# Haplothrips aculeatus

## **Distinguishing features**

Both sexes fully winged. Body and legs brown to dark brown, all tarsi and fore tibiae yellowish-brown; antennae brown, segment III yellow at base; fore wing pale with base shaded; major setae pale. Antennae 8-segmented, segment III with one small sense cone, IV with 4 sense cones; VIII short. Head longer than wide; maxillary stylets about one-third of head width apart, retracted to postocular setae, maxillary bridge complete; postocular setae with acute apices, scarcely 0.7 as long as dorsal length of compound eye. Pronotum with 4 pairs of major setae with acute apices, anteromarginal setae no larger than discal setae; epimeral sutures complete; prosternal basantra present, mesopresternum complete. Fore tarsus with a minute tooth. Fore wing constricted medially, with 4–9 duplicated cilia; sub-basal setae pointed. Tergite IX setae all acute about 0.5 as long as tube; tube short, about twice as long as basal width.

Male similar to female, with no pore plate on sternite VIII; fore tarsal tooth sometimes well-developed; tergite IX setae S2 short and stout; aedeagus slender and narrowed to apex.

#### **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 species of *Haplothrips* 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). *Haplothrips aculeatus* is unusual amongst the species of this genus that are recorded from Britain for its relatively short tube and finely acute major setae, with the pronotal anteromarginal setae being no larger than the discal setae. It is distinguished from other British *Haplothrips* species associated with wetland and other grasses by having only one, not two, sense cones on antennal segment III.

#### **Biological data**

Breeding on the leaves and inflorescences of various species of Poaceae, Cyperaceae and Juncaceae. In Britain, it has mostly been recorded from *Phragmites australis* and *Bolboschoenus maritimus*, but in Continental Europe it has been regarded as a minor pest of cereal crops.

#### **Distribution data**

Previously considered uncommon in Britain, recorded only from the East Anglian Fens plus an historic record from Oxfordshire (Collins, 2006). However, recent findings, including multiple findings across East Anglia and Dumfries & Galloway, suggest that it is both more common in the Fens than thought previously, and more widespread in



aculeatus Head & pronotum



aculeatus Antenna



Head & pronotum



Female tergites VIII-X

general. It occurs widely across Europe, from Iceland south east to Turkey, and beyond to Iran, and east to China and Japan (Okajima, 2006; Mirab-balou *et al.*, 2011).

### Family name

PHLAEOTHRIPIDAE - PHLAEOTHRIPINAE

#### **Species name**

Haplothrips aculeatus (Fabricius)

#### Original name and synonyms

Thrips aculeatus Fabricius, 1803: 312 Phloeothrips albipennis Burmeister, 1836: 410 Thrips frumentarius Beling, 1872: 651 Phloeothrips oryzae Matsumura, 1899: 1 Phloeothrips japonicus Matsumura, 1899: 3 Anthothrips minor Karny, 1907: 50 Haplothrips cephalotes Bagnall, 1913: 265 Haplothrips funebris Priesner, 1928: 599 Haplothrips crassicornis Priesner, 1928: 599

#### References

Collins DW (2006) Odontothrips confusus Priesner (Thysanoptera: Thripidae) new to Britain and recent records of other British thrips. British Journal of Entomology and Natural History **19**: 145–156.

Mirab-balou M, Tong X, Feng J & Chen X (2011) Thrips (Thysanoptera) of China. Check List 7: 720-744.

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

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.

Okajima S (2006) The Suborder Tubulifera (Thysanoptera). The Insects of Japan 2: 1–720.



Fore wing duplicated cilia