

***Austrostigmaeus* gen. n. (Acari: Prostigmata: Stigmaeidae), with the description of a new species from Australia**

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Abstract

A new genus, *Austrostigmaeus* is proposed for a new species, *A. walteri* from Western Australia. *Austrostigmaeus* is similar to *Pilonychiopus* Meyer and *Neilstigmaeus* Gerson & Meyer in the absence of leg tarsal claws and the presence of a developed arolium. Comparative characters for separating *Austrostigmaeus* **gen. n.**, *Gymnostigmaeus* Ehara & Ueckermann, *Neilstigmaeus* Gerson & Meyer, *Pilonychiopus* Meyer and *Summersiella* Gonzalez-R. are given. Both adult sexes and the deutonymph female are described and illustrated.

Key words: Acari, Prostigmata, Stigmaeidae, new genus, new species

Introduction

The family Stigmaeidae currently contains 30 genera (Fan & Zhang 2005; Fan & Walter 2005; Ehara & Ueckermann 2006), many of which have a pair of developed tarsal claws on each leg, however, a few genera have lost the tarsal claws and evolved a specialized membranous arolium, like that of *Pilonychiopus* Meyer known from South Africa (Meyer 1969, Meyer & Ueckermann 1989) and *Neilstigmaeus* Gerson & Meyer from Australia (Gerson & Meyer 1995). Here a new genus is proposed for a new species, collected from Australia, which shares these characters.

Material and methods

Line drawings were made in pencil using a camera lucida attachment on a microscope and inked with Rotring Rapidograph Pens. Measurements made using stage-calibrated ocular