



## A new *Denisiella* Folsom and Mills, 1938 (Collembola: Sminthurididae) from Colombia

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### Abstract

*Denisiella colombiana* sp. nov. is described and illustrated from Colombia. Males and females are studied. Two keys for the species of the world are included, one for males and one for females.

**Key words:** new species, sexual dimorphism, chaetotaxy

### Introduction

*Denisiella* Folsom and Mills, 1938—a genus of the family Sminthurididae—is remarkable because of its extraordinary sexual dimorphism. Till now only eight valid and two unnamed species (Bellinger *et al.* 1996–2008) belong to this genus.

The fauna of Collembola from Colombia is very poorly known. The knowledge base was broadened through a recent study by the senior author on species associated with agricultural soils (Ospina *et al.* 2004). Beyond that, there is only one contribution to taxonomy (Palacios-Vargas & Peñaranda 2005).

The eight named species of *Denisiella* from the world are: *D. lithophila* Snider, 1988 (from United States of America); *D. maesorum* Palacios-Vargas, 1995 (Nicaragua), *D. nayarita* Palacios-Vargas & Bernava, 1999 (Mexico), *D. ramosa* (Folsom, 1932) (Hawaii), *D. seurati* (Denis, 1925) (French Polynesia), *D. serroseta* (Börner, 1908) (South Africa) and *D. sexpinnata* (Denis, 1931), (Costa Rica) and *D. diomedesi* (Panama), which is the most recent description by the junior author (Palacios-Vargas, 2007).

A new species of *Denisiella* based on Colombian specimens of both sexes is described here. Chaetotaxy of male antenna follows the nomenclature of setae established by Massoud and Betch (1972).

**Abbreviations:** Ant. I–IV, antennal segments I–IV.

### *Denisiella colombiana* sp. nov.

Figs 1–14

**Description. Male.** Length 600 µm (n = 12). Body dark purple and furcula almost transparent. Legs and antennae with purple pigment at their bases. 6 + 6 pigmented eyes.

Antennae classically bent as in all Sminthurididae males, elbowed between Ant. II and III. Ratio of antennal segments about 1:1.1: 0.47:0.69. Ant. I with 7 setae, two of them very small and thin. Ant. II with 20