



## The genus *Folsomides* Stach (Collembola, Isotomidae) in Kermanshah Province (W Iran) with the description of two new species

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### Abstract

The genus *Folsomides* Stach, 1922 is represented by four species in the Iranian fauna, two of which are new to the science. *Folsomides halshinicus* **sp. nov.** and *Folsomides subvinosus* **sp. nov.** are found in Kermanshah Province (Western Iran). The new species belong to the *Folsomides angularis* (Axelson, 1905) group and they are distinguishable from other congeneric species by the macrochaetotaxy (11/22233 macrochaetae on thoracic II to abdominal V tergites) and the number of chaetae on dens. A table with the diagnostic characters for the identification of Iranian species of *Folsomides* is given. Some figures of *F. vinosus* Fjellberg, 1993 from Canary Island was given after study of type specimens.

**Key words:** *Folsomides halshinicus*, *Folsomides subvinosus*, species list, taxonomy, Iran

### Introduction

The first record of the *Folsomides* genus of the Iranian fauna was *Folsomides parvulus* Stach, 1922, a common cosmopolitan species, listed for the North of Iran by Cox (1982) and Sari regions (Northern Iran) by Yahyapour (2012). Later *F. marchicus* (Frenzel, 1941) was recorded from Kermanshah areas (Western Iran) (Kahrarian *et al.* 2012, Kahrarian & Arbea 2013).

During a recent study of the Collembola from Kermanshah areas, we found some specimens of this genus which belonged to *F. parvulus*, *F. marchicus* and two new species that are described and illustrated herein.

### Material and methods

Samples of soil and leaf litter were collected in various localities and extracted into 75% alcohol by the Berlese-Tullgren funnels. Collembola specimens were sorted and mounted under slides in Hoyer's solution.

**Abbreviations used.** Abd—abdominal tergum, Ant—antennal segment, ms—microsensillum, PAO—postantennal organ, SA, M and L—subaxial, median and lateral macrochaetae on thoracic and abdominal tergum, Th—thoracic tergum.

The terminology (types of macrochaetotaxy) used in the descriptions follows Fjellberg (1993).

**Material deposit.** IAUK—Kermanshah Branch, Islamic Azad University; JIAP—Private collection of J.I. Arbea (Spain).

### Results

The genus *Folsomides* from Kermanshah Province (Western Iran)—species list

**Discussion.** As the previous new species, *Folsomides subvinosus* **sp. nov.** belongs to the species group of *Folsomides angularis* (Axelson, 1905) and also have lost several ms (10/001). Main differences between *F. subvinosus* **sp. nov.** and these species are summarized in Table 4. The new species is most similar to *F. vinosus*, but easily separated by the dorsal macrochaetotaxy; The new species has 22333 macrochaetae on Abd I–V, but *F. vinosus* has 11133 abdominal macrochaetae (Fig 3 vs 5); these species also differ in the shape of dorsal sensilla on Abd V, lower sensilla longer than upper ones in *F. subvinosus* **sp. nov.** and lower sensilla equal in length to upper ones in *F. vinosus*.

**Etymology.** Its name reflects the similarity to *F. vinosus*.

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