

Notes on the Fauna and Taxonomy of the Click Beetles (Coleoptera, Elateridae) of Russia and Neighboring Countries

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Abstract—New data on the distribution and taxonomy of some species of click-beetles in Russia and adjacent countries are given. Several species are recorded for the first time for the following territories: *Brachygonus bouyoni* (Chass.), *B. dubius* (Plat. et Cate) and *Zoroachros lewisi* (Schw.), for Russia; *Sericus sulcipennis* (Baudi), for Ukraine; *Berninelsonius hyperboreus* (Gyll.), *Cidnopus parallelus* (Motsch.), and *Limonium poneli* Les. et Mertl., for Kazakhstan. New interesting findings of *Sericus sulcipennis* and *Selatosomus songoricus* (Kr.) are reported. Comments on some erroneous faunistic records of several elaterids, including some species from Middle Asia, are made. The following new synonymy is established: *Haterumelater fulvago* (Marseul, 1868) = *Elater tauricola* Gurjeva, 1957, **syn. n.** Notes on the variability of *Selatosomus latus* (F.) are given, and its conspecificity with *S. corpulentus* (Cand.) is confirmed. The external morphology and genitalia of the little known *Selatosomus nanus* Gur. are studied, and the systematic position of this species is discussed.

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Though the click-beetle fauna of Russia and adjacent countries was dealt with in a great number of publications including summarizing monographs (Gurjeva, 1979b, 1989a; Dolin, 1982, 1988; Mardjanyan, 1987; Agaev, 1988; Dolin and Atamuradov, 1994; etc.), many taxa of Elateridae have been insufficiently studied in this territory, as manifested by recent publications of interesting faunistic findings and descriptions of new click-beetle species from this region (Mardjanyan, 2015; Prosvirov and Kovalenko, 2015; Prosvirov, 2015b; Schimmel et al., 2015).

The new data on some rare and little-known Elateridae species of Russia and adjacent countries obtained in the course of examination of the material deposited in various museums and private collections are of considerable interest. In the present publication, along with these data, notes on the fauna and taxonomy of several widely distributed click-beetle species are given and erroneous faunistic records of some species are discussed.

MATERIALS AND METHODS

The following acronyms are used here to designate the collections where the material is stored.

CAB, A.O. Bieńkowski's collection (Zelenograd, Russia); CAN, A.V. Napolov's collection (Riga, Latvia); CDE, collection of the Department of Entomo-

logy of M.V. Lomonosov Moscow State University (Moscow, Russia) including material from the private collection of the author; ZIN, the Zoological Institute, the Russian Academy of Sciences (St. Petersburg, Russia); ZMMU, the Zoological Museum of M.V. Lomonosov Moscow State University (Moscow, Russia).

The material was examined using a MBS-1 binocular and a Mikromed 3 var. 3-20 M trinocular microscopes. For photography, some specimens examined were mounted on transparent plates. The photographs were taken by means of a Canon EOS-6D and a Canon EOS-40D cameras with a Canon MP-E 65 mm objective and using the method of "extended focus." Some photographs of the genitalia were taken using a Mikromed 3 var. 3-20 M microscope with a ToupCam 5.1 MP video ocular. All the photographs of the genitalia were taken from slides in glycerin; the method of preparation of these slides was described earlier (Prosvirov and Savitsky, 2011). The terminology for parts of the genitalia follows that in the studies of Mardjanyan (1987) and Prosvirov and Savitsky (2011).

The length of a beetle body was measured along the midline from the anterior margin of the frons to the elytral apex using an eyepiece-micrometer.

An additional information and annotations of the data of labels are given in brackets.

Subfamily **Elaterinae** Leach, 1815

Tribe **Ampedini** Gistel, 1848

Genus **Brachygonus** Buysson, 1912

The only species of the genus *Brachygonus*, *B. megerlei* (Lacordaire, 1835), was recorded for the territory of Russia (Orlov, 2007; Prosvirov, 2013). One of these records (Prosvirov, 2013) is erroneous and based on misidentification of the material: the specimens from Belgorod Province belong to *B. dubius* (Platia et Cate, 1990), and those from Krasnodar Territory, to *B. bouyoni* (Chassain, 1992) (see below). The true *B. megerlei* has not been found by me in the material from Russia; Orlov's (2007) record may also refer not to this species but to the similar *B. bouyoni*. Thus, the data on the presence of *B. megerlei* in the Russian fauna require confirmation.

Brachygonus bouyoni (Chassain, 1992) (Figs. 1–8)

Prosvirov, 2013 : 255 (as *B. megerlei* (material from Krasnodar Territory)).

Material. Russia. *Krasnodar Territory*: Novorossiiskii District, environs of Malyi Utrish Village, “Bolshoi Utrish” Nature Reserve, near station of A.N. Severtsov Institute of Ecology and Evolution, 27.V.2016 (F.A. Martynovchenko), 1 ♀ (CDE); same locality, at night, on trees, 28.V–6.VI.2013 (A.S. Prosvirov), 2 ♂ (CDE); Cape Malyi Utrish, near Dyurso Vill., 13–21.VII.2009 (A.I. Miroshnikov), 1 ♀ (CDE).

Distribution. Central and Southern Europe (Cate et al., 2007; Chittaro and Blanc, 2012), Russia (Prosvirov, 2013, as *B. megerlei* (part)).

Taxonomic notes. This species is very similar to *B. megerlei* and sustainably differs from it in the shape of the prosternal process and the structure of the aedeagus. It is noteworthy that the structure of the aedeagus is a subject to rather wide variation in *B. bouyoni*: the structure of the apical part of the parameres and their general shape vary in the two males examined (Figs. 4, 5). The figures of the aedeagus of *B. bouyoni* in various publications are also significantly different (see Chassain, 1992; Sánchez-Ruiz et al., 2003; Delnatte et al., 2011). The structure of the female genitalia is typical of the genus *Brachygonus* (Figs. 6, 7; see also Sánchez-Ruiz et al., 2003; Recalde Irurzun and Sánchez-Ruiz, 2006).

Brachygonus dubius (Platia et Cate, 1990)
(Figs. 9–13)

Prosvirov, 2013 : 255, color plate 3: fig. 14 (as *B. megerlei* (material from Belgorod Province)).

Material. Russia. *Belgorod Prov.*: Borisovskii Distr., Borisovka Vill., “Belogorie” Nature Reserve, “Les na Vorskle” area, VII.1992 (V.Yu. Savitsky), 3 ♂ (CDE); Borisovka Vill., farmstead of “Belogorie” Nature Reserve, at light, 27–28.VII.2012 (M.Ya. Orlova-Bienkowskaya, A.O. Bieńkowski), 1 ♂ (CAB).

Distribution. Europe, the Near East (Cate et al., 2007; Platia, 2016), Russia (Prosvirov, 2013, as *B. megerlei* (part)).

Taxonomic notes. *Brachygonus dubius* clearly differs from the closely related species in proportions of the body, the pubescence, shape of the antennomeres of the male, shape of the prosternal process, and the structure of the aedeagus. Similarly to *B. bouyoni*, *B. dubius* demonstrates variations in the aedeagus structure (Figs. 12, 13, see Chassain, 1992; Recalde Irurzun and Sánchez-Ruiz, 2006; Delnatte et al., 2011).

