Case 3369

Bothynus Hope, 1837 (Insecta, Coleoptera, Scarabaeidae): proposed conservation of usage by designation of Scarabaeus ascanius Kirby, 1819 as the type species

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Abstract. The purpose of this application, under Article 70.3.2 of the Code, is to conserve the current usage of the generic name Bothynus Hope, 1837 for well-known scarab beetles of the family Scarabaeidae (subfamily Dynastinae) by designation of Scarabaeus ascanius Kirby, 1819 as the type species. The type species of Bothynus is at present Geotrupes cuniculus Fabricius, 1801, based on a misidentification. It has long been recognized that the species involved in Hope’s misidentification of G. cuniculus is indeterminable. It is proposed that Scarabaeus ascanius Kirby, 1819 is designated as the type species.

Keywords. Nomenclature; taxonomy; Coleoptera; Scarabaeidae; Bothynus; Scarabaeus ascanius; Dynastinae; Pentodontini.

1. Hope (1837, p. 95) established the genus Bothynus and included two species, Geotrupes cuniculus Fabricius 1801 (p. 20) and Scarabaeus ascanius Kirby, 1819 (p. 399). He explicitly designated G. cuniculus Fabricius, 1801 as the type species of the genus Bothynus. However, Hope’s description of the genus Bothynus is inconsistent with the true G. cuniculus, and it is obvious that Hope used this name based on a misidentification (see Burmeister, 1847, p. 117; Lacordaire, 1856, p. 413; Prell, 1936, p. 185; Endrödi, 1969, p. 108). The true G. cuniculus is a well-known species from Cuba, Hispaniola, Puerto Rico, Trinidad, and northeastern South America and is currently classified in the genus Tomarbus Erichson, 1847. Additionally, it has long been recognized that the species involved in Hope’s misidentification of G. cuniculus is undeterminable because of Hope’s vague description (Lacordaire, 1856; Endrödi, 1969) and the lack of any voucher specimens in the Hope collection at Oxford University (Endrödi, 1969; D. Mann, personal communication to BCR).

2. Lacordaire (1856, p. 413) recognized that the type species of Bothynus (Hope’s concept of G. cuniculus) was indeterminable and proposed S. ascanius as the type species instead. Although this action is not valid under the Code, it has been adopted by practically all taxonomists who have dealt with Bothynus since 1856 (e.g. Bates, 1888, p. 319; Arrow, 1937, p. 40; Blackwelder, 1944, p. 255; Endrödi, 1969, p. 107;

3. The prevailing usage of *Bothynus* is not consistent with the true *G. cuniculus* as the type species but is consistent with *S. ascanius* as the type species. To apply the rules of the Code and begin using the true *G. cuniculus* as the type species is undesirable because this was not the intent of Hope when he erected the genus, and it would upset the current usage of both the dynastine genera *Bothynus* and *Tomarus* along with the more than 50 species within both genera. Although this is a case of a misidentified type species, the problem cannot be remedied using Article 70.3.2 because the taxonomic species actually involved in the misidentification (Hope’s concept of *G. cuniculus*) cannot ever be reliably determined, and the Commission’s ruling is needed.

4. The International Commission on Zoological Nomenclature is accordingly asked:

1. to use its plenary power to set aside all fixations of type species for the nominal genus *Bothynus* Hope, 1837 before that by Lacordaire (1856);
2. to place on the Official List of Generic Names in Zoology the name *Bothynus* Hope, 1837 (gender: masculine), type species *Scarabaeus ascanius* Kirby, 1819, as ruled in (1) above;
3. to place on the Official List of Specific Names in Zoology the name *ascanius* Kirby, 1819, as published in the binomen *Scarabaeus ascanius* (specific name of the type species of *Bothynus* Hope, 1837, as ruled in (1) above).

References


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Comments on this case are invited for publication (subject to editing) in the Bulletin; they 
should be sent to the Executive Secretary. I.C.Z.N., Natural History Museum, Cromwell 
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