

Section 3406. Mediterranean Fruit Fly Interior Quarantine

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

A. Pest. Mediterranean fruit fly (*Ceratitidis capitata*) of the family Tephritidae is a notorious pest of most fleshy fruit and many vegetables. The adult has banded wings and is smaller than a house fly.

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.cdffa.ca.gov/plant/medfly/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. If an area is not undergoing the sterile insect technique, an infestation is present** when eggs, a larva, a pupa, a mated female or two or more male or unmated female Mediterranean 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 two or more.
- 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. **Satellite infestations:** Notwithstanding(b)(6), detection of a single life stage of Mediterranean 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 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 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).
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 Mediterranean 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 Mediterranean fruit fly the Department uses the lifecycle model with 54.3° Fahrenheit base developmental temperature and 622 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 Mediterranean 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 *Ceratitis capitata*.

Scientific Name	Common Name
<i>Acca sellowiana</i> (O. Berg) Burret	Pineapple guava
<i>Acokanthera oppositifolia</i> (Lam.) Codd	Bushman's poison
<i>Acokanthera schimperi</i> (A. DC.) Benth. & Hook. f. ex Schweinf.	Arrow poison tree
<i>Actinidia chinensis</i> Planch	Golden kiwifruit
<i>Actinidia deliciosa</i> (A. Chev.) C. F. Liang & A. R. Ferguson	Kiwifruit
<i>Anacardium occidentale</i> L.	Cashew ^{1}
<i>Annona cherimola</i> Mill.	Cherimoya
<i>Annona muricata</i> L.	Soursop
<i>Annona reticulata</i> L.	Custard apple
<i>Annona senegalensis</i> Pers	Wild custard apple
<i>Antiaris toxicaria</i> (Pers.) Lesch.	Sackingtree
<i>Antidesma venosum</i> E. Mey. ex Tul.	Tassel berry
<i>Arbutus unedo</i> L.	Strawberry tree
<i>Arenga pinnata</i> (Wurmb) Merr.	Sugar palm
<i>Argania spinosa</i> (L.) Skeels	Argantree
<i>Artabotrys monteiroae</i> Oliv.	N/A
<i>Artocarpus altilis</i> (Parkinson) Fosberg	Breadfruit
<i>Averrhoa bilimbi</i> L.	Bilimbi
<i>Averrhoa carambola</i> L.	Starfruit
<i>Azima tetracantha</i> Lam.	N/A
<i>Berberis holstii</i> Engl.	N/A
<i>Blighia sapida</i> K. D. Koenig	Akee
<i>Bourreria petiolaris</i> (Lam.) Thulin	N/A
<i>Brucea antidysenterica</i> J. F. Mill	N/A
<i>Butia capitata</i> (Mart.) Becc.	Jelly palm, coco palm
<i>Byrsonima crassifolia</i> (L.)	Kunth Golden spoon
<i>Calophyllum inophyllum</i> L.	Alexandrian laurel
<i>Calophyllum tacamahaca</i> Willd.	
<i>Calotropis procera</i> (Aiton) W. T. Aiton	Sodom's apple milkweed
<i>Cananga odorata</i> (Lam.) Hook. f. & Thomson	Ylang-ylang
<i>Capparicordis crotonoides</i> (Kunth) Iltis & Cornejo	N/A
<i>Capparis sandwichiana</i> DC.	Puapilo
<i>Capparis sepiaria</i> L.	N/A
<i>Capparis spinosa</i> L.	Caperbush
<i>Capsicum annuum</i> L.	Sweet pepper

