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On the Classification of the Genus *Cantharis* Linné (Coleoptera, Cantharidae)

by W. Wittmer and S. Kasantsev

Abstract: The classification of the genus *Cantharis* Linné, 1758 is revised. It was found to include four subgenera: *Cantharis* (s.str.) with the type species *C. fusca* L., *C. (Telephorus)* Schaeffer, 1766, n.stat. with the type species *C. pellucida* F., *C. (Absidiella)* Wittmer, 1972, n.stat. with the type species *C. mongolica* Pic and *C. (Taiwanocantharis)* Wittmer, 1982 with the type species *C. tripunctata* Wittmer, 1984. *Cantharis pellucida* Fabricius is designated the type species for *Telephorus*. *Absidiella kaszabi* (Wittmer, 1971), n.syn. was found to be a junior synonym of *Cantharis mongolica* Pic, 1906.

Key words: Coleoptera Cantharidae Cantharinae – Palearctic – taxonomy – synonymy – key.

During the last years different authors have contributed by creating genera and subgenera in which various diverging soldier-beetles initially described in the genus *Cantharis* Linné, 1758, found their place. Among these are:

<i>Malthinus</i> Latreille, 1806	<i>Metacantharis</i> Bourgeois, 1886
<i>Silis</i> Charpentier, 1825	<i>Lycocerus</i> Gorham, 1898
<i>Chauliognathus</i> Hentz, 1830	<i>Plectonotum</i> Gorham, 1891
<i>Cordylocera</i> Guérin, 1830	<i>Athemus</i> Lewis, 1895
<i>Rhagonycha</i> Eschscholtz, 1830	<i>Stenothemus</i> Bourgeois, 1907
<i>Podabrus</i> Westwood, 1838	<i>Macrosilis</i> Pic, 1911
<i>Dismorphocerus</i> Solier, 1849	<i>Micropodabrus</i> Pic, 1920
<i>Polemius</i> Leconte, 1851	<i>Fissocantharis</i> Pic, 1921
<i>Tytthonyx</i> Leconte, 1851	<i>Mimopolemius</i> Pic, 1921
<i>Malthodes</i> Kiesenwetter, 1852	<i>Polemiosilis</i> Pic, 1921
<i>Themus</i> Motschulsky, 1857	<i>Hemipodistra</i> Ganglbauer, 1922
<i>Heteromastix</i> Boheman, 1858	<i>Bactrocantharis</i> Barovskij, 1926
<i>Cratosilis</i> Motschulsky, 1860	<i>Prothemon</i> Champion, 1926
<i>Cyrtomoptera</i> Motschulsky, 1860	<i>Kandyosilis</i> Pic, 1929
<i>Rhaxonycha</i> Motschulsky, 1860	<i>Afronycha</i> Wittmer, 1949
<i>Absidia</i> Mulsant, 1862	<i>Hyponotum</i> Wittmer, 1949
<i>Armidia</i> Mulsant, 1862	<i>Micronotum</i> Wittmer, 1949
<i>Discodon</i> Gorham, 1881	<i>Cultellungis</i> McKey–Fender, 1950
<i>Silidius</i> Gorham, 1883	<i>Paradiscodon</i> Wittmer, 1954
<i>Sphaerarthrum</i> Waterhouse, 1884	<i>Boveycantharis</i> Wittmer, 1969

<i>Cordyrocerellus</i> Wittmer, 1969	<i>Gymnocanthalis</i> Wittmer, 1979
<i>Guineapolemius</i> Wittmer, 1969	<i>Pakabsidia</i> Wittmer, 1979
<i>Indopolemius</i> Wittmer, 1969	<i>Macrohabronychus</i> Wittmer, 1981
<i>Pseudoabsidia</i> Wittmer, 1969	<i>Habronychus</i> Wittmer, 1982
<i>Islamocanthalis</i> Wittmer–Magis, 1978	<i>Taiwanocanthalis</i> Wittmer, 1982
<i>Mikadocanthalis</i> Wittmer–Magis, 1978	<i>Wittmercanthalis</i> Satô, 1986
<i>Podosilis</i> Wittmer, 1978	

The remaining species described as *Canthalis* can be grouped in four subgenera.

