Acta Zoologica Academiae Scientiarum Hungaricae 66(2), pp. 111–162, 2020
DOI: 10.17109/AZH.66.2.111.2020

A REVIEW OF THE GENUS *BLAPS* (COLEOPTERA: TENEBRIONIDAE) OF CENTRAL AND SOUTH KAZAKHSTAN WITH DESCRIPTION OF TWO NEW SPECIES

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A taxonomic review of the 32 species and subspecies of the genus *Blaps* Fabricius, 1775 from Central and South Kazakhstan is given. Two new species are described: *Blaps skopini* **sp. n.** and *Blaps fouquei* **sp. n.** The first species is most similar to *Blaps granulata* Gebler, 1825, *B. granulipennis* Skopin, 1966 and *B. tsharynensis* Skopin, 1961 but differs from these lastly mentioned species in the longer caudal extension of the elytra (mucro), shape and punctation of pronotum, structure of the male parameres and female genital tubes. *Blaps fouquei* **sp. n.** is most similar to *B. seriata* Fischer von Waldheim, 1820, and differs in the longer antennae, elytra flattened along suture, structure of the male parameres and female genital tubes. *Blaps turcomanorum* Seidlitz, 1893 is recorded for Kazakhstan for the first time. A key to all species known from the area under consideration is presented. Lectotypes of *B. gigantea* Motschulsky, 1845 and *B. confusa* Ménétriés, 1832 are designated. The most species are illustrated for the first time.

Key words: *Blaps*, Kazakhstan, taxonomy, distribution, new species.

INTRODUCTION

The largest genus in the tribe Blaptini Leach, 1815, *Blaps* Fabricius, 1775 includes more than 250 species, more than 30 of which are listed for Kazakhstan (Löbl *et al*. 2008). The most complete taxonomic revision of the genus *Blaps* (including Middle Asia and Kazakhstan) was published by Seidlitz (1893), the disadvantages of his system we discussed earlier (Chigray *et al.* 2016, Chigray & Nabozhenko 2016).

Recently some progress in studies on the phylogeny and systematics of *Blaps* from the Western Mediterranean region (Soldati *et al*. 2009, Martínez Fernández 2010, Comdamine *et al*. 2011, Castro Tovar 2014, Kergoat *et al.* 2014, Soldati *et al*. 2017), the Caucasus (Abdurakhmanov & Nabozhenko 2011) and China (Ren *et al*. 2016) was reached. Species of *Blaps* from other regions, especially from Middle Asia, Kazakhstan, the Middle East, Afghanistan and Himalaya, need a further revision. Only a few taxonomic papers on these regions were published in the 21st century (Schawaller 2006, Chigray & Nabo-

zhenko 2016, Chigray *et al*. 2016, Nabozhenko *et al*. 2019). This paper aims to summarise new data on the fauna of the genus of Middle Asia and Kazakhstan.

Significant contributions to the knowledge of adults and larvae of *Blaps* of Kazakhstan were published by Skopin (1960, 1961, 1964, 1966, 1968, 1973, 1977), who analysed faunistics, morphology and morpho-ecological evolution of Blaptini.

The taxonomic and faunistic reviews of *Blaps* of Western Kazakhstan, as well as some taxonomic problems were discussed in our previous work (Chigray *et al*. 2016). The genus is very diverse in Central and South Kazakhstan, but the status of some subspecies needs revision and molecular-genetic analysis. The fauna of the *Blaps* of Kazakhstan has been studied quite well, but discovery of new species continues (Medvedev 2004, Chigray *et al*. 2016). In this study two new species of *Blaps* from South Kazakhstan are described and a review of the genus *Blaps* from Central and South Kazakhstan is presented.

MATERIAL AND METHODS

The study is based on the examination of adult beetles from the following institutes, museums and private collections: ZIN – Zoological Institute of the Russian Academy of Sciences, St. Petersburg, Russia; IEPaAY – Institute of Ecology of Plants and Animals Ural Branch of the Russian Academy of Sciences, Yekaterinburg, Russia; NMP – Národní Museum, Prague, Czech Republic, NHM – Naturhistorisches Museum, Vienna, Austria. Scanning electron microscopy was made with the SEM EVO-40 XVP (LEO 143OVP) (Federal Research Centre the Southern Scientific Centre of the Russian Academy of Sciences, Rostov-on-Don, Russia).

South Kazakhstan includes the following provinces: Almaty, Jambyl, Turkistan, Kyzylorda; Central Kazakhstan includes only the Karaganda Region.

The system of Matthews and Bouchard (2008) is used for the abdomen: abdominal ventrites 1–5 (we use) or abdominal sternites III–VII.

The synonymy of the species was published in Löbl *et al*. (2008). The references include only the publications with records of *Blaps* in Kazakhstan and publications with original descriptions.

TAXONOMY

Subgenus *Blaps* Fabricius, 1775

Type species: *Tenebrio mortisagus* Linnaeus, 1758

Blaps ballioni Skopin, 1977
(Fig. 1)

Skopin, 1977: 151.

Type material examined (ZIN). Holotype: ♂, 'Ugam Ranges / Baldarbek River / h = 1800 m / 14.vi.1964 / leg. N. Skopin' [in Cyrillics]. Allotype: 1 ♀, 'Karzhantau Range / Badam River / h = 1600 m / 18.v.1938 / leg. N. Skopin' [in Cyrillics].

Distribution. Kazakhstan: Ugam and Karzhantau ranges (Skopin 1977).

Blaps caraboides caraboides Allard, 1882
(Fig. 2)

Allard, 1882: 135; Seidlitz, 1893: 294; Skopin, 1960: 50 (larva); Skopin, 1961: 189.

Material examined (ZIN). 1 ♂, 'Southeast Kazakhstan / around Issyk Lake / vii. 1958 / leg. N.G. Skopin' [in Cyrillics]; 1 ♂, 'Kazakhstan / southeast side of Ketmen Range / 20 km north of Sarynaz / h = 2000 / arid recess near crag / 3.vi.1986. / leg. L. Egorov' [in Cyrillics]; 1 ♀, 'Kazakhstan / Alma-Ata / Big Almaty Lake / 21.vii.1958 / leg. N.G. Skopin' [in Cyrillics].

Distribution. Kazakhstan, China (Gansu, Ningxia, Qinghai, Shaanxi, Xinjiang, Xizang provinces), Kyrgyzstan, Tajikistan, Afghanistan (Löbl *et al*. 2008).

Regional distribution. Southeast Kazakhstan and adjacent territories of Kyrgyzstan (Central Tian Shan) (Skopin 1961).

Blaps caraboides intermittens Kaszab, 1962
(Fig. 3)

Kaszab, 1962: 313; Skopin, 1961: 189.

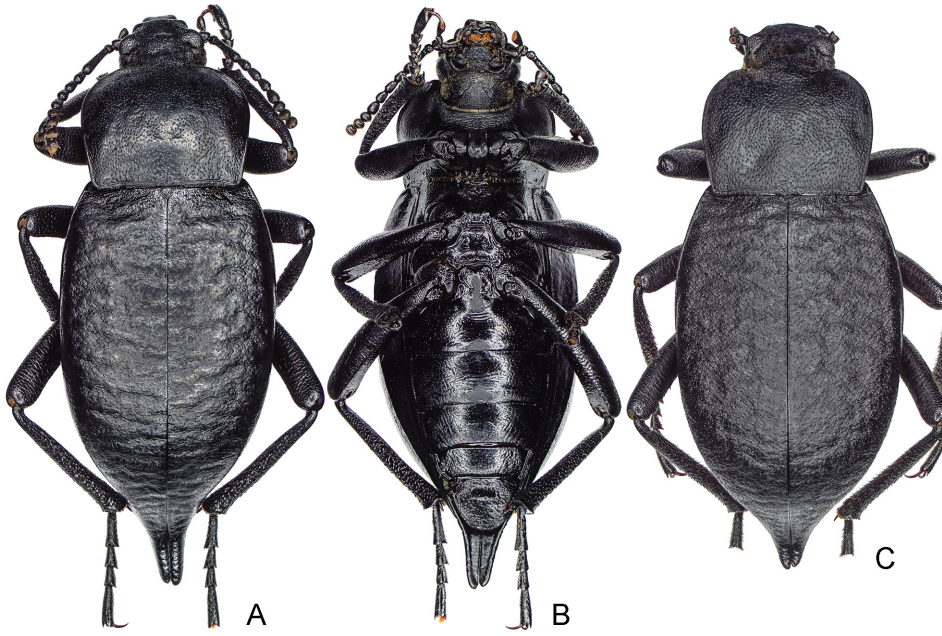

Fig. 1. *B. ballioni*, habitus. A, B = ♂; C = ♀; A, C = dorsal view; B = ventral view

Type material examined (ZIN). Paratypes: 6 ♂♂, 'Southeast Kazakhstan / Dzungarian Alatau / Malyy Baskan River / 10.vi.1953 / leg. N. Balabas' [in Cyrillics].

Material examined (ZIN). 2 ♂♂, 'Southeast Kazakhstan / Dzungarian Alatau / Malyy Baskan River / 25 km east of Pokatilovka village / 18.vi.1968 / leg. G. Bugaev' [in Cyrillics] [45°23'22.90"N, 80°8'25.18"E].

Comments. The subspecies was formally described by Kaszab (1962), but a year before, Skopin (1961) already indicated, without giving a name, that Kaszab considered the populations of the Dzhungarian Alatau as a separate subspecies.

Distribution. Kazakhstan: to the northeast of Ili River, spruce groves in Dzungarian Alatau (Skopin 1961, Kaszab 1962).

Blaps deplanata Ménétriés, 1832
(Figs 4, 21A,B)

Ménétriés, 1832: 199; Fischer von Waldheim, 1832: 192 (*"Blaps muricata"*); Seidlitz, 1893: 288; Skopin, 1968: 86; Medvedev & Nepesova, 1985: 119.

Type material examined (ZIN). Lectotype of *Blaps deplanata* (designated by Abdurakhmanov & Nabozhenko 2011): ♂, 'Baku. // deplanata Menet. Baku // Lectotypus / *Blaps*

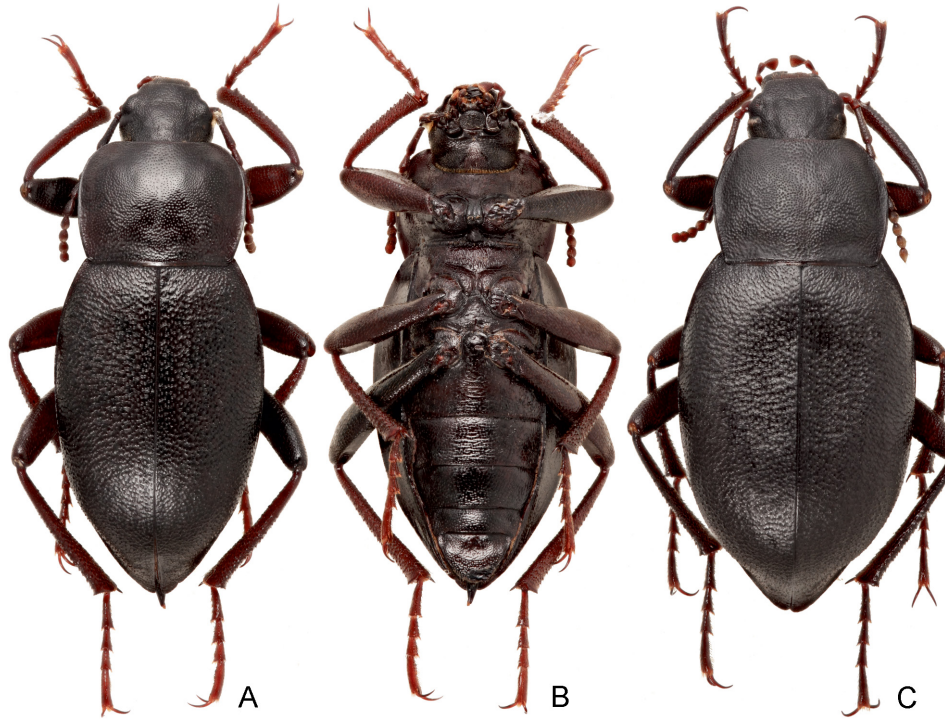

Fig. 2. *B. caraboides caraboides*, habitus. A, B = ♂; C = ♀; A, C = dorsal view; B = ventral view

deplanata Mén. 1832 / des. Abdurakhmanov & Nabozhenko'. Paralectotype: 1 ♀, 'Baku. // Paralectotypus / *Blaps deplanata* Mén. 1832 / des. Abdurakhmanov & Nabozhenko'. Lectotype of *Blaps muricata* (designated by Abdurakhmanov & Nabozhenko 2011): ♂, 'Baku. // *muricata* Fisch. Baku // Lectotypus / *Blaps deplanata* Mén. 1832 / des. Abdurakhmanov & Nabozhenko'.

Material examined (ZIN). 1 ♀, 'Kazakhstan / Barsa-Kelmes Island [former island of Aral Sea] / 13.xii.1978 / leg. A. Konev'; 1 ♂, 'Uzbekistan / Between Bukhara and Kata Kurgan / v.[18]84. / leg. Regel'; 3 ♂♂, 2 ♀♀, 'Uzbekistan / Juma – Samarkand / 12.vii.[18]98 / leg. Retter'; 1 ♂, 'Uzbekistan / Around Samarkand / 1.iii.[18]96 / leg. L. Barshevsky' [in Cyrillics]; 11 ♂♂, 'Uzbekistan / Around Samarkand / 3.iii.[18]96 / leg. L. Barshevsky' [in Cyrillics]; 1 ♂, 1 ♀, 'Uzbekistan / Around Samarkand / 13-15.iv.[18]96 / leg. L. Barshevsky' [in Cyrillics]; 1 ♂, 'Uzbekistan / Samarkand / 1898 / leg. Retter'; 1 ♀, 'Uzbekistan / Samarkand district / Samarkand / 7.v.1904 / leg. G. Suvorov' [in Cyrillics]; 1 ♂, 'Uzbekistan / Samarkand / 1892 / leg. O. Herz'; 1 ♂, 'Uzbekistan / Samarkand / 1892 / leg. Herz // coll. Sivers'.

Distribution. Azerbaijan (Apsheron Peninsula), Iran, Kazakhstan, Turkmenistan, Uzbekistan (Abdurakhmanov & Nabozhenko 2011, Medvedev & Nepesova 1985).

Regional distribution. The Barsakelmes Nature Reserve (a former island in the Aral sea), the outskirts of Northwestern Tian Shan (the Boroldaytau mountains) (Skopin 1968).

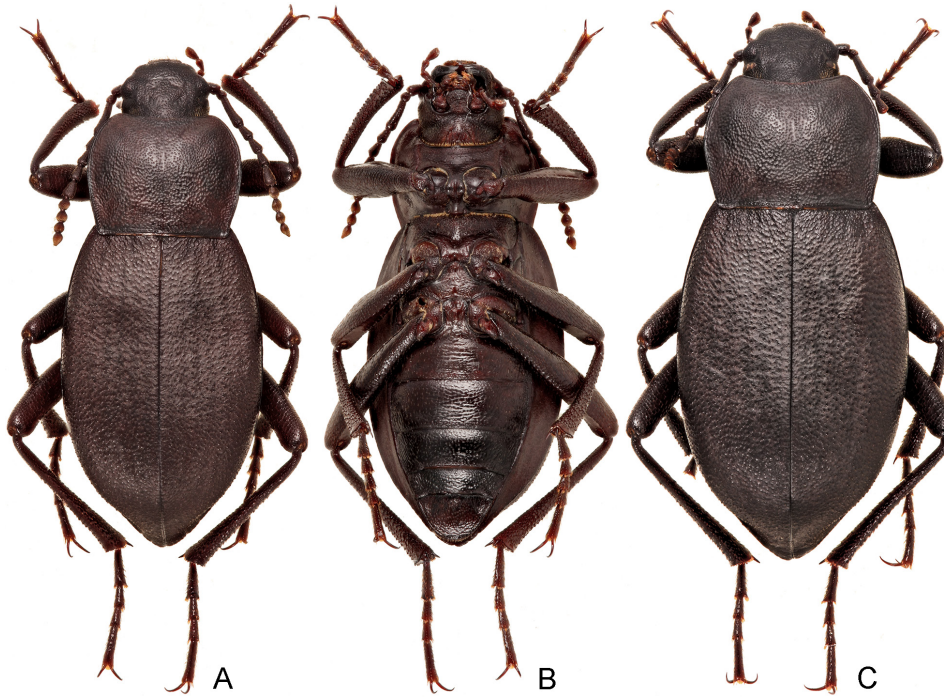

Fig. 3. *B. caraboides intermittens*, habitus. A, B = ♂; C = ♀; A, C = dorsal view; B = ventral view

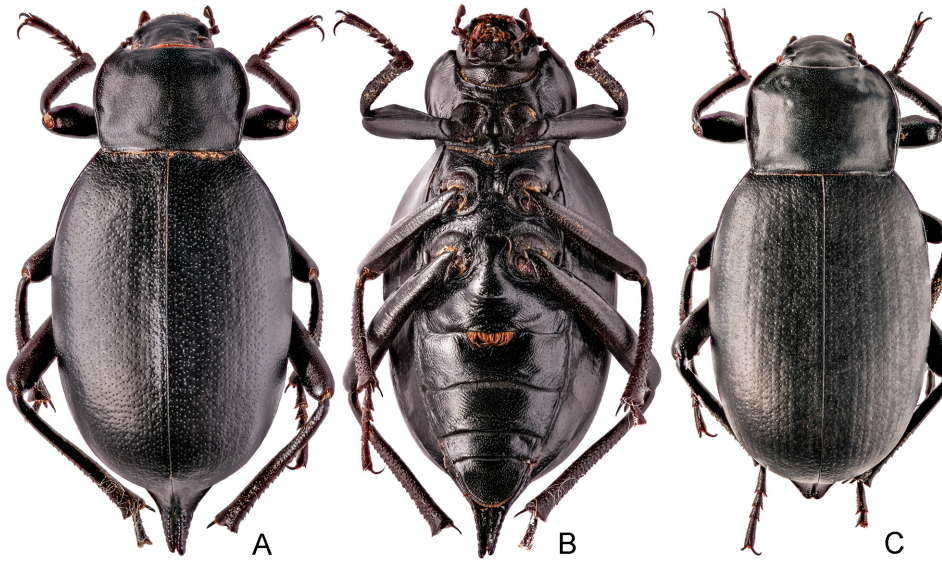

Fig. 4. *B. deplanata*, habitus. A, B = ♂; C = ♀; A, C = dorsal view; B = ventral view

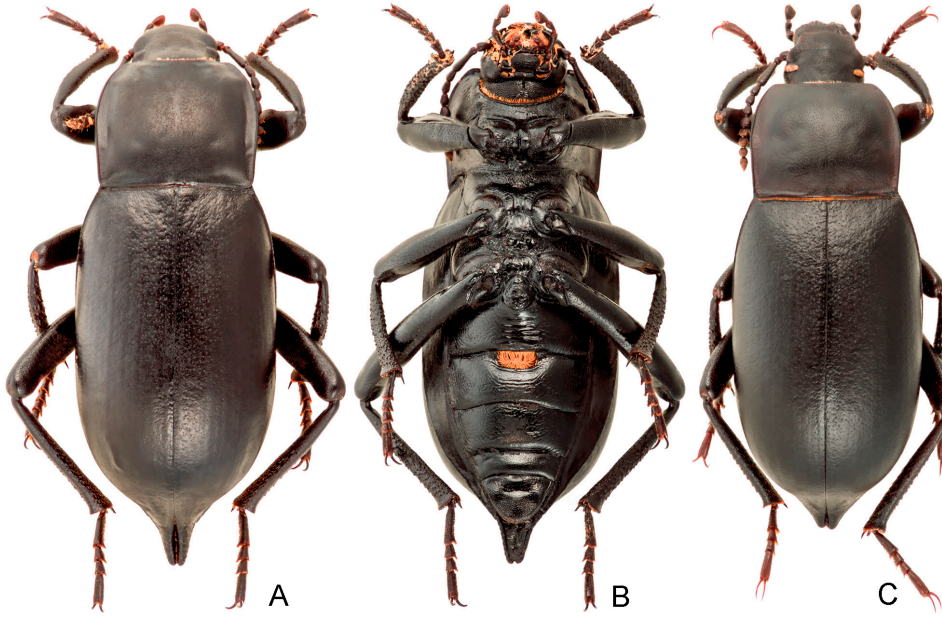

Fig. 5. *B. evanida*, habitus. A, B = ♂; C = ♀; A, C = dorsal view; B = ventral view

Blaps evanida Seidlitz, 1893
(Figs 5, 27D)

Seidlitz, 1893: 285; Skopin, 1960: 55 (larva); Skopin, 1961: 191; Skopin, 1968: 86.

