

A NEW SPECIES OF AEOLOTHrips (THYSANOPTERA: AEOLOTHRIPIDAE) FROM MANGO CROPS IN OAXACA, MEXICO

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ABSTRACT

We describe *Aeolothrips romanruizi* sp. nova that has been recently discovered in mango orchards in the Isthmus region of Oaxaca in southern Mexico. *Aeolothrips romanruizi* sp. nova exhibits an ornamentation of the mesonotum and metanotum very different from others in this genus, except *A. microstriatus*, which is similarly ornamented; but these 2 species differ in forewing color pattern, body size and some other characters of chaetotaxy. A key to the *Aeolothrips* species of Central America and Mexico is provided.

Key Words: fruit, *Aeolothrips microstriatus*, predator, SEM

RESUMEN

Se describe una nueva especie del género *Aeolothrips* que ha sido recolectado en el cultivo de mango en la región del Istmo de Oaxaca en el sur de México. En las especies descritas del género *Aeolothrips* la ornamentación del meso y metanoto es completamente distinto de la descrita aquí, solo *A. microstriatus* es similar y la nueva especie difiere de esta en el patrón de color del ala anterior, el tamaño corporal y otros caracteres referentes a la quetotaxia. Se anexa una clave para las especies de *Aeolothrips* de Centro América y México.

Palabras Clave: fruta, *Aeolothrips microstriatus*, depredador, SEM

Insect predators are one of the most important agents in insect pest management practices, especially in those scenarios where there are few known parasitoids to control microarthropod pests (Sánchez-Ruiz et al. 1997). Predatory thrips species of Thysanoptera: Aeolothripidae have been studied as potential biological control agents. For example, *Franklinothrips orizabensis* Johansen 1974 has received much attention as a possible biological control agent of thrips species that are harmful to crops (Hoddle 2003b).

Members of Aeolothripidae are medium-sized, usually with dark brown bodies about 2.5mm long (Mound & Marullo 1996). Adults and larvae of many species in this family appear to be facultative predators of other small arthropods, in that they feed on both floral tissues as well as on thrips and mites that live in flowers. Some species are almost certainly exclusively phytophagous (Tyagi et al. 2008), but in the warmer parts

of the world, a considerable number of species are predators (Hoddle 2003a). Worldwide, about 250 species are recognized in 26 genera of Aeolothripidae (Mound & Marullo 1996).

Studies in avocado groves in search of natural enemies of *Scirtothrips perseae* Nakahara 1997 have identified predator species in *Aeolothrips*, *Aleurodothrips*, *Franklinothrips*, *Leptothrips*, *Scolothrips*, and *Karnyothrips* as possible biological control agents (Hoddle et al. 2002; Camberos-Campos et al. 2011) for this pest.

Here we describe a new species of the genus *Aeolothrips* that has recently been discovered in mango crops in the Isthmus region of Oaxaca in southern Mexico. This predatory thrips may be important in controlling many species of phytophagous thrips that attack this crop.

Aeolothrips romanruizi sp. nova.