

**SCARABAEUS SEROTINUS PANZER, 1799 (CURRENTLY  
NOBIUS SEROTINUS) A VALID NAME (NOMEN PROTECTUM)  
(Coleoptera, Aphodiidae)**

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*Nobius serotinus* (Panzer, 1799) is the name currently in prevailing use, as the presumed valid name, for a well known species whose geographic distribution extends from central Europe to the Russian Federation Far East. Yet, it is a junior synonym of the unused *Scarabaeus minutus* Herbst, 1783. Under the provisions of the International Code of Zoological Nomenclature, particularly its Article, 23.9, as we show below, use of the name *Nobius serotinus* (Panzer, 1799) as the valid name must be maintained.

Herbst (1783) described *Scarabaeus minutus*, from Berlin, as follows (page 10): «32. Minutus. Berlin. § Er ist nicht größer, wie der Quisquilius, aber etwas länglicher; Kopf und Brustschild glänzend schwarz; die Deckschilde haben ein schönes rothbraun, hie und da etwas dunkler schattirt, und sauber gestreift; die füsse sind gleichfalls rothbraun; im Mist. Eine Abbildung halte ich nicht nothig.». [Its is not larger than the Quisquilius, but somewhat more elongate; head and pronotum shining black; the elytra are of a beautiful reddish brown, now and then somewhat more darkly shaded, and are neatly striated; the legs are also reddish brown; in dung. I did not consider an illustration necessary.]

Six years later, Herbst (1789) used the same name, *Scarabaeus minutus*, for another species, of which, besides a detailed description in German, he gave the following short diagnosis (page 269): «*Minutus*. 163.) *Scarabaeus scutellatus muticus niger*, elytris brunneis villosis. Mus. *Herbst*.».

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Herbst's blunder was noticed by Creutzer (1799) who proposed the synonymy *Scarabaeus minutus* Herbst, 1789 = *Scarabaeus scrofa* Fabricius, 1787 (currently *Trichonotulus scrofa*), and judged necessary to create a new name for *Scarabaeus minutus* Herbst, 1783. Creutzer (1799) wrote (page 60): «Dass Hrn. Herbsts *Scarabaeus minutus* Käf. II. 269. 163. t. 18. f. 7. der *Scarab. scrofa* Fabr. sey, ist ausser Zweifel. Eben so gewiss ist es aber auch, dass Hr. Herbst im Archiv unter dem Namen *minutus* einen ganz andern Käfer beschrieben hat, der in seinem Systeme nicht mehr vorkömmt, und der ich auch bey keinem andern Schriftsteller finde. Ich eile, dieses schöne Käferchen einer unverdienten Vergessenheit zu entreissen. Den Namen habe ich, um alle Verwirrung zu vermeiden, ändern müssen.» [That Mr. Herbst's *Scarabaeus minutus* Käf. II. 269. 163. t. 18. f. 7. is the *Scarab. scrofa* Fabr. is beyond doubt. Also, it is equally certain that M. Herbst have described in Archiv under the name *minutus* an entirely different beetle, which does not appear anywhere in his System, and which I also did not find by any other author. I hurry to rescue this beautiful little beetle from undeserved oblivion. To avoid any confusion, I must change the name.].

Creutzer (1799) then proceeded to describe the species under the name *Aphodius serotinus*, making it clear that he was re-describing *Scarabaeus minutus* Herbst, 1783: «A. *Serotinus*. Tab. I. fig. 11. a. § A. *niger nitidus*, *elytris rufis*: *macula oblonga disci lunulaque ante apicem nigris*. § *Scarab. minutus* Herbst Archiv. IV. p. 10. n. 32.».

Panzer (1799) described the same species under the name *Scarabaeus serotinus*. Neither did Creutzer (1799) credit Panzer with the authorship of *serotinus*, nor did Panzer (1799) credit Creutzer. According to Evenhuis (1997), Heft 67 of Panzer's work was published before June 1799. We could not find any information on the actual date of publication of Creutzer's work, other than the date "1799" printed on the cover page. Hence, Creutzer's work has to be deemed published on 31 December 1799. Consequently, *Scarabaeus serotinus* Panzer, 1799 has priority over *Aphodius serotinus* Creutzer, 1799 but, as mentioned above, it is a junior synonym of *Scarabaeus minutus* Herbst, 1783.

Article 23.9.1 of the International Code of Zoological Nomenclature establishes that: «Prevailing usage must be maintained when the following conditions are both met: 23.9.1.1. the senior synonym or homonym has not been used as a valid name after 1899, and 23.9.1.2.

the junior synonym or homonym has been used for a particular taxon, as its presumed valid name, in at least 25 works, published by at least 10 authors in the immediately preceding 50 years and encompassing a span of not less than 10 years.

