



***Skadisotoma*, a new genus of Isotomidae (Collembola) from Australia**

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Abstract

A new species and genus, *Skadisotoma inpericulosa*, is described from south-eastern Australia. It possesses some characters that are found in Tomoceridae, such as a long cylindrical dens that is medially bent and a mucro with at least six teeth of different sizes and three setae but in other characters it resembles an isotomid. In this it shows similarities to the Boreal genus *Mucronia* Fjellberg, but differs from it in the possession of spines on the dens and in some chaetotaxic characters.

Key words: *Skadisotoma inpericulosa* n. gen. n. sp., Great Dividing Range, Tomoceridae, alpine vegetation, cryptic species

Introduction

The collembolan fauna of Australia is still poorly known with just under 400 species described although it has been estimated that at least 2000 species occur on the continent (Greenslade 1991). This lack of knowledge is particularly true of montane regions where endemism is likely to be highest (Endo *et al.* 2014). The only publication so far on these collembolan faunas relates to the Snowy Mountains region near Mount Kosciusko where Greenslade (2002) recorded 45 species noting that the highest local endemism was found in subalpine grassland compared to subalpine woodland or alpine heath.

We describe here a new genus and species from mainly high altitude sites in south east Australia found in alpine heath, alpine meadow and *Eucalyptus* and *Nothofagus* forests. It is unusual in that it possesses characters typical of both the Isotomidae and the Tomoceridae.

Abbreviations. abd—abdomen, ant—antenna, blf—basolateral field, bmf—basomedial field, or—organite, prox—proximal setae, S setae—sensilla, th—thorax, PAO—postantennal organ, SAMA—South Australian Museum.

The characters used for the description and for diagnosing the new genus are those in common use for Isotomidae as described in Potapov (2001) and Fjellberg (2007).

***Skadisotoma* gen. nov.**

Type species: *Skadisotoma inpericulosa* sp.nov.

Diagnosis of genus. Habitus typical of Isotominae except for dens with a median bend and long mucro with additional teeth and setae. Abd V and VI separate; ocelli 6 + 6; small round PAO with tendency to lobation; lamella 1 of maxilla elongate with expanded fan-shaped distal part; clavate tenent hairs absent; bothriotricha absent; abdomen V with 3 + 3 long S setae in row a; anterior face of manubrium with longish spines or spine-like setae; dens cylindrical, not tapering, with low dorsal crenulations in distal half, anteriorly with several irregular transverse