Genus ***Haterumelater*** Ôhira, 1968

Haterumelater fulvago (Marseul, 1868)
(Figs. 15–17, 19–22)

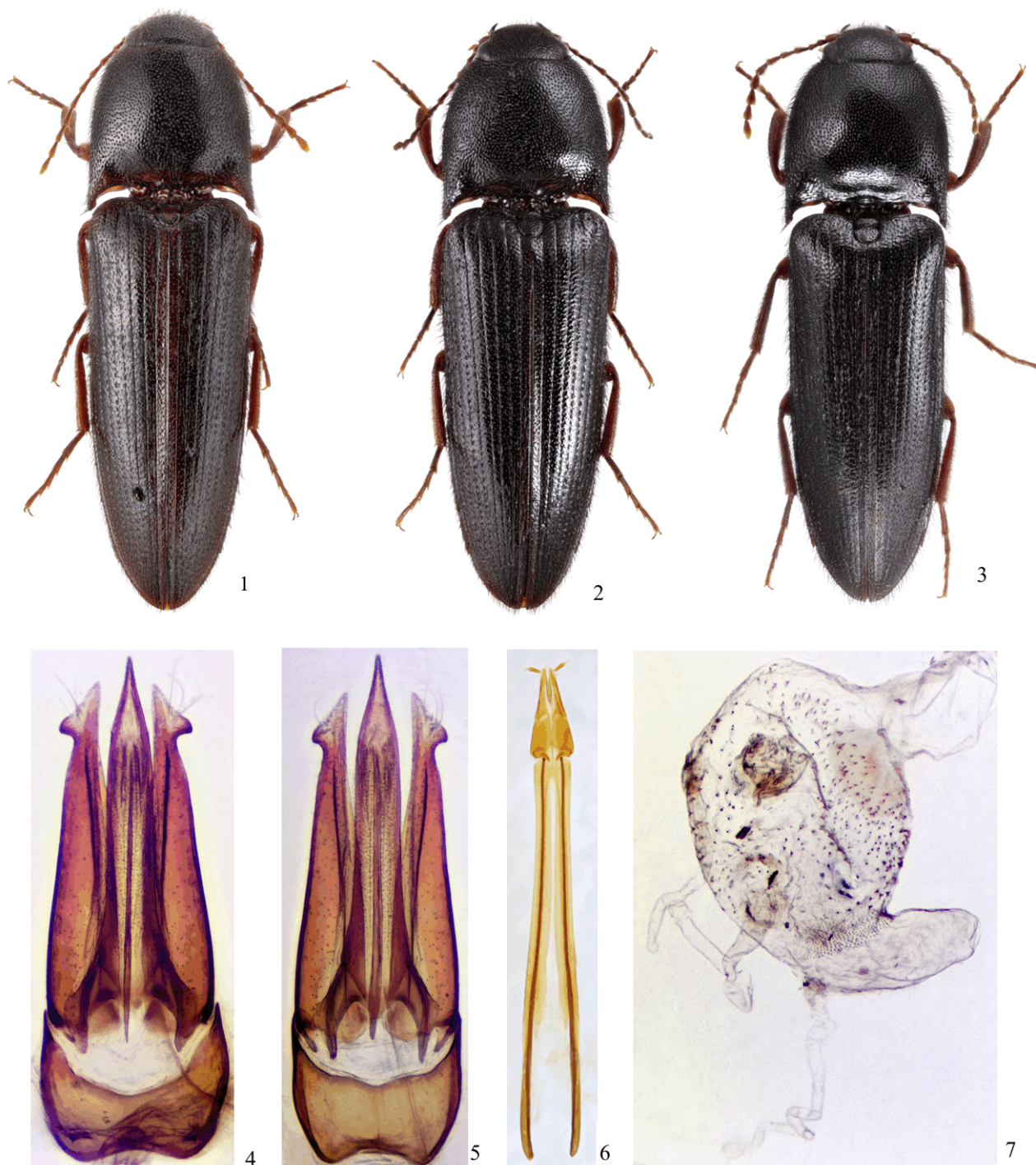
Elater tauricola Gurjeva, 1957, **syn. n.** (Figs. 14, 18).

Material. Russia. *Krasnodar Terr.*: Novorossiiskii Distr., Cape Malyi Utrish, near Dyurso Vill., 13–21.VII.2009 (A.I. Miroshnikov), 18 ♂♀ (CDE), 2 ♂ (CAN). *Crimea*: Alushta, “Rabochii Ugolok,” at light, 20.VII.1959 (M.K. Tikhonravov) 1 ♀ (CDE).

Type material. *Elater tauricola* Gurjeva, 1957 (ZIN). Holotype, ♂: “Sebastopol, Tauria, VII.14, V. Pliginski.” Paratypes, 1 ♂, 2 ♀: “Krim, Mangub-Kal., 21.7.06, W. Pliginski,” 1 ♀ (abdomen missing); “Crimea, Sevastopol, 27.VII.11, Martino, N 117,” 1 ♂ (abdomen missing); “Mukhalatka Vill., South Cost of Crimea, VII.1902, N. Kuznetsov,” 1 ♀.

Distribution. Southern Europe, the Near East, Russia (Cate et al., 2007; Platia and Ghahari, 2016).

Taxonomic notes. *Elater tauricola* was described from the Southern Crimea and subsequently transferred to the genus *Haterumelater* (Gurjeva, 1957, 1979a). The external characters of *H. tauricola* entirely fit the diagnosis of the widely distributed and morphologically variable *H. fulvago*. The conspecificity of these two taxa was already hypothesized by Preiss and Platia (2003), but, according to the description (Gurjeva, 1979b), *H. tauricola* considerably differs



