Thrips parvispinus

Distinguishing features

Female macroptera. Body brown, head and thorax paler than abdomen, head commonly with cheeks darker than median area; legs mainly yellow; antennal segment III yellow, also basal half of IV-V; fore wings brown with base sharply pale. Antennae 7-segmented, III-IV constricted at apex, VII small. Head wider than long, ocellar setae pair III small and arising on anterior margins of triangle; postocular setae pairs I & III slightly longer than ocellar setae III, pair II minute. Pronotum posterior margin with 3 pairs of setae. Metanotum reticulate medially, reticles varying in shape and sometimes with faint internal markings; median setae long and arising behind anterior margin; campaniform sensilla absent. Fore wing first and second veins with complete rows of setae; clavus with 5 marginal setae. Tergite II with 3 lateral marginal setae; posterior margin of tergite VIII with comb almost absent, a few microtrichia present laterally; pleurotergites without discal setae. Sternites II & VII without discal setae, III-VI with about 6 to 12 discal setae in an irregular row.

Male macroptera. Body mainly or entirely yellow; tergite VIII with no posteromarginal comb; sternites III–VII each with small transverse pore plate, discal setae arising laterally.

Related species

Thrips parvispinus is closely related to *T. orientalis,* but that has the fore wing uniformly shaded not pale at the base, and the metanotal sculptured reticles with more pronounced internal markings. The genus *Thrips* is the second largest genus in the Thysanoptera, and currently includes, worldwide, over 300 species. All members of genus *Thrips* lack ocellar setae I on the head, and they all have ctenidia on tergite VIII posteromesad to the spiracles. Other characters, such as number of antennal segments, number of setae on the fore wing veins, and number of discal setae on the sternites are variable between species (Palmer, 1992; Nakahara, 1994; Mound & Masumoto, 2005).

Biological data

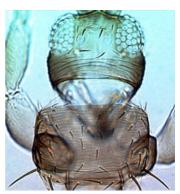
Feeding and breeding in flowers and on leaves, and apparently attracted to scented white flowers such as *Gardenia*. It has damaged sweet pepper crops in Spain, and ornamental plants under glass in the Netherlands. It has been recorded from *Capsicum* crops in Puerto Rico, and as damaging *Gardenia* plants in Florida, Colorado, Georgia and North Carolina, as well as being intercepted in other States. It is also reported as causing damage to papaya crops in Hawaii.

Distribution data

First recorded in Europe in 1998, in two glasshouses in Greece (Mound & Collins, 2000); since 2017 it has also been recorded from France, Germany, the Netherlands and Spain (EPPO Global Database, 2025). In temperate countries *T. parvispinus* is a glasshouse pest. In 2024, *T. parvispinus* was found for the first time in an English glasshouse, causing major damage to a sweet pepper



Female



Head & pronotum



Antenna



Meso & metanotum

crop (information supplied by Jude Bennison, ADAS). Originally a southeast Asian species, presumably native to the area around Thailand and Malaysia, it is widespread in countries south from Java to Taiwan, Philippines, Timor and northern Australia. It has been listed from some eastern African countries as well as Mauritius, and is now regarded as a regulated pest in the USA, with populations in Hawaii and Florida. In January 2025 *parvispinus* was identified from Capsicum in Mexico by Francisco Infante. An overview of *T. parvispinus* as a global invasive pest species is provided by Ahmed *et al.* (2024).

Family name

THRIPIDAE - THRIPINAE

Species name

Thrips parvispinus (Karny)

Original name and synonyms

Isoneurothrips parvispinus Karny, 1922: 106 Isoneurothrips jenseni Karny, 1925: 7 Isoneurothrips pallipes Moulton, 1928: 296 Thrips (Isoneurothrips) taiwanus Takahashi, 1936: 440.

References

Ahmed MZ, Roberts JW, Soto-Adames FN, McKenzie CL & Osborne LS (2024) Global Invasion of *Thrips parvispinus* (Karny) (Thysanoptera: Thripidae) across three continents associated with its one haplotype. *Journal of Applied Entomology* DOI: 10.1111/jen.13376

EPPO Global Database (2025) *Thrips parvispinus* (THRIPV). https://gd.eppo.int/taxon/THRIPV/distribution (accessed 21/01/25)

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

Mound LA & Collins DW (2000) A south east Asian pest species newly recorded from Europe: *Thrips parvispinus* (Thysanoptera: Thripidae), its confused identity and potential quarantine significance. *Journal of European Entomology* **97**: 197–200.



Tergites VII–IX



Sternites III-VII



Male



Fore wing

Nakahara S (1994) The genus *Thrips* Linnaeus (Thysanoptera: Thripidae) of the New World. *United States Department of* Agriculture. Technical Bulletin **1822**: 1–183.

Palmer JM (1992) *Thrips* (Thysanoptera) from Pakistan to the Pacific: a review. *Bulletin of the British Museum (Natural History) Entomology Series* **61** (1): 1–76.