



Four new *Pseudosinella* (Collembola: Entomobryidae) from La Rioja, Spain

JOSÉ C. SIMÓN BENITO¹ & JOSÉ G. PALACIOS-VARGAS²

¹Comisión Docente de Zoología, Departamento de Biología, C/Darwin, 2, Universidad Autónoma de Madrid, 28049 Madrid, Spain.
E-mail: carlos.simón@uam.es

²Laboratorio de Ecología y Sistemática de Microartrópodos, Dpto. Biología, Facultad de Ciencias, UNAM, 04510 México, D. F., México. E-mail: jgpv@ph.fciencias.unam.mx

Abstract

Four new species of *Pseudosinella* from La Rioja, Spain are described and illustrated. They are *P. logrognensis* **sp. nov.**, *P. leivaensis* **sp. nov.**, *P. gutierrezae* **sp. nov.** and *P. torcuatoensis* **sp. nov.**, which were found in soils of different field crops. Identification keys are given for some of them, based on the chaetotaxy or the number of eyes, in order to compare the new species with those having 5 + 5 eyes.

Key words: Collembola, Entomobryidae, *Pseudosinella*, Spain, La Rioja, new species

Introduction

Even though the genus *Pseudosinella* has been well studied in the Iberian Peninsula, new species continue to be found. In a recent study of agricultural soils from La Rioja Region of Spain, we found four species, which were identified as new thanks to the electronic keys posted on the web page by Christiansen (2007).

For the description of the new species and the keys, we use the system of Gisin (1967) and we give the formula of Christiansen *et al.* (1990) and the same abbreviations as we used in our recent contribution to this genus (Simón Benito & Palacios-Vargas 2007).

Species description

Pseudosinella logrognensis **sp. nov.**

Figs 1–4, Table 1

Material examined. Spain, La Rioja, Leiva: male (holotype) in the sample of ecologic horticultural 4LEHE4, 20.i.2004; male (paratype) from a sample of soil of conventional fruit plantation 4LEFRC1, 15.xi.2003; two specimens (paratypes) from a sample of soil of conventional fruit plantation 4LEFRC4, 15.xi.2003; one specimen (paratype) from a sample of soil of conventional fruit plantation 4LEFRC5, 15.xi.2003. Santo Domingo: one specimen from the sample of ecologic horticultural 4STHE3, 12.v.2003. C. Gutiérrez Martín coll. All the specimens on slides in the laboratory of Zoology of the Universidad Autónoma de Madrid, Spain.

Etymology. This species is named after Logroño, capital of La Rioja.

Description. Length 1.25–1.3 mm. Body without pigment, 5+5 eyes.

Antenna without pigment or scales, its proportion with head 1.2. Ant. IV without apical bulb. Apical organ of third antennal segment with two straight short rods, easy to observe.