

NEW FAUNISTIC DATA ON EIGHT SPECIES OF *DELIPHROSOMA* REITTER, 1909, WITH A REDESCRIPTION OF *D. FRISCHI* SHAVRIN, 2011 (COLEOPTERA: STAPHYLINIDAE: OMALIINAE: ANTHOPHAGINI)

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New faunistic data are presented for eight species of the genus *Deliphrosoma* Reitter, 1909, including new record of *D. prolongatum prolongatum* (Rottenberg, 1873) from Romania. *Deliphrosoma frischi* Shavrin, 2011 from Iran (Esfahan) is redescribed and illustrated; the female is described for the first time.

Key words: Staphylinidae, Omaliinae, *Deliphrosoma*, redescription, Palearctic Region, distribution, records.

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INTRODUCTION

The genus *Deliphrosoma* Reitter, 1909 includes 25 species distributed in the West Palearctic Region, with the vast majority of species described from southeastern Europe and Near East (Schülke & Smetana 2015). Different aspects of the morphology of the genus, possible relations with other taxa of Omaliinae and distribution were provided by Zerche (1991, 1998, etc.). Based on the external and internal morphological features, *Deliphrosoma* belong to the *Anthobium*-group of genera (Shavrin & Smetana 2020) and similar to the megadiverse genus *Anthobium* Leach, 1819.

This study presents faunistic records of eight species from south Europe, Turkey, Lebanon,

Iran and Azerbaijan. Besides that, the illustrative redescription of Iranian *D. frischi* Shavrin, 2011 is presented.

MATERIAL AND METHODS

The studied material is deposited in several institutional and private collections (curators are given in parentheses):

cSh—collection of Alexey Shavrin, Daugavpils, Latvia
HNHM—Hungarian Natural History Museum, Budapest, Hungary (Gy. Makranczy)
MNHUB—Museum für Naturkunde der Humboldt-Universität zu Berlin, Germany (J. Frisch)

NME–Naturkundmuseum Erfurt, Germany (M. Hartmann)
 NMPC–National Museum, Prague, Czech Republic (J. Hájek)
 NSMT–collection of A. Smetana, deposited at The National Museum of Nature and Science, Toshiba, Japan (S. Nomura)
 SMTD–Staatliche Naturwissenschaftliche Sammlungen Dresden, Germany (O. Jäger)

Morphological studies were carried out using Nikon SMZ 745T and Nikon Eclipse E200 stereomicroscopes. A digital camera (Sony Alpha DSLR–A300) was used for photograph of the habitus. I not provided all known taxonomic and faunistic references for the most species, since they can be found in Zerche (1991), Herman (2001), Shavrin (2011), etc.

RESULTS

***Deliphrosoma fratellum* (Rottenberg, 1874)**
 (*creticum* Scheerp., *major* Bernh.)

Material. NORTH MACEDONIA: 1 male: Golešnica Planina. 28.07.1936. J. Fodor leg. (HNHM).

***Deliphrosoma frischi* Shavrin, 2011**
 (Figs. 1–4)

Deliphrosoma frischi Shavrin, 2011: 35

Material. 1 male, 2 females: ‘IRAN, Esfahan Province | S Semirom: Komeh | 2810m | N 31°00’47” E 051°35’28” | 11.05.2007, lg. [J.] Frisch & [S.] Serri’ (MNHUB).

Redescription. Measurements (in mm): maximum width of head including eyes: 0.70–0.82; length of head (from base of labrum to neck constriction along head midline): 0.50–0.60; length of antenna (holotype): 1.45; ocular length (longitudinal): 0.20–0.22; length of pronotum: 0.60–0.77; maximum width of pronotum: 0.95–1.11; sutural length of elytra (length of elytra from the apex of scutellum to the posterior margin of sutural angle): 1.55–2.22; maximum width of elytra: 1.30–1.45; maximum width of abdomen:

1.00–1.37; length of metatibia (averaged): 1.02; length of metatarsus (averaged): 0.59 (metatarsomeres 1–4: 0.37; metatarsomere 5: 0.22); length of aedeagus (from base of the median lobe to apex of parameres): 0.80–0.82; total length (from anterior margin of clypeus to apex of abdomen): 3.90 (holotype)–4.76.