Capsicum baccatum L.	Barpeppar
Capsicum chinense Jacq.	Bonnet pepper
Capsicum frutescens L.	Bird pepper
Capsicum pubescens Ruiz & Pav.	Apple chile
Carica papaya L.	Papaya
Carissa bispinosa (L.) Desf. ex Brenan	Hedgethorn
Carissa carandas L.	Bengal currants
Carissa macrocarpa (Eckl.) A. DC.	Natal plum
Carissa spinarum L.	Carandas plum
Carissa tetramera Stapf	N/A
Carya illinoensis (Wangenh.) K. Koch	Pecan ^{1}
Casimiroa edulis La Llave & Lex.	White sapote
Celtis tala Gillies ex Planch.	Tala
Cestrum nocturnum L.	Lady of the night
Chrysobalanus icaco L.	Coco plum
Chrysophyllum cainito L.	Star apple
Chrysophyllum gonocarpum (Mart. & Eichler) Engl.	N/A
Chrysophyllum oliviforme L.	Wild star apple
Chrysophyllum viridifolium J. M. Wood & Franks	N/A
Citharexylum myrianthum Cham.	N/A
Citrofortunella microcarpa (Bunge) Wijnands	Calamondin
Citrus aurantiifolia (Christm.) Swingle	Sour lime
Citrus aurantium L.	Sour orange
Citrus deliciosa Ten.	Mediterranean mandarin
Citrus jambhiri Lush.	Rough lemon
Citrus latifolia (Yu. Tanaka) Tanaka	Persian lime
Citrus limetta Risso	Sweet lemon
Citrus limettioides Tanaka	Palestine sweet lemon
Citrus limon (L.) Burm. f.	Lemon ^{2}
Citrus limonia Osbeck	Canton lemon
Citrus maxima (Burm.) Merr.	Pummelo
Citrus medica L.	Citron
Citrus meyeri Yu. Tanaka	Meyer lemon
Citrus myrtifolia Raf.	Myrtle-leaf orange
Citrus nobilis Lour.	King orange
Citrus paradisi Macfad.	Grapefruit
Citrus reshni hort. ex Tanaka	Cleopatra mandarin
Citrus reticulata Blanco	Mandarin
Citrus sinensis (L.) Osbeck	Orange
Citrus x tangelo J. W. Ingram & H. E. Moore	Tangelo
Citrus unshiu Marcow.	Satsuma mandarin

Clausena anisata (Willd.) Hook. f.	Horsewood
Clausena lansium (Lour.)	Skeels Wampi
Coccinia grandis (L.) Voigt	Ivy gourd
Coccinia microphylla Gilg	N/A
Coccoloba uvifera (L.) L.	Sea grape
Coffea arabica L.	Arabian coffee
Coffea canephora Pierre ex A. Froehner	Robusta coffee
Coffea liberica W. Bull ex Hiern	Liberian coffee
Cola natalensis Oliv.	N/A
Corallocarpus ellipticus Chiov.	N/A
Cordia sp.	N/A
Corynocarpus laevigatus J. R. Forst & G. Forst	Karakatrad
Crataegus azarolus L.	Azarole
Crataegus gracilior J. B. Phipps	N/A
Cucumis dipsaceus Ehrenb. ex Spach	Hedgehog cucumber
Cucurbitella asperata (Gillies ex Hook. & Arn.) Walp.	N/A
Cyclanthera pedata (L.) Schrad.	Lady's slipper
Cydonia oblonga Mill.	Quince
Dimocarpus longan Lour.	Longan
Diospyros abyssinica (Hiern) F. White	N/A
Diospyros decandra Lour.	Chan in
Diospyros ebenum J. Koenig	Ceylon ebony
Diospyros kaki Thunb.	Japanese persimmon
Diospyros mespiliformis Hochst. ex A. DC.	N/A
Diospyros pallens (Thunb.) F. White	N/A
Diospyros pubescens Pers.	N/A
Diospyros virginiana L.	American persimmon
Dovyalis caffra (Hook. f. & Harv.) Sim.	Kei apple
Dovyalis hebecarpa (Gardner) Warb.	Ceylon gooseberry
Drypetes floribunda (Müll. Arg.) Hutch.	N/A
Drypetes gerrardii Hutch.	N/A
Drypetes natalensis (Harv.) Hutch.	N/A
Ehretia cymosa Thonn.	N/A
Ekebergia capensis Sparrm.	Cape ash
Elaeodendron schweinfurthianum (Loes.) Loes	N/A
Englerophytum magalismontanum (Sond.) T. D. Penn.	N/A
Eriobotrya japonica (Thunb.) Lindl.	Loquat
Euclea divinorum Hiern	N/A
Eugenia brasiliensis Lam.	Brazil cherry

