

# Review of Species of the Subgenus *Colaphoptera* Motsch., Genus *Chrysolina* Motsch. (Coleoptera, Chrysomelidae) from the Caucasus and Northern Turkey

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**Abstract**—A new species *Chrysolina (Colaphoptera) kataevi* sp. n. from N Turkey, similar to *Ch. planicollis* Breit, is described. *Chrysolina rosti kubanensis* L. Medvedev and Okhrimenko, 1991 is placed to synonymy with *Ch. apsilaena* Silfverberg (= *fuscicornis* Weise, 1892, non Linne, 1776). *Chrysolina abchasica* Weise is transferred from the subgenus *Hypericia* to *Colaphoptera*. A list of Caucasian and Turkish species of the subgenus *Colaphoptera* Motsch. is given.

A study of a new material on leaf-beetles from northern Turkey made it necessary to revise the taxonomic position of some Caucasian species of the subgenus *Colaphoptera* Motsch., genus *Chrysolina* Motsch., and to describe a new species.

*Chrysomela porphyrea* Faldermann, 1837, is the first species of the subgenus *Colaphoptera* described from the Caucasus. Weise (1892) described two more species and gave a key to all species known at that time. In his review of the Caucasian species of this subgenus, Bechyné (1952) described one new species and a number of subspecies of the already known species, most of which have later been reduced to synonyms. The classification of the subgenus was also considered by Medvedev and Okhrimenko (1991), who, unfortunately being unaware of a paper published earlier in the same year (Lopatin and Konstantinov, 1991), made some mistakes.

From northern Turkey, a single species of this subgenus was described (Breit, 1919), even though Turkey must be covered by the range of the subgenus, since *Ch. (Colaphoptera) blanchei* Fairm. is known from Syria and Palestine. The present paper adds to the list one more species from the Dogu-Karadeniz Daglari Range in northern Turkey.

All species of the subgenus *Colaphoptera* are mountain taxa with disjunctive ranges. All these, including *Ch. abchasica* (as also noted by Bechyné), are apterous and form no large aggregations, with the exception of 2 or 3 species. The biology has only been

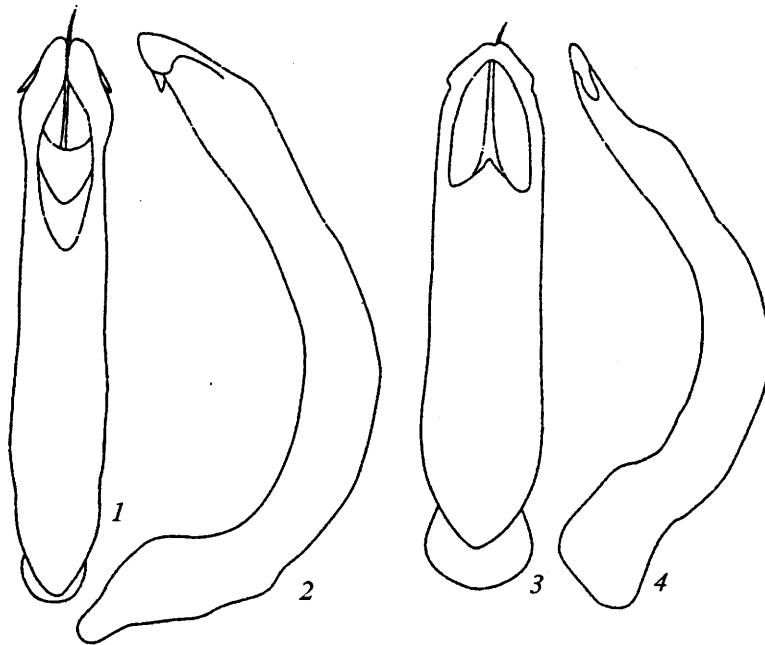
studied in detail for the Carpathian species. Host plants (*Petasites albus* and *Seneco nemorensis*, Asteraceae; *Chaerophyllum aromaticum* and *Aegopodium* sp., Apiaceae; and *Lamium*, *Salvia*, and *Stachys*, Lamiaceae) are known only for 3 species, but these should, most probably, be referred to most of the species. For European species of the subgenus, ovi-viviparity has been noted.