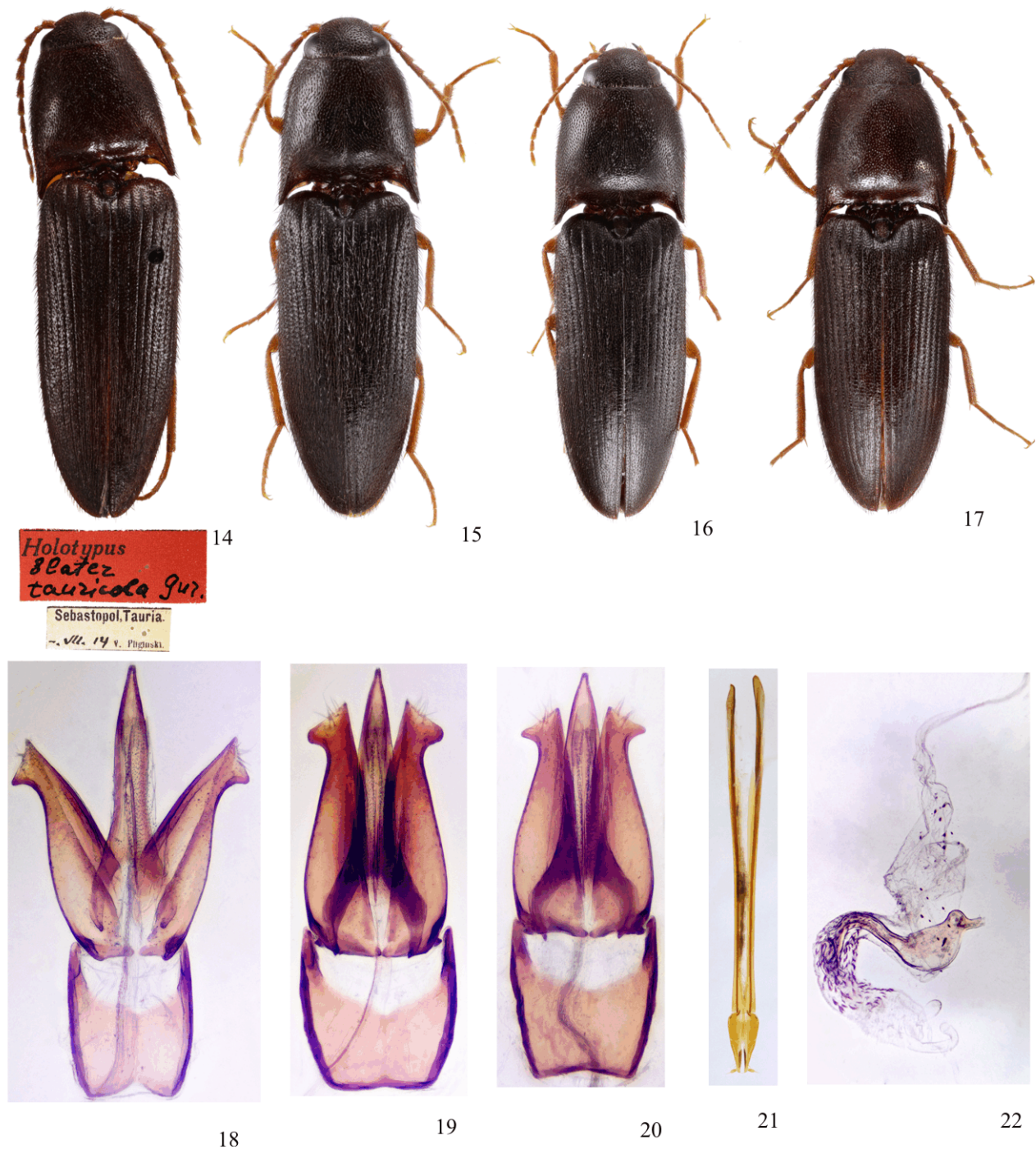
Figs. 1–7. *Brachygonus bouyoni* (Chass.), Russia, Krasnodar Terr., general view of male (1, 2) and female (3); aedeagus, ventral view (4, 5); ovipositor, ventral view (6); part of female genital tract (7, 1); (5) 12.5 mm (length of body of beetle hereinafter); (2, 4) 13.2 mm; (3, 6, 7) 12.3 mm.

from *H. fulvago* in the structure of the aedeagus. The slide of the genitalia of the *H. tauricola* paratype, from which the aedeagus was figured in the original description (Gurjeva, 1979b), has been presumably lost; however, I had an opportunity to examine the structure

of the aedeagus of the holotype (Fig. 18) and found it almost identical to that of *H. fulvago* with only insignificant differences very likely within the range of individual variation of the aedeagus structure in this species (Figs. 19, 20). Thus, *H. tauricola* and *H. ful-*



Figs. 8–13. *Brachygonus* spp., males: (8, 9) head, pronotum, and base of elytra; (10, 11) general view [(8) *B. bouyoni* (Chass.), Russia, Krasnodar Terr. (12.5 mm); (9–13) *B. dubius* (Plat. et Cate), Russia, Belgorod Prov.; (9, 11) 11.5 mm; (10, 13) 11.1 mm].



Figs. 14–22. Elateridae: (14–17) general view; aedeagus, (18–20) ventral view; (21) ovipositor, ventral view; part of female genital tract (22, 14) [(18) *Haterumelater tauricola* (Gur.), holotype, male (9.2 mm); (15–22) *Haterumelater fulvago* (Mars.), Russia (15, 16, 18–22) Krasnodar Terr.; (17) Crimea); (15, 19) male (8.5 mm); (16, 21, 22) female (11.1 mm); (17) female (10.4 mm)].

vago are conspecific. The differences seen in the figure (Gurjeva, 1979b) can be accounted for either by an aberrant structure of the aedeagus in the paratype of *H. tauricola* or by distortions of proportions in the drawing or subsequent typographical reproduction of the figure.

The structure of the female genitalia of *H. fulvago* is similar to that in the other species of the genus (Figs. 21, 22, see Ôhira, 2005).

Tribe **Elaterini** Leach, 1815

Genus **Sericus** Eschscholtz, 1829

Sericus sulcipennis (Baudi di Selve, 1871)
(Figs. 23, 24)

Material. Russia. *The Republic of Karelia:* 12 km SE of Poyakonda Vill., Kindo Peninsula, semishrub pit bog, net-sweeping, 1.VII.2015 (M.Ya. Orlova-Bienkowskaya, A.O. Bieñkowski), 1 ♀ (CAB). **Ukraine.** *Zakarpattia Prov.:* Mezghorskii Distr., environs of Sinevir Vill., 28.VI.1973 (V.F. Palii), 1 ♂ (CDE).

Distribution. Europe, Russia—from the north and the center of the European part to Eastern Siberia inclusive (Cate et al., 2007; Platia, 2010; Prosvirov, 2015a). This species was also recorded for Crimea (Vávra et al., 2012), but without specifying the locality. Here the species is recorded for the first time for Ukraine; the record from Karelia shifts northwards the northern border of the known distribution range of *S. sulcipennis* in the territory of Russia (formerly the northernmost records of this species were those from Leningrad Province).

Taxonomic notes. In the publications concerning *S. sulcipennis*, this species is considered to be described by Buysson (1893); however, the first description was published by Baudi [di] Selve (1871), and Buysson's publication only reproduced the diagnosis of *S. sulcipennis* with the note "Baudi in litt." (J. Delnatte, pers. communication).

Subfamily **HYPNOIDINAE** Schwarz, 1906

Tribe **Hypnoidini** Schwarz, 1906

Genus **Berninelsonius** Leseigneur, 1970

Berninelsonius hyperboreus (Gyllenhal, 1827)
(Figs. 25, 26)

Material. Kazakhstan. *East Kazakhstan Prov.:* Kanton-Karagay Distr., northern slope of Sarymsakty Mt.

Range, Sarym-Sakty River gorge, *h* = 2000–2600 m, 1.VII.2001 (V.Yu. Savitsky), 29 ♂♀ (CDE).

Distribution. This boreomontane species occurs in Europe, the north of the European part of Russia, Siberia, the Russian Far East, Mongolia, China, and North Korea; it also occurs in North America (Stibick, 1976; Cate et al., 2007). It is recorded for the first time for Kazakhstan.

