

## Flower Thrips Management in Southern Highbush Blueberry in Florida

Flower thrips (*Frankliniella bispinosa* Morgan) are a pest of southern highbush blueberries in Florida during bloom. Larvae and adults feed on all parts of the flowers including ovaries, styles, petals, and developing fruit. This feeding damage can reduce pollination and the quantity and quality of fruit produced. Adult females also cause damage to fruit when they lay their eggs inside flower tissues, and the newly hatched larvae bore holes in the flower tissue when they emerge, resulting in scarring of the fruit. Thrips numbers typically increase dramatically as corollas open and bloom progresses.



Flower thrips have a short life cycle (one cycle in 18 to 22 days under ideal conditions). This includes two active feeding larval stages and two inactive pupae stages before becoming adults, completing multiple generations per year. Adults are very small (1/16 of an inch in length), yellowish to orange in color, with fringed wings.



Determining when or if blueberries should be treated for thrips is difficult. To measure treatment thresholds for southern highbush blueberries, begin sampling bloom clusters as soon as the flower begins to open. Sample four to five areas in a 1-acre block by placing a white sheet of paper under a flower cluster and tapping lightly. Count the number of flowers in the cluster, and also the number of thrips dislodged from the flower cluster. If you average more than four thrips per flower some type of management is recommended. Alternatively, two white sticky traps could be used to monitor a 5-acre block (one on the border and one in the center). If you have more than 80–100 thrips then some type of management is needed.

Blueberries are a pollination-sensitive crop, and careless use of insecticides and subsequent bee kill can easily impair pollination and ruin fruit set. Only selected insecticides (Delegate®) should be used during bloom. If Delegate® is used, the insecticide should be applied in the early morning or late evening and given 3 hours of drying time before bees are allowed to forage on the crop. Assail® and Apta® are the material of choice **only** until 5 days pre-bloom.

Resources –

- *Frankliniella bispinosa* Morgan (Insecta: Thysanoptera: Thripidae) ([http://entnemdept.ufl.edu/creatures/VEG/THRIPS/Frankliniella\\_bispinosa.htm](http://entnemdept.ufl.edu/creatures/VEG/THRIPS/Frankliniella_bispinosa.htm))
- 2022 Florida Blueberry Integrated Pest Management Guide (<https://edis.ifas.ufl.edu/publication/HS380>)
- UF/IFAS Blueberry Growers Guide app (<https://tosto.re/blueberryuf>)

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