MISSISSIPPI DEPARTMENT OF AGRICULTURE AN COMMERCE
BUREAU OF PLANT INDUSTRY
P.O. BOX 5207
MISSISSIPPI STATE, MS 39762

QUARANTINE REGULATIONS

To prevent the introduction and spread of citrus greening disease caused by the bacterial pathogen, *Candidatus liberibacter* spp. and vectored by the insect psyllid, *Diaphorina citri* kuwayama.

139.01 In order to prevent in-state dissemination of *Candidatus liberibacter* spp. and the Asian citrus psyllid (ACP), *Diaphorina citri* kuwayama in Mississippi, the Commissioner of Agriculture and Commerce through the Bureau of Plant Industry (BPI), in accordance with Section 69-25-7 paragraph (2), and Section 25-43-7, Mississippi Code 1972 and laws amendatory thereto, does declare and give public notice of the establishment of an quarantine setting forth the following:

Citrus greening disease (CG), infective agent being *Candidatus liberibacter* spp. and the insect vector, *Diaphorina citri* kuwayama are hereby declared to be public nuisances being especially injurious to citrus spp., certain ornamental plants and to some native vegetation of Mississippi.

139.02 **Quarantine Area(s) within Mississippi**: Hancock County and other Mississippi counties wherein established infestations of *Diaphorina citri* and/or *Candidatus liberibacter spp.* are detected. "Established infestation" shall mean the existence of a *C. liberibacter* spp. infection or *D. citri* infestation of a host plant within a nursery setting, citrus grove, residential setting or in the natural environment.

139.03 **Regulated articles:**

1. Effective immediately, regulated articles as cited below may not be moved into or within Mississippi from quarantined areas listed above in 139.02 except as outlined hereafter. All nursery stock, plants, bud wood, cuttings, other plant parts except seed and fruit of those plants listed hereafter and any other plants or parts thereof, which the Commissioner determines to present a risk of spreading *C. liberibacter* spp. and/or *D. citri*, including but not limited to the following:

    a. For Asian citrus psyllid:
        i. *Aegle marmelo* - (Bael)
        ii. *Aeglopsis chevalieri* - (Dwarf powder-flask)
        iii. *Afraegle gabonensis* - (Gabon powder-flask)
        iv. *Afraegle paniculata* - (Nigerian powder-flask)
        v. *Atalantia monophylla* - (Indian atalantia)
        vi. *Atalantia spp.* - (atalantia)
        vii. *Balsamocitrus dawaei* - (Uganda powder-flask)
        viii. *Bergera (=Murraya) koenigii* - (Curry-bush)

~~ix. *Calodendrum capense* - (Cape chestnut)~~
~~x. *X Citroncirus webberi* - (Citrange)~~
~~xi. *Citropsis articulate* - (African cherry orange)~~
~~xii. *Citropsis gilletiana* - (Gillet's cherry orange)~~
~~xiii. *Citropsis schweinfurthii* - (Uganda cherry orange)~~
~~xiv. *Citrus madurensis* - *(= X Citrofortunella microcarpa)* - Calamondin)~~
~~xv. *Citrus spp.* - (Oranges, Lemons, Limes, grapefruit, etc.)~~
~~xvi. *Clausena anisum-olens* - (Anis)~~
~~xvii. *Clausena. Excavate* - (Pink wampee)~~
~~xviii. *Clausena indica* - *(*Clausena)~~
~~xix. *Clausen. Lansium* - (Wampee)~~
~~xx. *Eremocitrus glauca* - (Australian desert lime)~~
~~xxi. *Eremocitrus hybrid* - (Eremolemons, eremoranges, remoradias)~~
~~xxii. *Fortunella spp.* - (Kumquats)~~
~~xxiii. *Limonia acidissima* - (Indian wood apple)~~
~~xxiv. *Merrillia caloxylon* - (Flowering merrillia)~~
~~xxv. *Microcitrus australasica* - (Australian finger-lime)~~
~~xxvi. *Microcitrus australis* - (Australian round lime)~~
~~xxvii. *Microcitrus papuan* - (Finger lime, citrus apple)~~
~~xxviii. *X Microcitronella spp.* - (Faustrimedin)~~
~~xxix. *Murraya spp.* - (Curry leaf, orange-jasmine, Chinese-box, aranjo-azmin)~~
~~xxx. *Naringi crenulata* - (Naringi)~~
~~xxxi. *Pamburus missionis* - (Pamburus)~~
~~xxxii. *Poncirus trifoliata* - (Trifoliate orange)~~
~~xxxiii. *Severinia buxifolia* - (Chinese box orange)~~
~~xxxiv. *Swinglea glutinos* - (Tabog)~~
~~xxxv. *Tetradium ruticarpum* - (Evodia, su-zhu-yu)~~
~~xxxvi. *Toddalia asiatica* - (Wild orange tree)~~
~~xxxvii. *Triphasia trifolia* - (Limeberry)~~
~~xxxviii. *Vepris (=Toddalia) lanceolata* - (White ironwood)~~
~~xxxix. *Zanthoxylum fagar* - (Lime pricklyash, wild lime tree).~~

