



A new species of *Folsomia* from mofette fields of the Northwest Czechia (Collembola, Isotomidae)

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Abstract

Folsomia mofettophila **sp. nov.** is described from cold, volcanic gas vents (mofettes) in the Northwest Bohemia (Czech Republic). The species is characterized by large post-antennal organ and combines characters of *F. bisetosa* Gisin and *F. kuznetsovae* Potapov & Taskaeva.

Key words: *Folsomia mofettophila* **sp. nov.**, key to *F. bisetosa*-complex, mofette fields

Introduction

During the field studies (May, September 2008, March 2009) at mofette sites of Plesna Valley (NW Bohemia, Czech Republic) we studied collembolan communities at transects of 3 different CO₂ levels (0.1%, 20–30%, and 100%). Among the recorded species, there was one new *Folsomia* species closely related to *Folsomia bisetosa* Gisin, 1953 which we describe in the present paper.

Material and methods

The soil sampling was made with a soil corer (4 cm diameter, 0–5 cm, 50 cm³). The samples were stored in cool boxes. The extraction was carried out next day in a laboratory (Görlitz) in Berlese devices. Above all 62 samples from the Hartousov meadow were taken (all transects).

Abbreviations. PAO—Post Antennal Organ, Abd. I–VI—abdominal segments, Ant. I–IV—antennal segments, Th.I–III—thoracic segments.

Folsomia mofettophila **sp. nov.**

Figs 1–8, Tab. 1–2

Type locality. NW-Czechia, Bohemia, 12°, 27′, 46″ E, 50°, 07′, 59″ N, Plesna valley, Hartousov meadow (vegetation mainly *Bistortia officinalis*, *Deschampsia cespitosa* and *Festuca ovina*), 423 m a.s.l., soil core sample (reduktosol, 0–5cm), 30.ix.2008, leg. H.-J. Schulz.

Type material. Holotype: female on slide (deposited at the Senckenberg Museum of Natural History Görlitz; 4 paratypes on slides, 30.ix.2008, deposited in Görlitz (Senckenberg Museum of Natural History), 3 paratypes on slides, 14.v.2008, deposited in Moscow (Moscow State Pedagogical University, Department of Zoology and Ecology), 3 paratypes on slides, 25.iii.2009, deposited in Görlitz, all paratypes from the same location, leg. H.-J. Schulz.