Haplothrips maliflorus

Distinguishing features

Both sexes fully winged. Body and legs dark brown, sometimes with fore tarsi, apices of fore tibiae and antennal segment III a little paler; major setae on head and pronotum pale to light brown; fore wing pale with extreme base shaded. Antennae 8segmented, segment III with one sense cone, IV with 4 sense cones; VIII short and very slightly constricted at base. Head distinctly longer than wide; maxillary stylets scarcely 0.1 of head width apart, retracted to eyes, maxillary bridge stout; postocular setae pointed. Pronotum with five pairs of bluntly pointed setae, midlateral and anteromarginal setae rather short; epimeral sutures complete; prosternal basantra small and close under mouth cone, ferna present, mesopresternum eroded to paired lateral triangles. Fore tarsal tooth small, arising in basal half of tarsus. Fore wing constricted medially, with no duplicated cilia; sub-basal setae pointed, S3 much longer than S1 and S2. Tergites II–VII with setae S1 bluntly pointed; tergite IX setae S1 and S2 finely acute; fustis within segment IX unusually elongate, longer than basal width of tube; tube slightly shorter than tergite IX.

Male similar to female, fore tarsal tooth larger and tube longer; tergite IX setae S2 shout and stout; pseudovirga of aedeagus slender.

Related species

H. malifloris is one of almost 20 species in this genus that lack duplicated cilia on the fore wing, and therefore are usually placed in a subgenus *Trybomiella*. In contrast to most of these species, however, there is only one sensorium on the third antennal segment in *H. malifloris*, the S1 setae on the ninth abdominal tergite are long and finely acute, the fustis within segment IX is longer than the basal width of the tube, and the maxillary stylets are unusually long and close together medially

in the head. The genus *Haplothrips* is one of the three most species rich genera of Thysanoptera, and currently includes about 245 species worldwide (Mound & Minaei, 2007). These are found mainly from Europe across the Old World, and only a few species come from southern South America (Mound & Zapater, 2003). Although 17 *Haplothrips* species are listed from Mexico and North America (Mound & Marullo, 1996) only six of these are recorded from California (Hoddle *et al.* 2004). Little is known of the biology of the Californian species, although elsewhere the species of *Haplothrips* are associated particularly with the flowers of Poaceae and Asteraceae.

Biological data

Presumably breeding in flowers, adults have been taken in small numbers from various plants with no recorded specificity. There is a series of both sexes in the Ewart Collection, Riverside from *Tidestromia oblongifolia* [Amaranthaceae].

Distribution data

Recorded from New Mexico, California, Arizona, and Texas.

Family name

PHLAEOTHRIPIDAE, PHLAEOTHRIPINAE



Female Female head & pronotum Male head & pronotum



Pronotum

Head





Mesonotum & metanotum

Prosternum





Pelta & tergites II–III Female segments IX–X (tube)



rizona and Texas

Species name

Haplothrips malifloris Hood

Original name and synonyms

Haplothrips malifloris Hood, 1916: 121.

References

Hoddle M, Mound LA & Nakahara S (2004) Thysanoptera recorded from California, USA: a checklist. *Florida Entomologist* **87**: 317–323.

Mound LA & Marullo R (1996) The Thrips of Central and South America: An Introduction. *Memoirs on Entomology, International* **6**: 1–488.

Mound LA & Minaei K (2007) Australian insects of the *Haplothrips* lineage (Thysanoptera – Phlaeothripinae). *Journal of Natural History* **41**: 2919–2978.

Mound LA & Zapater MC (2001)South American *Haplothrips* species (Thysanoptera, Phlaeothripidae), with a new species of biological control interest to Australia against weedy *Heliotropium amplexicaule* (Boraginaceae). *Neotropical Entomology* **32**: 437–442.