Cotton Seed Bug (Oxycarenus hyalipennis)

The Cotton Seed Bug (CSB) is a pest of plants in the family Malvaceae and an agriculturally significant pest primarily of cotton (*Gossypium spp.*), okra (*Abelmoschus esculentus*), and kenaf (*Hibiscus cannabinus*). First detected in California in 2019, CSB is now considered established in the environment and recently detected in multiple nurseries in Southern California.



Photo Credit: Natasha Wright, FDACS-DPI.

CSB is a small Hemipteran insect, roughly 4mm long as an adult, and is brown-black in color with a pink-red abdomen and clear wings (though nymphs lack wings). CSB is relatively nondescript and, at a glance, may be confused with a variety of other Hemipterans, especially other seed bugs in the superfamily Lygaeoidea. CSB has multiple generations per year and may complete a full generation (egg to adult) in as little as 20 days. CSB eats using a straw-like mouthpart to puncture into plant material and suck out fluids.

Host Plants

Aside from cotton, CSB feeds on a wide variety of Malvaceous seeds, including common ornamental plants such as Mallows, Hibiscus, and Bellflowers. However, any plant in the family Malvaceae may be a host, and CSB requires Malvaceous hosts to reproduce. When host plants are not present or entirely devoid of moisture, CSB may feed on non-Malvaceous plants, and they can often be seen in large groups waiting for the return of their host plants.

Potential Impact

Cotton Seed Bug damage is a major concern in cotton and can cause significant loss of germination and seed oil content. Additionally, when CSB is present in cotton and become crushed during cotton processing, it can stain the cotton and render it unmarketable. Feeding on other Malvaceous host seeds may also result in loss of germination. On both Malvaceous and non-Malvaceous hosts, moisture-seeking feeding damage on leaves, stems, and fruit may present as greasy or damaged spots, possibly exuding gum depending on the plant type.

If you suspect Cotton Seed Bug, please contact San Diego County's Plant Pest Diagnostics Lab below.

