

On the status of some of the *Cantharis* Linnaeus, 1758 species described in the first half of the 19th century by Ménériés, Gebler and Fischer von Waldheim (Coleoptera: Cantharidae)

О статусе некоторых видов *Cantharis* Linnaeus, 1758, описанных в первой половине 19-го века Менетрие, Геблером и Фишером фон Вальдгеймом (Coleoptera: Cantharidae)

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КЛЮЧЕВЫЕ СЛОВА: Coleoptera, Cantharidae, Cantharinae, *Cantharis*, таксономия, Палеарктическая область.

ABSTRACT. Description of several *Cantharis* taxa introduced in the first half of the 19th century by Ménériés, Gebler and Fischer von Waldheim are restudied, and the following new synonymies are proposed: *Telephorus biplagiatus* Ballion, 1871, **syn.n.** is suggested as a junior synonym of *Cantharis cantholoma* Gebler, 1833; *Podabrus vittatus* Fischer von Waldheim, 1844, **syn.n.** — as a junior synonym of *Cantharis daurica* Gebler, 1832; *Podabrus lunulatus* Fischer de Waldheim, 1844: 34, **syn.n.** — as a junior synonym of *Cantharis terminata* Faldermann, 1835; and *Telephorus edentulus* Baudi di Selve, 1872, **syn.n.** and *Rhagonycha beckeri* Pic, 1902, **syn.n.** — as junior synonyms of *Cantharis pygmaea* Ménériés, 1832.

РЕЗЮМЕ. На основании переизучения описания ряда таксонов рода *Cantharis*, предложенных в середине 19-го века Менетрие, Геблером и Фишером фон Вальдгеймом, предложена следующая новая синонимия: *Telephorus biplagiatus* Ballion, 1871, **syn.n.** предлагается рассматривать в качестве синонима *Cantharis cantholoma* Gebler, 1833; *Podabrus vittatus* Fischer von Waldheim, 1844, **syn.n.** — в качестве синонима *Cantharis daurica* Gebler, 1832; *Podabrus lunulatus* Fischer de Waldheim, 1844: 34, **syn.n.** — в качестве синонима *Cantharis terminata* Faldermann, 1835, а *Telephorus edentulus* Baudi di Selve, 1872, **syn.n.** и *Rhagonycha beckeri* Pic, 1902, **syn.n.** — в качестве синонимов *Cantharis pygmaea* Ménériés, 1832.

Introduction

Soldier beetles of the genus *Cantharis* Linnaeus, 1758 are widespread and speciose in the Holarctic realm, their number exceeds 250 species, a considerable part of which are recorded from the Mediterranean region, and several oldest taxa were described by Linnaeus [Delkeskamp, 1977; Kazantsev, Brancucci, 2007]. When first Coleoptera material started pouring in from the vast south-eastern and asiatic territories of Russia in the first half of the 19th century, quite a few new *Cantharis* species were discovered by the pioneers of Russian entomology, Ménériés [1832], Gebler [1832; 1833], Faldermann [1835] and Fischer von Waldheim [1844]. Some of these new taxa were introduced as *Cantharis*, some as *Telephorus* Schaeffer, 1766 and some as *Podabrus* Dejean, 1833. The reason for such confusion was that *Cantharis* was believed at that time to belong both in Cantharidae [e.g. Fabricius, 1775] and Meloidae [e.g., Latreille, 1802], and the latter two genera were regarded as replacement names for *Cantharis* by the followers of Latreille. For instance, Fischer von Waldheim described his new taxa under the name of *Podabrus*, adding the word *Cantharis* in smaller letters below *Podabrus* [Fischer von Waldheim, 1844], while Gebler and Ménériés followed Fabricius's opinion and continued to attribute these soldier beetles to *Cantharis* [Ménériés, 1832; Gebler, 1832; 1833]. It is worth mentioning that in case of *Cantharis*

(sensu Fabricius) and *Telephorus* it was clear that the taxa came from one genus, whereas *Podabrus* was quite a different genus that now belongs in a different tribe, Podabrini. All that, along with rather brief and inadequate, in contemporary terms, descriptions, added to the confusion and led to a situation when some of these names, such as *C. oculata* Gebler, 1817, *C. daurica* Gebler, 1832, *C. annularis* Ménétrés, 1836, were widely used, while others, such as *C. cantholoma* Gebler, 1833, *Podabrus lunulatus* Fischer von Waldheim, 1844 or *P. vittatus* Fischer von Waldheim, 1844, although available and valid, were listed in catalogues as *incertae sedis* and, even if tentatively included in certain genera, never used for identification purposes [Kazantsev, Brancucci, 2007; Kazantsev, 2011].

