

## ***Franklinothrips*; a pantropical Thysanoptera genus of ant-mimicking obligate predators (Aeolothripidae)**

LAURENCE A. MOUND<sup>1</sup> & PHILIPPE REYNAUD<sup>2</sup>

<sup>1</sup>CSIRO Entomology, GPO Box 1700, Canberra ACT, Australia 2601

<sup>2</sup>Laboratoire National de la Protection des Végétaux, Unité d'entomologie, 2 Place Viala  
F-34060 Montpellier cedex 01, France

### **Abstract**

The Aeolothripidae genus *Franklinothrips* Back is redefined with a key provided to the 14 species recognised worldwide, of which *F. brunneicornis* from New Caledonia and *F. strasseni* from Nepal are described as new. Most of the species appear to be bisexual and localised in distribution, but *F. vespiformis* is usually unisexual and is found in many tropical countries, here being recorded from Australia for the first time. All of the species are probably predatory, as adults and larvae, three species having been promoted as biological control agents against pest thrips in European greenhouses. Comments are given on predation and ant-mimicry amongst Aeolothripidae.

**Key words:** biocontrol, mimicry, predation, new species

### **Introduction**

The fast-running females of the tropical genus *Franklinothrips* are, when alive, easily misidentified as ants or bethylid wasps rather than as Thysanoptera (Fig. 1). In this genus, adults as well as their curious red, humped-backed larvae (Fig. 2) are obligate predators on other small arthropods, and they can be observed to actively seek their prey (Hoddle, 2003a,b). The degree of mimicry attained, involving both behaviour and body form, varies between species, and is particularly strong in the African species *F. megalops*. Males are less ant-like in appearance, being smaller than females, with longer antennae, a less constricted waist, and commonly with paler wings but darker antennae. Some species in the genus appear to be arboreal, living on the leaves of trees and possibly high in the canopy. Other species occur on small trees and shrubs, and *F. vespiformis* is commonly found at ground level on herbs. Various members of the genus are considered to be, and are sometimes marketed as, useful biological control agents against pest thrips (Loomans & Heij-