

THE SUPRASPECIFIC STRUCTURE OF THE SUBTRIBE BLAPTINA LEACH, 1815 (COLEOPTERA, TENEBRIONIDAE: BLAPTINAE)

IVAN CHIGRAY and ALEXANDER KIREJTSCHUK

¹Zoological Institute, Russian Academy of Sciences,

1 Universitetskaya Emb., St Petersburg 1990343, Russia

E-mails: chigray93@bk.ru <https://orcid.org/0000-0002-3830-6860>,

agk@zin.ru, kirejtshuk@gmail.com <https://orcid.org/0000-0002-8826-0258>

Years of research of the subtribe Blaptina made it possible to clarify relations between some species and propose changes in supraspecific structure of this subtribe. *Blaps scabiosa* Baudi di Selve, 1874 is designated as a type species of *Caraboblaps* Bauer, 1921, the new synonymy is proposed: *Blaps* Fabricius, 1775 = *Caraboblaps* Bauer, 1921, **syn. n.** *Blaps nitens* nitens Laporte, 1840 is designated as a type species of *Periblaps* Bauer, 1921, *Blaps ominosa* Ménétériés, 1832 is designated as a type species of *Holoblaps* Bauer, 1921; type species of *Periblaps* and *Holoblaps* are transferred here to genus *Lithoblaps*, as a result the following new synonymy is proposed: *Lithoblaps* Motschulsky, 1860 = *Periblaps* Bauer, 1921, **syn. n.** = *Holoblaps* Bauer, 1921, **syn. n.** The similarity of the structure of the aedeagus of *Ablapsis compressipes* Reitter, 1887 and some species of the subgenus *Prosoblapsia* Skopin et Kaszab, 1978 (genus *Blaps* Fabricius, 1775) gives a base to transfer the taxon *Ablapsis* Reitter, 1887 into the genus *Blaps* as a separate subgenus (*Ablapsis* **stat. resurr.**). *Blaps tentrioides* Seidlitz, 1893 (= *Blaps socia* Seidlitz, 1893) is designated as a type species of the subgenus *Protoblaps* Bauer, 1921. As the genera *Protoblaps* Bauer, 1921 and *Genoblaps* Bauer, 1921 have one type species and the aedeagal structure of type species of *Ablapsis*, *Protoblaps* and *Prosoblapsia* is similar, the new synonymy is proposed: *Ablapsis* Reitter, 1887 = *Protoblaps* Bauer, 1921 **syn. n.** = *Genoblaps* Bauer, 1921 **syn. n.** = *Prosoblapsia* Skopin et Kaszab, 1978, **syn. n.** Analysis of imaginal and larval structures of the species here united in the taxon *Lithoblaps* Motschulsky, 1860 and other members of *Blaps* showed that differences between these two groups are comparable with those between other genera of the subtribe and, therefore, the former taxon is here regarded as a distinct genus *Lithoblaps* **gen. resurr.** Thus, 100 species and subspecies (marked as **comb. n.** or **comb. resurr.**) are transferred from *Blaps* to *Lithoblaps*. The additional new combination is established: *Dila platytorax* (Gemminger, 1870), **comb. n.** (from *Blaps*). The key to genera and the catalogue of the subtribe Blaptina are given.

Key words: Blaptina, sections of Allard, imaginal and larval characters, new synonymy, new combinations

INTRODUCTION

The subtribe Blaptina Leach, 1815 (Tenebrionidae: Blaptinae) is most numerous within the tribe Blaptini and includes more than 340 species and subspecies (NABOZHENKO & CHIGRAY 2020, KAMIŃSKI *et al.* 2021). The range of this subtribe mostly coincides with that of the mentioned tribe (MEDVEDEV 2001).

© Authors

Published by the Hungarian Natural History Museum
and the Biological Section of the Hungarian Academy of Sciences.
The journal uses a CC BY-NC license

covering the considerable part of the Palaearctic Region (reaching 60th parallel north in Europe and nearly 56th in Asia), northern areas of the Afrotropical one (partly Sahel, southern Arabian Peninsula and Somalia) and northern part of the Indo-Malayan one (Southern China and Thailand). MEDVEDEV (2000, 2001, 2007) reviewed different interpretations of the system of this tribe before beginning of the 21th century. Having analysed its generic structure, he paid a particular attention to the publications of REITTER (1887, 1893), SEIDLITZ (1893), SKOPIN (1960) and recognized himself in it eight (MEDVEDEV 2000, 2001) or nine genera (MEDVEDEV 2007) without taxa *Thaioblaps* Masumoto, 1989 and *Neoblaps* Ren et Li, 2001.

The subtribe Blaptina is represented by 11 genera in the Catalogue of Palaearctic Coleoptera by LÖBL *et al.* (2008), although later REN *et al.* (2016) synonymised the generic names *Neoblaps* and *Coelocnemodes* Bates, 1879, and also proposed the subtribe Dilina Ren, 2016 for the genera *Dila* Fischer von Waldheim, 1844, *Coelocnemodes* and *Hoplitoblaps* Fairmaire, 1888. CHIGRAY *et al.* (2019) synonymised the generic names *Dila* and *Caenoblaps* König, 1906, subtribe ones Dilina and Blaptina, and also proposed the genus *Medvedevia* I. Chigray, 2019 (CHIGRAY 2019). In the recent Catalogue of Palaearctic Coleoptera (NABOZHENKO & CHIGRAY 2020) the subtribe Blaptina contains 10 Palaearctic genera.

BOUCHARD *et al.* (2021) added four genera to Blaptina (*Caraboblaps* Bauer, 1921, *Periblaps* Bauer, 1921, *Protoblaps* Bauer, 1921, and *Holoblaps* Bauer, 1921), proposed the name *Medvedevoblaps* Bouchard et Bousquet, 2021 for *Protoblaps* G. S. Medvedev, 1998 (non Bauer, 1921), and also synonymized the names *Prosoblapsia* Skopin et Kaszab, 1978 and *Genoblaps* Bauer, 1921. As a result, the number of genera of Blaptina reached 15. However, a position of some taxa of Blaptina still remain unfixed, thus the generic structure of the subtribe remains under discussion. The present publication aims to solve some taxonomic and nomenclatural problems of the subtribe, and propose a new interpretation of its generic structure.

MATERIAL AND METHODS

The study is based on the examination of adult beetles and larvae from the Zoological Institute of the Russian Academy of Sciences (ZIN, St Petersburg) and the Hungarian Natural History Museum (HNHM, Budapest).

All specimens shown in the figures (except *Thaioblaps punneae* Masumoto, 1989) are deposited in ZIN, *T. punneae* is deposited in HNM.

Selected specimens were dissected to study genitalia and some inner structures. The genitalia after dissection were macerated in boiling 10% KOH solution a few minutes and rinsed with water.

The photographs were taken with a Canon EOS 40D digital camera with Canon MP-E 65 mm objective. Images were produced using Zerene Stacker 1.04 and Adobe Photoshop software.

TAXONOMY

Remarks on different interpretations of the structure of the genus Blaps

The genus *Blaps* Fabricius, 1775 currently includes more than 300 Palaearctic and Afrotropic species and subspecies, arranged into four subgenera (NABOZHENKO & CHIGRAY 2020): *Blaps* s. str., *Arenoblaps* G. S. Medvedev, 1999, *Dineria* Motschulsky, 1860 and *Prosoblapsia*.

SOLIER (1848) made a first attempt to divide *Blaps* into groups of species. For delimitation of these groups arranged into a key to species he used the presence or absence of sexual dimorphism, shape of the pronotum and elytra.

MOTSCHULSKY (1860) splitted the genus *Blaps* into 13 genera mostly proposed by him, which were arranged into two groups. The group I unites the species without setal bruch between the abdominal ventrites 1 and 2 (*Gebleria* Motschulsky, 1846, *Prosodes* Eschscholtz, 1829, *Dila*, *Leptomorpha* Faldermann, 1835, *Dineria*, *Blapisa* Motschulsky, 1860, *Uroblaps* Motschulsky, 1860, *Blapimorpha* Motschulsky, 1860), while the species of the group II bear setal bruch between the abdominal ventrites 1 and 2 (*Platyblaps* Motschulsky, 1860, *Agroblaps* Motschulsky, 1860, *Blaps*, *Lithoblaps* Motschulsky, 1860, *Rhizoblaps* Motschulsky, 1860). The genera in these two groups were separated mainly after their body shape. Presently only *Prosodes*, *Gebleria* (subgenus of *Prosodes*), *Dila*, *Blaps* and *Dineria* (subgenus of *Blaps*) are recognized as the valid names of taxa, but others are considered as junior synonyms of *Blaps* (LÖBL *et al.* 2008, NABOZHENKO & CHIGRAY 2020, BOUCHARD *et al.* 2021).

ALLARD (1880, 1881a, b, 1882) included in the tribe Blaptini ("Blapsides") six genera from the East Hemisphere (*Tagona* Fischer von Waldheim, 1820, *Gnaptor* Brullé, 1832, *Blaps*, *Prosodes*, *Dila* and *Leptomorpha*) and two of the West Hemisphere (*Eleodes* Eschscholtz, 1829 and *Nycterinus* Eschscholtz, 1829). Besides, ALLARD (1880) re-organised the composition of *Blaps*: lowered the rank of some genera of Motschulsky (*Uroblaps*, *Lithoblaps*, *Rhizoblaps*, *Blapisa*, *Platyblaps*, *Blapimorpha*, *Dineria*, *Agroblaps*) to subgenera of *Blaps*; proposed one additional subgenus *Leptocolena* Allard, 1880; parted the genus into two divisions ("première" and "deuxième"), which were diagnosed by the structure of lamella between tarsal claws – division I comprises the species with the lamella acute at apex, while division II the species with the lamella widely rounded or straight at apex.

SEIDLITZ (1893) contributed some changes in the system elaborated by Allard (see above) and distinguished some groups in each of both divisions: 11 groups in the division I and 17 in the division II. Close relationship in both Allard's divisions can be traced, but the groups defined by Seidlitz in each division mostly look like rather formal. Nevertheless, his species group interpretation is still used by many coleopterists.

BAUER (1921, pp. 229–230) divided the genus *Blaps* into two subgenera (“Untergattungen”): advanced (“höchstentwickelten”) subgenus *Blaps*, corresponding to the division I by Allard and more archaic (“untere Stufe”) subgenus *Protoblaps*, corresponding to the division II by Allard. In each of these subgenera Bauer included some aggregates of species (“Artengruppen” or “inferioren Untergattung”) with names: *Periblaps*, *Notoblaps*, and *Holoblaps* in *Blaps*, and also *Leptomorpha*, *Genoblaps*, *Blapidurus*, *Mesoblaps* etc. in *Protoblaps*. Later KOLBE (1928) recognized the system of the genus *Blaps* by Bauer and added some other species-groups (*Opisthoblaps*, *Tracheloblaps*, *Sceloblaps*). Many (but not all) species-groups (Artengruppen) and the so-called second-order subgenera (inferioren Untergattung) from papers of BAUER (1921) and KOLBE (1928) are formally available according to the ICZN (1999). They do not fall under the concept of “aggregates of species”, which implies the spelling of the species name with a lowercase letter (Article 6.2) and corresponds to Article 6.1 of ICZN, where subgeneric names “must begin with an upper-case letter” and have separate names.

SKOPIN (1960) after his studies of larvae of the tribe Blaptini restored the genus *Lithoblaps* completely corresponding to the division I by Allard and showed that its larvae are different from those of other species of *Blaps* and even of other genera of the subtribe Blaptina. Unfortunately, these Skopin’s conclusions did not find recognition among other tenebriologists: BOGATCHEV (1965) treated the *Lithoblaps* as a subgenus of *Blaps*; G. S. MEDVEDEV (2001) also considered that *Lithoblaps* has not so distinct characters to raise its rank to a separate genus, although he recognized a reason to discriminate a separate subgenus. G. S. Medvedev provided the co-authors of the first edition of the Catalogue of Palaearctic Coleoptera (LÖBL *et al.* 2008) with his consultations while they were preparing its manuscript, but he did not want to join to its authorship. In particular, he recommended (personal communication) to use as valid only four subgenera: *Blaps sensu stricto*, *Arenoblaps*, *Dineria* and *Prosoblapsia* (while *Lithoblaps* was preferred as a synonym of *Blaps*). In the second edition of this catalogue the subgeneric structure of the genus *Blaps* remained unchanged (NABOZHENKO & CHIGRAY 2020), however, the names of BAUER (1921) were added as synonyms.

The phylogenetic hypothesis elaborated after the structural characters of Mediterranean members of the genus *Blaps* (CONDAMINE *et al.* 2011) in general fits with the phylogeny based comparison of four mitochondrial gene fragments (KERGOAT *et al.* 2014) where the genus *Blaps* is represented by two clades: *Blaps sensu stricto* + “Mediterranean *Blaps*”. Some combined phylogenetic models based on both structural and molecular characters the genus *Blaps* give two monophyletic branches corresponding with two clades obtained in the molecular comparision (CONDAMINE *et al.* 2013) or the tribe Blaptini is parted into two branches: *Blaps* s. str. + ((*Gnaptorina* Reitter, 1887 + (*Prosodes* Eschscholtz, 1829 + *Gnaptor*)) + («Mediterranean *Blaps*»)) (SOLDATI *et al.* 2017).

Position of some subgeneric taxa of Bauer (1921)

The subgenera, erected by KOLBE (1928) in the genus *Blaps* were synonymized in the Catalogue (NABOZHENKO & CHIGRAY 2020) and are not considered here. Later, BOUCHARD *et al.* (2021) rightly corrected the authorship, year, and the type species for the subgenus *Mesoblaps* Bauer, 1921 on page 246, but forgot to correct this on page 44. The same was done for *Notoblaps* Bauer, 1921 (correctly on page 269, incorrectly on 44).