Eugenia involucrata DC.	Cherry of the Rio Grande
Eugenia pyriformis Cambess.	Uvaia
Eugenia uniflora L.	Surinam cherry
Ficus carica L.	Fig
Filicium decipiens (Wight & Arn.) Thwaites ex Hook. f.	N/A
Flacourtia indica (Burm. f.) Merr.	Governor's plum
Flagellaria guineensis Schumach.	N/A
Flueggea virosa (Roxb. ex Willd.) Royle	N/A
Fortunella japonica (Thunb.) Swingle	Round kumquat
Fortunella margarita (Lour.) Swingle	Oval kumquat
Frangula californica (Eschsch.) A. Gray	California buckthorn
Garcinia brasiliensis Mart.	N/A
Garcinia livingstonei T. Anderson	African mangosteen
Garcinia mangostana L.	Mangosteen
Garcinia xanthochymus Hook. f.	Sour mangosteen
Geoffroea decorticans (Gillies ex Hook. & Arn.) Chañar	Burkart
Grewia trichocarpa Hochst. ex A. Rich.	N/A
Guettarda speciosa L.	Sea randa
Hancornia speciosa Gomes	Mangaba
Harpephyllum caffrum Bernh. ex C. Krauss	Kaffir date
Harrisonia abyssinica Oliv.	N/A
Hexachlamys edulis (O. Berg) Kausel & D. Legrand	Cereja do Rio Grande
Inga feuillei DC.	Pacae
Inga laurina (Sw.) Willd.	N/A
Inga sellowiana Benth.	N/A
Juglans australis Griseb.	Argentine walnut ^{1}
Juglans hindsii (Jeps.) R. E. Sm.	Hind's black walnut ^{1}
Juglans neotropica Diels	Andean walnut ^{1}
Juglans nigra L.	Black walnut ^{1}
Juglans regia L.	English walnut ^{1}
Lagenaria siceraria (Molina) Standl.	Bottle gourd
Lamprothamnus zanguebaricus Hiern	N/A
Latania loddigesii Mart.	Blue latan
Licania tomentosa (Benth.) Fritsch	Oiti
Litchi chinensis Sonn.	Litchi
Ludia mauritiana J. F. Gmel.	N/A
Lycium europaeum L.	Boxthorn

Lycium ferocissimum Miers	African boxthorn
Lycium subglubosum L.	N/A
Malpighia emarginata DC.	Barbados cherry
Malpighia glabra L.	Acerola
Malus floribunda Siebold ex Van Houtte	Japanese crab apple
Malus pumila Mill.	Paradise apple
Malus sylvestris (L.) Mill.	Crab apple
Mangifera indica L.	Mango
Manilkara butugi Chiov.	N/A
Manilkara jaimiqui (C. Wright) Dubard	Wild sapodilla
Manilkara sansibarensis (Engl.) Dubard	N/A
Manilkara sulcata (Engl.) Dubard	N/A
Manilkara zapota (L.) P. Royen	Sapote
Matisia cordata Humb. & Bonpl.	South American sapote
Mespilus germanica L.	Medlar
Mimusops bagshawei S. Moore	N/A
Mimusops caffra E. Mey. ex A. DC.	Coastal red milkwood
Mimusops elengi L.	Medlar
Mimusops kirkii Baker	N/A
Mimusops kummel Bruce ex A. DC.	N/A
Mimusops obtusifolia Lam.	N/A
Mimusops zeyheri Sond.	Transvaal red milkwood
Momordica charantia L.	Balsam apple
Monodora grandidieri Baill.	N/A
Morus alba L.	White mulberry
Morus nigra L.	Black mulberry
Morus rubra L.	Red mulberry
Mouriri elliptica Mart.	N/A
Muntingia calabura L.	Calabur tree
Murraya exotica L.	Chinese boxwood
Murraya paniculata (L.) Jack	Mock orange
Musa acuminata Colla	Banana ^{3}
Musa x paradisiaca L.	French plantain ^{3}
Myrcianthes pungens (O. Berg) D. Legrand	Guabiju
Myrianthus arboreus P. Beauv.	N/A
Noronhia emarginata (Lam.) Thouars	Chinese plum
Ochrosia elliptica Labill.	Scarlet wedge-apple
Olea europaea L.	Wild olive
Olea woodiana Knobl.	N/A