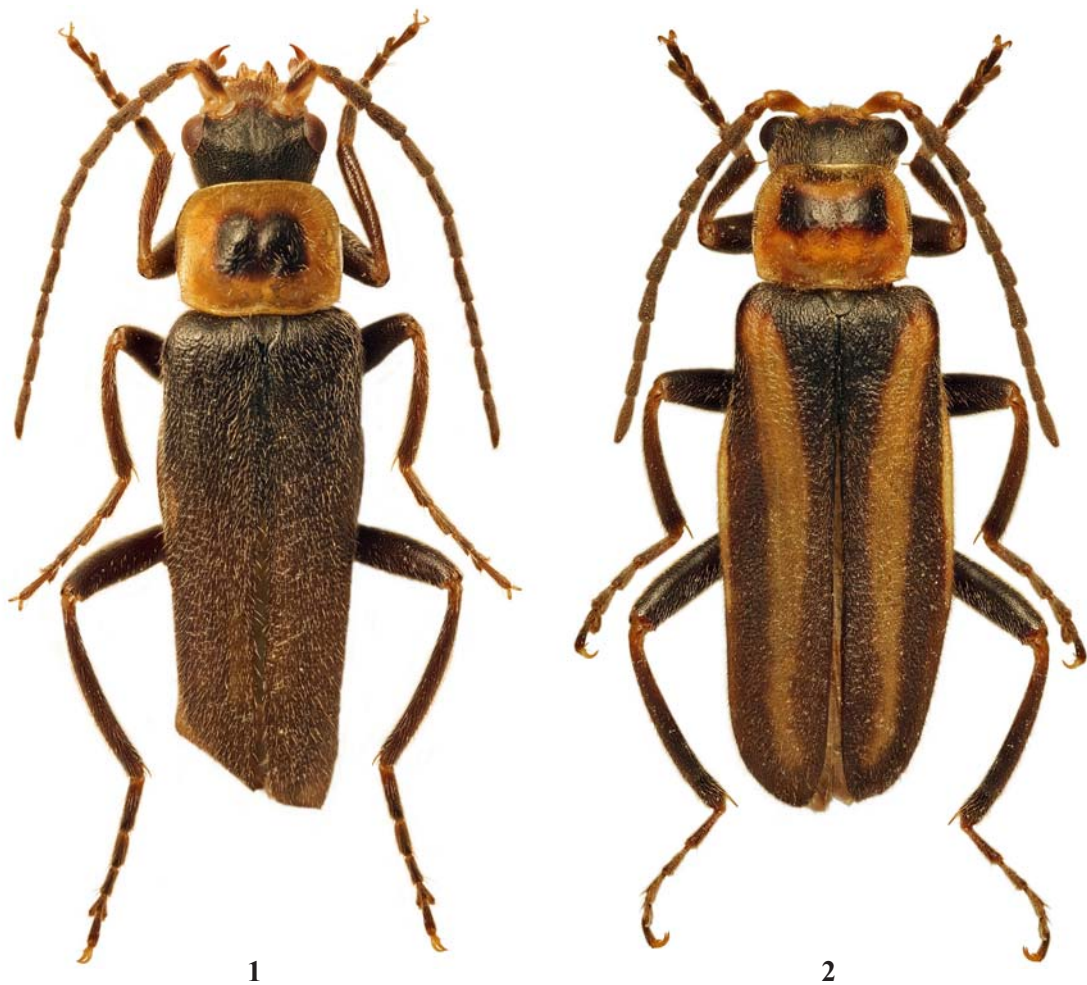
This could have certainly been resolved by the study of type specimens. Unfortunately, no syntypes of soldier beetle taxa described by Ménétrés, Gebler or Fischer von Waldheim from the territory of the former Russian Empire have been found in the Zoological Museum of Moscow University, or in the Zoological Institute, Saint Petersburg, where they should be deposited.

