CALIFORNIA DEPARTMENT OF FOOD AND AGRICULTURE
PROPOSED CHANGES IN THE REGULATIONS

Title 3, California Code of Regulations
Section 3591.15 Melon Fruit Fly Eradication Area
INITIAL STATEMENT OF REASONS/
POLICY STATEMENT OVERVIEW

The California Department of Food and Agriculture (Department) proposes to amend the host list in Title 3 California Code of Regulations (CCR) Section 3591.15 Melon Fruit Fly Eradication Area which provides authority to the Department to allow effective eradication and quarantine activities to prevent Melon Fruit Fly (*Bactrocera cucurbitae*), from spreading throughout California.

Description of the Public Problem, Administrative Requirement, or Other Condition or Circumstance the Regulation is Intended to Address

These regulations are intended to address the obligation of the Secretary of Food and Agriculture to protect the agricultural industry of California from the movement and spread within California of injurious plant pests as required by Food and Agricultural Code (FAC) Sections 401 and 403.

Purpose and Factual Basis

The specific purpose of amending Section 3591.15 Melon Fruit Fly Eradication Area is to revise and update the known host list for Melon Fruit Fly (MFF) to coincide with the official MFF host list promulgated in September 2016 by the United Stated Department of Agriculture (USDA), Animal and Plant Health Inspection Service (APHIS). By pairing the California host list with the USDA host list, the California Department of Food and Agriculture (Department) will be able to enact any eradication activities needed against MFF using the federal standards.

California's requirements for the MFF must parallel the USDA requirements or the entire state will be quarantined if the pest is detected. Therefore, MFF must regulate hosts on the revised USDA host list.

The factual basis for the determination by the Department that the amendment of Section 3591.15 is necessary is as follows:

While reviewing the regulations for this pest it was found that the USDA had released an updated version of the MFF host list. As the CDFA regulation is no longer up to date with the latest information this amendment is necessary to bring it into harmony with the most current USDA list.

MFF is a major agricultural pest within Asia and areas of artificial introduction, and many of its host plants are grown in California. MFF attacks the fruit of various plants that are part of California's economic and agricultural landscape, including citrus, stone fruits, and tomatoes. The female punctures host fruit to lay eggs which develop into larvae. In some hosts it also lays eggs in the flowers, stems, and exposed roots. The punctures admit decay organisms that may cause tissue breakdown. Larval feeding causes breakdown of fruit tissue. Fruits with egg punctures and larval feeding are generally unfit for human consumption. The California Agriculture Statistics Review 2021-2022 lists the value of tomatoes at 1.2 billion dollars and California as the largest citrus-producing state in America. Tomatoes and citrus are hosts to MFF.

If the fly were allowed to spread and become established in host fruit production areas, California's agricultural industry would suffer losses due to increased pesticide use, decreased production of marketable fruit, and loss of markets if the USDA or other states or countries enact a quarantine against California products which can host and carry the fly.

Project Description

**Section 3591.15**

In Section 3591.15 (b)(1), the host list was for the fruits of the listed plants. However the September 2016 host list released by the USDA reflects updated research into the pest and its hosts. Having a host list with the most accurate information allows the Department to carry out eradication activities effectively. Therefore to better mirror the USDA list the berries, fruits, nuts or vegetables of the listed plant species are now considered host articles for MFF.

Since MFF is able to infest flowers, fleshy leaves and stems of some cucurbits, those plant parts are also regulated on the following genera and species,: *Benincasa hispida, Citrullus colocynthis, Citrullus lanatus, Coccinia spp., Cucumis anguria, Cucumis melo, Cucurbita maxima, Cucurbita moschata, Cucurbita pepo, Lagenaria* spp*., Luffa* spp*., Momordica* spp*., Sechium edule, Sicyos* spp*. and Trichonsathes* spp. In addition, all cultivars, varieties, and hybrids of the plant species listed are assumed to be suitable hosts unless otherwise noted in the regulation

