

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

Treatment of fruit with fungicides, chemicals, and disinfectants alone, is not a substitute for all the additional requirements of the CBS Federal Order. Packing houses and processors must have a signed compliance agreement with APHIS.

All fungicides, chemicals, and disinfectants that are used must be registered for use in the State in which they are being applied. The treatment must be applied in accordance with all label directions. Applications must be made within the confines of a controlled production facility or packing house that has a signed compliance agreement with APHIS. Precautions must be taken to prevent contamination of water, and contact with all wildlife, including federally protected species.

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 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 a treatment listed in A3 above or an organic disinfectant, such as PAA or hydrogen dioxide (also known as hydrogen peroxide). Treatments must be applied in accordance with label directions.

C. References

USDA APHIS PPQ. Treatment Manual. Sections D301.75-11 (a-1), (a-2), and (a-3).
http://www.aphis.usda.gov/import_export/plants/manuals/ports/downloads/treatment_pdf/domestic_treatments.pdf (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 2011. 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

USDA APHIS PPQ, March 2011. Federal Domestic Quarantine Order. *Guignardia citricarpa* Kiely, Causal Agent of Citrus Black Spot (CBS).
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USDA APHIS PPQ, May 2011. 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

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USDA APHIS PPQ, March 2012. Federal Domestic Quarantine Order. *Guignardia citricarpa* Kiely, Causal Agent of Citrus Black Spot (CBS).
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