

Collaborative Blueberry Gall Midge Monitoring in Central Florida

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Situation

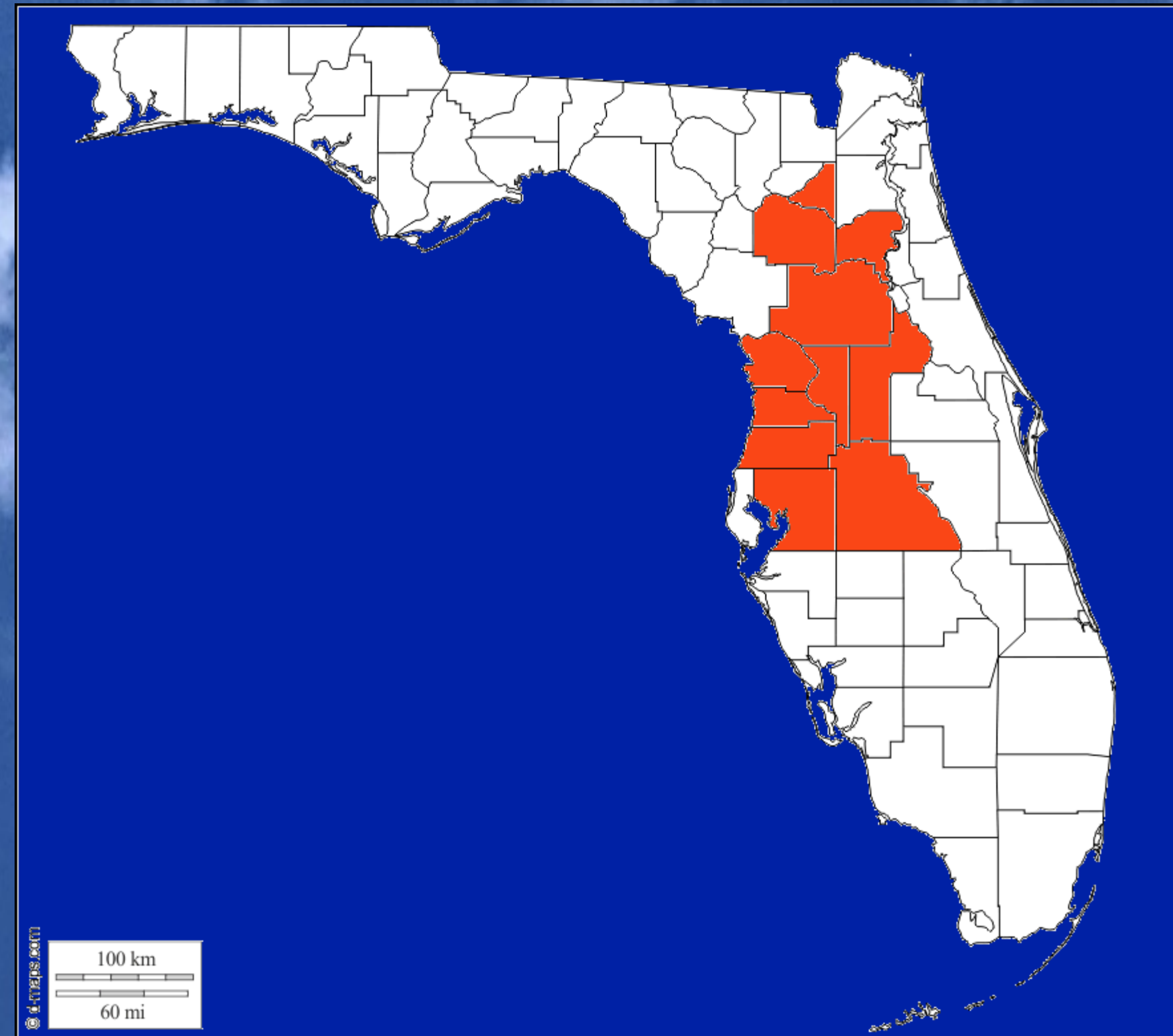
- ◆ Blueberry gall midge is a new blueberry pest that threatens Florida production
- ◆ The insect lays eggs in blueberry buds. Resulting larvae eat these buds, causing death of flower and loss of potential fruit.
- ◆ Detection is difficult and timely sprays are required to prevent damage.

