



## Redescription of *Friesea handschini* Kseneman, 1938 (Collembola, Neanuridae) with notes on intraspecific variability of the species

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### Abstract

Examination of *Friesea handschini* Kseneman, 1938 (Collembola, Neanuridae) specimens from the type locality and nearby regions of the Romanian and Ukrainian Carpathians has shown that the original description and redescrptions were inaccurate. Detailed and fully illustrated redescription of the species is given and chaetotaxy variability is discussed. A neotype is designated for the species. *Tetracanthella ksenemani* Nosek, 1964 found in samples with *F. handschini* is reported as new for Romania.

**Key words:** springtail, taxonomy, chaetotaxy variation, *Tetracanthella ksenemani*

### Introduction

Mistakes in descriptions, i.e. erroneously interpreted characters occur in taxonomical literature of springtails (Collembola) (for examples see Hopkin 1997: 91) from time to time. These may propagate and create newer misunderstandings which have to be clarified sooner or later. Even the most renowned researchers like Stach (e.g. 1949), would miss features on their specimens now and then. In cases when these mistakes refer to features of high taxonomical importance, this may lead to repeated description of the same biological species under another name based on actually non-existent differences. These synonymies can be avoided by examining closely related taxa's type materials prior to describing, however for different reasons this is often impossible. A similar situation almost occurred with *Friesea* Dalla Torre specimens collected in Romania, which proved to be however representatives of the species *Friesea handschini* Kseneman, 1938.

*F. handschini* was described from the Mt. Pip Ivan (that time "Pop Ivan") situated in the Northeastern Carpathians, on the Romanian-Ukrainian border. In the Romanian part of that region a collaborative research between the Hungarian Natural History Museum (HNHM) and the University Vasile Goldiș has been launched in 2004. This project enhanced our knowledge of the Collembola fauna of Maramureș County (Dányi *et al.* 2006, Dányi & Traser 2008) and yielded several *Friesea* specimens very similar to the species *Friesea handschini* ("*Friesea cf. handschini*" in Dányi *et al.* 2006). These specimens however showed some differences to the original and the subsequent descriptions of the species in certain characters. Further specimens from the type locality and the neighbouring area allowed us to evaluate these differences as intraspecific variations, i.e. as misinterpretations of characters in earlier descriptions of the species. A detailed and illustrated redescription is given to show the real features of the species and clear the characters erroneously documented before. Variability in chaetotaxy is reported here in detail as well, as some of the character states given in the original description occur actually very seldom in the species.