Subfamily **Denticollinae** Stein et J. Weise, 1877

Tribe **Denticollini** Stein et J. Weise, 1877

Genus **Cidnopus** C. G. Thomson, 1859

Cidnopus parallelus (Motschulsky, 1860)
(Figs. 27, 28)

Material. Kazakhstan. *East Kazakhstan Prov.:* Kokpekty Distr., 100 km SSE of Ust-Kamenogorsk, 5 km NE of Panteleimonovka Vill., Kaiyndy pine forest, *h* = 850 m, 20.VI–2.VII.1993 (A.V. Napolov), 1 ♂ (CDE), 1 ♀ (CAN).

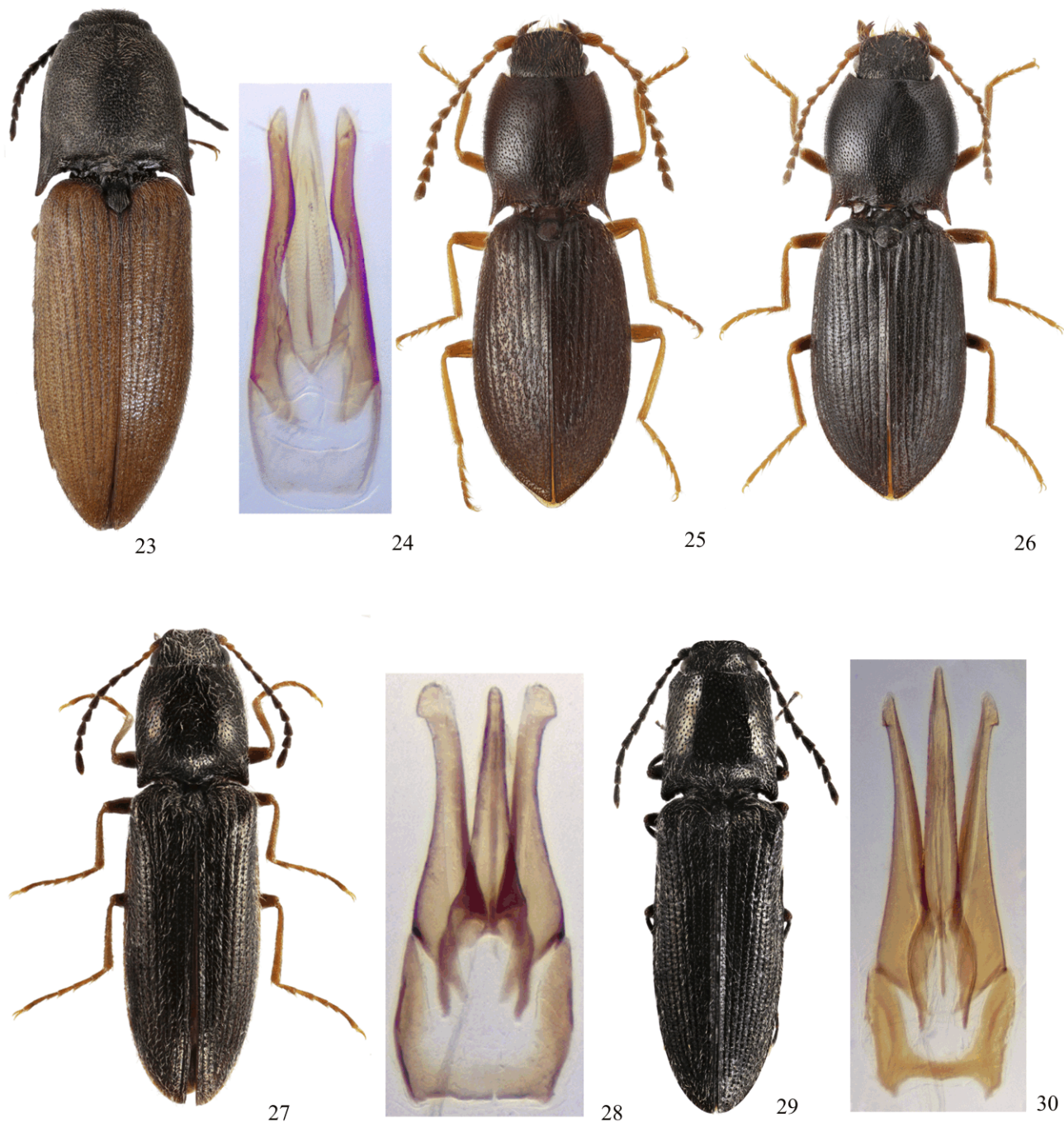
Distribution. Siberia, the Russian Far East, Mongolia (Cate et al., 2007). The record of *C. parallelus* for Korea (Németh and Platia, 2014) can be due to misidentification of the material (see below). This is the first record of the species for Kazakhstan.

Taxonomic notes. This species is closely related to *C. koltzei* (Reitter, 1895) distributed in the same territory (Cate et al., 2007) but differs in the body proportions and in the structure of the frons, pronotum, and aedeagus (Fig. 28; Reitter, 1895; Tcherepanov, 1957). It is noteworthy that the images of the aedeagus of *C. parallelus* given in the literature (Gurjeva, 1989b; Németh and Platia, 2014) are erroneous. The aedeagus shown in Gurjeva's (1989b) publication seems to belong to *C. koltzei*. In the paper by Németh and Platia (2014), judging by the photographs of the adults and the figure of the aedeagus, *C. nigronitidus* Han et Lee, 2012 described from Korea (Han et al., 2012) is misidentified as *C. parallelus*. The taxonomic status of *C. nigronitidus* requires specification, as the characters listed in the diagnosis of this species are very similar to those of *C. koltzei*.

Genus **Limonius** Eschscholtz, 1829

Limonius poneli Leseigneur et Mertlik, 2007
(Figs. 29, 30)

Material. Kazakhstan. *East Kazakhstan Prov.:* Kokpekty Distr., 100 km SSE of Ust-Kamenogorsk,



Figs. 23–30. Elateridae: (23, 25–27, 29) general view; (24, 28, 30) aedeagus, ventral view [(23, 24) *Sericus sulcipennis* (Baudi), male (Ukraine, the Zakarpattia Prov.; 7.9 mm); (25, 26) *Berninelsonius hyperboreus* (Gyll.), Kazakhstan, East Kazakhstan Prov.; (25) male (7 mm); (26) female (7.5 mm); (27, 28) *Cidnopus parallelus* (Motsch.), male (Kazakhstan, East Kazakhstan Prov.; 5.2 mm); (29, 30) *Limonius poneli* Les. et Mertl., male (Kazakhstan, East Kazakhstan Prov.; 6.2 mm)].

5 km NE of Panteleimonovka Vill., Kaiyndy pine forest, h = 850 m, 20.VI–2.VII.1993 (A.V. Napolov), 1 ♂ (CDE).

Distribution. Europe, Turkey, the Transcaucasia, Russia—from the European part to Western Siberia (Cate et al., 2007; Platia, 2016; Prosvirov and Efimov, 2016). This is the first record of this species for the territory of Kazakhstan.

