# *Willemia unispina* sp. n. a new species of Collembola (Hypogastruridae) from West Norway

# Arne Fjellberg

Fjellberg, A. 2007. *Willemia unispina* sp. n. a new species of Collembola (Hypogastruridae) from West Norway. Norw. J. Entomol. 54, 33-35.

A new species of *Willemia* with one anal spine, granulated post antennal organ and exceptionally swollen dorsal sensilla was discovered in soil in lush deciduous forest in a scree slope near Bergen, West Norway. The new species is described and figured. It is suggested that the species may belong to a western element in the Nordic fauna.

Key words: Collembola, Willemia, unispina, new species, Norway.

Arne Fjellberg, Museum of Zoology, Lund University, Helgonavägen 3, S-223 62 Lund, Sweden. E-mail: arne.fjellberg@zool.lu.se

### INTRODUCTION

The genus Willemia has about 35 species of worldwide distribution, of which 17 are Palaearctic (Thibaud et al. 2004). Six species are present in the Nordic countries (Fjellberg 1998). Most species are well marked and characterized by either two or none anal spines. During field work along the coast of West Norway in the summer of 1999, one specimen of a remarkable form with only one anal spine – sitting exactly in the axial line on tip of abd.6 - was discovered. At first it was thought to be an aberrant form of one of our common species, but the presence of secondary lobes in the post antennal organ and very swollen dorsal sensilla on thorax and abdomen triggered another visit to the actual locality the next year. Fifteen specimens, present in several samples, were all morphological similar and left no doubt that it was an undescribed species.

# DESCRIPTION

Type material (all in slides deposited at Tromsø Museum, Dept. of Zoology, Tromsø). Holotype:

Female from "Norway. **HOY**: Os. Hattvik, 1.XI.2000. Rich slope, hardwood forest. A.Fjellberg 040.00". - Paratypes: 14 specimens in 8 slides from the same sample.

#### Willemia unispina sp. n.

Full-grown specimens 0,5 mm. General habitus typical for the genus. PAO with 4 large lobes, each with an irregular secondary lobation of ridges and papillae (Figure 1A). Labrum with 5-5-4 setae, prelabral setae 2. Mandibles and maxillae unmodified. Labial palps with 5 papillae (A-E), 4 guards and 5 proximal setae. Basomedian field with 4 setae, basolateral with 5. Ventral side of head with 3+3 postlabial setae. On dorsal side of head the anterior seta a<sub>0</sub> is present in adults, absent in juveniles/subadults. Apical organ of antenna 3 with two small exposed sensilla and two slender guards set widely apart. Fourth antenna with pointed and curved sensilla, of which C, D and F are thicker than others (Figure 1E). Dorsal chaetotaxy of thorax and abdomen as Figure 1C. Lateral sensilla on th.2-3 dagger-like, the p<sub>4</sub> sensilla on th.2-abd.3 strongly pear-shaped. On