~~b. For citrus greening/*C. liberibacter* spp.:~~
~~i. *Aeglopsis chevalieri* - (Dwarf powder-flask)~~
~~ii. *Balsamocitrus dawei* - (Uganda powder-flask)~~
~~iii. *Bergera (=Murraya) koenigii* - (Curry bush)~~
~~iv. Calodendrum capense - (Cape chestnut)~~
~~v. X Citrocirus webberi - (Citrange)~~
~~vi. *Citrus madurensis (= X Citrofortunella microcarpa)* - Calamondin)~~
~~vii. *Citrus spp.* - (Oranges, Lemons, Limes, grapefruit, etc.)~~
~~viii. Clausena indica - (Clausena)~~
~~ix. C. lansium - (Wampee)~~
~~x. Fortunella spp. - (Kumquats)~~

xi. Limonia acidissima - (Indian wood apple)
xii. *Microcitrus australasica* - (Australian finger-lime)
xiii. *Murraya sp.* - (Curry leaf, orange-jasmine, Chinese-box, naranjo azmin)
xiv. Poncirus trifoliata - (Trifoliate orange)
xv. Severinia buxifolia - (Chinese box-orange)
xvi. Swinglea glutinosa - (Tabog)
xvii. Triphasia trifolia - (Limeberry)
xviii. Vepris (=Toddalia) lanceolata - (White ironwood)

2. Any live stage of Asian citrus psyllid, *Diaphorina citri* Kuwayama.
3. Any other product, article, or means of conveyance, if an inspector determines that it presents a risk of spreading citrus greening or Asian citrus psyllid, and after the inspector provides written notification to the person in possession of the product, article, or means of conveyance that it is subject to the restrictions of the regulations.
4. Fresh citrus fruit as described in 139.04 (4) below.

139.04 **Movement of Regulated Articles within Mississippi:**

1. Movement of regulated articles from regulated counties quarantined for the presence of citrus greening disease (CG) to non-regulated counties is prohibited.
2. Should more than one county become infested with ACP and not CG regulated articles may be moved between and among such counties unrestricted.
3. Certain plants and plant products may be moved from counties not infested with CG but quarantined for the presence of ACP to non-quarantined counties in Mississippi under the following conditions:

   a. Treatment.
      All regulated articles moving from areas quarantined for the presence of ACP **or** CG must be treated with an approved treatment for ACP either listed in the federal register, 7 CFR 305 or listed below in 3 (b) using an Environmental Protection Agency (EPA) approved product labeled for use in nurseries. Persons applying treatments must follow the product label, its applicable directions, and all restrictions and precautions, including statements pertaining to Worker Protection Standards.
   b. Regulated articles subject to infestation by ACP must be treated with a drench containing imidacloprid as the active ingredient within 30 days prior to shipping and also be treated with a foliar spray with a product containing acetamiprid, chlorpyrifos, or fenpropathrin as the active ingredient within 10 days prior to movement.

4. Fresh Citrus Fruit.
   a. Fresh citrus fruit grown and sold from a quarantined county and being moved to counties where ACP is not present must be cleaned using normal packinghouse procedures and free of leaf or stem material.

b. Producers under compliance agreements must comply with this requirement on all fruit moved off the farm.

3. Inspection.

All regulated articles that have been treated as provided above must be inspected by an inspector and found free of the ACP within 72 hours prior to shipping. Inspection of regulated articles treated with methyl bromide fumigation will not be required since the treatment is considered to be effective in killing all life stages of ACP that might be present.

5. **Compliance Agreements**.

a. Any person engaged in the business of growing and handling regulated articles for intrastate movement shall enter into a compliance agreement with the Bureau of Plant Industry to facilitate the movement of regulated articles within the state in accordance with all of the requirements herein specified. Such persons must agree to handle, pack, process, treat, and move regulated articles in accordance with federal and state regulations; to use all permits and certificates in accordance with instructions; and to maintain and offer for inspection such records as may be required.

b. **Cancellation**. Any state compliance agreement may be cancelled by an official BPI inspector if the inspector finds that the person who entered into the compliance agreement has failed to comply with all of the federal or state regulatory requirements. If the person is given notice of cancellation orally, written confirmation of the decision and the reasons for it must be provided as promptly as circumstances allow. Any person whose compliance agreement is cancelled may appeal the decision in writing within 30 days after receiving the written notification. Thereafter, Mississippi rules of administrative law shall be used to resolve the issue.