Tribe **Selatosomini** Schimmel et al., 2015

Genus **Selatosomus** Stephens, 1830

Selatosomus latus (Fabricius, 1801)
(Figs. 31–38)

Material (only the specimens in which the genitalia were examined are included; all are deposited in CDE). **Russia.** *Rostov Prov.*: Belokalitvinskii Distr., environs of Pogorelov Vill., left bank of Kalitva River, 6.V.2007 (A.S. Ukrainskii), 5 ♂ (1 specimen—in window trap); same locality, 7.V.2007 (A.S. Ukrainskii), 1 ♂ (window trap); same locality, 8.V.2007 (A.S. Ukrainskii), 2 ♂; same locality, 9.V.2007 (A.S. Ukrainskii), 1 ♂. *Volgograd Prov.*: Pallasovskii Distr., northwestern environs of Elton Vill., near Lake Elton, 17.V.1992 (V.Yu. Savitsky, M.Yu. Savitsky), 1 ♂. *Astrakhan Prov.*: Akhtubinskii Distr., Bogdinskobaskunchakskii Nature Reserve, environs of Lake Baskunchak, NE of Baskunchak Vill., 20.V.1992 (V.Yu. Savitsky, M.Yu. Savitsky), 1 ♂; environs of Verkhni Baskunchak, environs of Kochevaya Station, 4.V.2007 (A.S. Ukrainskii), 2 ♂. *Kemerovo Prov.*: southeastern suburb of the city of Kemerovo, sweeping in meadow-steppe, 7.VI.2009 (D.A. Efimov), 1 ♂; Kemerovskii Distr., environs of the city of Kemerovo, Mozhukha Vill., meadow-steppes, 55°25'N, 85°56'E, 30.V.2004 (D.A. Efimov), 1 ♂; 15 km NW of Kemerovo, Krekovo Vill., 55°31'N, 85°52'E, 29.V.2011 (D.A. Efimov), 1 ♂; environs of Mazurovo Vill., forest-steppe, meadow, 31.V.1999 (D.A. Efimov), 1 ♂; Krapivinskii Distr., 8 km SSW of Saltymakovo Vill., environs of Azhendarovo Biological Research Station of Kemerovo State University, 54°45'N, 87°01'E, h = 165 m, 21–27.V.2011 (A.V. Korshunov), 1 ♂; Belovskii Distr., Kuznetskaya Depression, Starobachaty Vill., steppe, 10.VI.2011 (D.A. Efimov), 1 ♂. *Amurskaya Prov.*: Arkharinskii Distr., near Obluch'e, 20–30.V.2001, 1 ♂. *Primorskii Terr.*: Lazovskii Distr., environs of Lazo Vill., 43°22'43"N, 133°54'01"E, 1–24.V.2007 (V.P. Shokhrin), 1 ♂; same locality, 26–29.V.2007 (V.P. Shokhrin), 2 ♂; same locality,

1–3.VI.2007 (V.P. Shokhrin), 1 ♂. **Kazakhstan.** *East Kazakhstan Prov.*: Katon-Karagay Distr., environs of Katon-Karagay Vill., northern slope of Sarymsakty Mt. Range, 10.VI.2016 (S.V. Dement'ev), 1 ♂.

Distribution. This is a widely distributed Trans-Palaearctic species (Cate et al., 2007).

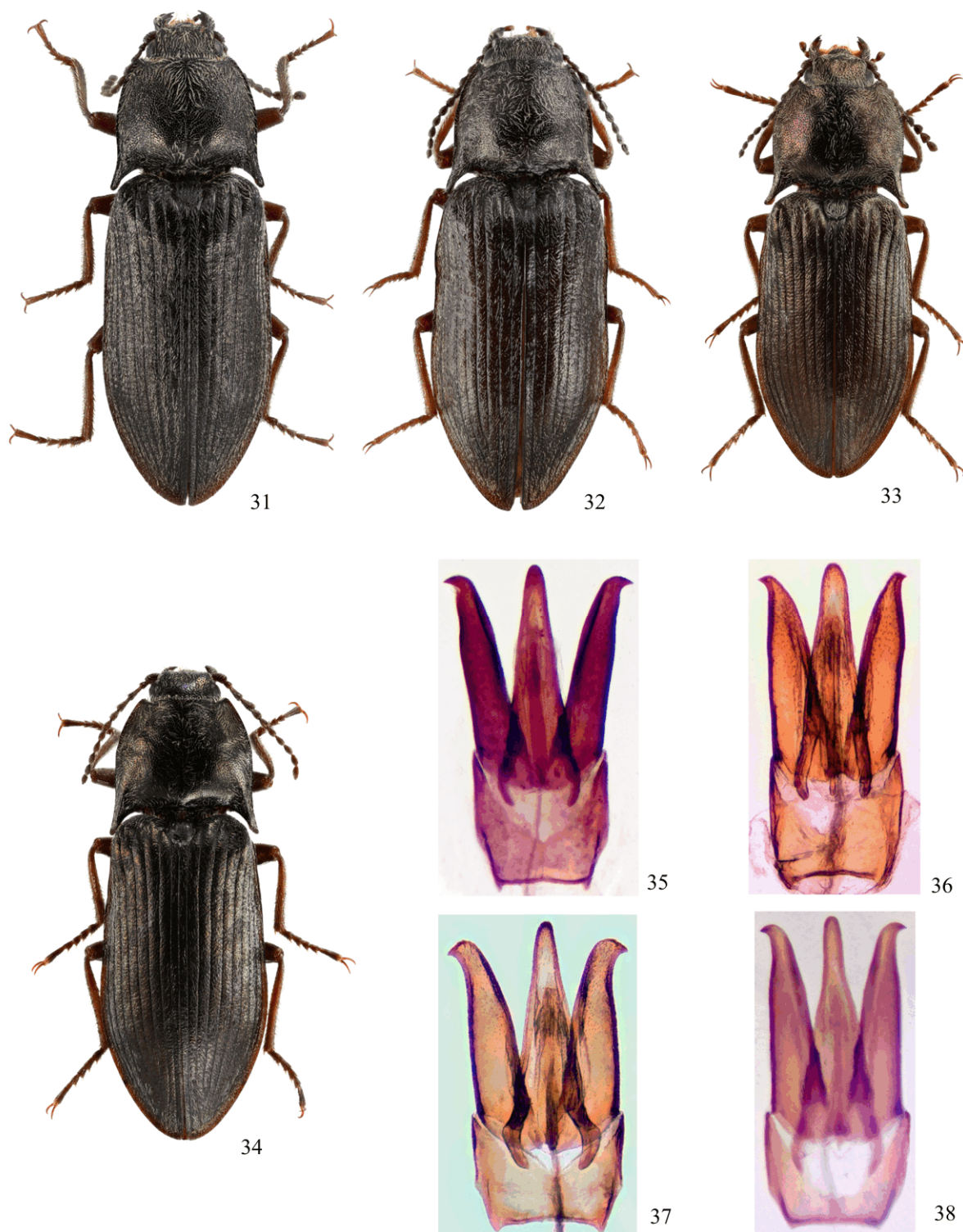
Taxonomic notes. *Selatosomus latus* demonstrates a very wide range of variation; beetles from geographically remote populations frequently differ significantly in the coloration and size of the body and in many other morphological characters (Gurjeva, 1989a). There are forms (especially in the mountain areas of Europe, the Caucasus, and the Transcaucasia) considered by some authors as variations of *S. latus* and by others, as a separate species (Dolin, 1971, 1975; Gurjeva, 1989a; Tarnawski, 1995). One of such taxa is *S. corpulentus* (Candèze, 1879) described from Dauria and downgraded later to a synonym of *S. latus* (Candèze, 1879; Gurjeva, 1982). In the recently published revision of the tribe Selatosomini of China and adjacent regions (Schimmel et al., 2015), *S. corpulentus* is considered a separate species.

