



CALIFORNIA DEPARTMENT OF  
FOOD & AGRICULTURE

Karen Ross, Secretary

DATE: December 1, 2020

TO: County Agricultural Commissioners

FROM: Pest Detection/Emergency Projects

SUBJECT: **Pest Detection Advisory No. PD15-2020**  
**Cotton seed bug, *Oxycarenus hyalinipennis* (Costa)**

This is to update all county agricultural commissioners on the recent finds of cotton seed bug (*Oxycarenus hyalinipennis*) in southern California. This widely-distributed pest is found in Africa, Asia, Europe, South America, and the Caribbean. It was found in Florida in 2010 and was declared eradicated from that state in 2014. Other than that, it was not known to be present in the United States until it was found in California in 2019 on *Abutilon palmeri* (Malvaceae) in a residential area of Los Angeles. Follow-up surveys failed to find additional cotton seed bugs in the area. That same year, a report was observed on a citizen science web site of an observation of the cotton seed bug in the Santa Ana Mountains in Orange County. A survey in that area failed to find the insect.

On October 29, 2020, suspect specimens were collected from roadside *Lagunaria patersonia* trees in a residential area of Irvine, Orange County, California. These specimens were confirmed as cotton seed bug by CDFA entomologists. The trees in the area are all reported to be heavily infested.

On November 10, 2020, cotton seed bugs were also found on hibiscus plants in a residential/commercial area in Long Beach (Los Angeles County). On November 12, 2020, cotton seed bugs were found on *Abutilon palmeri* plants in a residential area in Fullerton (Orange County). Also on November 12, 2020, cotton seed bugs were found on *Lagunaria patersonia* trees on the University of California Riverside campus (Riverside County). Therefore, the pest is known to be present in multiple locations in three counties in California.

The cotton seed bug is a small (adults are 4 mm long), brownish-black, nondescript 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 the finds in California) *Lagunaria*. Agricultural hosts include cotton, okra, and kenaf. *Lagunaria patersonia* trees appear to be a prime host. Adults are also reported to feed (possibly only for water) on leaves and fruits of a wide variety of other plants, but this is not considered to be economically significant and reliable



reports of large-scale damage from such feeding has not been seen. Damage to cotton seed is reported to impact oil quality and reduce seed germination significantly. Cotton seed bugs cause staining of cotton lint when their bodies are crushed during harvesting and processing.

CDFA is continuing to work with USDA on potential further actions. The USDA-CPHST data sheet, which includes information on the identification of and surveying for this pest, is available here:

<http://download.ceris.purdue.edu/file/3036>

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

If you have any questions regarding this advisory, please contact Jason Leathers by email at [jason.leathers@cdfa.ca.gov](mailto:jason.leathers@cdfa.ca.gov).