Deliphrosoma Reitter, 1909 – a new genus for the fauna of Middle Asia (Coleoptera: Staphylinidae: Omaliinae) and the description of two new species

A.V. Shavrin

Institute of Systematic Biology, Daugavpils University, Vienibas, 13, Daugavpils LV-5401 Latvia. E-mail: ashavrin@hotmail.com

Ключевые слова: Coleoptera, Staphylinidae, Omaliinae, Key words: Coleoptera, Staphylinidae, Omaliinae, Deliphrosoma, Middle Asia, Kazakhstan, Kirgizia, new species.

Abstract. Two new species of the genus Deliphrosoma Reitter, 1909 are described from Middle Asia: D. ivanovi sp. n. (Karatau Mt., Kazakhstan) and D. kirgizica sp. n. (Gissar, Kirgizia).

Introduction


In the present paper, I describe two new species from Kazakhstan and Kirgizia and provide material on one unnamed species from Tajikistan. New data significantly extend the distribution of the genus to the east (almost by 1000 km) and demonstrate our poor knowledge of the Asian Omaliinae fauna.

Material and methods

The examined material was deposited in: ZMM – Zoological Museum of Moscow University, Moscow, Russia (A.A. Gusakov); ZIN – Zoological Institute, St.-Petersburg, Russia (S.V. Andreeva, B.A. Korotyaev).

Morphological studies were carried out using Zeiss Discovery V8 and V12 stereomicroscopes. A digital camera (Sony Alpha DSLR-A300) was used for photographs and all figures were enhanced using Adobe Photoshop software.

The measurements are given in mm and abbreviated as follows: WH – maximum width of head including eyes; LH – length of head (from base of labrum to neck constriction along the head midline); LA – length of antenna; LE – longitudinal length of eye; LT – length of temple (from posterior margin of eye to neck constriction); LP – length of pronotum; WP – maximal width of pronotum; SLE – 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; L Aed – length of aedeagus; TL – total length (from the base of labrum to the apex of abdomen).

Deliphrosoma ivanovi sp. n.

(FIG. 1–2, 5–6)

Material. Holotype: 1♂ «Karatau Mt., Zhamanty River», N43º52’05” E68º11’55”, [h=]731 m, 10.05.2010, Ivanov A.V.» (ZMM).

Description. Measurements: WH: 0.55; LH: 0.3; LA: 0.75; LE: 0.12; LT: 0.075; LP: 0.5; WP: 0.8 ; SLE: 1.17; WE: 1.05; WA: 1.05; L Aed: 0.37. TL: 2.8.

Forebody as in Fig. 1. Body dark brown; head and antennae black; ocelli, mouthparts, femur and sides of pronotum brown; apex of femur, base of tibia and tarsi yellowish brown. Eyes large, weakly convex, 1.6 times as long as temples. Ocelli relatively large, distance between ocelli little more than the distance between ocellus and posterior margin of eye. Punctuation approximately evenly spaced, deeper and coarser on ocular ridges. Interstices as wide as half to one puncture diameter; in anterior and in median part without microsculpture, glossy, in posterior part behind the eyes and between ocelli with well visible coarse microsculpture. Antenna as in Fig. 2. Length/width of antennal segments: I: 0.1 x 0.07; II: 0.08 x 0.056; III: 0.08 x 0.04; IV–VII: 0.06 x 0.04; VIII–X: 0.05 x 0.06; XI: 0.1 x 0.06. Pronotum 1.4 times wider than head, distinctly expanded in medial part, gradually tapering posteriorly. Medial impressions at the sides of pronotum relatively deep; disc of pronotum with indistinct impression in anterior part and with two weak oval impressions in posterior third. Surface of pronotum is covered by sparse punctuation, interstices between punctures with coarse microsculpture except anterior flattened margins of pronotum. Scutellum large, triangular, with small irregular scattered punctures, without microsculpture. Elytra long, wider and more than twice as long as pronotum, slightly expanded posteriorly. Punctuation significantly denser and deeper than that of pronotum, in median part along suture, punctures coarser and confluent, interstices without microsculpture, shiny. Abdomen small, tapering towards apex at tergite V; tergite V with pair of tomentose spots; with weak punctuation, with distinct isodiamic microsculpture.

Male. Aedeagus (Fig. 5) relatively narrow, oval, abruptly narrowed to apex; parameres narrow, with three short setae at their apex; endophallicus long, large, forming spiral in basal part of aedeagus, with numerous thorn-like structures. Paramere (right) laterally as in Fig. 6.

Female unknown.
Comparative notes. Based on coloration, shape of the head and pronotum and by the long elytra, *D. ivanovi* sp. n. is closely related to *D. skalitzkyi* Bernhauer, known from Azerbaijan [Bernhauer, 1902: 703; Zerche, 1991: 326], from which it differs by the significantly smaller body, by the distance between ocelli and posterior edges of eyes, by the shape and structure of the aedeagus (*aedeagus of D. skalitzkyi* narrower, paramerae wider apically, endophallus narrower and shorter). Based on the small body length and the character of punctation and coloration, *D. ivanovi* sp. n. is allied to *D. kirgizica* sp. n., from which it differs by the narrower pronotum, the transverse antennomere X (Fig. 2), the absence of a longitudinal impression in median part of pronotum, the presence of tomentose spots on tergite V.
the narrower aedeagus and endophallus, the shape of the parameral apex (apex of D. kirgizica sp. n. is significantly curved).

