



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