

# Liothrips ilex

## Distinguishing features

Both sexes fully winged. Body and legs dark brown, tarsi and apex of fore tibiae yellow; antennal segment III yellow, IV–VI variably yellow in basal half; major setae dark brown, tergite IX setae paler; fore wing deeply and uniformly shaded. Antennae 8-segmented; segment III with one sense cone, IV with 3 sense cones; VIII short and broad at base. Head scarcely longer than wide; maxillary stylets retracted to postocular setae, about one fifth of head width apart medially; post ocular setae pointed, shorter than dorsal eye length; mouth cone extending between fore coxae. Pronotum with five pairs of softly pointed major setae, posteroangulars longer than half median length of pronotum; epimera sometimes with a second pair of short stout setae; epimeral sutures complete; prosternal basantra not developed, ferna present, mesopresternum lateral triangles weakly joined medially. Fore tarsus without a tooth. Metanotum weakly reticulate medially, median setae small and acute. Fore wing parallel sided, with about 12 duplicated cilia; three softly pointed sub-basal setae sub-equal in length. Tergite IX setae S1 and S2 pointed, slightly shorter than tube.

Male similar to female; tergite IX setae S2 short; sternite VIII without a pore plate.



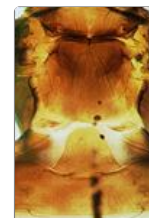
Female



Antenna Antennal segments III–V



Head & pronotum



Mesonotum, metanotum, pelta & tergite II



Fore wing

## Related species

*L. ilex* is host specific to the Californian Toyon or Christmasberry shrub. It is similar in color and structure to the lily thrips, *L. vaneekei*, with long finely pointed pronotal epimeral setae, but has darker mid and hind tibiae. Contrary to statements in Cott (1956: 56), antennal segments IV, V and VI are variable in color and sometimes almost entirely brown. As a result, such specimens are not readily distinguishable from specimens identified as *L. dumosus* and *L. eremicus*. Currently, there are almost 280 species listed in the genus *Liothrips*, although 30 of these are placed in two sub-genera known only from Asia. As a result, this is larger than either *Thrips* or *Haplothrips*, these three being the largest genera of Thysanoptera. However, in comparison to both *Thrips* and *Haplothrips* there are far greater problems in *Liothrips* in species recognition. A particularly high proportion of the described species are known from single samples, or even single individuals, resulting in little knowledge of variation within and between species, and thus the general assumption that most members of the genus are host-specific requires extensive testing. Stannard (1957) listed 32 species of *Liothrips* from North America, and subsequently (Stannard, 1968) included 14 of these in his keys to the Illinois fauna. Cott (1956) treated 11 species from California, two of which he placed in *Rhynchothrips*, but currently from this State there are 13 *Liothrips* species listed (Hoddle *et al.*, 2004) of which several cannot at present be recognized.

## Biological data

Breeding on young leaves of *Heteromeles arbutifolia* [Rosaceae], the Californian Toyon or Christmasberry shrub. This thrips induces irregular galls and leaf distortion on this horticulturally important plant, and individuals pupate in soil (Bailey, 1938: 64).

## Distribution data

Known only from California.

## Family name

PHLAEOTHIRIPIDAE, PHLAEOTHIRIPINAE

## Species name

*Liothrips ilex* (Moulton)

### Original name and synonyms

*Trichothrips ilex* Moulton, 1907: 62

### References

Bailey SF (1938) Thrips of economic importance in California. *University of California College of Agriculture Experimental Station* **346**: 1–77.

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Hoddle M, Mound LA & Nakahara S (2004) Thysanoptera recorded from California, USA: a checklist. *Florida Entomologist* **87**: 317–323.

Stannard LJ (1957) The phylogeny and classification of the North American genera of the sub-order Tubulifera (Thysanoptera). *Illinois Biological Monographs* **25**: 1–200.

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