A revision of the African species of Odontolochini Stebnicka & Howden, 1996 (Coleoptera: Scarabaeidae: Aphodiinae)

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Abstract

The taxonomic position and synonymy of 11 native afrotropical species of Odontolochini Stebnicka & Howden, 1996 are discussed and re-descriptions are provided. Lectotypes are here designated for Odontolochus sulcatus Endrödi, 1964 and Loeblietus sulcatus Endrödi, 1979. The genus Loeblietus Endrödi, 1973 is formally synonymized with Odontolochus Schmidt, 1916 and seven new species level synonyms are proposed: Odontolochus chevalieri Paulian, 1942 syn. n., O. parcepunctatus Petrovitz, 1956 syn. n., O. sulcatus Endrödi, 1964 syn. n., and Loeblietus sulcatus Endrödi, 1979 syn. n. are found to be junior synonyms of O. raffrayi Paulian, 1942. Odontolochus granulipennis Petrovitz, 1956 syn. n. and O. heyrovskyi Balthasar, 1963 syn. n. are considered conspecific with O. spinicollis (Harold, 1871) and Odontolochus elgonensis Balthasar, 1961 syn. n. conspecific with O. oberthueri (Clouët, 1900). The name Anodontolochus Paulian, 1942 is determined to be unavailable as no type species was designated with the original description. A key to the 11 species of Odontolochus is provided, sexual dimorphic characters are described and illustrated for the first time, and a general diagnosis of the tribe on the world basis is included.

Key words: Scarabaeidae, Aphodiinae, Odontolochini, lectotypes, synonymy, equatorial Africa

Introduction

The relatively small tribe Odontolochini (Scarabaeidae: Aphodiinae) is noteworthy because of its apparent rarity, strikingly peculiar body form, and widely disjunct global distribution. The tribe currently includes seven genera with 25 species distributed in Australia (Stebnicka & Howden 1996), South America (Stebnicka 2003, Stebnicka & Galante 2007) and Africa (Endrödi 1964, 1967, 1971, 1973). Skelley (2007) summed up the present state of knowledge of the Neotropical Odontolochini in the context of the worldwide fauna of the tribe. Stebnicka (2009) transferred a single Asian species to the Eupariini that was long considered to be in the tribe Odontolochini.

While identifying and comparing the odontolochine specimens among materials from various collections, I found that African taxa are misinterpreted and need a careful revision. Previous interpretation of defining characters of particular species proved to be questionable with no reference to the existing, name-bearing types. It appeared necessary to revise these taxa in order to provide a reliable means of identification, to stabilize nomenclature through lectotype designations, and to improve the published record of species distributions. As a result of the present study, the total number of 18 names used for African Odontolochini decreases to 11 valid species names all placed in the genus Odontolochus Schmidt. These species are concentrated in the equatorial zone and ranging from Ethiopia in the east to Senegal in the west.

Members of the tribe Odontolochini are nearly pantropical in distribution but are apparently absent from tropical Asia. As suggested by Stebnicka & Howden (1996), it is replaced in the mentioned area with the morphologically similar and seemingly related psammodine genus Odochilus Harold (Odochilinae sensu