

On the Synonymy of Two Species Names of the Genus *Aphodius* Ill. (Coleoptera, Scarabaeidae) Described by S. M. Iablokoff-Khnzorian

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Abstract—Based on examination of the type material, names of two *Aphodius* species are placed in synonyms: *A. edgardi* Solsky, 1876 = *A. sartus* Iablokoff-Khnzorian, 1971, syn. n.; and *A. putridus* Geoffroy, 1785 = *A. avetissiani* Iablokoff-Khnzorian, 1964, syn. n.

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Iablokoff-Khnzorian (1964, 1970, 1971) described a number of new species of scarab beetles including two species of dung beetles of the genus *Aphodius* from Transcaucasia and Middle Asia, namely *A. sartus* and *A. avetissiani*. These species have been known so far only from the type specimens. Incomplete descriptions and lack of further findings necessitated clarification of the taxonomic status of these forms. Owing to assistance of M.Yu. Kalashian we had an opportunity to examine the type specimens of *A. sartus* and *A. avetissiani* deposited in the Institute of Zoology of the National Academy of Sciences of Armenia (Yerevan). This allowed us to establish new synonymy of the names.

Aphodius (Pseudacrossus) edgardi Solsky, 1876

= *Aphodius (Cinacanthus) medvedevi* Iablokoff-Khnzorian, 1970 : 54 (nom. praeocc., non *A. medvedevi* Nikritin, 1969), **syn. n.**

= *Aphodius (Cinacanthus) sartus* Iablokoff-Khnzorian, 1971 : 184 (nom. nov. pro *A. medvedevi* Iablokoff-Khnzorian), **syn. n.**

A. sartus Iablokoff-Khnzorian, 1971, (= *A. medvedevi* Iablokoff-Khnzorian, 1970, nom. praeocc.) was described from a single male (erroneously identified by the author as a female) from Gandzhina (Tajikistan) (Fig. 1). In the original description, the following diagnostic characters are given: body dark brown, elytra reddish yellow with dark suture, fore part of pronotum slightly narrowed before rounded fore angles. Elytral intervals flat, distinctly shagreened. Apical setae of middle and hind tibiae of different length.

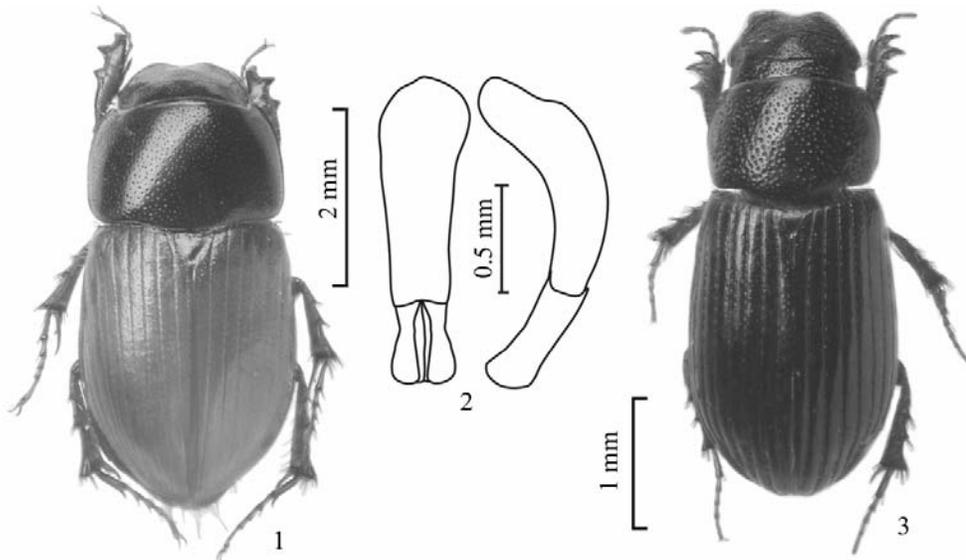
Because of the short and situated basally fore tibial spur, the author placed the new species into the subgenus *Cinacanthus* A. Schmidt and compared it with *A. gregarius* Harold and *A. sordescens* Harold. However such a shape of the fore tibia as well as characteristic shape of the aedeagus (Fig. 2) are typical not only of the subgenus *Cinacanthus* (sensu Schmidt) but also of a number of probably related species which are placed now in the subgenera *Bodilus* Mulsant et Rey, *Lunaphodius* Balthasar, *Melaphodius* Reitter and *Pseudacrossus* Reitter.

The holotype of *A. sartus* examined by the authors of the present contribution is similar to *A. (Pseudacrossus) edgardi* Solsky in all the characters. It differs from other specimens of *A. edgardi* only in the lighter color of the body (especially of elytra). Probably it is a recently emerged, teneral specimen. *A. edgardi* is widespread in the foothills of Middle Asia, including Tajikistan (Nikolajev, 1987).

Aphodius (Plagiogonus) putridus Geoffroy, 1785

= *A. (Eccoctaphodius) avetissiani* Iablokoff-Khnzorian, 1964 : 61, **syn. n.**

A. avetissiani Iablokoff-Khnzorian was described from 2 specimens collected in the nest of common vole (*Microtus arvalis*) in Goris District of Armenia. For this species a monotypic subgenus *Eccoctaphodius* was proposed with the following diagnosis: apical margins of elytra curved toward the suture; sutural angles spine-shaped; hind angles of pronotum concave; spur of fore tibiae does not reach the apex of first segment of fore tarsi. The author noted that elytral



Figs. 1–3. *Aphodius* Ill.: (1, 2) *A. sartus* Iablokoff-Khnzorian, holotype [(1) general view; (2) aedeagus, dorsal and lateral view]; (3) *A. avetissiani* Iablokoff-Khnzorian, holotype, general view.

intervals 7 and 9 in the representative of the new subgenus are carinate and fused apically. This character is diagnostic for the subgenus *Plagiogonus* Mulsant, however the author did not indicate any differences between *Eccocephodius* and *Plagiogonus*. In his later monograph (Iablokoff-Khnzorian, 1967), he indicated a character to distinguish *A. (Eccocephodius) avetissiani* from *A. (Plagiogonus) putridus* Geoffroy (*Plagionotus* of the author): spine-shaped apices of elytra in the former species and truncated ones in the latter.

The name *Eccocephodius* was placed in synonyms of *Plagiogonus* by Dellacasa (1988), but the author did not examine the type of *A. avetissiani*. In the original description two specimens are mentioned. Of them, only one specimen with the label "Holotypus *Aphodius avetissiani* Khnz." still exists (Fig. 3). We compared this specimen with a large number of specimens of *A. putridus*, deposited in the collection of the Zoological Institute, Russian Academy of Sciences, St. Petersburg, and found that the shape of its elytral apices is within the limits of variability of this species.

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