

Section 3425. Melon Fruit Fly Interior Quarantine

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

A. Pest. Melon fruit fly (*Bactrocera cucurbitae*) of the family Tephritidae is a notorious pest of most fleshy fruit and many vegetables. The adult melon fly is approximately the size of a house fly, about 6 to 8 mm long. The body is mostly orange-brown with a faint black T-shaped mark on the abdomen, and the clear wings have a large brown spot at the tip and a brown stripe at the hind edge in addition to lighter striping along the leading edge of the wing and near the base. The female has a short tube at the end of its body through which the pointed ovipositor can be extruded.

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: <https://www.cdfa.ca.gov/plant/ml/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. 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.

3. **Satellite infestations:** a detection of a single life stage of Melon 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.
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 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 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 Melon 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 Melon fruit fly the Department uses the lifecycle model with 48.92° Fahrenheit base developmental temperature and 1357 degree days Fahrenheit per generation.

C. Commodities Covered.

1. **All fruit** (including nuts and berries), **vegetables** (other than leafy types grown above ground), **and the fruiting bodies of the plants listed herein.** All these items that are infested or are exposed to infestation by Melon fruit fly are declared a public nuisance. Unless proven otherwise, all cultivars, varieties, and hybrids of

the plant species listed herein are considered suitable hosts of *Bactrocera cucurbitae*.

| Scientific Name | Common Name |
|---|---------------------------|
| <i>Abelmoschus esculentus</i> | Okra |
| <i>Abelmoschus moschatus</i> | Musk okra |
| <i>Adenia hondala</i> | Hondala |
| <i>Anacardium occidentale L.</i> | Cashew |
| <i>Annona muricata</i> | Soursop |
| <i>Annona reticulata</i> | Apple, Custard |
| <i>Annona senegalensis</i> | Wild custard apple |
| <i>Artocarpus heterophyllus</i> | Jackfruit |
| <i>Averrhoa carambola L.</i> | Starfruit |
| <i>Baccaurea angulata</i> | Red angle tampoi |
| <i>Benincasa fistulosa</i> | Round gourd |
| <i>Benincasa hispida</i> | Melon, Chinese |
| <i>Brassica juncea</i> | Mustard, leaf |
| <i>Brassica oleracea var. botrytis</i> | Cauliflower |
| <i>Capparis sepiaria L.</i> | N/A |
| <i>Capparis thorelii</i> | N/A |
| <i>Capsicum annum</i> | Pepper, chili |
| <i>Capsicum annum L.</i> | Sweet pepper, bell pepper |
| <i>Capsicum frutescens</i> | Pepper, tabasco |
| <i>Carica papaya</i> | Papaya, common |
| <i>Cavratia trifolia</i> | Threeleaf cavratia |
| <i>Citrullus amarus</i> | Citron melon |
| <i>Citrullus colocynthis</i> | Colocynth |
| <i>Citrullus lanatus</i> [<i>Citrullus vulgaris</i>] | Watermelon |
| <i>Citrullus sp.</i> | Melon |
| <i>Citrus nobilis</i> | Orange, king |
| <i>Citrus reticulata</i> | Orange, mandarin |
| <i>Citrus sinensis</i> | Orange, sweet |
| <i>Coccinia grandis</i> | Gourd, ivy |
| <i>Coccinia spp.</i> | Gourds |
| <i>Crescentia spp.</i> | |
| <i>Lagenaria spp.</i> | |
| <i>Momordica spp.</i> | |
| <i>Trichosanthes spp.</i> | |
| <i>Cucumis angaria</i> | Gherkin, West Indian |
| <i>Cucumis melo var. conomon</i> | Melon, Oriental pickling |

