones near the water together with Aleocharinae (Oxypodini), *Thinobius* sp., *Ochthephilus* sp., *Bembidion* spp (type locality as in Fig. 9).

Etymology. The new species is dedicated to my friend and colleague, the biologist Dr. I.V. Enushchenko (Russia, Irkutsk), who collected some type specimens and helped me during the field trips in the Baikal region (summer 2008-2010).

Fig. 9. Type locality of *Coryphium enushchenkoi* Shavrin, sp.n.

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