The present study is a further contribution to the knowledge of *Cantharis* of Russia. The original descriptions of some of the taxa proposed in the first half of the 19th century were re-examined and compared with the ample material from the respective regions. This study allows eliminating the obscurity of some of the taxa that have so long remained largely unused and suggesting new synonymies.

Material and Methods

The studied specimens were pinned or glued on cardboard plates. For examination the abdomina were detached from the relaxed specimens and treated for several hours in 10% KOH at room temperature, then, with the extracted genitalia, placed in a microvial with glycerin for photography.

MSP-1 zoom stereoscopic dissecting microscope with x8–x80 magnification range were used. Photographs were taken with a Canon EOS 6D camera and Canon MP-E 65 mm lens.



Figs 1–2. General view of *Cantharis*, males: 1 — *C. cantholoma*; 2 — *C. daurica*.
Рис. 1–2. Общий вид *Cantharis*, самцы: 1 — *C. cantholoma*; 2 — *C. daurica*.

Taxonomy

Family Cantharidae Imhoff 1856 (1815)
Subfamily Cantharinae Imhoff 1856 (1815)
Tribe Cantharini Imhoff 1856 (1815)

Cantharis Linnaeus, 1758

Cantharis Linnaeus, 1758: 400.

Type species: *Cantharis fusca* Linnaeus, 1758.

Subgenus *Cantharis* Linnaeus, 1758

Cantharis Linnaeus, 1758: 400.

Type species *Cantharis fusca* Linnaeus, 1758.

= *Oripa* Motschulsky, 1860: 398. Type species *Oripa transmarina* Motschulsky, 1860.

= *Silotrachelus* Solsky, 1881: 31. Type species *Silotrachelus semirufus* Solsky, 1881.

= *Telephorus* J. C. Schaeffer, 1766: pl. CXXIII. Type species *Cantharis fusca* Linnaeus, 1758.

Cantharis (s.str.) *cantholoma* Gebler, 1833

Fig. 1.

Cantharis cantholoma Gebler, 1833: 280.

= *Cantharis auliensis* Pic, 1914: 4.

= *Cantharis bimaculifera* Heyden, 1888: 41.

= *Telephorus biplagiatus* Ballion, 1871: 351, **syn.n.**

= *Cantharis biplagiaticollis* Pic, 1914: 5.

= *Cantharis chianschanensis* Pic, 1913: 187.

= *Cantharis dia* Reitter, 1898: 123.

= *Cantharis funestula* Pic, 1906: 82.

= *Cantharis kiritschenkoi* Barovskij, 1926: 240.

= *Cantharis musarti* Pic, 1913: 187.

= *Cantharis uniplagiata* Pic, 1914: 5.

= *Cantharis xantholoma* Gebler, 1833, incorrect subsequent spelling.

REMARKS. The type of *Cantharis cantholoma* Gebler, 1833 has not been found yet. Its description reads as follows: 'Brevis lutea; vertice, thoracis punctis duobus, pectore, scutello, elytris thorace latioribus abdominque nigris, his margine luteis. Long. 3 lin. Lat. 1 lin. (Semel prope Loktewsk capta). A *C. laterali* statura brevior, colore antennarum, punctis thoracis, elytris hoc latioribus distincta.' [Gebler, 1833]. Although the taxon was compared to *C. lateralis* Linnaeus, 1758, its description may be attributed to just one Cantharinae species occurring in the Altai region (where 'Loktewsk' is located), which is currently known as *Cantharis biplagiata* (Ballion, 1871) [Kazantsev, Brancucci, 2007; Kazantsev, 2011]. It is, indeed, easily differentiated from *C. lateralis* by the wider body and elytra, black legs and antennae, as well as by the elytral coloration (Fig. 1). This rather variable in appearance species is distributed from Central Asia, northwestern China (Xinjiang) and Altai to East Siberia (Yakutia, Buryatia, Irkutsk Oblast) and Mongolia [Kazantsev, Brancucci, 2007; Kazantsev, 2011]. As the two species apparently belong to a single taxon, *Telephorus biplagiatus* Ballion, 1871, **syn.n.** is proposed as a junior synonym of *Cantharis cantholoma* Gebler, 1833.

