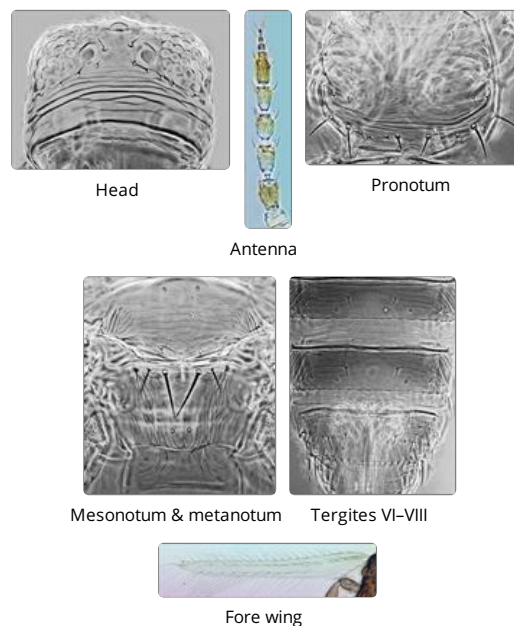


Frankliniella tuttlei

Distinguishing features

Both sexes fully winged. Body and legs mainly yellow with weak brown shading; antennal segment I pale, II–V with apex brown, VI darker than II; fore wing pale. Antennae 8-segmented; segments III–IV with forked sense cone. Head slightly wider than long; three pairs of ocellar setae present, pair III shorter than diameter of one ocellus, arising between anterior margins of posterior ocelli; postocular setae pair I present, pair IV shorter than diameter of hind ocellus. Pronotum with anteromarginal and anteroangular setae scarcely longer than discal setae, 2 pairs of posteroangulars long; one pair of minor setae medially between posteromarginal submedian setae; posteromarginal setae IV no larger than III. Mesonotum with 2 pairs of setae close to anterior margin, campaniform sensilla present. Fore wing with 2 complete rows of veinal setae. Abdominal tergites V–VIII with paired ctenidia, VIII with ctenidia anterolateral to spiracle; posteromarginal comb on VIII with long, slender microtrichia on small triangular bases; tergite X clearly shorter than IX. Sternites III–VII without discal setae.



Related species

This is one of 24 species in the *F. minuta* group (Sakimura & O'Neill, 1979). These are all associated with flowers of Asteraceae, and are known mainly from South and Central America and western USA. Californian specimens labeled as *F. tuttlei* that have been studied from the Ewart Collection at UCR have ocellar setae III arising between the posterior ocelli, posterior to a tangent joining the anterior margins of these ocelli. This condition was illustrated by Sakimura & O'Neill (1979) both for this species and for *F. ewarti*. These two are currently distinguished by the color of the second antennal segment, and the slightly shorter tenth abdominal tergite of *F. tuttlei*. There are almost 240 species listed in the genus *Frankliniella*, with up to 130 further names placed into synonymy (Nakahara, 1997). This high rate of synonymy has been due to the previously unrecognized variability in size and color of so many species.

Biological data

Presumably breeding in flowers, and recorded from *Aster* and *Palafoxia* [Asteraceae].

Distribution data

Recorded only from California and Arizona.

Family name

THRIPIDAE - THRIPINAE

Species name

Frankliniella tuttlei Sakimura & O'Neill

Original name and synonyms

Frankliniella tuttlei Sakimura & O'Neill, 1979: 30

References

Nakahara S (1997) Annotated list of the *Frankliniella* species of the world (Thysanoptera: Thripidae). *Contributions on Entomology, International* 2 (4): 355–389.

Sakimura K & O'Neill K (1979) *Frankliniella*, redefinition of genus and revision of *minuta* group of species (Thysanoptera: Thripidae). *U.S. Department of Agriculture, Technical Bulletin* 1572: 1–49.

