

Haplothrips leucanthemi

Distinguishing features

Both sexes fully winged. Body brown to dark brown, fore tarsi and base of antennal segment III yellow, also base of IV usually brighter; fore wing pale with base extensively shaded. Antennae 8-segmented, segment III with 2 sense cones, IV with 4 sense cones; VIII short and broad at base. Head slightly longer than wide; maxillary stylets one third of head width apart, retracted to postocular setae, maxillary bridge complete; postocular setae acute and short, usually not reaching posterior margin of compound eyes. Pronotal anteromarginal and midlateral setae acute, no longer than discal setae; epimeral sutures complete; prosternal basantra and ferna present, mesopresternum eroded to paired lateral triangles. Fore tarsal tooth minute in female. Fore wing constricted medially, with 7–12 duplicated cilia, sub-basal setae acute or blunt. Tergite IX setae S1 bluntly pointed, much shorter than tube, S2 acute.

Male with no pore plate on sternite VIII; fore femora size is subject to allometric variation, and large males have the fore tarsal tooth large; tergite IX setae S2 short and stout; pseudovirga of aedeagus slender.

Related species

The genus *Haplothrips* is one of the three most species-rich genera of Thysanoptera, and currently includes about 245 species worldwide. Most of these species come from the Holarctic or the Old World tropics, with 80 listed from Europe and 14 from Britain. No *Haplothrips* species is known to be endemic to the Neotropics, although a few are native to southern South America (Mound & Zapater, 2003). *Haplothrips* species are largely phytophagous, particularly associated with the flowers of Asteraceae and Poaceae, but some are predatory (Mound & Minaei, 2007). Among species of this genus *Haplothrips leucanthemi* is unusual because of the short setae on the head and pronotum, although this character state is shared with *propinquus*. However, the identity of *H. leucanthemi* is a contentious problem. Both sexes can be found living in large daisy flowers, such as those of *Chrysanthemum leucanthemum*. In contrast, only females are ever found living in red clover flowers, *Trifolium pratense*, and these females are often known as *H. niger*. Currently, this is considered to be a parthenogenetic strain of *H. leucanthemi* (Mound & Minaei, 2007; Minaei & Mound, 2008).

Biological data

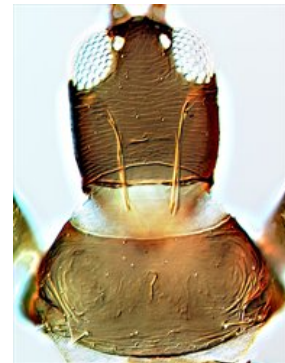
Bisexual populations breed particularly in the flowers of *Chrysanthemum leucanthemum*, but also on some other Asteraceae, and large and small males can occur together. Unisexual populations occur on *Trifolium pratense* [Fabaceae].

Distribution data

Taken widely in England & Scotland, from the south coast to northern Scotland (Mound *et al.*, 1976), and widespread across the Holarctic south to Iran and California (Hoddle *et al.*, 2004). Also introduced to



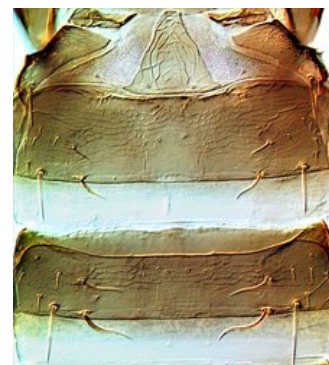
Female



leucanthemi Head & pronotum



Antenna



Pelta & tergites II-III

Hawaii, Australia and New Zealand (Mound & Walker, 1986: as *H. niger*).

Family name

PHLAEOTHIRIPIDAE - PHLAEOTHIRIPINAE

Species name

Haplothrips leucanthemi (Schrank)

Original name and synonyms

Thrips leucanthemi Schrank, 1781: 298

Phloeothrips niger Osborn, 1883: 154

Phloeothrips armatus Lindeman, 1887: 335

Phloeothrips obscuricornis Reuter, 1909: 20

Haplothrips trifolii Priesner, 1919: 130

Zygothrips wyomingensis Watson, 1923: 82

Haplothrips scythicus Knechtel, 1961: 1325

References

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

Minaei K & Mound LA (2008) The Thysanoptera Haplothripini (Phlaeothripidae) of Iran. *Journal of Natural History* **42**: 2617–2658.

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

Mound LA, Morison GD, Pitkin BR & Palmer JM (1976) Thysanoptera. *Handbooks for the Identification of British Insects* **1** (11): 1–79.

Mound LA & Walker AK (1986) Tubulifera (Insecta: Thysanoptera). *Fauna of New Zealand* **10**: 1–140.

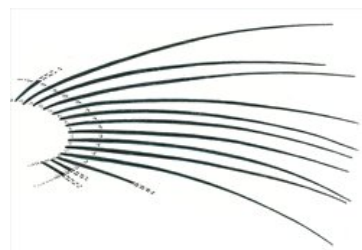
Mound LA & Zapater MC (2003) South American *Haplothrips* species (Thysanoptera, Phlaeothripidae), with a new species of biological control interest to Australia against weedy *Heliotropium amplexicaule* (Boraginaceae). *Neotropical Entomology* **32**: 437–442.



Female tergites VIII-X



Fore wing



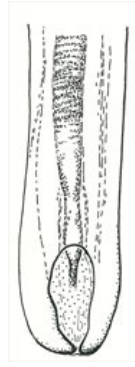
Fore wing apical cilia smooth



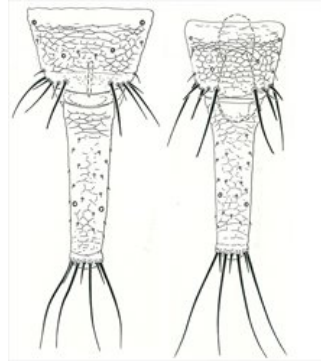
Head & pronotum (large male)



Male aedeagus



Male aedeagus



Tubes of male & female