

FOR INFORMATION AND ACTION
DA-2010-02
January 7, 2010

SUBJECT: Federal Order for *Pseudomonas syringae* pv. *aesculi*

TO: STATE AND TERRITORY AGRICULTURAL REGULATORY OFFICIALS

The Animal and Plant Health Inspection Service (APHIS) is issuing a Federal Order (attached) to prohibit the importation from all countries, except Canada, of *Aesculus* spp. plants for planting (excluding seed) because they are hosts of *Pseudomonas syringae* pv. *aesculi*. To prevent the introduction and dissemination of this harmful plant pathogen into the United States, this Federal Order is effective beginning January 25, 2010.

Recent scientific literature identifies *P. syringae* pv. *aesculi* as a destructive plant pathogen that seriously affects and leads to the death of plants in its host genus, *Aesculus*. *P. syringae* pv. *aesculi* is rapidly spreading through Europe. Recent surveys have estimated that in the United Kingdom approximately 49 percent of the horse chestnut trees are infected with this pathogen and in the Netherlands 30 percent are infected.

P. syringae pv. *aesculi* is not known to occur in the United States, and the pathogen is not known to be seed-transmitted. Plant pathogens, including viruses and viroids, are extremely difficult to detect during a port of entry inspection of the host plants, particularly in the absence of symptoms.

In order to prevent the entry of *P. syringae* pv. *aesculi*, APHIS has determined that it is necessary to prohibit the importation of *Aesculus* spp. plants for planting, with the exception of seed, until a pest risk analysis has been completed and appropriate effective mitigation measures have been established.

For additional information regarding this Federal Order, please contact Arnold T. Tschanz at (301) 734-5306 or Arnold.T.Tschanz@aphis.usda.gov.

/s/ Paul R. Eggert for

Rebecca A. Bech
Deputy Administrator
Plant Protection and Quarantine

Attachment:
Federal Order

FEDERAL IMPORT QUARANTINE ORDER

Pseudomonas syringae pv. *aesculi* Causal organism of bleeding canker of horse chestnut

January 7, 2010

This Federal Order prevents the introduction into the United States of the harmful bacterial plant pest, *Pseudomonas syringae* pv. *aesculi*, causal agent of bleeding canker of horse chestnut.

This Federal Order, issued pursuant to the regulatory authority provided by the Plant Protection Act of June 20, 2000, as amended, Section 412(a), 7 U.S.C. 7712(a), which authorizes the Secretary of Agriculture to prohibit or restrict the importation, entry, exportation or movement in interstate commerce of any plant, plant product, biological control organism, noxious weed, article or means of conveyance, if the Secretary determines that the prohibition or restriction is necessary to prevent the introduction into the United States or the dissemination of a plant pest or noxious weed within the United States.

P. syringae pv. *aesculi* is not known to occur in the United States, and the pathogen is not known to be seed-transmitted. Plant pathogens, including viruses and viroids, are extremely difficult to detect during a port of entry inspection of the host plants, particularly in the absence of symptoms.

Aesculus spp. plants for planting are used in The Netherlands and United Kingdom and elsewhere in Europe as a street tree, in public areas and private gardens. There are several *Aesculus* species that are native to North America, as well as the introduced, cultivated *A. hippocastanum* that has naturalized in the eastern United States.

Recent surveys have estimated that in the United Kingdom 35-50,000 horse chestnut trees (approximately 49 percent of the surveyed trees in 2007) are infected with this pathogen and in the Netherlands 30 percent of horse chestnut trees are infected. In Europe this disease is extremely damaging to the commonly planted *A. hippocastanum* and *A. xcarnea*, although apparently the disease is found on all species of *Aesculus* in the Netherlands. Trees of all sizes and ages are affected. Young trees (10-30 years old) are apparently more susceptible with some dying within 3-5 years after symptom development. The bacterium has been isolated from horse chestnut trunks, branches, leaves, flowers and fruits.

The earliest symptoms of infection are bleeding lesions that can range from red to yellow or black. The lesions are usually located at the base of the tree expanding upward to branches and stems as the infection spreads. In dry conditions there may be a crust present near the exit wound. The tree crown may show leaf yellowing and early leaf drop. Bark may be cracked or missing.

If bark is removed an orange-brown mottling can be present. Girdling of the trunk or branch is possible within a few years. The symptoms greatly resemble *Phytophthora* infection, leading to the misidentification of the causal organism of this disease until recent research positively identified *P. syringae* pv. *aesculi* as the causal agent.

In order to prevent the entry of *Pseudomonas syringae* pv. *aesculi*, APHIS has determined that it is necessary to no longer allow the importation of *Aesculus* spp. plants for planting, with the exception of seed, until a pest risk analysis has been completed and appropriate effective mitigation measures have been established. Due to the potential for the spread of these very serious plant pathogens, this Federal Order is effective beginning January 25, 2010.

Plant Genera Prohibited Pending Pest Risk Analysis (PRA):

Aesculus spp. plants for planting, except seed

Countries from Which Plants are Prohibited Pending a PRA:

All foreign countries, except Canada