

***Xenyllodes psammo* sp. n. and *Halisotoma arenicola* sp. n. Two new Norwegian species of psammophilic Collembola (Odontellidae, Isotomidae)**

ARNE FJELLBERG

Fjellberg, A. 2009. *Xenyllodes psammo* sp. n. and *Halisotoma arenicola* sp. n. Two new Norwegian species of psammophilic Collembola (Odontellidae, Isotomidae). Norwegian Journal of Entomology 56, 131–139.

Two new species, *Xenyllodes psammo* sp. n. and *Halisotoma arenicola* sp. n., are described from sand dunes and sandy foreshores along the southern coast of Norway. A summary of key characters for separating the world species of *Halisotoma* Bagnall, 1949 is given, as well as a key to the four European species. A new definition of *Halisotoma boneti* (Delamare, 1954) is given based on recent samples from the Black Sea, the Sea of Azov and the Canary Islands.

Key words: Collembola, Odontellidae, Isotomidae, *Xenyllodes*, *Halisotoma*, Norway

Arne Fjellberg, Mågerøveien 168, NO-3145 Tjøme, Norway. E-mail: arnecoll@gmail.com

Introduction

New field work along the sandy beaches in the counties Vest Agder and Rogaland in southernmost Norway during 2009 revealed a rich psammophilic Collembola fauna with several species recorded for the first time from Norway and, surprisingly, three species new to science. Two of these species are described in the present paper, the third is published elsewhere (Fjellberg in press).

Abbreviations. a, m, p: setae of the anterior (a), median (m) and posterior (p) row on thorax and abdomen; Abd.I–VI: abdominal segments; Ant.I–IV: Antennal segments; Cx: coxa; Fe: femur; ms: microsensillum; PAO: postantennal organ; RY: Rogaland, outer part; Scx: subcoxa; Th.I–III: thoracic segments; Ti.I–III: tibiotarsi of 1.–3. pairs of legs; Tr: trochanter; VAY: Vest Agder, outer part.

Genus *Xenyllodes* Axelson, 1903

The genus *Xenyllodes* is a small genus with only one known European species, *X. armatus*

Axelson, 1903. Four other species are known from the Neotropic and Nearctic regions: *X. ununguidentatus* Palacios-Vargas & Najt, 1985 (Mexico), *X. wapiti* Fjellberg, 1985 (Canada), *X. mohuitli* Vasquez & Palacios-Vargas, 1986 (Mexico), and *X. palaciosi* Mari Mutt, 1987 (Colombia). The type species of the genus, *X. armatus*, is also known from North America. The new species which is described below, is the only member of the genus having only 2+2 ocelli, apart from the Canadian *X. wapiti*. For separation from this species, see discussion below.

***Xenyllodes psammo* sp. n.**

(Figures 1A–E, 1G, 2A)

Type material. Holotype (preadult ♂, in slide) and 32 paratypes (2 in slide, 30 in alcohol) from Norway **RY**, Hå: Brusand (lat. 58,53063°, lon. 5,76665°) 10 September 2009, *Ammophila arenaria* (L.) roots in sand dunes at beach front, leg A. Fjellberg 9.315. All types are deposited in the Natural History Museum, Oslo (NHMO). Additional material: Several samples from sand dunes over a distance of about two kilometres