Revision of the Neotropical genus *Alloraphes* Franz
(Coleoptera: Staphylinidae: Scydmaeninae)

PAWEŁ JAŁOSZYNSKI
Museum of Natural History, University of Wrocław, Sienkiewicza 21, 50-335 Wrocław, Poland. E-mail: scydmaenus@yahoo.com

Abstract

The Neotropical genus *Alloraphes* Franz belonging to the tribe Cyrtoscydmini is revised. *Alloraphes* is redefined based on a detailed morphological study, and *Parastenichnaphes myrmecophilus* (Franz) is transferred back to *Alloraphes*, where it was originally placed. *Alloraphes jamaicae* Franz, *A. peruanus* Franz, *A. lenkoi* Franz, *A. yucatani* Franz, *A. chiaapasensis* Franz and *A. myrmecophilus* Franz, stat. rest. are redescribed; *A. dentatus* sp. n. from Peru and *A. peckorum* sp. n. from Bolivia are described. *Alloraphes magnus* Franz and *A. bolivarensis* Franz are treated as species inquirendae pending further study. The placement of *Alloraphes magnus*, known from a single female only, remains unclear. The type material of *A. bolivarensis* was not found in the Franz Collection and the original description hardly allows for the species identification.

Key words: Coleoptera, Staphylinidae, Scydmaeninae, Cyrtoscydmini, *Alloraphes*, *Parastenichnaphes*, new species, revision, morphology, Neotropical

Introduction


Franz (1989) redefined the genera *Alloraphes*, *Parastenichnaphes* and *Stenichnaphes* mostly based on the structure of the aedeagus. *Alloraphes* and *Parastenichnaphes* share an interesting pumping apparatus of the median lobe, composed of a basally located membranous area (a diaphragm) with a lentiform median sclerotization that provides an attachment place for muscles extending distally and laterally and anchored in the rigid walls of the median lobe. This structure can be imagined as playing an important role during copulation to erect the copulatory piece by increasing the internal pressure. This is achieved by contraction of the muscles, which leads to retraction of the flexible membranous area and therefore a reduction of the internal volume of aedeagus. While a similar mechanism seems to be commonly utilized by Scydmaeninae (and other Staphylinoidea), the specific arrangement and shape of its components, especially the basal location of the diaphragm and the strongly sclerotized lentiform structure in the middle is known in Cyrtoscydmini only in *Alloraphes* and *Parastenichnaphes*. Interestingly, a similarly built device can be seen also in some Euthelini (e.g., Jałoszyński 2003). *Stenichnaphes*, a genus externally
Type material. Holotype: Brazil (São Paulo): ♀, three labels (Fig. 67): "Barueri, Sao Paulo / Brasij [sic!], lg. K. Lenko" with "No 10" on reverse side [white, printed; reverse handwritten in blue ink]; "Alloraphes / magnus / m. / det. H. Franz" [white, handwritten and printed]; "Holotypus" [red, handwritten] (NHMW).

Remarks. Alloraphes magnus is known from a single female collected in the southern part of Brazil (Fig. 68j). It differs from all species of Alloraphes in the pronotum without even traces of lateral marginal carinae or edges, different shape of the mesoventral intercoxal process and the presence of an additional median carina within the asetose impressions of mesoventrite (Fig. 26). All other characters agree with those of Alloraphes, but basing only on a single female specimen it is not possible to clarify the taxonomic placement of this interesting and unusually large (BL 1.25 mm) species. Examination of males and their genital characters may help solving this problem. Currently A. magnus should be treated as a species inquirenda, genus incertae sedis within Cyrtoscydmini, but certainly close to Alloraphes.

Acknowledgments

My thanks go to Harald Schilhammer (NHMW) for issuing a loan of specimens from the Franz Collection; Vasily Grebennikov (Canadian Food Inspection Agency, Ottawa, Canada) for sending me interesting specimens from his and Steward Peck's collection; and Anna Siudzińska (Wrocław University of Environmental and Life Sciences, Poland) for taking SEM images.

References

http://dx.doi.org/10.1007/978-3-662-24755-6
http://dx.doi.org/10.11646/zootaxa.3630.1.2