Caraboblaps Bauer, 1921. BOUCHARD *et al.* (2021) noted that this taxon was described before 1931 and available according Article 12.1 (ICZN, 1999). Originally and subsequently, no species were included in this subgenus and now its status is undetermined taxon in Blaptina (BOUCHARD *et al.* 2021). According to the original description, BAUER (1921) included in *Caraboblaps* slender species with thin antennae, clear elytral mucro with visible lateral margins and absence of hair tuft between male abdominal ventrites 1 and 2. Bauer also mentioned, that species of this group are distributed in "Turkestan, Buchar and Astrabad". The species *Blaps scabiosa* Baudi di Selve, 1874 is clearly corresponds to the diagnosis of the subgenus *Caraboblaps* (NABOZHENKO *et al.* 2019). Thus, we include *Blaps scabiosa* Baudi di Selve, 1874 as a single species in the subgenus *Caraboblaps* and this species is deemed to be the only originally included nominal species and the type species by monotypy. There is no important character to distinguish the subgenus *Caraboblaps*, as the presence/absence of hair tuft on male abdomen can only be a distinguished feature between species (difference occurred even between closely related ones). Morphological characteristics of *Blaps scabiosa* Baudi di Selve, 1874 are presented in Nabozhenko with co-authors, and of *Blaps mortisaga* (Linnaeus, 1758) in many papers (FERRER & PICKA 1990, FERRER & FERNÁNDEZ 2008, NABOZHENKO *et al.* 2022, etc.). As a result, the following new synonymy is proposed: *Blaps* Fabricius, 1775 = *Caraboblaps* Bauer, 1921, **syn. n.**

Periblaps Bauer, 1921. Here is the same nomenclatural problem as with *Caraboblaps* (BOUCHARD *et al.* 2021). BAUER (1921) included this "Artengruppen" to the subgenus "*Blaps* s. str." sensu Bauer, which is interpreted here as the genus *Lithoblaps*. He noted, that *Periblaps* includes eight species from Mesopotamia, Arabia, Egypt, Nubia and Algeria. Bauer mentioned only one more or less clear diagnostic character for *Periblaps*: comparatively short elytral mucro. The characters of *Blaps nitens nitens* Laporte, 1840 from Algeria and Tunisia are clearly correspond to those in the diagnosis of the subgenus. Thus, we include *B. nitens nitens* (now in the genus *Lithoblaps*) as a single species in the subgenus *Periblaps* and this species is deemed to be the only originally included nominal species and the type species by monotypy. The type species of *Periblaps* is transferred here to *Lithoblaps*. As a result, the following new synonymy is proposed: *Lithoblaps* Motschulsky, 1860 = *Periblaps* Bauer, 1921, **syn. n.**

Holoblaps Bauer, 1921. Here is the same nomenclatural problem as with *Caraboblaps* and *Periblaps* (BOUCHARD *et al.* 2021). BAUER (1921) included this “Artengruppen” to the subgenus “*Blaps* s. str.” sensu Bauer, which is interpreted here as the genus *Lithoblaps*. He noted, that *Holoblaps* includes species from “Buchara, Turkmenien, und Turkestan und zum Kaspi-See (Baku)” (now Uzbekistan, Kazakhstan, Turkmenistan and Azerbaijan). Bauer mentioned only one more or less clear diagnostic character for *Periblaps*: elytral mucro is very long. Many species from Middle Asia possess this character, but only one *Lithoblaps* species is known from Baku: “*Blaps*” *ominosa* Ménétriés, 1832. Thus, we include *B. ominosa* (now in the genus *Lithoblaps*) as a single species in the subgenus *Holoblaps* and this species is deemed to be the only originally included nominal species and recognised as its type species. The type species of *Holoblaps* is transferred here to *Lithoblaps*. As a result, the following new synonymy is proposed: *Lithoblaps* Motschulsky, 1860 = *Holoblaps* Bauer, 1921, **syn. n.**

Protoblaps Bauer, 1921. Despite Bauer’s unequivocal position that the named species groups (*Caraboblaps*, *Genoblaps*, *Periblaps*, *Holoblaps* etc.) are infrasubgeneric groupings within the two subgenera *Blaps* and *Protoblaps*, the code (ICZN, 1999) interprets the names of these “Artengruppen” as subgeneric ones according to Article 6.1. BOUCHARD *et al.* (2021) noted that this taxon was described before 1931 and, therefore applicable according to the Article 12.1 (ICZN). Originally and subsequently, no species were included in this subgenus and now its status is undetermined taxon in Blaptina (BOUCHARD *et al.* 2021). However, Bauer clearly wrote that his subgenus *Protoblaps* included species from 17 species-groups, some of which were discussed separately in his paper. He clearly added seven species (in different species-groups) in the subgenus *Protoblaps*: *B. prolongata*, *B. chinensis*, *B. glabrata*, *B. tentyrioides*, *B. emoda*, *B. crassicornis*, *B. rugulipennis* (for authors, years and synonymy of these taxa see the catalogue below). All of these taxa are formally deemed to be the only originally included nominal species. As a result, we designated here *Blaps tentyrioides* Seidlitz, 1893 as the type species of



Fig. 1. *Blaps (Ablapsis) compressipes* Reitter, 1887, aedeagus: A = dorsal view; B = ventral view; C = lateral view

the subgenus *Protoblaps* Bauer, 1921. This species best characterizes this “primitive” subgenus in the understanding of BAUER (1921).

*On composition and position of the taxa Ablapsis Reitter, 1887,
Protoblaps Bauer, 1921 and Prosoblapsia Skopin et Kaszab, 1978
in the subtribe Blaptina*

REITTER (1887) proposed *Ablapsis* Reitter, 1887 as a subgenus in the genus *Blaps* but later he elevated it to a generic rank (REITTER 1893). SEIDLITZ (1893) regarded *Ablapsis* in the genus *Prosodes*. MEDVEDEV (2001) pointed out that *Ablapsis* would be better to include in *Blaps* as a subgenus and added to its composition also some species from the subgenus *Prosoblapsia*. *Ablapsis* indeed is rather similar to *Blaps sensu stricto* by its body shape the chaetotaxy of antennomeres, shape of the pronotum, structure of femora, tibial spurs, plantar setose brushes on tarsomeres, ventral lamella between tarsal claws and structure of spermateca, however, the aedeagal structure of *Ablapsis compressipes* is distinct from those in *Blaps sensu stricto* in the smaller parameres in relation to the basal piece of the aedeagus and completely separated by the suture between them, apical piece upward curved at apex and ribbed lateral edges of the gonopore (Fig. 1). Such shape of the aedeagus is characteristic of some species of the subgenus *Prosoblapsia*, including the type species of the latter taxon (*Leptocolena allardiana* Reitter, 1889). This

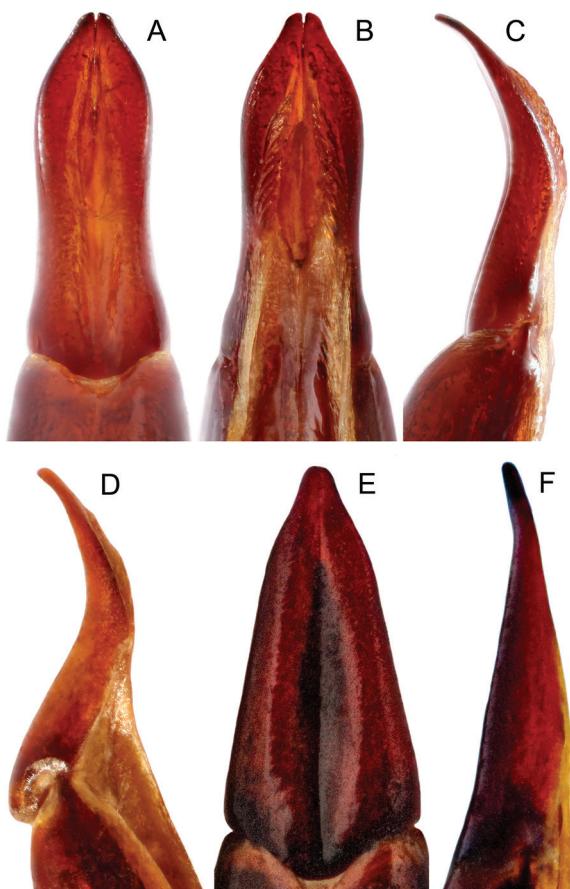


Fig. 2. Apical piece of aedeagus (parameres): A–C = *Blaps (Ablapsis) allardiana allardiana* Reitter, 1889; D = *B. (Ablapsis) berezowskii* G.S. Medvedev, 1998; E, F = *Blaps tentyroides* Seidlitz, 1893 (= *Blaps socia* Seidlitz, 1893); A, E = dorsal view; B = ventral view; C, D, F = lateral view

Medvedev's opinion is here supported here and, therefore, *Ablapsis* stat. resurr. is hereby considered as a subgenus in the genus *Blaps*.

BAUER (1921) erected the subgenus *Genoblaps* with the type species *Blaps tentyroides* Seidlitz, 1893 (= *Blaps socia* Seidlitz, 1893) by monotypy (BOUCHARD et al. 2021). BOUCHARD et al. (2021) treated *Protoblaps* Bauer, 1921 as a genus, however, BAUER (1921) proposed it as a subgenus of the genus *Blaps*. The structure of the aedeagus of the type species of *Protoblaps* is similar to that in the type species of *Ablapsis*. The genera *Protoblaps* Bauer, 1921 and *Genoblaps* Bauer, 1921 should be synonymized on the base on one type species. The subgenus *Prosoblapsia* was proposed by SKOPIN and KASZAB (1978) with indication in its diagnosis of four male characters and 12 characters of both sexes. Nevertheless, conditions of some of these features are present only in the species

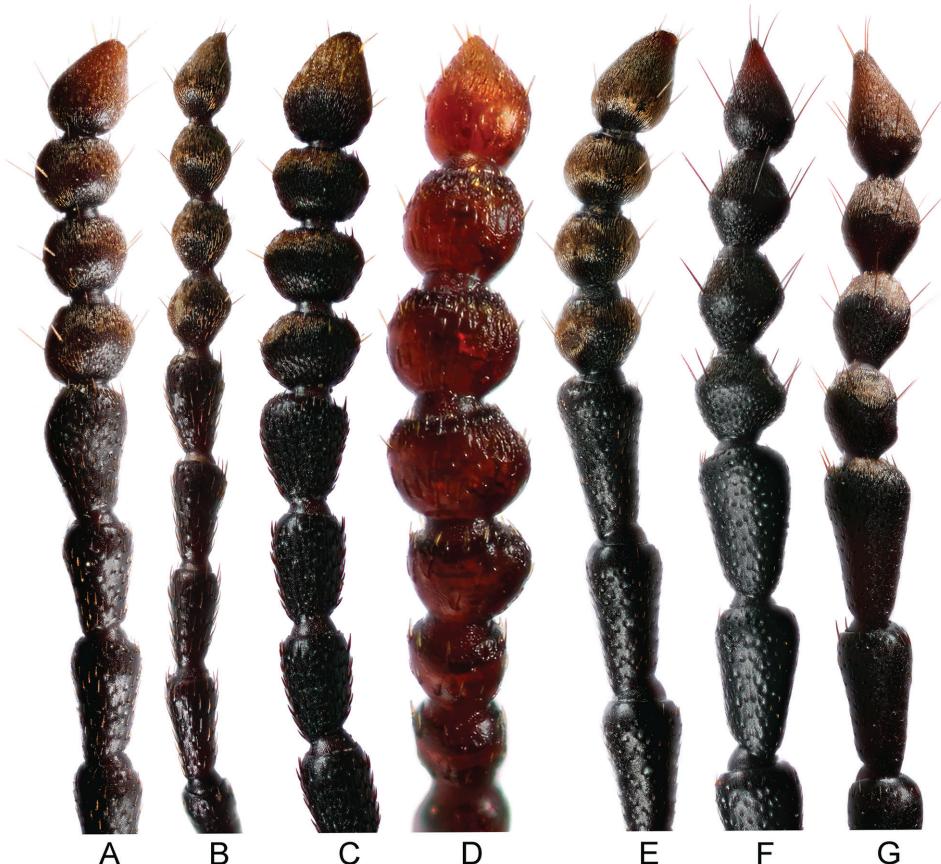


Fig. 3. Antennae of Blaptina. A = *Blaps (Blaps) mortisaga* (Linnaeus, 1758); B = *Blaps (Ablapsis) allardiana* allardiana Reitter, 1889; C = *Blaps (Dineria) halophila* Fischer von Waldheim, 1820; D = *Blaps (Arenoblaps) hiemalis* Semenov et Bogatchev, 1940; E = *Lithoblaps gigas* (Linnaeus, 1767), comb. n.; F = *Dila laevicollis* (Gebler, 1841); G = *Dilablaps paradoxa* Bogatchev, 1976

indicated by the latter co-authors (f.e. setose brushes on protarsomeres), while some others are shared among other subgenera (widely rounded apex of the lamella between tarsal claws). It is thought the most diagnostic features of the latter subgenus are the parameres curved upward and completely divided by a suture (Fig. 2A–C). As the aedeagal structure of type species of *Ablapsis*, *Protoblaps* and *Prosoblapsia* is similar, the new synonymy is proposed: *Ablapsis* Reitter, 1887 = *Protoblaps* Bauer, 1921 *syn. n.* = *Genoblaps* Bauer, 1921 *syn. n.* = *Prosoblapsia* Skopin et Kaszab, 1978, *syn. n.*

Blaps berezowskii G. S. Medvedev, 1998 was proposed originally for the subgenus *Blaps*, but the structure of the apical part of the parameres clearly indicates that this taxon is a member of the subgenus *Ablapsis* (Fig. 2D).



Fig. 4. Antennae of Blaptina: A = *Medvedevoblaps kashkarovi* (G. S. Medvedev, 1998); B = *Thaumatoblaps marikovskiji* Kaszab & G. S. Medvedev, 1984; C = *Coelocnemodes tibialis* Ren in Ren, Ba, Liu, Niu, Zhu, Li et Shi, 2016; D = *Nalepa cylindracea* (Reitter, 1887); E = *Thaioblaps punneae* Masumoto, 1989; F = *Blaps (Ablapsis) compressipes* Reitter, 1887

Position of Lithoblaps in the subtribe Blaptina

Having reconstructed the fauna of the Middle Asia KRYZHANOVSKIJ (1965) supposed the origin of the tribe Blaptini in the Paleogene and further diversification in the Neogene. CONDAMINE *et al.* (2013) found an early separation of the Mediterranean “branches” of *Blaps* sensu stricto and “Mediterranean *Blaps*” (i.e., *Lithoblaps*) admitting age of this separation not later than the early Oligocene.

Analyses of structural and molecular characters (CONDAMINE *et al.* 2013, KERGOAT *et al.* 2014, SOLDATI *et al.* 2017) of representatives of the tribe Blaptina showed that *Lithoblaps* is distinctly and comparably separated from all other genera of the subtribe, including the genus *Blaps* (comprising *Blaps* sensu stricto, *Arenoblaps*, *Dineria* and *Ablapsis*). This is clearly seen in the structure of antenomeres 8–11 (Figs 3, 4), ventral lamella between tarsal claws (Fig. 5) and male meso- and metafemora (Figs 6, 7) and described below in the emended diagnosis in more detail. Thus, the rank of *Lithoblaps* gen. resurr. is reasonable to consider as generic.

Emended diagnosis of the genus Lithoblaps gen. resurr.