Material examined (ZIN). 1 ♀, 'Southeast Kazakhstan / Alma-Ata Region / Kurdayskaya station / h = 900 m / 07.viii.1907 / leg. A. Jakobson' [in Cyrillics]; 2 ♂♂, 8 ♀♀, 'Southeast Kazakhstan / Alma-Ata Region / Kurdayskiy pass / h = 1100 m / 16.v.1907 / leg. A. Jakobson' [in Cyrillics] [43°16′23.25″N, 74°49′37.78″E]; 1 ♂, 5 ♀♀, 'Southeast Kazakhstan / Alma-Ata Region / Vernyi (Alma-Ata) suburbs / h = 900 m / 23–29.v.1907 / leg. A. Jakobson' [in Cyrillics] [43°12′12.60″N, 76°50′37.26″E]; 1 ♂, 'Southeast Kazakhstan / Alma-Ata Region / Kara-Bulak village / 24.vii.1909 / leg. I.E. Boikov' [in Cyrillics].

Distribution. Kazakhstan (Löbl *et al*. 2008), "Turkestan" (Skopin 1961).

Regional distribution. The plain near Trans-Ili Alatau Range (Skopin 1960), northern slopes and foothills of Trans-Ili Alatau Range (Skopin 1961), Zhetizhol Range, southeastern part of Karatau Ridge (Skopin 1968).

Blaps faustii Seidlitz, 1893
(Figs 6, 27E)

Seidlitz, 1893: 305; Skopin, 1968: 86.

Material examined (ZIN). 1 ♂, 'Kazakhstan / Around Kazalinsk / Dorandsh / 20.x.[18]75 // 79221' [in Cyrillics]; 1 ♂: 'Uzbekistan / Bukhara / Amu Darya / Kelif / 10.vi.1904 / leg. Suvorov' [in Cyrillics]; 1 ♀, 'Uzbekistan / Bishkent / Bukhara / 8.v.[18]97 / leg. Kazankov' [in Cyrillics].

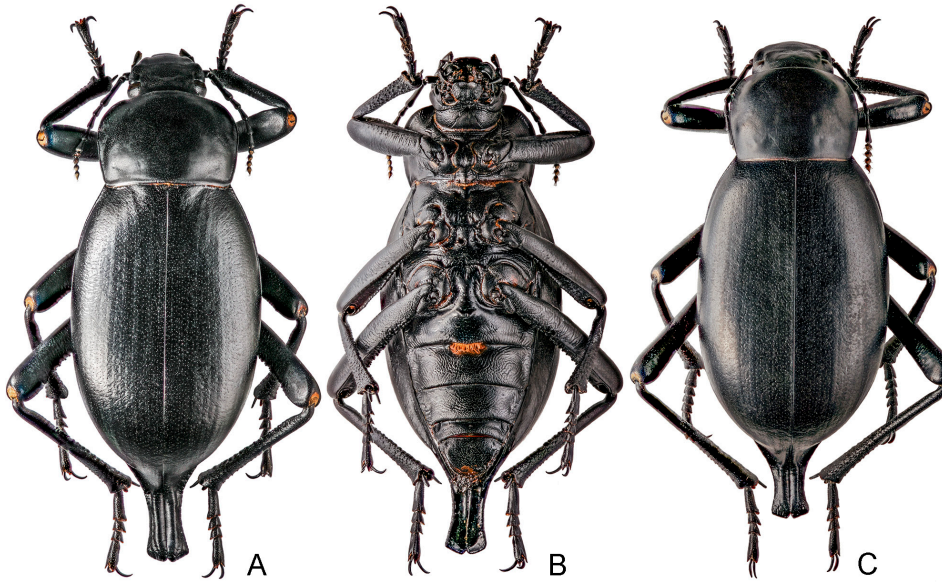

Fig. 6. *B. faustii*, habitus. A, B = ♂; C = ♀; A, C = dorsal view; B = ventral view

Distribution. Kazakhstan, Uzbekistan, Turkmenistan, Tajikistan, Afghanistan (Löbl *et al*. 2008).

Regional distribution. Northern and northeastern parts of the Kyzylkum desert (Skopin 1968).

Blaps fouquei sp. n.
(Figs 7–11)

Type material (ZIN). Holotype: ♂, 'South Kazakhstan / Akmechet-Aulie Cave / 100 km NW Bourny / 22.vi.1964 / leg. V. Kusov // coll. N. Skopin'. Paratypes: 1 ♀, 'South Kazakhstan / Karatau Ridge / 30 km W Sholakkorgan / h = 915 m / 43°46'27.11"N, 68°48'50.20"E / 7.vi.2015 / leg. A. Shapovalov'; 1 ♂: 'South Kazakhstan / Karatau Ridge / 15 km S Kozmoldak village / 43°51'36.0''N, 068°32'52.5''E / h = 931 m / 16.iv.2014 / leg. A. V. Ivanov'.

Description. *Male*. Body black, mat, slender. Anterior margin of epistoma weakly arcuately emarginate, straight in middle. Lateral margins of epistoma weakly rounded. Lateral margins of genae straight in anterior half, rounded at base. Lateral margins of head with distinct emargination between epistoma and genae. Head widest at level of poste-

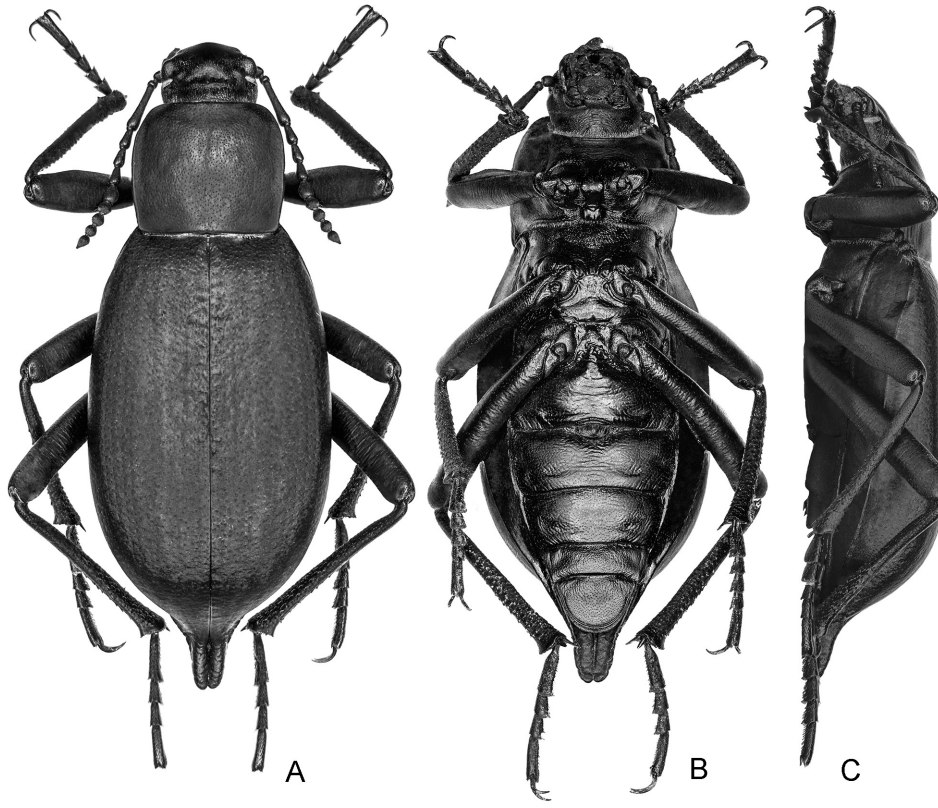

Fig. 7. *B. fouquei* sp. n., habitus, ♂. A = dorsal view; B = ventral view; C = lateral view

rior margin of eyes. Head 1.45 times as wide as interocular distance. Antennomeres 10–11 reaching base of elytra. Ratio of length/width of antennomeres 2–11 as 7(9), 43(10), 19(10), 17(10), 17(11), 18(14), 10(9), 10(9), 10(9), 12(10). Mentum transversely oval, convex in middle, its base straight. Punctation of head fine, sparse (puncture diameters on frons 5 times as wide as distance between punctures, puncture diameters on genae 2 times as wide as distance between punctures).

Pronotum weakly transverse (1.15 times as wide as long), widest at middle, 1.72 times as wide as head. Ratio of pronotal width near anterior angles to widest part and width at base 5.3 : 7.7 : 7.2. Anterior margin of pronotum widely emarginate, lateral margins widely rounded, base straight. Lateral margins of pronotum weakly emarginate near base. Disc of pronotum weakly convex, lateral sides narrow flattened. Anterior angles obtuse, widely rounded, posterior angles right, narrowly rounded. Pronotum completely beaded, except for middle of apex and base. Pronotal punctation moderately coarse, dense (distance between punctures in middle subequal to one puncture diameter), punctation of lateral sides and near base sparser (puncture diameters 2 times as wide as distance between punctures). Prothoracic hypomera with small wrinkles and covered with small granules. Lateral margins of hypomera not excavate.

Elytra weakly convex, elongate (1.93 times as long as wide together), flattened along suture, widest at middle, 3.42 times as long and 2.52 times as wide as pronotum, 2.52 times as wide as head. Caudal extension of elytra (mucro) distinct, 2.2 mm long; elytra 10 times as long as mucro. Elytral surface with fine microwrinkles and rasp-like punctation, obliterated from base to middle, and almost completely disappearing closer to elytral apex. Epipleura with fine wrinkles and sparse fine rasp-like punctures. Hair tuft between

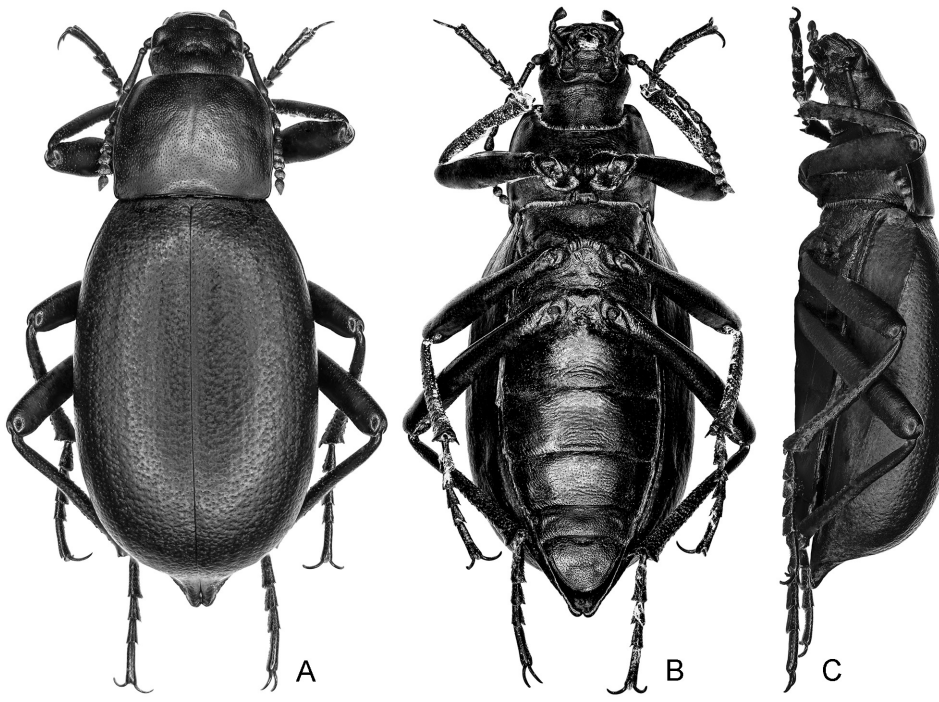

Fig. 8. *B. fouquei* sp. n., habitus, ♀. A = dorsal view; B = ventral view. C = lateral view

abdominal ventrites 1 and 2 present. Abdominal ventrite 1 without tubercle. Abdominal ventrites 1–3 with sparse rasp-like punctation and sparse granules, covered with short recumbent hairs. Abdominal ventrites 4–5 with moderately dense punctation, punctation at lateral sides of ventrite 4 forming wrinkles, ventrite 5 completely beaded, except for base and with unclear bead apically.

Anterior margin of male inner sternite VIII emarginate; accessory gland of sternite VIII moderately long and thin. Rods of *spiculum gastrale* not merged at apex, forming long common stem. Aedeagus length 4.5 mm, width 0.9 mm. Aedeagus weakly C-curved. Lateral margins of parameres weakly rounded, widely emarginate in apical third, lateral sides of parameres with longitudinal impression in basal two-thirds, apex rounded. Parameres length 1.3 mm, width 0.9 mm.

Legs long, slender. Ratio of lengths of femora, tibiae and tarsi of fore, middle and hind legs 8.4 : 7.3 : 5.3, 9.4 : 7.9 : 6.1, 11.6 : 10.5 : 7.8. All tarsomeres with one pair of setal brushes.

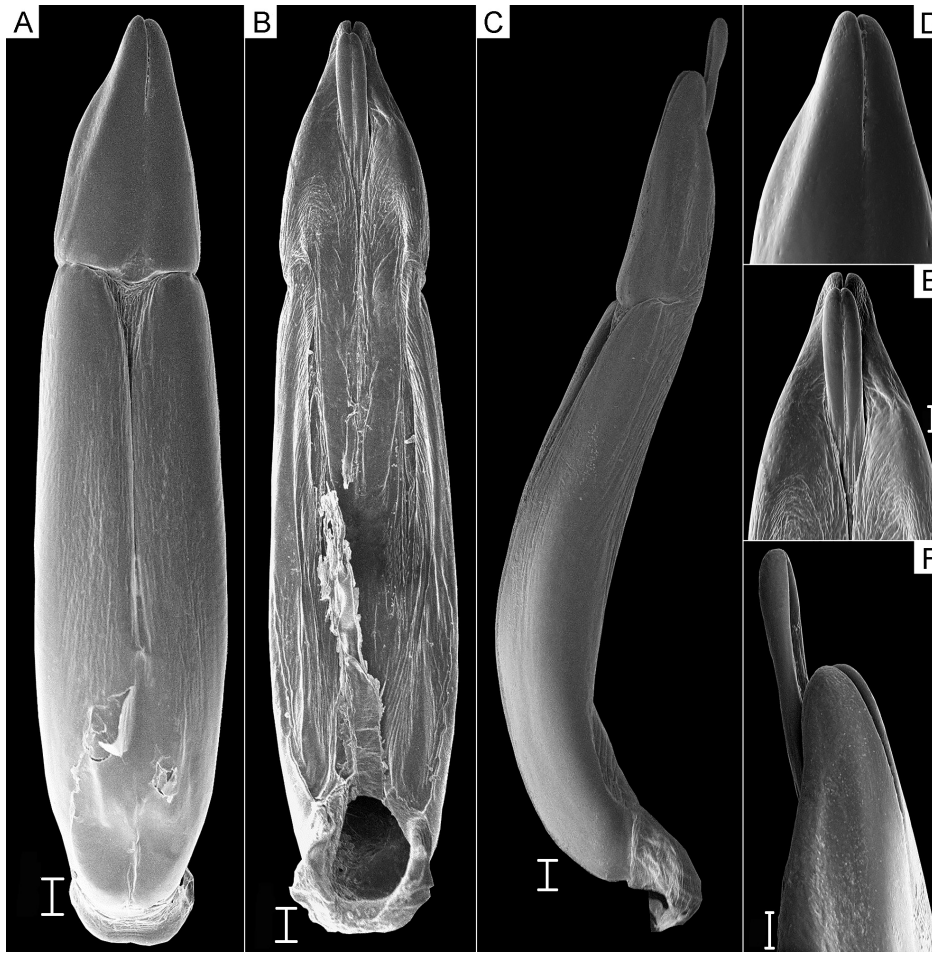

Fig. 9. *B. fouquei* sp. n., aedeagus. A = dorsal view; B = ventral view; C = lateral view; D = apical piece, dorsal view; E = the same, ventral view; F = the same, lateral view. Scale bars: 100 μm for A–C, 30 μm for D, 200 μm for E–F

Body length 29–30 mm, width 11–11.1 mm.

Female. Shape of body and punctation similar to those of male. Head 1.41 times as wide as interocular distance. Antennomere 11 reaching base of pronotum. Ratio of pronotal width near anterior angles, in widest part and at base 4.9 : 7.0 : 6.9. Elytra elongate (1.76 times as long as wide together), 3.65 times as long and 1.55 times as wide as pronotum, 2.4 times as wide as head. Mucro short (1 mm).

Ovipositor moderately long. Apical lobes straight in basal two-thirds, weakly arcuately emarginate at apical third. Apex of lobes acute. Ventral side of lobes with excavation near middle. Middle of ventral side of lobes with small deep longitudinal wrinkles. Ante-

Fig. 10. *B. fouquei* sp. n. A–C = ovipositor: A = ventral view; B = dorsal view; C = lateral view; D–E = apical lobes: D = ventral view; E = dorsal view

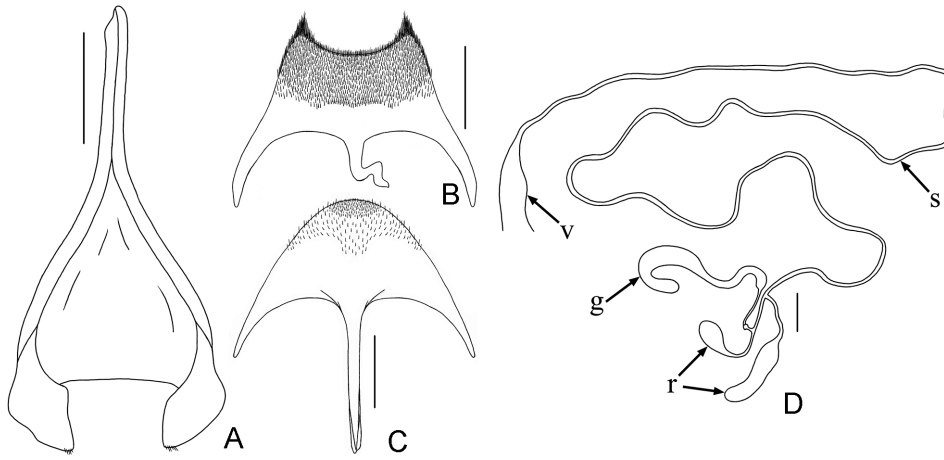

Fig. 11. *B. fouquei* sp. n., details of structure. A = *spiculum gastrale*; B = male inner sternite VIII, C = *spiculum ventrale*; D = female genital tube (v = vagina, s = basal duct of spermatheca, r = reservoirs, g = accessory gland of spermatheca). Scale bars = 1 mm

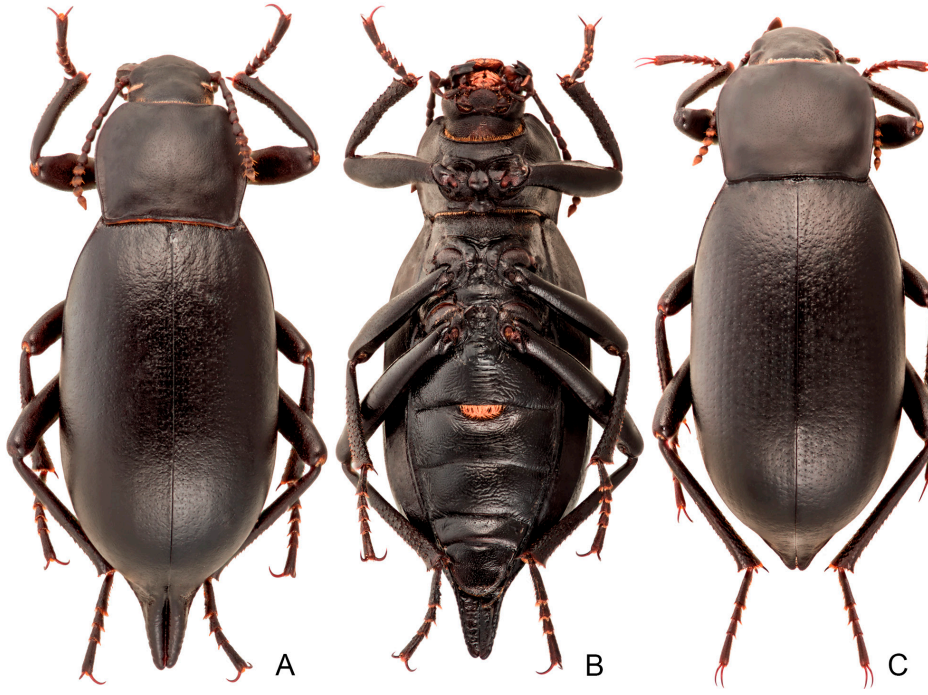

Fig. 12. *B. seriata*, habitus. A, B = ♂; C = ♀; A, C = dorsal view; B = ventral view

rior margin of proctiger widely emarginate. Basal duct of spermatheca between vagina and reservoirs long, gland of spermatheca short. Reservoirs of spermatheca separated from each other; 1st reservoir sharply expanding from middle, wide in apical half; 2nd reservoir almost spherical at apex, 1st reservoir slightly larger than 2nd. Base of spermathecal gland very thin. Stem of *spiculum ventrale* moderately long and wide.

Body length 27.3 mm, width 11.1 mm.

Etymology. The species epithet of this new species is dedicated to the late Czech entomologist, Ren**é** Fouque.