The following species and footnotes are being added to the host list:

| **Scientific Name** | **Common Name** |
|---|---|
| *Abelmoschus esculentus* (L.) Moench | Okra |
| *Abelmoschus moschatus* Medik. | Musk okra |
| *Adenia hondala* (Gaertn.) W. J. de Wilde | Hondala |
| *Anacardium occidentale* L. | Cashew[1] |
| *Annona senegalensis* Pers. | Wild custard apple |
| *Artocarpus heterophyllus* Lam. | Jackfruit |
| *Averrhoa carambola* L. | Starfruit |
| *Baccaurea angulata* Merr. | Red angle tampoi |
| *Benincasa fistulosa* (Stocks) H. Schaef. & S. S. Renner | Round gourd |
| *Benincasa hispida* (Thunb.) Cogn. | Ash gourd |
| *Capparis sepiaria* L. | N/A |

| | |
|---|---|
| *Capparis thorelii* Gagnep. | N/A |
| *Citrullus amarus* Schrad. | Citron melon |
| *Citrus hystrix* DC. | Kaffir lime |
| *Citrus maxima* (Burm.) Merr. | Pummelo, pomelo |
| *Citrus paradisi* Macfad. | Grapefruit |
| *Citrus reticulata* Blanco | Mandarin |
| *Citrus sinensis* (L.) Osbeck | Orange |
| *Coffea arabica* L. | Arabian coffee |
| *Cucumis anguria* L. | Pepino cimarrón |
| *Cucumis dipsaceus* Ehrenb. ex Spach | Hedgehog cucumber |
| *Cucumis maderaspatanus* L. | Sträv mukreva |
| *Cucumis spp.* | Melon, cucumber, cantaloupe |
| *Cucurbita* spp. | Pumpkin, squash, gourd |
| *Cyclanthera pedata* (L.) Schrad. | Lady's slipper |
| *Cydonia oblonga* Mill. | Quince |
| *Diplocyclos palmatus* (L.) C. Jeffrey | Lollipop climber |
| *Dracaena curtisii* Ridl. | N/A |
| *Dracontomelon dao* (Blanco) Merr. & Rolfe | Argus pheasant tree |
| *Eriobotrya japonica* (Thunb.) Lindl. | Loquat |
| *Ficus chartacea* Wall. ex King | N/A |
| *Ficus erecta* Thunb. | Ai xiao tian xian guo |
| *Ficus pumila* L. | Climbing fig |
| *Fragaria vesca* L. | Wild strawberry |
| *Gymnopetalum scabrum* (Lour.) W. J. de Wilde & Duyfjes | N/A |
| *Hylocereus undatus* (Haw.) Britton & Rose | Dragon fruit, Pitaya |
| *Juglans hindsii* (Jeps.) R. E. Sm. | Hind's black walnut[3] |
| *Lagenaria sphaerica* (Sond.) Naudin | Kanonkulspumpa |
| *Maerua siamensis* (Kurz) Pax | N/A |
| *Manilkara zapota* (L.) P. Royen | Sapote |
| *Melothria sphaerocarpa* (Cogn.) H. Schaef. & S. S. Renner | Dark egusi |
| *Momordica charantia* L. | Bitter melon, Balsam apple |
| *Momordica foetida* Schumach. | N/A |
| *Momordica trifoliolata* Hook. f. | N/A |
| *Musa* x *paradisiaca* L. | Banana[4] |
| *Pandanus fascicularis* Lam. | Padang |
| *Physalis philadelphica* Lam. | Husk tomato |
| *Sicyos pachycarpus* Hook. & Arn. | Kupala |

| | |
|---|---|
| *Solanum aethiopicum* L. | Chinese scarlet eggplant |
| *Solanum anguivi* Lam. | N/A |
| *Solanum betaceum* Cav. | Tree tomato |
| *Solanum capsicoides* All. | Cockroach berry |
| *Solanum erianthum* D. Don | Big eggplant |
| *Solanum linnaeanum* Hepper & P.-M. L. Jaeger | Apple of Sodom |
| *Solanum lycopersicum* L. | Tomato, cherry tomato |
| *Solanum macrocarpon* L. | African eggplant |
| *Solanum mauritianum* Scop. | Bugtree |
| *Solanum nigrum* L. | Black nightshade |
| *Solanum pseudocapsicum* L. | Jerusalem cherry |
| *Solanum sessiliflorum* Dunal | Orinoco apple |
| *Solanum* spp. | Tomato, eggplant, cockroach berry, Apple of Sodom, bugtree, nightshade, False Jerusalem cherry |
| *Solanum trilobatum* L. | N/A |
| *Strychnos nux-vomica* L. | Nux-vomica tree |
| *Strychnos spinosa* Lam. | Monkey orange |
| *Syzygium samarangense* (Blume) Merr. & L. M. Perry | Java apple |
| *Telfairia occidentalis* Hook. f. | Fluted gourd |
| *Terminalia catappa* L. | Tropical almond |
| *Tetrastigma leucostaphylum* (Dennst.) Alston ex Mabb. | N/A |
| *Trichosanthes pilosa* Lour. | Snake gourd |
| *Trichosanthes tricuspidata* Lour. | N/A |
| *Trichosanthes wallichiana* (Ser.) Wight | N/A |
| *Trichosanthes wawraei* Cogn. | N/A |
| *Triphasia trifolia* (Burm. f.) P. Wilson | Limeberry |
| *Zehneria mucronata* (Blume) Miq. | N/A |
| *Zehneria wallichii* (C. B. Clarke) C. Jeffrey | N/A |
| *Ziziphus jujuba* Mill. | Chinese jujube |

