## APHIS-Approved Packing House Procedures for *Guignardia citricarpa*, Causal Agent of Citrus Black Spot (CBS)

- A. Regulated fruit of *Citrus* spp. from a CBS quarantined area can move interstate with a certificate to all States provided it has met all conditions of the CBS Federal Order and is treated as follows:
  - 1. Washed, and
  - 2. Brushed, and
  - 3. Surface disinfested with at least one of the following treatments, and

Treatment: D301.75-11(a-1) — Chemical Treatment

Thoroughly wet the fruit for at least 2 minutes with a solution containing 200 parts per million sodium hypochlorite. Maintain the solution at a pH of 6.0 to 7.5. Treatment must be applied in accordance with label directions.

Treatment: D301.75-11(a-2) — Chemical Treatment

Thoroughly wet the fruit with a solution containing sodium o-phenyl phenate at a concentration of 1.86 to 2.0 percent of the total solution. If the solution has sufficient soap or detergent to cause a visible foaming action, wet for 45 seconds. If the solution does not contain sufficient soap to cause a visible foaming action, wet for 1 minute. Treatment must be applied in accordance with label directions.

Treatment: D301.75-11(a-3) — Chemical Treatment

Thoroughly wet the fruit with a solution of 85 parts per million peroxyacetic acid (PAA) for at least 1 minute. Treatment must be applied in accordance with label directions.

- 4. Treated with label rates of imazalil and/or thiabendazole at the time of packing, and
- 5. Waxed
- B. Regulated asymptomatic organic\* fruit of *Citrus* spp. from a CBS quarantined area, can move interstate with a certificate to all States provided it has been inspected by an inspector, meets all other conditions of the CBS Federal Order, and is treated as follows:
  - 1. Washed, and
  - 2. Brushed, and
  - 3. Surface disinfested with an organic disinfectant, such as PAA or hydrogen dioxide (also known as hydrogen peroxide). Treatments must be applied in accordance with label directions.

- C. Regulated symptomatic organic\* fruit of *Citrus* spp. from a CBS quarantined area, can move interstate with a limited permit to non-commercial citrus producing States provided it meets all other conditions of the CBS Federal Order, and is treated as follows:
  - 1. Washed, and
  - 2. Brushed, and
  - 3. Surface disinfested with an organic disinfectant, such as PAA or hydrogen dioxide (also known as hydrogen peroxide). Treatments must be applied in accordance with label directions.

Note\*: Fruit from an organic operation may typically undergo washing, brushing, and surface disinfection. Organic operations may not typically wax and/or treat fruit with fungicides at the time of packing. Fruit that is not treated with fungicides, such as imazalil and/or TBZ, poses a risk of spread of *G. citricarpa*.

## B. References

USDA APHIS PPQ. Treatment Manual. Sections D301.75-11 (a-1), (a-2), and (a-3). <a href="http://www.aphis.usda.gov/import\_export/plants/manuals/ports/downloads/treatment\_pdf/domest\_ic\_treatments.pdf">http://www.aphis.usda.gov/import\_export/plants/manuals/ports/downloads/treatment\_pdf/domest\_ic\_treatments.pdf</a> (last accessed, December 21, 2010).

USDA APHIS PPQ, December 2010. Risk assessment of *Citrus* spp. fruit as a pathway for the introduction of *Guignardia citricarpa* Kiely, the organism that causes Citrus Black Spot disease Center for Plant Health Science and Technology, Plant Epidemiology and Risk Analysis Laboratory, Raleigh, NC, USA.

USDA APHIS PPQ, January 2010. Federal Domestic Quarantine Order. *Guignardia citricarpa* Kiely, Causal Agent of Citrus Black Spot (CBS). http://www.aphis.usda.gov/plant\_health/plant\_pest\_info/citrus/black\_spot.shtml