



<http://dx.doi.org/10.11646/zootaxa.3956.1.3>

<http://zoobank.org/urn:lsid:zoobank.org:pub:C092A5F7-48C0-45D4-8DDD-6DBB543DC5DF>

The water mite genus *Procorticacarus* K.O. Viets in Australasia (Acari: Hydrachnidia, Hygrobatidae)

HARRY SMIT

Naturalis Biodiversity Center, P.O. Box 9517, 2300 RA Leiden, The Netherlands. E-mail: harry.smit@naturalis.nl

Abstract

The following new species are described: *Procorticacarus curtipalpis*, *P. kosciuszko*, *P. nasutus*, *P. neocaledonicus*, *P. neoprasadi*, *P. paulaae*, *P. quadriscutatus*, *P. queenslandicus*, *P. septentrionalis* and *P. wenlockensis*. The male of *Procorticacarus australicus* is described for the first time. Many new records are reported for Australia, with the first records of the genus from South Australia, Western Australia and the Northern Territory. Moreover, the genus is for the first time reported from New Caledonia. A key is given for all Australian species of the genus.

Key words: water mites, new species, Australia, New Caledonia

Introduction

Hygrobatidae are an important part of the water mite fauna of Australia. Of the 533 known species from Australia (Harvey 1998, www.watermite.org viewed March 7, 2015) 90 belong to the Hygrobatidae. One of the most species-rich genera of the latter family is *Procorticacarus* K.O. Viets, 1978, with 22 species described thus far (Cook 1986, Harvey 1998, Smit 2001, Pesic & Smit 2009). The genus *Procorticacarus* K.O. Viets, 1978 has an Australasian distribution and is known from Australia and New Guinea. Within Australia, the genus is thus far known from Tasmania, Victoria, New South Wales and Queensland only. In New Guinea eight species are known (Wiles 1990, 1994, Smit 2011). Thus far, no species were known from New Caledonia and New Zealand.

In this paper nine new species are described from Australia and one from New Caledonia, the latter being the first species for this island. Numerous new records are given, including the first records for South Australia, Western Australia and the Northern Territory. Finally, a key is given for all Australian species of the genus.

Material and methods

Unless stated otherwise, all material has been collected by the author. All non-type material is lodged in the Netherlands Centre for Biodiversity Naturalis, Leiden. Numbers are given as males/females/deutonymphs. The following abbreviations have been used: PI-PV = palp segments 1–5; Cxgl4 = coxoglandularium 4; Vgl–2 = ventroglandularium 2; I-leg-4–6 = fourth–sixth segments of first leg; asl = above sea level; NP = National Park; AMS = Australian Museum, Sydney; MNHN = Muséum national d'Histoire naturelle, Paris; NTM = Museum and Art Gallery of the Northern Territory, Darwin; QM = Queensland Museum, Brisbane; RMNH = Naturalis Biodiversity Center, Leiden; SMF = Senckenberg Forschungsinstitut und Naturmuseum, Frankfurt am Main; WAM = Western Australian Museum, Perth. Measurements of paratypes are given in brackets. All measurements are in μm , measurements of palp and leg segments are of the dorsal margins. Coordinates were obtained with a GPS. When no measurements were made or were not possible, coordinates are derived from Google Earth (given as degrees, minutes and seconds).