



California Department of Food and Agriculture

Invasive Fruit Fly

Frequently Asked Questions

Background: California is experiencing an unusually high number of invasive fruit fly detections this season. The California Department of Food and Agriculture (CDFA), in cooperation with the United States Department of Agriculture (USDA) and the County Agricultural Commissioners, has initiated local regulatory measures to eradicate and prevent the statewide spread of Queensland fruit fly, Tau fruit fly, Mediterranean fruit fly and Oriental fruit fly.

Counties Currently Impacted by Invasive Fruit Fly Quarantines:

- **Oriental fruit fly:** Contra Costa, Riverside, Sacramento, San Bernardino, and Santa Clara counties
- **Mediterranean fruit fly:** Los Angeles County
- **Tau fruit fly:** Los Angeles County
- **Queensland fruit fly:** Los Angeles and Ventura counties

- Source your plants locally and responsibly. To search for a licensed nursery near you, visit [CDFA's Directory of Licensed Nurseries](#).
- Inspect your garden for signs of invasive fruit flies or maggots and report any findings to CDFA at [1-800-491-1899](tel:1-800-491-1899), www.cdfa.ca.gov/plant/ReportaPest/, or your [local county agricultural commissioner's office](#).
- Please cooperate with agriculture officials and allow them access to your garden to inspect plants.

Q. What are the CDFA, the USDA, and County Agricultural Commissioners doing about this?

- The USDA has announced \$103.5 million in additional funding to address invasive fruit fly programs in California and elsewhere.
- County, state, and federal agencies are cooperating in conducting trapping, treatment and quarantine efforts to address the increased number of fruit fly introductions.
- Additionally, the USDA has deployed trapping staff from throughout the United States to assist with fruit fly projects in California because of the unprecedented number of fruit fly infestations.
- USDA has also deployed an Incident Management Team to assist with planning, logistics and outreach efforts for the Oriental Fruit Fly project in San Bernardino and Riverside counties.
- County Agricultural Commissioners continue to support fruit fly projects and are providing additional staff to help with trapping, treatment and quarantine activities.

- CDFA has partnered with the California Conservation Corps, Cooperative Agricultural Support Services, and private contractors to help with trapping, larval surveys, and fruit removal. Fruit removal in key areas is necessary to prevent the further spread of invasive fruit flies, as infested fruit can host hundreds of maggots.
- More information, including the most up-to-date quarantine maps, regulatory information, and pest profile information for the various fruit flies, may be found here: <https://www.cdfa.ca.gov/plant/PDEP/treatment/index.html>

Industry – Summary and Q&A

Q: What can the industry do proactively?

- An option for growers outside of the quarantine area is to start pre-quarantine treatments (same as pre-harvest bait treatments) in case a fruit fly is found nearby, and the quarantine area expands.
- County Agricultural Commissioners may issue a Treatment Agreement and monitor all pre-quarantine treatments.
- Pre-quarantine treatments are done in the same manner as the pre-harvest quarantine treatments for quarantine compliance.
- Pre-quarantine treatments are not mandatory but can help assure that growers will be able to continue harvesting and shipping their produce should the quarantine expand and include their property.
- Growers of nursery stock host plants may consider keeping them free of produce. In the event of a fruit fly quarantine, host plants with produce are placed on hold and the produce must be removed.

Q: What can packinghouses or nurseries do proactively?

- Packinghouses may encourage growers of host commodities located outside of the quarantine area to participate in voluntary, pre-quarantine treatments so harvest may occur as intended.
- Nurseries area may consider continuously monitoring host nursery stock and keeping them free from produce. In the event of a fruit fly quarantine, host plants with produce are placed on hold and the produce must be removed.

Q. How are various fruit fly quarantines triggered?

- A quarantine is triggered by the number of adult flies captured—within three miles of each other and in one life cycle:
 - Mediterranean, Melon, Caribbean fruit fly – 2
 - Mexican fruit fly – 5
 - Oriental, Guava, Peach fruit fly – 6 Rural or 8 Urban
 - All other adult invasive fruit flies (e.g., Queensland fruit fly) – 2
 - OR

- SINGLE detection of a larva, mated female, or pupa indicating a breeding population.

Q: What is considered the “core area” around a fruit fly detection?

- The core area is part of an established quarantine area and is comprised of a 0.5-mile radius surrounding the detection of an adult fruit fly or larvae.

