



## A new species of the family Heterolatzeliidae from the Balkan Peninsula (Diplopoda, Chordeumatida)

DRAGAN Ž. ANTIĆ<sup>1,3</sup>, VLADIMIR T. TOMIĆ<sup>1</sup>, TONČI RAĐA<sup>2</sup>, LUKA R. LUČIĆ<sup>1</sup>,  
BORIS D. DUDIĆ<sup>1</sup> & SLOBODAN E. MAKAROV<sup>1</sup>

<sup>1</sup>Institute of Zoology, Faculty of Biology, University of Belgrade, 11000 Belgrade, Serbia

<sup>2</sup>Speleological Society “Špiljar”, 21000 Split, Croatia

<sup>3</sup>Corresponding author. E-mail: [dragan.antic@bio.bg.ac.rs](mailto:dragan.antic@bio.bg.ac.rs)

### Abstract

A new species of *Heterolatzelia* Verhoeff, 1897, *H. karlstrasseri* sp. n., is described from the Đatlo Cave in east Herzegovina. A brief discussion about the relationship between *H. karlstrasseri* sp. n. and *H. durmitorensis* Gulička, 1968 and a distribution map of the family Heterolatzeliidae are presented.

**Key words:** Heterolatzeliidae, new species, cave, Herzegovina.

In a recent revision of the family Heterolatzeliidae Verhoeff, 1897, Makarov *et al.* (2011) showed that this family includes three species: *Heterolatzelia nivalis* Verhoeff, 1897, *H. durmitorensis* Gulička, 1968 and *Massarilatzelia dugopoljica* Makarov and Rađa, 2011, with its distribution restricted to a small area of the Dinarids. In view of the relatively great diversity of millipedes on the Balkan Peninsula, we felt that some additional new heterolatzelids may possibly exist in certain isolated shelters in the Dinarids. Over the past few years, the third author (TR) extensively and intensively explored numerous caves, pits, and epigean habitats in the karst region of the Dinarids in order to confirm such an assumption. In one cave he collected a few small chordeumatids. After careful examination of the samples, we identified a species new to science belonging to the family Heterolatzeliidae. The discovery of this species from Herzegovina, between the ranges of *H. nivalis* and *H. durmitorensis* jibes nicely with the biogeographical pattern of Heterolatzeliidae distribution and supports the hypothesis of Makarov *et al.* (2011) that this family is of Dinaric origin, with the center of diversification in the inner Dinarids in Bosnia and Herzegovina.

### *Heterolatzelia karlstrasseri* Antić and Makarov, new species

Figs. 1–4

**Material examined.** Holotype: male from the Đatlo Cave (43°03'42.01"N, 18°29'40.87"E), Kobilja Glava, village of Korita, boundary of the municipalities of Bileća and Gacko, Bosnia and Herzegovina, collected on July 14, 2013 by T. Rađa (IZB, HTL HK 100-1). Paratypes: four juveniles, same data as holotype (IZB, HTL HK 100-2). The type material is deposited in the collection of the Institute of Zoology, Faculty of Biology, University of Belgrade, Serbia (IZB).

**Etymology.** In honor of the late Dr. Karl Strasser, one of the greatest European diplopodologists, whose contribution to our knowledge of the Balkan millipede fauna is invaluable.

**Description.** Body with 30 segments (including telson) in holotype male. Juveniles with 28 segments (including telson). Dorsal and ventrolateral side of metazonites brownish, prozonites, lateral keels, and anterior part of metazonites yellowish. Body length 12.64 mm (holotype male). Vertical diameter of the largest pleurotergites 0.92 mm (holotype male).

**Head** (holotype male): With five rows of 22 ocellae. Occipital axial suture short and clear. Labrum with three labral teeth, and with 5+6 labral and 2+2 supralabral setae. Ventral margins of stipes densely denticulated. Each stipe with one prominent anterior tooth with two setae. Gnathochilarium without any peculiarities. Promentum triangular; stipites with

oral side vs. absence of such connecting lamella; absence of small medial fimbriate processes on the inner edges of colpocoxites vs. presence of these processes; and ovoid vs. subquadrangular posterior gonopods.

### Acknowledgments

This work was supported by the Serbian Ministry of Education, Science, and Technology (Grant 173038).

### References

- Makarov, S.E., Ćurčić, B.P.M., Tomić, V.T., Rađa, T., Rađa, B., Ćurčić, S.B., Mitić, B.M. & Lučić, L.R. (2011) Revision of the family Heterolatzeliidae (Diplopoda, Chordeumatida). *Zootaxa*, 2994, 33–44.
- Mršić, N. (1992) *Biokoviella mauriesi* gen. nov., sp. nov. (Biokoviellidae fam. nov.), Macrochaetosomatinae subf. nov. (Anthogonidae) and superfamily Cleidogonoidea of the western Balkans (Craspedosomidea, Diplopoda). *Razprave IV. Razreda SAZU*, 33, 51–91.