Antennomeres 8–11 comparatively short, with ratio of their joint length to joint length of antennomeres 6–7–1.2. Setae of antennomeres not thick. Mentum not concealed the base of labial palpi. Pronotum transverse and bordered along sides. Processes of mesoventrite and abdominal ventrite 1 comparatively narrower (distance between mesocoxae 1.3–2.2 times as great as

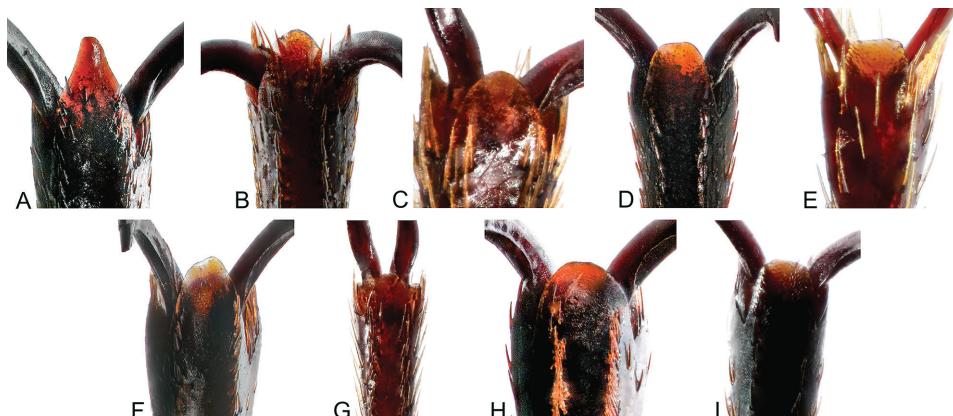


Fig. 5. Ventral lamella between tarsal claws. A = *Lithoblaps gigas* (Linnaeus, 1767), comb. n.; B = *Blaps* (*Blaps*) *mortisaga* (Linnaeus, 1758); C = *Blaps* (*Ablapsis*) *allardiana* *allardiana* Reitter, 1889; D = *Blaps* (*Dineria*) *halophila* Fischer von Waldheim, 1820; E = *Blaps* (*Arenoblaps*) *hiemalis* Semenov et Bogatchev, 1940; F = *Dilablaps paradoxa* Bogatchev, 1976; G = *Medvedevoblaps kashkarovi* (G. S. Medvedev, 1998); H = *Coelocnemodes tibialis* Ren in Ren, Ba, Liu, Niu, Zhu, Li et Shi, 2016; I = *Thaumatoblaps marikovskiji* Kaszab et G. S. Medvedev, 1984

transverse diameter of mesocoxa). Diameter of metacoxa 1.5–2.1 times as long as distance between metacoxa. Elytral apices frequently form elongate process (mucro). Abdomen with setose tuft between ventrites 1 and 2, sometimes tuft missing. Upper and lower edges of flexion side of profemora without teeth or angular projecting. Male meso- and metafemora along lower posterior edge serrate. Protibia with two apical spurs, slightly different in length. Male protarsomeres without plantar setose brush. Ventral lamella between tarsal claws acuminate or narrowly rounded, subtriangular or lanceolate.

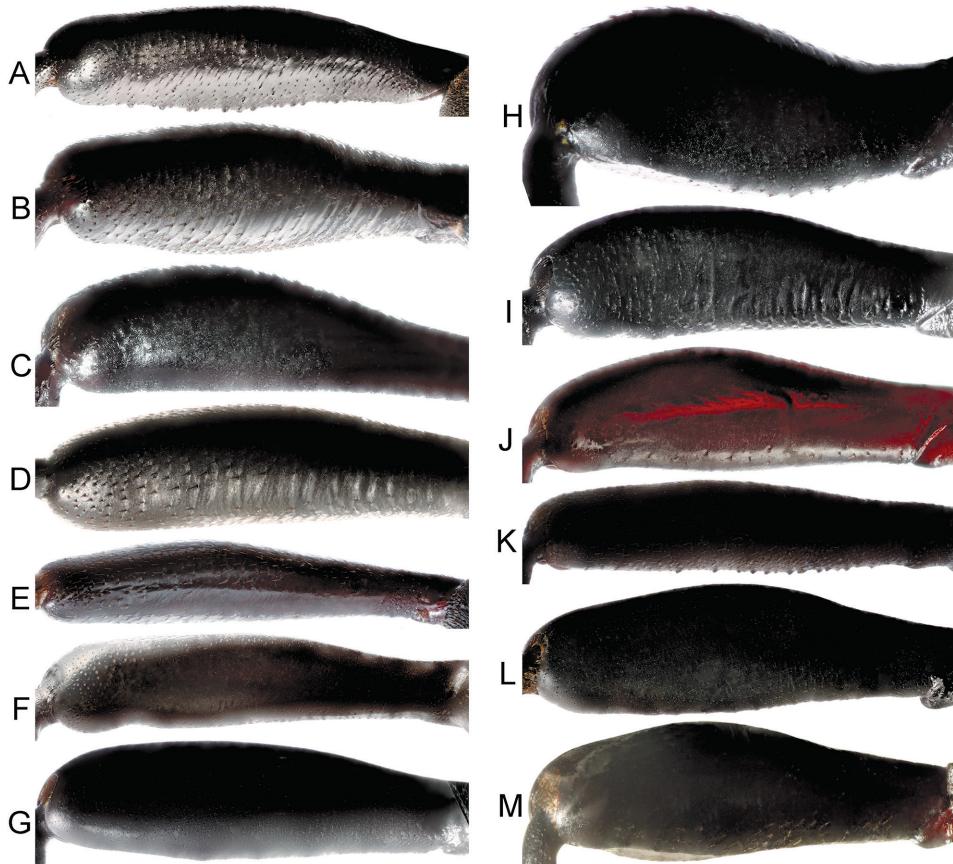


Fig. 6. Mesofemora of Blaptina: A = *Lithoblaps gigas* (Linnaeus, 1767), comb. n.; B = *Blaps* (*Blaps*) *mortisaga* (Linnaeus, 1758); C = *Blaps* (*Arenoblaps*) *hiemalis* Semenov et Bogatchev, 1940; D = *Blaps* (*Dineria*) *halophila* Fischer von Waldheim, 1820; E = *Blaps* (*Ablapsis*) *allardiana* Allardiana Reitter, 1889; F = *Thaiooblaps punneae* Masumoto, 1989; G = *Dila laevicollis* (Gebler, 1841); H = *Thaumatoblaps marikovskiji* Kaszab et G. S. Medvedev, 1984; I = *Coelocnemodes tibialis* Ren in Ren, Ba, Liu, Niu, Zhu, Li et Shi, 2016; J = *Nalepa cylindracea* (Reitter, 1887); K = *Medvedevoblaps kashkarovi* (G. S. Medvedev, 1998); L = *Dilablaps paradoxa* Bogatchev, 1976; M = *Blaps* (*Ablapsis*) *compressipes* Reitter, 1887

Emended diagnosis of the genus Blaps

Antennomeres 8–11 comparatively long with ratio of their joint length to joint length of antennomeres 6–7 – 1.47. Setae of antennomeres not thick. Mentum not covering base of labial palpi. Pronotum transverse to subquadrate and bordered along sides. Processes of mesoventrite and abdominal ventrite 1 comparatively narrower (distance between mesocoxae 1.3–2.2 times as great as transverse diameter of mesocoxa). Metacoxa 1.5–2.1 times as long as distance between metacoxae. Elytral apices frequently forming elongate process

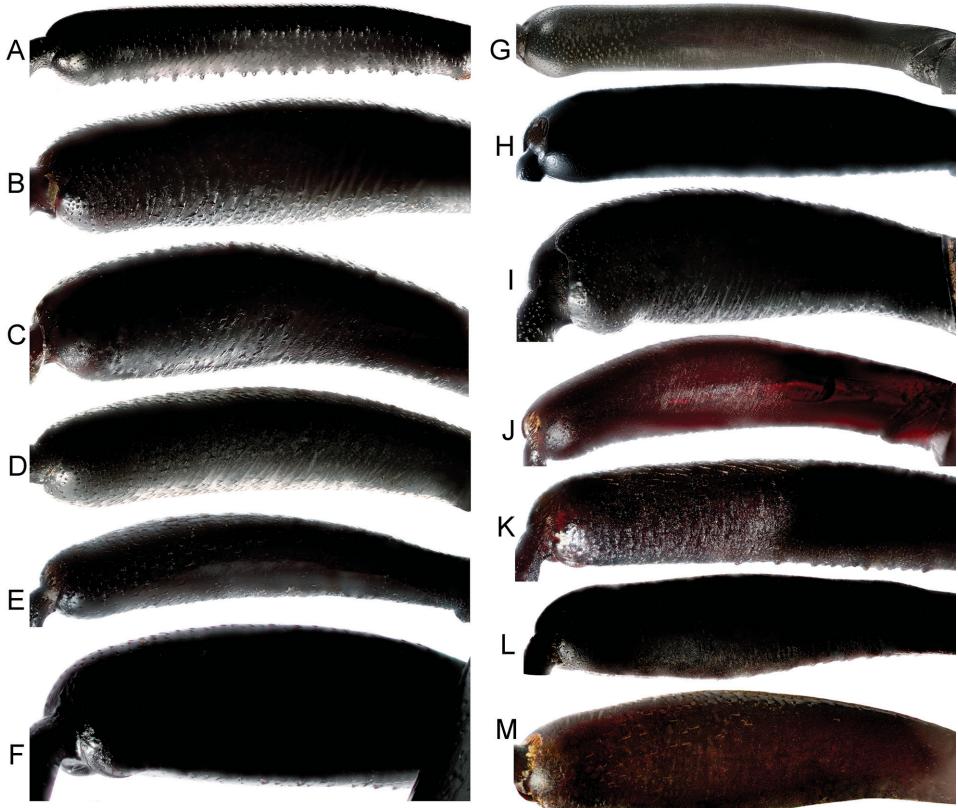


Fig. 7. Metafemora of Blaptina: A = *Lithoblaps gigas* (Linnaeus, 1767), comb. n.; B = *Blaps (Blaps) mortisaga* (Linnaeus, 1758); C = *Blaps (Arenoblaps) hiemalis* Semenov et Bogatchev, 1940; D = *Blaps (Dineria) halophila* Fischer von Waldheim, 1820; E = *Blaps (Ablapsis) allardiana allardiana* Reitter, 1889; F = *Thaumatoblaps marikovskiji* Kaszab & G.S. Medvedev, 1984; G = *Thaiblaps punneae* Masumoto, 1989; H = *Dila laevicollis* (Gebler, 1841); I = *Coelocnemodes tibialis* Ren in Ren, Ba, Liu, Niu, Zhu, Li et Shi, 2016; J = *Nalepa cylindracea* (Reitter, 1887); K = *Medvedevoblaps kashkarovi* (G. S. Medvedev, 1998); L = *Dilablaps paradoxa* Bogatchev, 1976; M = *Blaps (Ablapsis) compressipes* Reitter, 1887

(mucro). Abdomen with setose tuft between ventrites 1 and 2, sometimes tuft missing. Upper and lower edges of flexion side of profemora without teeth, either sometimes with one tooth (*Blaps femoralis* Fischer von Waldheim, 1844) or small kiel. Male meso- and metafemora along lower side even. Protibia with two apical spurs, slightly different in length. Male protarsomeres without plantar setose brush or with plantar brush at basal half of protarsometres 1-2 and mesotarsomere 1. Ventral lamella between tarsal claws straight or widely rounded, quadrangular or trapezoid.

Notes of differences of larvae of Lithoblaps and Blaps

Mature larva of *Lithoblaps*. The external labral surface with 32–36 longer setae (Fig. 8A). According to SKOPIN (1960) the inner labral surface with fields of thorns (thorned) clearly extended behind the middle (sometimes almost

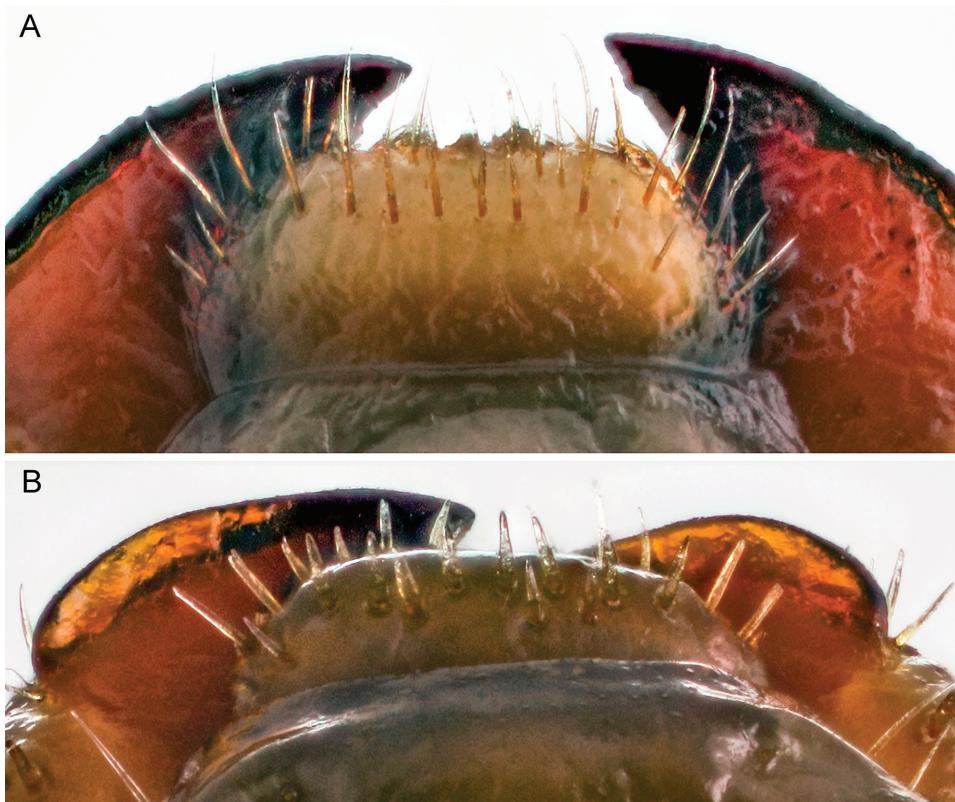


Fig. 8. The external labral surface of larvae: A = *Lithoblaps ominosa* (Ménétriés, 1832) comb. n.; B = *Blaps (Blaps) parvicollis parvicollis* Zubkov, 1829

reached labral base). The external edge of the abdominal tergite IX with of more numerous, widely spread and longer thorns and its apex obtuse, without long process (Fig. 9A, B).

Mature larva of *Blaps*. The external labral surface with 20–22 shorter setae (Fig. 8B). According to SKOPIN (1960) the inner labral surface with fields of thorns (thorned) not extended behind the middle. The external edge of the abdominal tergite IX with narrow stripe of short thorns and its apex with a long process and paired thorns (Fig. 9C, D).

