

Heliothrips haemorrhoidalis

Distinguishing features

Both sexes fully winged. Body dark brown with legs yellow, but abdomen golden in freshly emerged adults; antennal segments III–V & VII–VIII yellow, VI variably brown; fore wing pale with hind margin and veinal fork shaded. Head strongly reticulate, cheeks constricted into basal neck. Antennae 8-segmented, segments III & IV each with simple sense cone, VIII slender and at least 3 times as long as VII. Pronotum reticulate at anterior and posterior, with no long setae. Metanotum with reticulate triangle projecting over metascutellum, median setae small and arise on anterior half of sclerite. Tarsi 1-segmented. Fore wing with apex rounded bearing long cilia; costa with widely spaced long cilia, posteromarginal cilia not wavy; veinal setae scarcely larger than microtrichia. Abdominal tergites strongly reticulate on lateral thirds; tergite I median setal pair minute arising anterior to reticulate area; II–VIII median setae long and close together; VIII with long postero-marginal comb of microtrichia; tergite X short with complete median division. Sternites with three pairs of small marginal setae.

Male very rare, except in Peru (Mound, 1976).

Related species

Three species are now recognised in *Heliothrips* all from South America (Nakahara *et al.*, 2016), but with *haemorrhoidalis* now widespread around the world. *Heliothrips similis* from Brazil is very similar to *haemorrhoidalis*, but has the metanotal triangle without any projection at the posterior margin, and tergite I has the pair of minute median setae arising within the area of reticulation. A species from South Africa that was described as *Heliothrips sylvanus* is now placed in the genus *Neoheliothrips* Nakahara, O'Donnell & Mound.

Biological data

This species, the greenhouse thrips, occurs on a wide variety of plants including citrus, fruit trees, tea, *Pinus*, ferns and domestic garden plants. In eastern Australia a very large population was observed on tree ferns (*Dicksonia antarctica*) under water stress due to flooding. In New Zealand, Zondag (1977) reported damage to young, lower, shaded foliage of *Pseudotsuga menziesii*, and Zondag (1973) and Kershaw (1977) recorded the species as attacking young *Pinus radiata*. Although often considered a pest, adults, larvae and pupae are usually most abundant only on older senescing leaves, and on plants that are growing suboptimally. The larvae have a tubular last abdominal segment and, when disturbed, raise this over the thorax and exude a droplet of faecal material. Attacked leaves often bear numerous small, brown spots of this dried faecal exudate. Pupae occur on the leaves together with larvae and adults.

Distribution data

Known as the Greenhouse Thrips in temperate areas, this species occurs worldwide in the tropics and sub-tropics. In New Zealand the first recorded specimen was collected at Palmerston North (WI) from *Viburnum* and rose leaves in 1930 by W. Cottier. In the Auckland region its a pest on many garden plants, and occurs out-of-doors as far south as Christchurch.

Family name



Antenna



Teneral female



Mature female



Head & pronotum

THRIPIDAE, PANCHAETOTHRIPINAE

Species name

Heliethrips haemorrhoidalis (Bouché)

Original name and synonyms

Thrips haemorrhoidalis Bouché, 1833: 42

Heliethrips adonidum Haliday, 1836: 443

Heliethrips abdominalis Reuter, 1891: 165

Heliethrips haemorrhoidalis var. *ceylonicus* Schmutz, 1913: 992

Heliethrips haemorrhoidalis angustior Priesner, 1923: 89

Heliethrips semirufus Girault, 1928: 1

Dinurothrips rufiventris Girault, 1929: 1

References

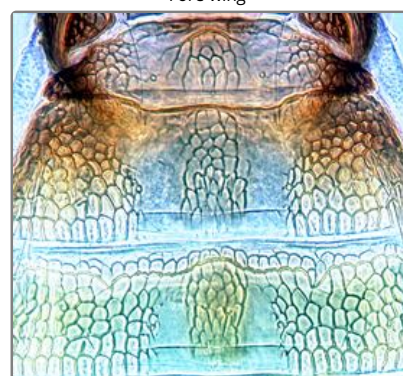
Kershaw DJ (1977) Report of the forest biology survey, September 1975 - August 1976. New Zealand Forest Service, Forest Research Institute, forest biology survey report no. 10. Unpublished, FS file 50/4, 23 p
Martin NA (2017) Greenhouse thrips - *Heliethrips haemorrhoidalis*.



Head & thorax



Fore wing



Tergites I-III



Female tergites VI-X

<http://nzacfactsheets.landcareresearch.co.nz/factsheet/InterestingInsects/Greenhouse-thrips---Heliethrips-haemorrhoidalis.html>

Mound LA (1976) The identity of the greenhouse thrips *Heliethrips haemorrhoidalis* (Bouché) (Thysanoptera) and the taxonomic significance of spanandric males. *Bulletin of Entomological Research* 66: 179-180.

Nakahara S, O'Donnell CA & Mound LA (2016) *Heliethrips haemorrhoidalis* and its relatives, with one new species and one new genus (Thysanoptera). *Zootaxa* 4021 (4): 578-584.

Scott-Brown AS & Simmonds MSJ (2006) Leaf morphology of hosts and nonhosts of the thrips *Heliethrips haemorrhoidalis* (Bouché). *Botanical Journal of the Linnean Society* 152: 109-130.

Zondag R (1973) Thrips In Report of the Forest Research Institute, New Zealand Forest Service, 1972, pp. 57

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