

### 3252. CARIBBEAN FRUIT FLY

State Exterior Quarantine

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

- A. Pest.** Caribbean fruit fly, *Anastrepha suspensa*, of the family Tephritidae is, in the adult state, a yellowish-brown fly from one and a half to two times the size of a housefly. This insect is a serious pest of many kinds of fruit.
- B. Area Under Quarantine.** The Commonwealth of Puerto Rico and all the State of Florida south of and including Hernando, Sumter, Lake, and Volusia counties.
- C. Articles and Commodities Covered.**

(Additional Hosts, see Appendix I)

1. The fruit or berries of all plants listed below are declared to be hosts and possible carriers of the Caribbean fruit fly.

<u>Common Name</u>	<u>Botanical Name</u>
Akee	<i>Blighia sapida</i>
Allspice	<i>Pimenta dioica</i>
Apple	<i>Malus sylvestris</i>
Avocado, except commercial fruit	<i>Persea americana</i>
Barbados Cherry	<i>Malpighia glabra</i>
Bell Pepper, except commercial fruit	<i>Capsicum frutescens</i>
Blackberry	<i>Rubus</i> hybrid
Box Orange	<i>Severinia buxifolia</i>
Calabur	<i>Muntingia calabura</i>
Calamondin	<i>X Citrofortunella mitis</i>
Carambola	<i>Averrhoa carambola</i>
Ceylon Gooseberry	<i>Dovyalis hebecarpa</i>
Cherry of the Rio Grande	<i>Eugenia aggregata</i>
Cocoplum	<i>Chrysolobanus icaco</i>
Egg Fruit	<i>Pouteria campechiana</i>
Fig	<i>Ficus carica</i>
Governor's Plum	<i>Flacourtia indica</i>
Grapefruit	<i>Citrus paradisi</i>
Grumichama	<i>Eugenia brasiliensis</i>
Guava (all)	<i>Psidium</i> spp.
Guiana Plum	<i>Drypetes lateriflora</i>
Imbe	<i>Garcinia livingstonei</i>
Jaboticaba	<i>Myrciaria cauliflora</i>
Jambolan Plum	<i>Syzygium cumini</i>
Japanese Pear	<i>Pyrus pyrifolia</i>
Japanese Persimmon	<i>Diospyros kaki</i>
Java Apple	<i>Syzygium samarangense</i>
Kei Apple	<i>Dovyalis caffra</i>
Kieffer Pear	<i>Pyrus pyrifolia</i> x <i>Pyrus communis</i>
Kiwi	<i>Actinidia chinensis</i>
Kumquat	<i>Fortunella crassifolia</i>
Kumquat (oval)	<i>Fortunella margarita</i>
Lime	<i>Citrus aurantifolia</i>

Limeberry	<i>Triphasia trifolia</i>
Limequat	<i>X Citrofortunella floridana</i>
Longan, except commercial fruit	<i>Dimocarpus longan</i>
Loquat	<i>Eriobotrya japonica</i>
Lychee, except commercial fruit	<i>Litchi chinensis</i>
Mango	<i>Mangifera indica</i>
Miracle Fruit	<i>Synsepalum dulcificum</i>
Natal Plum	<i>Carissa grandiflora</i>
Nectarine	<i>Prunus persica</i>
Orange Jasmine	<i>Murraya paniculata</i>
Jack Orangequat	<i>Citrus nobilis</i> 'unshu' x <i>Fortunella</i> sp.
Otaheite Apple	<i>Spondias dulcis</i> (=S. <i>cytherea</i> )
Papaya	<i>Carica papaya</i>
Peach	<i>Prunus persica</i>
Pear	<i>Pyrus communis</i>
Pitomba	<i>Eugenia luschnathiana</i>
Pomegranate	<i>Punica granatum</i>
Pond Apple	<i>Annona glabra</i>
Rangpur Lime	<i>Citrus limonia</i>
Rose Apple	<i>Syzygium jambos</i>
Sapodilla	<i>Manilkara zapota</i>
Sour Orange	<i>Citrus aurantium</i>
Sugar Apple	<i>Annona squamosa</i>
Surinam Cherry	<i>Eugenia uniflora</i>
Sweet Lemon	<i>Citrus limetta</i>
Sweet Orange	<i>Citrus sinensis</i>
Tangelo	<i>Citrus paradisi</i> x <i>Citrus reticulata</i>
Tangerine	<i>Citrus reticulata</i> Blanco
Temple Orange	<i>Citrus sinensis</i> x <i>Citrus reticulata</i>
Tomato, except commercial fruit	<i>Lycopersicon esculentum</i> (L. <i>lycopersicum</i> )
Tropical Almond	<i>Terminalia catappa</i>
Velvet Apple or Velvet Persimmon	<i>Diospyros blancoi</i>
Wampi	<i>Clausena lansium</i>
White Sapote	<i>Casimiroa edulis</i>
Wild Balsam Apple	<i>Momordica charantia</i>
Wild Cinnamon	<i>Canella winteriana</i>
Wild Dilly	<i>Manilkara jaimiqui</i> ssp. <i>emarginata</i>
	<i>Annona hybrid</i>
	<i>Atalantia citriodes</i>
	<i>Eugenia coronata</i>
	<i>Eugenia ligustrina</i>
	<i>Ficus altissima</i>
	<i>Garcinia xanthochymus</i>
	<i>Manilkara roxburghiana</i>
	<i>Myrcianthes fragrans</i>
	<i>Myrciaria glomerata</i>
	<i>Pseudanmomis umbellulifera</i>
	<i>Rheedia aristata</i>
	<i>Terminalia muelleri</i>
	<i>Trevisia palmata</i>