According to the authors (Schimmel et al., 2015), *S. corpulentus* differs from the closely related species in the structure of the pronotum and aedeagus. Examination of the material from the Russian Far East, which fits the description of *S. corpulentus*, has shown that the diagnostic characters of this taxon are subject to a considerable individual variability, and, moreover, similar states of these characters also occur in typical representatives of *S. latus* from other regions of Russia. The small size of the body characterizing this taxon is on the whole typical of the populations of *S. latus* from the eastern part of the range (Gurjeva, 1982, 1989a). All this confirms Gurjeva's (1982) opinion about the conspecificity of *S. corpulentus* and *S. latus*.

Selatosomus nanus Gurjeva, 1975
(Figs. 39–41, 43, 45, 47, 49)

Material. Holotype, ♂: “Kaukasus, Zorsk. ushch. [in Cyrillic; according to the original description (Gurjeva, 1975)—“Zorskoe Gorge”], Maljushenco” (ZIN).

Distribution. *Selatosomus nanus* was recorded for the territory of Armenia (Cate et al., 2007); however, this record is erroneous. Actually the type locality of this species, the Zorskoe Gorge (the Zorskie Mountains), was formerly a part of Surmalinskii Uezd [= District] of Yerivanskaya Gubernia [= Province]



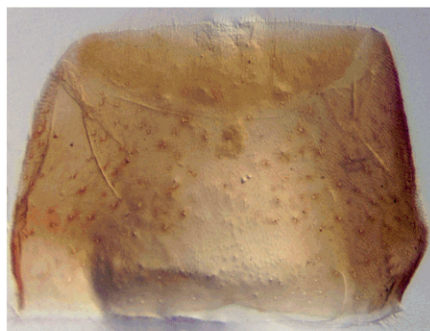
Figs. 31–38. *Selatosomus latus* (F.), males: (31–34) general view; (35–38) aedeagus, ventral view [(31) Russia, Astrakhan Prov. (10.5 mm); (32, 36) Russia, Kemerovo Prov. (10.3 mm); (33, 34) Russia, Primorskii Terr. (10.3 mm); (35) Russia, Astrakhan Prov.; (37) Kazakhstan, East Kazakhstan Prov.; (38) Russia, Primorskii Terr.].



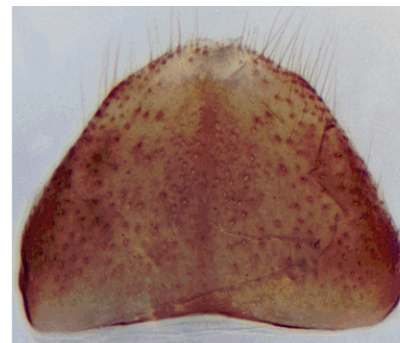
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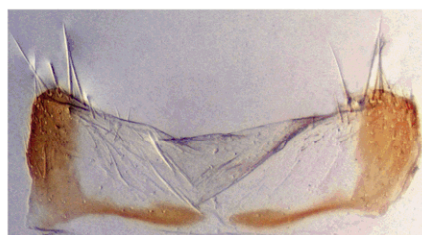
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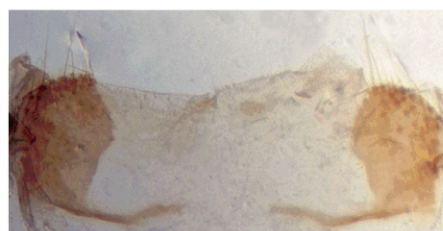
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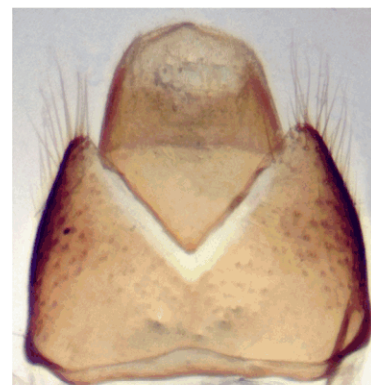
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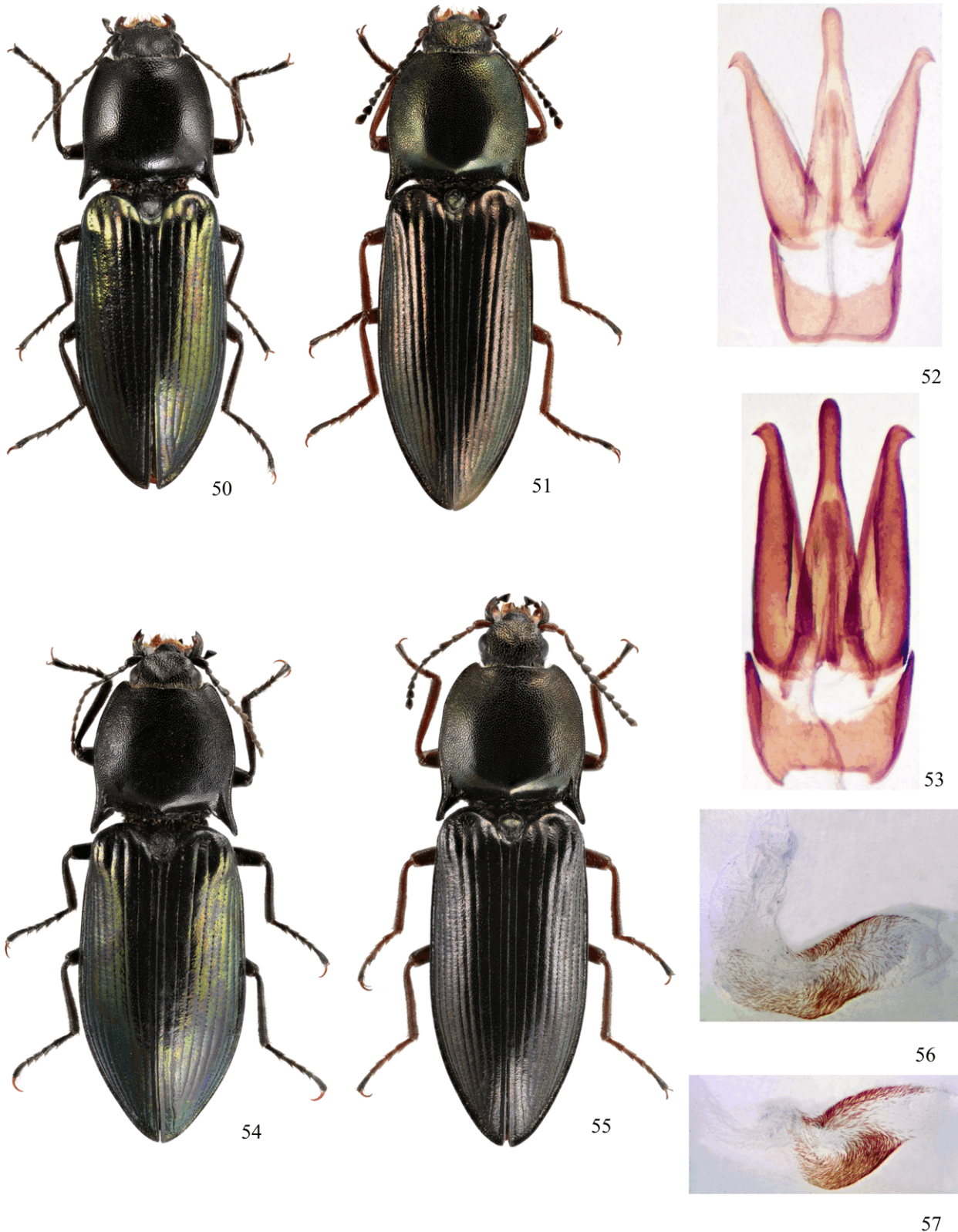


