Thrips tabaci

Distinguishing features

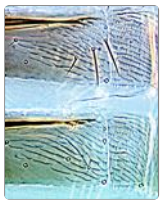
Female macroptera. Body colour varying from yellow to brown, depending largely on temperatures during development; ocellar pigment never red, usually grey; antennal segments III–IV brown with basal half pale; fore wings pale. Antennae 7-segmented. Head wider than long, ocellar setae pair III small and arising on anterior margins or just within triangle; postocular setae pairs I–III about equal to ocellar setae III in length. Pronotum posterior margin with 3 (or 4) pairs of setae. Mesonotum without anterior pair of campaniform sensilla. Metanotum irregularly reticulate medially with lines converging to midpoint near posterior margin; median setae short and arising behind anterior margin; campaniform sensilla absent. Fore wing first vein usually with 4 (varying from 2–6) setae on distal half, second vein with row of about 15 setae. Tergite II with 3 lateral marginal setae; posterior margin of tergite VIII with complete comb of long slender microtrichia; tergite IX lacking pair of campaniform sensilla on anterior half; pleurotergites without discal setae, sculpture bearing rows of fine microtrichia. Sternites without discal setae. Male macroptera. Small and yellow; tergite VIII with marginal comb represented by a few irregular microtrichia; sternites III–V with narrow transverse pore plate.


Female


Antenna


Head & pronotum


Meso & metanota


Pleurotergites V-VI


Tergites VII-IX


Male tergites VIII-IX


Male sternites II-VI


Larva II tergites VIII-X


Fore wing

Related species

Thrips tabaci has a dense covering of closely spaced rows of microtrichia on the pleurotergites, and moreover lacks paired campaniform sensilla on the anterior half of the ninth abdominal tergite; these are both unusual character states within the genus *Thrips*. The lack of red pigment beneath the three ocelli on the head usually facilitates recognition of this species, particularly amongst crop pests. There are 33 species of *Thrips* genus known from Australia (Mound & Masumoto, 2005), out of a total of 296 species worldwide (ThripsWiki, 2020). Many of these species have the antennae clearly 7-segmented, whereas others have 8 segments. Some species have two complete rows of setae on the fore wing veins, whereas others have the setal row on the first vein more or less widely interrupted. Moreover, some species have sternal discal setae, whereas other species have only marginal setae on the sternites. Despite this variation, all members of *Thrips* genus have paired ctenidia on the tergites, and on tergite VIII these are postero-mesad to the spiracles, and they also lack ocellar setae pair I in front of the first ocellus. In contrast, *Frankliniella* species have ctenidia on tergite VIII antero-lateral to the spiracles, and a pair of setae is always present in front of the first ocellus.

Biological data

Feeding and breeding in flowers and on leaves of many unrelated plant species, but only in low numbers on Australian native plants. Abundant on onions and garlic, *Allium* spp. [Alliaceae], but also common on cereals, potatoes, vines and glasshouse crops. Feeding damage includes silvering of leaves. Males known in eastern Mediterranean countries and also in New Zealand, but not in Australia. Vector of tospoviruses, particularly potatoes in Tasmania, but also a predator of mites.

Distribution data

Originally from the eastern Mediterranean area where males are common on *Allium* spp., but now worldwide although rare in the wet tropics. Although widespread across Australia, males have not been recorded on this continent. Males have been studied from New Zealand, also North America and Cuba.

Family name

THRIPIDAE - THRIPINAE

Species name

Thrips tabaci Lindeman

Original name and synonyms

Thrips solanaceorum Widgalm in Portschinsky, 1883: 44
Thrips tabaci Lindeman, 1889: 61
Limothrips allii Gillette, 1893: 15
Thrips communis Uzel, 1895: 176
Thrips communis pulla Uzel, 1895: 177
Thrips communis annulicornis Uzel, 1895: 177
Thrips flava obsoleta Uzel, 1895: 187
Parathrips uzeli Karny, 1907: 48
Thrips bicolor Karny, 1907: 49
Thrips bremnerii Moulton, 1907: 59
Thrips brachycephalus Enderlein, 1909: 441
Thrips hololeucus Bagnall, 1914: 24
Thrips adamsoni Bagnall, 1923: 58
Thrips debilis Bagnall, 1923: 60
Thrips mariae Cotte, 1924: 2
Thrips frankeniae Bagnall, 1926: 654
Thrips seminiveus Girault, 1926: 1
Thrips atricornis Priesner, 1927: 437
Thrips nigricornis Priesner, 1927: 436
Thrips dorsalis Bagnall, 1927: 576
Thrips irrorata Priesner, 1927: 436
Thrips indigenus Girault, 1929: 29
Thrips dianthi Moulton, 1936: 104
Ramaswamiahiella kallarensis Ananthakrishnan, 1960: 564.

References

Mound LA & Masumoto M (2005) The genus *Thrips* (Thysanoptera, Thripidae) in Australia, New Caledonia and New Zealand. *Zootaxa* **1020**: 1–64. **http://www.mapress.com/zootaxa/2005f/zt01020p064.pdf**