Differential diagnosis. The body shape of the new species is similar to that in *Blaps seriata* Fischer von Waldheim, 1820 (Fig. 12), and differs from the latter in the following character states: antennomeres 10–11 of *Blaps fouquei* **sp**. **n**. reaching first quarter of elytra, those of *B. seriata* reaching only basal quarter of the pronotum; elytra of *Blaps fouquei* **sp**. **n**. flattened along the suture, elytra of *B. seriata* weakly convex; lateral sides of parameres of *Blaps fouquei* **sp**. **n**. weakly rounded in the basal two-thirds, apical third widely emarginate, lateral sides of parameres of *B. seriata* weakly rounded; reservoirs of the spermatheca in *Blaps fouquei* **sp**. **n**. are separated from each other, reservoirs of the spermatheca and valve of the accessory gland in *B. seriata* are closely located.

Blaps granulata Gebler, 1825

Skopin (1966, 1968) presented keys to adults for subspecies of *Blaps granulata*. Multiple subspecies (seven described, two scheduled for description) of *B. granulata* raises doubts. The validity of these taxa requires careful analysis using molecular-genetic methods; keys of Skopin, based on the elytral granulation, is unclear and difficult to use in identification of the taxa. In this paper, we present material on four Kazakhstanian subspecies of *B. granulata* (material on *B. granulata stackelbergi* Bogatchev, 1952 was not studied), but only the nominotypical subspecies is included in our key.

Blaps granulata altynemelis Skopin, 1966
(Fig. 13)

Skopin, 1966: 337; Skopin, 1968: 85.

Type material examined (ZIN). Holotype: ♂, 'Southeast Kazakhstan / Dzungarian Alatau / Altyn-Emel Range / 29.viii.1962 / leg. N.G. Skopin' [in Cyrillics]. Allotype: 1 ♀, 'Southeast Kazakhstan / upper terrace of Ili River / 24.viii.1962 / leg. N.G. Skopin' [in Cyrillics]. Paratypes: 1 ♂, 1 ♀, 'Southeast Kazakhstan / Dzungarian Alatau / Altyn-Emel Range / 30.viii.1962 / leg. N.G. Skopin' [in Cyrillics]; 1 ♀, 'Southeast Kazakhstan / Alma-Ata Region /

Sary-Ozek suburbs / 04.vii.1962 / leg. N.G. Skopin' [in Cyrillics] [44°21'7.37"N, 77°59'5.12"E]; 1 ♀, 'Southeast Kazakhstan / Sarkand / 10.iv.1965. / leg. N. Yerolskaya' [in Cyrillics].

Material examined (ZIN). 2 ♀♀, 'Southeast Kazakhstan / northern slope of Altyn-Emel Range / Kugaly suburbs / 16.ix.1966 / leg. N.G. Skopin' [in Cyrillics] [44°25'56.56"N, 78°42'26.28"E]; 1 ♀, 'Semirechye Region / env. of Araltobe / 14.ix.1966 / leg. N. Skopin' [in Cyrillics]; 1 ♂, 'Southeast Kazakhstan / env. of Tekeli / 22.v.1967 / leg. V. Linsky' [in Cyrillics].

Distribution. Kazakhstan (Almaty Region) (Löbl *et al*. 2008).
Regional distribution. Altyn-Emel Range (Skopin 1966, 1968).

Blaps granulata granulata Gebler, 1825
(Figs 14, 27B)

Gebler, 1825: 47; Seidlitz, 1893: 287; Skopin, 1961: 189: Skopin, 1966: 336; Skopin, 1968: 85; Arnoldi & Medvedev, 1969: 403; Ren *et al*., 2016: 119.

Material examined (ZIN). 1 ♂, 'Southeast Kazakhstan / Alma-Ata Region / bottom land of Bolshaya Almatinka River / h = 1000 m / 02.vi.1949 / leg. N.G. Skopin' [in Cyrillics]; 1 ♂, 'Southeast Kazakhstan / Alma-Ata Region / Ketmen Range / Podgornoye suburbs /

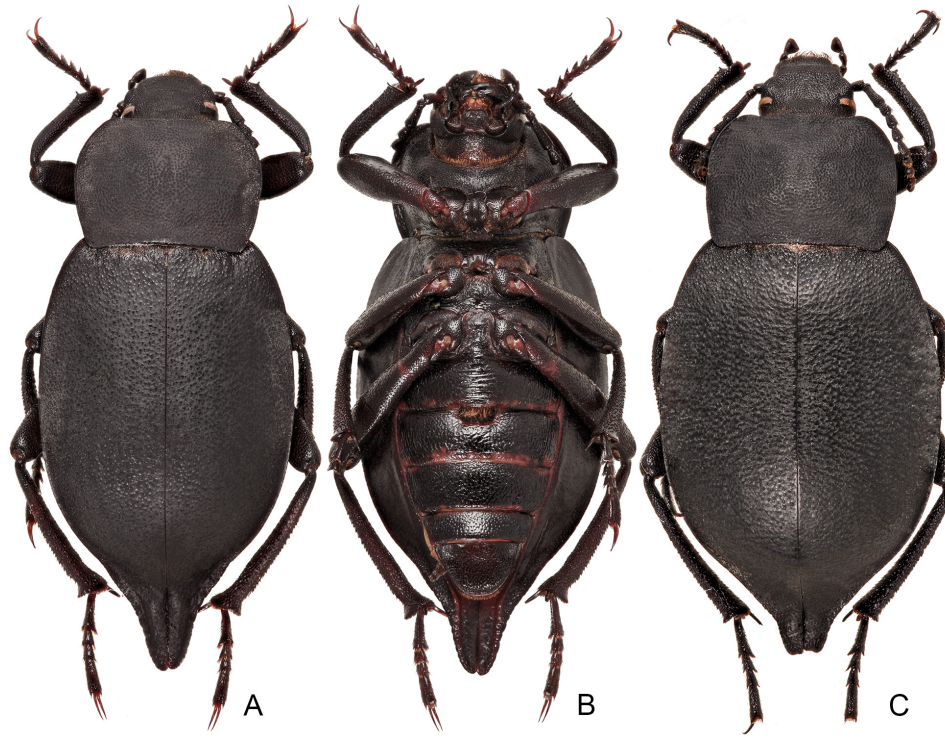

Fig. 13. *B. granulata altynemelis*, habitus. A, B = ♂; C = ♀; A, C = dorsal view; B = ventral view

05.vii.1960 / leg. N.G. Skopin' [in Cyrillics] [44°16'1.02"N, 79°28'18.53"E]; 1 ♂, 1 ♀, 'Southeast Kazakhstan / South-Western Balkhash Lake region / Chu-Iliyskiye gory / 28.vii.1965 / leg. V. Kombulin' [in Cyrillics]; 1 ♂, 'Southeast Kazakhstan / Moyunkum Sands / Kos-Kuduk station / 12.x.1949 / leg. A. Gyarynin' [in Cyrillics] [44°4'56.14"N, 77°25'14.85"E]; 2 ♂♂, 'Southeast Kazakhstan / Alma-Ata Region / Kurtogay natural boundary / 21.vii.1959 / leg. N.G. Skopin' [in Cyrillics] [43°15'52.20"N, 78°58'25.09"E]; 1 ♂, 'Southeast Kazakhstan / Sands along Khorgos River / 17.iv.1965 / leg. N.G. Skopin' [in Cyrillics]; 1 ♂, 'Southeast Kazakhstan / Alma-Ata Region / Alma-Ata / Zailiyskiy Alatau Range / 16.v.1964 / leg. G. Kosolapova' [in Cyrillics] [43°9'43.70"N, 76°53'16.83"E]; 2 ♂♂, 1 ♀, 'Southeast Kazakhstan / Alma-Ata Region / Tekeli suburbs / 22.v.1967 / leg. V. Linskiy' [in Cyrillics] [44°51'47.06"N, 78°45'45.56"E]; 2 ♂♂, 1 ♀, 'Southeast Kazakhstan / Alma-Ata Region / Dzungarian Alatau / Koktuma village / 26.vi.1962 / leg. G.S. Medvedev' [in Cyrillics] [45°51'17.07"N, 81°38'20.27"E]; 1 ♀, 'Southeast Kazakhstan / Alma-Ata Region / Karatal River / 16.vi.1964 / leg. N. Gorbunov' [in Cyrillics]; 1 ♂, 'Southeast Kazakhstan / Alma-Ata Region / lower reaches of Lepsy River / 16.vi.1965 / leg. N.G. Skopin' [in Cyrillics]; 1 ♂, 'Southeast Kazakhstan / Alma-Ata Region / Alma-Ata / 03.vi.1957 / leg. N.G. Skopin' [in Cyrillics] [43°9'43.70"N, 76°53'16.83"E]; 2 ♂♂, 'Southeast Kazakhstan / Alma-Ata Region / Kokishbay village / 16.ix.1948 / leg. D. Aleksandrov' [in Cyrillics] [45°2'19.10"N, 75°26'55.43"E]; 1 ♂, 'Southeast Kazakhstan / Alma-Ata Region / Akkol village / 13.vii.1969 / leg. N.G. Skopin' [in Cyrillics] [45°0'42.54"N, 75°39'31.32"E]; 1 ♂, 'Southeast Kazakhstan /

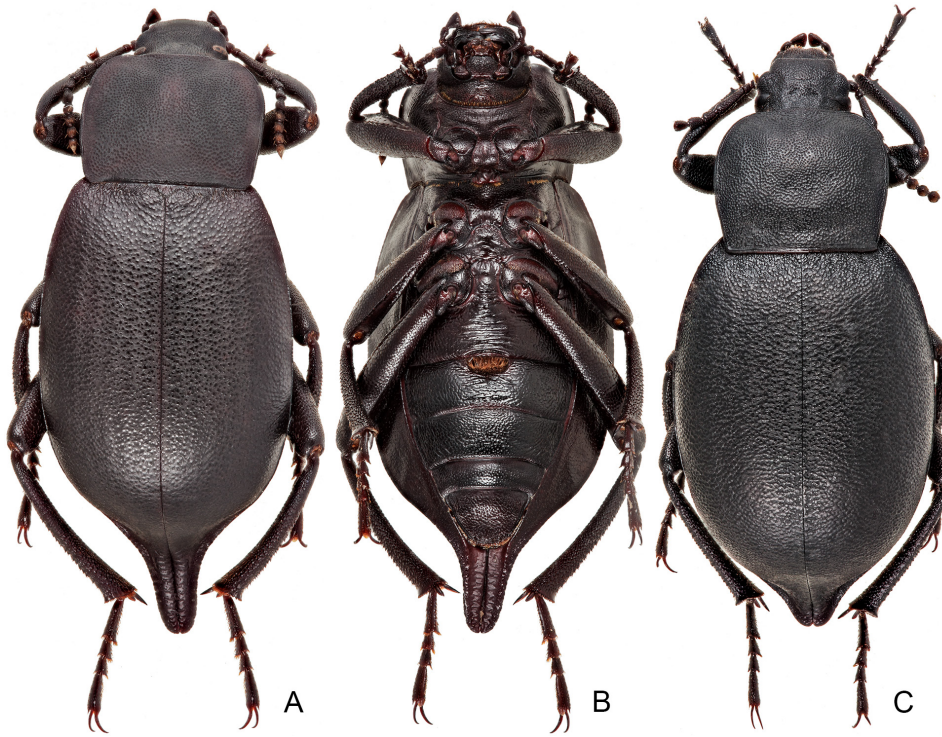

Fig. 14. *B. granulata granulata*, habitus. A, B = ♂; C = ♀; A, C = dorsal view; B = ventral view

Alma-Ata Region / Dzungarian Alatau / 30 km south-west of Sarkand city / 15.vi.1968 / leg. T. Bugaev' [in Cyrillics] [45°18'41.75"N, 79°33'25.99"E]; 1 ♂, 'Southeast Kazakhstan / Alma-Ata Region / Araltobe suburbs / 14.09.1966 / leg. N.G. Skopin' [in Cyrillics] [45°2'10.45"N, 75°27'11.49"E]; 1 ♂, 1 ♀, 'Southeast Kazakhstan / Alma-Ata Region / 40 km south of Khorgos village / 14.iv.1965 / leg. N.G. Skopin' [in Cyrillics] [43°52'13.06"N, 80°14'24.21"E]; 1 ♂, 'Southeast Kazakhstan / Jambyl Region / 120 km west of Burubayltal village / 15.ix.1964 / leg. N.G. Skopin' [in Cyrillics] [45°15'52.41"N, 72°29'3.35"E]; 1 ♂, 'Southeast Kazakhstan / Alma-Ata Region / Bakanas village / 09.vi.1953 / leg. A. Savicheva' [in Cyrillics] [44°48'29.94"N, 76°16'19.24"E]; 1 ♂, 'Southeast Kazakhstan / Alma-Ata Region / Sartaga [env. of Narynkol village] / 24.iv.1964 / leg. N.G. Skopin' [in Cyrillics] [42°43'12.29"N, 80° 9'57.62"E]; 7 ♂♂, 3 ♀♀, 'Eastern Kazakhstan / Saykan Range / Kendyrlik (Saryterek) village / 02.vii.1910 / leg. A. Jakobson' [in Cyrillics] [47°29'52.50"N, 85°10'36.35"E]; 1 ♂, 'Uzbekistan / Malyy Chimgan Mount / 23.vi.1936 / leg. N.G. Skopin' [in Cyrillics] [41°32'45.11"N, 70°2'8.62"E]; 1 ♂, 'Kyrgyzstan / Kyrgyz Ridge / Shamsi ravine / viii.1958 / leg. Pivovarov' [in Cyrillics] [42°39'17"N, 75°23'20"E].

Comments. Specimens labelled as "*Blaps granulata mixta*" and "*Blaps granulata psammophila*" are deposited in ZIN and NMP collections (prepared by Skopin for description, but remained undescribed). The specimens have no

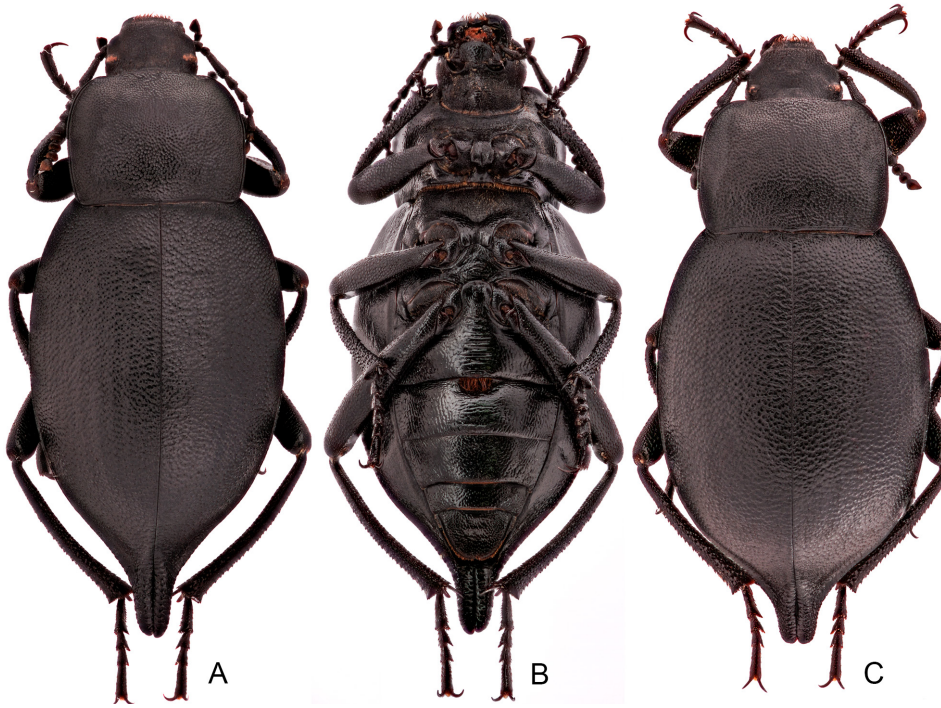

Fig. 15. *B. granulata mixta*, habitus. A, B = ♂; C = ♀; A, C = dorsal view; B = ventral view

distinct differences from the nominotypical subspecies and interpreted here as *Blaps granulata granulata*.

Additional material. "*Blaps granulata mixta*" (unpublished name) (Figs 15A–C). Material examined (ZIN). 3 ♂♂, 3 ♀♀, 'Southeast Kazakhstan / Alma-Ata Region / Jabyrtau mountains / 26.vi.1966 / leg. N.G. Skopin' [in Cyrillics] [42°56'49"N, 79°59'15"E]; 1 ♀, 'Southeast Kazakhstan / Alma-Ata Region / Narynkol village / 30.v.1961 / leg. V. Chekalin' [in Cyrillics] [42°43'12.29"N, 80° 9'57.62"E]; 1 ♂, 'Southeast Kazakhstan / Alma-Ata Region / Terskey Alatau Range / Koksay River / 08.vi.1957 / leg. L. Marinenko' [in Cyrillics]; 1 ♀, 'Southeast Kazakhstan / Alma-Ata Region / Ketmen Range / 20.iii.1960 / leg. V. Zadorin' [in Cyrillics] [43°20'35.53"N, 80°40'42.01"E]; 1 ♂, 'Kyrgyzstan / North from Issyk-Kul lake/ Chong-Örüktü village / 2.v.1956 / leg. N. Skopin' [in Cyrillics].

"*Blaps granulata psammophila*" (unpublished name) (Figs 16A–C). Material examined. 1 ♂, 'Thian-S. Musart' (NMP); 1 ♀ (NMP), 'Chan-Tengri. Mont. merid.' (NMP); 1 ♀, 'Turkestan, Reitter leg.' (NMP); 1 ♂, 'Southeast Kazakhstan / Panfilov [Zharkent city] / 12.05.1960 / leg. N. Skopin' [in Cyrillics] (ZIN); 1 ♂, 'caudata Gebl. Turcom.' (NMP); 1 ♀, 'Southeast Kazakhstan / Panfilov [Zharkent city] / 12.05.1960 / leg. N. Skopin' [in Cyrillics] (ZIN).

Distribution. Central and Southeast Kazakhstan and adjacent areas of Kyrgyzstan (Skopin 1960, 1961; Arnoldi & Medvedev 1969), China (Gansu and Xinjiang provinces) (Löbl *et al*. 2008, Ren *et al*. 2016).

Regional distribution. Eastern part of Kyrgyz Range, the mountainous part of Talas River area, eastern part of Trans-Ili Alatau Range (Skopin 1968).

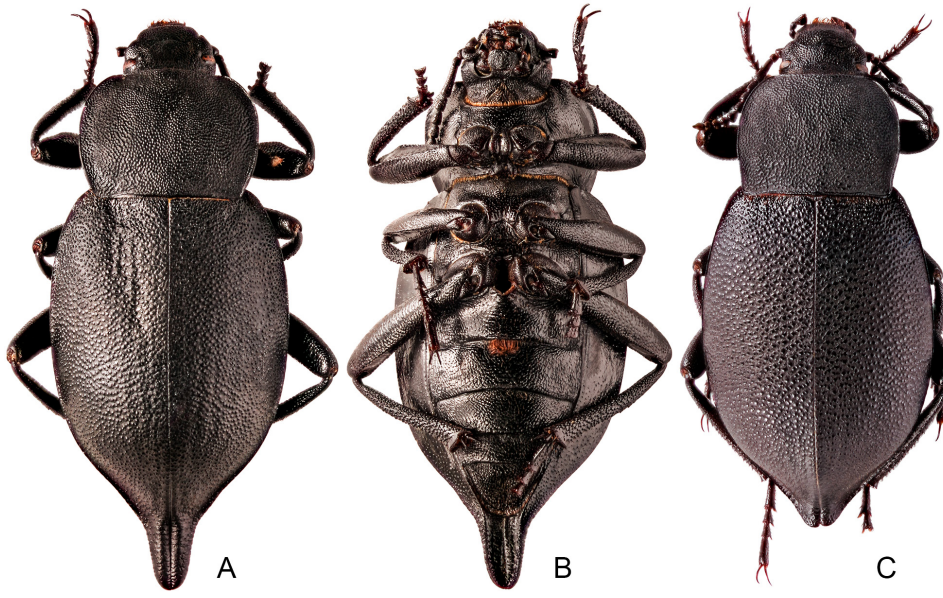

Fig. 16. *B. granulata psammophila*, habitus. A, B = ♂; C = ♀; A, C = dorsal view; B = ventral view

Blaps granulata obliterata Ménétriés, 1849
(Fig. 17)

Ménétriés, 1849: 236 ("Turcomanie"); Skopin, 1966: 337; Skopin, 1968: 85.

Material examined. 1 ♀, 'Turkestan // *Blaps caudata* / Turkestan / ii.20' (NMP); 1 ♂, 'Syr Daria / Bang-Haas' (NMP); 1 ♂, 'Western Balkhash Lake region / 120 km W Baital village / 15.ix.1964 / leg. N. Skopin' [in Cyrillics] (ZIN); 1 ♀, 'Kyrgyz Range / Shamsi pass / viii.1958 / leg. Pivovarov' [in Cyrillics] (ZIN).

Distribution. Kazakhstan (Löbl *et al*. 2008).

Regional distribution. Muyunkum Desert, to the west and south of Balkhash Lake (Baital), the lower course of the Ili River (Skopin 1966, 1968).