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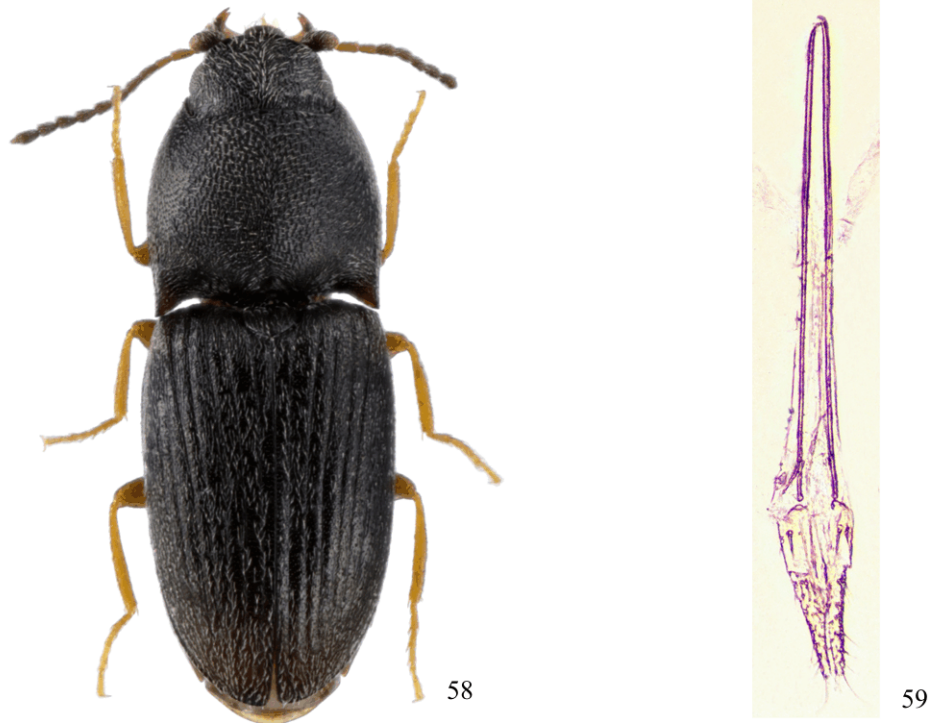


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Figs. 39–49. *Selatosomus* spp., males, general dorsal (39) and lateral view (40); (41, 42) abdominal tergite VIII, dorsal view; (43, 44) abdominal sternite VIII, ventral view; (45, 46) abdominal tergite IX, dorsal view; (47, 48) abdominal sternite IX, dorsal view; (49, 39) aedeagus, ventral view [(40, 41, 43, 45, 47, 49) *S. nanus* Gur., holotype (5.7 mm); (42, 44, 46, 48) *S. aeneus* (L.), Russia, Moscow Prov.].



Figs. 50–57. *Selatosomus* spp.: (50, 51, 54, 55) general view; (52, 53) aedeagus, ventral view; (56, 57) part of female genital tract [(50, 52, 54, 56) *S. songoricus* (Kr.), Russia; (50, 52) male, Republic of Altai (10.8 mm); (52) female, Tuva (14.1 mm); (51, 53, 55, 57) *S. coreanus* (Miwa); (51, 53) male, Russia, Primorskii Terr. (14.1 mm); (55) female, Russia, Primorskii Terr. (16.6 mm); (57) female, Mongolia, Arhangai aimak].



Figs. 58, 59. *Zorochros lewisi* (Schw.), female, Russia, Sakhalin Prov. (2.2 mm): (58) general view; (59) ovipositor, ventral view.

and is situated in the spurs of Ararat Mountain (Pagirev, 1913; Menitskii and Popova, 2007; A.I. Mi-roshnikov, pers. communication). At present, it is an eastern Turkish territory (İğdir Province) adjacent to Armenia.

Taxonomic notes. This species described from a single male was not mentioned later in the literature dealing with species of the genus *Selatosomus*, except for the *Catalogue of Palaearctic Coleoptera* (Cate et al., 2007) in which *S. nanus* is mentioned as a species with a vague taxonomic position in this genus.

Examination of the holotype has shown that *S. nanus* demonstrates several original external characters which are not typical of the majority of the species of *Selatosomus*. In particular, the posterior angles of its pronotum are very short and bear no carina and its prosternal process is strongly bent toward the body between the middle coxae. The small size of the body, the structure of the prosternal lobe and metacoxal plates, and some other features of the external structure of *S. nanus* are characteristic of some members of the genera *Selatosomus* and *Warchalowskia* Tarnawski, 1995 from Middle Asia rather than of *Selatosomus* from the Western Palaearctic Region (Gurjeva, 1989a; Tarnawski, 1995; Schimmel et al., 2015). This

species is most similar to *S. messorobius* Dolin, 1971 described from Southeastern Kazakhstan (Dolin, 1971).

The genitalia of *S. nanus* were not examined earlier, and their structure (Fig. 49) turned out to be characteristic of the species of the tribe Ctenicerini Fleutiaux, 1936, first of all, the members of the genus *Pseudanostirus* Dolin, 1964, rather than of the other taxa of Selatosomini (Figs. 35–38, 52, 53). At the same time, the structure of the terminalia of *S. nanus* is typical of the species of Selatosomini (Figs. 41, 43, 45, 47).

All the aforesaid testifies that the taxonomic position of *S. nanus* requires further clarification; first of all, the still unknown female of this species should be examined.

***Selatosomus songoricus* (Kraatz, 1879)**
(Figs. 50, 52, 54, 56)

Material. **Russia.** *The Republic of Altai:* Ongudaiskii Distr., 26.5 km SE of Ongudai Vill., Chuiskii Highway, Chike-Taman Pass, 50°38'41.6"N, 86°18'43.9"E, h = 1300 m, 28.VI.2015 (Ya.N. Kovalenko), 1 ♂ (CDE). *The Republic of Tuva:* Bai-Taiginskii Distr., Alash River valley, 3 km S of Lake

Kara-Khol, 51°19'N, 89°27'E, 18.VII.2013 (A.A. Der-galev), 1 ♀ (CDE).

