

The genus *Scirtothrips* in Australia (Insecta, Thysanoptera, Thripidae)

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Abstract

Twenty-one species of leaf-feeding thrips from Australia in the genus *Scirtothrips*, including eleven newly described species, are here distinguished with an identification key and illustrations. Some of these species are host-specific, but with diverse host associations, including tree ferns, two different genera of cycads, *Acacia*, *Allocasuarina*, *Brachychiton*, *Hakea*, and *Kunzea*. Two new species-groups, based on *S. albomaculatus* and *S. akakia*, are distinguished, both with several species on endemic species of *Acacia*. In contrast, other species are highly polyphagous, and some of these are crop pests, including *S. dorsalis* and *S. aurantii*, the South African citrus thrips that was introduced recently to Queensland. Three species are part of the northern tropical fauna, *S. dorsalis*, *S. dobroskyi*, and *S. tenor*, whereas most of the others are endemic to the arid areas of Australia. The monotypic genus *Labiothrips* Bhatti & Mound is synonymised with *Scirtothrips* Shull, and the New Zealand species *S. pan* Palmer & Mound is removed from the Australian list as a misidentification. The species recognised are: *S. akakia* sp.n., *S. albomaculatus* Bianchi, *S. astibos*, sp.n., *S. aurantii* Faure, *S. australiae* Hood (= *auricorpus* Girault, **syn.n.**), *S. casuarinae* Palmer & Mound, *S. dobroskyi* Moulton, *S. dorsalis* Hood, *S. drepanofortis* sp. n., *S. eremicus* sp.n., *S. frondis* sp.n., *S. helenae* Palmer & Mound, *S. inermis* Priesner, *S. kirrhos* sp.n., *S. litotes* sp.n., *S. longipennis* (Bagnall), *S. moneres* sp.n., *S. pilbara* sp.n., *S. quadriseta* sp.n., *S. solus* sp.n., and *S. tenor* (Bhatti & Mound).

Key words: *Scirtothrips*, pests, citrus, Australian endemics, host-specificity

Introduction

Species of the genus *Scirtothrips* are small, active thrips that breed on the young leaves of plants, although adults may at times be found in flowers. *Scirtothrips* species occur mainly in the warmer parts of the world, and several of them are serious pests on a range of unrelated plants. The Californian citrus thrips, *S. citri* (Moulton), also the South African citrus thrips, *S. aurantii* Faure that has recently become established in Australia, are both well known for causing economically important damage to citrus fruit. Similarly, *S. perseae* Nakahara, a recently introduced pest of avocados in California, causes considerable financial losses due to fruit scarring as a result of feeding by adults and larvae (Hoddle et al., 2003). In contrast, *S. dorsalis* Hood is widespread and a frequent pest in countries between Pakistan, Japan and Australia, causing damage to many crops including chillies, tea, grapes, and strawberry plants. In addition to these major pests, several other *Scirtothrips* species have been recorded as damaging crop plants, either in tropical countries or under glass in temperate countries (Mound & Palmer, 1981).

Worldwide, the number of described *Scirtothrips* species has more than doubled in the past 20 years. Bailey (1964) stated that the genus included 35 species, but this had increased to about 40 when Mound & Palmer (1981) provided a means of recognising the 10 major pest species in this genus. In contrast, with the 11 new species from Australia described here, the total number of described *Scirtothrips* is now over 100. Of this total, 32