**2. Soil or planting media within the drip area of plants producing, or which have produced, fruit of the plants listed in (1) above.**

**3. Exemptions. The following are exempt from provisions of this regulation:**

- (A) Green sour lime fruit which shows no yellow coloring.
- (B) Lemons regardless of color.

**D. Restrictions.** Articles and commodities covered are prohibited entry into California from the area under quarantine, except as provided below:

**1. Articles and Commodities Covered Admissible When Treated at Origin.**

Articles and commodities covered are admissible into California from the area under quarantine provided each lot or shipment is accompanied by a certificate issued by an authorized representative of the origin State Department of Agriculture or the United States Department of Agriculture affirming that the lot or shipment was treated for Caribbean fruit fly, prior to shipment and under supervision of the origin State Department of Agriculture or the United States Department of Agriculture, in a manner approved by the Secretary of the Department of Food and Agriculture and was not exposed to reinfestation by the fly.

**CARIBBEAN FRUIT FLY FLORIDA INFESTED COUNTIES  
APPENDIX A**

**08-02-80**

Brevard	Manatee
Broward	Martin
Charlotte	Monroe
Collier	Okeechobee
Dade	Orange
De Soto	Osceola
Glades	Palm Beach
Hardee	Pasco
Henry	Pinellas
Hernando	Polk
Highlands	Saint Lucie
Hillsborough	Sarasota
Indian River	Seminole
Lake	Sumter
Lee	Volusia

**GUAVA, MANGO, AND PAPAYA  
APPENDIX B**

**08-11-80**

Florida officials notified us that all commercial guava, mango, and papaya fruit originating in Florida would be grown in the Caribbean fruit fly infested southern part of the state. This material should be rejected unless certified treated. Exceptions could be backyard grown fruit that the owner asserts originated from a noninfested county or green mangoes (see APPENDIX. G).

**MASTER PERMIT FOR THE SHIPMENT OF CITRUS  
FRUIT TO CALIFORNIA FROM FLORIDA  
APPENDIX C**

**01-30-15**

Master Permit No. QC 222 has been reissued to the Florida Department of Agriculture and Consumer Services (FDACS) to authorize Florida businesses to ship citrus fruit (grapefruits, oranges, tangelos, and tangerines only), grown in Florida in areas certified free of Caribbean fruit fly, shipped to California without fumigation or cold treatment.

Certification: An additional declaration shall be placed on the phytosanitary certificate or USDA Fruit and Vegetable Citrus Certificate stating: "Meets the requirements of California Master Permit No. QC 222." The certificate must also contain the designated Caribbean Fruit Fly area numbers. The certificate shall have the numbers of boxes of fruit from each designated area included in the shipment as well as the name of the approved shipper and the shipper's assigned identification number.

Standard boxes: Caribbean Fruit Fly certification with the term "designated area" and a corresponding number shall appear on the top surface of the carton.

Gift Pack Shipments: Must meet *all* of the following requirements.

- a. Gift packs containing Florida origin citrus must be accompanied (on the box or the accompanying paperwork) by a Federal Shield or other USDA approved stamp/sticker indicating the citrus fruit is certified for applicable federal quarantines.
- b. Each carton must be marked indicating the fruit "Meets the requirements of California Master Permit No. QC 222" and that it must be held for inspection.
- c. Each shipper must appear on the Master Permit No. QC 222 [Approved Gift Pack Shippers List](#) (available on the PHPPS Extranet site under Quarantine Commodity Permits).