[1] Nuts are not regulated, the fleshy fruit is the host material[2]

Seeds are not regulated, the fleshy leaf is the host material[3]

Nuts are not regulated, the husk is the host material

[4] Movement of green bananas of cultivars “Williams”, “Valery”, “Grand Nain” and standard and dwarf “Brazilian” without fingers that are ripe before the rest of the plant, fused fingers or exposed flesh may be allowed through the system approach listed in 7 CFR § 318.13-22

[5] Mature, green commercially-produced 'Sharwil' avocados are not regulated
[6] Flowers are the host material

The following species are not present on the host list released in September 2016 and have been removed:

| ***Scientific Name*** | ***Common Name*** |
|---|---|
| *Annona muricata* | Soursop |
| *Annona reticulata* | Apple, Custard |
| *Brassica oleracea* var. *botrytis* | Cauliflower |
| *Cayratia trifolia* | Threeleaf cayratia |
| *Citrus nobilis* | Orange, king |
| *Cresentia* spp. | |
| *Cucumis angaria* | Gherkin, West Indian |
| *Cucumis melo* var. *cantalupensis* | |
| *Cucumis pubescens* | Cucurbit |
| *Cucumis trigonus* | |
| *Cucumis utllissimus* | Melon, long |
| *Cyphomandra betaceae* | Tomato, tree |
| *Lycopersicon esculentum* (pink to red ripe) | Tomato |
| *Malus sylvestris* | Apple |
| *Phaseolus radiatus* | Bean, mung |
| *Phoenix dactylifera* | Date palm |
| *Prunus persica* | Peach |
| *Pyrus communis* | Pear |
| *Sicyos* sp. | Cucumber, bur |
| *Trichosanthes anguina* | Gourd, serpent cucumber |
| *Trichosanthes cucumeroides* | Gourd, snake |

The FAC Section 5761 has been added to "Authority cited" because FAC Section 5761 allows the Department to draft regulations naming hosts of a pest that are subject to

eradication. FAC Section 5761 has been removed from the “Reference” section because it more accurately describes authority than a statute implemented by the regulation.

The FAC Section 5764 is removed from the “Reference” section because the Department does not currently replace host plants in eradication areas that are established by regulation.

Current Laws & Regulations

Existing law, FAC Section 401.5, states that the department shall seek to protect the general welfare and economy of the state and seek to maintain the economic well-being of agriculturally dependent rural communities in this state.

Existing law, FAC Section 407, provides that the Secretary may adopt such regulations as are reasonably necessary to carry out the provisions of this code that the Secretary is directed or authorized to administer or enforce.

Existing law, FAC Section 5322, provides that the Secretary may establish, maintain, and enforce quarantine, eradication, and such other regulations as are in their opinion necessary to circumscribe and exterminate or prevent the spread of any pest that is described in FAC Section 5321.

Existing law, FAC Section 5761, provides that the Secretary may proclaim any portion of the state to be an eradication area with respect to the pest, prescribe the boundaries of such area, and name the pest and the hosts of the pest which are known to exist within the area, together with the means or methods which are to be used in the eradication or control of such pest.

Existing law, FAC Section 5762, provides that the Secretary may proclaim any pest with respect to which an eradication area has been proclaimed, and any stages of the pest, its

hosts and carriers, and any premises, plants, and things infested or infected or exposed to infestation or infection with such pest or its hosts or carriers, within such area, are public nuisances, which are subject to all laws and remedies which relate to the prevention and abatement of public nuisances.

