

Section 3417. Mexican Fruit Fly Interior Quarantine

A quarantine is established against the following pest, its hosts and possible carriers:

A. Pest. Mexican fruit fly (*Anastrepha ludens*)

B. Area Under Quarantine.

- 1. An area shall be designed as under quarantine** when survey results indicate an infestation is present, the Department has defined the infested area and the local California County Agricultural Commissioner(s) is notified and requests the quarantine area be established. The Department shall also provide electronic and/or written notification of the area designation(s) to other California County Agricultural Commissioners and other interested or affected parties and post the area description to its website at: <https://www.cdfa.ca.gov/plant/mexfly/regulation.html>. An interested party may also go to the above website and elect to receive automatic notifications of any changes in the regulated or quarantine areas through the list serve option.
- 2. If an area is not undergoing the sterile insect technique, an infestation is present** when eggs, a larva, a pupa, a mated female or five or more male or unmated female Mexican fruit fly adults are detected within three miles of each other and within one life cycle. In an area undergoing sterile insect technique the criteria for an infestation are the same except a single mated female does not constitute an infestation but counts towards an adult for five or more.
- 3. The initial area under quarantine shall be a minimum of 4.5 mile radius** surrounding the qualifying detections being used as an epicenter. Commercial host properties shall not be split by the quarantine boundary line and the boundary line shall be expanded beyond the 4.5 miles as necessary to encompass such host material in its entirety. Wherever possible, known accepted mapping features, including but not limited to roads, streets, highways, creeks, streams, rivers, canals, city, county, State, park and forest boundary lines

are used first and if there are no acceptable features such as these then imaginary lines with or without latitude and longitude points may be used.

4. **Satellite infestations:** a detection of a single life stage of Mexican fruit fly within any established quarantine area may be considered a satellite infestation and may be used as the epicenter using an additional 4.5 mile radius surrounding the detection to expand the quarantine area.
5. **Any interested party or local entity may appeal** an area designation by submission to the Department of a written request for review of the designation accompanied by clear and convincing evidence justifying a change in the designation. The appeal must be filed no later than ten (10) working days following receipt of the notice of designation. The Department must respond with a written decision no later than ten (10) working days following the receipt of the appeal. During the pending of the appeal, the designation under appeal shall remain in effect.
6. **The infested area designation shall be removed** if no additional life stages are detected by trapping or visual surveys for three life cycles after the last detection within the quarantine area.
7. **A life cycle** is an estimate of insect phenology based on a heat degree day temperature driven model. Base developmental temperature thresholds are used in this model's calculations and it estimates the generation time period necessary for the completion of a generation of Mexican fruit fly. Daily minimum and maximum temperatures are used to produce a sine curve over a 24-hour period. The degree days for that day are estimated by calculating the area above the threshold and below the curve, assuming that the temperature curve is symmetrical around the maximum temperature. For Mexican fruit fly the Department uses the lifecycle model with 48.92° Fahrenheit (9.4° Celsius) base developmental temperature and 1357 degree days Fahrenheit (754 degree days Celsius) per generation.

C. Commodities Covered. The following are declared to be hosts and possible carriers of Mexican fruit fly.

1. All fruit of the following plants:

<u>Scientific Name</u>	<u>Common Name(s)</u>
<i>Acca sellowiana</i>	Pineapple guava, feijoa
<i>Anacardium occidentale</i>	Cashew nut
<i>Annona cherimola</i>	Cherimoya
<i>Annona liebmanniana</i>	Hardshell custard apple
<i>Annona reticulata</i>	Custard apple
<i>Annona squamosa</i>	Sugar apple
<i>Capsicum pubescens</i>	Apple chile
<i>Carica papaya</i>	Papaya
<i>Casimiroa spp.</i>	White sapote, yellow chapote, matasano
<i>Citrofortunella microcarpa</i> (x <i>Citrofortunella mitis</i>)	Calamondin
<i>Citrus aurantiifolia</i>	Lime
<i>Citrus aurantium</i>	Sour orange
<i>Citrus deliciosa</i>	Italian tangerine, willow-leaf mandarin
<i>Citrus hassaku</i>	Hassaku orange
<i>Citrus limetta</i>	Sweet lime
<i>Citrus limettioides</i>	Sweet lime
<i>Citrus limonia</i>	Rangpur lime, canton lemon, sour lemon, Mandarin lime
<i>Citrus maxima</i>	Pummelo, shaddock
<i>Citrus medica</i>	Buddha's-Hand, citron, finger citron
<i>Citrus meyeri</i>	Meyer lemon, dwarf lemon, Chinese dwarf lemon
<i>Citrus nobilis</i>	King orange
<i>Citrus x paradisi</i>	Grapefruit
<i>Citrus reshni</i>	Cleopatra mandarin, spice mandarin