**TREATMENTS  
APPENDIX D**

**03-07-17**

**COLD TREATMENTS**

Quarantine cold treatments for certain commodities are acceptable. Cold treatment schedules are found in the [USDA Treatment Manual](#). Acceptable cold treatment schedules are T107-a-1 and T107-c, and are summarized as follows:

**T107-a-1**

Apple, cherry, kiwi, nectarine, peach, pear, plum, pomegranate

34 °F (1.11 °C) or below 15 days

35 °F (1.67 °C) or below 17 days

**T107-c**

Apple, carambola, cherry, pomegranate  
 32 °F (0 °C) or below 11 days  
 33 °F (.56 °C) or below 13 days  
 34 °F (1.11 °C) or below 15 days  
 35 °F (1.67 °C) or below 17 days

**IRRADIATION TREATMENT**

The approved irradiation schedule is found in the [USDA Treatment Manual](#). The acceptable irradiation treatment schedule for Caribbean Fruit Fly host material is:

T105, Table 5-2-4 (IR@70Gy minimum)

**FUMIGATION TREATMENT**

Carambola: Methyl bromide fumigation treatment for carambola only. The acceptable treatment schedule for Caribbean fruit fly (carambola only) is:

40 g/m<sup>3</sup> for 2 h (temperature 23 ± laC)

Note: The treatment reduces shelf life by 24-30% and 10ppb residues were not detected after 2 hours at 23C.

Phytosanitary certificates for the above listed commodities must state an acceptable quarantine treatment temperature/time duration in the certificate treatment section.

Citrus: For citrus fruit (grapefruits, oranges, tangelos, and tangerines only), grown in Florida in areas *not* certified free of Caribbean fruit fly, California will accept methyl bromide fumigation treatment at a minimum rate of 2.5 lbs/1000 cubic ft. for 2 hours at 70° F and above. Also, as per the guidance in the federal treatment manual, the lot of Citrus sp. shall only be eligible for fumigation if a representative sample of the fruit is inspected and the level of fruit infested with fruit flies is less than 0.5% for the lot.

**DEFINITION OF COMMERCIAL FRUIT  
 APPENDIX E**

**12-12-96**

Commercial fruit means that fruit which has been commercially produced, cleaned, sorted and packed. The foregoing results in fruit that is free of splits or cracks, among other things, and thus without risk of harboring Caribbean fruit fly.

**MAMEY COLORADO  
 APPENDIX F**

**04-21-99**

Mamey colorado, *Pouteria sapota*, (a.k.a. mamey sapote) fruit, when certified as grown and harvested in Florida from commercial or backyard sources, is allowed into California. Studies conducted by USDA's Agricultural Research Service have been interpreted as demonstrating that this fruit is not a host for Caribbean fruit fly in Florida.

**IMMATURE MANGOS  
 APPENDIX G**

**04-22-03**

Untreated, Florida-grown **immature** mangos are enterable into California during the period each year from April 15 through July 31, provided they meet the following criteria:

1. Mangos must have flesh that is white, cream, or very light yellow in color. Peel color will vary, and will not necessarily be green.
2. Mangos must be no more than two thirds the full normal size and weight of mature fruit.
3. The sides and shoulder of the fruit must not be fully developed (swollen).
4. The fruit must be accompanied a Florida phytosanitary certificate with the following additional declaration: "The immature mangos in this shipment were harvested prior to July 31 of the current year."