Existing law, FAC Section 5763, provides that the Secretary, or the commissioner acting under the supervision and direction of the director, in a summary manner, may disinfect or take such other action, including removal or destruction, with reference to any such public nuisance, which he thinks is necessary.

The existing laws obligates the Secretary to investigate and determine the feasibility of controlling or eradicating pests of limited distribution but establishes discretion with regard to the establishment and maintenance of regulations to achieve this goal.

This amendment provides the necessary regulatory authority to prevent the artificial spread of a serious insect pest, which is a mandated statutory goal.

Evaluation of Inconsistency/Incompatibility with Existing State Regulations

The Department is the only agency that can implement plant quarantines. As required by Government Code Section 11346.5(a)(3)(D), the Department has conducted an evaluation of this regulation and has determined that it is not inconsistent or incompatible with existing state regulations.

Anticipated Benefits from This Regulatory Action

The amendment of the host list to mirror the USDA host list for MFF supports the Department's ability to eradicate a serious insect pest; this is a mandated, statutory goal.

This regulation is necessary to prevent the spread of MFF to un-infested areas of the state. The regulation benefits industries (nursery, fruit for domestic use and exports, packing

facilities), the environment (urban landscapes), and the overall California economy by preventing the spread of MFF.

The amendment of this regulation benefits the citrus, stone fruits, and tomato (nursery, fruit for domestic use and exports, packing facilities) industries and the environment (urban landscapes) by providing the Department an accurate host list to prevent the artificial spread of the MFF over short and long distances.

The California, national and international consumers of California citrus and tomatoes benefit by having high quality produce available at lower cost. It is assumed that any increases in production costs will ultimately be passed on the consumer.

The amendment of this regulation benefits homeowners who grow their own host fruits for consumption and host material which is planted as ornamentals in various rural and urban landscapes.

The amendment of this regulation may benefit homeowners who grow host material for consumption and/or ornamentals in various rural and urban landscapes. By working with an up-to-date host list the Department is more likely to prevent infestation with MFF and thereby preventing damage to hosts., The regulation eliminates future needs for hosts to be treated in order to mitigate infestations of MFF.

California Environmental Quality Act

Prior to conducting any action authorized by this regulation, the Department shall comply with the California Environmental Quality Act of 1970 (Public Resources Code Section 21000 et. seq. as amended) and the State CEQA Guidelines (Title 14 California Code of Regulations Section 15000 et. seq.).

Mandate on Local Agencies or School Districts

The Department has determined that this regulation does not impose a mandate on local agencies or school districts.

Economic Impact Analysis (Government Code 11346.3(b))

The eradication and prevention of the spread of MFF in California through the amendment and implementation of this regulation economically benefits:

- the general public
- homeowners and community gardens
- the agricultural industry
- the State's general fund

*The Creation or Elimination of Jobs within the State*

The amendment is designed to minimize the spread of MFF in California through regulation of host material. Detection activities are currently being performed by existing state staff throughout the state by trapping and identifying all pests. No additional staff positions will be created or eliminated by this amendment. Therefore, the Department has determined that this regulatory proposal will not have a significant impact on the creation or elimination of jobs in the State of California.

*The Creation or Elimination of Businesses in California*

The amendment is designed to minimize the spread of MFF in California through regulation of host material. Detection activities are currently being performed by existing state staff throughout the state by trapping and identifying all pests. No new businesses will be required, and current activities do not eliminate existing business. Therefore, the Department has determined that this regulatory proposal will not have a significant impact on the creation of new businesses or elimination of new businesses in California.

*The Expansion of Businesses in California*

The amendment is designed to minimize the spread of MFF in California through regulation of host material. Detection activities are currently being performed by existing CDFA staff throughout the state by trapping and identifying all pests. No new businesses will be required, and current activities do not expand existing businesses. Therefore, the Department has determined that this regulatory proposal will not have a significant impact on the expansion of businesses currently doing business in California.

*Significance Adverse Impact on Business*

The amendment is designed to minimize the spread of MFF in California through regulation of host material. Detection activities are currently being performed by existing CDFAstaff throughout the state by trapping and identifying all pests. No businesses are currently adversely affected by these activities. Therefore, the Department has determined that this regulatory proposal will not have any significant adverse impacts on businesses currently doing business in California.

*Worker Safety*

This regulation is not expected to have an effect on worker safety.