Blaps granulata turcomana Fischer von Waldheim, 1843
(Fig. 18)

Fischer von Waldheim, 1844: 88; Gebler, 1844: 103 ("*Blaps caudata* Gebler, 1844"); Skopin, 1960: 50 ("*B. caudata*") (larva); Skopin, 1961: 189 ("*B. caudata*"); Skopin, 1966: 337 ("*B. caudata*"); Skopin, 1968: 85 ("*B. caudata*"); Ren *et al*. 2016: 121.

Fig. 17. *B. granulata obliterata*, habitus. A, B = ♂; C = ♀; A, C = dorsal view; B = ventral view

Material examined (ZIN). 1 ♂, 1 ♀, 'Southeast Kazakhstan / Alma-Ata Region / Bayserke village / 1907 / leg. V. Nedzeltsky' [in Cyrillics] [43°29′28.18″N, 77°3′48.68″E]; 1 ♂, 'Southeast Kazakhstan / Alma-Ata Region / Alma-Ata / 25.iv.1950 / leg. N.G. Skopin' [in Cyrillics] [43°12′12.60″N, 76°50′37.26″E]; 5 ♂♂, 3 ♀♀, 'Southeast Kazakhstan / Alma-Ata Region / Anrahai Mountains / canyon of Kopaly River / 14.v.1909 / leg. Nedovpukov' [in Cyrillics] [44°1′11.62″N, 75°5′54.61″E]; 1 ♂, 1 ♀, 'Southeast Kazakhstan / Semirechye / Kurdayskiy pass / h = 1100 m / 16.v.1907 / leg. A. Jakobson' [in Cyrillics] [43°16′23.25″N, 74°49′37.78″E]; 4 ♂♂, 3 ♀♀, 'Southeast Kazakhstan / Alma-Ata Region / Verniy (Alma-Ata) / 25.vii.1909 / leg. Nedovpuk[ov]' [in Cyrillics] [43°12′12.60″N, 76°50′37.26″E]; 3 ♂♂, 5 ♀♀, 'Southeast Kazakhstan / Alma-Ata Region / Jambyl region / Korday village / 07.vii.1906 / leg. N. Radkevich' [in Cyrillics] [43°2′14.36″N, 74°42′50.64″E]; 4 ♂♂, 1 ♀, 'Southeast Kazakhstan / Alma-Ata Region / Alma-Ata city suburbs / 19.vi.1909 / leg. Nedovpuk[ov]' [in Cyrillics] [43°12′12.60″N, 76°50′37.26″E]; 2 ♂♂, 3 ♀♀, 'Southeast Kazakhstan / Alma-Ata Region / Anrahai Mountains / Almalysai River / 10–14.v.1909 / leg. Nedovpukov' [in Cyrillics] [44°0′6.33″N, 75°48′49.63″E]; 2 ♂♂, 1 ♀, 'Kyrgyzstan / Jalal-Abad Region / Kara-Kul city / 27.vi.1913 / leg. Chernivin' [in Cyrillics] [41°37′47.53″N, 72°40′14.68″E]; 1 ♂, 'Kyrgyzstan / Naryn Region / Kokomeren River / 18–19.v.1914 / leg. Mikhalevskaya' [in Cyrillics].

Distribution. Kazakhstan, Uzbekistan, Kyrgyzstan, China (Nei Mongol and Xinjiang provinces) (Löbl *et al*. 2008, Ren *et al*. 2016).

Regional distribution. The distribution overlaps with that of the nominotypical subspecies (Skopin 1968).

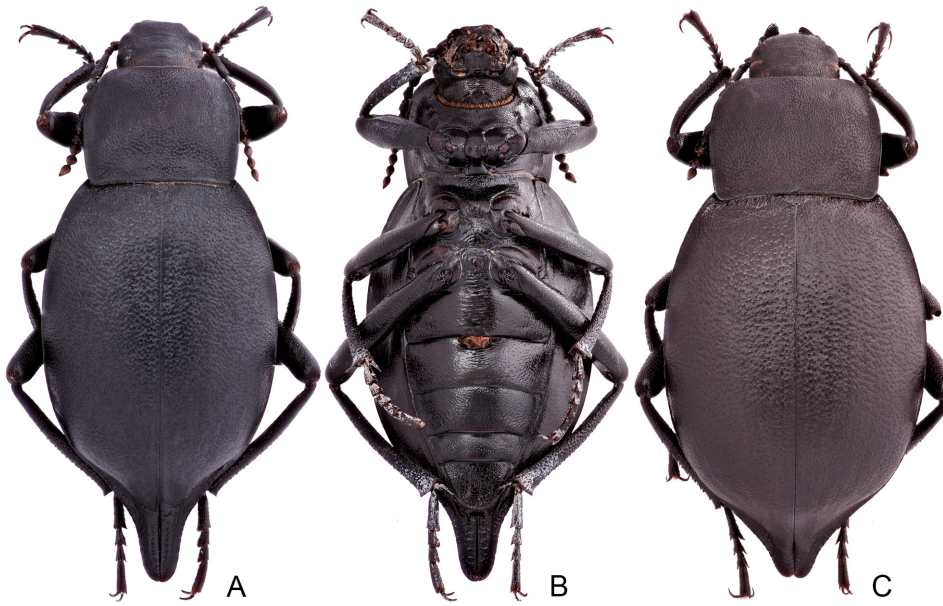

Fig. 18. *B. granulata turcomana*, habitus. A, B = ♂; C = ♀; A, C = dorsal view; B = ventral view

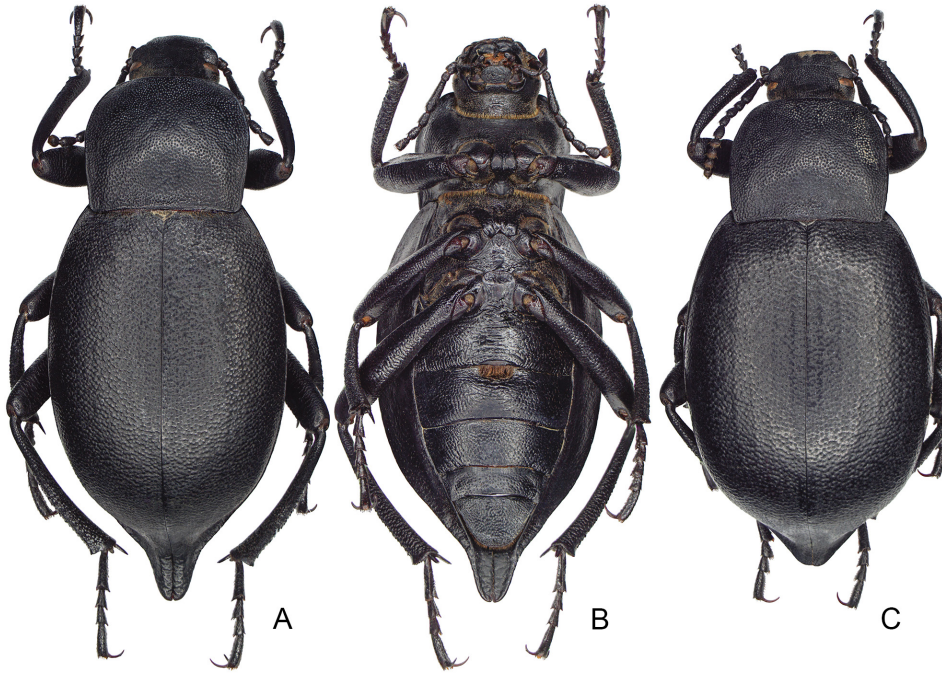

Fig. 19. *B. granulipennis*, habitus. A, B = ♂; C = ♀; A, C = dorsal view; B = ventral view

Fig. 20. *B. holconota*, habitus. A, B = ♂; C = ♀; A, C = dorsal view; B = ventral view

Blaps granulipennis Skopin, 1966
(Figs 19, 27A)

Skopin, 1966: 337.

Type material examined (ZIN). Holotype (♂), allotype (♂) and paratypes (2♀♀): 'Eastern Kazakhstan / east coast of Lake Alakol / 20 km north of Uzynbulak village / 06.vii.1965 / leg. N.G. Skopin' [in Cyrillics] [45°54'44.73"N, 82°10'50.51"E].

Comments. Skopin (1966) described this species (after study of six specimens available to him), but did not indicate the number of males and females in the description. There are four specimens in the collection of ZIN: the holotype, the allotype (male!) and 2 paratypes.

Distribution. Kazakhstan: the area surrounding Alakol Lake and Zhalanashkol Lake (Skopin 1966).

Blaps holconota Fischer von Waldheim, 1844
(Figs 20, 21C,D)

Fischer von Waldheim, 1844: 71 (Desertis Kirgisorum); Skopin, 1960: 57 (larva); Skopin, 1961: 192; Skopin, 1968: 86; Arnoldi & Medvedev, 1969: 403; Medvedev & Nepesova, 1985: 119 (*Blaps scutellata*); Chigray *et al*., 2016: 9.

Material examined (ZIN). 2 ♂♂, 'Southeast Kazakhstan / Jambyl Region / Moyynkum village / 20.vii.1960 / leg. L. Serkova' [in Cyrillics] [44°15'51.05" N, 72°55'15.69"E]; 1 ♂, 'Southeast Kazakhstan / Jambyl Region / Muyunkum village / 22.iv.1954 / leg. L. Serkova' [in Cyrillics] [44°15'51.05"N, 72°55'15.69"E]; 1 ♂, 1 ♀, 'Southeast Kazakhstan / Alma-Ata Region / 40 km south-west of Zharkent city / 26.iv.1965 / leg. N.G. Skopin' [in Cyrillics] [43°54'33.36"N, 79°38'30.23"E]; 1 ♂, 'Southeast Kazakhstan / Alma-Ata Region / Sasykbulak spring / Ulken-Bugutty mountains / 29.vi.1960 / leg. N. Skopin' [in Cyrillics] [43°32'25.36"N, 79°4'15.09"E]; 1 ♀, 'Southeast Kazakhstan / Alma-Ata Region / Kokishbay village / lower course of Ili River / Rondy duct / 16.ix.1948 / leg. D. Aleksandrov' [in Cyrillics] [44°58'42.14"N, 75°33'42.53"E]; 1 ♀, 'Southeast Kazakhstan / Alma-Ata Region / Saryyesik-Atyrau sands / 12.x.1953 / leg. V. Chekalin' [in Cyrillics] [45°30'44.27"N, 77°1'55.41"E]; 1 ♀, Southeast Kazakhstan / Alma-Ata Region / Sarybulak village / 06.vii.1907 / leg. A. Jakobson' [in Cyrillics] [43°14'57.69"N, 74°17'35.90"E]; 1 ♂, 'Southeast Kazakhstan / Semirechye Region / Dzharkentskiy uyezd / Ili River / 18.iv.1906 / leg. V. Ryunbeyl' [in Cyrillics]; 1 ♂, 3 ♀♀, 'Semirechye province. / Galford Mountain pass' [in Cyrillics].

Comments. Arnoldi and Medvedev (1969) distinguished two species: *Blaps holconota* and *Blaps scutellata* Fischer von Waldheim, 1844. These names are listed in the catalogue of Löbl *et al*. (2008) as concerning different species, but the authors of this paper use the name *Blaps holconota* because didn't find distinct differences between these two taxa (Chigray *et al*. 2016: 9).

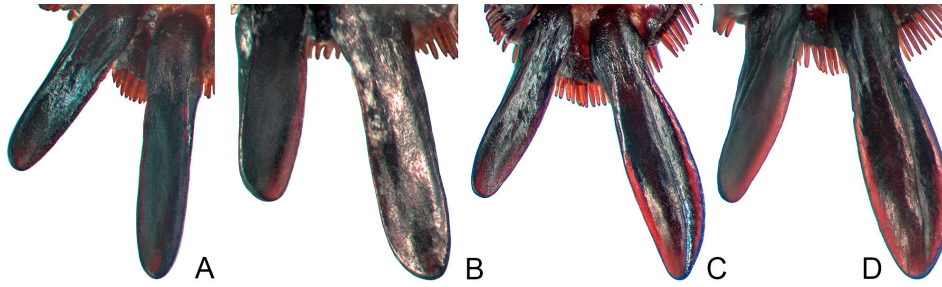

Fig. 21. The spurs. A, B = *B. deplanata*; C, D = *B. holconota*; A, C = the spurs on the mesotibiae; B, D = the spurs on the metatibiae

Distribution. Northern and Southern Kazakhstan, Uzbekistan, Turkmenistan, Afghanistan (Skopin 1961, Arnoldi & Medvedev 1969, Löbl *et al*. 2008).

Regional distribution. Desert areas of South Kazakhstan (Skopin 1961, Arnoldi & Medvedev 1969).

Blaps inflexa Zoubkoff, 1833

Zoubkoff, 1833: 331; Seidlitz, 1893: 292; Skopin, 1960: 52 (larva); Skopin, 1968: 84; Medvedev & Nepesova, 1985: 120; Chigray *et al*., 2016: 6. (see figures in: Chigray *et al*. 2016: fig. 10)

Material examined (ZIN). 1 ♂, 'Kazakhstan / middle of Syr Darya River / Kyzylorda / 30.v.1933 / leg. N.G. Skopin' [in Cyrillics]; 2 ♂♂, 'South Kazakhstan / left bank of Syr Darya River / Tugay / between Shardara and Kok-su / 11.v.1964 / leg. N.G. Skopin' [in Cyrillics].

Distribution. Kazakhstan**,** Uzbekistan (from Namangan to Amu Darya River delta), Turkmenistan (Medvedev & Nepesova 1985 (Amu Darya River delta); Löbl *et al*. 2008).

Regional distribution. The species is distributed in Syr Darya River valley (Skopin 1968).

Blaps kadyrbekovi Medvedev, 2004

Medvedev, 2004: 570; Chigray *et al*., 2016: 6. (see figures in: Chigray *et al*. 2016: figs 9D–F)

Type material examined (ZIN). Holotype and paratypes from both localities were studied (Medvedev 2004).

Distribution. Kazakhstan: Atyrau Region (Kulsary), North Aral Sea coast (Butakov gulf) (Medvedev 2004).

Blaps lethifera lethifera Marsham, 1802

Marsham, 1802: 479; Faldermann, 1837: 50 ("*Blaps anthracina*"); Motschulsky, 1845: 68 ("*Blaps robusta*"); Skopin, 1960: 53 (larva); Arnoldi & Medvedev, 1969: 403; Chigray *et al*., 2016: 7. (see figures in: Chigray *et al*. 2016: figs 11A–C)

Type material examined (ZIN). Lectotype of *Blaps robusta* (designated by Abdurakhmanov & Nabozhenko 2011): ♀, 'Lehmann // *Blaps robusta* Motsch // Lectotypus / *Blaps robusta* / des. Abdurakhmanov & Nabozhenko'. Lectotype of *Blaps anthracina* (designated by Abdurakhmanov & Nabozhenko 2011): ♀, 'Caucas. // *anthracina* Fald. Caucas. // Lectotypus / *Blaps anthracina* / des. Abdurakhmanov & Nabozhenko'.

Material examined (ZIN). More than 60 specimens from Western Kazakhstan Region.

Distribution. Europe (everywhere, north to Scandinavia and the European part of Russia), North Africa, the Middle East, North Caucasus, Western Siberia (Abdurakhmanov & Nabozhenko 2011), Western (Chigray *et al*. 2016), North and NE Kazakhstan (Skopin 1960), China: Xijiang (Ren *at al*. 2016).

Regional distribution. Karaganda Region (Skopin 1960, Arnoldi & Medvedev 1969).

Blaps motschulskiana Bogatchev, 1947
(Figs 22, 36A)

Motschulsky, 1845: 65 ("*Blaps gigantea*"); Seidlitz, 1893: 268 ("*B. gigantea*"); Bogatchev, 1947: 515 (*B. motschulskiana*, new name for *B. gigantea* Motschulsky, 1845 nec *B. gigantea* L. Petagna, 1819); Skopin, 1968: 87 ("*Lithoblaps gigantea*").

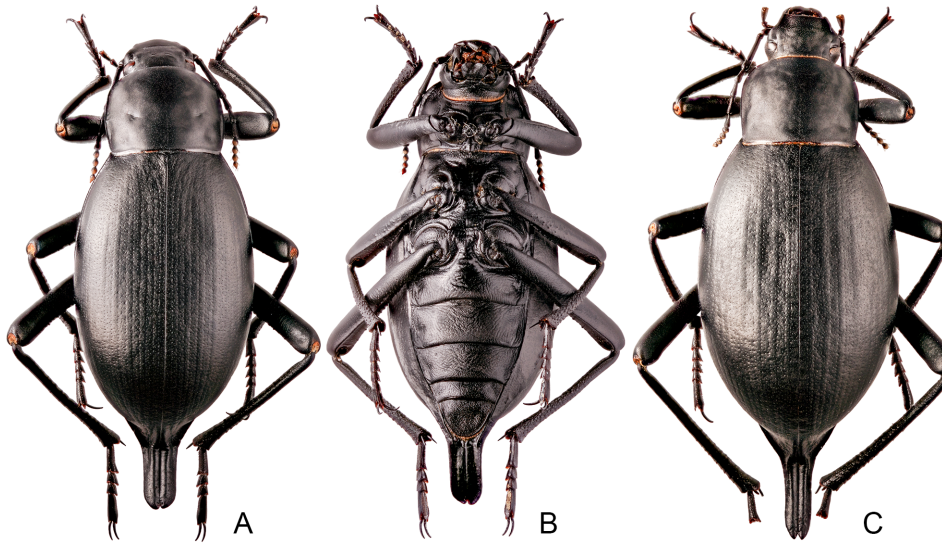

Fig. 22. *B. motschulskiana*, habitus. A, B = ♂; C = ♀; A, C = dorsal view; B = ventral view

Type material examined (ZIN). Lectotype of *Blaps gigantea* Motschulsky, 1845 is designated here: ♂, '*Blaps gigantea* Motschulsky / Tekke. // Lectotypus / *Blaps gigantea* Motschulsky, 1845 / des. I.A. Chigray'.

Material examined (ZIN). 1 ♂, 'Turkmenistan / Karahan / 15.v.1976 / leg. G. Medvedev' [in Cyrillics]; 1 ♀, 'Turkestan'; 1 ♀ 'Turkmenistan / Trans-Caspian Region / Ashgabat / 3.v.1889 / leg. A. Semenov' [in Cyrillics]; 1 ♂ 'Turkmenistan / Trans-Caspian Region / Ashgabat / 2.v.1889 / leg. A. Semenov' [in Cyrillics]; 2 ♀♀ 'Trans-Caspi G. / Turcmenien / leg. E. König'; 1 ♀ 'Turkmenistan / Ashgabat / 1986 / leg. Varentsev' [in Cyrillics].

Distribution. Kazakhstan (Skopin 1968), Turkmenistan, Afghanistan (Löbl *et al*. 2008).

Regional distribution. Southeastern parts of Kyzylkum desert and Syr Darya River near the border of Uzbekistan (Skopin 1968).

Blaps nitida Fischer von Waldheim, 1844
(Fig. 23)

Fischer von Waldheim 1844: 96; Seidlitz, 1893: 280; Skopin, 1961: 190.

Material examined (ZIN). 1 ♂, 1 ♀, 'Central Kazakhstan / Karaganda Region / 30 km west of Gulshad village [46°37′27.91″N, 73°57′55.11″E] / 17.ix.1964 / leg. N.G. Skopin' [in Cyrillics].

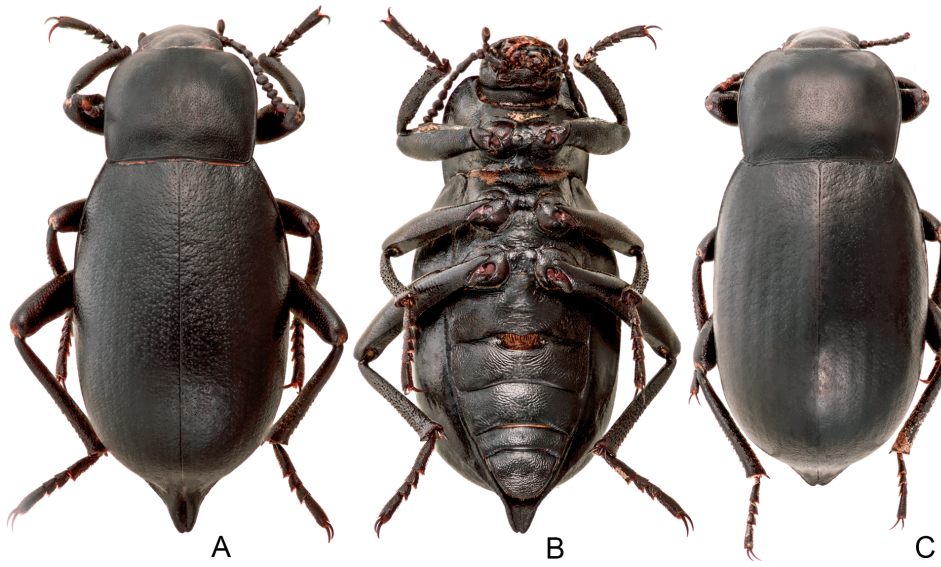

Fig. 23. *B. nitida*, habitus. A, B = ♂; C = ♀; A, C = dorsal view; B = ventral view

Comments. Skopin (1973) discussed the taxonomic position of *Blaps nitida* Fischer von Waldheim, 1844 and the very variable *B. lethifera* Marsham, 1802. The first taxon is listed as a subspecies of *B. lethifera* in the card index and the collection of ZIN, but as a valid species in the Catalogue of Palaearctic Coleoptera (Löbl *et al*. 2008). The status of *B. nitida* can be clarified after the study of type specimens. In the subsequent key, *B. nitida* and *B. lethifera* are given in the same key couplet. Arnoldi and Medvedev (1969) did not mention *B. nitida* for Central Kazakhstan.