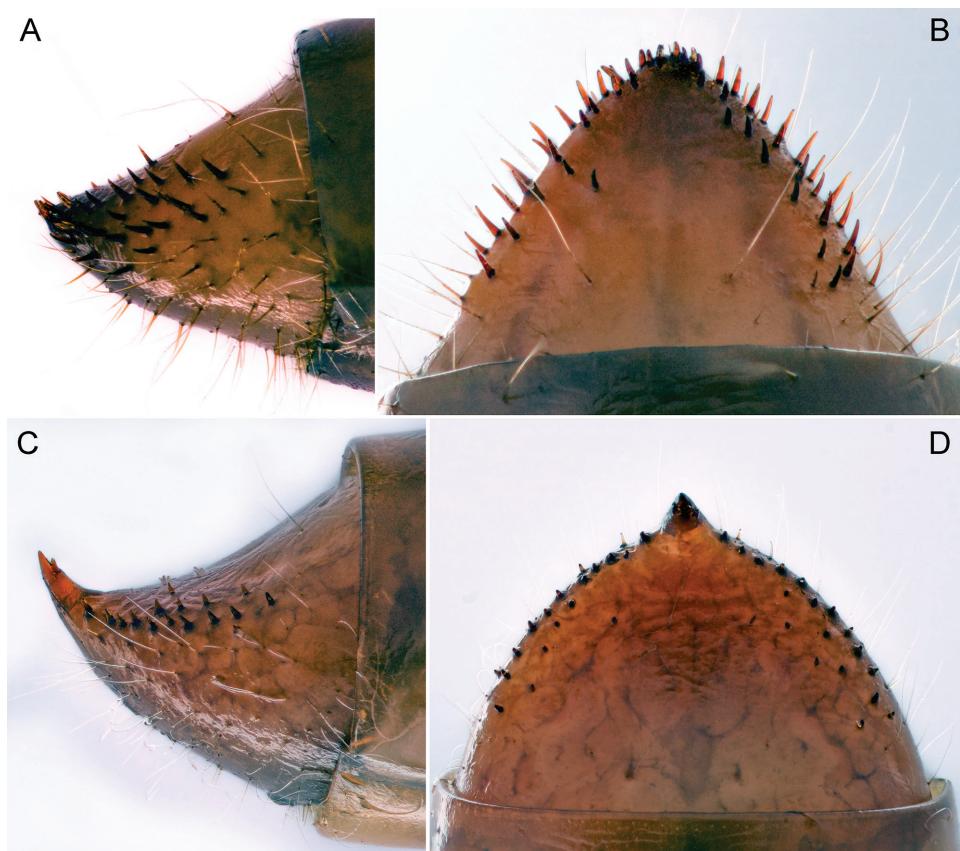


Fig. 9. The abdominal tergite IX of larvae: A, B = *Lithoblaps ominosa* (Ménétriés, 1832) comb. n.; C, D = *Blaps (Blaps) parvicollis parvicollis* Zubkov, 1829; A, C = lateral view; B, D = dorsal view

A KEY OF GENERA OF THE SUBTRIBE BLAPTINA

1. Lamella between tarsal claws acute, triangular or lanceolate at apex
Lithoblaps
- Lamella between tarsal claws obtuse, straight or widely rounded at apex 2
2. Protibia with one spur. Body narrower *Thaumatoblaps*
- Protibia with two spurs. Body wider 3
3. Pronotum not beaded. Mentum very large, concealed parts of cardo and stipes, and completely concealed base of labial palpi. Processes of mesoventrite and abdominal ventrite 1 very wide (distance between mesocoxae 1.1 times as great as transverse diameter of mesocoxa). Distance between metacoxae subequal to transverse diameter of metacoxal
Medvedevia
- Pronotum beaded. Mentum smaller, cardo, stipes and base of labial palpi exposed. Processes of mesoventrite and abdominal ventrite 1 narrower (distance between mesocoxae 1.3–2.2 times as great as transverse diameter of mesocoxa). Diameter of metacoxa longer 1.5–2.1 times as great as distance between metacoxae 4
4. Outer spur of protibia much smaller than inner one *Nalepa* Reitter, 1887
- Spurs of protibia slightly different in size 5
5. Male abdomen always without setose tuft between ventrites 1 and 2, flexion side of profemora with clear tooth or large projecting keel on upper edges 6
- Male abdomen often with setose tuft between ventrites 1 and 2, flexion side of profemora without clear tooth or large projecting keel, sometimes if tooth present, male abdomen with setose tuft (*Blaps femoralis*, Mongolia) 10
6. Elytral integument microgranulate and rugose *Hoplitoblaps*
- Elytral integument smoothed, sometimes with rasp-like punctuation (but not rugose) 7
7. Setae of antennomeres thick (Fig. 4C). Flexion side of male profemora with two very large teeth, female profemora with only one tooth on upper side. Flexion side of all male tibiae with small setose tuft near spurs
Coelocnemodes

- Setae of antennomeres not thick (Figs 3F, G, 4E). Flexion side of male and female profemora with one tooth or projecting keel on upper side. Sometimes flexion side of only male pro- and mesotibiae with small setose tuft near spurs 8
- 8. Pronotum subexplanate at all sides (including anterior and posterior). Male metatibiae S-curved *Dilablaps* Bogatchev, 1976
- Pronotum gently sloping at all sides (including anterior and posterior). Male metatibiae not S-curved 9
- 9. Mucro absent or very short, unclearly separated from main parts of elytra. Apical lobes of coxites of ovipositor widely rounded at apex. Basal duct of spermatheca short, accessory gland of spermatheca longer than basal duct, spermatheca with two reservoirs *Dila*
- Mucro well expressed, clearly separated from main parts of elytra. Apical lobes of coxites of ovipositor long, apex of lobes narrowly rounded. Basal duct of spermatheca moderately long, spermatheca with three reservoirs (first reservoir very small, second and third reservoirs of usual size) *Thaiblaps*
- 10. Plantar surface of male protarsomeres 1–3 in apical half and mesotarsomere 1 in apical third with brush of dense setae. Meso- and metafemora with small teeth on inner side. Epipleura short, reaching base of abdominal ventrite 5 *Medvedevoblaps*
- Plantar surface of male protarsomeres without setose tuft or with small tuft in basal side of protarsomeres 1–2 and mesotarsomere 1. Meso- and metafemora without teeth on inner side. Epipleura longer, reaching at least middle of abdominal ventrite 5 *Blaps*

Figures of type species of the genera and subgenera of the subtribe Blaptina are given below (Figs 10–13).

CATALOGUE OF THE SUBTRIBE BLAPTINA LEACH, 1815

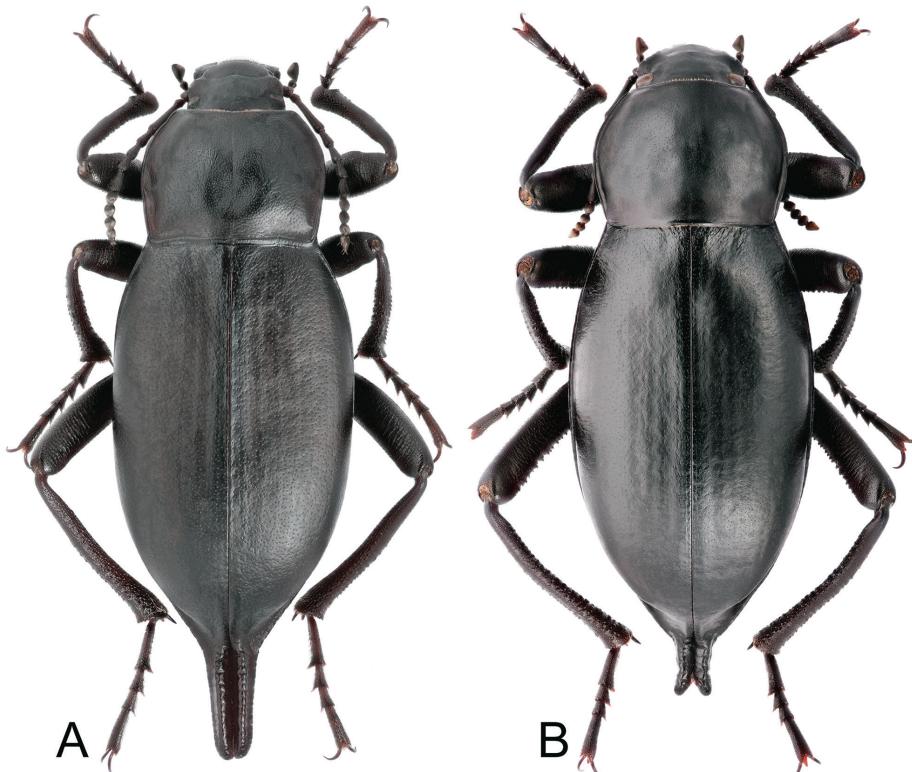
Notes. The catalogue includes all genera and subgenera currently recognized from the Palaearctic, Afrotropical and Indo-Malayan regions (see Chigray 2020, Bouchard *et al.* 2021, Li *et al.* 2022, Nabozhenko *et al.* 2022*a, b*).

“*Blaps sinuatocollis sinuatocollis*” was proposed as an intrasubspecies unit of *Blaps reflexicollis* Solier, 1848 (= *Blaps lethifera* Marsham, 1802). This name was excluded from the taxa considering by the zoological nomenclature regu-

lated by ICZN (NABOZHENKO *et al.* 2022b), therefore, *Blaps sinuatocollis suecica* J. Ferrer et Picka, 1990 should be used as a valid subspecies of *B. lethifera*.

The status of *Blaps platythorax* Gemminger, 1870 (for replacement name of *Blaps laticollis* Redtenbacher, 1850 (non *Blaps laticollis* Solier, 1848)) needs to be supported (CHIGRAY & NABOZHENKO 2016, CHIGRAY *et al.* 2019). It was described from Shiraz and Redtenbacher pointed out the elongate cylindrical body and presence of large tooth on the profemora in this taxon: "femoribus anticis dentatis" (KOLLAR & REDTENBACHER 1850). The latter character differs the genus *Dila* from other genera of the tribe Blaptini known from Iran and this species must be excluded from the genus *Blaps*: *Dila platythorax* (Gemminger, 1870) **comb.n.**

We offer "**comb. resurr.**" instead of "**comb. n.**" for some species of *Lithoblaps*, because MOTSCHULSKY (1860) and SKOPIN (1960) have already established such combination.



© Zoological Institute of the Russian Academy of Sciences

Fig. 10. Species of Blaptina, habitus: A = *Blaps mortisaga* (Linnaeus, 1758); B = *Lithoblaps gigas* (Linnaeus, 1767)

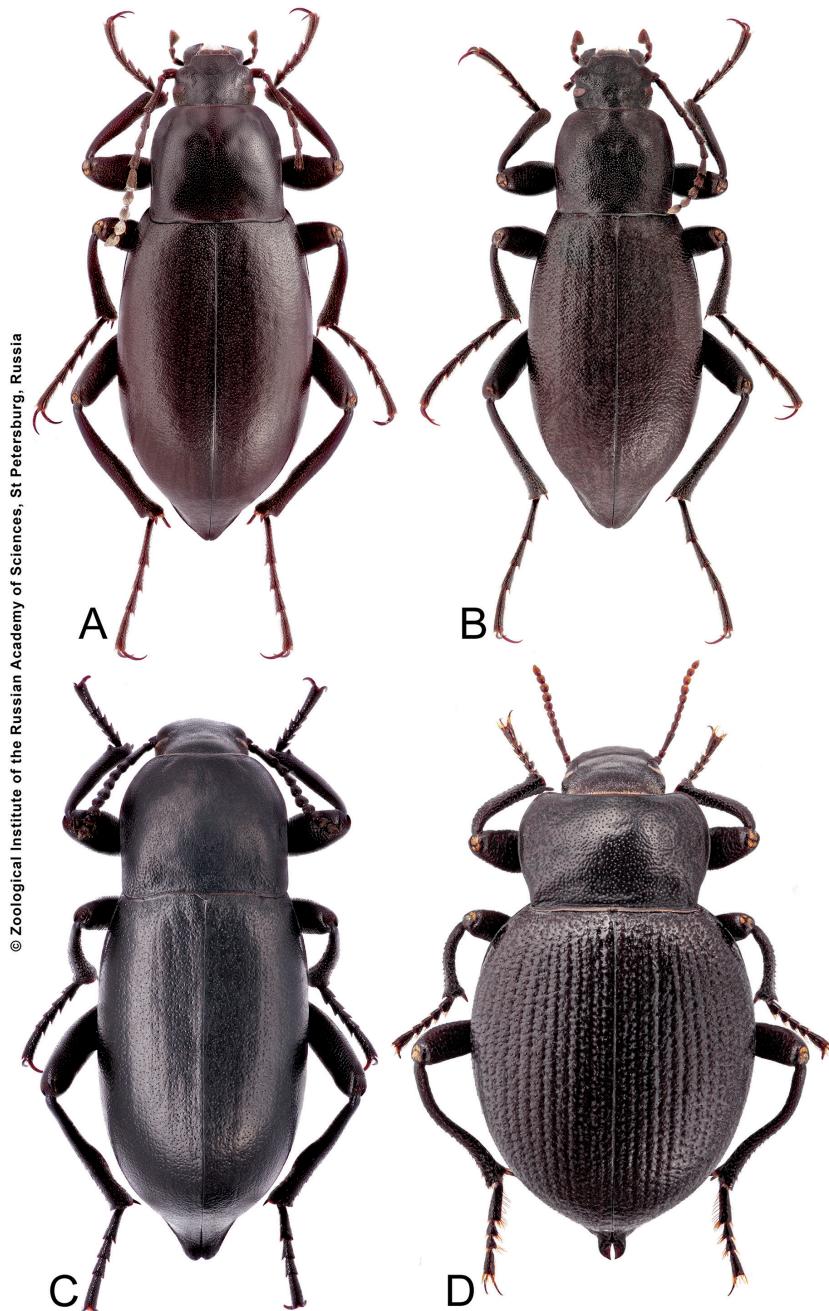


Fig. 11. Species of Blaptina, habitus: A = *Blaps (Ablapsis) compressipes* Reitter, 1887; B = *Blaps (Ablapsis) allardiana allardiana* Reitter, 1889; C = *Blaps (Dineria) halophila* Fischer von Waldheim, 1820; D = *Blaps (Arenoblaps) hiemalis* Semenov et Bogatchev, 1940

