

Article



New Australian hygrobatids (Acari: Hydrachnidia: Hygrobatidae), with the description of two new genera and three new species

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Abstract

Two new genera of the water mite family Hygrobatidae (Acari: Hydrachnidia) are described from Australia, *Ioannibates* **gen. nov.** and *Pseudoaustraliobates* **gen. nov.** In addition, three new species are described, *Ioannibates papillosus* **sp. nov.**, *Pseudoaustraliobates flindersi* **sp. nov.** and the second species of the genus *Declinobates* K.O. Viets, *D. tasmanicus*.

Key words: Acari, Hydrachnidia, Hygrobatidae, Australia, new species.

Introduction

Species of the water mite family Hygrobatidae make up a large part of the water mite fauna of rheophilic habitats of the Southern Hemisphere (Smit 2001, 2002, 2005). Genera richness of the Hygrobatidae is highest in the Neotropical region with 33 genera, followed by the Indo-Australian region with 24 genera (Di Sabatino *et al.* 2008). Within Australia, 17 genera are known, of which 14 are endemic to the Indo-Australian faunal region (Harvey 1998).

In this paper two new genera will be described, as well as the second species of the genus *Declinobates* K.O. Viets.

Material and methods

Unless stated otherwise, all material has been collected by the author. Specimens are lodged in the Western Australian Museum, Perth (WAM), the Tasmanian Museum and Art Gallery, Hobart (TMAG), the South Australian Museum, Adelaide (SAM) and the Zoological Museum of the University of Amsterdam (ZMAN).

The following abbreviations have been used: PI-PV for palp segments 1–5; IV-leg-4-6 for the fourth to sixth segments of fourth leg; a.s.l. above sea level; NP National Park.

Range measurements are for all specimens mentioned in the material examined. Lengths of palp and leg segments are dorsal lengths. All measurements are given in μm . The coordinates of locations given as latitude, minutes and seconds are taken from Google Earth, and are by approximation. Other coordinates are measured with a GPS on the spot itself.