Canthalis (s.str.) Linné 1758

spec. typ. *Canthalis fusca* Linné, 1758
Syst. Nat. ed. 10: 401

The species included in this subgenus differ from all the others particularly by the peculiar structure of the aedeagus. The dorsal plate is practically absent here exposing wide and short laterophyses, the parameres of the basal piece on the contrary being long and narrow, shortly bent inward at the apex (Fig. 1). Normally *Canthalis* species have a well developed dorsal plate of the basal piece, often longer than the parameres, almost always longer than the laterophyses, but never absent. The above mentioned species are also marked for their robust body, wide pronotum with rounded sides and strong legs. In accordance with the modern understanding of superspecific taxonomy this group certainly deserves separation at subgeneric level. The following taxa must be attributed to this subgenus:

- C. (*Canthalis*) *fusca* Linné, 1758
- C. (*Canthalis*) *rustica* Fallén, 1807
- C. (*Canthalis*) *oculata* Gebler, 1827
- C. (*Canthalis*) *annularis* Ménétriez, 1836
- C. (*Canthalis*) *reichei* Mulsant, 1862

Canthalis (*Telephorus*) Schaeffer, 1766, n.stat.

Cyrtomoptila Motschulsky, 1859, (1860) (spec. typ. *Canthalis lateralis* Linné, 1758)
Dicranodes Motschulsky 1859 (1860), (spec. typ. *Dicranodes nodicollis* Motschulsky, n.nud.)
spec. typ. *Canthalis pellucida* Fabricius, Ent syst., I 1792: 214, n.decl.

Schaeffer when introducing his *Telephorus* (and not *Thelephorus* as indicated Kiesenwetter in 1860) illustrated the genus by coloured pictures of three common European beetles belonging to two superfami-

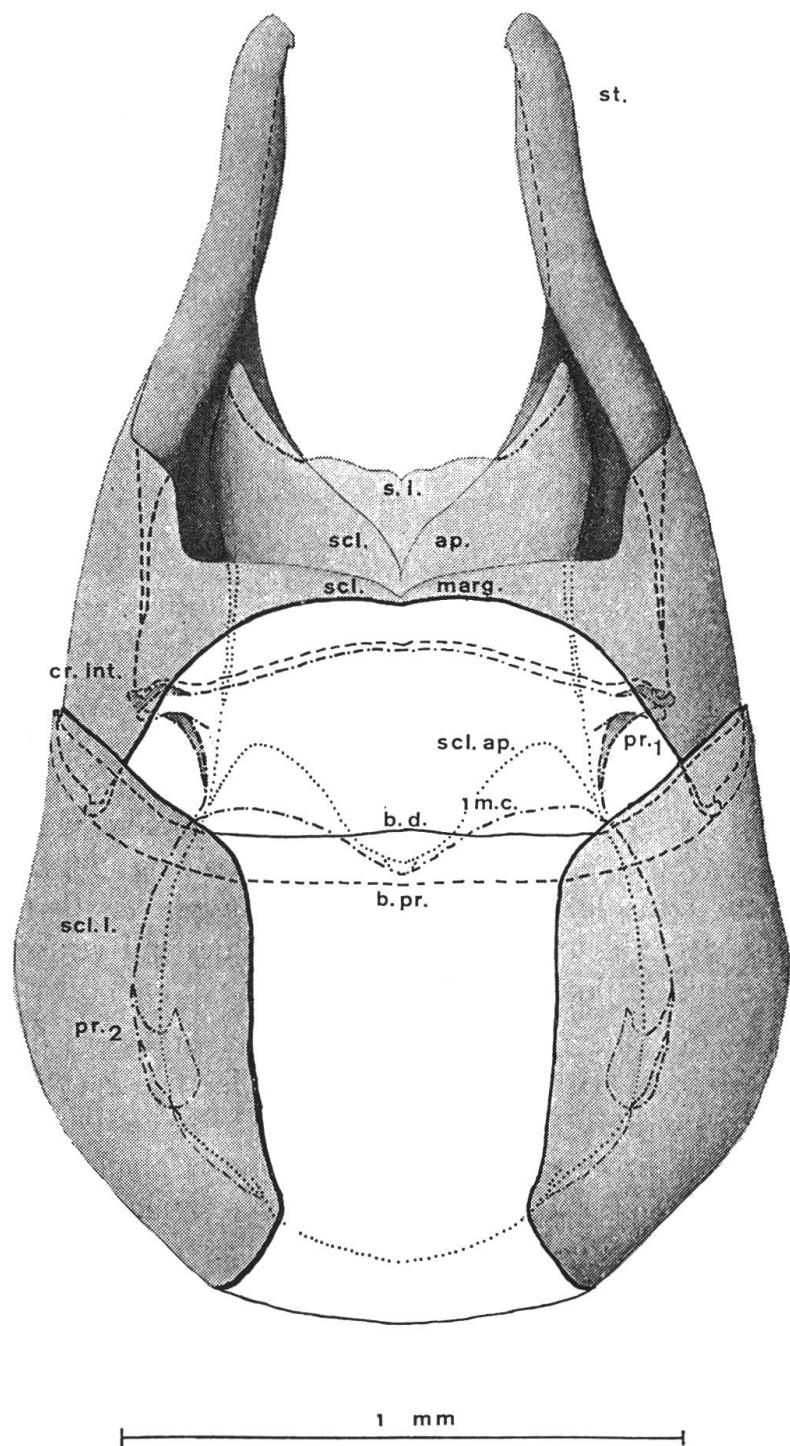


Fig. 1: Aedeagus of *Cantharis fusca* Linné, ventral view (after Magis, 1971).