The paper is based on the material collected by me in Georgia and on collections by A.G. Koval, I.A. Belousov, B.M. Kataev, and B.A. Korotyayev. I am sincerely grateful to the persons listed. Type specimens of the new species will be deposited at the Zoological Institute, Russian Academy of Sciences (St. Petersburg).

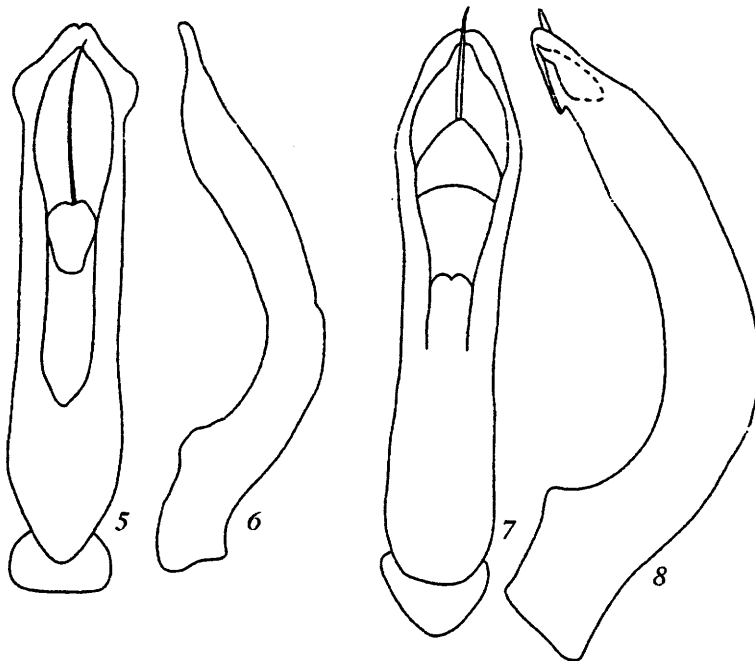
***Chrysolina (Colaphoptera) kataevi* Lopatin, sp. n.**

Differs from *Ch. planicollis* Breit, the only species known from Turkey, primarily in the shape of the aedeagus, irregular elytral striation, and coloration of the dorsum and legs.

**Description. Male** (holotype). Body widely oval, convex, 1.4 times as long as wide, reddish brown with violet tint. Antennae and legs chestnut-brown. Clypeus and frons near eyes with fine, rather sparse punctures. Pronotum 2.25 times as wide as long, without separate lateral carina, the widest at the beginning of apical third, not emarginate along basal margin at posterior angles. Lateral margins weakly converging posteriad and noticeably, anteriad. Punctures on pronotum fine, intervals varied, but always 2–3 times puncture diameter. Scutellum smooth.



Figs. 1-4. *Chrysolina* Motsch., aedeagus in dorsal (1, 3) and lateral (2, 4) view: (1, 2) *Ch. rosti* Weise; (3, 4) *Ch. planicollis* Breit.



Figs. 5-8. *Chrysolina* Motsch., aedeagus in dorsal (5, 7) and lateral (6, 8) view: (5, 6) *Ch. kataevi* sp. n.; (7, 8) *Ch. apsilaena* Silf.