*Estimated Cost or Savings to Public Agencies or Affected Private Individuals or Entities*

The Department has determined that Sections 3591.15 does not impose a mandate on local agencies or school districts. All eradication activities shall be conducted by the Department and quarantines by county agricultural commissioners. Therefore, no reimbursement is required under Section 17561 of the Government Code.

The Department also has determined that no reimbursable costs or savings under Part 7 (commencing with Section 17500) of Division 4 of the Government Code to local agencies or school districts and no nondiscretionary costs or savings to local agencies or school districts, will result from the amendment of Section 3591.15.

There are no reimbursable costs or savings under Part 7 (commencing with section 17500) of Division 4 of the Government Code to local agencies or school districts and no nondiscretionary costs or savings to local agencies or school districts anticipated from the amendment of this amendment.

The Department has determined that the proposed actions will not have a significant adverse economic impact on housing costs or California business, including the ability of California businesses to compete with businesses in other states.

*Potential Impact to Homeowners and Community Gardens*

Modifying the host list would result in no impacts to the general public because there are already many common host species on the list. By having a host list that is maintained with the most current information the Department has a higher likelihood of keeping the pest from spreading in California.

*Potential Impacts to General Fund and Welfare*

The proposed regulations do not have immediate or definitive impact to the general fund or general welfare. They will make is more likely that MFF would be detected before an infestation can happen, and if there is an infestation the Department can react quickly and effectively. Speed of response is key to eradicating an incipient pest infestation. Programmatic delays potentially can lead to pest quarantines, as well as increased production costs and potential job loss. The agricultural industry is one of the economic engines in the state. Negative impacts to agriculture impact the state's economic recovery and the general welfare of the state. Additionally, any further job losses in this area would likely be felt by low-skilled workers whose employment options are already limited. The loss of any additional agricultural jobs would likely result in an increase in the state's public assistance obligations which would also negatively impact the state's economic recovery.

<u>Assessment</u>

The amendment of Section 3591.15 is designed to prevent or minimize the spread of MFF.

The Department has made an assessment that the amendment to this regulation would: (1) not create or eliminate jobs within California, (2) not create new business or eliminate existing businesses within California,(3) not affect the expansion of businesses currently doing business within California, (4) is expected to benefit the health and welfare of California residents, (5) is expected to benefit the state's environment, and is (6) not expected to benefit workers' safety.

Health and welfare: The proposed action will benefit the health and welfare of California residents by making it more likely that MFF would be detected before an infestation can happen, and, if there is an infestation, the Department can react quickly and effectively. Speed of response is key to eradicating an incipient pest infestation. Programmatic delays potentially can lead to pest quarantines, as well as increased production costs and potential job loss.

The state's environment: The proposed action will benefit the state's environment by increasing the chance that MFF would be detected before an infestation can happen. If the Department neglects to regulate the types of hosts, this pest could spread into the local environment via the surrounding non-agricultural ecosystems. This could adversely impact private and commercial landscape plantings, local, regional, state and national parks, other recreational sites, open habitats, and wild lands. Affected plants could become less vigorous and may produce fewer seeds. Plants/trees with low propagule output can result in major changes to plant community structure.

Alternatives Considered

The Department must determine that no alternative considered would be more effective in carrying out the purpose for which the action is proposed or would be as effective as and less burdensome to affected private persons than the proposed action.

The Department considered taking no action. If no action is taken, the Department would not have an up to date host list for MFF. Without an up-to-date host list if a MFF infestation

were to occur USDA APHIS could potentially designate the entire state as infested with MFF, rather than just infested counties. If USDA APHIS were to consider the entire state infested, there would likely be additional detrimental quarantine requirements directed against California host commodities by the USDA APHIS and our international trade partners. Therefore, this alternative was rejected.

Information Relied Upon

The Department is relying upon the following studies, reports, and documents in the amendment of Section 3591.15:

California Department of Food and Agriculture, California Agriculture Statistics Review 2021-2022, page 57

California Department of Food and Agriculture, Melon Fruit Fly Pest Profile, https://www.cdfa.ca.gov/plant/pdep/target_pest_disease_profiles/melon_ff_profile.html, visited May 1, 2024

United Stated Department of Agriculture (USDA), Animal and Plant Health Inspection Service (APHIS). *Bactrocera cucurbitae*, Melon Fly Host List, 2016, September 2016