© Zoological Institute of the Russian Academy of Sciences, St Petersburg, Russia

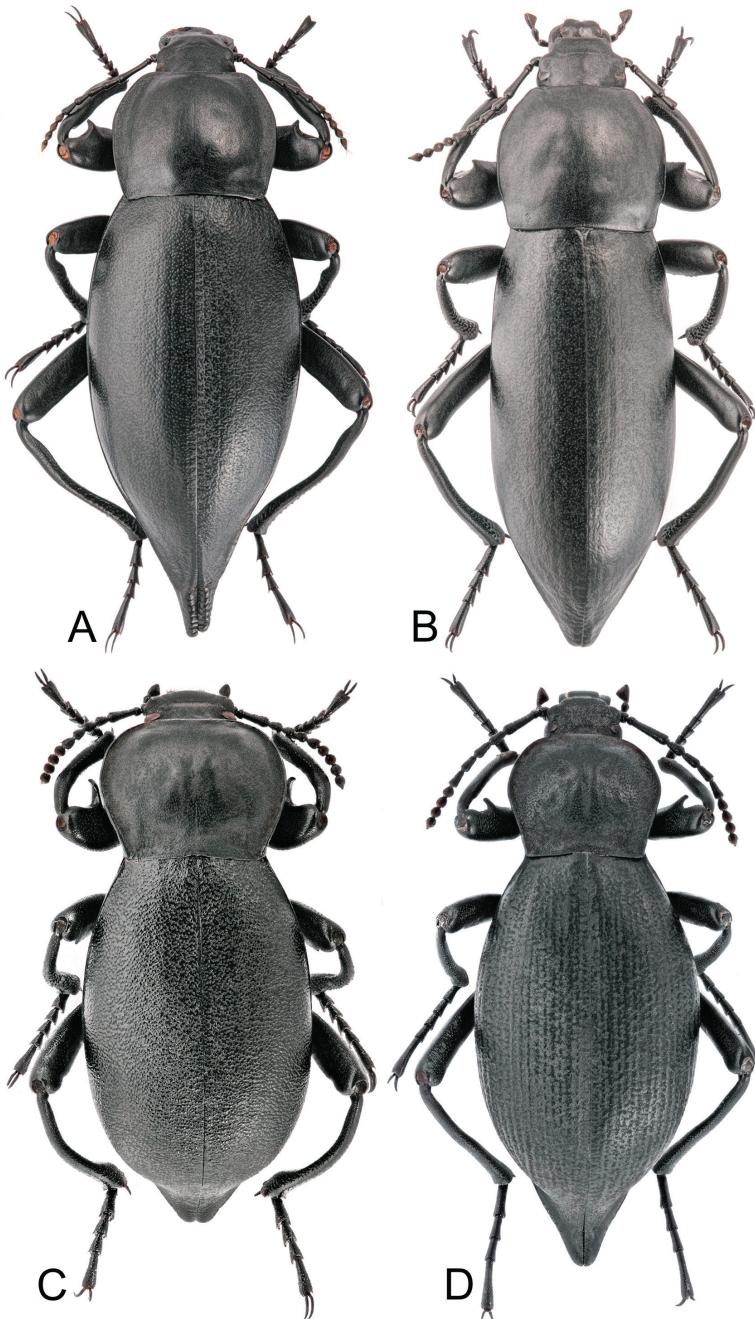
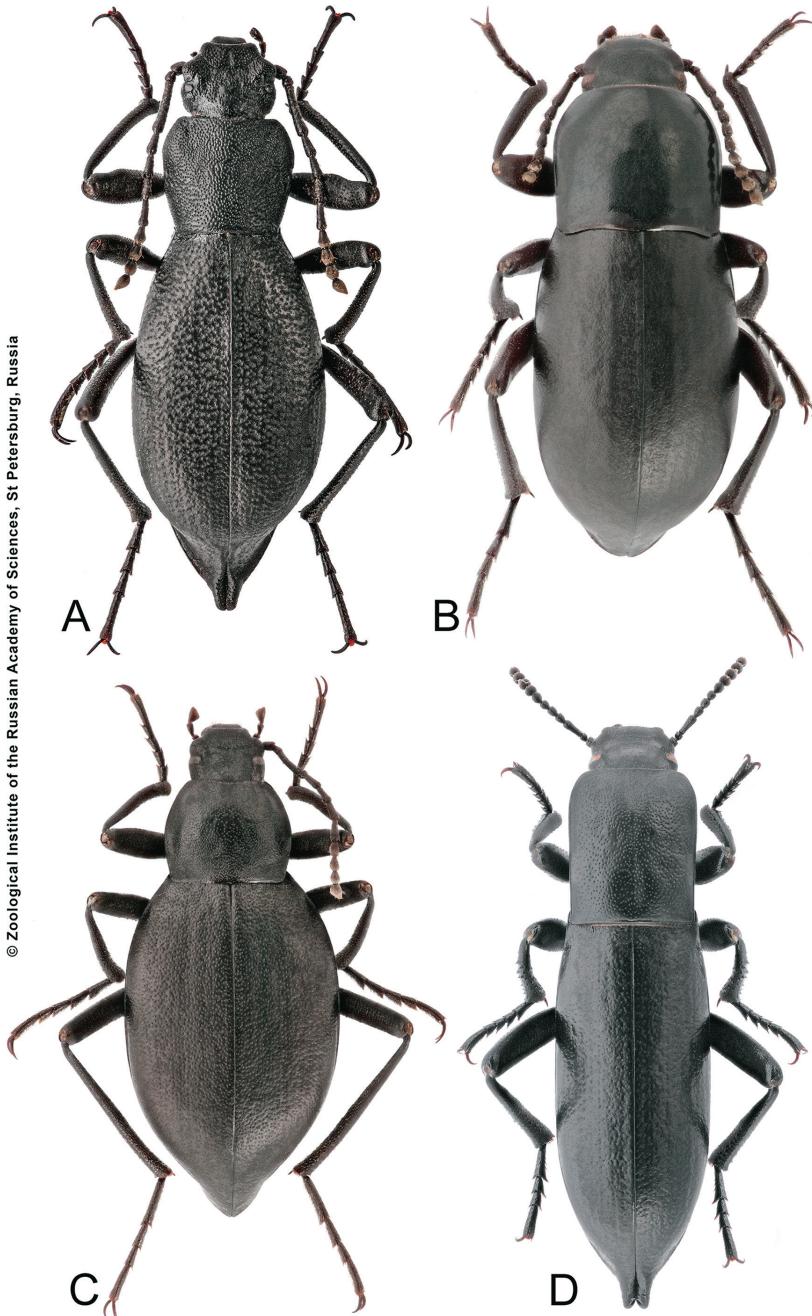


Fig. 12. Species of Blaptina, habitus: A = *Dilablaps paradoxa* Bogatchev, 1976; B = *Dila laevicollis* (Gebler, 1841); C = *Coelocnemodes tibialis* Ren in Ren, Ba, Liu, Niu, Zhu, Li et Shi, 2016; D = *Thaioblaps punneae* Masumoto, 1989



© Zoological Institute of the Russian Academy of Sciences, St Petersburg, Russia

Fig. 13. Species of Blaptina, habitus: A = *Medvedevia glebi* I. Chigray, 2019; B = *Nalepa cylindracea* (Reitter, 1887); C = *Medvedevoblaps kashkarovi* (G. S. Medvedev, 1998); D = *Thaumatomoblaps marikovskii* Kaszab et G. S. Medvedev, 1984

Genus *Blaps* Fabricius, 1775, type species
Tenebrio mortisagus Linnaeus, 1758

Subgenus *Ablapsis* Reitter, 1887, type species *Blaps compressipes* Reitter, 1887
= *Prosoblaps* Skopin et Kaszab, 1978,
type species *Leptocolena allardiana* Reitter, 1889
= *Protoblaps* Bauer, 1921, type species
Blaps tentyrioides Seidlitz, 1893
(= *Blaps (Ablapsia) socia* Seidlitz,
1893), designated here
= *Genoblaps* Bauer, 1921, type species
Blaps tentyroides Seidlitz, 1893
allardiana alaiensis Seidlitz, 1893
= *suntantinga* Schuster, 1923
allardiana allardiana Reitter, 1889
= *znoikoi* Semenov et Bogatchev, 1936
apicecostata Blair, 1922
berezowskii G. S. Medvedev, 1998
breiti Reitter, 1913
= *trapezicollis* Gebien, 1913
brevipes Seidlitz, 1893
brevis Ren et Wang, 2001
compressipes (Reitter, 1887), **comb. resurr.**
(*Ablapsis*)
conica Ren et Shi, 2016
gentilis *gentilis* Fairmaire, 1887
gentilis semistriatotomorpha Skopin et
Kaszab, 1978
gentilis transversithorax Skopin et Kaszab,
1978
helleri Schuster, 1923
himalaica Blair, 1923
latericosta Reitter, 1889
maeander Kraatz, 1885
socia Seidlitz, 1893
= *gentiloides* Kaszab, 1977
= *punctithorax* Kaszab, 1977
= *radula* Kaszab, 1977
= *semistriata* Kaszab, 1977
= *tentyroides* Seidlitz, 1893
tenuicornis Gebler, 1847
= *altaica* Kelejnikova, 1970
= *depressa* Gebler, 1829
transversim sulcata meandroides Skopin, 1977
transversim sulcata transversim sulcata Bal-
lion, 1878

= *rudesculpta* Semenov et Bogatchev,
1936

Subgenus *Arenoblaps* G.S. Medvedev,
1999, type species *Blaps hiemalis*
Semenov et Bogatchev, 1940
hiemalis Semenov et Bogatchev, 1940

Subgenus *Blaps* Fabricius, 1775,
type species *Tenebrio mortisagus* Lin-
naeus, 1758
= *Acanthoblaps* Reitter, 1889, type spe-
cies *Blaps dentitibia* Reitter, 1889
= *Agroblaps* Motschulsky, 1860, type
species *Blaps fatidica* J. Sturm,
1807 (= *Blaps lethifera* Marsham,
1802)
= *Blapidurus* Fairmaire, 1891, type
species *Blapidurus crassicornis*
Fairmaire, 1891
= *Blapimorpha* Motschulsky, 1860, type
species *Blaps reflexa* Gebler, 1832
= *Blapisa* Motschulsky, 1860, type spe-
cies *Blaps jaegeri* Hummel, 1827
(= *Tenebrio mortisagus* Linnaeus,
1758)
= *Caraboblaps* Bauer, 1921, type species
Blaps scabiosa Baudi di Selve,
1874
= *Hypoblaps* Kolbe, 1928, type species
Blaps rotundata Solier, 1848
= *Leptocolena* Allard, 1880, type species
Blaps mucronata Latreille, 1804
= *Leptomorpha* Faldermann, 1835, type
species *Leptomorpha chinensis*
Faldermann, 1835
= *Mesoblaps* Bauer, 1921, type species
Blaps rugulipennis Fairmaire,
1891
= *Nanoblaps* Semenov & Bogatchev,
1936, type species *Blaps jakovlevi*
Semenov & Bogatchev, 1936
= *Notoblaps* Bauer, 1921, type species
Blaps juliae Allard, 1881
= *Opisthoblaps* Kolbe, 1928, type spe-
cies *Blaps sulcifera* Seidlitz, 1893
= *Platyblaps* Motschulsky, 1860, type
species *Blaps holconota* Fischer
von Waldheim, 1844

- abbreviata abbreviata* Ménétriés, 1836
 = *ecaudata* Küster, 1845
 = *ovata* Solier, 1848
 = *rotundicollis* Reiche et Saulcy, 1857
abbreviata indagator Reiche et Saulcy, 1857
acuminata acuminata Fischer von Waldheim, 1820
 = *przewalskyi* Reitter, 1887
acuminata kulszhana Skopin, 1973
acutangula Ren et Wang, 2001
adelae L. Soldati et F. Soldati, 1999
afghanistanica Gridelli, 1954 (1955)
amurensis Allard, 1881
angusta Seidlitz, 1893
anura Seidlitz, 1893
araxicola Seidlitz, 1893
aruktavica G. S. Medvedev, 2004
aspericollis Schuster, 1923
badakschanica Kaszab, 1960
balashovi Bogatchev et G. S. Medvedev, 1974
ballioni Skopin, 1977
bogatshevi G. S. Medvedev, 1964
brunnea Allard, 1881
bucharensis Seidlitz, 1893
bushirensis Kaszab, 1959
caraboides caraboides Allard, 1882
 = *aberrans* Reinig, 1931
 = *alaiensis* Reinig, 1931
 = *chinensis* Reinig, 1931
 = *emarginata* Reinig, 1931
 = *licinoides* Seidlitz, 1893
 = *ovata* Reinig, 1931
 = *schusteri* Reinig, 1934
caraboides intermittens Kaszab, 1962
caspica I. Chigray, Abdurakhmanov, Nabozhenko et Shapovalov, 2016
caucasica Nabozhenko et I. Chigray, 2022
chinensis Faldermann, 1835
choui Ren et Wang, 2001
clotzeri Fischer von Waldheim, 1844
concii Koch, 1965
conradtii Seidlitz, 1893
contracta Ren, 2016
crassicornis Fairmaire, 1891
cretensis Koch, 1948
cribrosa Solier, 1848
 = *angulata* Reiche et Saulcy, 1857
cychroides Fairmaire, 1887
- davidis* Deyrolle, 1878
 = *davidea* (Allard, 1886) (*Blapimorpha*)
dehaani Baudi di Selve, 1875
dentitibia Reitter, 1889
deplanata Ménétriés, 1832
 = *cordata* Seidlitz, 1893
 = *curvipes* Baudi di Selve, 1874 (1875)
 = *muricata* Fischer von Waldheim, 1832
dispar Seidlitz, 1893
dorsogranata Fairmaire, 1887
eleodes Kaszab, 1962
elliptica Seidlitz, 1893
emoda Allard, 1881
ernesti I. Chigray, 2020
evanida Seidlitz, 1893
eximia Semenov et Bogatchev, 1936
felix Waterhouse, 1889
 = *regia* Seidlitz, 1893
femoralis femoralis Fischer von Waldheim, 1844
femoralis rectispina Kaszab, 1968
fouquei I. Chigray et Ivanov, 2020
freibergi Skopin, 1969
garzica Ren et Wang, 2001
gibba Laporte, 1840
 = *australis* Solier, 1848
 = *impressicollis* Solier, 1848
 = *italica* Baudi di Selve, 1875
 = *planicollis* Solier, 1848
 = *rectangularis* Solier, 1848
glabrata Seidlitz, 1893
glazunovi Semenov et Bogatchev, 1936
gobiensis J. Frivaldszky, 1890
 = *mongolica* Seidlitz, 1893
graeca Solier, 1848
granulata altnymelis Skopin, 1966
granulata granulata Gebler, 1825
 = *seidlitzii* Schuster, 1936
granulata granulosa Ménétriés, 1854
granulata kirgisica Skopin, 1966
granulata obliterate Ménétriés, 1849
granulata stackelbergi Bogatchev, 1952
granulata turcomana Fischer von Waldheim, 1843
 = *caudata* Gebler, 1844
granulipennis Skopin, 1966
gressoria Reitter, 1889
haarlovi Gridelli, 1954
helopioides Seidlitz, 1893

