

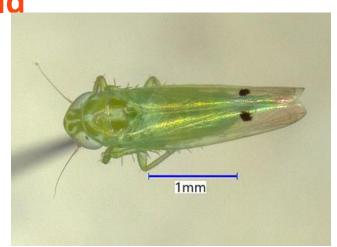
Two-Spotted Cotton Leafhopper 'Jassid' update

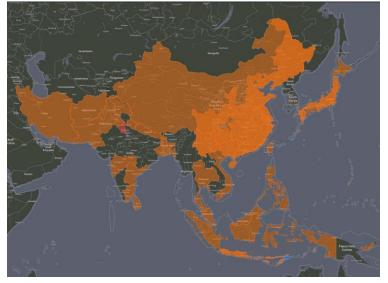
Isaac L. Esquivel Field and Forage Crop Entomologist NFREC-Quincy, FL

Two Spotted Cotton Leafhopper Amrasca biguttula

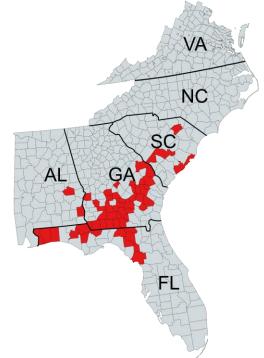
Also known as the Cotton Jassid

- Easier to say Jassid!
- Native to the Indian Subcontinent, east to Japan and Micronesia
- Puerto Rico 2023
- Florida 2024 → 2025
- Detected in cotton 7/3/25 in Gilchrist Co. (Likely earlier)
- Pretty much every field from Jacson county → east.





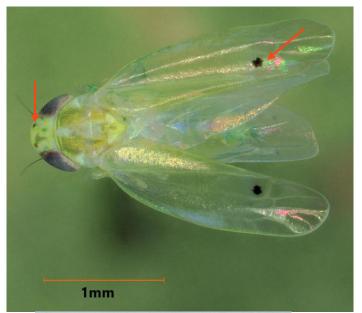
As of Aug 8th 2025



Two Spotted Cotton Leafhopper Amrasca biguttula

Identification

- Very small → looks like a lot of other leafhoppers
 - Like the potato leaf hopper
- Can be distinguished by a pair of two black dots on the head and wings.
 - Need to dissect male genitalia for confirmation
- Late instar nymphs have black dots on developing wingpads









Cotton Jassid Biology

Life History

- Females insert eggs into plant tissues such as tender petioles, twigs and succulent leaves; have also been found to lay eggs in the leaf tissue, usually in the spongy layer between the vaascular bundles and the epidermis.
- Eggs hatch 3-4 days
- Nymphs: 5 instars (8-11 days)
- Adults live 2-4+ weeks.
- Generation about 2 weeks.
- Economic pest in other parts of the world.







Eggs embedded in midvein of leaf oblong/crescent shaped

Cotton Jassid Biology

Damage to Cotton

- Feed on the lower surface of leaves (introduce salivary toxins).
- Yellowing, reddening, then browning of leaves, "hopperburn", can lead to the complete desiccation of the plants.
- Not sure about yield effects yet
- It appears that plants go downhill quickly from the first signs of hopper burn



Early discoloration



From Friday to
Monday went from
slight discoloration to
this





Upward cupping of leaves



Two Spotted Cotton Leafhopper Amrasca biguttula

Scouting and Preliminary Threshold

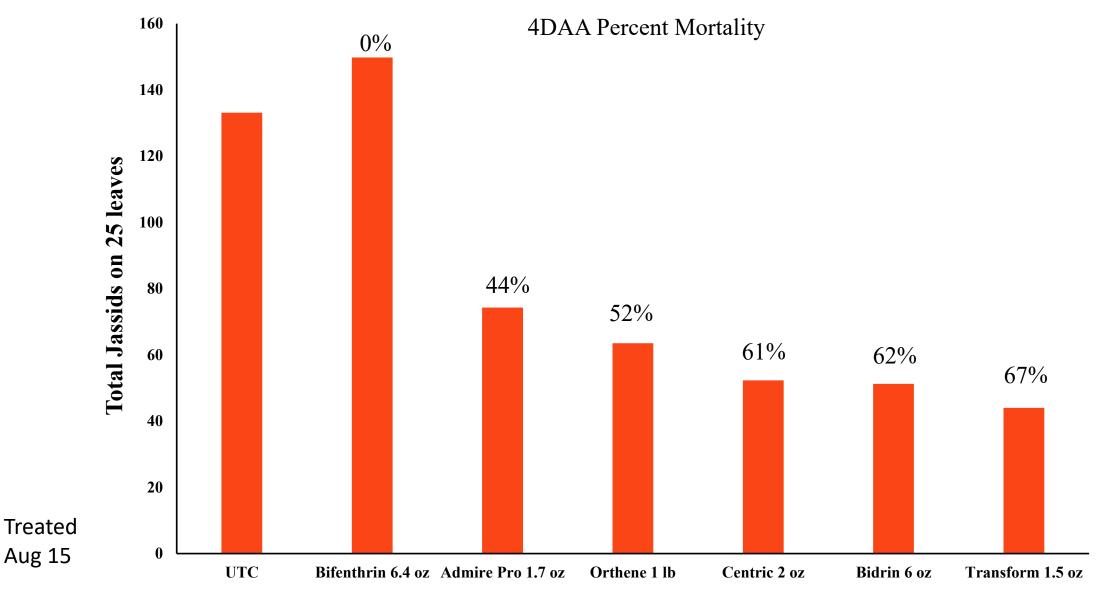
- Count jassid nymphs on the underside of an individual mainstem leaf in the top 6 inches.
- Sample 1 leaf per acre or a minimum of 25, whichever is greatest.
- **Preliminary** Threshold:
 - 3/4 nymphs per leaf and symptoms present.
 - Do not confuse with aphids.



