

A new species of *Polydiscia* (Acari, Prostigmata, Tanaupodidae) with reference to its host: a new species of *Deuterosminthurus* (Collembola, Symphypleona, Bourletiellidae)

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Abstract

During the sampling campaign to describe the Iberian fauna of Collembola, an undescribed species of the family Bourletiellidae living on *Genista hispanica* L. was found with parasitic mites. The attached parasitic mites were identified as the larval instar of a new species of *Polydiscia*, a prostigmatid mite of the family Tanaupodidae Thor, 1935. The genus was previously cited in Austria. The Collembola, *Deuterosminthurus bisetosus* **sp. nov.**, which was found in distant localities on the Iberian Peninsula, and *Polydiscia deuterosminthurus* **sp. nov.**, are both here described. Both species were found together on *Genista* for three consecutive years. The abundant material obtained has allowed us to study both species with SEM (Scanning Electron Microscopy), and show characteristics in greater detail than has been possible with light microscopy.

Key words: Parasitic mite, *Polydiscia*, Tanaupodidae, Collembola, Bourletiellidae, *Deuterosminthurus*, new species

Introduction

The Collembola are considered one of the most abundant groups of Hexapoda as well as one of the most ancient, their systematics, taxonomy and ecology have been widely worked, but there still many species to describe and autoecological studies to be performed. Acari on Collembola have been reported in a few papers: trombidid larvae on *Entomobrya nivialis* (L.) and *Salina celebensis* Schaeffer (Entomobryidae) (Handschin, 1926), phoretic acarid and saptroglyphid hypopi on *Sminthurus fuscus* (L.) (Sminthuridae) (Waldorf, 1974), *Erythrites* sp. nr. *womersleyi* (Southcott, 1946) from two Australian species of the genus *Corynephoria* (Sminthuridae) (Greenlade & Southcott 1980), and *Cheyletus eruditus* (Schr.) on unnamed Collembola in Poland (Haitlinger, 1991).