



Animal and Plant Health Inspection Service

Emergency and Domestic Programs – Program Update

Program: *Phytophthora ramorum*

Date: June 2011

APHIS *Phytophthora ramorum* Program 2011, 2nd Quarter Summary

Background and History:

The APHIS-PPQ *P. ramorum* regulatory program initiated with the First Interim Rule February 14, 2002, is now in its 9th year. Currently 14 counties in California and 162 square miles in Curry County, in Oregon are designated as quarantine areas for *P. ramorum* regulated articles. The remaining counties in California and Oregon, and the entire state of Washington are designated as regulated areas for inter-state shipment of nursery stock. The USDA *P. ramorum* quarantine program, in place since 2002, has been successful in limiting the pathogen's artificial spread into the environment beyond the currently quarantine areas. **Presence of *P. ramorum* in the environment has not caused large-scale disease outbreaks in the forest landscape outside the currently quarantined areas in CA and OR.** The *P. ramorum* program in consultation with stakeholders has funded and developed several survey and remediation protocols, outreach and training initiatives. These efforts have benefitted the nursery industry by assuring the commercial movement of disease-free plants. In addition, APHIS-PPQ has been working for the past one year with state regulatory officials, the National Plant Board leadership and the Nursery Industry to improve the current *P. ramorum* regulatory framework. **Between, April 1st to June 30, 2011 *P. ramorum* was reported from 19 nurseries.**

Program Updates:

April, 2011: Eastern and Southern Plant Board Meetings: *P. ramorum* program presentations at both the Eastern (April 11-14) and the Southern Plant Board (April 17-20) meetings were made by William Newton, from APHIS Eastern Regional Office.

Advance Notification Federal Order:

Industry Feedback:

On April 20, 2011 *P. ramorum* Program Managers (EDP, Western Regional Office, PPQ, OR) participated in a conference call with Oregon Nursery Association members to discuss the implementation of the recent advance notification Federal Order. No major issue regarding the FO was raised by the Association management or members during the call other than, needing clarification on the timelines and format of the review process. APHIS had assured the stakeholders that it would conduct periodic reviews of the process and also after the fall 2011 shipping season conduct a thorough review to assess whether the FO has met the stated objectives. It is now two months since the Federal Order (FO) on Advance Notification has been effective (March 1st, 2011).

Assessment and Impact: April 29, 2011:

To assess the impact of the advance notification FO on inter-state shipments of *P. ramorum* host nursery stock, program managers have been soliciting and receiving information from both receiving states and the shipping states (SPROs, SPHDs). By being proactive APHIS has been able to rapidly resolve issues related to the FO. The program managers have been working with the regulatory officials of the shipping states to resolve or clarify issues raised by the receiving states.

Examples of Issues / Concerns raised by receiving states are: i) Additional work sorting and compiling faxed advance notification , ii) Advance Notification received does not contain list of the specified host plants, iii) Shipment delivery dates mentioned does not reflect the actual shipment arrival dates, iv) Plant species or varietal name not mentioned, v) Notifications are not standardized, vi) Some states are not set-up to respond to the notifications or do not have the resources to manage them, vii) Shipping nursery info missing on advanced notifications sent by brokers, viii) Shipping nurseries not sending advance notification to the appropriate email or fax contact.

A number of states have stated that the notification has had no adverse impact rather it has, “dramatically increased their ability to prioritize resources and provide direct traceability of incoming shipments and assisted in their surveys”. Additionally, the FO has assisted receiving states track a number of un-licensed establishments in their states.

Advance Notification Violation:

Detection of *P. ramorum* in an online inter-state shipper from OR resulted in trace forward investigation in 47 states. Host species confirmed positive for *P. ramorum* on May 13, 2011 were *Camellia* ‘Blood of China’ and *Camellia* ‘April Tryst’ and *Rhododendron* ‘Landmark’ during delimiting surveys. As most of the interstate shipments are mail order and nearly all states received at least one mail order shipment. However, **only two states** (RI and NY) received *Camellia sp.* ‘April Tryst’ confirmed positive at the shipping end. Sample collected in both RI and NY have tested negative. Information received from Oregon Department of Agriculture and states receiving shipments revealed that the nursery had not provided advance notification to majority of the states. APHIS is investigating the violation of the FO.