Length of elytra less than their width somewhat before the middle, 2.7 times length of pronotum. Elytra with obtusely rounded humeri, covered with irregular punctation. Punctures noticeably larger and deeper than those on pronotum, forming short irregular rows only in places. Intervals between punctures shining; in places, noticeably exceeding puncture diameter; cov-

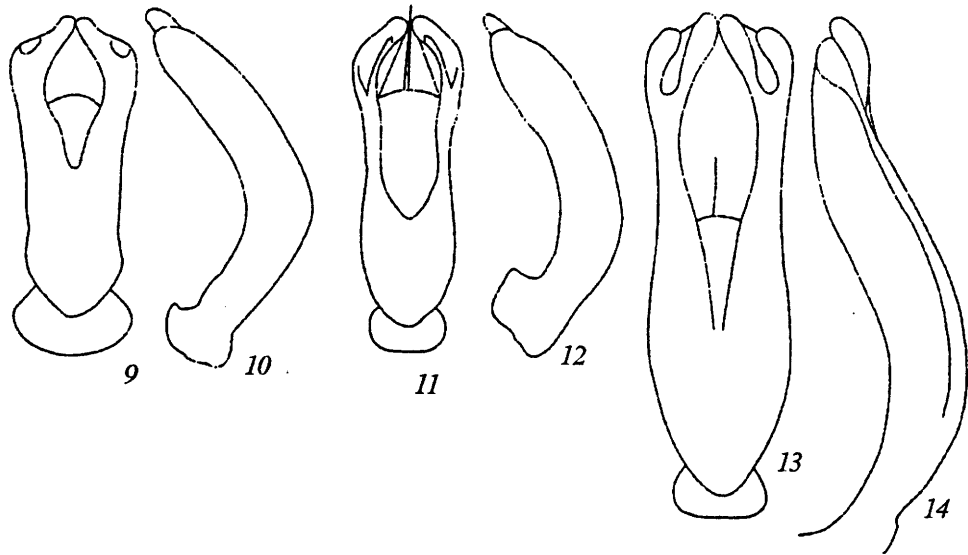
ered with fine sparse distinct punctures. Aedeagus (Figs. 5, 6) long, parallel-sided, triangularly widened apically. Body length 7 mm.

**Female** (paratype). Body more convex; body length 7.5 mm; width, measured at midlength of elytra, 5 mm. Legs and antennae rufous.

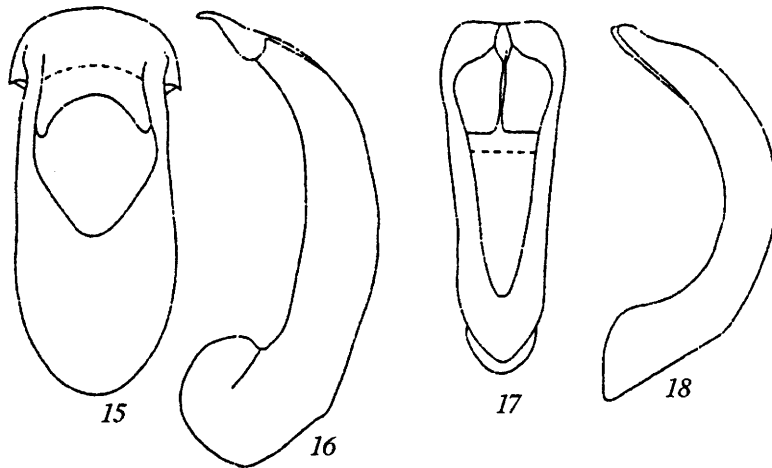
**Material.** Northern Turkey: Dogu-Karadeniz Daglari Range, 1800 m, valley of a river near Gul Dagi, 26.VI.1998. Two specimens from collections by B.M. Kataev, for whom the species is named.