To the best of our knowledge, *Scarabaeus minutus* Herbst, 1783 was used as a valid name only twice, by Gmelin (1790) and Panzer (1795). Schönherr (1806) listed *Scarabaeus minutus* Herbst, 1783, together with *Aphodius serotinus* Creutzer, 1799 and *Scarabaeus serotinus* Panzer, 1799, as synonyms of *Scarabaeus foetidus* Fabricius, 1792 with a question mark and the following note including those three names: «An species distincta?». It appears that, since Schönherr (1806), the name *Scarabaeus minutus* Herbst, 1783 has vanished from literature. It certainly has not been used as a valid name after 1899. Therefore, the first condition of Article 23.9.1 is met.

The second condition of Article 23.9.1 is met as well, as shown by the list below of 25 works, published by 15 (first) authors, and encompassing a period of 42 years, where *serotinus* (Panzer, 1799) was used as the presumed valid name:

- 1) Ádám, L. 1986. Beetles (Coleoptera) inhabiting sheep droppings in dry pastures of Hungary. *Folia Entomologica Hungarica*, 47: 5-12. [page 8].
- 2) Ádám, L. 1994. A checklist of the Hungarian Scarabaeoidea with the description of ten new taxa (Coleoptera). *Folia Entomologica Hungarica*, 55: 5-17. [page 14].
- 3) Ádám, L. & G. Hegyessy 1998. Adatok a Zempléni-hegység, a Hernád-völgy, a Bodrogeköz, a Rétköz és a Taktaköz lemezescsapú bogárfaunájához (Coleoptera: Scarabaeoidea). *Zempléni Környezetvédelmi Egyesület, Sátoraljaújhely*. 80 pp. (in Hungarian with English abstract) [page 65].
- 4) Allenspach, V. 1970. *Insecta Helvetica, Catalogus*, 2. Coleoptera Scarabaeidae, Lucanidae. Schweizerischen Entomologischen Gesellschaft, Lausanne, 168 pp. [page 64].
- 5) Balthasar, V. 1964. Monographie der Scarabeidae und Aphodiidae der palaearktischen und orientalischen Region (Coleoptera: Lamellicornia). Band 3. Aphodiidae. Tschechoslowakischen Akademie der Wissenschaften, Prague, 652 pp, 2 pls. [pages 274, 275].
- 6) Baraud, J. 1977. Coléoptères Scarabaeoidea. Faune de l'Europe occidentale: Belgique, France, Grande-Bretagne, Italie, Péninsule Ibérique. Supplément à la Nouvelle Revue d'Entomologie, 7(1), Toulouse, 352 pp. [page 99].
- 7) Baraud, J. 1992. Coléoptères Scarabaeoidea d'Europe. Faune de France et régions limitrophes. 78. Fédération Française des Sociétés de Sciences Naturelle & Société Linnéenne de Lyon, Lyon. ix + 856 pp, xi pls. [page 237].

- 8) Berlov, E.Ya., O.I. Kalinina & G.V. Nikolajev 1989. Scarabaeidae. Pp. 380-434. In: P.A. Ler, *Opredelitel nasekomykh dalnego vostoka SSSR v shesti tomakh. Tom III. Zhestkokrylye, ili zhuki. Chast 1.* Akademia Nauk SSSR, Leningrad, 522 pp. [page 398].
- 9) Bunalski, M. 1999. Die Blatthornkäfer Mitteleuropas, Coleoptera, Scarabaeoidea. *Bestimmung - Verbreitung - Ökologie.* František Slamka, Bratislava, 80 pp. [page 19].
- 10) Bunalski, M. 2001. Contributions to the knowledge Scarabaeoidea (Coleoptera) of Bulgaria. Part II. Species not recorded from Bulgaria before. *Wiadomości Entomologiczne*, 20(1-2): 29-32. [page 30].
- 11) Bunalski, M. 2001. Checklist of Bulgarian Scarabaeoidea (Coleoptera) (Fourth contribution to the knowledge of Scarabaeoidea of Bulgaria). *Polskie Pismo Entomologiczne*, 70(3): 165-172. [page 167].
- 12) Carpaneto, G.M. & E. Piattella. 1995. Coleoptera Polyphaga V (Lucanoidea, Scarabaeoidea). In: A. Minelli, S. Ruffo & S. La Posta (eds.). *Checklist delle specie della fauna italiana*, 50. Edizioni Calderini, Bologna, 18 pp. [page 8].
- 13) Carpaneto, G.M., E. Piattella & R. Pittino. 2000. The scarab beetles of Turkey: an updated checklist and chorotype analysis (Coleoptera, Scarabaeoidea). *Biogeographia*, 21: 217-240. [page 228].
- 14) Dellacasa, G. 1983. *Sistematica e nomenclatura degli Aphodiini italiani (Coleoptera Scarabaeidae: Aphodiinae).* Museo regionale di Scienze naturali. Monografie, Torino, 1: 465 pp. [page 360].
- 15) Dellacasa, G. & M. Dellacasa. 2006. *Fauna d'Italia. Coleoptera Aphodiidae Aphodiinae.* Edizioni Calderini, Bologna, xii + 484 pp. [page 218].
- 16) Dellacasa, G., P. Bordat & M. Dellacasa. 2001. A revisional essay of world genus-group taxa of Aphodiinae (Coleoptera Aphodiidae). *Memorie della Società Entomologica Italiana*, 79: 1-482. [page 211].
- 17) Dellacasa, M. 1988. Contribution to a world-wide catalogue of Aegialiidae, Aphodiidae, Aulonocnemidae, Termitotrogidae (Coleoptera Scarabaeoidea). *Memorie della Società Entomologica Italiana*, 66 (1987): 3-455. [pages 198, 388].
- 18) Dellacasa, M. & G. Dellacasa. 2006. Tribe Aphodiini Leach, 1815. Pp. 105-142. In: I. Löbl & A. Smetana (eds.). *Catalogue of Palaearctic Coleoptera. Volume 3: Scarabaeoidea - Scirtoidea - Dascilloidea - Buprestoidea - Byrrhoidea.* Apollo Books, Stenstrup. 690 pp. [page 131].
- 19) Iablokoff-Khnzorian, S.M. 1967. *Fauna Armyanskoi SSR, Nasekomye zhestkokrylye. Tom VI. Plastintchaousye (Scarabaeoidea).* Izdatielstvo Akadiemii Nauk Armyanskoi SSR, Erevan, 226 pp. (Fauna of Armenian SSR. Insecta Coleoptera. Tom. VI: Scarabaeoidea. In Russian) [page 97].
- 20) Král, D. 1993. Scarabaeoidea. Pp. 66-71. In: J. Jelínek. *Check-list of Czechoslovak Insects IV (Coleoptera).* Folia Heyrovskyana, Supplementum 1: 172 pp. [page 69].
- 21) Krell, F.-T. 1995. Die Lamellicornia (Coleoptera) der Käfersammlung Dr. Theodor Hübner in den Naturkundlichen Sammlungen der Stadt Ulm, Bundesrepublik