Distribution. Kazakhstan, Russia (Western Siberia) (Löbl *et al*. 2008).

Regional distribution. Central and Southeast Kazakhstan (Skopin 1961).

Blaps parvicollis parvicollis Zoubkoff, 1829

Zoubkoff, 1829: 160; Seidlitz, 1893: 281; Skopin, 1960: 54 (larva); Arnoldi & Medvedev, 1969: 404; Chigray *et al*. 2016: 6. (see figures in: Chigray *et al.* 2016: figs 9A–C)

Material examined**.** 1 ♀, 'Kazakhstan / Aral Sea / Barsa-Kelmes Island [a former island of Aral Sea] / 20.vi.1940 / leg. Zvorygin' [in Cyrillics].

Additional material examined**.** More than 50 specimens from Western Kazakhstan.

Comments. The records for Karaganda and Jambyl regions (Arnoldi & Medvedev 1969) are erroneous and probably belong to the subspecies *Blaps parvicollis quadricollis* Ballion, 1878. Differentiation of the subspecies by females is difficult. The female studied from Barsakelmes Reserve (the western part of Southern Kazakhstan) has the body shape and the structure of genitalia similar to those of the nominotypical subspecies from Western Kazakhstan. The authors of this paper have not seen any male of the nominotypical subspecies from South Kazakhstan.

Distribution. South of European part of Russia, Azerbaijan (Apsheron), Kazakhstan (Abdurakhmanov & Nabozhenko 2011)

Regional distribution. The Barsakelmes Nature Reserve (a former island in the Aral Sea).

Blaps parvicollis quadricollis Ballion, 1878
(Fig. 24)

Ballion, 1878: 304; Skopin, 1973: 868 (*B. parvicollis*, subsp.).

= *subcordata* Seidlitz, 1893: 306; Semenov Tian-Shansky & Bogatchev 1936: 567; Skopin, 1960: 54 (larva); Skopin, 1961: 190 (*B. parvicollis*, subsp.); Skopin, 1968: 85 (*B. parvicollis*, subsp.).

Type material examined (NHM). Lectotype of *Blaps subcordata* (designated by Skopin): ♂, 'Haberhauer / Turkestan / 89 // Lectotypus / *Blaps subcordata* Soll. / N. Skopin de-

sign. / 1978 // *Blaps parvicollis quadricollis* Ball. / N. Skopin det. / 1978'. Paralectotypes: 1 ♂, 1 ♀, 'Haberhauer / Turkestan / 89'.

Material examined. ZIN. 1 ♂, 2 ♀♀, 'Southeast Kazakhstan / Alma-Ata Region / Anrahai Mountains / canyon of Kopaly River / 16–19.v.1909 / leg. Nedovpuk[ov]' [in Cyrillics] [44° 1'11.62"N, 75° 5'54.61"E]; 2 ♂♂, 2 ♀♀, 'Southeast Kazakhstan / Alma-Ata Region / canyon of Kopaly River / 19.v.1909 / leg. Nedovpuk[ov]' [in Cyrillics] [44° 1'11.62"N, 75° 5'54.61"E]; 2 ♀♀, 'Southeast Kazakhstan / Jambyl region / Akyr-Tyube village / 25.v.1931 / leg. Veltishchev' [in Cyrillics] [42°59'31.57"N, 72°6'5.64"E]; 2 ♂♂, 'Southeast Kazakhstan / Alma-Ata Region / Ili-Karatal along Turkestan-Siberian Railway / 05.vi.1930 / leg. V. Kizeritskiy' [in Cyrillics]; 1 ♂, 1 ♀, 'Southeast Kazakhstan / Semirechye Region / Kunkuzskaya Upland (Altyn-Emel Range) to north of Aladan / iv.1879 / leg. E. Regel'; 1 ♂, 1 ♀, 'Southeast Kazakhstan / Semirechie / upper reaches of River Bota-Boruly / 20.v.1909 / leg. Nedovpuk[ov]' [in Cyrillics]; 1 ♀, 'Southeast Kazakhstan / Alma-Ata Region / Alma-Ata city suburbs / 03.v.1908 / leg. Nedzvetszkiy' [in Cyrillics] [43°12'12.60"N, 76°50'37.26"E]; 1 ♂, 2 ♀♀, 'Southeast Kazakhstan / env. of Jambyl / Merke village / iv.1910 / leg. E. Fischer' [42°52'5.52"N, 73°11'46.21"E]; 1 ♂, 'Southeast Kazakhstan / Alma-Ata Region / Uzun-Kargaly River / 15.iv.1909 / leg. Nedzvetszkiy' [in Cyrillics] [43°6'51.03"N, 76°21'34.08"E].

Comments. Skopin (1960) suggested that *Blaps parvicollis subcordata* Seidlitz, 1893 could be the eastern subspecies of *B. parvicollis*, and indicated that the larvae of both subspecies are very similar in a structure. Later, Skopin (1973) synonymized *B. parvicollis subcordata* with *B. parvicollis quadricollis* Ballion, 1878 and pointed to the error of Semenov Tian-Shansky and Bogatchev (1936), who noted that *B. quadricollis* is indistinguishable from *B. pterosticha*

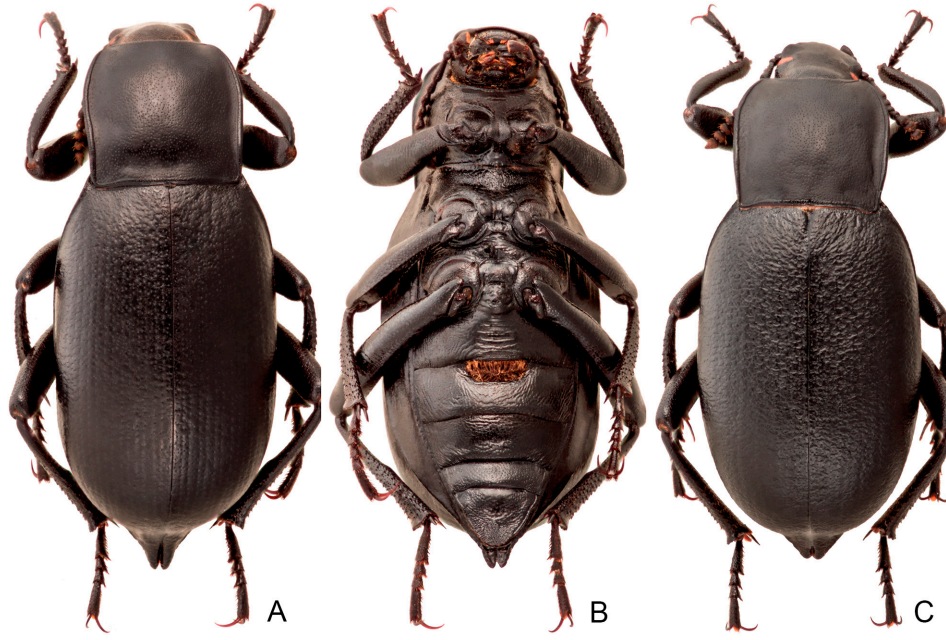

Fig. 24. *B. parvicollis quadricollis*, habitus. A, B = ♂; C = ♀; A, C = dorsal view; B = ventral view

Fischer von Waldheim, 1844. Löbl *et al*. (2008) erroneously listed *Blaps parvicollis subcordata* as a separate species and *B. parvicollis quadricollis* as a junior synonym of *B. pterosticha*.

Blaps parvicollis quadricollis differs from *B. pterosticha* in smaller body size, coarser pronotal bead, male metatibia with thickening in apical half and subglobular reservoirs of spermatheca. Based on the more elongated pronotum and elytra, coarser and thicker pronotal bead and male metatibia with thickening in the apical half (Figs 25A, B), structures of male and female genitalia and also presence of populations with intermediate characters in intergradation zones, it is thought that *B. p. quadricollis* is a subspecies of *B. parvicollis*. Separation of females is difficult, as the body shape (in particular structure of pronotum and elytra) and the structure of spermatheca are rather variable.

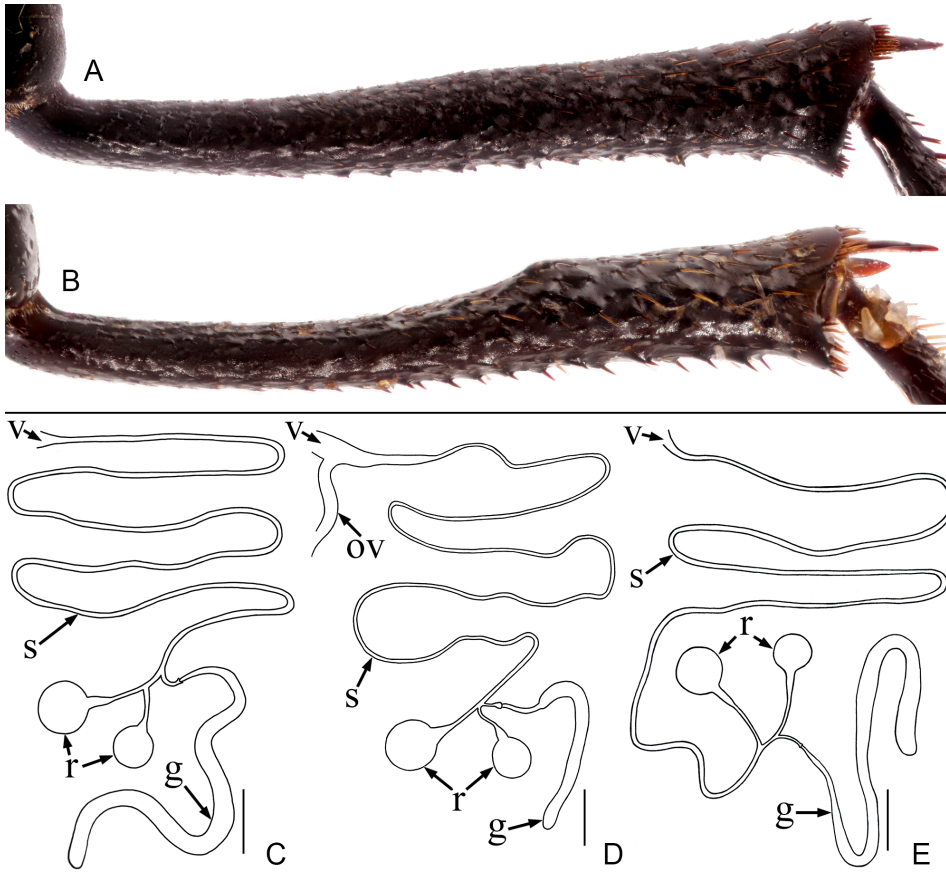

Fig. 25. Subspecies *B. parvicollis*, details of structure. A – *B. parvicollis parvicollis*, B – *B. parvicollis quadricollis*; A, B – male metatibia; C–E – the variability of genital ducts of females. (ov – oviduct; v – vagina, s – basal duct of spermatheca, r – reservoirs, g – accessory gland of spermatheca). Scale bars = 1 mm

Some authors (Medvedev 2001, Chigray *et al*. 2016) illustrated female genital ducts of *B. p. parvicollis*. Recent studies revealed that the genital ducts of each of both subspecies of *B. parvicollis* in Southern Kazakhstan are represented by three types: 1) bases of both reservoirs of the spermatheca are joined in a common duct at a distance from the basal duct (Fig. 25C); 2) bases of reservoirs of the spermatheca are joined and do not form a common tube before the basal duct (Fig. 25D); 3) bases of reservoirs of the spermatheca are separately joined with the basal duct (Fig. 25E).

Distribution. The subspecies is widely distributed in the southern zone of Kazakhstan (Skopin 1968).

Blaps pruinosa Eversmann, 1833

Eversmann, 1833: 53; Motschulsky, 1860: 532 ("*Rhizoblaps"*); Seidlitz, 1893: 268; Skopin, 1960: 58 ("*Lithoblaps"*) (larva); Skopin, 1961: 58 ("*Lithoblaps"*): 192; Skopin, 1968: 87 ("*Lithoblaps"*); Arnoldi & Medvedev, 1969: 404; Medvedev & Nepesova 1985: 115; Chigray *et al*. 2016: 12. (see figures in: Chigray *et al*. 2016: figs 13A–C)

Type material examined (ZIN). Lectotype of *Blaps pruinosa* (designated by Abdurakhmanov & Nabozhenko 2011): ♂, 'Kirgis Step // Lehmann // *Blaps pruinosa* Eversm. Kirgs. Desert // golden square // Lectotypus / *Blaps pruinosa* Eversmann / des. Abdurakhmanov & Nabozhenko'. Lectotype of *Blaps rorulenta* Motschulsky, 1845 (designated by Abdurakhmanov & Nabozhenko 2011): ♀, '*rorulenta // Rhisoblaps rorulenta* Motch. Songoria // c. Motschulsky // golden square // Lectotypus / *Blaps rorulenta* 1845 / des. Abdurakhmanov & Nabozhenko'.

Material examined (ZIN). 1 ♂, 1 ♀, 'Southeast Kazakhstan / Alma-Ata Region / 40 km south-west of Zharkent village / 26.iv.1965 / leg. N.G. Skopin' [in Cyrillics] [43°59'24.43"N, 79°34'3.92"E].

Additional material examined (ZIN). More than 50 specimens from the Caspian Depression.

Distribution. Southeast of the European part of Russia, Kazakhstan (from the Caspian sea to southern foothills of Tarbagatay Mts.), Uzbekistan, Turkmenistan, Tajikistan (Medvedev & Nepesova 1985, Abdurakhmanov & Nabozhenko 2011).

Regional distribution. The species is widely distributed in the central (Arnoldi & Medvedev 1969) and southern zones of Kazakhstan to eastern Balkhash Lake (Skopin 1961).

Blaps pterosticha Fischer von Waldheim, 1844 (Figs 26, 27C)

Fischer von Waldheim, 1844: 93; Seidlitz, 1893: 286 ("Turkestan"); Skopin, 1960: 55 (larva); Skopin, 1961: 191; Skopin, 1968: 86; Ren *et al*., 2016: 153.

Material examined (ZIN). 1 ♂, 1 ♀, 'Southeast Kazakhstan / Alma-Ata Region / Konyrolen village / 16.vii.1957 / leg. N.G. Skopin' [in Cyrillics] [44°16'36.38"N, 79°18'5.33"E]; 1 ♂, 1 ♀, 'Southeast Kazakhstan / Alma-Ata Region / 40 km south-west of Zharket village / 26.iv.1965 / leg. N.G. Skopin' [in Cyrillics] [43°59'24.43"N, 79°34'3.92"E]; 1 ♂, 'Southeast Kazakhstan / Alma-Ata Region / 30 km north of Taldykorgan city / 07.ix.1962 / leg. N.G. Skopin' [in Cyrillics] [45°18'9.84"N, 78°21'9.40"E]; 1 ♂, 'Southeast Kazakhstan / Alma-Ata Region / Kurtogay natural boundary / 15.vii.1959 / leg. N.G. Skopin' [in Cyrillics] [43°15'52.20"N, 78°58'25.09"E]; 2 ♀, 'Southeast Kazakhstan / Alma-Ata Region / 30 km south of Dubun village / 10.vi.1969 / leg. N.G. Skopin' [in Cyrillics] [43°26'5.87"N, 80°11'13.00"E]; 1 ♀, 'Southeast Kazakhstan / Alma-Ata Region / Kurtogay natural boundary / 12.v.1961 / leg. N.G. Skopin' [in Cyrillics] [43°15'52.20"N, 78°58'25.09"E]; 1 ♂, 1 ♀, 'Southeast Kazakhstan / Alma-Ata Region / 40 km north of Zharkent village / 14.v.1961 / leg. N.G. Skopin' [in Cyrillics] [44°31'44.58"N, 79°59'36.85"E]; 1 ♂, 1 ♀, 'Southeast Kazakhstan / Alma-Ata Region / Saryzhaz village / 25.vi.1966 / leg. N.G. Skopin' [in Cyrillics] [42°54'31.02"N, 79°35'49.30"E]; 1 ♀, 'Southeast Kazakhstan / Alma-Ata Region / Kapchagay city / 29.iii.1962 / leg. N.G. Skopin' [in Cyrillics] [43°51'40"N, 77° 2'45.73"E]; 1 ♂, 1 ♀, 'Southeast Kazakhstan / Alma-Ata Region / Zharkent village / 12.v.1961 / leg. N.G. Skopin' [in Cyrillics] [44° 9'24.73"N, 79°59'53.04"E].

Comments. Skopin (1961) showed that *Blaps pterosticha* and *B. tenuicauda* Seidlitz, 1893 are morphologically similar species and their lifestyles are the

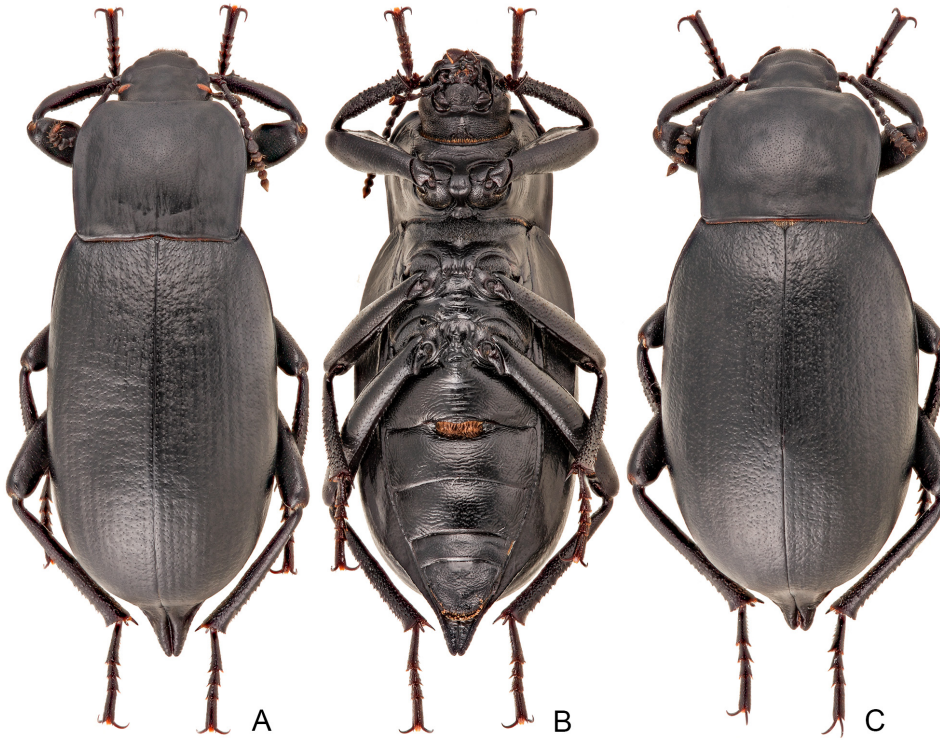

Fig. 26. *B. pterosticha*, habitus. A, B – ♂; C = ♀; A, C = dorsal view; B = ventral view

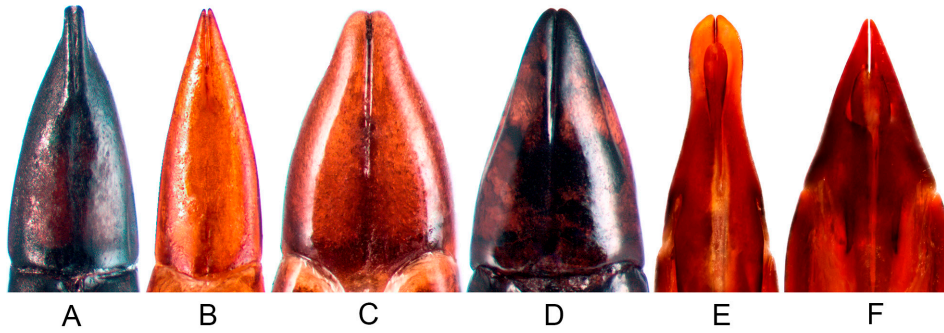

Fig. 27. Apical piece of aedeagus (parameres). A = *B. granulipennis*; B = *B. granulata granulata*; C = *B. pterosticha*; D = *B. evanida*; E = *B. faustii*; F = *B. turcomanorum*

same; he suggested that *B. tenuicauda* is only a form of *B. pterosticha*. Recent studies confirmed this opinion based on the absence of any significant external and internal structural differences between the specimens formerly considered as these two "taxa", including those provided by Skopin with the label "Homotypus". The validity of these taxa needs a confirmation by re-examination of the type specimens of both "species". In the subsequent key *B. pterosticha* and *B. tenuicauda* are given in the same couplet.