Body, antenna and femora yellow-brown to brown (holotype), some specimens with distinctly paler basal margins of pronotum and entire elytra (Figs. 1–2); mouthparts, tibiae and tarsi yellow. Body shiny; head with distinct transverse microsculpture on apical portion, with very dense isodiametric meshes between base of antenna and apical margins of eyes, without (holotype) or with sparse microreticulation in middle and basal portions; neck with distinct, transverse meshes; pronotum without or with indistinct transverse microreticulation; scutellum with transverse microsculpture; abdomen with distinct isodiametric sculpture. Head with irregular and very sparse punctation, larger and denser in middle portion; neck with fine, sparse punctation; pronotum with irregular punctation, sparser and finer in middle portion (holotype with larger and denser punctures); scutellum without or with several fine punctures in apical portion; elytra with moderately sparse and large punctation, somewhat deeper than that on pronotum, denser and deeper in prescutellar and finer in apical portions, forming unclear six very vague and tangled longitudinal rows of punctures; abdomen without visible punctation. Body glabrous, apical and infraorbital portions of head with long semierect setae, lateral and middle parts of pronotum with three-four long setae; elytra with very sparse and moderately long setae in lateral and middle portions; surface of abdominal tergites with sparse, short setation, and long one-three additional setae on each paratergite. Habitus as in Figs. 1–2.

Head 1.3–1.4 times as broad as long; middle portion slightly and widely elevated, with moderately deep depressions between supra-antennal protuberances and anterior margins of eyes, middle portion between antecellar foveae with narrow superficial impression, indistinct in holotype; antecellar foveae deep and moderately long,

reaching level of middle length of eyes; postocular ridge indistinct, obtuse, with surface between postocular ridge and posterior margin of eyes as long as two nearest ommatidia; basal portion behind ocelli with distinct and moderately deep impression; anterior portion between antennal insertion and anterior margin of eye with semi-circular, deep notch. Eyes large, convex. Ocelli large, situated behind level of postocular ridges; distance between ocelli about as long as distance between ocellus and posterior margin of eye. Apical segment of maxillary palpus about twice as long as preceding segment. Antenna reaching middle of elytra when reclined; basal antennomere suboval, about three times as long as broad, antennomere 2 distinctly narrower than basal antennomere, 3 about 1.3 times as long as and slightly narrower than 2, 4–7 distinctly shorter than 3, 8 slightly shorter than 7, 9–10 slightly shorter and broader than 8, apical antennomere about 1.3 times as long as 10.

Pronotum slightly convex, 1.4–1.5 times as broad as long, 1.3 times as broad as head, widest in anterior portion, widely rounded anteriorly and

gradually narrowed posteriorly toward rounded hind angles; apical and posterior margins somewhat straight; lateral portions narrow, each with moderately deep, oval pit slightly above middle.

Elytra relatively convex, longer than wide and significantly longer than twice as long as pronotum, slightly widened toward apical third, reaching basal margin of abdominal tergites IV or V; apical margins straight or rounded. Hind wings fully developed.

Legs long, slender; tibiae covered by dense, long setae; metatarsus 1.7 times as long as metatibia.

Abdomen distinctly narrower than elytra, with two small, round tomentose spots in the middle of abdominal tergite V; apical margin of abdominal tergite VII with narrow palisade fringe.

Male (Fig. 1). Protarsomeres 1–4 very wide. Apical margin of abdominal tergite VIII straight. Apical margin of abdominal sternite VIII widely concave. Adeagus with wide basal portion, gradually narrowing toward truncated apex (Fig. 3);



Figs. 1–2. Habitus of *Deliphrosoma frischi*: 1–male, 2–female. Scale bar: 1.00 mm.

parameres asymmetric (right paramere slightly longer than left), narrow, exceeding apex of median lobe, with rounded apical portions and two short apical setae; internal sac narrow and moderately long, with a field of large spines in middle. Lateral aspect of aedeagus as in Fig. 4.