Opilia amentacea Roxb.	N/A
Opuntia spp.	Tuna, prickly-pear
Oxyanthus zanguebaricus (Hiern) Bridson	N/A
Parmentiera aculeata (Kunth) Seem.	Candletree
Passiflora alata Curtis	Wingstem passionflower
Passiflora caerulea L.	Blue passionflower
Passiflora edulis Sims	Common passionflower
Passiflora foetida L.	Love-in-a-mist passionflower
Passiflora ligularis Juss.	Sweet granadilla
Passiflora suberosa L.	Cork passionflower
Passiflora tripartita (Juss.) Poir.	Banana passionflower
Pentarrhopalopilia umbellulata (Baill.) Hiepko	N/A
Peponium mackenii (Naudin) Engl.	N/A
Pereskia aculeata Mill.	Barbados gooseberry
Persea americana Mill.	Avocado ^{4}
Rubus sanctus Schreb.	Blackberry
Salacia elegans Welw. ex Oliv.	N/A
Salpichroa origanifolia (Lam.) Thell.	Cock's eggs
Sandoricum koetjape (Burm. f.) Merr.	Red santol
Santalum album L.	Sandalwood
Santalum ellipticum Gaudich.	Yellow sandalwood
Scaevola plumieri (L.) Vahl	Beechberry
Scaevola taccada (Gaertn.) Roxb.	Beach naupaka
Sideroxylon foetidissimum Jacq.	False mastic
Sideroxylon inerme L.	N/A
Sideroxylon polynesianum (Hillebr.) Smedmark & Anderb	N/A
Simmondsia chinensis (Link) C. K. Schneid.	Jjoba
Solanum aethiopicum L.	Chinese scarlet eggplant ^{6}
Solanum betaceum Cav.	Tree tomato
Solanum elaeagnifolium Cav.	Bull nettle
Solanum glaucophyllum Desf.	N/A
Solanum incanum L.	Palestine nightshade
Solanum linnaeanum Hepper & P.-M. L. Jaeger	Apple of Sodom
Solanum lycopersicum L.	Tomato ^{7}
Solanum macrocarpon L.	African eggplant ^{6}
Solanum mauritianum Scop.	Bugtree