Distribution. Kazakhstan, Kyrgyzstan, China (Xizang province), Mongolia (Löbl *et al*. 2008, Ren *et al*. 2016), Afghanistan (Kaszab 1970)

Regional distribution. North of the Muyunkum Desert, Middle Irtysh region, Balkhash Lake region (Skopin 1961).

Blaps skopini sp. n.
(Figs 28–33, 37C)

Type material. Holotype (♂) and paratypes (1 ♂, 2 ♀♀): 'Southeast Kazakhstan / Ketmen Range / 7 km SW Aktam village / 43°23'21.6''N, 79°52'48.3''E / h=1376 m / 30.v.2015 / leg. A.V. Ivanov' (ZIN); Paratypes: 1 ♂, 1 ♀: 'Southeast Kazakhstan / Sugates Mountains / 4.ix.1968 / leg. N.G. Skopin' (ZIN); 1 ♂, 3 ♀♀: 'Southeast Kazakhstan / Ketmen Range / 4 km N Talas village / 43°10'07.2''N, 79°47'38.6''E / h=2185 m / 24.iv.2018 / leg. A.V. Ivanov' (ZIN); 2 ♂♂: 'Southeast Kazakhstan / Ketmen Range / 4 km N Talas village / 43°10'07.2''N, 79°47'38.6''E / h=2185 m / 09.iv.2019 / leg. A.V. Ivanov' (IEPaAY, ZIN); 1 ♂: 'Southeast Kazakhstan / 14 km NW Aktogay village / 43°17'43.9''N, 78°59'27.7''E / h=1006 m / 24.v.2016 / leg. A.V. Ivanov' (ZIN).

Description. *Male*. Body black, mat, slender. Anterior margin of epistoma weakly emarginate, straight in middle. Lateral margins of epistoma straight. Lateral margins of genae straight in anterior half, rounded at base. Lateral margins of head with indistinct emargination between epistoma and genae. Head widest at level of eyes and temples. Head 1.41 times as wide as interocular distance. Antennomeres 10–11 reaching base of pronotum when directed backwards. Ratio of length/width of antennomeres 2–11 as 6 (8),

31 (9), 11 (9), 11 (9), 11 (9), 15 (11), 10 (8), 10 (9), 10 (10), 14 (10). Mentum hexagonal, with weak outer angles. Punctation of head sparse, dense (distance between punctures subequal to or smaller than puncture diameter), bottom of punctures with one microgranule.

Pronotum transverse (1.32 times as wide as long), widest at middle, 1.94 times as wide as head. Ratio of pronotal width near anterior angles to widest part and that at base 4.1 : 7.8 : 6.2. Disc of pronotum weakly convex, narrow flattened along lateral sides and base. Anterior margin of pronotum widely emarginate, lateral margins widely rounded in anterior third and weakly rounded in posterior half, base of straight. Disk completely beaded except for apical middle. Anterior angles widely rounded, posterior angles narrowly rounded and right. Punctures of pronotum similar to those on head, strongly dense, puncture subcontiguous, sparser in middle (distance between punctures smaller than puncture diameter). Prothoracic hypomera with small wrinkles and covered with sparse small granules. Hypomera along lateral margins narrowly excavate.

Elytra weakly convex, elongate (2.1 times as long as wide together), widest at middle, 3.86 times as long and 1.37 times as wide as pronotum, 2.39 times as wide as head. Caudal extension of elytra (mucro) distinct, 5 mm long; elytra 4 times as long as mucro. Elytra with rasp-like punctures, punctation at sides becoming denser. Epipleura with fine wrinkles and sparse fine rasp-like punctation. Hair tuft between abdominal ventrites 1 and 2 present. Abdominal ventrites 1–3 with large transverse wrinkles in middle, ventrites 4–5 without wrinkles. Abdominal ventrites 1–3 covered with sparse small granules and

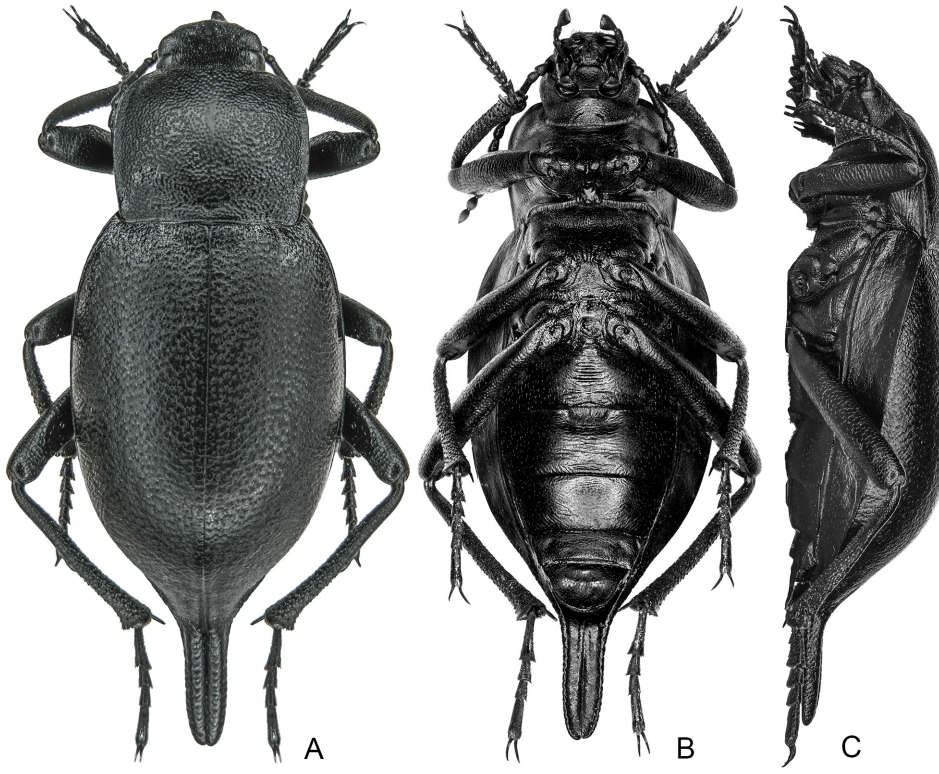

Fig. 28. *B. skopini* sp. n., habitus, ♂. A = dorsal view; B = ventral view; C = lateral view

rasp-shaped punctures, ventrite 4 with only rasp-like punctures, ventrite 5 with simple punctures, completely beaded except for base.

Legs slender. Ratio of lengths of femora, tibiae and tarsi of fore, middle and hind legs 6.5 : 5.5 : 3.2; 7.2 : 6.3 : 4.1; 9.1 : 8.2 : 4.7. All tarsomeres with bifurcated setal brush.

Anterior margin of male inner sternite VIII weakly emarginate, straight in middle, accessory gland of sternite VIII moderately long and thin, middle of sternite without hairs. Rods of *spiculum gastrale* merged at apex, forming long common stem, lobes of *spiculum gastrale* elongated. Aedeagus length 4.3–4.4 mm, width 0.8–0.9 mm. Aedeagus weakly C-shaped. Basal third of lateral margins of parameres almost straight, middle widely rounded, apical third strongly acuminate at apex. Parameres length 1.4 mm, width 0.5 mm. Sides of parameres with two longitudinal impressions: one longer beginning from base and another shorter and disposed at middles.

Body length 27–28 mm, width 9.7–9.9 mm.

Female. Shape of body and punctation similar to those of male. Head 1.26 times as wide as interocular distance. Antennomeres 10–11 reaching base of pronotum when directed backwards. Ratio of pronotal width near anterior angles, in widest part and at base 3.8 : 6.9 : 6.4. Elytra elongate (1.72 times as long as wide together), 3.16 times as long and 1.38 times as wide as pronotum, 2.7 times as wide as head. Mucro short (1.6 mm).

Ovipositor moderately long. Apical lobes straight in basal thirds, weakly arcuately rounded in middle, apical third weakly arcuately emarginate. Apex of lobes acute. An-

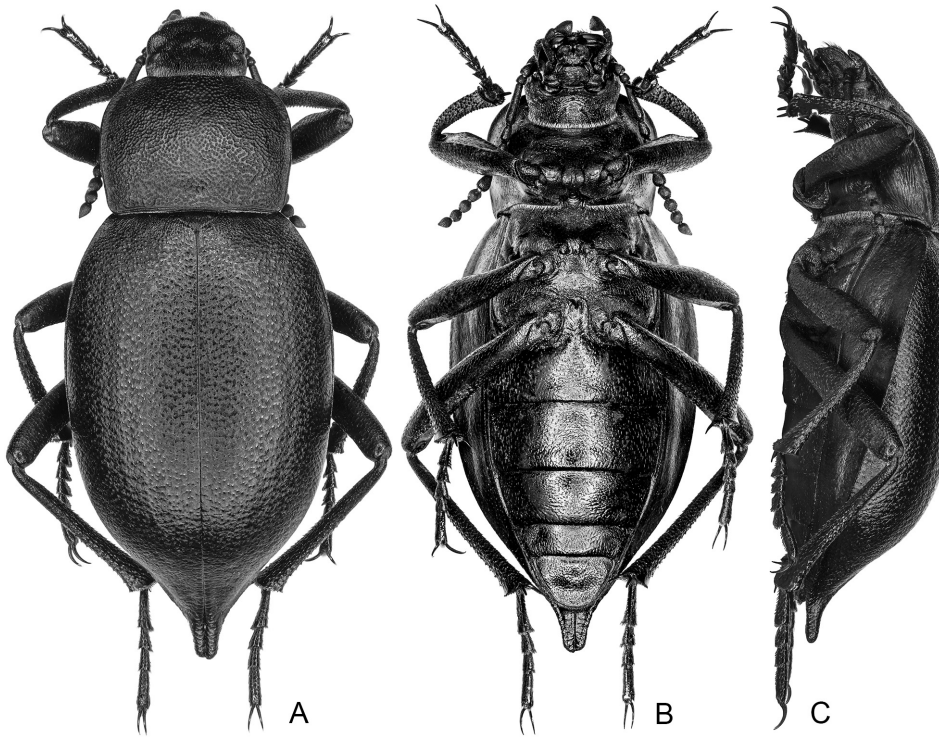

Fig. 29. *B. skopini* sp. n., habitus, ♀. A = dorsal view; B = ventral view; C = lateral view

terior margin of proctiger with deep narrow emarginated in middle. Basal duct of spermatheca between vagina and reservoirs long, gland of spermatheca short. Bases of reservoirs of spermatheca thin, their apical half wider, 1st reservoir twice larger than 2nd. Stem of *spiculum ventrale* moderately long and thin.

Body length 22–24 mm, width 9–9.2 mm.

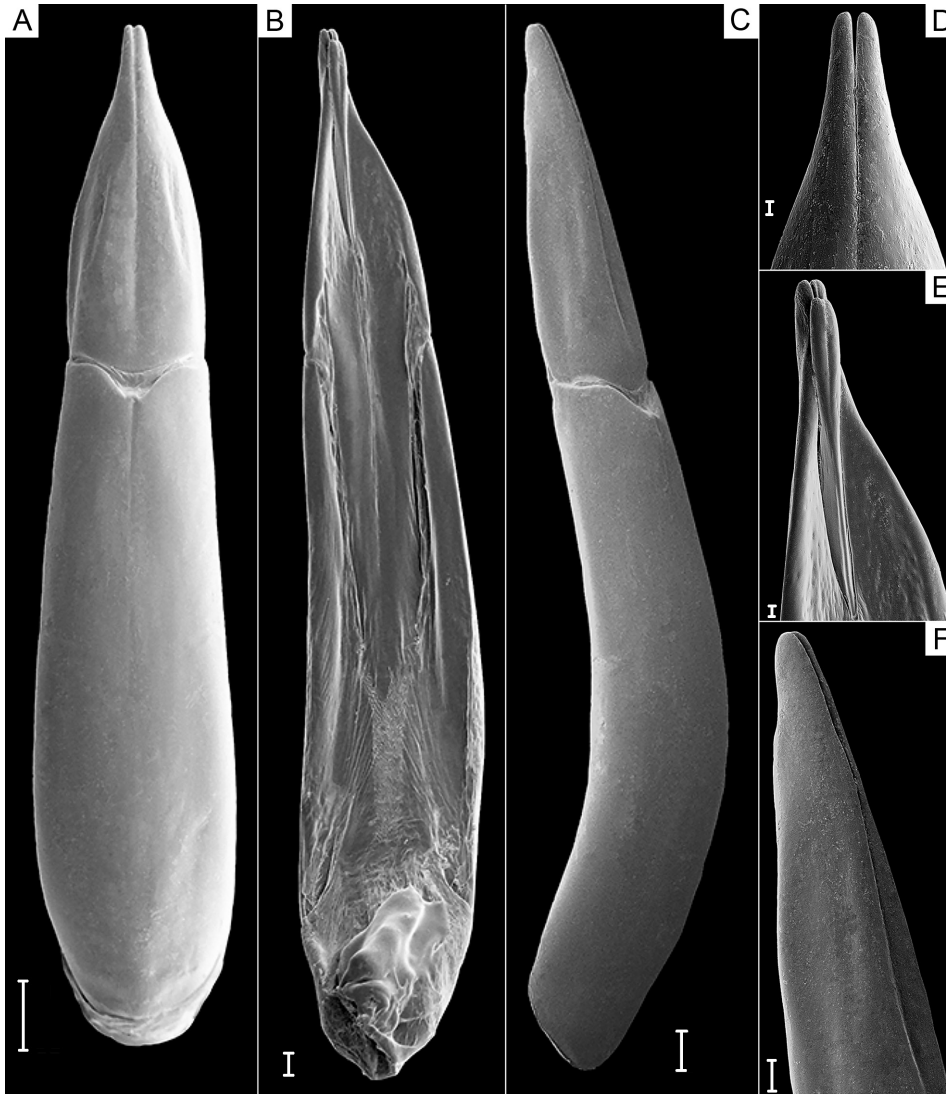

Fig. 30. *B. skopini* sp. n., aedeagus. A = dorsal view; B = ventral view; C = lateral view; D = apical piece, dorsal view; E = the same, ventral view; F = the same, lateral view. Scale bars: 30 μm for D, E, 100 μm for B, F, 200 μm for C, 300 μm for A

Etymology**.** The species is named after the late Nikolay Georgievich Skopin famous specialist on Central Asian Tenebrionidae.

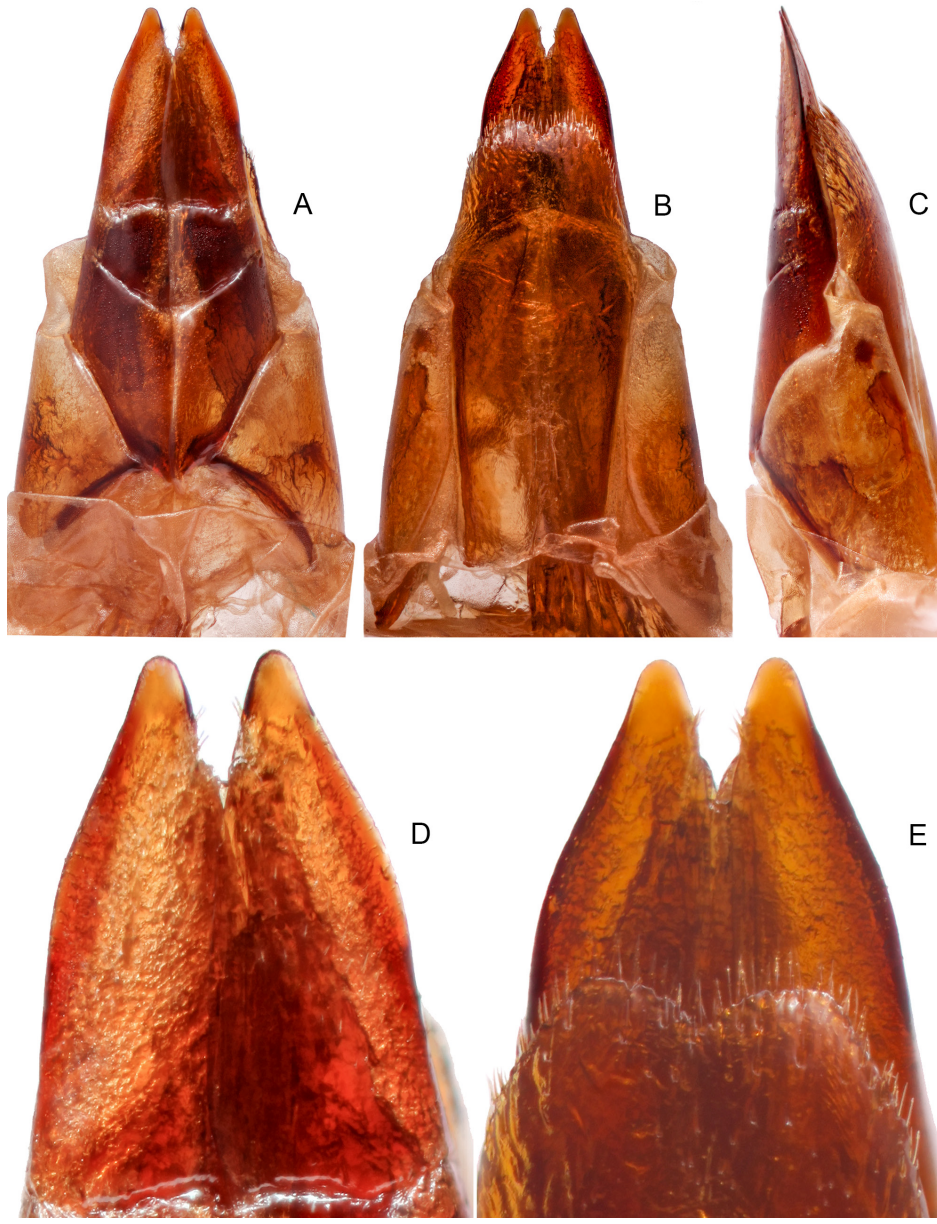

Fig. 31. *B. skopini* sp. n. A–C =ovipositor: A = ventral view; B = dorsal view; C = lateral view; D–E = apical lobes: D = ventral view, E = dorsal view

Differential diagnosis. The body shape and punctation of this new species is similar to *B. granulata*, *B. granulipennis* and *B. tsharynensis*. *Blaps skopini* **sp**. **n**. differs from:

- *B. granulata* in the more elongate pronotum (pronotum of *B. granulata* 1.4 times as wide as long); longer mucro of males (male elytra of *B. granulata* 5.5 times as long as mucro); in contrast to those of *Blaps skopini* **sp**. **n**., the sides of parameres of *B. granulata* are smooth, without longitudinal impression, slightly and gradually arched to apex (viewing from above), apex of the latter is straight (Fig. 28B);
- *B. granulipennis* in the coarser and denser punctation of the pronotum (punctures in *Blaps skopini* **sp. n.** are subcontiguous, while in *B. granulipennis* are subcontiguous everywhere except for middle); longer mucro of males and females (elytra of *B. granulipennis* 7.9 times as long as mucro); sides of parameres of *B. granulipennis* are widely rounded to the apex, with obtuse distinct emargination near the apex; lateral sides of apex of parameres are straight and parallel relative to each other (Fig. 27A);
- *B. tsharynensis* in the coarser and denser punctation of the pronotum (punctures in *Blaps skopini* **sp. n.** are subcontiguous, while they in *B. tsharynensis* are not contiguous); longer mucro of males and females (elytra of *B. tsharynensis* 10.5 times as long as mucro); larger and more distinct hair tuft between abdominal ventrites 1 and 2 (Figs 35B); parameres of *Blaps skopini* are elongated (2.48 times as long as wide), while parameres of *B. tsharynensis* are shorter (1.8 times as long as wide); joined apex of parameres in *Blaps skopini* **sp. n.** is thin and long (Fig. 30), while

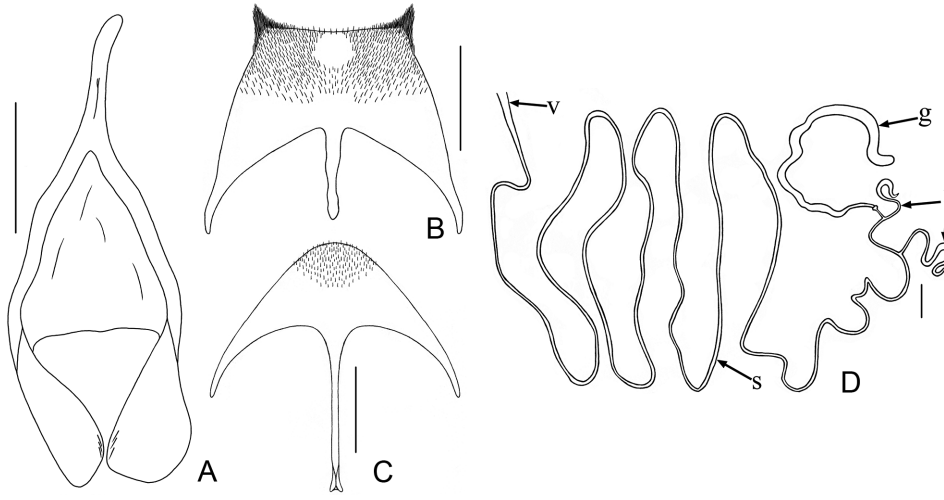

Fig. 32. *B. skopini* sp. n., details of structure. A = *spiculum gastrale*; B = male inner sternite VIII, C = *spiculum ventrale*; D = female genital tube (v = vagina, s = basal duct of spermatheca, r = reservoirs, g = accessory gland of spermatheca). Scale bars = 1 mm

that in *B. tsharynensis* is thin, but short; reservoirs of spermatheca of *Blaps skopini* **sp. n.** are thin and fusiform, while reservoirs of spermatheca in *B. tsharynensis* are elliptic; stem of *spiculum ventrale* of the new species is thinner than that in *B. tsharynensis*.

