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Article



Species of the genus *Scirtothrips* from Africa (Thysanoptera, Thripidae)

LAURENCE A. MOUND¹ & MICHAEL STILLER²

¹Honorary Research Fellow, CSIRO Ecosystem Sciences, GPO Box 1700, Canberra, ACT 2601, Australia. E-mail laurence.mound@csiro.au ²Biosystematics Division, ARC-Plant Protection Research Institute, Private Bag X134, Queenswood, 0121, South Africa. E-mail: stillerm@arc.agric.za

Abstract

A key is provided to 14 species of *Scirtothrips* recorded from Africa south of the Sahara, including Cape Verde Islands. *S. dodonaeae* **sp. n.** is described from *Dodonaea* in South Africa, and the possibility is discussed that South African populations here referred to as *S.* aff. *dorsalis* represent a new species. Type specimens of the six *Scirtothrips* species described by J.C.Faure have been re-examined, and brief diagnoses are provided for all 14 species.

Key words: Scirtothrips, Africa, Dodonaea, S. dorsalis, new species

Introduction

Species of the genus *Scirtothrips* are minute, usually yellow, insects of which several are major pests on the leaves of various crops around the world (Hoddle & Mound, 2003). The genus currently includes about 100 species from the tropics and subtropics (Mound, 2011), where these thrips feed and breed on newly emerged, young leaves. However, they also breed on other rapidly developing plant tissues, such as the very young fruits of several crops including *Citrus*, *Capsicum* and *Persea*, also, in Australia, in the flowering spikes of *Mangifera*. A few adults may sometimes be found in the flowers of various plants, but *Scirtothrips* species apparently do not need to feed on pollen to reproduce, and cannot usefully be considered as "flower thrips". Many described species remain poorly defined, especially a suite of species from *Mangifera* in Mexico (Hoddle *et al.*, 2008a), and there is evidence of molecular diversity within species (Hoddle *et al.*, 2008b), as discussed below for *S. dorsalis*.

Among the earliest species described in this genus were six from South Africa (Faure, 1929). Unfortunately, the slides prepared and studied for the description of these species were all produced before Prof. J.C. Faure had perfected a technique for slide mounting cleared specimens. When uncleared specimens of *Scirtothrips* species are mounted onto microscope slides, the body contents are commonly iridescent. This iridescence can totally obscure all surface sculptural details, yet it is these details that are now recognised as important in distinguishing one species from another (Mound & Palmer, 1981). For detailed study, adults of *Scirtothrips* must be fully cleared prior to slide mounting (Hoddle *et al.*, 2008c). The identity and relationships of most of the six species described from South Africa have thus remained equivocal. The objective of the present work has been to examine the holotypes and best available paratypes of the species described by Faure, to determine where possible some of the surface details on these specimens, to present a new identification key to all of the *Scirtothrips* species known from Africa south of the Sahara including Cape Verde Islands, and to describe one new species that appears to be specific to *Dodonaea viscosa* in southern Africa. This new species is particularly interesting because it is only the third member of this genus known to have a comb of stout setae on the hind femora of males. The genus *Scirtothrips* is likely to include many more species, particularly in the semi-arid areas of Africa, and this paper is no more than an introduction to the subject.

The holotype of the new species is deposited, together with the holotypes of the six species of *Scirtothrips* described by Faure, in the ARC-Plant Protection Research Institute, Queenswood, South Africa. Nomenclatural