



## A review of the whitefly genus *Aleurocanthus* Quaintance & Baker (Hemiptera: Aleyrodidae) in Australia

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### Abstract

A review of the genus *Aleurocanthus* in Australia recognises 22 species, of which eleven new species are described here - *A. ashleyi* sp. n., *A. callistemonus* sp. n., *A. coombi* sp. n., *A. gullanae* sp. n., *A. laurenae* sp. n., *A. maculatus* sp. n., *A. mcneili* sp. n., *A. neofroggatti* sp. n., *A. octospinosum* sp. n., *A. sapindus* sp. n. and *A. schmidtii* sp. n. recorded from the Australian mainland for the first time is *A. luteus* Martin, whilst the presence of *A. woglumi* Ashby is confirmed from an Australian territory (Christmas Island, Indian Ocean) and from Daru Island in the Torres Strait. Distributional, biological and host data are presented for *Aleurocanthus* species in Australia, and a key to species is given.

**Key words:** Taxonomy, pest, key, whitefly, *Aleurocanthus*

### Introduction

*Aleurocanthus* Quaintance & Baker (Hemiptera: Aleyrodidae) is a widespread and speciose Old World genus found in tropical and temperate climates. The genus includes 78 described species (Martin & Mound, 2007) with a number of pest species now widely distributed. The gregarious and often conspicuous nature of immatures, broad host range and impact on crops have highlighted a number of *Aleurocanthus* species as major or minor pests in tropical and subtropical climates. *Aleurocanthus valenciae* Martin & Carver has been recorded as damaging citrus in Australia, whilst *A. spiniferus* (Quaintance) is now found widely in Australia damaging commercial and ornamental plants (APPD 2001; many records Martin, 1999). Other pest species like *A. woglumi* Ashby and *A. citriperdus* Quaintance & Baker are recorded as serious horticultural pests in Indonesia, Papua New Guinea and elsewhere. A better understanding of the endemic Australian fauna of this genus is important for quarantine, horticultural and biodiversity purposes.

This work reviews the Australian species of *Aleurocanthus*, describes eleven new species and presents a key to species. The availability of more extensive collections than those available to Martin (1999) has allowed a more detailed examination of the ranges of a number of species, including a species from New Guinea recorded from Australia for the first time. Listings of known and new host plants, and comments on the pest status of several species, are included. Studies by Martin on the whitefly faunas of New Guinea (1985) and Australia (1999) recorded *Aleurocanthus* as the most speciose genus in these respective regions. Martin (1999), in working with the Australian *Aleurocanthus*, described three new Australian species, and recorded the presence in Australia for the first time of two species from SE Asia and New Guinea respectively. This brought the total number of Australian described species to nine, whilst recognising that small or poor samples of at least another nine Australian species awaited description. Descriptions and discussions are principally based on the puparia—the final nymphal stage.