- We have observed populations increase significantly in last two weeks.
- Similar to whiteflies
- Crops we should watch:
 - Cotton, corn, soybean, peanut, okra, sunflowers, eggplant, potatoes, peas, and others potentially.

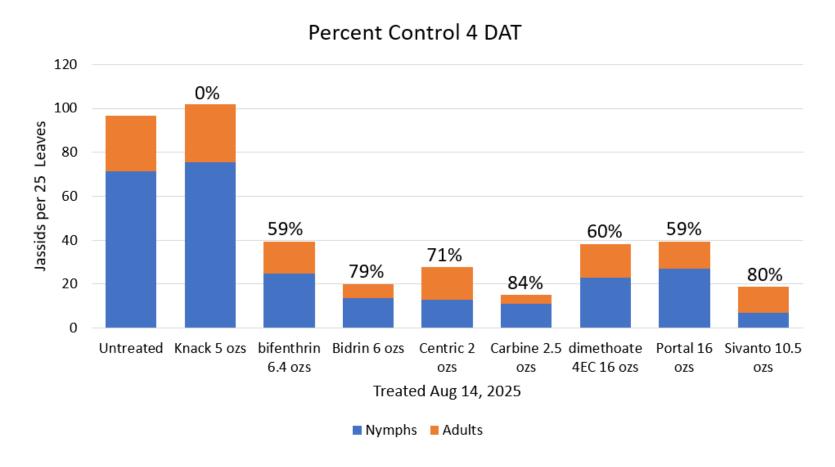
Jackson Co. On-Farm Efficacy Trial

(Drs. Isaac L. Esquivel & Scott Grahm-Auburn)



Cotton Jassid

Brooks County (4 DAT) Dr. Phillip Roberts, UGA



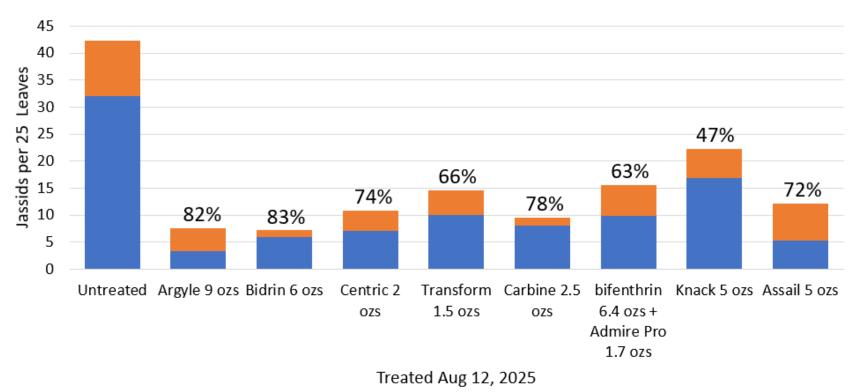


Cotton Jassid

Appling County (3 DAT)

Dr. Phillip Roberts, UGA

Percent Control 3 DAT

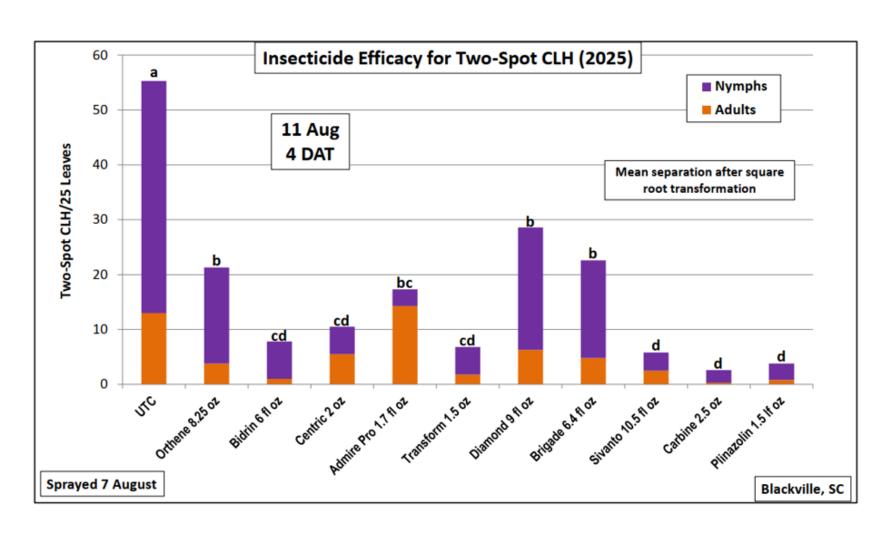


■ Nymphs ■ Adults



Cotton Jassid

Blackville SC (Dr. Jeremy Greene, Clemson)



Notes on commercial application GA & FL

Preliminary insecticide efficacy

- NFREC: Aug 6th Bidrin 8oz/a
 - Good control: 4 DAT, rain 40 mins after application
- Gilchrist Co: 1st week of July
 - Assail 6.1 oz/a applied to treat whitefly in 3 fields with Jassids present.
 - Jassid populations did not seem to increase 3 weeks later → need data on this.

Appling County: 2 fields treated.

July 31st: bifenthrin 6.4 ozs/a + Orthene 97 0.5 lb/a Fair control 4 DAT and will be resprayed August 5th.

August 1st: Bidrin 8 ozs/a Very good control observed 3 DAT.

Tifton (Dr. Camp Hand)

August 1st: Bidrin 6 ozs/a Very good control observed 3 DAT.

Pyrethroids (bifenthrin) **DO NOT** provide acceptable control.