Q. How large is the fruit fly quarantine zone(s)?

- There are three main areas to consider within the fruit fly quarantine zone, and each has different requirements for harvest/bulk citrus movement:
 1. Detection site: The property where a detection occurred
 2. Core Area: A one-half-mile radius around each detection
 3. Quarantine Area: A 4.5-mile radius around each detection

Q. What steps must growers in these three areas of the quarantine zone follow to harvest/move their bulk citrus?

- For properties where the detection occurred and properties within the core area (0.5-mile radius around the detection site):
 - Fruit fly host crops are not eligible for packing, but may be stored, [processed](#) and consumed on the growing site.
 - Pre-harvest bait treatments are not allowed in the core areas.
 - Fruit fly host crops grown within the core areas that have no fruit fly or immature life stages detected on the growing grounds may be sent, under project approval, for processing or post-harvest treatment.
 - Fruit fly host crops may be moved offsite for [juicing, processing, freezing](#), etc. under compliance and safeguarding with the approval of the receiving county ag commissioner and any applicable transiting counties.
 - Fruit fly host crops can be harvested and moved offsite for the appropriate post-harvest treatment per the USDA Treatment Manual. The post-harvest treatment matrix is specific for each fly type and host crop. If the post-harvest protocol requires fumigation, the fumigator and fumigation site require certification. All treatments must be conducted in accordance with the [USDA Treatment Manual](#).
 - Ag commissioners of the county where the fruit would be received and processed or fumigated do have the ability to refuse acceptance of the product and Ag commissioners in transiting counties may also prohibit transit.
 - Fruit fly host crops not processed onsite, or sent to post-harvest treatment, should be removed from the trees and properly disposed of, and not left in the field.
 - Host produce should be sent to an approved landfill or be composted, buried on site, or otherwise processed on-site in any of

the approved methods under supervision by CDFA, USDA and/or the County Agricultural Commissioner.

- For properties outside of the core area, but inside of the quarantine zone:
 - Growers can conduct [pre-harvest bait treatments](#) with project-approved insecticides, applied at project-approved intervals.
 - Follow the pre-harvest bait treatment schedule to apply the required number of treatments before harvest.
 - A minimum of 4 treatments are required during the warmer months, and more than 4 in the cooler months. The treatment duration will never be less than 30 days during the warmer months, and up to 130 days in the cooler months.
 - Determination of the [pre-harvest bait treatment window](#) is based on the degree day model for the specific fruit fly. Once treatment has begun, it must continue through the harvest period.
 - The bait treatments must be made under a compliance agreement.
 - Growers can also opt to remove and dispose of host produce as described above.
 - Eligible fruit fly host crops can be harvested and an appropriate post-harvest treatment can be done following the USDA Treatment Manual. The post-harvest treatment matrix is specific for each fly type and host crop. If the post-harvest treatment includes fumigation, the fumigator and fumigation site will require certification, and the treatment protocol is the same as fruit located within the core area above.
- All growers are encouraged to reach out to their local County Agricultural Commissioner.

Q. What about other host crops in the quarantine zones intended for export?

- The various quarantine situations can change rapidly, including the requirements of other states and countries. It is critical to stay in communication with your export certifier for the latest updates.

Q: Can packers receive and pack host crops grown outside of the quarantine area?

- Yes. Host crops grown outside the quarantine area can be packed in packinghouses in the quarantine area under certain protocols. However, some export destinations will not accept host crops that are packed in a quarantine area, even if it is grown and harvested outside the quarantine area. Growers are encouraged to work directly with their packinghouse.

Q. Can host crops grown in a quarantine area be exported internationally?

- Some countries will accept produce from a quarantine area that has been treated; however, some countries will not. For the most recent information, contact your export certifier.

Q. What can the industry do to help spread the word about the risks?

- Remind fellow industry members of the importance of following quarantine regulations and encourage them to invest in pre-harvest bait treatments.
- Report any suspected invasive fruit fly sightings to the CDFA, the USDA or your local County Agricultural Commissioner.
- Encourage area residents to avoid moving any homegrown produce from their properties and to cooperate with agriculture officials working in their area.
- Help spread the “Don’t Pack a Pest” message to travelers or those receiving produce in the mail or through other shipping channels (www.dontpackapest.com).
- Share social media posts created or shared by CDFA, USDA or County Agricultural Commissioners.