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Revision of the family Heterolatzeliidae (Diplopoda, Chordeumatida)

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Abstract

A new genus is established for a new diplopod species from Croatia: *Massarilatzelia dugopoljica* **n. gen, n. sp.**, which is described, thoroughly illustrated, and diagnosed. Two subspecies of the genus *Heterolatzelia* Verhoeff, 1897, *H. nivalis rupivaga* Verhoeff, 1899, and *H. nivalis absoloni* Attems, 1951 are synonymized and attributed to *H. nivalis* Verhoeff, 1897. Analysis of postembryonic development showed that in the representatives of the family Heterolatzeliidae the type of anamorphosis is teloanamorphosis. A key to genera and species of the family is presented, as well as an account of their geographic distribution.

Key words: Diplopoda, Heterolatzeliidae, *Massarilatzelia dugopoljica*, new genus, revision, endemism, biogeography, Croatia, Balkan Peninsula

Introduction

Representatives of the family Heterolatzeliidae Verhoeff, 1897 have been recorded only in the south and middle Dinarids on the Balkan Peninsula (Croatia, Bosnia and Herzegovina, and Montenegro). Most species are found in caves, but also under stones and in the deep soil layers.

The genus *Heterolatzelia* was erected by Verhoeff (1897) for the species *Heterolatzelia nivalis* Verhoeff, 1897, from Mt. Bjelašnica (Bosnia and Herzegovina). Two years later, Verhoeff (1899) described a new subspecies, *H. nivalis rupivaga* Verhoeff, 1899, from one cave on Mt. Jablanica (Bosnia and Herzegovina) (without assignation of the cave name). Attems (1904) described a new species, *H. silvatica* Attems, 1904, and created a new subgenus *Fagina* Attems, 1904. Later (Attems 1926), *Fagina* was elevated to full genus and became the type of a new family Faginidae, 1926. However, Mauriès (2003) allocated this genus to the family Neoatractosomatidae Verhoeff. Attems (1951, 1959) described subspecies *H. nivalis absoloni* Attems, 1951, from a cave on the border between Montenegro and Bosnia and Herzegovina (without cave name). Interestingly, Gulička (1968) described two species from Mt. Durmitor (Montenegro): *H. durmitorensis* Gulička, 1968 (from the Ledena Pećina Cave), and *H. cornutum* Gulička, 1968 (from leaf-litter near Crno Jezero Lake, just few kilometers from Ledena Pećina Cave).

Verhoeff (1910) proposed the family Heterolatzeliidae with two subspecies from Bosnia and Herzegovina (*H. nivalis nivalis*, and *H. nivalis rupivaga*). Attems (1959) kept Verhoeff's superfamily Haplomera, but added the family Heterolatzeliidae, although the representatives of this family have tarsal papillae on leg pairs 3–7. Strasser (1971) in his Catalogues of diplopods from Yugoslavia includes three species (*H. cornuta*, *H. durmitorensis*, and *H. nivalis*), and two subspecies (*H. nivalis rupivaga*, and *H. nivalis absoloni*) in the family Heterolatzeliidae. Hoffman (1979) retained the family level, and considered Heterolatzeliidae as a member of the superfamily Brannerioidea Cook, but noted the problematic validity of the species and subspecies and mentioned that this family includes three, or possibly only one valid species. Mauriès (1982) shared the opinion that the family Heterolatzeliidae possibly belongs to the superfamily Cleidogonoidea Shear. Mršić (1992) discussed the taxonomic position of the family Heterolatzeliidae, and as far as the structure of the anterior gonopods is concerned, shared Mauriès' (1982) opinion

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