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## ***Tetracanthella doftana* sp. nov. (Collembola, Isotomidae) from Romania, with a key to Carpathian *Tetracanthella* Schött, 1891**

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### **Abstract**

A new species of the *Tetracanthella pilosa* group is described from Romanian Carpathians. *T. doftana* sp. nov. is similar to *T. andalusiaca* Deharveng, 1987. They differ by the number of sublobal hairs, size of macrochaetae and distribution. A key to Carpathian *Tetracanthella* Schött, 1891 species is also given.

**Key words:** springtails, description, macrochaetotaxy

### **Introduction**

The genus *Tetracanthella* Schött, 1891 is a large taxon of springtails (Collembola) comprising 99 species (Bellinger *et al.* 2013), which inhabits mosses and lichens on rocks and tree trunks, but also stony soils and forest litter, mainly in the mountains (Potapov 2001). All of them live in the northern hemisphere, 7 in Nearctic (Christiansen & Bellinger 1998) and 92 in Palearctic (Deharveng 1987, Potapov 2001, Potapov & Deharveng 2005, Kaprus' & Tsalan 2009, Parisi 2007), 13 have been recorded from the Carpathians (Rusek 1977, Potapov & Kaprus' 1993, Kaprus' *et al.* 2006, Smolis & Skarżyński 2006, Fiera 2007, Sterzyńska *et al.* 2007, Dányi & Traser 2008a, b, Kaprus' & Tsalan 2009, Dányi *et al.* 2010, L'ubomír Kováč *in litt.*, Popa 2012). The aim of this work was to describe a new species of the *Tetracanthella pilosa* group from Romania and to give a key to Carpathian *Tetracanthella*.

### **Material and methods**

The specimens were cleared in lactic acid and KOH or Nesbitt's fluid (chloral hydrate, concentrated hydrochloric acid, distilled water), subsequently mounted on slides in arabic gum mixed solution (distilled water, arabic gum, glycerol, chloral hydrate), and studied using a Nikon Eclipse E600 and Axio Scope A1 Zeiss phase contrast microscopes. Figures were drawn with a camera lucida. In order to compare morphology of species related to *Tetracanthella doftana* sp. nov., the following material of *Tetracanthella andalusiaca* Deharveng, 1987 was examined: 2 paratypes on slides labelled "ECA5, Grazalema" deposited at the Museum of Natural History, Paris. Terminology for the description follows that given in Potapov (2001).