# **Odontothrips loti**

## **Distinguishing features**

Both sexes fully winged. Body and legs dark brown, mid and hind tarsi paler, fore tarsi and parts of fore tibiae yellow; antennal segment III yellow, IV light brown; fore wings brown with sub-basal white band. Antennae 8-segmented; segments III-IV constricted to apex, with forked sense cone; segment VI sense cone with enlarged oval base; dorsal apex of segment I with pair of setae. Head wider than long; three pairs of ocellar setae present, pair III as long as distance between compound eyes, arising on or just outside anterior margins of ocellar triangle; maxillary palps 3-segmented. Pronotum with little sculpture, about 10 discal setae and two pairs of long posteroangular setae. Fore tarsus distal segment with 1 or 2 small tubercles; fore tibia apex with prominent re-curved claw ventrally and a seta-bearing tubercle at apex of inner margin. Mesonotum with paired anterior campaniform sensilla, median setae close to posterior margin. Metanotum weakly reticulate; median setae long, arising at anterior margin; campaniform sensilla present medially. Fore wing first vein with setal row almost complete but variable and commonly with small sub-apical gap; setal row complete on second vein. Abdominal tergites with no ctenidia, median setal pair small and wide apart, no sculpture medially; tergite VIII with posteromarginal comb with slender microtrichia laterally but none on median third, with group of microtrichia anterolateral to spiracle; IX with 2 pairs of campaniform sensilla, X with median split. Sternites without discal setae, S1 on VII arising in front of margin.

Male smaller than female; tergite IX with pair of short broad setae posterolaterally; sternites without pore plates; extruded genitalia with one pair of stout spines, each arising from a separate elongate trachea-like structure (caniculus).

#### **Related species**

The genus *Odontothrips* currently includes 33 species. All but two of these are from the Holarctic region, including Iran and China, but one species is described from Rajasthan, India, and another from Guinea. From Europe, 19 species of *Odontothrips* are recorded (zur Strassen, 2003), with eight from Britain. Almost all *Odontothrips* species breed only in the flowers of Fabaceae (Pitkin, 1972). The fore tibial apex of *loti* is similar to that of *phaleratus*, but the fore wing colour and setal row on the first vein are different, and the male genitalia of *loti* have stout endothecal spines.

#### **Biological data**

Feeding and breeding in flowers and pupating at ground level, and found on various species of Fabaceae in several genera including *Lotus*, *Anthyllis*, *Ononis* and *Trifolium*.

#### **Distribution data**

Common in England and Scotland, with records from Kent to Caithness. Also, recently recorded from Wales for the first time, in



Female



Head & pronotum



Antenna



Fore tibia & tarsus

Pembrokeshire (Mound *et al.*, 1976; Collins, 2021a). Also recorded from County Wicklow, Republic of Ireland (O'Connor, 2008) and many parts of Europe south from Norway. Present in China (Mirabbalou *et al.*, 2011), and has also been introduced into North America (Stannard, 1968).

## Family name

THRIPIDAE - THRIPINAE

#### Species name

Odontothrips loti (Haliday)

## Original name and synonyms

Thrips loti Haliday, 1852: 1108

Euthrips ulicis var. californicus Moulton, 1907: 44

Odontothrips ulicis var. adustus Priesner, 1914: 191

Odontothrips uzeli Bagnall, 1919: 262

Odontothrips fasciata Priesner, 1926: 228

Odontothrips anthyllidis Bagnall, 1928: 96

Odontothrips brevipes Bagnall, 1934: 489

Odontothrips quadrimanus Bagnall, 1934: 60

Odontothrips thoracicus Bagnall, 1934: 59

Odontothrips ginlingensis Feng & Zhao, 1994: 1

Odontothrips yinggeensis Feng & Zhang, 2000: 3

### References

Collins DW (2021a) Noteworthy recent records of species of Thripidae (Thysanoptera) in Great Britain. *British Journal of Entomology and Natural History* **34**: 169–191.

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

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

O'Connor JP (2008) A review of the Irish thrips (Thysanoptera). *Irish Naturalists' Journal* **29**: 20–24.

Pitkin BR (1972) A revision of the flower-living genus *Odontothrips* Amyot & Serville. *Bulletin of the British Museum (Natural History)* (Entomology) **26**: 371–402.

Stannard LJ (1968) The thrips, or Thysanoptera, of Illinois. *Bulletin of the Illinois Natural History Survey* **29**: 213–552.

zur Strassen R (2003) Die terebranten Thysanopteren Europas und des Mittelmeer-Gebietes. *Die Tierwelt Deutschlands* **74**: 1–271.



Meso & metanota



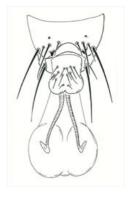
Tergites VII-VIII



Fore wing



Male tergite IX & genitalia



Male tergite IX & genitalia