Blaps tenuicauda Seidlitz, 1893
(Fig. 33)

Seidlitz 1893: 307; Skopin, 1960: 56 (larva); Skopin, 1961: 191; Skopin, 1968: 86.

Material examined (ZIN). 1 ♀, 'South Kazakhstan / South-Kazakhstan Region / Sharapkhana village / 06.v.1964 / leg. N.G. Skopin' [in Cyrillics] [41°51'52.60"N, 69°26'43.72"E]; 1 ♂, 'South Kazakhstan / South-Kazakhstan Region / Arys city / 14.v.1967 / leg. N.G. Skopin' [in Cyrillics] [42°26'42.32"N, 68°51'31.23"E].

Distribution. Kazakhstan (Löbl *et al*. 2008), Uzbekistan (Skopin 1961).

Regional distribution. South Kazakhstan, hilly steppe between Tashkent and Shymkent cities (Skopin 1961); Syrdarya River region (Skopin 1968).

Comments. See comments at *Blaps pterosticha*.

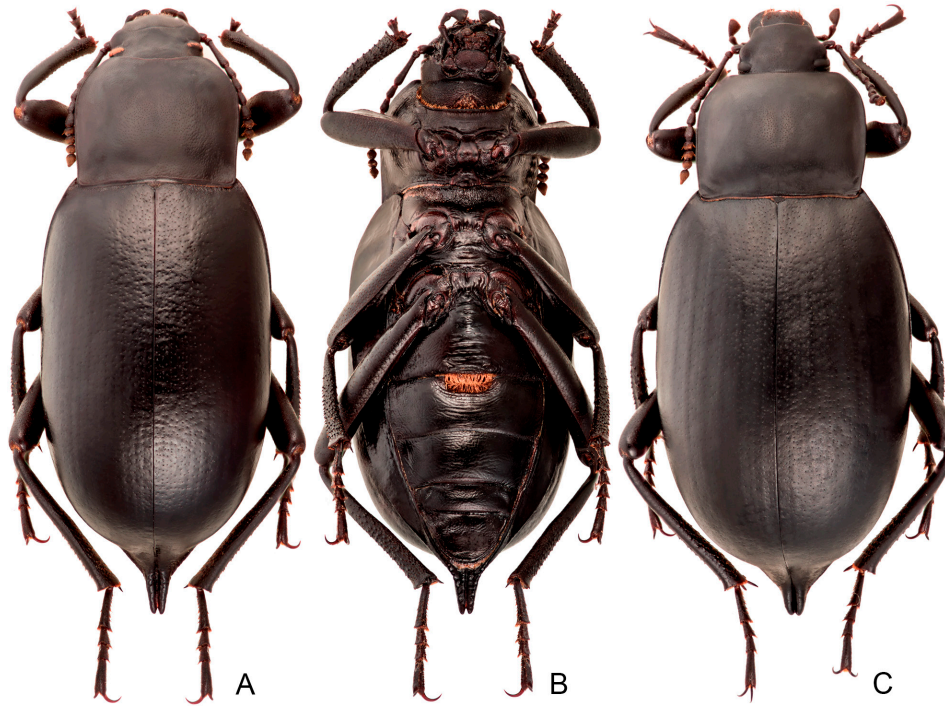

Fig. 33. *B. tenuicauda*, habitus. A, B = ♂; C = ♀; A, C = dorsal view; B = ventral view

Blaps transversalis Fischer von Waldheim, 1844 (Fig. 34)

Fischer von Waldheim, 1844: 105; Seidlitz 1893: 285 ("Turkestan"); Skopin, 1960: 55 (larva); Skopin, 1961: 191; Skopin, 1968: 86; Arnoldi & Medvedev, 1969: 404; Ren *et al*. 2000; 27; Ren *et al*., 2016: 171.

Material examined (ZIN). 1 ♂, 'Southeast Kazakhstan / Alma-Ata Region / canyon of Kopaly River / 19.v.1909 / leg. Nedovpuk[ov]' [in Cyrillics] [44°1'11.62"N, 75° 5'54.61"E]; 1 ♂, 'Southeast Kazakhstan / env. of Jambyl / Ulanbel village / 02.v.1960 / leg. L. Serkova' [in Cyrillics] [44°49'34.59"N, 71°8'17.27"E]; 1 ♂, 'Southeast Kazakhstan / Jambyl / Khantau mountains / 25.vi.1969 / leg. K. Nurpeisov' [in Cyrillics] [44°13'28.19"N, 73°55'28.64"E]; 1 ♀, 'Kyrgyzstan / Bishkek city / 15.v.1907 / leg. A. Jakobson' [in Cyrillics] [42°53'10.32"N, 74°32'5.29"E]; 1 ♂, 'Kyrgyzstan / Chu River / Boom canyon / 30.iv.1956 / leg. N.G. Skopin' [in Cyrillics] [42°40'30.86"N, 75°53'35.95"E].

Distribution. Kazakhstan (Arnoldi & Medvedev 1969), China (Löbl *et al*. 2008), Kyrgyzstan (Skopin 1961, 1968).

Regional distribution. Between Talas and the Chu rivers (Skopin 1961); eastern part of the Karatau Range, the Muyunkum Desert and valley area near the Chu River (Skopin 1968).

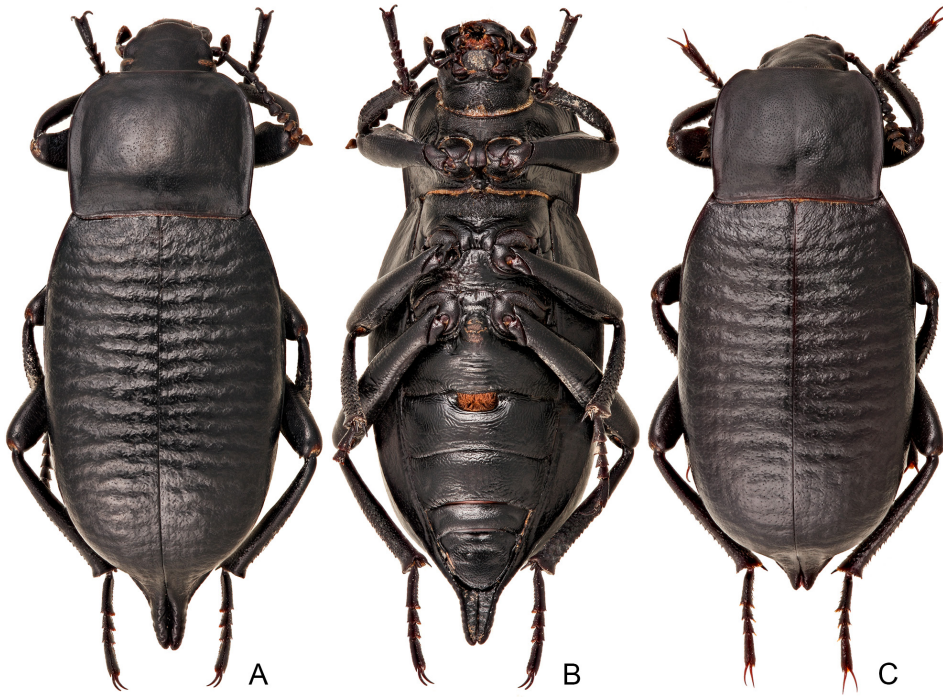

Fig. 34. *B. transversalis*, habitus. A, B = ♂; C = ♀; A, C = dorsal view; B = ventral view

Blaps tsharynensis tsharynensis Skopin, 1961
(Figs 35, 36B)

Skopin, 1961: 190; Skopin, 1964: 390; Skopin, 1966: 339.

Type material examined (ZIN). Holotype: ♂, 'Southeast Kazakhstan / Alma-Ata Region / Kurtogay natural boundary / 21.vii.1959 / leg. N.G. Skopin' [in Cyrillics] [43°15′52.20″N, 78°58′25.09″E]. Allotype: ♀, 'Southeast Kazakhstan / Alma-Ata Region / Kurtogay natural boundary / 21.vii.1959 / leg. N.G. Skopin' [in Cyrillics] [43°15′52.20″N, 78°58′25.09″E]. Paratypes: 1 ♂, 'Southeast Kazakhstan / Alma-Ata Region / middle course of Charyn River / 23.iv.1960 / leg. N.G. Skopin' [in Cyrillics]; 1 ♂, 'Southeast Kazakhstan / Alma-Ata Region / Kurtogay natural boundary / 12.v.1961 / leg. N.G. Skopin' [in Cyrillics] [43°15′52.20″N, 78°58′25.09″E]; 1 ♀, 'Southeast Kazakhstan / Alma-Ata Region / Kurtogay natural boundary / 05–19.vii.1959 / leg. N.G. Skopin' [in Cyrillics] [43°15′52.20″N, 78°58′25.09″E].

Material examined (ZIN). 1 ♂, 1 ♀, 'Southeast Kazakhstan / Alma-Ata Region / Lavar village suburbs / 04.vi.1966 / leg. N.G. Skopin' [in Cyrillics] [43°34′4.62″N, 78°5′22.28″E]; 2 ♂♂, 2 ♀♀, 'Southeast Kazakhstan / Alma-Ata Region / 40 km south-west of Dzharkent city / 26.iv.1965 / leg. N.G. Skopin' [in Cyrillics] [43°55′58.35″N, 79°35′39.24″E]; 1 ♂, 1 ♀, 'Southeast Kazakhstan / Alma-Ata Region / 60 km west of Gulshat village / 17.ix.1964 / leg. N.G. Skopin' [in Cyrillics] [46°36′57.83″N, 73°34′7.28″E]; 1 ♂, 1 ♀, 'Southeast Kazakhstan /

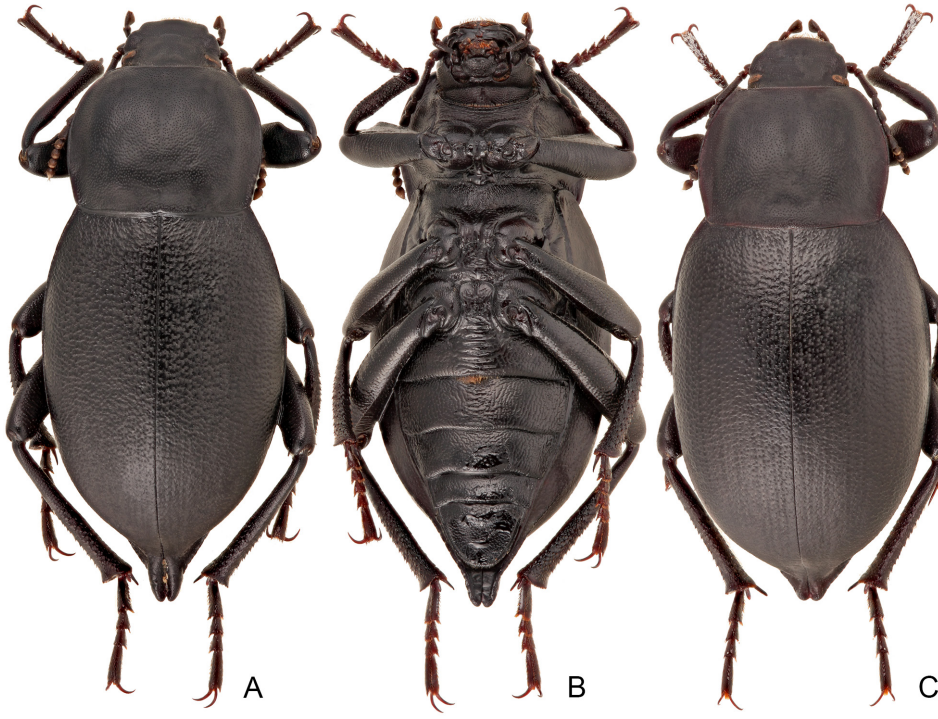

Fig. 35. *B. tsharynensis tsharynensis*, habitus. A, B = ♂; C = ♀; A, C = dorsal view; B = ventral view

Fig. 36. Hair tuft between 1st and 2nd abdominal ventrites. A = *B. motschulskiana*, B = *B. tsharynensis tsharynensis*, C = *B. skopini* sp. n.

Alma-Ata Region / lower reaches of Karatal River / 28.v.1965 / leg. N.G. Skopin' [in Cyrillics] [46°8'18.41"N, 77°9'44.45"E].

Distribution. Kazakhstan (Löbl *et al*. 2008).

Regional distribution. The Kurtogay canyon, Ili River region (near the spring of Ayak-Kalkan) (Skopin 1961).

Blaps tsharynensis balchashensis Skopin, 1966
(Fig. 37)

Skopin, 1966: 338.

Type material examined (ZIN). Holotype: ♂, 'Kazakhstan / North of Balkhash Lake / 60 км W Gulshat village/ 17.ix.1964 / leg. N.G. Skopin' [in Cyrillics]. Paratypes: 1 ♂, 1 ♀, 'Central Kazakhstan / Karaganda Region / 40 km south of Sayak village / 21.ix.1964 / leg. N.G. Skopin' [in Cyrillics] [46°38'59.60"N, 77°18'17.37"E]; 1 ♂, 'South Kazakhstan / right bank of Chu River / 13.ix.1964 / leg. N. G. Skopin' [in Cyrillics].

Material examined (ZIN). 5 ♂, 'Southeast Kazakhstan / Alma-Ata Region / lower reaches of Karatal River / 28.v.1965 / leg. N.G. Skopin' [in Cyrillics] [46°8'18.41"N, 77°9'44.45"E]; 1 ♀, 'Southeast Kazakhstan / Alma-Ata Region / 30 km west of Gulshat village / 17.ix.1964 / leg. N.G. Skopin' [in Cyrillics] [46°36'59.25"N, 73°56'35.18"E].

Distribution. Central and Southeast Kazakhstan (Balkhash Lake region) (Skopin 1966).

Blaps turcomanorum Seidlitz, 1893
(Figs 27F, 38)

Seidlitz, 1893: 305

Material examined (ZIN). 1 ♂, 1 ♀, 'Kazakhstan / Dzhambul [Jambyl] // *Blaps turcomanorum*'.

Distribution. Kazakhstan (first record for the country), Uzbekistan (Löbl *et al*. 2008).

Regional distribution. Southeast Kazakhstan.

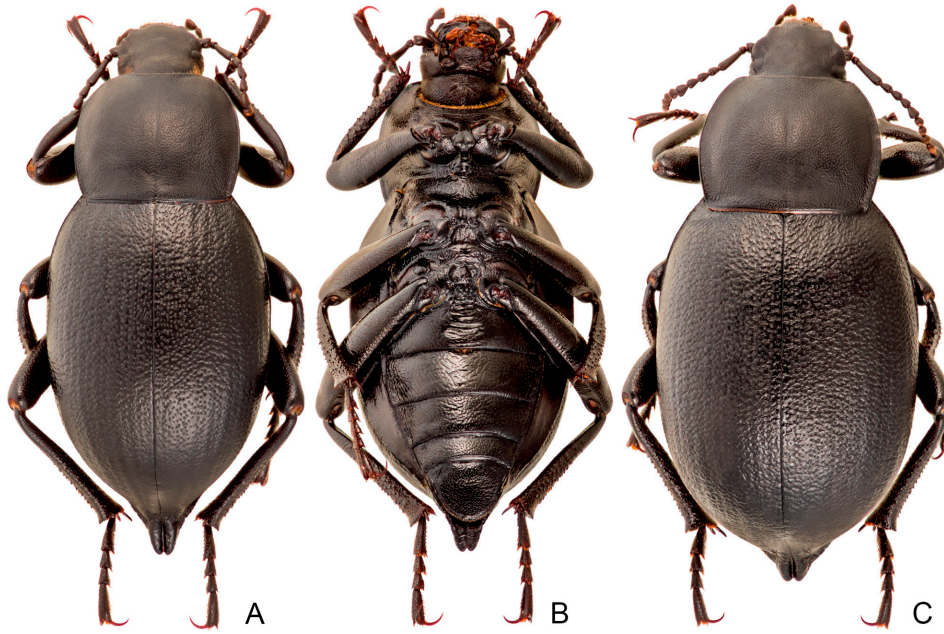

Fig. 37. *B. tsharynensis balchashensis*, habitus. A, B = ♂; C = ♀; A, C = dorsal view; B = ventral view

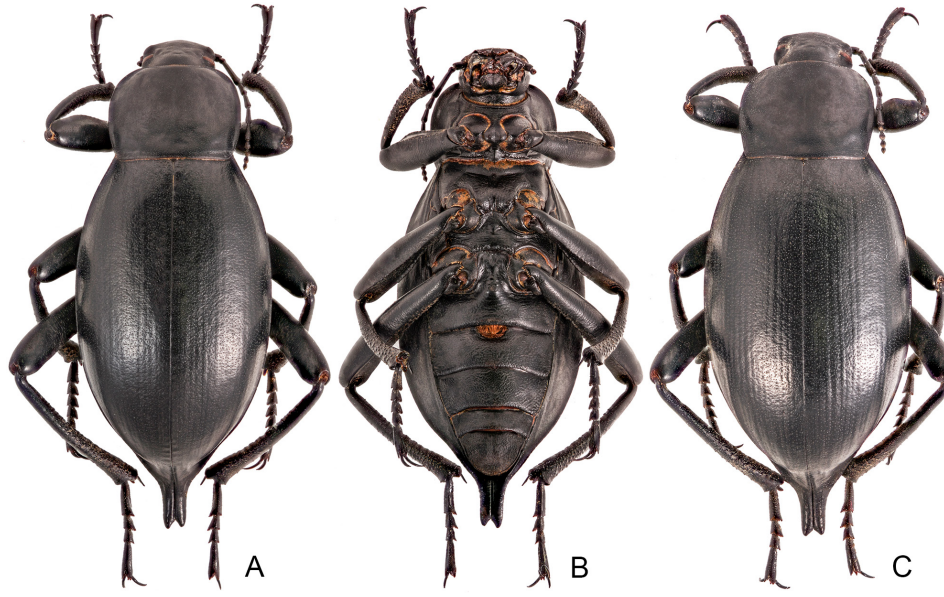

Fig. 38. *B. turcomanorum*, habitus. A, B = ♂; C = ♀; A, C = dorsal view; B = ventral view

Blaps virgo Seidlitz, 1893
(Fig. 39)

Seidlitz, 1893: 307; Skopin, 1961: 190; Ren *et al*. 2000; 27; Ren *et al*., 2016: 178.

Material examined. NHM. 1 ♂, 'Haberhauer / Turkestan / 89 // *Blaps akinina* All // sagitta // Cotypus / *Blaps sagitta* Seidl. / N. Skopin design. / 1978'. ZIN. 1 ♂, 4 ♀♀, 'Naryn mountains / Semirechye Region / 6.vi.1905. / leg. Nezhivov' [in Cyrillics]; 1 ♂, 'Naryn mountains / Semirechye Region / 8.vi.1905. / leg. Nezhivov' [in Cyrillics]; 2 ♀♀, 'Naryn mountains / Semirechye Region / 11.vi.1905. / leg. Nezhivov' [in Cyrillics]; 1 ♂, Przhevalsk [Karakol] / 28.vi.04 / leg. Nezhivov' [in Cyrillics]; 2 ♀♀, 'Naryn mountains / 9.vii.1904 / leg. Nezhivov' [in Cyrillics]; 3 ♀♀, 'Naryn town / 10.vii.1904 // leg. Herz'; 1 ♀, 'Naryn town / 11.vii.1904'; 1 ♀, 'Naryn town / 20.vi.04 / leg. Nezhivov' [in Cyrillics]; 3 ♂♂, 1 ♀, 'South-east Kazakhstan / Dzungarian Alatau / 1.vi.1968 / leg. N.G. Skopin' [in Cyrillics]; 1 ♂, 1 ♀, 'Dzungarian Alatau / 5 km N Bien River / 22.v.1968 / leg. N.G. Skopin' [in Cyrillics].

Comments. A population of *B. virgo* with short mucro (1–1,5 mm) occurs near Bien River (Alma-Ata Region).

