

Citrus Pest Quick Guide:

Flower Thrips (*Frankliniella bispinosa* Morgan and *Frankliniella kellyae* Sakimura)

Life Cycle

Thrips eggs are small and embedded into flower parts, making them hard to detect and often not identifiable. Larvae are white to yellow with fringed wings, appear similar to other *Frankliniella* thrips, and often are not identifiable. The pupal stages are non-feeding and not generally noticed because pupation often occurs out of sight in the soil. Most thrips that attack plants are yellow to amber in color. Adult thrips migrate as “aerial plankton” to new hosts during flowering each year.

Damage

Thrips have specialized mouthparts that allow them to puncture plant material with one half of their mandible and then suck up plant material with the other half. These insects have a wide host range, making them particularly challenging to manage.

Thrips feeding removes the contents of cells 1–5 cells deep from the feeding site. These cells then die and can result in flowers being aborted. High populations of thrips can also reduce fruit set, particularly in Navel and Valencia orange.

If feeding occurs on the foliage or fruit, it may cause silvering. Feeding on the bloom can cause petal browning or malformed fruit. Common feeding damage includes scarring or bronzing, a ring near the top of the fruit or where fruit were touching in the grove.



Frankliniella bispinosa adult.
Credit: L. Buss, UF/IFAS



Thrips feeding on flower.
Credit: UF/IFAS CREC



“Halo” from thrips feeding.
Credit: UF/IFAS CREC



“Halo” from thrips feeding on young fruit.
Credit: UF/IFAS CREC



Thrips feeding damage.
Credit: UF/IFAS CREC

1. This document is ENY-2063, one of a series of the Entomology and Nematology Department, UF/IFAS Extension. Original publication date April 2022. Visit the EDIS website at <http://edis.ifas.ufl.edu> for the currently supported version of this publication.

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