Methods

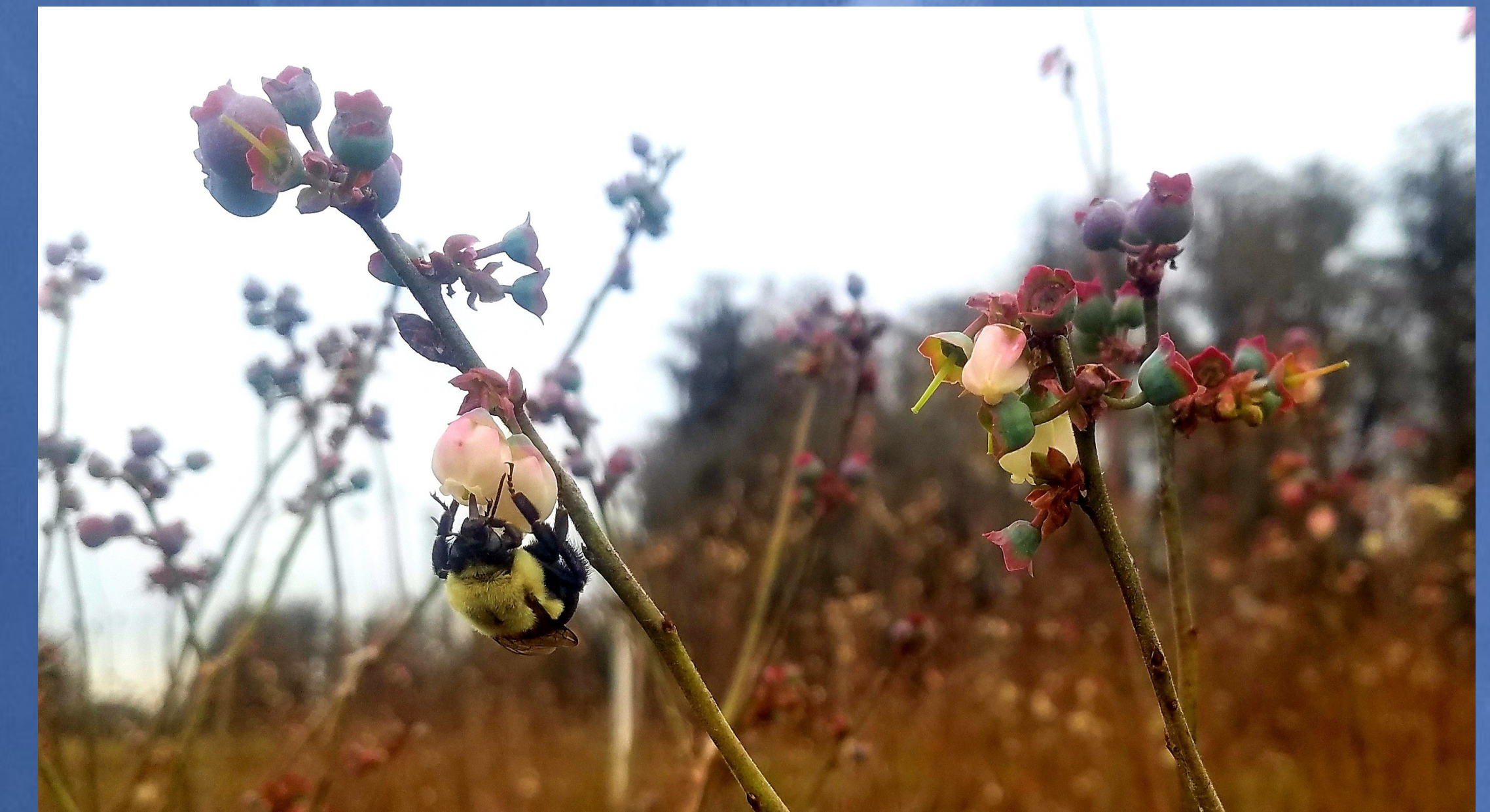
- ◆ Regional agents and the Blueberry Extension Coordinator set up traps and monitored BGM populations in Central Florida farms on a weekly basis throughout the flowering season.
- ◆ 15 farms were monitored in 2018/19. The 8 most active farms were monitored in 2019/20.
- ◆ Population tallies were reported to the Florida Blueberry Growers Association to rapidly disseminate data to growers.
- ◆ An educational program was provided with seminars on blueberry pests including hands-on identification exercises.

Results

- ◆ 1,345 BGM were identified across 15 farms in the region during 2018/19. 221 BGM were identified in 8 farms in 2019/20.
- ◆ Surveyed growers, 29% of whom own 100+ acre farms, indicated that they used the published results of the monitoring program to assist in making spray decisions. 57% reduced their pesticide use and observed reduced pest damage. Growers reported reduced production costs.



Counties monitored for blueberry gall midges.



Blueberry gall midges are at their most dangerous right when pollinators are brought into the field, rendering systemic pesticides unusable. Only the flying adults can be treated, so sprayings must be timed for when gall midges are present.



A trap is given a cursory inspection for gall midges before being removed and replaced. Traps are refreshed on a regular basis and sent to a lab for positive identification using a dissecting microscope. The threshold for spraying is two adult blueberry gall midges in a single trap.



Signs of blueberry gall midge damage.