This taxon has been long cited as *C. xantholoma* Gebler, 1833 [Jacobson, 1911; Delkeskamp, 1977; Kazantsev, Brancucci, 2007; Kazantsev, 2011] and it seems to be the case when an incorrect subsequent spelling is in prevailing usage, and thus is to be preserved, according to Article 33 of the ICZN. However, as no single specimen has ever been attributed to this taxon after its publication, the return to its original spelling does not seem to refute any practice and/or usage whatsoever, and, therefore, appears to be thoroughly appropriate.

Cantharis (s.str.) *daurica* Gebler, 1832

Fig. 2.

Cantharis daurica Gebler, 1832: 45.

= *Cantharis mannerheimi* Pic, 1902: 63.

= *Podabrus vittatus* Fischer von Waldheim, 1844: 34, **syn.n.**

REMARKS. The type of *Podabrus vittatus* Fischer von Waldheim, 1844 appears to have been lost. However, the description of this taxon seems to be clear enough: '*P[odabrus] elongatus, angustatus; capite thoraceque flavis; elytra fusco-grisea, flavi-limbata, vittata, vittis binis obscuris nigrescentibus, altera media, altera marginali*. Long. 3 lin. Lat. 1 lin. Forma et habitus praecedentis [*P. nigriventris*]. Caput nutans flavescens, oculis prominentibus nigris. Thorax submarginatus flavus impressione postica triangulari profunda. Elytra obscuri grisea, albo marginata, vittis binis obscuris nigrescentibus, altera medio, alteraque margine. Pectus nigrum, abdomen et pedes flavi. *Hab.* in Tataria magna. D. Pander' [Fischer von Waldheim, 1844].

This description of a '*Podabrus*' from 'Tataria magna' (which is anywhere from the Caspian Sea to the Far East Pacific Coast, north of what is considered now Central Asia) perfectly fits to just one cantharine species from this vast area. It is *Cantharis daurica* Gebler, 1832, whose coloration is unique due to the black longitudinal elytral stripes (Fig. 2). *Cantharis daurica* is distributed in East Siberia (Tuva, Transbaikalia), Far East (Amurskaya Oblast) and Mongolia [Kazantsev, Brancucci, 2007; Kazantsev, 2011]. As these species apparently belong to a single taxon, and also taking into account that Fischer regarded *Podabrus* as a replacement name for *Cantharis*, *Podabrus vittatus* Fischer de Waldheim, 1844, **syn.n.** is proposed as a junior synonym of *Cantharis daurica* Gebler, 1832.

Cantharis (s.str.) *terminata* Faldermann, 1835

Fig. 3.

Cantharis terminata Faldermann, 1835: 192.

= *Cantharis dahlgreni* Wittmer, 1984: 1.

= *Telephorus fissicollis* Fairmaire, 1884: 179.

= *Podabrus lunulatus* Fischer de Waldheim, 1844: 34, **syn.n.**

= *Malthinus melanoscelsis* Kolenati, 1846: 41.

= *Cantharis sudetica* Letzner, 1847: 75.

= *Necydalis vesubiella* Bourgeois, 1893: 19.

REMARKS. The type of *Podabrus lunulatus* Fischer de Waldheim, 1844 appears to have been lost. However, its description is unexpectedly explicit: '*P[odabrus] flavo-fuscus; thorace marginato nitido, medio nigro-maculato; elytris pallidis, lunula apicis nigra*. Long. 4 1/2 lin. Lat. 1 1/2 lin. Caput nutans fuscum, oris partibus pallidioribus. Antennae basi nigrae, medio pallidae, apice fuscae. Thorax marginatus fuscus splendidus, maculis linearibus duabus obliquis nigris medio. Elytra pallide fusca, subpunctulata, apice nigrocincta sive lunula nigra terminata. Corpus pallum. Pedes pallide flav. *Hab.* in Rossia meridionali. D. Boschniak.' [Fischer von Waldheim, 1844].