Section 10201 Farm Bill, FY 2011 funded *P. ramorum* programs:

National *P. ramorum* Survey:

In total *P. ramorum* program has received \$1,750,340 through the Farm Bill 10201 funding for FY 2011. The activities funded are under the Survey and Analysis (\$596,677). National surveys will be conducted in 16 non-regulated (AL, GA, IN, KY, LA, MA, MI, NJ, NY, OH, RI, SC, TN, TX, VA and WV) States (\$483,873) and Oregon (\$110,804) to verify if *P. ramorum* is widespread in nurseries growing host plants. This is the second year of surveys mainly in non-regulated states which will use sensitive water and soil baiting methods to detect *P. ramorum*. FY 2011-11 almost 600 nurseries were surveyed and the pathogen was detected in only 8 nurseries located in non-regulated states (MS, AL, GA, SC, NY).

In addition, Farm bill funds were also made available for conducting work under the Safeguarding Nursery Systems (**\$504,841**) objectives and, for National Ornamental Research Site at the Dominican University of California (**\$664,822**)

Activities funded under the *P. ramorum* mitigation initiatives under the Safeguarding Nursery Systems goal include, a) Assessment of disinfectants with Colorado State University; Private Industry; and USDA-ARS (\$128,532); b) Assessment of disease epidemiology/spread in nurseries with USDA-ARS, OR; University of Cambridge (114,637); c) Development of water-filtration methods to reduce pathogen spread with Washington State University, WA (\$94,183); d) Analysis of seed transmission of the pathogen with USDA-ARS, Ft. Detrick, MD (\$40,665); e) Mitigation research at National Ornamental Research Site in collaboration with Nursery Industry, in California (\$664,822).

Technical Workshops:

Detection workshop:

On May 18-19, APHIS-PPQ Eastern Region sponsored a *P. ramorum* soil and water detection workshop in Nashville, Tennessee. In attendance were representatives from the Tennessee Department of Agriculture, Division of Regulatory Services; University of Tennessee Extension; Tennessee Department of Forestry; USDA APHIS-PPQ and Forest Service. Topics included: APHIS's protocols and demonstration of water and soil baiting procedures and practical exercises in the laboratory. Activities also included site visit to a wholesale nursery where participants were exposed to real-life survey techniques.

June 28-30, *P. ramorum* water workshop at Puyallup, WA:

APHIS/CPHST Program Managers attended the 3 day workshop organized by Washington State University and COMTF to discuss the current status of research and mitigation of *P. ramorum* in water ways. The meeting was attended by over sixty participants from around the country representing Universities, Federal and State Regulatory agencies, Forest Service, Nature Conservancy, and Private Industry. The workshop included field visits to nurseries, affected landscapes and water treatment facilities at WSU.

Nursery Detections to date (2000 – 2011 March)

Year	# Nurseries	# States	Notes
2000, and prior	Zero		There were no reported nursery detections prior to 2001
2001	One	California	In infested area
2002	Zero		
2003	20	3	CA, OR, WA
2004	176	21	125 linked to one nursery's shipments
2005	99	7	
2006	62	11	
2007	23	6	
2008	28	8	
2009	26	11	Also, 6 landscape detections in 4 states; Data 2009 , Dec 31st
2010	34	13	33 nurseries, and 1 greenhouse, 2 landscape detections.
2011 (Jan-Jun)	19	4	19 nursery detections

Details of detections from January to March 2011:

Between, January 1st to June 30, 2011 *P. ramorum* has been reported from 19 nurseries in total, of which 10 were inter-state shippers and 9 non-interstate/retail establishments.

Breakdown:

Regulated states: California: 9 nurseries - 3 interstate, 6 non-interstate shippers; Oregon: 6 nurseries - 4 interstate, 2 non-interstate shippers; Washington State: 3 nurseries (all inter-state shippers)

Non-regulated States: South Carolina: 1 nursery (Non-interstate shipper), soil positive.

P. ramorum was detected on the following plant species:

Camellia 34%; *Rhododendron* 34%; *Pieris* 5%; *Viburnum* 5%; *Magnolia* 5%; *Osmanthus* 4%; Other (7) species 13%.

