

Introduction: The two-spot cotton leafhopper, or cotton jassid (*Amrasca biguttula*), has emerged as a significant threat to the cotton industry in the United States (Graham, 2025). As a sap feeder that feeds primarily on the undersides of leaves, it causes “hopperburn”, resulting in yellowing, curling, and reddening to browning of leaves. Infestations can severely reduce crop yields through foliage loss in cotton, okra, eggplant, and other crops.

Distribution: The cotton jassid originates from Asia and Oceania, where it is commonly found in warmer regions. It is present in the Middle East to Australia and the Mariana Islands and has been reported in Africa and the Caribbean (CAPS 2025). The first official record in the continental United States was in 2023, and it has been spreading throughout the southeastern United States with records in Alabama, Florida, Georgia, Texas and South Carolina (Cabrera-Asencio *et al.*, 2023).

Description: Eggs are rectangular, yellowish-white, less than 1 mm long, and laid within leaf veins and midribs, making them nearly undetectable without magnification. Immatures are wingless, pale green, and very small (2.18 to 2.34 mm long). They are difficult to distinguish from nymphs of other leafhopper species. Adults measure about 2 to 3 mm in length, are pale green, and have yellowish-green wings. Each forewing usually bears a distinctive black spot. Because these markings are sometimes faint or absent, accurate identification may require dissection of the male genitalia. Both nymphs and adults move characteristically sideways and hop quickly when disturbed (CAPS 2025).

Biology: Reproduction occurs year-round and generations overlap. Females lay between 14 and 60 eggs, which usually hatch within 5 to 7 days. The immature nymphal phase lasts 5 to 16 days, and adults may live up to 5 weeks. The duration of the life cycle varies with temperature and humidity. Development may proceed more rapidly on certain hosts, such as okra. The plant species that are target-ed by the cotton jassid may change over the course of the season as the insects move to exploit available host plants (CAPS 2025).



Adult cotton jassid (*Amrasca biguttulata*)
(images by Isaac L. Esquivel (UF/IFAS).



Cotton jassid nymph (*Amrasca biguttulata*) (images
by Isaac L. Esquivel (UF/IFAS).

Economic importance: Hopperburn caused by cotton jassid feeding inhibits plant growth and leads to the premature shedding of buds, flowers, and fruitlets, decreasing both crop yield and quality (CAPS 2025). Both nymphs and adults excrete honeydew, which promotes sooty mold growth on the leaf surface and shades the leaves from sunlight needed to photosynthesize. Cotton jassid feeds on a wide variety of plants so it poses a significant potential threat to California agriculture. It is a destructive pest of cotton (*Gossypium hirsutum*) in its native range. It also causes documented damage to okra (*Abelmoschus esculentus*), roselle (*Hibiscus sabdariffa*), sunflower (*Helianthus annuus*), tomato (*Solanum lycopersicum*), and eggplant (*Solanum melongena*). A list of hosts is available in CABI (2024) and also includes various grasses, and legumes like pigeon pea (*Cajanus cajan*) and cowpea (*Vigna unguiculata*).



Hopperburn damage caused by cotton jassid (*Amrasca biguttulata*) on cotton in Florida (images by Isaac L. Esquivel (UF/IFAS)).



References:

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