

Mecynothrips

Generic diagnosis

Large, slender, macropterous Idolothripinae, with males exhibiting size-associated allometry in various structures. Head more than twice as long as wide, projecting in front of bulging eyes; usually with two pairs of ocellar setae, pair I near anterior ocellus, pair II near posterior ocelli; two pairs of postocular setae; genae with at least 3 stout setae; maxillary stylelets short, V-shaped and low in head. Antennae 8-segmented, III with 2 sense cones, IV with 4 sense cones. Pronotum of large male sometimes with anteroangular horns; notopleural sutures complete, but sometimes incomplete in large male. Prosternal basantra present, mesopresternum broad; metathoracic sternopleural sutures absent. Fore tarsal tooth present in male, absent in female; fore femora enlarged in large males; fore tibia sometimes with seta-bearing apical tubercle in male. Fore wings with numerous duplicated cilia. Pelta with well-developed lateral wings; tergite II with two pairs of wing-retaining setae, but III–V each with three pairs of sigmoid wing-retaining setae and numerous sigmoid accessory setae. Tube shorter than head, sides almost straight, with few lateral setae and evenly narrowing to anal ring.

Nomenclatural data

Mecynothrips Bagnall, 1908: 356. Type species *Mecynothrips wallacei* Bagnall, by monotypy.

This genus of 14 species replaces the pantropical *Elaphrothrips* East of Wallace's Line in Indonesia (ThripsWiki, 2021).

Australian species

Mecynothrips acanthus (Hood, 1918: 77).

Mecynothrips hardyi (Priesner, 1928: 657).

Mecynothrips wallacei Bagnall, 1908: 357.

Relationship data

This genus is closely related to the pantropical genus *Elaphrothrips* in the Idolothripinae, Idolothripini, Elaphrothripina. Similar in size and shape to *Idolothrips* but without prominent lateral setae on the tube.

Distribution data

Two of the species in Australia are found only in rain forest in northern Queensland, but *hardyi* lives on the dead leaves of *Acacia harpophylla* in arid areas of southern Queensland.

Biological data

Spore-feeding on dead branches and dead leaves, adults (but not larvae) of these species have a spore-crushing apparatus in the fore gut (Tree *et al.* 2010).

References

Mound LA (1974) Spore-feeding Thrips (Phlaeothripidae) from Leaf Litter and Dead Wood in Australia. *Australian Journal of Zoology* 27: 1–106.



wallacei males



hardyi female



acanthus pronotum large male



acanthus pronotum small male



hardyi pronotum



wallacei pelta



hardyi with eggs



hardyi proventriculus



hardyi proventriculus SEM

Palmer JM & Mound LA (1978) Nine genera of fungus-feeding Phlaeothripidae (Thysanoptera) from the Oriental Region. *Bulletin of the British Museum (Natural History)*. Entomology 37: 153–215.

Tree DJ, Mound LA & Walter GH (2010) Fungal spore-feeding by adult and larval *Mecynothrips hardyi* (Priesner) (Thysanoptera: Phlaeothripidae: Idolothripinae). *Journal of Natural History* 44: 307–316.

ThripsWiki (2021) ThripsWiki - providing information on the World's thrips. Available from: <http://thrips.info/wiki/> (Accessed 1.xii.2021)