

Frankliniella schultzei



Distinguishing features

Female macroptera. Body either yellow with faint shadings on tergites and antennal segments VI-VIII brown, or brown with pronotum, tibiae and tarsi paler, and antennae brown with segments III-V yellow at base; fore wings pale with dark setae. Antennae 8-segmented; III-IV with forked sense cone, VIII longer than VII. Head wider than long; 3 pairs of ocellar setae, pair III arising close together between anterior margins of hind ocelli and as long as side of ocellar triangle; postocular setae pair IV as long as distance between hind ocelli. Pronotum with 5 pairs of major setae; anteromarginal setae slightly shorter than anteroangulars, one pair of minor setae present medially between posteromarginal submedian setae. Metanotum with 2 pairs of setae at anterior margin, campaniform sensilla absent. Fore wing with 2 complete rows of venal setae. Tergites VI-VIII with paired lateral ctenidia, on VIII anterolateral of spiracle; posteromarginal comb on VIII not developed. Sternites III-VII without discal setae.

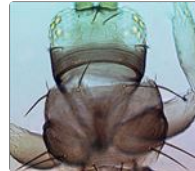
Male macroptera. Similar to female but smaller; tergite VIII with a few teeth laterally on posterior margin; sternites III-VII with broadly transverse pore plate.



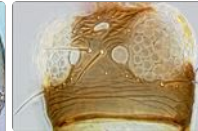
Female (dark form)



Female (pale form)



Head & pronotum



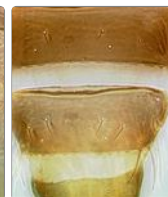
Head



Antenna



Meso & metanota



Tergites VII-IX



Female sternites I-III

Related species

Frankliniella species all have a pair of setae in front of the first ocellus, a complete row of setae on both veins of the fore wing, and a pair of ctenidia on tergite VIII situated anterolateral to the spiracles. Most of the 180 described species are known only from the neotropics, but *F. schultzei*, *F. occidentalis* and *F. williamsi* have been widely introduced around the world (Kirk & Terry, 2003). *F. schultzei* is exceptional within the genus because of the close placement of ocellar setae III within the ocellar triangle, and tergite V lacks paired ctenidia. The variation in colour within and between populations has been interpreted as indicating a series of sibling species, and this suggestion has been supported by molecular studies (Hereward *et al.*, 2017).



Male tergite IX



Male sternites IV-VII



Biological data

Feeding and breeding in flowers and on leaves. This is a highly polyphagous pest, that is also an important vector of tospoviruses on many crops. However, it also feeds on leaf mites of which it can be a useful biocontrol agent.

Distribution data

Pantropical, and widespread throughout Australia.

Family name

THRIPIDAE - THIRIPINAE

Species name

Frankliniella schultzei (Trybom)

Original name and synonyms

Physopus schultzei Trybom, 1910: 151

Euthrips gossypii Shiraki, 1912: 56

Frankliniella sulphurea Schmutz, 1913: 1019

Frankliniella delicatula Bagnall, 1919: 263
Frankliniella trybomi Karny, 1920: 36
Frankliniella persetosae Karny, 1922: 97
Frankliniella dampfi Priesner, 1923: 64
Frankliniella tabacicola Karny, 1925: 4
Frankliniella dampfi interocellaris Karny, 1925: 126
Frankliniella africana Bagnall, 1926: 100
Frankliniella anglicana Bagnall, 1926: 281
Frankliniella aeschlyi Girault, 1927: 2
Parafrankliniella nigripes Girault, 1928: 4
Frankliniella paucispinosa Moulton, 1933: 122
Frankliniella kellyana Kelly & Mayne, 1934: 20
Frankliniella dampfi nana Priesner, 1936: 85
Frankliniella lycopersici Andrewartha, 1937: 163
Frankliniella favoniana Priesner, 1938: 30
Frankliniella pembertonii Moulton, 1940: 247
Frankliniella clitoriae Moulton, 1940: 248
Frankliniella schultzei nigra Moulton, 1948: 100
Frankliniella ipomoeae Moulton, 1948: 95.

References

Hereward J, Hutchinson JA, McCulloch GA, Silva R, Walter GH (2017) Divergence among generalist herbivores: the *Frankliniella schultzei* species complex in Australia (Thysanoptera: Thripidae). *Arthropod-Plant Interactions* 11(6): 875–887.

Mound L, Hoddle MS & Hastings A (2019) *Thysanoptera Californica. An identification and information system to thrips in California*. Lucidcentral.org, Identic Pty Ltd, Queensland, Australia.
https://keys.lucidcentral.org/keys/v3/thrips_of_california_2019/