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| <i>Cucumis melo</i> | Cantaloupe |
| <i>Cucumis melo var. Cantalupensis</i> | |
| <i>Cucumis pubescens</i> | Cucurbit, wild |
| <i>Cucumis pubescens</i> | Cucurbit |
| <i>Cucumis trigonus</i> | |
| <i>Cucumis sativus</i> | Cucumber |
| <i>Cucumis trigoni</i> | N/A |
| <i>Cucumis utlissimus</i> | Melon, long |
| <i>Cucurbita maxima</i> | Squash |
| <i>Cucurbita moschata</i> | Pumpkin, Canada |
| <i>Cucurbita pepo</i> | Pumpkin |
| <i>Cyphomandra betaceae</i> | Tomato, tree |
| <i>Solanum betaceum</i> | |
| <i>Dolichos lablab</i> | Bean, hyacinth |
| <i>Ficus carica</i> | Fig, common |
| <i>Ficus chartacea</i> | N/A |
| <i>Ficus erecta</i> | Ai xiao tian xian guo |
| <i>Ficus pumila L.</i> | Climbing fig |
| <i>Fragaria vesca L.</i> | Wild strawberry |
| <i>Gymnopetalum scabrum</i> | N/A |
| <i>Hbiscus esculentus</i> | Okra |
| <i>Hylocereus undatus</i> | Dragon fruit, Pitaya |
| <i>Juglans hindsii</i> | Hind's black walnut |
| <i>Lablab purpureus</i> | Lablab bean |
| <i>Lagenaira sphaerica</i> | Kanonkulpumpa |
| <i>Lagenaria siceraria</i> | Gourd, white-flowered |
| <i>Lagenaria spp.</i> | " |
| <i>Luffa acutangula</i> | Gourd, angled luffa |
| <i>Luffa aegyptiaca</i> | Gourd, sponge |
| <i>Luffa spp.</i> | " |
| <i>Lycopersicon esculentum</i> (pink to red ripe) | Tomato |
| <i>Maerua siamensis</i> | N/A |
| <i>Malus sylvestris</i> | Apple |
| <i>Mangifera indica</i> | Mango |
| <i>Manilkara zapota</i> | Sapote |
| <i>Melothria sphaerocarpa</i> | Dark egusi |
| <i>Momordica balsamina</i> | Gourd, balsam-apple |
| <i>Momordica charantia L.</i> | Bitter melon, Balsam apple |
| <i>Momordica cochinchiensis</i> | Gourd, kakari |
| <i>Momordica dioica</i> | Gourd, balsam-pear |
| <i>Momordica foetida</i> | N/A |

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| <i>Momordica spp.</i> | “ |
| <i>Momordica trifoliolata</i> | N/A |
| <i>Musa x paradisiaca L.</i> | Banana |
| <i>Pandanus fascicularis</i> | Padang |
| <i>Passiflora edulis</i> | Passion fruit |
| <i>Passiflora laurifolia</i> | Water lemon |
| <i>Persea americana</i> | Avocado |
| <i>Phaseolus lunatus</i> [<i>Phaseolus limensis</i>] | Bean, lima |
| <i>Phaseolus radiatus</i> | Bean, mung |
| <i>Phaseolus vulgaris</i> | Bean, string |
| <i>Phoenix dactylifera</i> | Date palm |
| <i>Physalis philadelphica</i> | Husk tomato |
| <i>Prunus persica</i> | Peach |
| <i>Psidium cattleianum</i> | Guava, cattley |
| <i>Psidium cattleyanum</i> | Strawberry guava |
| <i>Psidium guajava</i> | Guava |
| <i>Pyrus communis</i> | Pear |
| <i>Sechium edule</i> | Chayote |
| <i>Sesbania grandiflora</i> | Scarlet wisteria tree |
| <i>Sicyos pachycarpus</i> | Kupala |
| <i>Sicyos sp.</i> | Cucumber, bur |
| <i>Solanum aethiopicum L.</i> | Chinese scarlet eggplant |
| <i>Solanum anguivi</i> | N/A |
| <i>Solanum betaceum</i> | Tree tomato |
| <i>Solanum capsicoides</i> | Cockroach berry |
| <i>Solanum erianthum</i> | Big eggplant |
| <i>Solanum linnaeanum</i> | Apple of Sodom |
| <i>Solanum lycopersicum L.</i> | Tomato, cherry tomato |
| <i>Solanum macrocarpon L.</i> | African eggplant |
| <i>Solanum mauritianum</i> | Bugtree |
| <i>Solanum melongena</i> | Eggplant |
| <i>Solanum nigrum L.</i> | Black nightshade |
| <i>Solanum pseudocapsicum L.</i> | Jerusalem cherry |
| <i>Solanum sessiliflorum</i> | Orinoco apple |
| <i>Solanum spp.</i> | Tomato, eggplant, Cockroach berry, Apple of Sodom, bugtree, nightshade, False, Jerusalem Cherry |
| <i>Solanum trilobatum L.</i> | N/A |
| <i>Strychnos nux-vomica L.</i> | Nux-vomica tree |
| <i>Strychnos spinosa</i> | Monkey orange |
| <i>Syzygium samarangense</i> | Java apple |

