Liothrips

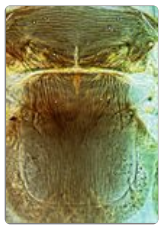
Generic diagnosis

Small to medium sized, dark, macropterous Phlaeothripinae with long dark setae. Head usually longer than wide, vertex transversely striate but reticulate on ocellar region; postocular setae long; mouth-cone long or short; maxillary stylets usually not retracted as far as postocular setae, and rarely close together. Antennae 8-segmented; segment III with one sense cone, IV with 3 (+1) sense cones; VIII slightly constricted at base. Pronotum transverse, with 5 pairs of long major setae; notopleural sutures complete. Prosternal basantra absent; ferna well developed; mesopresternum usually absent medially; metathoracic sternopleural sutures present but sometimes weak. Fore tarsal tooth absent in both sexes. Fore wings not constricted medially, with duplicated cilia. Pelta triangular; tergites II-VII each with two pairs of sigmoid wing-retaining setae; tergite IX setae S1 and S2 usually long and pointed. Male tergite IX setae S2 shorter and stouter than S1; sternite VIII with pore plate.

setinodis Head & pronotum

vaneeckei Head & pronotum

setinodis Metanotum & pelta



vaneeckei Meso & metanota

vaneeckei prosternites

vaneeckei Female

setinodis Antenna

vaneeckei Fore wing

flavicornis Holotype

Nomenclature

Liothrips Uzel, 1895: 261. Type species *Phloeothrips setinodis* Reuter, 1880, by subsequent designation of Hood, 1918.

Brachythrips Reuter, 1899: 28. Type species *Brachythrips flavicornis* Reuter 1899, by monotypy.Synonymised by Mound, 2024.

With 247 species listed worldwide, this is one of the most species-rich genera of Thysanoptera (ThripsWiki, 2023). *Liothrips flavicornis* (Reuter) remains known only from a single female that is probably not European in origin (Mound, 2024)

Euro-Mediterranean species

Liothrips amabilis Bagnall, 1927
Liothrips austriacus Karny, 1910
Liothrips flavicornis (Reuter, 1899)
Liothrips leucopus Titschack, 1958
Liothrips oleae (Costa, 1857)
Liothrips pragensis Uzel, 1895
Liothrips reuteri (Bagnall, 1913)
Liothrips setinodis (Reuter, 1880)
Liothrips vaneeckei Priesner, 1920

Distribution

Liothrips species have been described from all over the world, but mainly from tropical areas (Okajima, 2006), including almost 30 species from southern China (Dang *et al.*, 2024). There is considerable variation in position of the maxillary stylets amongst the species, from close together to more widely separated, also in head length, might suggest but there is no clear evidence that more than one evolutionary lineage exists among these species.

Biology

All of the species are associated with the leaves of dicotyledenous plants, including one widespread species on the

reduced leaves of lily bulbs. Some species are associated with leaf galls, and these possibly include gall inducers. However, some such species may be invaders of galls induced by other Phlaeothripinae, and such species may even be predators rather than phytophages.

Relationships

This is the primary genus of the *Liothrips*-lineage, an extensive group of leaf-feeding Phlaeothripinae that is found world-wide. This lineage also includes such species-rich genera as *Gynaikothrips* and *Gigantothrips* in tropical countries (Mound & Tree, 2021), as well as the closely related genus *Teuchothrips* (Mound *et al.*, 2023).

References

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