- holconota* Fischer von Waldheim, 1844
 = *corrosa* Fischer von Waldheim, 1844
 = *quinquecostata* Fischer von Waldheim, 1844
 = *stenothorax* Fischer von Waldheim, 1844
- holcus* Ren, 2016
- indicola* Bates, 1879
 = *lucens* Fairmaire, 1891
- inflatipennis* J.R. Sahlberg, 1908
- inflexa* Zubkov, 1833
 = *carbonaria* Kraatz, 1888
 = *haberhaueri* Seidlitz, 1893
- iraquensis* Kaszab, 1959
- jakovlevi* Semenov et Bogatchev, 1936
- japonensis* Marseul, 1879
- jeannei* J. Ferrer et L. Soldati, 1999
- kabuliensis* Kaszab, 1960
- kadyrbekovi* G. S. Medvedev, 2004
- kasatkini* I. Chigray et Nabozhenko, 2016
- kashgarensis* Bates, 1879
 = *eusoma* Kraatz, 1888
 = *lobnoriana* Reitter, 1887
- kiritschenkoi* Semenov et Bogatchev, 1936
- klapperichi* Kaszab, 1960
- kolbei* Schuster, 1914
- kovali* Abdurakhmanov et Nabozhenko, 2011
- kulzeri* Pierre, 1964
 = *kulzeriana* (Pierre, 1964) (*Caenoblaps*)
- ladakensis* Bates, 1879
- lata* Seidlitz, 1893
- ledereri* (Fairmaire, 1866) (*Prosodes*)
- lethifera lethifera* Marsham, 1802
 = *abdita* Picka, 1978
 = *angulicollis* (Motschulsky, 1860)
 (*Agroblaps*)
 = *anthracina* Faldermann, 1837
 = *asiatica* Solier, 1848
 = *bipunctata* Allard, 1881
 = *brevis* Fischer von Waldheim, 1844
 = *carinula* Seidlitz, 1893
 = *convexa* Fischer von Waldheim, 1844
 = *crassa* Reiche et Saulcy, 1857
 = *damascena* Fischer von Waldheim, 1844
 = *dorsata* Fischer von Waldheim, 1844
- = fatidica* J. Sturm, 1807
 = *laevicollis* Rey, 1892
 = *pterotapha* Fischer von Waldheim, 1832
 = *luctuosa* Ménétriés, 1832
 = *menetriesii* Kraatz, 1881
 = *milleri* Seidlitz, 1893
 = *obliterata* Ménétriés, 1848 (1849)
 = *orbicollis* Motschulsky, 1845
 = *pallasii* Seidlitz, 1893
 = *plicaticollis* Ménétriés, 1836
 = *proxima* Solier, 1848
 = *pulvinata* Ménétriés, 1849
 = *reflexicollis* Solier, 1848
 = *robusta* Motschulsky, 1845
 = *similis* Latreille, 1804
 = *striatopunctata* Allard, 1881
 = *subquadrata* Brullé, 1832
 = *tarda* (Motschulsky, 1860) (*Agroblaps*)
- lethifera suecica* J. Ferrer et Picka, 1990
- lindbergi* Kaszab, 1959
- longicornis* Kraatz, 1882
- longula* Reiche et Saulcy, 1857
- lucidula* G. S. Medvedev, 1998
- marginicollis* (Fairmaire, 1891) (*Blapidurus*)
- martensi* Kaszab, 1978
- medusa* Reitter, 1900
- medusula* Skopin, 1964
- menetriesiana* Bogatchev, 1948
- miliaria* Fischer von Waldheim, 1844
- moerens* Allard, 1881
- mortisaga* (Linnaeus, 1758) (*Tenebrio*)
 = *acuminata* (DeGeer, 1775) (*Tenebrio*)
 = *brevicornis* Seidlitz, 1893
 = *canaliculata* Faldermann, 1837
 = *carbo* Fischer von Waldheim, 1844
 = *confusa* Fischer von Waldheim, 1844
 = *dahlii* Solier, 1848
 = *elongata* Ménétriés, 1832
 = *encifer* Motschulsky, 1845
 = *jaegeri* Hummel, 1827
 = *koenigii* Seidlitz, 1893
 = *planicollis* Motschulsky, 1845
 = *reflexicollis* Fischer von Waldheim, 1844

- mucronata* Latreille, 1804
 = *chevrolatii* Solier, 1848
 = *dilatata* Laporte, 1840
 = *foveicollis* Allard, 1881
 = *obtusa* J. Sturm, 1807
 = *reflexa* Solier, 1848
 = *stricticollis* A. Villa et J. B. Villa, 1835
 = *striolata* Küster, 1846
 = *sublineata* Brullé, 1832
 = *subovata* Solier, 1848
murgabensis Bogatchev, 1961
mutata Gemminger, 1870
 = *convexa* Reiche et Saulcy, 1857
nadaii G. S. Medvedev, 2004
nanshanica Semenov et Bogatchev, 1936
nitida Fischer von Waldheim, 1844
 = *amoena* Fischer von Waldheim, 1844
nuristanica Kaszab, 1959 (1960)
oberthuerii Seidlitz, 1893
oblonga Kraatz, 1883
 = *gracilicollis* Kraatz, 1885
 = *major* Kraatz, 1883
ocreatia Allard, 1881
oertzenii Seidlitz, 1893
oglobini Semenov et Bogatchev, 1936
opaca Reitter, 1889
paludani Kaszab, 1959 (1960)
parvicollis parvicollis Zubkov, 1829
 = *affinis* Seidlitz, 1893
 = *krynickii* Krynicki, 1829
 = *scabra* Fischer von Waldheim, 1842
parvicollis quadricollis Ballion, 1878
 = *subcordata* Seidlitz, 1893
perlonga Bates, 1879
 = *prolongata* (Fairmaire, 1887) (*Leptomorpha*)
persicola Seidlitz, 1893
petiti Pierre, 1964
petra I. Chigray, Nabozhenko et Keskin, 2015
pilosa Ren et Wang, 2001
potanini Reitter, 1889
pseudocaudata Kaszab, 1960
pterosticha Fischer von Waldheim, 1844
 = *akinina* (Allard, 1882) (*Agroblaps*)
 = *multistriata* Ballion, 1878
pudica Ballion, 1888
puella Allard, 1881

putrida Motschulsky, 1845
reflexa Gebler, 1832
 = *variolaris* Gemminger, 1870
 = *variolosa* Fischer von Waldheim, 1844 (№ 95)
 = *vermiculata* Allard, 1882
reichardti Semenov et Bogatchev, 1936
rhynchoptera Fairmaire, 1886
 = *inermis* Fairmaire, 1887
rimskii Semenov et Bogatchev, 1936
rotundata Solier, 1848
 = *sodalis* Reiche et Saulcy, 1857
rougemonti Kaszab, 1986
rugosa Gebler, 1825
 = *variolosa* Fischer von Waldheim, 1844 (№ 117)
 = *scabripennis* Faldermann, 1835
 = *variolota* Gemminger, 1870
rugulipennis Fairmaire, 1891
rybalovi Tschernyshev et Mordkovitsh, 2002
scabiosa Baudi di Selve, 1874
 = *neoscabiosa* Nabozhenko, 2008
 = *scabiosa* Faust, 1875
skopini I. Chigray et Ivanov, 2020
subalpina Ménétriés, 1832
scutellata Fischer von Waldheim, 1844
semenovi Bogatchev, 1939
semenoviiana Bogatchev, 1941
seriata Fischer von Waldheim, 1820
 = *acuta* Seidlitz, 1893
 = *lajoyei* Allard, 1883
 = *seriatimpunctata* Fischer von Waldheim, 1844
 = *striola* Motschulsky, 1860
shach Kaszab, 1970
simplex Kaszab, 1960
sonamarga Skopin, 1978
splichali Gebien, 1913
srinagarica Kaszab, 1975
stoetzneri Schuster, 1923
stoliczkana Bates, 1879
strandii Semenov, 1936
sulcatipennis Schuster, 1920
szetschwana Schuster, 1923
taiyuonica Ren et Wang, 2001
tatsienlua Schuster, 1923

- tenuepunctata* (Motschulsky, 1860) (*Agroblaps*)
 = *vicina* Ménétriés, 1849
- tenuicauda* Seidlitz, 1893
- tenuicollis* Solier, 1848
- theodoridis* Pierre, 1964
- thibetana* Blair, 1922
- thibetanoides* Ren, 2004
- tianshanica* Semenov et Bogatchev, 1936
- tibialis* Reiche et Saulcy, 1857
 = *strigicollis* Baudi di Selve, 1875
 = *ecaudata* Seidlitz, 1893
- tibiella* Seidlitz, 1893
- transversalis* Fischer von Waldheim, 1844
- trapezoidalis* Kaszab, 1970
- tristiciae* Bogatchev, 1949
- tsharynensis balchashensis* Skopin, 1966
- tsharynensis tsharynensis* Skopin, 1961
- tschitscherini* Semenov et Bogatchev, 1936
- turkestanica* Seidlitz, 1893
- umbilicata* Seidlitz, 1893
- varicosa* Seidlitz, 1893
- variolosa* Faldermann, 1835
 = *tschiliana* Wilke, 1921
- verrucosa* Adams, 1817
 = *scabriuscula* Ménétriés, 1832
 = *montana* Motschulsky, 1839
- virgo* Seidlitz, 1893
 = *sagitta* Seidlitz, 1893
- urophora* Fairmaire, 1891
- waschana* Schuster, 1923
- yini* (Ren, Wang et Yu, 2000) (*Blaptogonia*)
- Subgenus *Dineria* Motschulsky, 1860,**
 type species *Blaps confusa* Ménétriés,
 1832 (= *Blaps halophila* Fischer von
 Waldheim, 1820)
 = *Laraliprosodes* Bogatchev, 1947, type
 species *Prosodes lar* Bogatchev,
 1947
- halophila* Fischer von Waldheim, 1820
 = *confusa* Ménétriés, 1832
 = *confluens* Fischer von Waldheim,
 1844
 = *convexicollis* Motschulsky, 1845
 = *coriacea* Fischer von Waldheim, 1842
 = *intrusa* Fischer von Waldheim, 1844
 = *longicollis* Fischer von Waldheim,
 1842
- = *solieri* Allard, 1881
 = *songorica* Fischer von Waldheim,
 1844
 lar (Bogatchev, 1947) (*Prosodes*)
- Genus *Lithoblaps* Motschulsky, 1860,**
 gen. resurr., type species *Tenebrio gigas* Linnaeus, 1767
 = *Holoblaps* Bauer, 1921, **syn. n.**, type species *Blaps ominosa* Ménétriés,
 1832
 = *Periblaps* Bauer, 1921, **syn. n.**, type species *Blaps nitens* Laporte,
 1840
 = *Rhizoblaps* Motschulsky, 1860, **syn. n.**, type species *Blaps pruimosa* Falderman, 1833
 = *Uroblaps* Motschulsky, 1860, **syn. n.**, type species *Blaps producta* Brullé, 1832 (= *Blaps lusitanica* Herbst, 1799)
L. alternans (Brullé, 1839), **comb. n.**
 (*Blaps*)
L. antennalis (Allard, 1881), **comb. n.**
 (*Blaps*)
L. appendiculata (Motschulsky, 1851),
 comb. n. (*Blaps*)
 = *caudata* (Solier, 1848)
 = *caudigera* (Gemminger, 1870)
L. approximans (Seidlitz, 1893), **comb. n.**
 (*Blaps*)
L. barclayi (Martínez Fernández et Ferrer, 2012), **comb. n.** (*Blaps*)
L. barrancoi (Castro Tovar, 2014), **comb. n.** (*Blaps*)
L. batesi (Allard, 1881) **comb. n.** (*Blaps*)
 = *rathjensi* (Schuster, 1938)
L. bedeli (Chatanay, 1914), **comb. n.**
 (*Blaps*)
L. bengalensis (Hope, 1831), **comb. n.**
 (*Blaps*)
 = *spathulata* (Solier, 1848)
L. bifurcata bifurcata (Solier, 1848), **comb. n.** (*Blaps*)
 = *andresi* (Koch, 1935)
 = *dimidiata* (Solier, 1848)
L. bifurcata mirei (Gridelli, 1952), **comb. n.** (*Blaps*)

- L. bifurcata strauchii* (Reiche, 1861), **comb. n.**
n. (Blaps)
 = *gridellii* (Pierre, 1961)
- L. binominata* (Escalera, 1914), **comb. n.**
(Blaps)
 = *caudata* (Allard, 1881)
 = *caudigera* (Allard, 1881)
- L. cognata* (Solier, 1848), **comb. n.** (*Blaps*)
 = *schweinfurthii* (Seidlitz, 1893)
- L. cordicollis* (Solier, 1848), **comb. n.** (*Blaps*)
- L. debdouensis* (Obenberger, 1914), **comb. n.** (*Blaps*)
- L. divergens* (Fairmaire, 1875), **comb. n.** (*Blaps*)
- L. doderoi* (Schuster, 1922), **comb. n.** (*Blaps*)
- L. effeminata* (L. Soldati, 2017), **comb. n.** (*Blaps*)
- L. emondi* (Solier, 1848), **comb. n.** (*Blaps*)
 = *nitidula* (Solier, 1848)
- L. fascinosa* (Seidlitz, 1893), **comb. n.** (*Blaps*)
- L. faustii bactriana* (Bogatchev, 1959), **comb. n.** (*Blaps*)
- L. faustii faustii* (Seidlitz, 1893), **comb. n.** (*Blaps*)
- L. ferganica* (Bogatchev, 1959), **comb. n.** (*Blaps*)
- L. fortesculpta* (Gridelli, 1953), **comb. n.** (*Blaps*)
- L. gigas* (Linnaeus, 1767), **comb. resurr.** (*Tenebrio*)
 = *avenae* (J. R. Sahlberg, 1903)
 = *azorica* (Seidlitz, 1893)
 = *gages* (Linnaeus, 1767)
 = *gigantea* (L. Petagna, 1819)
 = *obtusangula* (Rey, 1892)
 = *occulta* (Seidlitz, 1893)
 = *producta* (Brullé, 1833)
- L. haberti* (Peyerimhoff, 1931), **comb. n.** (*Blaps*)
- L. heydeni* (Allard, 1881), **comb. n.** (*Blaps*)
 = *taciturna* (Peyerimhoff, 1949)
- L. hispanica* (Laporte, 1840), **comb. n.** (*Blaps*)
- L. inflata* (Allard, 1881), **comb. n.** (*Blaps*)
- L. intermedia* (L. Soldati, 2017), **comb. n.** (*Blaps*)
- L. judaeorum* (Miller, 1861), **comb. n.**
(Blaps)
 = *judaica* (Seidlitz, 1893)
 = *pharao* (Seidlitz, 1893)
- L. juliae* (Allard, 1881), **comb. n.** (*Blaps*)
- L. kaifensis* (Seidlitz, 1893), **comb. n.** (*Blaps*)
- L. kollaris kollaris* (Seidlitz, 1893), **comb. n.** (*Blaps*)
- L. kollaris zhenzhuristi* (Bogatchev, 1939), **comb. n.** (*Blaps*)
- L. lugens* (Seidlitz, 1893), **comb. n.** (*Blaps*)
- L. lusitanica ceballosi* (Koch, 1944), **comb. n.** (*Blaps*)
- L. lusitanica espanoli* (Koch, 1944), **comb. n.** (*Blaps*)
- L. lusitanica lusitanica* (Herbst, 1799), **comb. n.** (*Blaps*)
 = *kordofana* (Baudi di Selve, 1875)
 = *mequignoni* (Koch, 1944)
 = *producta* (Brullé, 1832)
- L. magica* (Erichson, 1841), **comb. n.** (*Blaps*)
- L. maldesi* (L. Soldati, 2017), **comb. n.** (*Blaps*)
- L. maroccana* (Seidlitz, 1893), **comb. n.** (*Blaps*)
- L. medvedevi* (Bogatchev, 1961), **comb. n.** (*Blaps*)
- L. megalatlantica* (Koch, 1945), **comb. n.** (*Blaps*)
- L. motschulskiana* (Bogatchev, 1947), **comb. n.** (*Blaps*)
 = *gigantea* (Motschulsky, 1845)
- L. murati* (Peyerimhoff, 1943), **comb. n.** (*Blaps*)
- L. nefraensis nefraensis* (Seidlitz, 1893), **comb. n.** (*Blaps*)
- L. nefraensis vespertina* (Koch, 1937), **comb. n.** (*Blaps*)
- L. nitens barbara* (Solier, 1848), **comb. n.** (*Blaps*)
 = *substriata* (Solier, 1848)
- L. nitens brachyura* (Küster, 1848), **comb. n.** (*Blaps*)
 = *abbreviata* Solier, 1848
- L. nitens cyrenaia* (Seidlitz, 1893), **comb. n.** (*Blaps*)

