



## Australian *Arrenurus* (Acari, Hydrachnidia) with the description of eleven new species

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### Abstract

The following new species of the genus *Arrenurus* from Australia are described: *Arrenurus glaucus*, *A. hyalinus*, *A. grampiansensis*, *A. indentatus*, *A. kakadu*, *A. neogereckeii*, *A. niveensis*, *A. novaecambricus*, *A. pesici*, *A. pseudomargatellus* and *A. rotundicaudatus*. The female of *A. postmai* Smit is described for the first time.

**Key words:** Acari, Hydrachnidia, *Arrenurus*, new species, Australia

### Introduction

*Arrenurus*, with more than 800 known species the most speciose genus of the water mites, has a worldwide distribution and is found on every continent except Antarctica. From Australia 46 species and one subspecies are known thus far (Smit 1997, 1999, 2002, 2003a, b). This is a relatively low number compared to other regions of the world—e.g., from Europe almost 150 species are known (K.O. Viets 1978), and from South America 160 species (Rosso de Ferradás & Fernández 2005).

In this paper eleven new species are described collected from all over Australia. The female of *A. postmai* is described for the first time and many new records are given. The number of species will very likely increase in the future. In my collections numerous females are present without accompanying males, which could not be assigned to a known species. Describing new *Arrenurus*-species without males must be dissuaded.

### Material and methods

Coordinates were obtained with a GPS. When no measurements were made or were not possible, coordinates are derived from Geoscience Australia (<http://www.ga.gov.au/map/names/>) or Google Earth. Numbers are given as males/females/deutonymphs. The following abbreviations have been used: PI-PV = palp segment 1-5; D1-D4 = dorsoglandularia 1-4; L4 = lateroglandularium 4; I-leg-4-6 = fourth-sixth segments of first leg; AMS = Australian Museum, Sydney; NMV = Museum Victoria, Melbourne; NTM = Museum and Art Gallery of the Northern Territory, Darwin; QM = Queensland Museum, Brisbane; SAM = South Australian Museum, Adelaide; TMAG = Tasmanian Museum and Art Gallery, Hobart; WAM = Western Australian Museum, Perth; ZMAN = Zoological Museum of the University of Amsterdam. Measurements of paratypes are given in brackets. All measurements are in  $\mu\text{m}$ , measurements of palp and leg segments are of the dorsal margins. Third and fourth legs have usually many swimming setae, and this character is not repeated in the text.