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

**Alexey Shavrin**


*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.

**Alexey Shavrin. Institute of Systematic Biology, Daugavpils University, Vienibas 13, Daugavpils, LV-5401, Latvia; ashavrin@hotmail.com**

**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).
Temple 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.
Punctuation 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. Punctuation larger, coarser than
those on pronotum, distance between punctures
as diameter of a puncture.

Abdomen approximately as wide as width of
eytra; slightly widened from IV to V tergite, and
gradually tapered toward apex; tergites IV and V
with a pair of tomentose spots; without distinct
punctuation, 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
e margination. Tergite VIII as in Fig. 8.

Female. Tarsomeres of protarsi less dilated;
pronotum narrower; sternite VIII without apical
e margination, straight.
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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).
ACKNOWLEDGEMENTS

I wish to thank my friend and colleague I.V. Enushchenko (Irkutsk, Russia) for help during entomological trips in Siberia. I thank K.E. Vershinin, A.P. Fedotov, E.Yu. Osipov (all from Limnological Institute, Irkutsk, Russia) and V.V. Isaev (Vitimskiy nature reserve, Bodaibo, Russia) for organizing the field trip and friendly atmosphere during the field works in North Cisbaikalia. I am grateful to my colleague J. Klimaszewski (Québec, Canada) for correction of the English text of the manuscript.

The research was conducted within the framework of the project of European Social Fund (No 2009/0206/1DP/1.1.1.2.0/09/APIA/VIAA/010).

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Received: 18.10.2010.
Accepted: 15.12.2010.