



A new species of *Denisiella* (Collembola: Sminthurididae) from Panama and new records for *D. sexpinnata* (Denis, 1938)

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Abstract

Denisiella diomedesi sp. nov. from Panama is described and illustrated based on male specimens. It is close to *D. maesorum* from Nicaragua, but possesses a nasal organ. New localities for *D. sexpinnata* (Denis, 1931) from Mexico and Nicaragua are provided.

Key words: *Denisiella diomedesi* n. sp., sexual dimorphisms, nasal organ

Introduction

The family Sminthurididae is composed of minute Collembola characterised by a sexual dimorphism in which the antennae of males are modified for clasping the female antennae during the sperm transfer. The modifications are on antennal segments II and III but the degree of modification varies among the different genera.

Close to 150 species have been described in the Sminthurididae in 10 genera (Bellinger *et al.* 1996-2007). Four of the genera are monospecific, *Boernerides*, *Debouttevillea*, *Sinnamarides* and *Sminthuridia*. Two genera include many described species, *Sminthurides* (62) and *Sphaeridia* (65). *Pygicornides* and *Yosiides* have two species each, *Stenacidia* has three and *Denisiella* has seven named taxa and two undescribed species.

Only the genera *Sminthurides*, *Sphaeridia*, *Denisiella* and *Sinnamarides* are known from the Neotropical Region with 11, 14, four and one species respectively. The collembolan fauna of Panama is very poorly known (Palacios-Vargas 1992), and only recent field work by Castaño-Meneses *et al.* (2006) has provided useful material from this country.

The seven species of *Denisiella* known from the world are, *D. lithophila* Snider, 1988, *D. maesorum* Palacios-Vargas, 1995; *D. nayarita* Palacios-Vargas & Bernava, 1999; *D. ramosa* (Folsom, 1932), *D. seurati* (Denis, 1925), *D. serroseta* (Börner, 1908) and *D. sexpinnata* (Denis, 1931).

In this paper a new species of *Denisiella* is described based on male specimens collected by B. Zachrisson and kindly given to me by Dr. Gabriela Castaño-Meneses. The new species is of interest because of the presence of characters that have not before been found in the genus and so will contribute to future studies examining the phylogenetic relationships between genera of Symphypleona.