- L. nitens glebmedvedevi* (L. Soldati, 2020),
comb. n. (*Blaps*)
 = *medvedevi* (L. Soldati, Kergoat et
 Condamine, 2009)
- L. nitens laportei* (Ardoin, 1973), **comb. n.**
 (*Blaps*)
 = *sulcata* (Laporte de Castelnau, 1840)
- L. nitens mercatii* (Canzoneri, 1969),
comb. n. (*Blaps*)
- L. nitens nitens* (Laporte, 1840), **comb. n.**
 (*Blaps*)
 = *stygia* (Erichson, 1841)
 = *subteres* (Solier, 1848)
 = *tunisia* (Seidlitz, 1893)
 = *vicina* (Solier, 1848)
- L. nitens praedeserta* (Koch, 1944), **comb.**
n. (*Blaps*)
- L. nitens requieni* (Solier, 1848), **comb. n.**
 (*Blaps*)
- L. nitiduloides* (L. Soldati, 2017), **comb. n.**
 (*Blaps*)
- L. ominosa* (Ménétriés, 1832), **comb. n.**
 (*Blaps*)
 = *armeniaca* (Faldermann, 1837)
- L. orientalis* (Solier, 1848), **comb. resurr.**
 (*Blaps*)
- L. ovipennis* (Seidlitz, 1893), **comb. n.**
 (*Blaps*)
- L. pauliani* (Koch, 1945), **comb. n.** (*Blaps*)
- L. pavlovskii* (Bogatchev, 1959), **comb. n.**
 (*Blaps*)
- L. persica* (Seidlitz, 1893), **comb. n.** (*Blaps*)
- L. peyerimhoffi* (Koch, 1945), **comb. n.**
 (*Blaps*)
- L. pinguis* (Allard, 1881), **comb. resurr.**
 (*Blaps*)
- L. plana* (Solier, 1848), **comb. n.** (*Blaps*)
- L. polychresta* (Forskål, 1775), **comb.**
resurr. (*Tenebrio*)
 = *kuesteri* (Ballion, 1888)
 = *maura* (Solier, 1848)
 = *minor* (Solier, 1848)
 = *sulcata* (Fabricius, 1775)
- L. povolnyi* (Kaszab, 1970), **comb. n.**
 (*Blaps*)
- L. prodigiosa* (Erichson, 1841), **comb.**
resurr. (*Blaps*)
 = *multicosta* (Solier, 1848)
- L. propheta fiorii* (Español, 1967), **comb.**
n. (*Blaps*)
- L. propheta propheta* (Reiche, 1861b),
comb. n. (*Blaps*)
 = *algirica* (Ballion, 1888)
- L. pruinosa* (Eversmann, 1833), **comb.**
resurr. (*Blaps*)
 = *fischeri* (Fischer von Waldheim,
 1844) (*Blaps*)
 = *longipes* (Zubkov, 1833)
 = *rorulenta* (Motschulsky, 1845)
- L. reitteri* (Allard, 1885), **comb. n.** (*Uro-*
blaps)
- L. pubescens* (Allard, 1881), **comb. n.**
 (*Blaps*)
- L. punctostriata* (Solier, 1848), **comb. n.**
 (*Blaps*)
- L. quedenfeldtii* (Seidlitz, 1893), **comb. n.**
 (*Blaps*)
- L. ruhmeni* (Seidlitz, 1893), **comb. n.**
 (*Blaps*)
- L. spinosa* (Allard, 1881), **comb. n.** (*Blaps*)
- L. sulcifera* (Seidlitz, 1893), **comb. n.**
 (*Blaps*)
- L. superstitionis icosiensis* (Peyerimhoff,
 1925), **comb. n.** (*Blaps*)
- L. superstitionis superstitionis* (Erichson,
 1841), **comb. n.** (*Blaps*)
- L. taeniolata* (Ménétriés, 1832), **comb.**
resurr. (*Blaps*)
 = *hians* (Fischer von Waldheim, 1844)
- L. teocchii* (L. Soldati, 2017), **comb. n.**
 (*Blaps*)
- L. tichyi* (Martínez Fernández, 2010),
comb. n. (*Blaps*)
- L. tingitana* (Allard, 1881), **comb. n.** (*Blaps*)
 = *desertica* (Escalera, 1913)
- L. titanus* (Ménétriés, 1849), **comb. n.**
 (*Blaps*)
- L. torresallai* (Español, 1961), **comb. n.**
 (*Blaps*)
- L. tridentata* (Waterhouse, 1889), **comb.**
n. (*Blaps*)
- L. tripolitanica* (Karsch, 1881), **comb. n.**
 (*Blaps*)
 = *vialattei* (Peyerimhoff, 1920)
- L. turcomanorum* (Seidlitz, 1893), **comb.**
n. (*Blaps*)

- L. tuxeni* (Gridelli, 1954), **comb. n.** (*Blaps*)
L. waltlii (Seidlitz, 1893), **comb. n.** (*Blaps*)
L. wiedemannii (Solier, 1848), **comb. n.**
 (*Blaps*)
L. wolinskii (Bodemeyer, 1927), **comb. n.**
 (*Blaps*)
L. zarudniana chorassanica (Semenov et
 Bogatchev, 1936), **comb. n.** (*Blaps*)
L. zarudniana persis (Semenov et Bogatch-
 ev, 1936), **comb. n.** (*Blaps*)
L. zarudniana zarudniana (Semenov et
 Bogatchev, 1936), **comb. n.** (*Blaps*)
L. zugmayeri (Schuster, 1935), **comb. n.**
 (*Blaps*)
- Genus Coelocnemodes Bates, 1879 (1886),**
 type species *Coelocnemodes stolicz-
 kanus* Bates, 1879
 = *Neoblaps* Ren et Li, 2001, type species
 Neoblaps huizensis Ren et Li, 2001
heqingensis Ren in Ren, Ba, Liu, Niu, Zhu,
 Li et Shi, 2016
huizensis (Ren et Li, 2001) (*Neoblaps*)
aspericollis Fairmaire, 1886
stoliczkanus Bates, 1879
tibialis Ren in Ren, Ba, Liu, Niu, Zhu, Li
 et Shi, 2016
- Genus Dila Fischer von Waldheim, 1844,**
 type species *Blaps laevicollis* Gebler,
 1841
 = *Caenoblaps* König, 1906, type species
 Caenoblaps difformis König, 1906
afghanica Kaszab, 1960
alaica Semenov et Bogatchev, 1940
angustata (Baudi di Selve, 1875) (*Blaps*)
 = *laticollis* Baudi di Selve, 1875
 = *mniszechi* Allard, 1881
armata (Blair, 1913) (*Blaps*)
baeckmanni (Schuster, 1928) (*Caenoblaps*)
 = *daghestanica* G. S. Medvedev et Ab-
 durakhmanov, 1984
bomina Ren et Li, 2001
caudata Kaszab, 1970
crenatopunctata I. Chigray, Nabozhenko,
 Abdurakhmanov et Keskin, 2019
difformis (König, 1906) (*Caenoblaps*)
- hakkarica* I. Chigray, Nabozhenko, Ab-
 durakhmanov et Keskin, 2019
kulzeri (Schuster, 1928) (*Caenoblaps*)
kuntzeni Schuster, 1914
laevicollis (Gebler, 1841) (*Blaps*)
leptoscelis Reitter, 1900
lindbergi Kaszab, 1970
ngaria Li et Ren, 2023
nitida (Schuster, 1920) (*Caenoblaps*)
persiana Reitter, 1900
platythorax (Gemminger, 1870), **comb. n.**
 (*Blaps*)
 = *laticollis* L. Redtenbacher, 1850
rugelytra Ren in Ren, Ba, Liu, Niu, Zhu,
 Li et Shi, 2016
sedecimstriata Reitter, 1900
seriata Reitter, 1894
 = *bucharica* Reitter, 1900
svetlanae I. Chigray, Nabozhenko, Ab-
 durakhmanov et Keskin, 2019
transversecordata Reitter, 1899
- Genus Dilablaps Bogatchev, 1976, type**
 species *Dilablaps paradoxa* Bogatch-
 ev, 1976
paradoxa Bogatchev, 1976
- Genus Hoplitoblaps Fairmaire, 1888,**
 type species *Hoplitoblaps fallaciosa*
 Fairmaire, 1888
fallaciosa Fairmaire, 1888
- Genus Medvedevia I. Chigray, 2019**
 type species *Medvedevia glebi* I. Chig-
 ray, 2019
glebi I. Chigray, 2019
- Genus Nalepa Reitter, 1887**
 type species *Blaps cylindracea* Reitter,
 1887
acuminata Li et Ren, 2022
cylindracea (Reitter, 1887) (*Blaps*)
 = *ratalaria* (Ren et Wang, 2001)
ovalifolia Li et Ren, 2022
polita Li et Ren, 2022
quadrata Li et Ren, 2022
xinlongensis Li et Ren, 2022
yushuensis Li et Ren, 2022

Genus *Medvedevoblaps* Bouchard et Bousquet, 2021

type species *Protoblaps kashkarovi* (G.S. Medvedev, 1998)
 = *Protoblaps* G. S. Medvedev, 1998,
 non Bauer, 1921, type species
Protoblaps kashkarovi G. S. Medvedev, 1998
kashkarovi (G. S. Medvedev, 1998) (*Protoblaps*)

Genus *Thaioblaps* Masumoto, 1989

type species *Thaioblaps punneae* Masumoto, 1989
punneae Masumoto, 1989

Genus *Thaumatoblaps* Kaszab et G. S. Medvedev, 1984

type species *Thaumatoblaps marikovskii* Kaszab et G. S. Medvedev, 1984
marikovskii Kaszab et G. S. Medvedev, 1984
zhengi Ren et Luo, 1995

Species with unclear position, described in the genus *Blaps* and need further re-examination

Blaps armeniaca Baudi di Selve, 1876
Blaps indica Hope, 1831
Blaps lineata Laporte, 1840
Blaps planicollis Laporte, 1840
Blaps laticollis Solier, 1848
Blaps brevicollis Fairmaire, 1891

*

Acknowledgements – The authors are much obliged to M. V. Nabozhenko (Prestasian Institute of Biological Resources of the Daghestan Federal Research Centre of the Russian Academy of Sciences, Makhachkala), M. J. Kamiński (Museum and Institute of Zoology, Polish Academy of Sciences, Warsaw) and L. Soldati (French National Institute for Agriculture, Food, and Environment, Paris) for useful comments and suggestions, Győző Szél (HNHM, Budapest) and Aranka Grabant (HNHM, Budapest) for their help in the study of the Blaptina collection of HNHM. The studies were carried out within the framework of the Russian state research project No. 122031100272-3.

REFERENCES

- ALLARD, E. (1880): Essai de classification des blapsides de l'ancien monde. 1^{re} partie. – *Annales de la Société Entomologique de France* (5) **10**: 269–320.
- ALLARD, E. (1881a): Essai de classification des blapsides de l'ancien monde. 2^e partie. – *Annales de la Société Entomologique de France* (6) **1**: 131–180.
- ALLARD, E. (1881b): Essai de classification des blapsides de l'ancien monde. 3^e partie. – *Annales de la Société Entomologique de France* (6) **1**: 493–526.
- ALLARD, E. (1882): Essai de classification des blapsides de l'ancien monde. 4^e et dernière partie. – *Annales de la Société Entomologique de France* (6) **2**: 77–140.
- BATES, F. (1879) [1875–1882]: Characters of the new genera and species of Heteromera collected by Dr. Stoliczka during the Forsyth Expedition to Kashgar in 1873–74. – *Cistula Entomologica* **2**: 467–484.
- BAUDI DI SELVE, F. (1874): Catalogo dei tenebrioniti della fauna europea e circummediterranea del Museo Civico di Genova. – *Annali del Museo Civico di Storia Naturale di Genova* **6**: 89–115.
- BAUER, A. (1921): Die geographische Verbreitung der Tenebrioniden Europas. – *Archiv für Naturgeschichte (Abteilung A)* **87**(3): 207–247.

- BOGATCHEV, A. V. (1965): *Zhuki-chernotelki (Tenebrionidae) Sredney Azii i Kazakhstana [Darkling beetles (Tenebrionidae) of the Middle Asia and Kazakhstan]*. – SciD Abstract. Dushanbe, Academy of Sciences of Tajik SSR, 38 pp. [in Russian]
- BOGATCHEV, A. V. (1976): Novyy rod i vid zhukov-chernotelok (Coleoptera, Tenebrionidae) iz Tadzhikistana. – *Entomologicheskoe Obozrenie* 55: 98–100. [in Russian]
- BOUCHARD, P., BOUSQUET, Y., AALBU, R. L., ALONSO-ZARAZAGA, M. A., MERKL, O. & DAVIES, A. E. (2021): Review of genus-group names in the family Tenebrionidae (Insecta, Coleoptera). – *ZooKeys* 1050: 1–633. <https://doi.org/10.3897/zookeys.1050.64217>
- BRULLÉ, G. A. (1832): IV^e Classe. Insectes. Pp. 1–288. In: BORY DE SAINT VINCENT, J. B. G. M.: *Expédition scientifique en Morée. Section des sciences physiques. Tome III. – 1^{er} partie. Zoologie. Deuxième section. Des animaux articulés.* – Paris, F. G. Levraud, [1] + 400 + [2] pp.
- CHIGRAY, I. (2019): A new genus and species of darkling beetles of the tribe Blaptini (Coleoptera: Tenebrionidae) from Afghanistan and taxonomic changes in the tribe. – *Entomological Review* 99(7): 914–923. <https://doi.org/10.1134/S0013873819070054>
- CHIGRAY, I. (2020): A new species of darkling beetles of the genus Blaps Fabricius, 1775 (Coleoptera: Tenebrionidae) from Turkmenistan and Iran. – *Caucasian Entomological Bulletin* 16(2): 311–318. <https://doi.org/10.23885/181433262020162-311318>
- CHIGRAY, I. & NABOZHENKO, M. (2016): To the knowledge of the genus Blaps Fabricius, 1775 (Coleoptera: Tenebrionidae) from Iran and Transcaucasia. – *Annales zoologici* 66(2): 267–275. <https://doi.org/10.3161/00034541ANZ2016.66.2.007>
- CHIGRAY, I., NABOZHENKO, M., ABDURAKHMANOV, G. & KESKIN, B. (2019): A systematic review of the genus Dila Fischer von Waldheim, 1844 (= Caenoblaps König, 1906, syn.n.) (Coleoptera: Tenebrionidae) from the Caucasus, Turkey and boundary territories of Iran. – *Insect Systematics & Evolution*, 30 pp. [online publication]. <https://doi.org/10.1163/1876312X-00001006>
- CONDAMINE, F. L., SOLDATI, L., RASPLUS, J.-Y. & KERGOAT, G. J. (2011): New insights on systematics and phylogenetics of Mediterranean Blaps species (Coleoptera: Tenebrionidae: Blaptini), assessed through morphology and dense taxon sampling. – *Systematic Entomology* 36: 340–361. <https://doi.org/10.1111/j.1365-3113.2010.00567.x>
- CONDAMINE, F. L., SOLDATI, L., CLAMENS, A.-L., RASPLUS, J.-Y. & KERGOAT, G. J. (2013): Diversification patterns and process of wingless endemic insects in the Mediterranean Basin: historical biogeography of the genus Blaps (Coleoptera: Tenebrionidae). – *Journal of Biogeography* 40: 1899–1913. <https://doi.org/10.1111/jbi.12144>
- ESCHSCHOLTZ, J. F. (1829): *Zoologischer Atlas, enthaltend Abbildungen und Beschreibungen neuer Tierarten, während des Flottscapitains v. Kotzebue zweiter Reise um die Welt, auf der Russisch-Kaiserlichen Kriegsschlupp Predpriaetië in den Jahren 1823–1826. Drittes Heft.* – G. Reimer, Berlin, 18 pp., pls xii–xv. <https://doi.org/10.5962/bhl.title.38055>
- FABRICIUS, J. C. (1775): *Systema entomologicae, sistens insectorum classes, ordines, genera, species, adiectis synonymis, locis, descriptionibus, observationibus.* – Flensburgi et Lipsiae, Libraria Kortii, [32] + 832 pp. <https://doi.org/10.5962/bhl.title.36510>
- FAIRMAIRE, L. (1888): Coléoptères de l'intérieur de la Chine. – *Annales de la Société Entomologique de Belgique* 32: 7–46.
- FAIRMAIRE, L. (1891): Descriptions de coléoptères des Montagnes de Kashmîr. – *Comptes-Rendus des Séances de la Société Entomologique de Belgique*, lxxxviii–ciii.
- FALDERMANN, F. (1835): Coleopterorum ab illustrissimo Bungio in China boreali, Mongolia, et Montibus Altaicis collectorum, nec non ab ill. Turczaninoffio et Stchukino e provincia Irkutsk missorum illustrationes. – *Mémoires de l'Académie Impériale des Sciences de St. Pétersbourg. Sixième Série. Sciences Mathématiques, Physiques et Naturelles* 3(1): 337–464, pls i–v.

