

# Scirtothrips dorsalis

## Distinguishing features

Both sexes fully winged. Body yellow with brown marking medially on tergites III–VII, sternites without brown markings but antecostal ridges on tergites and sternites dark brown; fore wings usually strongly shaded but paler toward apex; antennal segment I pale, II shaded, III–VIII dark. Antennae 8-segmented, III and IV each with forked sense cone. Head about twice as wide as long, postocular and ocellar region closely striate; ocellar setae pair III arise between posterior ocelli, well behind tangent between their anterior margins; two pairs of post-ocellar setae as long as ocellar setae pair III. Pronotum closely striate, posteromarginal setae S2 clearly longer than S1. Metanotal sculpture usually with irregular longitudinal reticulate striations, median pair of setae far behind anterior margin. Fore wing scale with 4 marginal setae; second vein with 2 setae; posteromarginal fringe cilia all straight. Tergites III–V with bases of median setae usually closer together than length of these setae; tergal microtrichial fields with 3 discal setae; VIII with discal microtrichia present anteromedially, posteromarginal comb complete; tergite IX with discal microtrichia present posteromedially. Sternites with microtrichia extending across median area on posterior half. Male macroptera. Similar to female in colour and sculpture, but smaller; tergite IX without lateral drepanae.

## Related species

The genus *Scirtothrips* comprises over 100 described species worldwide, mostly in warmer countries. These species resemble species of *Neohydatothrips* in having the lateral thirds of the abdominal tergites covered in closely spaced rows of fine microtrichia, but the most closely similar genus is *Drepanothrips*. *S. dorsalis* is unusual in the genus in having microtrichia extending fully across the sternites, and in having the fore wing cilia straight rather than wavy. DNA sequence analysis suggests that *S. dorsalis* represents a complex of mainly cryptic species (Dickey *et al.*, 2015), though this remains unresolved taxonomically in the absence of clear demonstrations of biological differences between these molecular segregates.

## Biological data

Feeding and breeding on the leaves of its host plants, and a pest in the tropics on a wide range of crop plants in many different plant families, from lotus and chillies, to cotton and tea.

## Distribution data

This is a quarantine-listed pest species that is frequently intercepted at airports by the Plant Health Service of England and Wales. A population has been present within the Palm House at the Royal Botanical Gardens, Kew, since 2008, and still remains subject to official control measures (Scott-Brown *et al.*, 2018). This was the only known population in Europe until the species was found outdoors in citrus and pomegranate production near Valencia, Spain, in late 2016 (EPPO Global Database, 2017b). This Oriental pest species has otherwise become widespread around the tropical and sub-tropical parts of the world.

## Family name

THRIPIDAE - THRIPINAE

## Species name

*Scirtothrips dorsalis* Hood

## Original name and synonyms

*Scirtothrips dorsalis* Hood, 1919: 90

*Heliethrips minutissimus* Bagnall, 1919: 260

*Anaphothrips andreae* Karny, 1925: 24



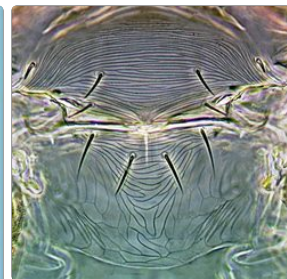
Female



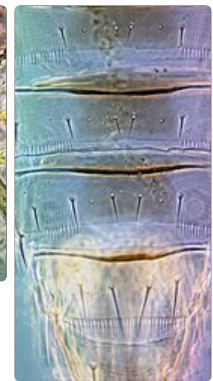
Head & pronotum



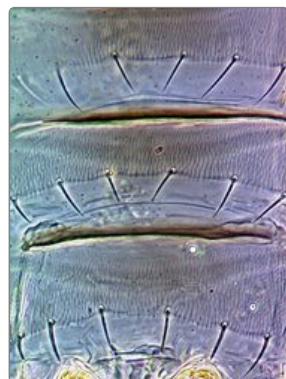
Antenna



Meso & metanota



Tergites V-VIII



Sternites V-VII



Fore wing

*Neophysopus fragariae* Girault, 1927: 1

*Scirtothrips dorsalis* var. *padmae* Ramakrishna, 1942: 169

## References

Dickey AM, Kumar V, Hoddle MS, Funderburk JE, Morgan J K, Jara-Cavieres A, Shatters RG Jr., Osborne LS & McKenzie CL (2015) The *Scirtothrips dorsalis* species complex: endemism and invasion in a global pest. *PLoS ONE* **10** (4):e0123747. doi:10.1371/journal.pone.0123747

EPPO Global Database (2017b) EPPO Reporting Service no. 07 - 2017 Num. article: 2017/129. <https://gd.eppo.int/reporting/article-6097>

Scott-Brown AS, Hodgetts J, Hall J, Simmonds MJS and Collins DW (2018) Potential role of botanic garden collections in predicting hosts at risk globally from invasive pests: a case study using *Scirtothrips dorsalis*. *Journal of Pest Science* **91** (2): 601-611.