*Key to Species of the Subgenus Colaphoptera  
from the Caucasus and Turkey*

- 1(10). Pronotal sides at most simply thickened, without carina separated by sulcus or large punctures.
- 2(3). Large punctures on elytra forming widely separate rows; intervals with finer, moderately dense, distinct punctures. Pronotum 2.5 times as wide as long, as wide at base as elytra, strongly narrowing anteriorly. Disc with uniform fine and sharp punctation. Elytra widely oval, not longer than wide, 3 times as long as pronotum. Body highly convex, metallic-blue-violet or black-violet, with bronze or reddish shine. Aedeagus (Figs. 3, 4) long and narrow; its apex shallowly emarginate laterally, without tubercles. 6–7 mm. Northeastern Turkey ..... *Ch. planicollis* (Breit).
- 3(2). Elytral punctation irregular or arranged in short irregular rows only in places.
- 4(5). Pronotal sides straightly narrowing, making pronotum trapeziform. Elytral punctures deep and large, separated by varied intervals covered with very fine and sparse punctures. Dorsal side strongly shining, brownish copper, occasionally with golden tint. Antennae and legs rufous, with metallic shine. Aedeagus (Figs. 9, 10) short, gradually widening apicad, with wide prominence in the middle, bearing on underside in apical half lateral emarginations separating convex middle part. 5.5–7.7 mm. Georgia ..... *Ch. trapezicollis* Bechyné.
- 5(4). Pronotum with sides more or less rounded; the widest in, or behind, the middle.
- 6(9). Aedeagus long (2.5–3 mm).
- 7(8). Apex of aedeagus strongly widening and divided into 3 lobes (Figs. 13, 14). Pronotal sides weakly rounded. Elytra with rather deep punctures forming in places paired rows; intervals between punctures smooth and strongly shining, with very fine and sparse punctures. Dorsal side rufous with violet tint, or violet with golden shine. Antennae and legs rufous. 6.2–8.5 mm. Southwestern Georgia (Adzharia), northeastern Turkey ..... *Ch. adzharica* Lopatin.
- 8(7). Apex of aedeagus triangular (Figs. 5, 6). Pronotal sides arcuate, noticeably converging apicad. Elytral punctures deep, but finer than those in the preceding species, mostly forming no rows wherever; intervals with deep and not very fine punctures. Upper side reddish brown, with violet tint. Legs and antennae rufous. 7.0–7.5 mm. Northern Turkey ..... *Ch. kataevi* sp. n.
- 9(6). Aedeagus short (1.5–1.7 mm), with pentagonal apex (Figs. 11, 12). Pronotal sides arcuate, weakly converging anteriorly, thickened. Dorsal side reddish brown with copper or violet tint, covered with dense and deep punctures larger on elytra. 5–8 mm. Caucasus ..... *Ch. porphyrea* (Faldermann).
- 10(1). Pronotal sides swollen and separated from disc, at least at base, by sulcus or row of coarse punctures.
- 11(12). Thickened pronotal sides separated from disc along entire length by stripe of large punctures. Elytra with distinct paired (in places fused) rows of punctures; interstriae with very fine punctures. Aedeagus (Figs. 15, 16) short and wide; its apex widely rounded, with lateral tubercles. Dorsal side copper-brown or violet, antennae and legs pale rufous. 5.5–6.2 mm. Krasnodar Territory and Abkhazia ..... *Ch. abchasica* (Weise).
- 12(11). Lateral pronotal carinae separated from disc by sulcus, at least at base.
- 13(14). Aedeagus short (1.5 mm), noticeably widening apicad, truncate apically (Figs. 17, 18). Lateral pronotal carinae separated from disc by sulcus only in posterior half. Elytral punctation very dense. Dorsal side dark bronze-brown, antennae and legs pale brown. 5–6.5 mm. S Krasnodar Territory, Abkhazia, Georgia ..... *Ch. caspica* (Weise).
- 14(13). Aedeagus long (3 mm), with narrowly rounded apex.
- 15(16). Apex of aedeagus narrowed and obtused apically (Figs. 1, 2); lateral tubercles well-visible in dorsal view, situated at tip (lateral view). Dorsal side reddish rufous, with metallic shine. Antennae and legs pale rufous. 6–7.5 mm. S Krasnodar Territory, Abkhazia ..... *Ch. rosti* (Weise).
- 16(15). Aedeagus noticeably widened before apex, then narrowing, and rounded at tip (Figs. 7, 8); lateral tubercles invisible in dorsal view, situated



Figs. 9–14. *Chrysolina* Motsch., aedeagus in dorsal (9, 11, 13) and lateral (10, 12, 14) view: (9, 10) *Ch. trapezicollis* Bechyné; (11, 12) *Ch. porphyrea* Fald.; (13, 14) *Ch. adzharica* Lopatin.