Female (Fig. 2). Protarsomeres 1–4 narrow. Apical margin of abdominal tergite VIII straight. Apical margin of abdominal sternite VIII round.

Remarks. The original description of *D. frischi* Shavrin, 2011 was based on the study of the single specimen with the brown body and dense, moderately deep punctation of the pronotum. Shapes of aedeagus and internal sac of the holotype were dramatically deformed and flattened (see Fig. 3 in Shavrin 2011). Some time after this description, I received three immature specimens of *Deliphrosoma* with the same label's data as well as the holotype. Despite the paler coloration of the body and finer, sparser punctation of the pronotum (Figs. 1–2), these specimens are morphologically conspecific with *D. frischi*. The male (Fig. 1) have well sclerotized aedeagus and internal sac, perfectly visible in parameral and lateral projections (Figs. 3–4). Thus, I decide to modify and correct the original description of the species. In general, *D. frischi* can be distinguished from the remaining species of the genus by the shape of asymmetric parameres.

***Deliphrosoma libanicum* (Fauvel, 1875)**
(*libanicus* Coiff.)

Material. LEBANON: 1 female: Pass between Ainata and Bcharré. 2600 m a.s.l. 18-29.05.1999. W. Heinz leg. (NSMT); 4 males, 2 females: Nord-Libanon Province, Bcharré, Jabal el Mekmel, 34°12'50"N, 36°04'06"E. 2500-2800 m a.s.l. 27.05.2006. J. Weipert leg. (NME, cSh).

***Deliphrosoma macrocephalum* (Eppelsheim, 1873)**
(*pechlaneri* Lohse)

Material. SERBIA: 1 female: 'SERB. Midžor B.Z 1.ix.[19]23 Dr. Rambousek' (NMPC).

***Deliphrosoma morvani* (Jarrige, 1971)**

Material. IRAN: 1 male: Mazandaran, 70 km SW Calus, 36°09'N 51°17'E. 2870 m a.s.l. 18.06.1999. E. & P. Hajdaj leg. (cSh).

***Deliphrosoma prolongatum prolongatum* (Rottenberg, 1873)**

Material. ROMANIA: 1 male: 'Mazura Kimpuluin [Câmpulung] 1915/6.09.' (NMPC).

Remarks. The subspecies is distributed in the central Europe (Schülke & Smetana 2014). It is here recorded from Romania for the first time.

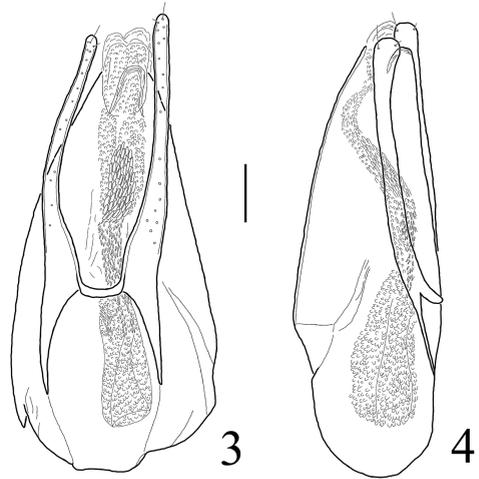
***Deliphrosoma skalitskyi* (Bernhauer, 1902)**

Material. AZERBAIJAN: 1 male: 'Caucasus. Araxesthal Leder.Reitter' (SMTD).

Remarks. The studied specimen present the same label's data as well as the type material (Zerche 1991).

***Deliphrosoma weiratheri* (Scheerpeltz, 1938)**

Material. TURKEY: 2 males, 1 female: 'Baiburt b. Trapezunt' (SMTD).



Figs. 3–4. Aedeagus of *Deliphrosoma frischi*: 3–aedeagus (parameral view), 4–aedeagus (lateral view). Scale bar: 0.10 mm.

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