



## Australian *Unionicola* (Acari: Hydrachnidia: Unionicolidae), with the description of two new subgenera and eight new species

HARRY SMIT

Zoological Museum, University of Amsterdam, Plantage Middenlaan 64, 1018 DH Amsterdam, The Netherlands.  
E-mail: smit.h@wolmail.nl

### Abstract

This paper deals with Australian *Unionicola* species, collected from all over the continent. Two new subgenera are described, *Vidrineatax* new subgen. and *Geikienicola* new subgen., as well as eight new species: *U. (Kovietstax) crassiseta* n. sp., *U. (Downesatax) curvipalpis* n. sp., *U. (Geikienicola) insolita* n. sp., *U. (Downesatax) latiseta* n.sp., *U. (Downesatax) longipalpis* n. sp., *U. (Vidrineatax) pilosa* n. sp., *U. (Giselatax) trisetica* n. sp. and *U. (Giselatax) uncatseta* n. sp. The subgenus *Smithatax* is synonymised under the subgenus *Downesatax*. Thus 11 of the now 56 subgenera in the genus *Unionicola* are known from Australia. Furthermore, the first description is given of the female of *U. flabelisetata* Cook. Additional data are provided for *U. cirrosa* Koenike. Many new records are presented, especially for the Northern Territory and Western Australia.

**Key words:** water mites, Australia, new species

### Introduction

The cosmopolitan water mite genus *Unionicola* is represented in Australia by 23 species (Harvey 1998). Studies on this genus started as early as 1914 with the description of a new *Unionicola*- species by Koenike (1914). Since then, more papers have been published on Australian *Unionicola* species by Koenike (1920), Lundblad (1947), Szalay (1953), K.O. Viets (1975, 1980a, 1980b, 1981, 1984), Cook (1986), Smit (1992) and Vidrine *et al.* (2007).

Most species have been reported from the north and the east, and very few species are known from the western part of the country. Species of *Unionicola* are free living as well as obligatory inhabitants of freshwater clams and sponges. Most species are found in standing waters, including pools in streams.

Cook (1974) distinguished eight subgenera, but since then a number of genera have been lowered to the rank of a subgenus of *Unionicola*. Vidrine (1996 and references therein) described many new subgenera, and altered the concept of the genus completely. Thus far, 55 subgenera are known, of which 11 occur in Australia.

This paper deals with free living species collected all over Australia. Two new subgenera and eight new species are described, and many new records are presented, especially for the Northern Territory and Western Australia. As more new species are expected to be living in freshwater clams, I refrained from making a key.

### Material and methods

Unless stated otherwise, all material has been collected by the author. Specimens are lodged in the Museum and Art Gallery of the Northern Territory, Darwin (NTM), Queensland Museum, Brisbane (QM), Western