lies, Canthoroidea and Cleroidea (Schaeffer, 1766). Though the coloration of legs in Schaeffer's illustrations of the Cantharids is erroneous and differs (the femurs are black and tibiae are yellow which is not met in European soldier-beetles of similar appearance) from what these insects actually have all three are easily recognizable. They are: *Cantharis fusca* L. (Fig. I), *Cantharis pellucida* F. (Fig. II) [Cantharidae, Cantharoidea] and *Malachius* sp. (Fig. III, VI) [Malachidae, Cleroidea]. And as far as no type species has been designated in *Telephorus*, in compliance with provisions of Recommendations 69B (3) and (6) of the International Code of Zoological Nomenclature (third edition) and with the aim to preserve the name *Telephorus* in the nomenclature we nominate *Telephorus pellucida* the type species of the subgenus.

As *C. fusca* was designated the type species for *Cantharis* (Kiesenwetter, 1860) and separated along with its close affinities in *Cantharis* s.str., the rest of *Cantharis* taxa (with the exception of *Absidiella* and *Taiwanocantharis* species) will enter the subgeneric division under the name of *Telephorus*. *Telephorus* will thus include a great variety of species differing in general appearance, especially the shape of pronotum, the degree of development of teeth on tarsal claws, but rather uniform in the shape of the aedeagus.

Dicranodes nodicollis Motschulsky, 1860, the type species of *Dicranodes* Motschulsky, 1860, remaining nomen nudum as its description never appeared, however is surely attributed to *Telephorus*, as its characters given in the generic key though too brief for a specific definition are sufficient to classify this Caucasian taxon out of both *Cantharis* (s.str.) as it has the elongate pronotum and *C. (Absidiella)* due to the toothed claws [Motschulsky, 1859 (1860)].

***Cantharis (Absidiella)* Wittmer, 1971 n.stat.**

spec. typ. *Cantharis mongolica* Pic, 1906, Echange 22: 38.

Pseudoabsidia kaszabi Wittmer, 1971, Ann. hist.-nat. Mus. Nat. Hung. 63: 192, Figs. 42, 43.

Absidiella kaszabi Wittmer, 1972, Ent. Arb. Mus. Frey. 23: 130–131, n.syn.

In our opinion most characters of *C. mongolica* Pic are in full conformity with those of the genus *Cantharis*, though it differs from the rest of its congeners by simple inner and outer claws in both sexes. The latter difference seems to be of significant subgeneric importance, but if not supported otherwise does not appear strong enough for generic separation. Therefore *Absidiella* is included into *Cantharis* as a subge-

nus. Its type species (Lectotype labelled, "Type", "C-mongolicus Pic" and 4 Paralectotypes labelled "Mongolia bor., Reitter", hereby designated – MP) was later described as *Pseudoabsidia kaszabi* and afterwards used as the type species of *Absidiella*.

***Cantharis (Taiwanocantharis)* Wittmer, 1982**

Ent. Rev. Japan. 37: 122

spec. typ. *C. (T.) tripunctata* Wittmer, 1984, l.c. 39: 147, Figs 86, 87.

This subgenus was created for two species from Taiwan differing from other *Cantharis* by the lack of teeth on all claws of the female.

The four presently recognized *Cantharis* subgenera are separated by the characters that are given in the key that follows.

A key to the subgenera of *Cantharis* Linné

1. Dorsal plate of the basal piece of the aedeagus normally developed, usually longer or only slightly shorter than parameres 2
 - Dorsal plate of the basal piece of the aedeagus reduced, exposing the basis of the parameres and the laterophyses **Cantharis** s.str.
 2. Claws of the front tarsi or of the middle and hind tarsi as well with a tooth at base (usually in both sexes) 3
 - Claws of all tarsi in both sexes toothless **Cantharis (Absidiella)**
 3. Claws of the front and usually of middle and hind tarsi with a plate or tooth at base, more conspicuous in male, less developed in female, so that sometimes the female hind tarsi are practically toothless **Cantharis (Telephorus)**
 - Claws of all tarsi in male with a tooth, while all claws in female are toothless **Cantharis (Taiwanocantharis)**

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