

CALIFORNIA DEPARTMENT OF FOOD AND AGRICULTURE
COTTON PEST CONTROL PROGRAM – COTTON SEED BUG UPDATE
55 YEARS OF SERVICE TO COTTON GROWERS

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Subject: Cotton Seed Bug, *Oxycarenus hyalinipennis* Detections in San Diego County

This advisory provides a brief update to the cotton industry of the recent detections of cotton seed bug (CSB) (*Oxycarenus hyalinipennis*) in San Diego County, California. These CSB detections are the first records in a production nursery setting in California.

San Marcos, San Diego County

- On July 11, 2025, County Agricultural Commissioner's (CAC) staff visited a nursery in San Marcos, San Diego County and collected six suspect CSB samples from *Hibiscus* plants. These samples were sent to the California Department of Food and Agriculture's (Department) Plant Pest Diagnostic Center (PPDC) for identification. On July 15, 2025, the PPDC confirmed the samples were six adult CSBs.
- All flowers and fruiting bodies (seed pods and/or seeds) will be removed from the plants on hold. Foliar treatment commences within the week along with reinspection in 30 days. San Diego County is continuing survey efforts at the nursery and surrounding areas, as well as conducting trace back and trace forward activities to determine potential origin of the CSB and any potential shipments of host material.
- The CAC staff have isolated 30 plants in total.
- Department and CAC staff will be visiting nurseries in the area to survey plants in Malvaceae family for CSB.
- The nearest commercial cotton field is 129 miles from this location.

Vista, San Diego County

- On July 11, 2025, CAC's staff visited a nursery in Vista, San Diego County and collected one suspect CSB sample from *Hibiscus* plants. The sample was sent to the PPDC for identification. On July 15, 2025, the PPDC confirmed the sample was an adult CSB.
- All flowers and fruiting bodies (seed pods and/or seeds) will be removed from the plants on hold. Foliar treatment commences within the week along with reinspection in 30 days. San Diego County is continuing survey efforts at the nursery and surrounding areas, as well as conducting trace back and trace forward activities to determine potential origin of the CSB and any potential shipments of host material.
- The CAC staff have isolated one plant in total.
- Department and CAC staff will be visiting nurseries in the area to survey plants in Malvaceae family for CSB.
- The nearest commercial cotton field is 127 miles from this location.

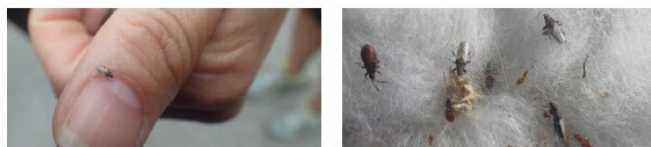
San Diego, San Diego County

- On July 16, 2025, CAC's staff visited a nursery in San Diego, San Diego County and collected eight suspect CSB samples from *Hibiscus* plants. The sample was sent to the PPDC for identification. On July 18, 2025, the PPDC confirmed the samples were adult CSBs.
- All flowers and fruiting bodies (seed pods and/or seeds) will be removed from the plants on hold. Foliar treatment commences within the week along with reinspection in 30 days. San Diego County is continuing survey efforts at the nursery and surrounding areas, as well as conducting trace back and trace forward activities to determine potential origin of the CSB and any potential shipments of host material.
- Department and CAC staff will be visiting nurseries in the area to survey plants in Malvaceae family for CSB.
- The CAC staff have isolated 79 plants in total.
- The nearest commercial cotton field is 123 miles from this location.

CSB is a small (adults are ~4mm long), brownish-black, nondescript true bug. The primary food of adults and nymphs is seed of plants in the family Malvaceae, including the genera *Gossypium*, *Hibiscus*, *Malva*, *Abutilon*, and (based on California detections) *Lagunaria*. Agricultural hosts include cotton, okra, and kenaf. *Lagunaria patersonia* trees appear to be a potential preferred host, as the seeds are present on the tree for long time periods. See the USDA-APHIS Pest Alert link below for images and additional information. Damage to cotton seed is reported to impact oil quality and reduce seed germination up to 75 percent. CSBs cause staining of cotton lint when their bodies are crushed during harvesting and processing.



Adult cotton seed bug, USDA photo by Julieta Brambila.



Adult cotton seed bug resting on a person's thumb (left), photo courtesy of California Department of Food and Agriculture. Life stages on cotton boll (right), USDA photo by Karolynne Griffiths.

The Department has conducted a visual survey to look for CSB in nurseries since 2023. In 2024, the Department surveyed a total of 49 nurseries for CSB in Los Angeles, Santa Barbara, San Diego, Riverside, Orange and Ventura counties. The nurseries were chosen based on the likelihood that they would have Malvaceous plants present ideally with seed pods. No CSB were found during this or past Pest Detection and Emergency Projects nursery and ornamental surveys. The Department continues in 2025 in conducting a CSB survey in nurseries located in Orange, Los Angeles, Ventura, Santa Barbara, Riverside, Santa Clara and San Diego counties. At least 54 sites will be surveyed during the 2025 survey. Production nurseries that ship Malvaceous plants out of state will be prioritized. In addition to these nursery/ornamental surveys, the Department is continuing to partner with the United States Department of Agriculture to conduct survey in commercial cotton and okra and monitor the spread of this pest. No CSB has been found in production cotton or okra in California to date. The Department will be providing an update during the upcoming California Cotton Pest Control Board meeting on December 18, 2025. The map below illustrates the current official CSB detections and proximity to the 2025 commercial cotton acreage.



The USDA-APHIS Pest Alert, which includes information on the identification of and surveying for this pest, is available here:

<https://www.aphis.usda.gov/sites/default/files/alert-cotton-seed-bug.pdf>

For information on the pest risk assessment and rating of cotton seed bug in California, please visit:

https://blogs.cdfa.ca.gov/Section3162/wp-content/uploads/2019/07/PRP2019-Oxycarenus_Profile_ADA.pdf

USDA Response Guidelines for commercial cotton fields:

[New Pest Response Guidelines: Oxycarenus hyalinipennis \(Costa\) Cotton Seed Bug](#)

If you have any questions regarding this advisory, please contact Canh Nguyen by email at canh.nguyen@cdfa.ca.gov.