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Two new species of *Willowsia* from New Caledonia (Collembola: Entomobryidae)

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Abstract

The genus *Willowsia* is reported for the first time from New Caledonia. Two new species, *W. neocaledonica* **sp. nov.** and *W. nigra* **sp. nov.**, are described based on material deposited at the Muséum National d'Histoire Naturelle, Paris. The new species can be distinguished from other members of the genus by coloration and characters of the dorsal chaetotaxy of the head and terga.

Key words: colour pattern, scales, chaetotaxy

Introduction

Collembola from New Caledonian have been the subject of many taxonomic studies which mostly dealt with Poduromorpha, the most recent one being a paper by Weiner *et al.* (2009). Symphypleona and Entomobryomorpha, the two other large orders of Collembola, have been much less studied. In particular, few genera and species of Entomobryidae, the largest family of Collembola, have been described so far (Yoshii, 1989; Zhang *et al.*, 2014), giving a strongly underestimated figure of its diversity in the island. The widespread genus *Willowsia* has not been reported from the island, its closest known location being in Australia where it is represented by a single species, *W. abrupta* Schött, 1917 (Zhang *et al.*, 2011). In this paper, we describe two new species of *Willowsia* collected in epigeal habitats of the island: *W. neocaledonica* **sp. nov.** and *W. nigra* **sp. nov.**

Material and methods

Specimens were mounted in Marc André II solution after clearing in lactic acid, and were studied using a Leica DMLB microscope. Photographs were taken with a ProgRes camera mounted on a Leica DMLB microscope and were enhanced with Photoshop CS2/PC (Adobe Inc.). Labial chaetae are named following Gisin (1967). Tergal chaetae are designated following Szeptycki (1979). The number of macrochaetae is given by half-tergite in the descriptions. Material is deposited in the collections of the Museum National d'Histoire Naturelle (MNHN), Paris, France, and in the Department of Entomology, College of Plant Protection, Nanjing Agricultural University (NJAU), Nanjing, China.

Abbreviations: Th.I–III—thoracic segment I–III; Abd.I–VI—abdominal segment I–VI; Ant.I–IV—antennal segment I–IV; mac—macrochaeta, -ae; mic—microchaeta, -ae; ms—microsensillum, -a; sens—ordinary S-chaetae on terga.

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