**APPROVED FLORIDA COMMERCIAL LITCHI &  
 LONGAN SHIPPERS  
 APPENDIX H**

**11-15-18**

Growers/Packers/Shippers, Location  
 AEG Trading Co., Inc. Chee "Max" Tun, Homestead  
 Bee Heaven Farm, MJ and SM Pikarsky, Homestead  
 Best Florida Produce, Miami  
 Brother Farm, Suhong Wu, Homestead  
 Chen-Wan & Kwong Lung Chiu, Loxahatchee  
 Cook's Grove, Regis Cook, Miami  
 Daniel J. Hodgman, Miami  
 Double Green Farms, Mike Chow, Florida City  
 Ely & Syphyia Ham, Homestead  
 Fresh King, Inc., Peter Schnebly, Homestead  
 Global Organic Specialty Source, Sarasota  
 Green Groves Farm, Homestead  
 Green Groves Organic Farm, Homestead  
 J&C Tropicals, Nibaldo Capote, Miami  
 JLS Litchi Farm, Mean Saniny, Miami  
 Kam Tai Farms, Choy Thay Chau, Homestead  
 Keith Rowe, Homestead  
 Khemara Farms, Peter Pith, Homestead  
 Laub Groves, Charles Laub, Homestead  
 Leaf Farms, Princeton  
 LNB Groves, Marc Ellenby, Homestead  
 Lychee Fruit Store, Pete Jaschinski, Loxahatchee  
 New Asian Tropical Produce LLC, Homestead  
 New Limeco LLC, Princeton  
 OK Farms, Gigi Lao, Homestead  
 Perez Groves, Maria Perez, Miami  
 Richard Quigley, Homestead  
 Season's Farm Fresh, Inc., Nick Bernal, Homestead  
 Steven Green, Homestead  
 Sun Harvest Tropicals, LLC, Miami  
**Sunshine Tropical Farm, Inc., Homestead**  
 Triple 8 Trading Intl Corp., Frederick Woo, Miami  
 Tron Dawdon, Tron & Joe Dawson, Homestead  
 Unity Groves, Homestead  
 Vega Produce LLC, Angel Jaimes, Medley  
 William B. Malaney, Homestead

**ADDITIONAL HOSTS  
APPENDIX I**

**10-29-15**

The following are known hosts for Caribbean fruit fly and should be rejected under the authority of California FAC, Section 6461.5 unless treated as outlined in Section D.1. of this quarantine. Note: There are many common names for scientific names. This list is not inclusive of all common names and common names should be verified.

<b><u>Common Name</u></b>	<b><u>Botanical Name</u></b>
Ambarella	<i>Spondias cytherea</i>
Apple	<i>Malus domestica</i> , <i>Malus</i> spp.
Atemoya	<i>Annona cherimola</i> x <i>A. squamosa</i>
Autumn Maple Tree	<i>Bischofia javanica</i>
Balsam Apple	<i>Momordica balsamina</i>
Bell Pepper (except commercial fruit)	<i>Capsicum annuum</i>
Birchberry	<i>Eugenia ligustrina</i>
Brazil Cherry	<i>Eugenia dombeyi</i>
Cabeluda	<i>Plinia glomerata</i>
Citrus	<i>Citrus</i>
Clementine	<i>Citrus reticulata</i>
Custard Apple,	<i>Annona squamosa</i> ,
Sugar Apple	<i>Annona reticulata</i>
Date Palm	<i>Phoenix dactylifera</i>
Garcinia aristata	<i>Garcinia aristata</i>
Garcinia	<i>Garcinia</i> spp.
Hog Plum	<i>Spondias mombin</i>
Jamboisier Rouge	<i>Eugenia pyriformis</i>
	<i>Cambess. var. uvalha</i>
Kumquat	<i>Fortunella</i> spp.
Kumquat (round)	<i>Fortunella japonica</i>
Kumquat, Meiwa	<i>Fortunella</i> x <i>crassifolia</i>
Malay Apple	<i>Syzygium lalaccense</i>
Mandarin	<i>Citrus reticulata</i>
Mangosteen	<i>Garcinia mangostana</i>
Mombin, Purple	<i>Spondias purpurea</i>
Mombin	<i>Spondias</i> spp.
Murraya	<i>Murraya</i> spp.
Natal Plum	<i>Carissa macrocarpa</i>
Orange	<i>Citrus sinensis</i>
Panama Orange	<i>Citrofortunella mitis</i>
Paradise Apple	<i>Malus pumila</i>
Persimmon	<i>Diospyros virginiana</i>
Plum	<i>Prunus domestica</i>
Plum, Japanese	<i>Prunus salicina</i>
Pummelo	<i>Citrus maxima</i>
Raspberry	<i>Rubus idaeus</i>
Sapodilla	<i>Achras zapota</i>
Satinleaf, Damson-plum	<i>Chrysophyllum oliviforme</i>
Sea-grape	<i>Coccoloba uvifera</i>
Shaddock	<i>Citrus grandis</i>
Snowflake Aralia	<i>Trevesia palmata</i>
Star Apple	<i>Chrysophyllum cainito</i>
Syzygium	<i>Syzygium</i> spp.
Triphasia	<i>Triphasia</i> spp.
Wild Coffee	<i>Casearia hirsuta</i>
Wild Dilly	<i>Eugenia</i> spp.