



<http://dx.doi.org/10.11646/zootaxa.4000.2.4>

<http://zoobank.org/urn:lsid:zoobank.org:pub:3425BE4D-4423-41B3-A9E1-A4DE936DE689>

## New record of the genus *Israelimeria* Weiner & Kaprus', 2005 (Collembola: Neanuridae: Pseudachorutinae) from Iran, with description of a new species

MASOUMEH ALIJANI<sup>1</sup>, MASOUMEH SHAYANMEHR<sup>1</sup>, DARIUSZ SKARŻYŃSKI<sup>2</sup>,  
AGATA PIWNIK<sup>2</sup> & ADRIAN SMOLIS<sup>2,3</sup>

<sup>1</sup>Department of Plant Protection, Sari Agricultural Science and Nature Resources University Sari, Mazandaran, Iran, Po. Box. 578

<sup>2</sup>Institute of Environmental Biology, University of Wrocław, Przybyszewskiego 63-77, 51-148 Wrocław, Poland

<sup>3</sup>Corresponding author

### Abstract

*Israelimeria persica* sp. nov. is described from Iran. The genus *Israelimeria* can be easily identified due to a reduction of the number of eyes and the complete absence of the postantennal organ and the furca. The new taxon, and also the second species of the genus, differs from *I. poliakovae* Weiner & Kaprus', 2005, known only from Judean Mts. in Israel, in size and shape of mandibles and many chaetotactic characters, especially number of setae in ocular area of the head, ventral tube, subcoxae "1" and microchaetae number in furcal area.

**Key words:** taxonomy, springtails, Asia

### Introduction

Members of the family Neanuridae have a very wide distribution, and they are found on all continents including Antarctica (Hopkin 1997). The family is also one of the largest and most species-rich among Collembola, with more than 1500 described species to date which constitute nearly one fifth of the world fauna of springtails (Bellinger *et al.* 2015). It is interesting to note that the most spectacular and largest living springtails, the species of the genus *Holacanthella* Börner, 1906, belong to this family. These species, which can reach almost 2 cm in length, are sometimes called "giant" springtails and are endemic to New Zealand (Stevens *et al.* 2007). Regarding the suprageneric classification of the family, Neanuridae is currently divided into six subfamilies: Frieseinae, Neanurinae, Pseudachorutinae, Morulininae, Caputanurinae and Uchidanurinae. Among them, the two last subfamilies comprise relatively small numbers of species that are distributed in restricted areas: East and Southeast Asia and Australia (Najt & Weiner 1992, Stevens *et al.* 2007, Wu & Yin 2007, Deharveng *et al.* 2011). Members of the other aforementioned taxa: Frieseinae, Neanurinae, Pseudachorutinae and Morulininae seem to be very frequent and common in Western Palearctic. Nevertheless, there are also many areas where the knowledge of the family is still fragmentary or in an initial stage.

Investigations of springtails in Iran have distinctly blossomed in recent years (Arbea & Kahrarian 2015, Kahrarian *et al.* 2013, Mayvan *et al.* 2015, Shayanmehr *et al.* 2013, Smolis *et al.* 2012). Up to date, 9 genera and 15 species of Neanuridae are known from Iran and the family constitutes more than 15 per cent of Collembola fauna in the country (Shayanmehr *et al.* 2013). However, considering the size of the country and its environmental differentiation, the present state of knowledge on Iranian Neanuridae seems to be underestimated and surely far from complete. For comparison, in a well-studied country like Poland, with an area five times smaller than Iran, 62 Neanuridae species classified into 14 genera are recorded (Sterzyńska *et al.* 2007).

In 2013, the first author collected a few specimens of Pseudachorutinae in northern Iran and sent the material to Poland for identification. The analysis of this material reveals that the specimens can be classified to the monotypic and recently described genus *Israelimeria* Weiner & Kaprus', 2005. In addition, the comparison of these individuals and the type material of *I. poliakovae* Weiner & Kaprus', 2005, showed that they represented a