

Karyothrips melaleucus

Distinguishing features

Female macropterous. Body bicoloured, head and thorax brown, also tube and abdominal segment IX; legs yellow, except fore femora largely brown; antennal segments II–V and basal half of VI yellow; fore wings weakly shaded medially, major setae pale but anal setae dark.

Antennae 8-segmented, VIII broad at base; segment III slightly smaller than IV, III with 2 small sense cones, IV with 3 sense cones. Head longer than wide; postocular setae long and capitate; maxillary stylets retracted almost to eyes, scarcely one-fifth of head width apart, maxillary bridge narrow. Pronotum with anteromarginal setae no larger than discal setae, remaining major setae capitate; fore tarsus with forwardly directed tooth. Prosternal basantra slightly longer than wide; mesopresternum transverse and slender. Fore wing weakly constricted medially, with 1 or 2 duplicated cilia. Pelta slightly longer than wide; tergites II–VII each with 2 pairs of sigmoid wing-retaining setae, these setae weak on II and VII; tergite IX setae S1 and S2 longer than tube and finely acute; tube shorter than pronotum, anal setae much longer than tube.

Related species

In ThripsWiki (2023) about 50 species were listed in the genus *Karyothrips*. However, Okajima & Masumoto (2024) have provided an identifications key to 44 species known from Asia between India and Japan, and refer to about 30 species listed in this genus from the New World. The genus was treated as a synonym of *Haplothrips* by Stannard (1968), but although the species are similar to *Haplothrips* species in structure, they have a fore tarsal tooth that is forwardly directed and often hook-like, and the anal setae are unusually long. The problems in distinguishing between these two genera are discussed by Mound & Minaei (2007), and more extensively by Okajima & Masumoto (2025). A key to 14 species from Central and South America that have been placed in this genus was given by Mound & Marullo (1996), and a key to 11 species from Japan was given by Okajima (2006). *K. melaleucus* has the maxillary stylets close together medially in the head, and is distinguished by the yellow abdomen in contrast to the brown head and thorax, and the long, acute, setae S1 on tergite IX that extend beyond the apex of the tube.

Biological data

Adults have been taken from many different plant species, but substantial breeding populations have been found in sub-tropical areas at the base of Kikuyu grass in association with populations of phytophagous mites (Mound & Wells, 2015). Also commonly associated with dead leaves and dead branches, where it is apparently predatory on mites or other thrips (Mound & Minaei, 2007), but possibly also predatory on coccids (Palmer & Mound, 1991).

Distribution data

The area of origin is not known, but presumably was somewhere in



Female



Head & pronotum



Head



Pronotum

the Asian tropics. This species has been recorded twice in Britain, on both occasions from a single adult female under glass at the Royal Botanic Gardens, Kew (Collins, 2010a). It was described originally from material taken in a greenhouse in Denmark, and has been found throughout the tropics and subtropics.

Family name

PHLAEOTHIRIPIDAE - PHLAEOTHIRIPINAE

Species name

Karnyothrips melaleucus (Bagnall)

Original name and synonyms

Hindsiana melaleuca Bagnall, 1911: 61

Zygothrips bicolor Hood & Williams, 1915: 126

Cephalothrips elongatus Watson, 1919: 3

Hindsiana pini Watson, 1922: 65

Hindsiana coccois Watson, 1922: 66

References

Collins DW (2010a) Thysanoptera of Great Britain: a revised and updated checklist. *Zootaxa* **2412**: 21–41.

Mound LA & Marullo R (1996) The thrips of Central and South America: an introduction (Insecta: Thysanoptera). *Memoirs on Entomology, International* **6**: 1–487.

Mound LA & Minaei K (2007) Australian insects of the *Haplothrips* lineage (Thysanoptera – Phlaeothripinae). *Journal of Natural History* **41**: 2919–2978.

Mound LA & Wells A (2015) Endemics and adventives: Thysanoptera (Insecta) Biodiversity of Norfolk, a tiny Pacific Island. *Zootaxa* **3964** (2): 183–210.

Okajima S (2006) The Suborder Tubulifera (Thysanoptera). *The Insects of Japan* **2**: 1–720.

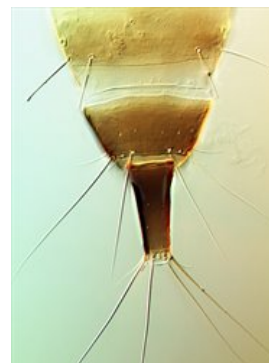
Okajima S & Masumoto M (2025) Review of the genus *Karnyothrips* (Thysanoptera, Phlaeothripidae) from Asia between India and Japan. *Zootaxa* **5578** (1): 01–82.

Palmer JM & Mound LA (1991) Thysanoptera. Chapter 22. 5, pp 67–76 in Rosen D [ed] *The Armoured Scale Insects, Their Biology, Natural Enemies and Control* Vol B. Amsterdam.

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



Prosternites



Tergites VIII-X