Solanum muricatum Aiton	Melon pear
Solanum nigrum L.	Black nightshade
Solanum pimpinellifolium L.	Currant tomato
Solanum pseudocapsicum L.	Jerusalem-cherry
Solanum scabrum Mill.	Garden huckleberry
Solanum seforthianum Andrews	Climbing nightshade
Solanum sessiliflorum Dunal	Cocona
Solanum sisymbriifolium Lam.	Dense thorn bitter apple
Solanum torvum Sw.	Turkey berry
Spondias dulcis Sol. ex Parkinson	Golden apple
Spondias mombin L.	Hog plum
Spondias purpurea L.	Red mombin
Spondias tuberosa Arruda ex Kost.	Imbu
Spondias venulosa (Engl.) Mart. ex Engl.	N/A
Sterculia apetala (Jacq.) H. Karst.	Panama tree
Strychnos decussata (Pappe) Gilg	N/A
Strychnos henningsii Gilg	N/A
Strychnos potatorum L. f.	Clearing nut tree
Strychnos pungens Soler.	N/A
Syngonium podophyllum Schott	American evergreen
Synsepalum dulcificum (Schumach.) Daniell	Miracle fruit
Syzygium cumini (L.) Skeels	Jambolan
Syzygium jambos (L.) Alston	Malabar plum
Syzygium malaccense (L.) Merr. & L. M. Perry	Malay apple
Syzygium paniculatum Gaertn.	Magenta lilly-pilly
Syzygium samarangense (Blume) Merr. & L. M. Perry	Java apple
Terminalia catappa L.	Tropical almond
Terminalia chebula Retz.	Black myrobalan
Theobroma cacao L.	Cacao
Thevetia peruviana (Pers.) K. Schum.	Lucky nut
Triphasia sp.	N/A
Vaccinium ashei J. M. Reade	Rabbit-eye blueberry
Vaccinium angustifolium Aiton	Lowbush blueberry
Vaccinium corymbosum L.	Highbush blueberry
Vaccinium virgatum Aiton	Rabbit-eye blueberry
Vangueria infausta Burch.	African medlar
Vasconcellea quercifolia A. St.-Hil.	Calasacha
Vepris lanceolata (Lam.) G. Don	White ironwood

Vepris nobilis (Delile) Mziray	N/A
Vepris simplicifolia (Engl.) Mziray	N/A
Vepris trichocarpa (Engl.) Mziray	N/A
Vitis spp.	Grapes
Wikstroemia phillyreifolia A. Gray	N/A
Ximenia americana L.	False sandalwood
Ximenia caffra Sond.	N/A
Ziziphus jujuba Mill.	Chinese jujube
Ziziphus lotus (L.) Lam.	Lotus jujube
Ziziphus mauritiana Lam.	Chinese apple
Ziziphus spina-christi (L.) Desf.	Christ's thorn

¹ Harvested nuts (almonds, pecans, walnuts) with dried husks are not regulated.

² Smooth-skinned lemons—‘Eureka,’ ‘Lisbon,’ and ‘Villa Franca’—are not regulated.

³ Green bananas of the cultivars ‘Williams,’ ‘Valery,’ ‘Grand Nain,’ and standard and dwarf ‘Brazilian’ without “faults” are not regulated.

⁴ Movement of ‘Hass’ avocados in and from quarantined areas is allowed if in accordance with Department-approved regulatory measures.

⁵ Pomegranate arils are not regulated.

⁶ Commercially produced eggplants are not regulated.

⁷ Only red ripe or turning tomatoes are regulated. Green tomatoes are not regulated.

2. **Soil** within the drip area of plants producing, or which have produced fruit, vegetables or berries as listed in (C.1) above.

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

1. Movement of Commodities Covered; Commercial Production and Wholesale

Distribution. It is unlawful to move within or from the quarantine area any commodity covered involving a commercial shipment at the production or wholesale level except in accordance with the following provisions:

- a. The commodity was produced inside or outside the quarantine area, has been commercially processed and packaged, or after commercial processing is being transported in bulk in a manner approved by the Director specifying conditions precluding infestation;
- b. The commodity was produced inside the quarantine area, is in unprocessed form and is moved under permit of the Director specifying conditions precluding infestation;

- c. The commodity was produced outside the quarantine area, is in unprocessed form and is being transported:
 - i. through the area by direct route and without delay in closed vehicles or containers; or
 - ii. to a commercial processing plant inside or outside the quarantine area; or
 - iii. under permit of the Director specifying conditions precluding infestation.

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

Retail size purchases of commodities covered obtained from commercial retail sources may be moved into, within or from the quarantine area, if the person in possession has a sales slip or other comparable document showing the purchase was made from a commercial retail establishment. Other transportation of such commodities is prohibited.

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 at all times 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.