- FALDERMANN, F. (1835): Coleopterorum ab illustrissimo Bungio in China boreali, Mongolia, et Montibus Altaicis collectorum, nec non ab ill. Turczaninoffio et Stchukino e provincia Irkutsk missorum illustrationes. – *Mémoires de l'Académie Impériale des Sciences de St. Pétersbourg. Sixième Série. Sciences Mathématiques, Physiques et Naturelles* 3(1): 337–464, pls i–v.
- FERRER, J. & FERNÁNDEZ, J. C. M. (2008): Blaps mortisaga (L.) o la leyenda de la muerte, una especie introducida en Europa boreal y occidental (Coleoptera, Tenebrionidae). – *Boletín de la Asociación española de Entomología* 32(3–4): 245–261.
- FERRER, J. & PICKA, J. (1990): The Blaps species of Sweden, with review of the B. lethifera group (Coleoptera, Tenebrionidae). – *Entomologisk Tidskrift* 111: 25–32.
- FISCHER VON WALDHEIM, G. (1820): *Entomographie de la Russie [Entomographia Imperii Rossici]. Auctoritate Societatis Caesareae Mosquensis naturae scrutatorum collecta et in lucem edita. Volume I. – Mosquae, Auguste Semen, 17* pls [Coleoptera] + 9 pls [other insects].
- FISCHER VON WALDHEIM, G. (1844): Spicilegum Entomographiae Rossicae. ii. Heteromera. – *Bulletin de la Société Impériale des Naturalistes de Moscou* 17: 3–144, pls 1–3.
<https://doi.org/10.5962/bhl.title.9529>
- GEMMINGER, M. (1870): [new names]. In: HAROLD, E. von: Geänderte Namen. – *Coleopterologische Hefte* 6: 119–124.
- ICZN [International Commission on Zoological Nomenclature] (1999): *International Code of Zoological Nomenclature. Fourth edition, adopted by the International Union of Biological Sciences*. – International Trust for Zoological Nomenclature, London, xxix, 306 pp.
- KAMIŃSKI, M. J., LUMEN, R., KANDA, K., IWAN, D., JOHNSTON, M. A., KERGOAT, G., BOUCHARD, P., BAI, X. L., LI, X. M., REN, G.-D. & SMITH, A. D. (2021): Reevaluation of Blapimorpha and Opatrinae: addressing a major phylogeny-classification gap in darkling beetles (Coleoptera: Tenebrionidae: Blaptinae). – *Systematic Entomology* 46(1): 140–156.
<https://doi.org/10.1111/syen.12453>
- KASZAB, Z. & MEDVEDEV, G. S. (1984): Drei neue asiatische Tenebrioniden (Coleoptera). – *Acta Zoologica Hungarica* 30: 79–85.
- KERGOAT, G. J., SOLDATI, L., CLAMENS, A.-L., JOURDAN, H., JABBOUR-ZAHAB, R., GENSON, G., BOUCHARD, P. & CONDAMINE, F. L. (2014): Higher-level molecular phylogeny of darkling beetles (Coleoptera, Tenebrionidae). – *Systematic Entomology* 39(3): 486–499.
<https://doi.org/10.1111/syen.12065>
- KOLBE, H. J. (1928): 2. Tiergeographie und Morphologie, neue Untersuchungen zur Entwicklungsgeschichte der Tiergattungen. – *Zoologischer Anzeiger* 77: 195–209.
- KOLLAR, V. & REDTENBACHER, L. (1850): Ueber den Charakter der Insecten-Fauna von Südpersien. – *Denkschriften der Kaiserlichen Akademie der Wissenschaften. Mathematisch-Naturwissenschaftliche Classe* 1: 42–53.
- KÖNIG, E. (1906): Dritter Beitrag zur Coleopteren-Fauna des Kaukasus. – *Wiener Entomologische Zeitung* 25: 23–27. <https://doi.org/10.5962/bhl.part.27197>
- KRYZHANOVSKY, O. L. (1965): *Sostav i proiskhozhdenie nazemnoy fauny Sredney Azii (glavnym obrazom na materiale po zhestkokrylym nasekomym) [Composition and origin of terrestrial fauna of Middle Asia (based on material of beetles)]*. – Nauka, Moscow – Leningrad, 419 pp. [In Russian]
- LAPORTE, F. L. N. de CAUMONT DE CASTELNAU (1840): *Histoire naturelle des insectes coléoptères; avec une introduction renfermant l'anatomie et la physiologie des animaux articulés, par M. Brullé. Tome deuxième*. –P. Duménil, Paris, 563 + [1] pp., pls 20–37.
- LI, X.-M., TIAN, J., FAN, J.-J. & REN, G.-D. (2022): Systematic review of the genus Nalepa Reitter, 1887 (Coleoptera, Tenebrionidae, Blaptinae, Blaptini) from the Tibetan plateau, with description of six new species and two larvae. – *Insects* 13: 598.
<https://doi.org/10.3390/insects13070598>

- LINNAEUS, C. (1758): *Systema Naturae per regna tria naturae, secundum classes, ordines, genera, species, cum characteribus, differentiis, synonymis, locis. Tomus I. Ed. Decima, Reformata.* – Holmiae, Laurentii Salvii, [5] + 6–823 + [1] pp. <https://doi.org/10.5962/bhl.title.542>
- LÖBL, I., NABOZHENKO, M. & MERKL, O. (2008): Tribe Blaptini Leach, 1815. Pp. 219–257. In: LÖBL, I. & SMETANA, A. (eds): *Catalogue of Palaearctic Coleoptera. Vol. 5. Tenebrionoidea.* – Apollo Books, Stenstrup.
- MARSHAM, T. (1802): *Entomologia britannica, sistens Insecta Britanniae indigena, secundum methodum Linnaeum disposita. Tomus I. Coleoptera.* – Wilks & Tailor, London, xxxi + 547 + [1] pp. <https://doi.org/10.5962/bhl.title.65388>
- MASUMOTO, K. (1989): Tenebrionidae of East Asia (V). A new genus related to *Blaps* (Blaptini) and a new species from northwest Thailand. – *Elytra* 17(2): 187–191.
- MEDVEDEV, G. S. (1998): To the knowledge of tenebrionid beetles of the tribe Blaptini (Coleoptera, Tenebrionidae) from the eastern part of the Tibet Plateau. – *Entomological Review* 78(1): 79–111.
- MEDVEDEV, G. S. (1999): Taxonomic significance of the structure of genital tubes in tenebrionid beetles of the tribe Blaptini (Coleoptera, Tenebrionidae) and description of a new subgenus and a new species. – *Entomologicheskoe Obozrenie* 78(2): 391–405. [in Russian]
- MEDVEDEV, G. S. (2000): Genera of the tenebrionid beetle tribe Blaptini (Coleoptera, Tenebrionidae). – *Entomological Review* 80(7): 774–790.
- MEDVEDEV, G. S. (2001): *Evolution and system of darkling beetles of the tribe Blaptini (Coleoptera, Tenebrionidae).* – Chteniya pamjati N. A. Cholodkovskogo. Iss. 53. Russian Entomological Society Publ., Saint Petersburg, 332 pp. [in Russian]
- MEDVEDEV, G. S. (2007): A contribution to the taxonomy and morphology of the tribe Blaptini (Coleoptera, Tenebrionidae). – *Entomological Review* 87(2): 181–214.
<https://doi.org/10.1134/S0013873807020078>
- MÉNÉTRIÉS, E. (1832): *Catalogue raisonné des objets de zoologie recueillis dans un voyage au Caucase et jusqu'aux frontières actuelles de la Perse entrepris par l'ordre de S.M. l'Empereur.* – Académie des Sciences, St. Petersburg, xxxiii + 272 + iv + [1].
<https://doi.org/10.5962/bhl.title.51784>
- MOTSCHULSKY, V. DE (1860): Coléoptères rapportés en 1859 par M. Sévertsef des steppes méridionales des Kirghises, et énumérés. – *Bulletin de L'Académie Impériale des Sciences de St.-Pétersbourg* 2: 513–544.
- NABOZHENKO, M. & CHIGRAY, I. (2020): Tribe Blaptini Leach, 1815. Pp. 268–296. In: IWAN, D. & LÖBL, I. (eds): *Catalogue of Palaearctic Coleoptera, Volume 5. Tenebrionoidea.* – Brill, Leiden, xxiv, 945 pp. https://doi.org/10.1163/9789004434998_004
- NABOZHENKO, M., DOĞAN, D. & YILDIRIM, E. (2022a): Additions to the knowledge of the diversity of darkling beetles (Coleoptera: Tenebrionidae) from Turkey with new records and taxonomic notes. – *Journal of Insect Biodiversity* 32(1): 5–25.
<https://doi.org/10.12976/jib/2022.32.1.2>
- NABOZHENKO, M., CHIGRAY, I., NTATSOPOULOS, K. & PAPADOPOLOU, A. (2022b): A key to Russian and Eastern European species of *Blaps* Fabricius, 1775 (Coleoptera: Tenebrionidae: Blaptinae) with the description of a new species from the North Caucasus supported by morphological and molecular data. – *Zootaxa* 5116(2): 267–291.
<https://doi.org/10.11646/zootaxa.5116.2.5>
- REDTENBACHER, L. (1850): [new taxa]. In: KOLLAR, V. & REDTENBACHER, L.: Ueber den Charakter der Insecten-Fauna von Südpersien. – *Denkschriften der Kaiserlichen Akademie der Wissenschaften. Mathematisch-Naturwissenschaftliche Classe* 1: 42–53.

- REITTER, E. (1887): Insecta in itinere Cl. N. Przewalskii in Asia Centrali novissime lecta. ix.
Tenebrionidae. – *Horae Societatis Entomologicae Rossicae* **21**: 355–389.
- REITTER, E. (1893): Ueber die Genus-Charaktere der Gattungen *Blaps* Fr., *Prosodes* Eschsch.
und Verwandte. – *Deutsche Entomologische Zeitschrift* **1893**: 313–316.
<https://doi.org/10.1002/mmnd.48018930213>
- REN, G.-D. & LI, Z. (2001): A new genus and two new species of the tribe Blaptini in China
(Coleoptera: Tenebrionidae). – *Zoological Research* **4**: 310–314.
- REN, G.-D., BA, Y., LIU, H., NIU, Y., ZHU, X., LI, Z. & SHI, A. (2016): *Fauna Sinica: Insecta. Volume 63: Coleoptera: Tenebrionidae (I.)*. – Science Press, Beijing, 532 pp. [in Chinese with an English summary]
- SEIDLITZ, G. (1893): Tenebrionidae. Pp. 201–400. In: KIESENWETTER, H. VON & SEIDLITZ, G.
VON (eds): *Naturgeschichte der Insecten Deutschlands begonnen von Dr. W. F. Erichson,
fortgesetzt von Prof. Dr. H. Schaum, Dr. G. Kraatz, H. v. Kiesenwetter, Julius Weise, Edm.
Reitter und Dr. G. Seidlitz. Erste Abtheilung. Coleoptera. Fünfter Band. Erste Hälfte*. Nico-
laische Verlags-Buchhandlung, Berlin.
- SKOPIN, N. G. (1960): Material on the morphology and the ecology of larvae of the genus
Blaptini (Coleoptera, Tenebrionidae). – *Trudy Instituta zoologii Akademii nauk Kazakh-
skoy SSR* **11**: 36–71. [in Russian]
- SKOPIN, N. G. & KASZAB, Z. (1978): Über die Arten der Gattung *Blaps* F. (Coleoptera, Te-
nebrionidae), gesammelt von Herrn Dr. W. Wittmer im Jahre 1976 in Kashmir. – *Folia
entomologica hungarica* **31**: 207–212.
- SOLDATI, L., CONDAMINE, F. L., CLAMENS, A.-L. & KERGOAT, G. J. (2017): Documenting te-
nebrionid diversity: progress on *Blaps Fabricius* (Coleoptera, Tenebrionidae, Teneb-
rioninae, Blaptini) systematics, with the description of five new species. – *European
Journal of Taxonomy* **282**: 1–29. <https://doi.org/10.5852/ejt.2017.282>
- SOLIER, A. J. J. (1848): Essai sur les collaptérides. 14^e Tribu. Blapsites. Pp. 149–370, pis iv–xv.
In: BAUDI DI SELVE: *Studi Entomologici pubblicati per cura di Flaminio Baudi e di Eugenio
Truqui. Tom. 1.* – Stamporia Degli Artisti Tipografi, Torino, 376 pp.

Submitted February 16, 2023; accepted July 17, 2023; published August 25, 2023

Academic editor: Barna Páll-Gergely

