

Section 3442. Malaysian Fruit Fly Interior Quarantine

A quarantine is established against the following pest, its host, and possible carriers.

A. Pest. Malaysian Fruit Fly (*Bactrocera latifrons*).

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/maff/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. (A)** In urban areas either eggs, a larva, a pupa, a mated female or two or more adult Malaysian 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. (B)** In rural or commercial host production areas either eggs, a larva, a pupa, a mated female or two or more adult Malaysian fruit flies of either sex are detected within three miles of each other and within one life cycle; or
 - c. (C)** Satellite infestations: Notwithstanding (b)(5), a detection of a single life stage of Malaysian 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 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 is 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 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.
- 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 that triggered the quarantine. Subsequent detections within the quarantine area that are more than three miles from, or one lifecycle after, the detections triggering the quarantine will not affect the area or duration of the quarantine unless they meet the criteria in subsection (b)(2)(A) or (B).
- 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 Malaysian 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 Malaysian fruit fly the Department uses the lifecycle model with 48.6° Fahrenheit (9.22° Celsius) base developmental temperature and 1101 degree days Fahrenheit per generation.

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

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

African eggplant (*Solanum macrocarpon* L.)
American nightshade (*Solanum americanum*)=(*Solanum anguivi*)=(*Solanum donianum*)
Apple-of-Sodom (*Solanum linnaeanum*)
Arabian coffee (*Coffea arabica* L.)
Ash gourd (*Benincasa hispida*)
Barpepper (*Capsicum baccatum*)
Bell Pepper (*Capsicum annuum* L.)=(var *annuum*)
Bird Pepper (*Capsicum frutescens* L.)
Bitter apple (*Solanum incanum* L.)=(*Solanum lanceifolium*)
Black nightshade (*Solanum nigrum* L.)
Bonnet Pepper (*Capsicum chinense*)
Bottle gourd (*Lagenaria siceraria*)
Cape-gooseberry (*Physalis peruviana* L.)
Cherry tomato (*Solanum lycopersicum* L.)=(*Solanum lycopersicum* L. var. *cerasiforme*)
Chili Pepper (*Capsicum annuum* L.)
Chinese boxwood (*Murraya paniculata* L.)
Chinese scarlet eggplant (*Solanum aethiopicum* L.)
Ci tian qie (*Solanum violaceum*)
Common jujube (*Ziziphus mauritiana*)
Crape myrtle (*Lagerstroemia indica* L.)=(*Linociera parkinsoni*)
Cucumber (*Cucumis sativus* L.)
Currant tomato (*Solanum pimpinellifolium* L.)
Da chi hong si xian (*Lycianthes biflora* Bitter)=(*Momordica trifoliolata*)
Devil's fig (*Solanum torvum*)
Divine nightshade (*Solanum nigrescens*)
Dutch eggplant (*Solanum capsicoides*)
Eggplant (*Solanum melongena* L.)
Garden huckleberry (*Solanum scabrum*)=(*Solanum* spp.)
Guava (*Psidium guajava* L.)
Hedgehog cucumber (*Cucumis dipsaceus*)

Indian almond (*Terminalia catappa* L.)
Indian nightshade (*Solanum lasiocarpum*)
Ivy gourd (*Coccinia grandis*)
Jerusalem-cherry (*Solanum pseudocapsicum* L.)
Lollipop-climber (*Diplocyclos palmatus*)=(*Gmelina philippensis* Cham.)
Macawbush (*Solanum mammosum* L.)
N/A (*Linociera xanthocarpum*)

N/A (*Solanum granulosoleprosum*)
Oriental pickling melon (*Cucumis melo* L.)=(subsp *agrestis*)
Pepper (*Capsicum spp.*)
Pomegranate (*Punica granatum* L.)=(*Sapindus rarak*)
Purple-fruited pea eggplant (*Solanum trilobatum* L.)
Rambai (*Baccaurea motleyana*)
Sticky nightshade (*Solanum sisymbriifolium*)=(*Solanum stramonifolium*)
Tomato (*Solanum lycopersicum* L.)=(*Solanum lycopersicum* L. var. *lycopersicum*)
Tropical soda apple (*Solanum viarum*)
Watermelon (*Citrullus lanatus*)
Wild passionfruit (*Passiflora foetida* L.)
Wild Sage (*Gmelina philippensis*)

2. 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 Malaysian fruit fly and the person in possession thereof has been so notified.

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

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 Malaysian fruit fly in a manner approved by the Secretary, is transported in a manner approved by the Secretary to preclude exposure to Malaysian fruit fly, and is accompanied by a certificate, verifying compliance with the above requirements, issued by the Secretary or county agricultural commissioner; or,
- b.** The commodity is moving for treatment for Malaysian fruit fly or processing and in a manner approved by the Secretary to preclude exposure to Malaysian 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 *B. dorsalis*; or,
 - b. 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 *B. latifrons*; 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 Malaysian fruit fly.

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