

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 Updates

This advisory provides an update to the cotton industry of the recent detections of cotton seed bug (CSB) (*Oxycarenus hyalinipennis*) in 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.
- The CAC staff have isolated 30 plants. These plants were destroyed on 7/28/2025.
- The site will be resurveyed.
- 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 one *Hibiscus* plant. The sample was sent to the PPDC for identification. On July 15, 2025, the PPDC confirmed the sample was an adult CSB.
- The CAC staff have isolated one plant in total, and the associated *Hibiscus* was treated with an insecticide 7/22/2025 and 7/29/2025.
- The site will be resurveyed.
- 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.

- The CAC staff have isolated 79 plants in total, and the associated *Hibiscus* lots were treated with an insecticide on 7/17/2025.
- The site will be resurveyed.
- The nearest commercial cotton field is 123 miles from this location.

Oceanside, San Diego County

- On July 18, 2025, CAC's staff visited a nursery in Oceanside, San Diego County and collected ten suspect CSB samples from *Hibiscus* plants. The sample was sent to the PPDC for identification and the PPDC confirmed the samples were adult CSBs.
- The CAC staff have isolated 3,251 plants in total, and the associated *Hibiscus* lots treated with an insecticide on 7/18/2025 and 7/19/2025.
- The site will be resurveyed.
- The nearest commercial cotton field is 118 miles from this location.

Oceanside, San Diego County

- On July 22, 2025, CAC's staff visited a nursery in Oceanside, San Diego County and collected seven suspect CSB samples from *Hibiscus* plants. The sample was sent to the PPDC for identification and the PPDC confirmed the samples were adult CSBs.
- The CAC staff have isolated 96 plants in total, and the associated *Hibiscus* lot treated with an insecticide on 7/25/2025.
- The site will be resurveyed.
- The nearest commercial cotton field is 118 miles from this location.

Escondido, San Diego County

- On July 22, 2025, CAC's staff visited a nursery in Escondido, San Diego County and collected three suspect CSB samples from *Hibiscus* plants. The sample was sent to the PPDC for identification and the PPDC confirmed the samples were adult CSBs.
- The CAC staff have isolated 23 plants in total, and the associated *Hibiscus* lots treated with an insecticide on 7/23/2025.
- The site will be resurveyed.
- The nearest commercial cotton field is 100 miles from this location.

Fallbrook, San Diego County

- On July 25, 2025, CAC's staff visited a nursery in Fallbrook, San Diego County and collected five suspect CSB samples from *Hibiscus* and *Malva sp.* plants. The sample was sent to the PPDC for identification and the PPDC confirmed the samples were adult CSBs.
- The CAC staff have isolated 4,910 plants in total, and the associated lots treated with insecticide on 7/25/2025 and 7/28/2025.

- The site will be resurveyed.
- The nearest commercial cotton field is 113 miles from this location.

Orange, Orange County

- On July 23, 2025, CDFA staff visited a nursery in Orange, Orange County and collected two suspect CSB samples from *Hibiscus* plants. The sample was sent to the PPDC for identification and the PPDC confirmed the samples were adult CSBs.
- The CDFA staff have isolated 100 plants in total, and the associated *Hibiscus* lots treated with insecticide on 8/6/2025.
- The reinspection is scheduled for 9/10/2025.
- The nearest commercial cotton field is 105 miles from this location.

Irvine, Orange County

- On August 04, 2025, CAC's staff visited a nursery in Irvine, Orange County and collected ten suspect CSB samples from *Hibiscus* plants. The sample was sent to the PPDC for identification and the PPDC confirmed the samples were adult CSBs.
- The CAC staff have isolated 124 plants in total, and the associated lots treated with an insecticide on 8/12/2025.
- The site will be resurveyed.
- The nearest commercial cotton field is 116 miles from this location.

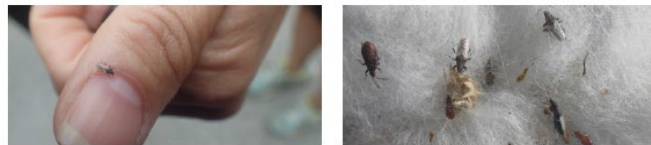
Santa Barbara, Santa Barbara County

- On July 31, and August 05, 2025, CAC's staff visited a nursery in Santa Barbara, Santa Barbara County and collected fourteen suspect CSB samples from *Alyogyne huegelii*, *Alyogyne* "Lady Barbara rose", and *Anisodonte* 'Tara's Pink' plants. The sample was sent to the PPDC for identification and the PPDC confirmed the samples were adult and nymph CSBs.
- The CAC staff have isolated 106 plants in total, and the plants were destroyed on 8/12/2025.
- The nearest commercial cotton field is 60 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.

Host Plant: *Malva parviflora*



CSBs on *Malva parviflora*



Photo courtesy: San Diego county CAC

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.cdфа.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@cdфа.ca.gov.