Distribution. Kazakhstan, Mongolia (Cate et al., 2007), Western Siberia (Prosvirov and Efimov, 2016). The new records expand the current boundaries of the range of this species in Russia and confirm the point of view that *S. songoricus* is widely distributed in the territory of the Altai-Sayan Highland (Prosvirov and Efimov, 2016).

Taxonomic notes. This species is closely related to *S. coreanus* (Miwa, 1928) inhabiting Siberia, the Russian Far East, and the adjacent regions (Cate et al., 2007) (Figs. 51, 53, 55, 57) but differs in the size and proportions of the body and in the structure of the genitalia (Figs. 50, 52, 54, 56).

Selatosomus talaskijensis Schimmel et al., 2015

Distribution. This species is known from two specimens; in the description, the type locality is given as “Kyrgyzstan: Tien-Shan, Talaskij Alatau, Aksu-Dzhabagly” (Schimmel et al., 2015). Actually the Aksu-Dzhabagly Nature Reserve is situated in Kazakhstan instead of Kyrgyzstan.

Subfamily **Negastrinae** Nakane et Kishii, 1956

Genus **Zorochores** C. G. Thomson, 1859

Zorochores lewisi (Schwarz, 1906)
(Figs. 58, 59)

Material. Russia. Sakhalin Prov.: Kunashir Island, Golovnin Volcano caldera, northern shore of Lake Goryachee, fumaroles, 43°52'52"N, 145°29'59"E, 28.VII.2011 (K.V. Makarov), 2 ♀ (CDE).

Distribution. Japan: Hokkaido and Honshu islands, (Ôhira, 1994; Kishii, 1999). This is the first record from Russia.

Taxonomic notes. *Zorochores lewisi* differs from the similar *Z. nikkoensis* (Kishii, 1976) known from Honshu Island in a smaller size, in the proportions of the body, in the character of the pubescence of the integument, and in the structure of the aedeagus (Kishii, 1976; Arimoto and Arimoto, 2016).

Notes on the Distribution of Some Species in Middle Asia

In the *Catalogue of Palaearctic Coleoptera* (Cate et al., 2007), the distribution of some species of Elateridae was described with a number of errors and in-

accuracies. As this important edition is widely used by coleopterologists, these defects should be listed and corrected. Here I redefine and correct some erroneous data on the distribution of several Middle Asian click-beetle species from the catalogue of Palaearctic Coleoptera (hereinafter, the catalogue).

Subfamily **Melanotinae** Candèze, 1859

Genus **Melanotus** Eschscholtz, 1829

Melanotus (Melanotus) avitus Candèze, 1886

In the catalogue, Uzbekistan is not included in the distribution range of this species, but records of *M. avitus* for Uzbekistan have been published (Gurjeva, 1989c; Dolin and Atamuradov, 1994).

Melanotus (Melanotus) cerberus Gurjeva, 1989

In the catalogue, this species is recorded for Kazakhstan, but all the known records of *M. cerberus* were made in the territory of Tajikistan (Gurjeva, 1989c).

Melanotus (Melanotus) dilaticollis Reitter, 1891

In the catalogue, this species is recorded only for the territory of Kyrgyzstan, but it is also known from Uzbekistan and Tajikistan, and the record from the Karzhantau Mt. Range may be attributed to the territory of Kazakhstan (Gurjeva, 1989c).

Melanotus (Melanotus) heydeni Schwarz, 1892

In the catalogue, Kazakhstan is not included in the range of this species, though *M. heydeni* was recorded from the territory of this country (Gurjeva, 1989c).

Melanotus (Melanotus) kirghizicus Dolin, 1969

In the catalogue, this species is recorded only for the territory of Kyrgyzstan, though it was also recorded from Kazakhstan, and some records should be attributed to Uzbekistan (Tugusheva, 1968; Gurjeva, 1989c).

Melanotus (Melanotus) mamillanus Gurjeva, 1989

In the catalogue, this species is recorded for Kazakhstan, though all the known records of this species were made in Uzbekistan (Gurjeva, 1989c).

Melanotus (Melanotus) skopini Dolin, 1971

In the catalogue, the range of *M. skopini* is bounded by the territory of Kyrgyzstan, but this species was

described from Kazakhstan and also recorded from Uzbekistan (Dolin, 1971; Gurjeva, 1989c).

Subfamily **Denticollinae** Stein et J. Weise, 1877

Tribe **Ctenicerini** Fleutiaux, 1936

Genus **Anostirus** C. G. Thomson, 1859

Anostirus hirculus Gurjeva, 1988

In the catalogue, this species is recorded for Kyrgyzstan, though it is actually known only from the territory of Kazakhstan (Gurjeva, 1988, 1989c).

Subfamily **Cardiophorinae** Candèze, 1860

Tribe **Cardiophorini** Candèze, 1860

Genus **Cardiophorus** Eschscholtz, 1829

Cardiophorus (Cardiophorus) gebleri meridionalis
Gurjeva, 1966

In the catalogue, this subspecies is recorded for Tajikistan, Turkmenistan, and Uzbekistan; however, reliable records of this subspecies were made in the territory of Tajikistan (Kondara, Ramit), and the published record from the "Kugitangtau Mountains" can be attributed to both Uzbekistan and Turkmenistan (Gurjeva, 1966).

Cardiophorus (Cardiophorus) gebleri rutilipes
Gurjeva, 1966

In the catalogue, the distribution of this subspecies is bounded by the territory of Kyrgyzstan; actually *C. gebleri rutilipes* was also recorded from various localities of Uzbekistan and from the "Karzhantau Mt. Range" (Kazakhstan or Uzbekistan) without specification of the data (Gurjeva, 1966).

Cardiophorus (Cardiophorus) mutabilis
Gurjeva, 1966

In the catalogue, Kazakhstan is not included in the range of this species, though *C. mutabilis* was recorded from its territory (Tugusheva, 1968).

Cardiophorus (Cardiophorus) opacus Gurjeva, 1966

In the catalogue, this species is recorded for Tajikistan, but all the known records of this species are from Uzbekistan (Gurjeva, 1966).

Cardiophorus (Cardiophorus) pellitus Schwarz, 1892

In the catalogue, Kazakhstan is not included in the range of this species, though *C. pellitus* was recorded from this territory (Tugusheva, 1968).

Cardiophorus (Metacardiophorus) ineptus
Gurjeva, 1966

According to the catalogue, this species inhabits Uzbekistan, but the only known record of *C. ineptus* ("Khasht-Darya, the Vakhsh Range") is from Tajikistan (Gurjeva, 1966).

Genus **Dicronychus** Brullé, 1832

Dicronychus nigropunctatus (Motschulsky, 1860)

In the catalogue, Uzbekistan is not included in the range of this species, though *D. nigropunctatus* is known from Yaz'yavan Vill. in Uzbekistan (Gurjeva, 1966). In the catalogue, records of *D. nigropunctatus* from Iran are also omitted (Jacobson, 1913; Cate et al., 2002).

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