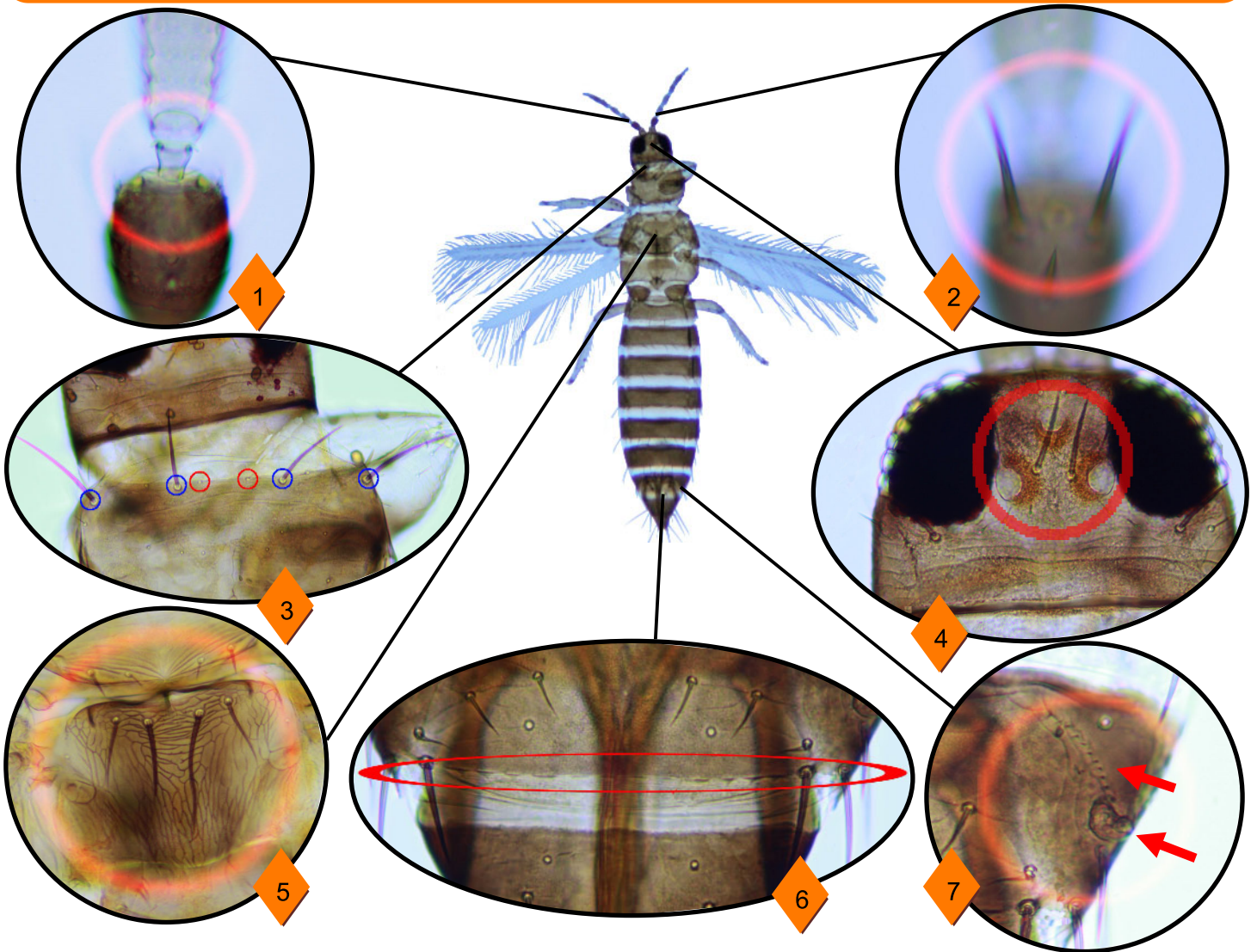


Common blossom thrips

Frankliniella schultzei (Trybom)

Jeffrey D. Cluever
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Morphology



1. Smooth pedicel at base of antennal segment III.
2. Setae arising from antennal segment II not forming stout spines.
3. 4 major setae on anterior margin of pronotum (blue); 2 minor setae (red).
4. Ocular III setae arising between posterior ocelli.
5. Metanotal campaniform sensilla absent.
6. Comb on tergite VIII not well-developed.
7. Ctenidium (upper arrow) on tergite VIII anterior to spiracle (lower arrow).

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Photo credits: Jeffrey D. Cluever.

Frankliniella schultzei

Appearance

Egg: Eggs are small, embedded in the foliage, and unlikely to be seen.

Larvae: Light in color, wingless, and are usually not differentiated from other larvae.

Pupal Stages: Wing buds present with antennae straight out (prepupa) or with antennae pulled back over the head (pupa). These are not usually identified.

Adult: Two color morphs exist. The dark morph is the most common in Florida, but the light-yellow morph is also present. Similar to other *Frankliniella* spp., the adult has 4 major setae on the anterior margin of the pronotum. Also similar to other *Frankliniella* spp., it has ctenidia (oblique rows of fine hairs [often appearing as dots]) on tergite VIII that are anterior to the spiracles. **Other diagnostic features:** The pedicel (base of antennal segment III) is smooth. Ocellar III setae (large pair nearest the ocelli) arise between the posterior ocelli. Metanotal campaniform sensilla (sensory structures that appear like two little circles) are absent. The comb on tergite VIII (row of microtrichia) is not well developed.

Life Cycle

The duration of each stage can vary based on temperature and host plant. At 24.5°C (76°F) on tomato it takes 12.3 days to develop from egg to adult. The individual stages are as follows:

1. Four days following oviposition into plant tissue the egg hatches.
2. The larva I and larva II each feed for 2.5 days.
3. At the end of the larva II stage the thrips drops to the soil to pupate. The non-feeding prepupal and pupal stages last for 1.2 and 2.1 days respectively.

Host Range and Distribution

Wide host range, including beans, cucumber, eggplant, lettuce, peach, peanut, pepper, pumpkin, roses, spinach, strawberry, tomato, and watermelon.

Origin: South America or Africa.

Distribution: Global. **United States:** Colorado, Hawaii, and Florida. **Florida:** Central and southern portions of the state.

Types of Injury

This species transmits the ilarvirus *Tobacco streak virus* and the tospoviruses *Chrysanthemum stem necrosis virus*, *Groundnut bud necrosis virus*, *Groundnut ringspot virus*, *Tomato chlorotic spot virus*, and *Tomato spotted wilt virus*.

It is primarily a flower feeder, so most damage would be expected on the flower or fruit. If feeding occurs on the foliage it may cause silvering or distortion. Feeding on the bloom can cause discoloration to the bloom or malformed fruit. Feeding on the fruit can cause scarring, bronzing, and malformations. Occasionally one may see oviposition blisters where the female has laid her eggs.