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## New species of *Aleurodamaeus* Grandjean, 1954 (Oribatida: Aleurodamaeidae) from South Africa

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### Abstract

Seven new species of *Aleurodamaeus* (Oribatida: Aleurodamaeidae) from South Africa are described: *A. salvadordalii* sp. nov., *A. vicinus* sp. nov., *A. angelae* sp. nov., *A. niedbalai* sp. nov., *A. minutus* sp. nov., *A. woasi* sp. nov. and *A. prominens* sp. nov.. Their distribution in South Africa is discussed. *Aleurodamaeus deswardti* (Hugo, 2010) **comb. nov.** is proposed. A key to all South African species of *Aleurodamaeus* is provided.

**Key words:** new species, new combination, Plateremaeoidea, *Aleurodamaeus* (*Aleurodamaeus*), distribution, habitat types, key

### Introduction

The superfamily Plateremaeoidea Trägårdh, 1931 currently consists of 10 families (according to Norton & Behan-Pelletier 2009). The families Gymnodamaeidae Grandjean, 1954, Aleurodamaeidae Paschoal and Johnston, 1985 and Idiodamaeidae Paschoal, 1986 are differentiated from the other families in this superfamily (Pheroliodidae, Nacunasellidae, Plateremaeidae, Pedrocortesellidae, Lyrifissellidae, Licnodamaeidae, Licnobelbidae) mainly by the presence of auriculate pedotecta I and II, filiform legs and the absence of a propodolateral apophysis.

Idiodamaeidae differs from Aleurodamaeidae and Gymnodamaeidae by having only one solenidion on the second leg tarsus (Norton & Behan-Pelletier 2009). Although the validity of this family is debated among oribatologists (see Woas 1992; Norton & Behan-Pelletier 2009; Subías 2004, 2012) further study and phylogenetic studies are needed to clarify the relationship among these families. Aleurodamaeidae differs from Gymnodamaeidae in several characteristics (Grandjean 1954; Balogh & Balogh 1992; Woas 1992; Norton & Behan-Pelletier 2009), the most important being the convex to flat shape of the notogaster in lateral view (concave to flat in Gymnodamaeidae) and the caudal notogastral setae being long, twisted and corkscrew-like (in Gymnodamaeidae, the setae are long or short, but never twisted and corkscrew-like).

The family Aleurodamaeidae consists of two genera, namely *Austrodamaeus* Balogh & Mahunka, 1981 and *Aleurodamaeus* Grandjean, 1954 with two subgenera *Aleurodamaeus* and *Trichodamaeus* Mahunka, 1984 (according to Subías 2004, 2012).

*Austrodamaeus* (consisting of one species, *A. elegantulus* (Hammer, 1958)) differs from *Aleurodamaeus* in having three pairs of anal and three pairs of adanal setae (two pairs each in *Aleurodamaeus*) and in having the genital and anal apertures separate (contiguous in *Aleurodamaeus*). Further, *Aleurodamaeus* is covered with a thick cerotegument layer and also retains the exuviae of the previous instars (not retained in *Austrodamaeus*). The retention of the exuvia is a difficult characteristic to determine, since the exuvia is weakly attached to the notogaster and the mite loses it easily during the course of its life. This has been discussed by several authors that have worked on *Aleurodamaeus* (Grandjean 1954; Pérez-Íñigo 1970; Woas 1992).

Until now, five species have been described in *Aleurodamaeus* (*Aleurodamaeus*): *A. australis* Woas, 1992 (South Africa), *A. cephalotes* (Berlese, 1916) (eastern Africa), *A. hungaricus* Paschoal & Johnston, 1985 (central Europe), *A. setosus* (Berlese, 1883) (southern Palearctic region) and *A. recenfesevpi* Ermilov & Rybalov, 2012 (Ethiopia) (see Subías 2004, 2012; Ermilov & Rybalov 2012). Only one species is known in *Aleurodamaeus*