New species: none

Positive Detections by Plant Species January – June 30, 2011

Plant Species/Variety	State	County	Status	Date Confirmed
<i>Arctostaphylos uva-ursi</i>	WA	Snohomish	Regulated	5/27/11
<i>Camellia sasanqua</i> 'Jean May'	CA	Santa Clara	Quarantined	4/15/11
<i>Camellia sasanqua</i> 'Showa No Sakae'	CA	Santa Clara	Quarantined	4/15/11
<i>Camellia sasanqua</i> 'Chansonette'	CA	Stanislaus	Regulated	4/18/11
<i>Camellia sasanqua</i> 'Hana Jiman'	CA	Santa Clara	Quarantined	5/3/11
<i>Camellia japonica</i> 'Red'	CA	Santa Clara	Quarantined	4/15/11
<i>Camellia japonica</i> - mixed	CA	Santa Clara	Quarantined	4/15/11
<i>Camellia japonica</i>	CA	Orange	Regulated	4/22/11
<i>Camellia japonica</i>	CA	Sacramento	Regulated	5/12/11
<i>Camellia japonica</i> 'Blood of China'	OR	Lane	Regulated	5/13/11
<i>Camellia japonica</i> 'April Tryst'	OR	Lane	Regulated	5/13/11
<i>Camellia japonica</i> 'April Tryst'	OR	Lane	Regulated	5/13/11
<i>Camellia japonica</i> 'Mathotiana'	CA	Sacramento	Regulated	5/18/11
<i>Camellia japonica</i> 'Debutante'	CA	Sacramento	Regulated	5/18/11
<i>Camellia</i> sp.	OR	Clackamas	Regulated	5/9/11
<i>Camellia</i> sp.	CA	Mendocino	Quarantined	6/9/11
<i>Camellia</i> sp.	CA	Stanislaus	Regulated	4/18/11
<i>Camellia</i> 'April Remembered'	OR	Clackamas	Regulated	5/25/11
<i>Cinnamomum camphora</i>	CA	Sacramento	Regulated	4/22/11
<i>Gaultheria shallon</i>	WA	Snohomish	Regulated	5/27/11
<i>Laurus nobilis</i>	CA	Stanislaus	Regulated	5/18/11
<i>Magnolia grandifolia</i>	CA	Sacramento	Regulated	5/18/11
<i>Magnolia grandifolia</i>	CA	Stanislaus	Regulated	5/18/11
<i>Magnolia</i> sp.	CA	Stanislaus	Regulated	5/18/11
<i>Mahonia aquifolium</i>	WA	Snohomish	Regulated	5/27/11
<i>Osmanthus heterophyllus</i>	CA	Stanislaus	Regulated	4/18/11
<i>Osmanthus</i> sp.	CA	Stanislaus	Regulated	4/18/11
<i>Pieris forrestii</i>	CA	San Joaquin	Regulated	5/3/11
<i>Pieris japonica</i> 'Forest Flame'	CA	Orange	Regulated	4/22/11
<i>Pieris</i> sp.	OR	Washington	Regulated	4/29/11
<i>Prunus laurocerasus</i>	CA	Stanislaus	Regulated	4/18/11
<i>Rhododendron</i> sp.	OR	Washington	Regulated	4/21/11
<i>Rhododendron</i> sp.	CA	Santa Cruz	Quarantined	5/3/11
<i>Rhododendron</i> sp.	OR	Clackamas	Regulated	5/9/11
<i>Rhododendron</i> sp.	OR	Clackamas	Regulated	5/9/11
<i>Rhododendron</i> sp.	OR	Lincoln	Regulated	5/13/11
<i>Rhododendron</i> sp.	OR	Lincoln	Regulated	5/13/11
<i>Rhododendron</i> sp.	OR	Lincoln	Regulated	5/13/11
<i>Rhododendron catawbiense</i> 'Balalaika'	OR	Clackamas	Regulated	5/9/11
<i>Rhododendron</i> 'Chinoides'	OR	Clackamas	Regulated	5/13/11
<i>Rhododendron</i> 'Chinoides'	OR	Clackamas	Regulated	5/13/11
<i>Rhododendron</i> 'Hellikii'	OR	Clackamas	Regulated	5/9/11
<i>Rhododendron</i> 'Dorothy Amateis'	OR	Washington	Regulated	4/29/11
<i>Rhododendron</i> 'PJM'	OR	Washington	Regulated	4/29/11
<i>Rhododendron</i> sp.	OR	Washington	Regulated	4/29/11
<i>Rhododendron</i> sp.	OR	Polk	Regulated	5/5/11
<i>Rhododendron</i> sp.	OR	Clackamas	Regulated	5/25/11
<i>Rhododendron</i> 'Landmark'	OR	Lane	Regulated	5/25/11
<i>Rhododendron</i> sp.	OR	Lincoln	Regulated	5/27/11
<i>Trachelospermum jasminoides</i>	CA	Sacramento	Regulated	5/18/11
<i>Viburnum tinus</i>	OR	Polk	Regulated	4/21/11
<i>Viburnum tinus</i> 'Spring Boquet'	OR	Clackamas	Regulated	5/9/11
<i>Viburnum plicatum</i>	OR	Clackamas	Regulated	5/25/11

Dated: June 30, 2011. Prakash K. Hebbar *Phytophthora ramorum* National Program Manager, USDA-APHIS-PPQ, APHIS Headquarters, Riverdale, Maryland 301.734.5717 www.aphis.usda.gov/plant_health/plant_pest_info/pram