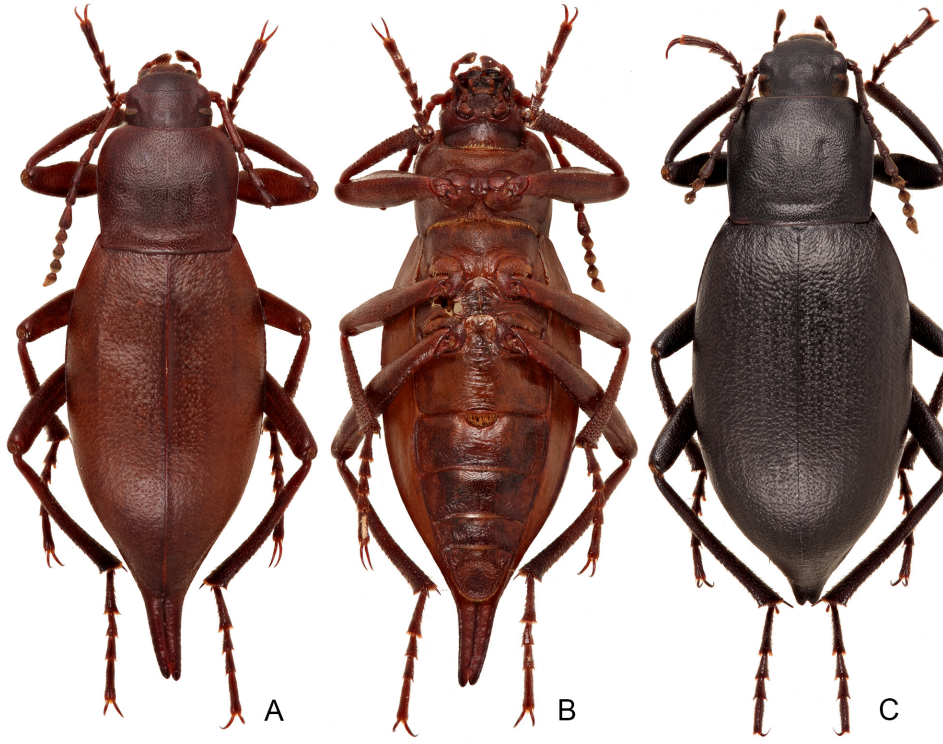

Fig. 39. *B. virgo*, habitus. A, B = ♂; C = ♀; A, C = dorsal view; B = ventral view

Distribution. Kazakhstan, Kyrgyzstan, China (Xinjiang Region) (Löbl *et al*. 2008, Ren *et al*. 2016).

Regional distribution. Northern slopes of Terskey Alatau Range (Naryn-kol Region).

Subgenus *Dineria* Motschulsky, 1860

Type species: *Blaps confusa* Ménétriés, 1832 (= *Blaps halophila* Fischer von Waldheim, 1820) by the subsequent designation (Medvedev & Iwan 2006).

Blaps halophila Fischer von Waldheim, 1820

Fischer von Waldheim, 1820: tab. xvi, fig. 7; Fischer von Waldheim, 1822: 190; Ménétriés, 1832; 201 ("*Blaps confusa*"); Skopin, 1960: 51 (larva); Arnoldi & Medvedev, 1969: 403; Chigray *et al*. 2016: 12. (see figures in: Chigray *et al*. 2016: figs 12D–F)

Type material examined (ZIN). Holotype of *Blaps convexicollis* Motschulsky, 1845: ♂, 'Mt. Altai // *Blaps convexicollis* m. Altai'. Lectotype of *Blaps confusa* Ménétriés, 1832 designated here: ♂, 'Caucas. // *confusa* Ménét. Caucas. // *Blaps longicollis* // Lectotypus / *Blaps confusa* Ménétriés, 1832 / des. I.A. Chigray'.

Material examined (ZIN). 2 ♀♀, 'Kazakhstan / Zaisan district / 5.vii.[19]26 / leg. Filatova' [in Cyrillics]; 1 ♂, 'Kazakhstan / Zaisan / Neygy Kuma / into *Achnatherum* sp. / 10.vi.1958 / leg. N.G. Skopin' [in Cyrillics]; 1 ♀, 'Kazakhstan / Zaisan hollow / 10.vi.1958 / leg. N.G. Skopin'; 1 ♀, 'Semirechye Region / Alatau / Kurdayskiy pass / 16.vii.1906 / leg. N. Radkevich' [in Cyrillics].

Distribution. Part of Central, Southern and Eastern Europe, the European part of Russia, the Great Caucasus, Southern Siberia, North Kazakhstan (Arnoldi & Medvedev 1969, Abdurakhmanov & Nabozhenko 2011).

Regional distribution. Karaganda Region (Skopin 1960).

Subgenus *Prosoblapsia* Skopin & Kaszab, 1978

Type species *Blaps allardiana* Reitter, 1889 by the original designation (Skopin & Kaszab 1978).

Comments. Medvedev (2001) interpreted the genus *Ablapsis* Reitter, 1887 as a subgenus of *Blaps* and some species of *Prosoblapsia* (*Blaps* (*Ablapsis*) *compressipes* Reitter, 1887, *B.* (*A.*) *berezowskii* G. S. Medvedev, 1998, *B.* (*A.*) *lucidula* G. S. Medvedev, 1998, *B.* (*A.*) *znoikoi* Semenov & Bogatchev, 1936 and *B.* (*A.*) *gentilis gentilis* Fairmaire, 1887) were included by him in the subgenus *Ablapsis*. However, further specialists have not accepted this opinion (Löbl *et al*., 2008, Ren *et al*., 2016). The taxonomic position and composition of *Ablapsis* and *Prosoblapsia* will be discussed in further works.

Blaps transversimsulcata transversimsulcata Ballion, 1878 (Fig. 40)

Ballion, 1878: 301; Seidlitz, 1893: 296 ("Turkestan"); Skopin, 1960: 52 (larva); Skopin, 1961: 190; Skopin, 1968: 84; Skopin, 1977: 149; Ren *et al*., 2016: 196.

Material examined (ZIN). 1 ♂, 1♀, 'Tian Shan, Musart // coll. N. Skopin' [in Cyrillics]; 1 ♂, 'Ost–Turkestan / Acsu River / 1067 m. / v.1903 / leg. Hauser // coll. N. Skopin' [in Cyrillics]; 1 ♂, 1♀, 'Uzbekistan / Tian Shan / Przhevalsk [Karakol] / 3300 m. / vi.77' [in Cyrillics]; 1 ♂, 'Cat River [tributary of Ili River]/ Dzungarian Region/ leg. Regel'; 1 ♂, 1♀, 'Env. of Kuldzha / 22.iv.79 / leg. A. Regel // Topotype // Homotype *Blaps rudesculpta* / det. N. Skopin'.

Comments. *Blaps transversimsulcata rudesculpta* Semenov Tian-Shansky et Bogatchev, 1936 is a younger synonym of *B. t. transversimsulcata* (Skopin 1977), not of *Blaps maeander* Kraatz, 1885 (mistake in Löbl *et al*. 2008).

Distribution. Kazakhstan, China (Xinjiang Province) (Löbl *et al*. 2008, Ren *et al*. 2016).

Regional distribution. Talas Ala-Too and Ugam Ranges (Skopin 1968).

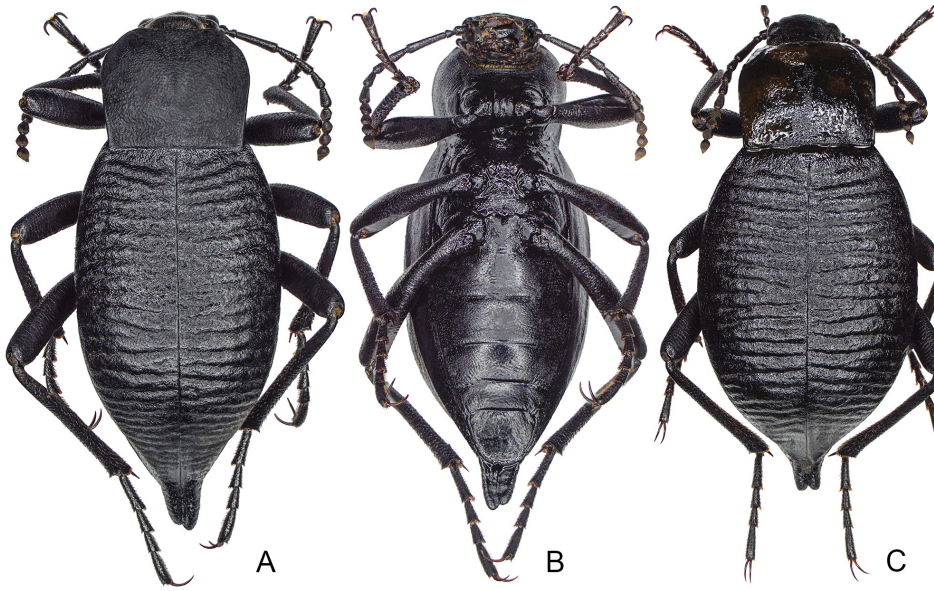

Fig. 40. *B. transversimsulcata transversimsulcata*, habitus. A, B = ♂; C = ♀; A, C = dorsal view; B = ventral view

Blaps transversimsulcata meandroides Skopin, 1977
(Fig. 41)

Skopin, 1977: 151.

Type material examined (ZIN). Holotype: ♂, 'Southeast Kazakhstan / Alma-Ata Region / Alma-Ata city suburbs / 19.vi.1957 / leg. N.G. Skopin' [in Cyrillics] [43°12'12.60"N, 76°50'37.26"E]. Paratypes: 1 ♂, 'Southeast Kazakhstan / Alma-Ata Region / Alma-Ata city / 24.vi.1952 / leg. N.G. Skopin' [in Cyrillics] [43°12'12.60"N, 76°50'37.26"E]; 1 ♂, 'Southeast Kazakhstan / Alma-Ata Region / Zailiyskiy Alatau / Khargaly canyon / 12.vii.1969 / leg. K. Nurpeisov' [in Cyrillics] [43°7'47.74"N, 76°22'30.08"E]; 1 ♂, 'Southeast Kazakhstan / Alma-Ata Region / Alma-Ata city suburbs / 13.vii.1953 / leg. N.G. Skopin' [in Cyrillics] [43°12'12.60"N, 76°50'37.26"E]; 1 ♂, 'Southeast Kazakhstan / Alma-Ata Region / Alma-Ata city suburbs / 23.vi.1957 / leg. N.G. Skopin' [in Cyrillics] [43°12'12.60"N, 76°50'37.26"E]; 1 ♂, 'Kazakhstan / Alma-Ata / h = 1400 m / 31.v.1950 / leg. N.G. Skopin'; 1 ♂, ♀, 'Kyrgyzstan / Bishkek city / 2.vi.1976 / leg.Yanushev' [in Cyrillics].

Material examined (ZIN). 1 ♂, 6 ♀♀, 'Eastern Kazakhstan / Alma-Ata Region / Zailiyskiy Alatau Range / gorge of Uzun-Kargaly River [N43°4'40.23", E76°24'9.25"] / 31.05–08.vi.1907 / leg. A. Jakobson' [in Cyrillics].

Distribution. Northern, North-East and Central Tian Shan (Kazakhstan, Kyrgyzstan) (Skopin 1977).

Regional distribution. Southeast Kazakhstan (Skopin 1977).

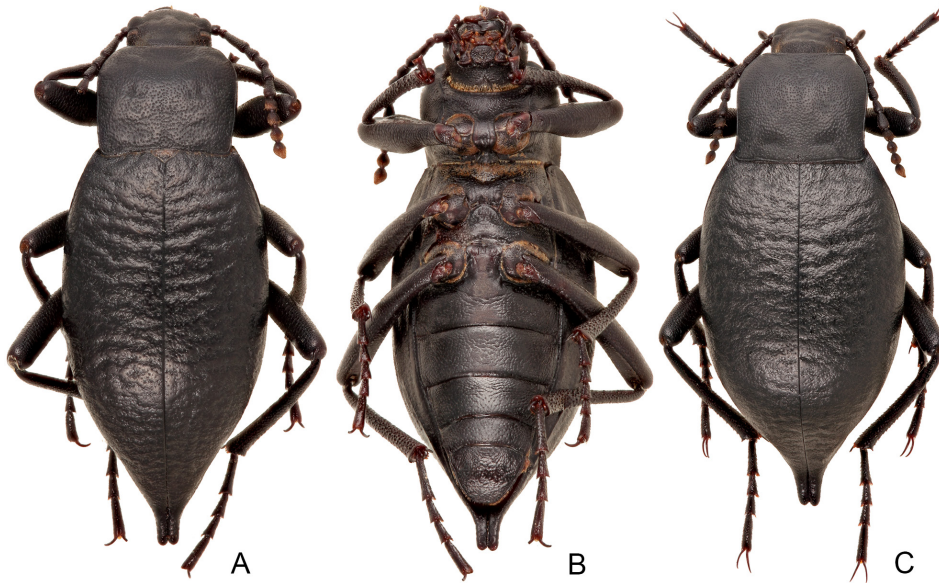

Fig. 41. *B. transversimsulcata meandroides*, habitus. A, B = ♂; C = ♀; A, C = dorsal view; B = ventral view

KEY TO THE *BLAPS* SPECIES OF CENTRAL AND SOUTH KAZAKHSTAN

1. Ventral lamella between tarsal claws triangular, acute or narrowly rounded at apex. Dorsal margin of metafemora on inner side with small teeth 2

– Ventral lamella between tarsal claws widely rounded or truncate. Dorsal margin of metafemora without small teeth on inner side 5

2. Mucro of male and female very short (0.5–0.7 mm), abruptly bifurcated at base in shape of two triangular processes *B. pruinosa*

– Mucro of male and female long (more than 3.0 mm), spatulate (not bifurcate) 3

3. Male without hair tuft between abdominal ventrites 1 and 2 or with group of long sparse hairs (Fig. 36A) *B. motschulskiana*.

– Male with hair tuft between abdominal ventrites 1 and 2 4

4. Mucro of male and female wide, flattened dorsovenrally. Male abdominal ventrite 1 with transverse tubercle. Male aedeagus very long (9 mm), lateral sides of parameres widely emarginate at middle, apex of parameres rounded (Fig. 27E) *B. faustii*

– Mucro of male and female narrow, not flattened. Male abdominal ventrite 1 with rounded tubercle. Male aedeagus shorter (5–6 mm), lateral sides of parameres straight, apex of parameres acute (Fig. 27F) *B. turcomanorum*

5. Male without hair tuft between abdominal ventrites 1 and 2 6

– Male with hair tuft between abdominal ventrites 1 and 2 13

6. Elytra with deep transverse wrinkles 7

– Elytra not wrinkled or with fine microwrinkles formed by punctures 9

7. Parameres very narrow and elongate (2.78 times as long as wide), separated by suture only in apical half. Lateral margins of parameres widely rounded along entire length *B. ballioni*

– Parameres wider (2.26 times as long as wide), completely separated by suture. Lateral margins of parameres widely rounded in basal half and weakly emarginate near apex 8

8. Wrinkles of elytra very deep, straight, subparallel *B. transversimsulcata transversimsulcata*

– Wrinkles of elytra shallower and more obliterated, irregular, not subparallel *B. transversimsulcata meandroides*

9. Male metatibiae thickened in the middle of inner side or slightly dislodged toward apex 10

– Male metatibiae without thickening in the middle of inner side or with extension from the middle toward apex 11

10. Elytra coarsely granulate *B. inflexa*

– Elytra punctate *B. halophila*

11. Male antennomeres 10–11 reaching basal quarter of pronotum, but not reaching base of pronotum. Male and female mucro well developed *B. kadyrbekovi*

– Male antennomeres 10–11 reaching base of pronotum or basal quarter of elytra. Male and female mucro absent 12

12. Anterior angles of pronotum widely rounded to obtuse. Pronotal punctures small, not merged with each other *B. caraboides caraboides*

Anterior angles of pronotum narrowly rounded, sharp. Pronotal punctures large, merged with each other *B. caraboides intermittens*

13. Wrinkles of elytra very deep and transverse *B. transversalis*

– Elytra not wrinkled or with very small wrinkles 14

14. Male abdominal ventrite 1 always with tubercle 15

– Male abdominal ventrite 1 without tubercle or with small tubercle (when body small) 18

15. Body robust, very wide. Tubercle of male abdominal ventrite 1 transverse or dentate, acute at apex 16

– Body more elongate. Tubercle of male abdominal ventrite 1 rounded and not acute at apex 17

16. Body very wide (2.1 times as long as wide). Anterior margin of pronotum deeply emarginate, anterior angles very protruding to head. Spurs of meso- and metatibiae flattened, triangular, acute at apex, asymmetric (Figs 21C,D) *B. holconota*

– Body less wide (2.3 times as long as wide). Anterior margin of pronotum widely emarginate, anterior angles shortly projecting to head. Spurs of meso- and metatibiae flattened, but obtuse and wide at apex, symmetric (Figs 21A,B) *B. deplanata*

17. Pronotum subparallel-sided along middle. Apex of parameres acute, lateral sides of parameres with longitudinal impressions along midlength (Fig. 27D) *B. evanida*

– Pronotum weakly rounded along middle. Apex of parameres wide, lateral sides of apex of parameres straight, without impressions (Fig. 27C) *B. pterosticha, B. tenuicauda*

18. Antennomeres 10–11 elongate (longer than wide). Lateral sides of pronotum not excavate. Body very slender, narrow. Male mucro very narrow and long *B. virgo*

– Antennomeres 10–11 rounded or transverse (wider than long). Lateral sides of pronotum always excavate. Body wider. Male mucro short (except for *B. skopini* **sp. n.**) 19

19. Punctation of pronotum fine and sparse (distance between punctures about twice as great as puncture diameter) 20

– Punctation of pronotum coarse and dense (distance between punctures smaller than puncture diameter), punctures sometimes merged 25

20. Bead of lateral margins of pronotum coarse or simple. Tubercle of male abdominal ventrite 1 short and wrinkled 21

– Bead of lateral margins of pronotum simple or thin. Male abdominal ventrite 1 without tubercle 23

21. Spurs on meso- and metatibiae simple, not flattened and not long. Apices of reservoirs of spermatheca ellipsoidal, 1st reservoir much larger than 2nd, bases of reservoirs distantly separated *B. nitida, B. lethifera*

– Spurs on meso- and metatibiae flattened and long. Apices of reservoirs of spermatheca spherical, bases of reservoirs subequal in size, close to each other or with common duct 22

22. Male metatibiae simple, gradually expanding from base to apex *B. parvicollis parvicollis*

– Male metatibiae with thickening only in apical half *B. parvicollis quadricollis*

23. Body slender. Pronotum square. Elytra flattened along suture. Legs long. Male hair tuft between 1st and 2nd abdominal ventrites large and distinct. Accesory gland of spermatheca short (basal duct of spermatheca 6 times as long as the gland) *B. fouquei* **sp. n.**

– Body wider. Pronotum transverse. Elytra weakly convex along suture. Legs shorter. Male hair tuft between 1st and 2nd abdominal ventrites very small and indistinct. Accesory gland of spermatheca long (basal duct of spermatheca twice as long as the gland) 24

24. Disk of pronotum strongly convex. Pronotal sides steeply sloping and widely explanate along margin *B. tsharynensis tsharynensis*

– Disk of pronotum moderately convex. Pronotal sides gently sloping and narrowly explanate along margin *B. tsharynensis balchashensis*

25. Lateral sides of parameres widely rounded, apices straight *B. granulata*

– Lateral sides of parameres with emarginate outline before apex 26

26. Pronotal punctation dense, punctures merged everywhere except for middle. Male mucro short, female mucro slightly expressed. Lateral margins of parameres widely rounded at apex, with emargination near apex; lateral outline of apex of parameres straight and subparallel-sided *B. granulipennis*

– Pronotal punctation extremely dense, punctures merged over entire surface. Male mucro long, female mucro well expressed. Basal third of lateral margins of parameres straight, middle widely rounded; lateral outline of apex of parameres straight, but not subparallel-sided *B. skopini* **sp. n.**

*

Acknowledgements – The authors are much obliged to V. Yu. Shmatko (Institute of Arid Zones RAS, Rostov-on-Don, Russia) for the preparation of photographs of some species, to A. M. Shapovalov (St. Petersburg, Russia) for providing the material from Kazakhstan, to A. G. Kirejtshuk (ZIN, St. Petersburg, Russia) and M. V. Nabozhenko (Precaspian Institute of Biological Resources of Dagestan Federal Researche Centre of the Russian Academy of Science, Makhachkala, Russia) for valuable comments and corrections during preparation of the manuscript.

The authors are also cordially thank the staff of the laboratory of insect taxonomy of ZIN RAS: M. G. Volkovitsh, S. V. Andreeva, A. V. Kovalev and A. G. Moseyko for various assistance and support in studies, to Purchart Luboš (Mendel University in Brno, Brno, Czech Republic) and Lukáš Sekerka (NMP) for assistance in studies of Tenebrionidae in the Natural History Museum Prague, to Harald Schilhammer (NHM) for provided material.

The studies were carried out under the framework of the Russian State Research Project No. AAAA-A19-119020690101-6 and the Russian Foundation for Basic Research (grants 18-04- 00243-a and 19-54-25001-Кипр_а).

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Received December 5, 2019, accepted April 15, 2020, published May 15, 2020