139.05 **Movement of Regulated Articles into and out of Mississippi**

Movement of regulated articles across state lines into and out of Mississippi is governed by USDA/APHIS/PPQ A Federal Domestic Quarantine Order and regulations promulgated thereunder.

Regulated articles must meet federal certification and permitting requirements if allowed to enter into interstate commerce.

139.06 **Disposition of articles found in violation**:

All regulated articles found in violation shall be immediately declared under stop-sale order and subject to inspection, treatment as described in 139.04 above and or to testing. Destruction, either by burning or burial at least 3 feet in an approved site shall result if test results are positive for *C. liberibacter* spp. However, if under the judgment of the Commissioner, said articles pose an imminent threat to the agricultural or horticultural industries or to the health of the environment said articles may be destroyed without laboratory testing.

139.06 **Removal of Quarantine may be accomplished by one of the following::**

1. A regulated county must remain free of *C. liberibacter* spp. *or D. citri* for no less than one year after eradication is proclaimed before quarantines can be lifted. Verification that eradication has been accomplished must be submitted in writing by state and/or federal officials before quarantines can be removed.
2. Said quarantine, upon approval by the Advisory Board, may be removed if the Commissioner determines that *C. liberibacter* spp. are endemic and no regulatory mechanisms will prove effective in preventing further dissemination of *D. citri* or *C. liberibacter* spp. within Mississippi.

139.07 Penalties:

1. Persons found in violation of state requirements shall be guilty of a misdemeanor and upon conviction thereof shall be punished by a fine of not more than one thousand dollars ($1,000) per violation or by imprisonment for not more than six (6) months or by both such fine and imprisonment at the discretion of the court having jurisdiction.
2. Each illegal shipment or sale transaction within the state shall be considered a separate violation and subject to prosecution accordingly.

Adopted :

_____ **Date: December 4, 2008**

Commissioner of Agriculture and Commerce

_____ **Date: December 4, 2008**

Director, Bureau of Plant Industry

ECONOMIC IMPACT STATEMENT

FILED UNDER THE AUTHORITY OF SECTION 25-43-3.105 FOR A NEW EMERGENCY RULE TO BE PROMULGATED UNDER THE MISSISSIPPI PLANT ACT, 69-25-7 (2).

PROPOSED RULE 44 ENTITLED: CITRUS GREENING DISEASE QUARANTINE

The purpose of said rule is to prevent the introduction and spread of citrus greening disease within Mississippi. The bacterial disease is caused by *Candidatus liberibacter* spp. and vectored by the Asian citrus psyllid (ACP), *Diaphorina citri* kuwayama. The bacterial disease is known to occur in Florida and Louisianna. Both the disease and its vector are regulated.

The proposed emergency rule is necessitated to prevent the whole state from becoming under federal quarantine rather than just Hancock County, where an infestation of Asian citrus psyllid was detected in August 2008 in a residential setting. The Bureau would regulate nurseries, retail establishments and other entities selling or transporting citrus and other host plants of the disease and vector within Hancock County. Inspections shall be made to insure that all host plants are free of the pests and are treated for the vector before being sold or transported out of the quarantined county. Unless adopted the federal order would require such for all counties in the state if this emergency rule were not implemented.

Mississippi has only two commercial growers of citrus, approximately 25 acres total, none of which is in Hancock County. The economic impact to the two growers will be minimal unless the orchards become infested with the bacterial disease. There is no pesticide which is effective in controlling the disease once established; therefore infected plants would be destroyed and the orchards placed under quarantine until the disease is under control. If regulatory action or disease control measures are not implemented the disease would eventually destroy the entire orchards and possibly spread to commercial growing areas nearby in both Alabama and Louisianna, which are not currently infested with the disease. Therefore, the initial goal is to prevent citrus greening from spreading by finding and destroying infected plants and the insect which spreads the disease.

Initial costs to the agency for implementing and enforcing the rule will be minimal, since only Hancock County is affected. Paperwork will be minimal and the cost/benefit ratio well justifies the manpower needed in the field and office. It is estimated that it would not take over 120 man-hours annually to implement, conduct surveys and enforce the rule in Hancock County. Whereas, without the emergency quarantine for Hancock County only, the cost would be 10-fold encompassing at least 10 other counties where citrus plants are propagated and/or sold to the public.

Additional counties will be quarantined if the disease and/or vector are discovered and the cost will be increased accordingly. The overall economic cost to the taxpayers is

~~expected to remain under $100,000 annually, even if the disease and vector spread to other southern counties.~~

~~Submitted by Harry Fulton, State Entomologist, MDAC-Bureau of Plant Industry September 26, 2008.~~