

## **Section 3424. *Bactrocera zonata* Interior Quarantine**

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

**A. Pest.** Peach Fruit Fly (*Bactrocera zonata*)

### **B. Area Under Quarantine.**

- 1. An area shall be designated 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: [www.cdfa.ca.gov/plant/pff/regulation.html](http://www.cdfa.ca.gov/plant/pff/regulation.html). An interested party may also go to the above website and elect to receive automatic notifications of any changes in quarantine areas through the list serve option.
- 2. An infestation is present when:**
  - a.** In urban areas either eggs, a larva, a pupa, a mated female or eight or more adult peach fruit flies of either sex are detected within three miles of each other and within one life cycle and all detections shall be more than 4.5 miles from any commercial host production area; or
  - b.** In rural or commercial host production areas either eggs, a larva, a pupa, a mated female or six or more adult peach fruit flies of either sex are detected within three miles of each other and within one life cycle; or
  - c.** Satellite infestations: a detection of a single life stage of peach 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.
- 3. The initial area under quarantine shall be a minimum of a 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. 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 submitted 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 receipt of the appeal. During the pending of the appeal, the designation under appeal shall remain in effect.
- 5. 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.
- 6. 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 peach 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 peach fruit fly the Department uses the lifecycle model with 54.7° Fahrenheit base developmental temperature and 818 degree days Fahrenheit per generation.

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

1. All fruit, vegetables or berries of the following:

<u>Scientific Name</u>	<u>Common Name(s)</u>
<i>Aegle marmelos</i>	Baeltree
<i>Azelia xylocarpa</i>	Doussie
<i>Annona reticulata</i>	Custard apple
<i>Annona squamosa</i>	Sugar apple
<i>Careya arborea</i>	Patana oak
<i>Carica papaya</i>	Papaya
<i>Casimiroa edulis</i>	White sapote
<i>Citrullus lanatus</i>	Watermelon
<i>Citrus aurantium</i>	Sour orange
<i>Citrus limon</i>	Lemon
<i>Citrus nobilis x Citrus deliciosa</i>	Kinnow
<i>Citrus paradisi</i>	Grapefruit
<i>Citrus reticulata</i>	Mandarin orange
<i>Citrus sinensis</i>	Orange
<i>Coccinia grandis</i>	Ivy gourd
<i>Cucumis sativus</i>	Cucumber
<i>Cydonia oblonga</i>	Quince
<i>Elaeocarpus hygrophilus</i>	Ma-kok-nam
<i>Eriobotrya japonica</i>	Loquat
<i>Ficus carica</i>	Fig
<i>Grewia asiatica</i>	Phalsa
<i>Lagenaria siceraria</i>	Bottle gourd
<i>Luffa acutangula</i>	Angled loofah
<i>Luffa spp.</i>	Tori
<i>Malpighia emarginata</i>	Barbados cherry
<i>Malus pumila</i>	Apple
<i>Malus sylvestris</i>	Crab apple
<i>Mangifera indica</i>	Mango

<i>Manilkara zapota</i>	<i>Sapodilla</i>
<i>Mimusops elengi</i>	<i>Spanish cherry</i>
<i>Momordica charantia</i>	<i>Bitter melon</i>
<i>Olea europaea</i>	<i>Olive</i>
<i>Persea Americana</i>	<i>Avocado</i>
<i>Phoenix dactylifera</i>	<i>Date palm</i>
<i>Prunus armeniaca</i>	<i>Apricot</i>
<i>Prunus avium</i>	<i>Sweet cherry</i>
<i>Prunus domestica</i>	<i>Plum</i>
<i>Prunus persica</i>	<i>Peach</i>
<i>Prunus sp.</i>	<i>N/A</i>
<i>Psidium cattleianum</i>	<i>Strawberry guava</i>
<i>Psidium guajava</i>	<i>Guava</i>
<i>Punica granatum</i>	<i>Pomegranate</i>
<i>Putranjiva roxburghii</i>	<i>Wild olive</i>
<i>Pyrus communis</i>	<i>Pear</i>
<i>Pyrus ussuriensis</i>	<i>Manchurian pear</i>
<i>Solanum lycopersicum</i>	<i>Tomato</i>
<i>Solanum melongena</i>	<i>Eggplant</i>
<i>Syzygium jambos</i>	<i>Rose apple</i>
<i>Syzygium samarangense</i>	<i>Java apple</i>
<i>Terminalia catappa L.</i>	<i>Tropical almond</i>
<i>Ziziphus jujuba</i>	<i>Jujube</i>
<i>Ziziphus mauritiana</i>	<i>Chinese date</i>

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

**D. Restrictions:**

- 1. At the wholesale level, articles and commodities covered in Section (C) are prohibited movement within or from the area under quarantine** except as provided in (a) or (b) below:
  - a. If the article or commodity has been treated in a manner approved by the department to eliminate peach fruit fly, is transported in a manner to preclude exposure to peach fruit fly, and is accompanied by a written certificate issued by an authorized State or county agricultural official affirming compliance with this subsection; or,
  - b. The article or commodity is moving for treatment for peach fruit fly or processing and in a manner approved by the department to preclude exposure to peach fruit fly and is accompanied by a written certificate issued by an authorized State or county agricultural official affirming such movement has been authorized under this subsection.
- 2. At the wholesale level, articles and commodities covered in Section (C) 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 compliance with (a), (b) or (c) below:
  - a. If the article or commodity is moving directly through the area under quarantine without delay and by a direct route in an enclosed vehicle or container or completely enclosed by a covering to prevent exposure to the peach fruit fly while en route through the area; or,
  - b. The article or commodity is destined to a wholesale or retail establishment within the quarantined area and, if moving between 9 a.m. and sunset, is transported in an enclosed vehicle or container or completely enclosed by a covering to prevent exposure to the peach 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 department 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 department to preclude exposure to peach fruit fly. No commodity covered shall be held for sale or sold from a truck, trailer, or other mobile vehicle.

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