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| <i>Telfairia occidentalis</i> | Fluted gourd |
| <i>Terminalia catappa</i> L. | Tropical almond |
| <i>Tetragium leucostaphylum</i> | N/A |
| <i>Trichosanthes anguina</i> | Gourd, serpent cucumber |
| <i>Trichosanthes cucumeroides</i> | Gourd, snake |
| <i>Trichosanthes dioica</i> | Gourd, pointed |
| <i>Trichosanthes pilosa</i> | Snake gourd |
| <i>Trichosanthes</i> spp. | “ |
| <i>Trichosanthes tricuspoidata</i> | N/A |
| <i>Trichosanthes wallichiana</i> | N/A |
| <i>Trichosanthes wawraie</i> | N/A |
| <i>Triphasia trifolia</i> | Limeberry |
| <i>Vigna unguiculata</i> | Cowpea |
| <i>Vitis trifolia</i> * | Grape* |
| <i>Zehneria mucronata</i> | N/A |
| <i>Zehneria wallichii</i> | N/A |
| <i>Ziziphus jujube</i> | Chinese jujube |

*Grape, *Vitis trifolia* = Threeleaf cayratia, *Cayratia trifolia*

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

D. Restriction on Movement, Possession and Sale of Commodities Covered.

1. **Movement of Commodities Covered; Commercial Production and Wholesale Distribution.** 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 in a manner approved by the department to eliminate melon fruit fly, is transported in a manner approved by the department to preclude exposure to melon fruit fly, and is accompanied by a certificate,

verifying compliance with the above requirements, issued by the department or county agricultural commissioner; or;

- b.** The commodity is moving for treatment for melon fruit fly or processing and in a manner approved by the department to preclude exposure to melon fruit fly and is accompanied by a written document affirming that movement has been authorized by the department or county agricultural commissioner.
- c.** 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:
 - i. 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 melon fruit fly; or
 - ii. The commodity is destined to a wholesale or retail establishment and, if moving between 9:00 a.m. and sunset, is transported in an enclosed vehicle or completely enclosed by a covering to prevent exposure to melon fruit fly; or
 - iii. The commodity is destined to a commercial processing facility.

2. Movement of Commodities Covered from Commercial Sources; Retail Level.

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.

3. Movement of Commodities Covered; Not from Commercial Sources.

- a.** Within the quarantine area, no commodity covered, including “backyard” production, shall be moved from the premises where grown without a permit from the Director;
- b.** Commodities covered not obtained from commercial sources may be transported into the quarantine area only if the person in possession has a

signed statement showing the commodity, amount, place of origin, destination and date of transportation.

- 4. Restrictions on Wholesale and Retail Sales.** Within the quarantine area, no wholesale or retail establishment shall handle, sell or offer for sale any commodity covered unless such commodities always are maintained in such a way or manner as to preclude pest exposure as determined by the Director. No commodity covered shall be held for sale or sold from a truck, trailer or other mobile vehicle.
- 5. No person shall transport, possess, handle or sell any commodity covered in violation of the provisions of this section.** No person shall knowingly prepare, possess, or use any false document, or knowingly make any false statement to any enforcement officer, in connection with the possession, sale or transportation of any commodity covered.

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