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A redefinition of *Dorythrips* (Thysanoptera: Melanthripidae) with a description of a new species from Argentina

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Abstract

A new species of Melanthripidae, *Dorythrips moundi*, is described from Mendoza, Argentina, from the flowers of *Zuccagnia punctata* (Fabaceae). This species differs from the other members of *Dorythrips* because it lacks the cephalic projection previously considered characteristic of this genus. The genus is redefined and a key provided to the four genera of Melanthripidae worldwide, together with a key to the six species of *Dorythrips*. Two of these are from Western Australia and four from southern South America, with *D. chilensis* recorded from Argentina for the first time.

Key words: *Dorythrips moundi*, *Dorythrips* key, Melanthripidae key

Introduction

Among Terebrantia, four families are considered to have retained the largest number of characters in the plesiomorphic state, Uzelothripidae, Merothripidae, Melanthripidae and Aeolothripidae. All species in these families have a well-developed cephalic tentorium. Uzelothripidae is known only from one species, and the unusual structure of the antennae, abdomen and forewing suggest that it is not closely related to other Thysanoptera species (Mound *et al.*, 1980). In the families Merothripidae and Melanthripidae, females retain two distinctive characters in the plesiomorphic state: abdominal sternite VIII is retained on the posterior margin of sternite VII as a pair of lobes bearing two pairs of setae (absent in all other Terebrantia); abdominal tergite X retains a pair of trichobothria on the posterior margin (greatly reduced in some species of Aeolothripidae, but otherwise absent in the other Terebrantia). Members of these two families also differ in that they have different behaviors; while Merothripidae species feed on fungus, Melanthripìdae species feed on flowers (Mound & Morris, 2007).

Four genera of extant species are included in the family Melanthripidae: *Melanthrips* Haliday (36 species), *Ankothrips* Crawford (12 species), *Cranothrips* Bagnall (12 species) and *Dorythrips* Hood (5 species) (Mound, 2009), but few characters have been used to distinguish these genera from each other. *Cranothrips*, *Ankothrips* and *Dorythrips* have unusual structures on the basal antennal segments or on the anterior margin of the head, and these are not present in *Melanthrips* species. However, these structures are also not developed in a few species of *Cranothrips* (Pereyra & Mound, 2009) as well as a new species of *Dorythrips* described here. This causes problems in defining these genera.

The genera included in Melanthripidae are geographically distributed as follows: *Cranothrips* and *Dorythrips* are known only from the Southern Hemisphere, whereas *Ankothrips* and *Melanthrips* are mainly from the Northern Hemisphere (Hoddle *et al.*, 2008), but each with one or two species from South Africa. Curiously each of these four genera has species that are endemic in more than one continent, and this may indicate that the evolution of these genera pre-dates the separation of continents.

The genus *Dorythips* was described originally by Hood (1931) for the single species *D. chilensis*, based

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