

Two new and unusual genera of millipedes (Diplopoda: Polydesmida) from Tasmania, Australia

ROBERT MESIBOV

Queen Victoria Museum and Art Gallery, Wellington Street, Launceston, Tasmania, Australia 7250;
mesibov@southcom.com.au

Abstract

Procophorella innupta n. gen., n. sp. (type species) and *P. bashfordi* n. sp., and *Paredrodesmus taurulus* n. gen., n. sp. (type species), *P. aceriendron* n. sp., *P. australis* n. sp., *P. bicalcar* n. sp., *P. monticolus* n. sp. and *P. purpureus* n. sp. are described. Both new genera are ‘head + 19 segments’ Polydesmida (head + 17 podous rings + 1 apodous ring + telson) with the uncommon pore formula 5, 7–18. *P. bicalcar* is unusual in having a long mesal process on the leg 1 prefemur and an epiproct divided into two large spurs, while leg 2 in *P. taurulus* has greatly inflated podomeres and a massive claw. Although *Paredrodesmus* and *Procophorella* are referable to the suborder Dalodesmidea Hoffman, 1977, their family placement is uncertain.

Key words: Diplopoda, Polydesmida, Tasmania, Australia

Introduction

The two genera of Polydesmida described here for the first time are apparently endemic to Tasmania. They are ‘dalodesmoid’ in having small, partly joined gonopod coxae completely withdrawn into a fairly large aperture, but the legs bear no sphaerotrichomes. I place the two new genera in the suborder Dalodesmidea Hoffman, 1977 without assigning them to a family.

Specimens were killed and preserved in 75–80% ethanol. Preliminary drawings on graph paper were made using material cleared in 60% lactic acid and viewed at 100 or 200x magnification through an eyepiece graticule. A Philips Electroscan ESEM 2020 operated in high-vacuum mode was used to examine preserved material which had been air-dried before sputter-coating with gold. SEM images were acquired digitally.

‘Male’ and ‘female’ in the text refer to stadium VII adults. Locality information is given as a locality name, a UTM grid reference (Australian Map Grid 1966, Grid Zone