

SHORT
COMMUNICATIONS

More on *Cicindela festina* (Coleoptera, Carabidae)

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Abstract—The identity of *Cicindela festina* Motschulsky, 1859 is discussed. Based on an examination of the holotype of this species, the following new synonymy is established: *C. trifasciata* Fabricius, 1781 = *C. festina* Motschulsky, 1859, **syn. n.**

In 1859, V.I. Motschulsky described a new species, *Cicindela festina*, from a single female collected in the Caucasus. The original description indicated the similarity of the new species to *C. trisignata* Dej. and *C. trifasciata* F. in the color of elytra and the shape of middle cross-band, respectively. In Motschulsky's (1859) opinion, *C. festina* is closely related to *C. strigata* Dej. (= *C. caucasica* Ad.), differing in the wider and shorter body and the shape of head and shoulders.

Later, the authors elaborating the classification of the genus *Cicindela* L., having no opportunity to examine the type specimen of *C. festina*, related it to different species. For example, Dokhtoureff (1885) supposed *C. festina* to be a synonym of *C. sublacerata* Solsky. Horn and Roeschke (1891) considered the Dokhtoureff's opinion erroneous and, after Motschulsky, related *C. festina* to *C. caucasica* (group VII, subgroup II). At the same time, these authors noted that the final conclusion on the taxonomic status of this species was impossible without examination of the type specimen. Lutshnik (1917), after examination of the type specimen of *C. festina*, concluded that this specimen was composed of parts belonging to beetles of two different species. In his opinion, the abdomen and elytra belong to a species closely related to *C. trisignata*; whereas the head and pronotum, to another one, closely related to *C. circumdata* Latr. et Dej. Therefore, Lutshnik suggested to suppress the name *C. festina* as a name of a non-existing species.

This concept of the status and taxonomic position of *C. festina* still remains immutable. In a checklist of the tiger beetles of the world, Wiesner (1992) treats this species as a synonym of *C. caucasica*, according to Horn and Roeschke (1891). In a checklist of the ground beetles from Russia and adjacent countries (Kryzhanovskij *et al.*, 1995), *C. festina* is also consid-

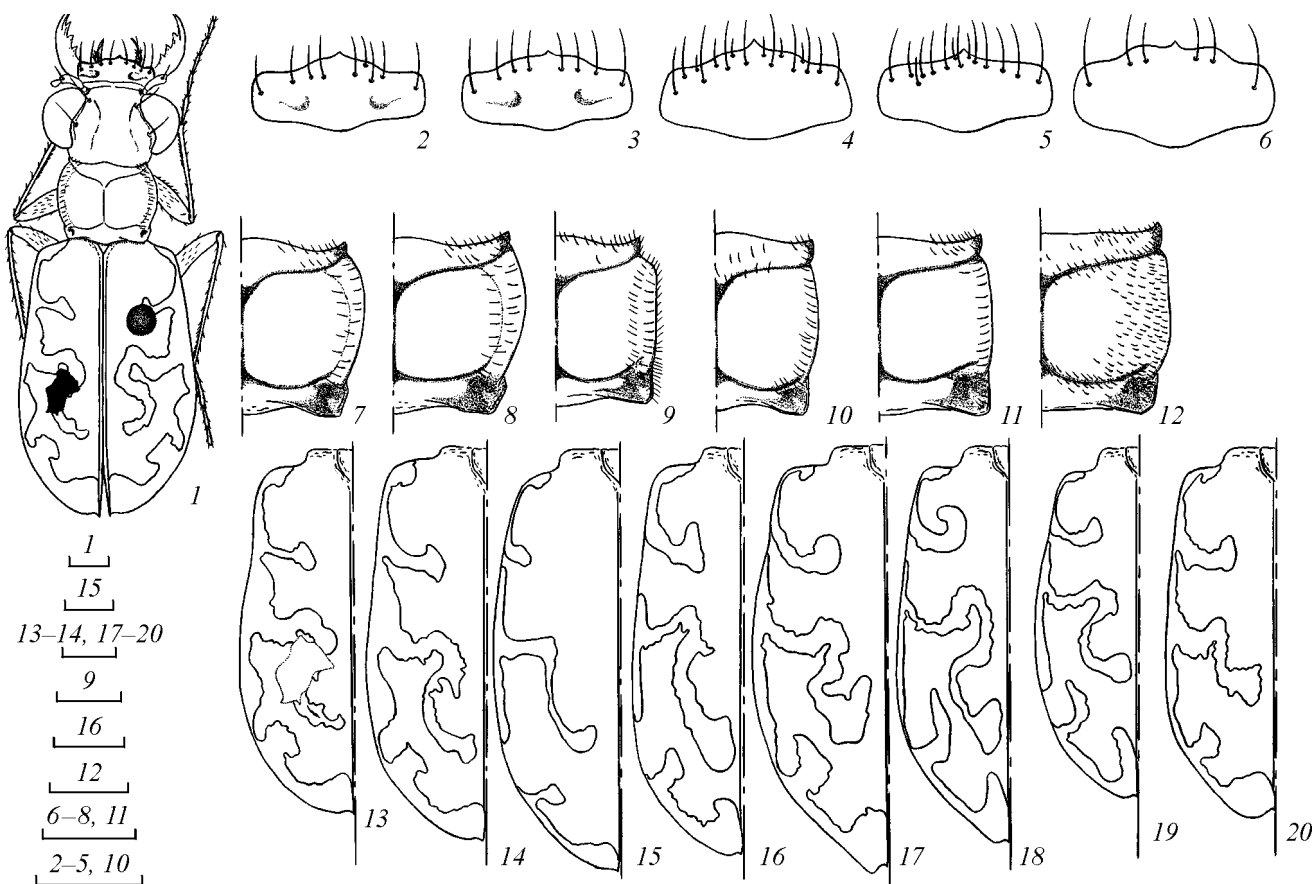
ered a synonym of *C. caucasica*, [erroneously—Ed.] supposed a "nomen nudum," which to a certain extent corresponds to Lutshnik's opinion (1917).