<i>Citrus reticulata</i>	Mandarin orange, tangerine
<i>Citrus sinensis</i>	Common, Kona, blood, baladi, navel, Valencia, corriente or sweet orange
<i>Citrus x tangelo</i>	Tangelo
<i>Citrus tangerina</i>	Tangerine, dancy tangerine
<i>Citrus unshiu</i>	Satsuma orange, unshiu, mikan
<i>Coffea arabica.</i>	Arabian coffee
<i>Cydonia oblonga</i>	Quince
<i>Diospyros kaki</i>	Japanese persimmon
<i>Inga jinicuil</i>	N/A
<i>Inga micheliana</i>	N/A
<i>Malus domestica</i>	Apple
<i>Malus pumila</i>	Apple
<i>Mammea americana</i>	Mammee-apple
<i>Mangifera indica</i>	Mango
<i>Melicoccus oliviformis</i>	Guaya
<i>Opuntia spp.</i>	Prickly pear cactus
<i>Passiflora edulis</i>	Passionfruit
<i>Persea americana</i>	Avocado ¹
<i>Pouteria sapota</i>	Mammee sapote
<i>Prunus domestica</i>	Plum, prune
<i>Prunus persica</i>	Peach, nectarine
<i>Psidium spp.</i>	All guava species
<i>Punica granatum</i>	Pomegranate
<i>Pyrus communis</i>	Pear
<i>Sargentia spp.</i>	Sargentia
<i>Sideroxylon capiri</i>	N/A
<i>Spondias spp.</i>	All mombin species
<i>Syzygium jambos</i>	Rose-apple
<i>Terminalia catappa.</i>	Tropical almond

¹Fresh, mature green variety 'Hass' avocados are not regulated

2. **Soil** within the drip area of plants producing, or which have produced, fruit listed in (C.1) above.
3. **Any other product, article, or means of conveyance** when it is determined by the director or county agricultural commissioner to present a hazard of spreading live Mexican fruit fly and the person in possession thereof has been so notified.

D. Restrictions:

1. **At the wholesale level, articles and commodities covered which have been commercially produced within the area under quarantine** are prohibited movement from or within the area under quarantine except in accordance with the following provisions:
 - a. The commodity has been treated for Mexican fruit fly in a manner approved by the director, is transported in a manner approved by the director to preclude exposure to Mexican fruit fly, and is accompanied by a certificate, verifying compliance with the above requirements, issued by the director or county agricultural commissioner; or,
 - b. The commodity is moving for treatment for Mexican fruit fly or processing and in a manner approved by the Secretary to preclude exposure to Mexican fruit fly, and is accompanied by a written document affirming that movement has been authorized by the Secretary or county agricultural commissioner.
2. **At the wholesale level, articles and commodities covered which have been commercially produced outside the area under quarantine** are prohibited movement into the area under quarantine except when accompanied by a shipping document indicating the point of origin and destination and moved in accordance with the following provisions:
 - a. The commodity is moving directly through the area under quarantine without delay in an enclosed vehicle or completely enclosed by a covering to prevent exposure to Mexican fruit fly; or,

- b. The commodity is destined to a permanent wholesale or retail establishment and is transported in an enclosed vehicle or completely enclosed by a covering to prevent exposure to Mexican fruit fly; or,
 - c. The commodity is destined to a commercial processing facility.
- 3. **At the retail level, articles and commodities covered which have been commercially produced are prohibited movement from or within the area under quarantine** except when the person in possession has a sales slip or other comparable document showing the commodity was purchased from a commercial establishment.
- 4. **Articles and commodities covered which have been non-commercially produced within the area under quarantine**, including "backyard" production, are prohibited movement from the premises where grown except under written authorization of the Secretary or county agricultural commissioner.
- 5. **Articles and commodities covered which have been non-commercially produced outside the area under quarantine** are prohibited movement into the area under quarantine except when the person in possession has signed a statement showing the commodity, amount, origin, destination, and date of transportation.
- 6. **Within the area under quarantine, no wholesale or retail establishment shall handle, sell or offer for sale any article or commodity covered** unless such commodities at all times are maintained in a manner approved by the Secretary to preclude exposure to Mexican fruit fly. No commodity covered shall be held for sale or sold from a truck, trailer, or other mobile vehicle.

Note: Authority: Sections 407, 5301, 5302 and 5322, Food and Agricultural Code. Reference: Sections 5301, 5302 and 5322, Food and Agricultural Code.