Etymology. The species name is dedicated to my colleague Alexander V. Ivanov (Ekaterinburg, Russia), collector of the holotype.

**Deliphrosoma kirgizica sp. n.**

(Fig. 3–4, 7–8)

**Material.** Holotype: 1♂, Kirgizia, Bishkek, 28.10.1993, O. Ovchinnikov (ZMM). Aedeagus of the holotype is damaged (without apex of left paramere).

**Description.** Measurements: WH: 0.6; LH: 0.37; LA: 1.03; LE: 0.17; LT: 0.07; LP: 0.55; WP: 0.87; SLE: 1.25; WE: 1.15; WA: 1.05; L:Aed: 0.4; TL: 3.4.

**Body** as in Fig. 3. Body dark brown; head, abdomen and antennae black; ocelli, mouthparts and legs yellowish brown. Eyes very large, weakly convex, two times as long as temples. Ocelli distinct, distance between ocelli little more than the distance between ocellus and posterior margin of eye. Punctuation deep, evenly spaced; coarser on ocular ridges posteriorly. Interstices as wide as the diameter of one or two punctures; in anterior and median part without microsculpture, glossy, in posterior part behind eyes and between ocelli near neck constriction with coarse microsculpture. Antenna as in Fig. 4. Length/width of antennal segments: I: 0.12 × 0.07; II: 0.1 × 0.06; III: 0.1 × 0.04; IV: 0.09 × 0.06; V: 0.1 × 0.06; VI–VIII: 0.08 × 0.06; IX–X: 0.08 × 0.07; XI: 0.12 × 0.07. Pronotum 1.5 times wider than head, transverse, with evenly rounded sides and posterior edges. Medial impressions at the sides of pronotum deep; disc of pronotum with longitudinal impression reaching midlength of pronotum and with two weak oval impressions in posterior third of pronotum. Surface of pronotum covered by coarse deep punctuation, punctuation at the side of pronotum denser and coarser; interstices between punctures with coarse microsculpture. Scutellum relatively small, rectangular, with indistinct small scattered punctures, without microsculpture. Elytra long, two times longer than pronotum, relatively parallel-sided, slightly expanded posteriorly. Punctuation denser and deeper than that of pronotum, interstices without microsculpture, glossy. Abdomen slightly narrower than elytra, with weak irregular punctuation and with distinct isodiametric microsculpture.

Male. Aedeagus (Fig. 7) relatively large, oval, with wide basal part, gradually narrowed to apex; parameres short and wide, with spade-like apices, with three short setae at their apex; endophallus very large, twisted into spiral in basal part of aedeagus, with numerous thorns along the entire length. Paramere (left) laterally as in Fig. 8.

Female unknown.

**Comparative notes.** *D. kirgizica sp. n.* is similar to *D. ivanovi sp. n.* (see comparative notes above). Additionally, based on the shape of head and by the flattened eyes, coloration and shape of the parameral apex, *D. kirgizica sp. n.* is very similar to *D. fratellum* (Rottenberg), which is distributed in SE Europe [Rottenberg, 1874: 330; Zerche, 1991: 322, 1997: 51; Bordoni, 1999: 202], from which it differs by the significantly smaller and more flattened body, the distance between ocelli (in *D. fratellum* the distance between ocelli is the same as distance between ocellus and posterior margin of eye), the longer elytra, the shape and structure of the aedeagus (aedeagus and endophallus of *D. fratellum* significantly narrower).

**Etymology.** The species is named after Kirgizia, the country which the type locality of this species belong to.

**Deliphrosoma sp.**

**Material.** 1♂, [Tajikistan] upper of Tupalang River[, Gissar, Vil’berg, 1898] (handwritten label, in Russian) (ZIN).

**Remarks.** Measurements: WH: 0.58; LH: 0.34; LE: 0.14; LT: 0.06; LP: 0.56; WP: 0.86; SLE: 1.14; WE: 1.12; WA: 1.14; TL: 2.9. The specimen is damaged: without both antennae.

This specimen probably represents a new species, that is similar to *D. kirgizica sp. n.*, but that differs from the latter by the smaller size and proportions of the body.

**Acknowledgements.**

I am indebted to A.V. Ivanov (Ekaterinburg, Russia) and A.A. Klimenko (Tver, Russia) for the loan of material. I am grateful to my colleague A.J. Brunke (Copenhagen, Denmark) for correction of the English text of the manuscript and A.V. Anischenko (Daugavpils, Latvia) for help in preparation of habitus photographs.

The research was conducted within the framework of the project of European Social Fund (No2009/0206/1DP/1.1.1.2.0/09/APIA/VIAA/010).

**References.**


References