The mentioned contradictions compel me to examine the problem of the identity of *C. festina* once more.

In Motschulsky's collection deposited at the Zoological Museum (Moscow State University, Russia), a specimen (female) has been found, corresponding to the original description and provided with several labels: "Alp. Cauc." (white, handwritten); "Type" (red, printed); and "Non-existent species, composed of parts belonging to beetles of two different species (1910), V. Lutshnik det." (white, handwritten). The specimen is badly damaged: both hind legs have been lost; in the right middle tarsus, only three segments present; only one and two, basal segments are present in the left and right antennae, respectively; left elytron is damaged by dermestids; only the central part of the abdominal sternite V is remaining; with abdominal sternite VI and genitalia lost (figure, 1). The head and pronotum, indeed had been glued to the elytra.

An examination of this specimen demonstrated that the head, pronotum, and elytra belong to the same beetle, which is testified by an absolute compliance between the articulation surface of pro- and mesothorax, the color and pubescence of pro- and mesothorax, lateral pieces of thorax, and legs. Thus, the specimen examined is not composed of parts belonging to beetles of different species.

Comparison of the specimen with the *Cicindela* species commonly treated as closely related to *C. festina* (Dokhtoureff, 1885; Horn and Roeschke, 1891; Lutshnik, 1917; Wiesner, 1992; Kryzhanovskij *et al.*, 1995) has shown that it differs from all of them: from *C. caucasica* and other species of the subgenus



(1) General view of *C. festina* (type, female) and (2–20) structural details of species of the genus *Cicindela*: (2–6) labrum; (7–12) pronotum, right half; (13–20) left elytron. (2, 7, 13) *C. festina*; (3, 8, 14) *C. trifasciata*; (4, 9, 15) *C. caucasica*; (5, 9, 15, 17) *C. trisignata*; (6, 12) *C. circumdata*; (10, 16) *C. sublacerata*; (18) *C. contorta*; (19) *C. litterifera*; (20) *C. arenaria*. Scale 1 mm.

Lophyridia Jeannel, in the glabrous clypeus and genae, chaetotaxy and shape of labrum (figure, 2, 4) and pronotum (figure, 7, 9), pale legs, and the elytral pattern (figure, 13, 15); from *C. sublacerata*, in the glabrous head, shape and pubescence of the pronotum (figure, 7, 10), pale legs, and shape and pattern of elytra (figure, 13, 16); from *C. trisignata* and the closely related species, in the chaetotaxy and shape of labrum (figure, 2, 5) and pronotum (figure, 7, 11), pale pattern and shape of apical part of elytra (figure, 13, 17–20), and also pale legs (in *C. trisignata*, as in other species of the subgenus *Cicindina* Adam et Merkl, only trochanters are pale); from *C. circumdata* and other representatives of the subgenus *Taenidia* Riv., in the shape of mandibles and labrum (figure, 2, 6), shape and pubescence of pronotum (figure, 7, 12), pubescence of abdomen and thorax, and pale femora.

A comparison of *C. festina* with other species of the genus *Cicindela* (sensu lato) revealed its identity to *C. trifasciata* F. distributed in the south of the US, Mexico, Central America, the Bahamas, and the Antilles.

The specimen is identified by a characteristic coloration and pale pattern on the elytral disc (figure, 13, 14); presence of 3, 4, and 5 setiferous pores in the scutellar, sutural, and humeral rows, respectively; color and pubescence of legs, thorax, and abdomen; and also shape of labrum (figure, 2, 3) and pronotum (figure, 7, 8). It is noteworthy that in *C. trifasciata*, the head and pronotum look really somewhat disproportional in comparison with elytra, which had also been indicated by Lutshnik (1917) for *C. festina*.

According to the International Code of Zoological Nomenclature (1988), *C. festina* is an available name. Thus, a synonymy is established: *Cicindela trifasciata* Fabricius, 1781 = *Cicindela festina* Motschulsky, 1859, **syn. n.** Type locality for *C. festina* is designated as “Alpes meridionales du Caucase” (Motschulsky, 1859). The *C. festina* female labeled “Alp. Cauc.,” “Type”, “*Cicindela festina* Motsch. Alp. Cauc.,” and “Non-existent species, composed of parts belonging to beetles of two different species (1910), V. Lutshnik det.” is the holotype by monotypy.

It is unknown why an American species was described as a Caucasian one. Motschulsky's work (1859) gives no information on the origin of the material from which *C. festina* had been described. Probably, this was erroneous labeling, which can be substantiated by the fact that the inscription "Alp. Cauc." on the original label is composed of two different superimposed inscriptions. Unfortunately, I failed to restore the older one.

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