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Article



Identification and host-plant associations of Australian Sericothripinae (Thysanoptera, Thripidae)

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Abstract

The Sericothripinae is a largely tropical group of about 140 species that are often strikingly bicoloured and have complex surface sculpture, but for which the biology is poorly known. Although 15 genera have been described in this subfamily, only three of these are currently recognised, with five new generic synonymies indicated here. In Australia, *Sericothrips* Haliday is introduced, with one European species deployed as a weed biological control agent. *Hydatothrips* Karny comprises 43 species worldwide, with six species found in Australia, of which two are shared with Southeast Asia, and four are associated with the native vine genus, *Parsonsia. Neohydatothrips* John comprises 96 species worldwide, with nine species in Australia, of which one is shared with Southeast Asia and two are presumably introduced from the Americas. Illustrated keys are provided to the three genera and 16 species from Australia, including six new species [*Hydatothrips aliceae*; *H. bhattii*; *H. williamsi*; *Neohydatothrips barrowi*, *N. bellissi*, *N. katherinae*]. One new specific synonym is recognised [*Hydatothrips haschemi* Girault (=*H. palawanensis* Kudo)], also four new generic synonyms [*Neohydatothrips* John (=*Faureana* Bhatti; *Onihothrips* Bhatti; *Sariathrips* Bhatti; *Papiliothrips* Bhatti); *Sericothrips* Haliday (=*Sussericothrips* Han)].

Key words: Thysanoptera, Thripidae, Sericothripinae, new species, new synonyms, *Sericothrips, Hydatothrips, Neohy*datothrips

Introduction

Sericothripines are remarkable amongst the Thripidae for their complex body sculpture and striking colour patterns. This paper establishes the identities of 16 of these species, at least 10 of which are Australian endemics, but with three known from Asia, and three northern hemisphere species of which one is a minor pest and one is involved in the biological control of a weed. Five of the 16 species were among 135 species of Thysanoptera described by A. A. Girault in a series of privately published notes between the years 1926 and 1932 (Gordh et al., 1979). These descriptions were excessively brief and uninformative, the slide-mounts of the type specimens were poorly prepared and often seriously damaged, and the species were usually based on single specimens. As a result, the Girault publications have posed a challenging problem to recognising and establishing the biological significance of many thrips species (Mound, 2008), and more than half of his names are now considered synonyms (Mound, 1996).

Host-plant associations

Host-plant associations have been established for 11 of the 16 species discussed here. Considering the Sericothripinae worldwide, host exploitation in this subfamily seems to have involved capture of various unrelated