Deutschland. Mitteilungen des Vereins für Naturwissenschaft und Mathematik Ulm/Donau, 36/37 (1993-1995): 49-87. [page 64].

22) Krell, F.-T. & H. Fery. 1992. Familienreihe Lamellicornia. In: G.A. Lohse & W.H. Lucht. Die Käfer Mitteleuropas, 2. Supplementband. Goecke & Evers, Krefeld: 200-254. [page 218].

23) Machatschke, J. W. 1969. Familienreihe Lamellicornia. Pp 265-371. In: H. Freude, K.W. Harde & G.A. Lohse. Die Käfer Mitteleuropas, Vol. 8 (Teredilia, Heteromera, Lamellicornia), Goecke & Evers, Krefeld, 388 pp. [page 316].

24) Nikolajev, G. V. 1987. Plastintchatousie Zhuki (Coleoptera, Scarabaeoidea) Kazakhstana i Srednei Azii. Akademiia Nauk Kazakhskoi SSR, Alma-Ata, 232 pp. (The scarab beetles (Coleoptera, Scarabaeoidea) of Kazakhstan and Central Asia) [page 109].

25) Spuris, Z. 1991. Latvijas Kukaiņu Katalogs. 9. Skarabeju dzimta (Scarabaeidae). Latvijas Entomologs, 34: 5-27. (In Latvian: Catalogue of the Insects of Latvia. 9. The family Scarabaeidae) [page 18].

In consequence, it is: *Scarabaeus serotinus* Panzer, 1799 (currently *Nobius serotinus*) (published no later than June 1799) (**nomen protectum**), valid name.

= *Scarabaeus minutus* Herbst, 1783 (**nomen oblitum**).

= *Aphodius serotinus* Creutzer, 1799 (published on 31 December 1799).

#### SUMMARY

The name *Scarabaeus serotinus* Panzer, 1799 (currently *Nobius serotinus*), currently in prevailing use as a valid name, is a junior synonym of the unused name *Scarabaeus minutus* Herbst, 1783. The rules set up in Article 23.9 of the International Code of Zoological Nomenclature are applied herein in order to obtain a reversal of precedence such that the younger name is given priority, as a **nomen protectum**, over the older name (**nomen oblitum**). Moreover, the priority of *Scarabaeus serotinus* Panzer, 1799 over *Aphodius serotinus* Creutzer, 1799 is established.

#### RIASSUNTO

Il nome *Scarabaeus serotinus* Panzer, 1799 (attualmente *Nobius serotinus*), ad oggi usato correntemente come nome valido, risulta sinonimo juniore di *Scarabaeus minutus* Herbst, 1783. Vengono dunque applicate le norme previste dall'articolo 23.9 del Codice Internazionale per la Nomenclatura Zoologica al fine di ottenere un'inversione di priorità a vantaggio del nome più recente (considerato **nomen protectum**) rispetto al nome più antico (considerato **nomen oblitum**). Si stabilisce inoltre la priorità di *Scarabaeus serotinus* Panzer, 1799 su *Aphodius serotinus* Creutzer, 1799.

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