This description of a '*Podabrus*' from 'Rossia meridionali' perfectly fits to just one cantharine species in southern Russia. It is *Cantharis terminata* Faldermann, 1835, whose coloration is unique due to the black 'lunula' at the apex of each elytron (Fig. 3). *Cantharis terminata* is distributed in the centre and south of the European part Russia, Western and Central Europe, throughout the Caucasus, in Kazakhstan and the Middle East [Kazantsev, Brancucci, 2007; Kazantsev, 2011]. As these species apparently belong to a single taxon, *Podabrus lunulatus* Fischer de Waldheim, 1844, **syn.n.** is proposed as a junior synonym of *Cantharis terminata* Faldermann, 1835.

Subgenus *Cyrtomoptila* Motschulsky, 1860*Cyrtomoptila* Motschulsky, 1860: 398.Type species *Cantharis lateralis* Linnaeus, 1758.= *Absidiella* Wittmer, 1972: 130. Type species *Pseudoabsidia kaszabi* Wittmer, 1971.= *Gymnocantharis* Wittmer, 1979: 328. Type species *Gymnocantharis himalaica* Wittmer, 1979.= *Wittmercantharis* Satô, 1986: 259. Type species *Telephorus vulcanus* Lewis, 1895.*Cantharis (Cyrtomoptila) pygmaea* Ménériés, 1832
Fig. 4.*Cantharis pygmaea* Ménériés, 1832: 162.= *Cantharis inforticornis* Pic, 1913: 187.= *Rhagonycha beckeri* Pic, 1902: 56, **syn.n.**= *Telephorus edentulus* Baudi di Selve, 1872: 106, **syn.n.**

REMARKS. The type of *Cantharis pygmaea* Ménériés, 1832 has not been found either. Its description reads as follows: 'Fusca, thorace submarginato, flavescenti; elytris fuscis; antennarum basi, pedibus anoque flavo-lividis; tibiis posticis infuscatis. Long. 2 li. 1/3. Larg. 1 li. Elle est très voisine de la *C. fulvicollis*, mais elle est deux fois plus petite, et autrement colorée. A Lenkoran' [Ménériés, 1832].

This description, although brief, allows rather confident attribution of the taxon, which is in fact related and similar to *C. lateralis*, distinguishable by the absence of light margin on the elytra (Fig. 4). *Cantharis pygmaea* is distributed in the steppe and semi-desert areas of southern Russia (Dagestan, Volgograd Oblast), also from Azerbaijan ('Lenkoran') [Ménériés, 1832], Turkmenistan, Uzbekistan and Iran to Mongolia [Kazantsev, Brancucci, 2007; Kazantsev, 2011]. The species *C. edentula* (Baudi, 1872) and *C. beckeri* (Pic, 1902) described, respectively, from southern Russia ('Ross. mer.') and Volgograd Oblast ('Sarepta') [Baudi a Selve, 1872; Pic, 1902], are very similar to *C. lateralis* as well, also differing by the uniformly black elytra. Both of them were notably introduced without being compared to *C. pygmaea*. Syntypes of *Rhagonycha beckeri* Pic, 1902 from the Museum of Natural History in Paris and the Zoological Institute in Saint-Petersburg were studied, and the taxon was transferred first from *Rhagonycha* to *Cantharis* and then to the subgenus *Cyrtomoptila* [Dahlgren, 1972; Kazantsev, 2010]. The type of *C. edentula* has not been found yet. Nevertheless, as there seem to occur just one such cantharine in the Pre- and Transcaspian steppe and semi-desert areas, and as the three above-mentioned species apparently belong to a single taxon,



Figs 3–4. General view of *Cantharis*, males: 3 — *C. terminata*; 4 — *C. pygmaea*.
Рис. 3–4. Общий вид *Cantharis*, самцы: 3 — *C. terminata*; 4 — *C. pygmaea*.

Telephorus edentulus Baudi, 1872, **syn.n.** and *Rhagonycha beckeri* Pic, 1902, **syn.n.** are proposed as junior synonyms of *Cantharis pygmaea* Ménériés, 1832.

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