Figs. 15–18. *Chrysolina* Motsch., aedeagus in dorsal (15, 17) and lateral (16, 18) view: (15, 16) *Ch. abchasica* Weise; (17, 18) *Ch. caspica* Weise.

at some distance from apex (lateral view). Dorsal side violet, with copper-golden shine; antennae and legs dark, jet-black; basal antennal segments rusty-rufous on underside. 5.5–7 mm. Krasnodar Territory ..... *Ch. apsilena* Silfverberg.

#### Catalogue of Species

##### *Chrysolina rosti* (Weise, 1892).

The range covers NW Caucasus, from Gelendzhik to Krasnaya Polyana in Krasnodar Territory, and Abkhazia as far as the upper Kodori River. The beetles occur in June, at altitude of 400–1700 m a.s.l.

##### *Chrysolina planicollis* (Breit, 1919).

Known only from northeastern Turkey: Chorokh and Lazistan Ranges (S of Trabzon and environs of Bayburt).

##### *Chrysolina kataevi* Lopatin.

NE Turkey: Dogu-Karadeniz Daglari (Trabzon).

##### *Chrysolina apsilena* Silfverberg, 1977.

*fuscicornis* Weise, 1892, non Linne, 1766.—*rosti kubanensis* L. Medvedev et Okhrimenko, 1991, **syn. n.**

Known in the NW Caucasus from foothills S of Krasnodar in the north; as far as Sochi to the south; and as far as the Belaya River to the east.

*Chrysolina trapezicollis* Bechyné, 1952.

—*kutaisa* Bechyné, 1952.—*exul* Bechyné, 1952.  
—*differens* Franz, 1952.

W Georgia. Records from mountainous regions of Krasnodar Territory need to be confirmed.

*Chrysolina porphyrea* (Faldermann, 1837).

—*p. minutior* Bechyné, 1952.—*p. diga* Bechyné, 1952.—*p. kubanica* Bechyné, 1952.—*p. erivanicola* Bechyné, 1952.

The commonest species in the Caucasus. Its range covers SW Krasnodar Territory, Abkhazia, and W Georgia. Records from Armenia, wherefrom Bechyné described the subspecies *erivanicola*, have not been corroborated and, apparently, are based on a mislabeled specimen.

*Chrysolina adzharica* Lopatin, 1988.

Known only from SW Georgia (Batumi and its environs) and NE Turkey.

*Chrysolina abchasica* (Weise, 1892).

*circassicola* Reitter, 1912.

The northern limit of the range runs in SW Krasnodar Territory (near Tuapse–Goikhtskii Pass–Tul'skii Pass); the eastern one, near Cherkessk; Abkhazia constitutes the southern part of the range. Bechyné (1952) placed this species in the subgenus *Hypericia* on the basis of the regular elytral punctation, differentiating it, however, from other species because of its aptery. Yet Bechyné left *Ch. planicollis* Breit in the subgenus *Colaphoptera*, even though regular rows on elytra are also present in this species. Medvedev and Okhri-

menko (1991) erroneously considered *Ch. abchasica* alate and, in this connection, did not include it in their review of Caucasian species of *Colaphoptera*.

*Chrysolina caspica* (Weise, 1892).

The range of this species, in contrast to its name, covers only S Krasnodar Territory, Abkhazia, and W Georgia. The beetles occur from low foothills (Gudauta, 400 m) to subalpine belt (Pshekish Range).

The synonymy presented by Medvedev and Okhri-menko (1991) for this species refers to *Ch. apsilae* Silfv.

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