



APHIS *Phytophthora ramorum* Program 2013, 1st 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 11th year. Currently 14 counties in California and 202 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. **Presence of *P. ramorum* in the environment has not caused disease outbreaks in the forest landscape outside the currently quarantined counties in CA and OR.** 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. 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. Between, January 1st to March 31st, 2013 *P. ramorum* has been reported in only one, retail and non-interstate shipping nursery in Washington State.

Program Updates:

***Phytophthora ramorum* program clarifies sampling and sample reporting procedures:**

For the *P. ramorum* regulatory program, a plant **sample** refers to a single bag of leaves. Each sample is to contain a minimum of 5 symptomatic (unhealthy) leaves from large-leaf species; 5-12 leaves if possible, and, for small leaf species, include the terminal 3 inches of a symptomatic branch with the leaf sample. It is strongly encouraged that each sample is from one plant, however, if there are not enough symptomatic leaves on the one plant, collect symptomatic leaves (if present) from other plants in the same block at the lowest taxonomic level possible. If necessary, the sample can be a composite from the same genus/species of multiple cultivars as long as they are from the same block (for example, all of the leaves in a sample are from "*Kalmia latifolia*"). If at all possible, avoid samples collected and labeled at the genus level (e.g., *Camellia* sp.); this provides very little epidemiological assistance if there is a positive. Regulatory action may commence on one sample **confirmed positive**. Samples collected from: 1) [APHIS funded nursery surveys](#), 2) from [trace investigations](#), or 3) from positive nurseries, that are suspect positive (ELISA or ImmunoStrip positive for the genus *Phytophthora* or presumptive positive for *P. ramorum* via PCR test), must be forwarded to a cooperating [NPPLAP accredited lab](#) or an APHIS lab for further testing.

State personnel should notify the lab when nursery survey or trace investigations are imminent in order to allow the lab time to ensure that necessary supplies are available and they are prepared to receive samples for processing. This will provide the lab with the best opportunity to process the samples as they are received rather than the possibility of losing important samples or the necessity of resurveying due to loss or deterioration of samples. Submitters should contact the lab prior to sending the samples (see contact list below). Have ready the required information:

1) tracking number, 2) number of samples being shipped, 3) the disease being tested for. All samples must have either a completed PPQ Form 391 or equivalent documentation. The lab may be your cooperating NPDN lab, or other cooperating [NPPLAP accredited lab](#) or an APHIS PPQ lab. If sample submitters are not sure which lab to send samples to, contact either the PPQ NIS Domestic Diagnostics Coordinator, Joel Floyd (Joel.P.Floyd@aphis.usda.gov, (301) 851-2115) or the PPQ *P. ramorum* Operations Manager, Stacy Scott (Stacy.E.Scott@aphis.usda.gov, (970) 494-7577).

NORS-DUC: National Ornamental Research Site (NORS) -Dominican University of California (DUC).

On March 11-12, USDA-APHIS-PPQ *P. ramorum* Program staff reviewed the research activities currently underway at NORS-DUC. Attendees included representatives from the American National Nursery and Landscape Association, National Plant Board, California Department of Food and Agriculture, USDA-Agriculture Research Service, USDA-Forest Service, University of California, Washington State University, and Oregon State University. During the meeting, researchers presented progress made in research on Best Management Practices of *P. ramorum* and its implementation in nurseries. More information can be obtained at

<http://www.dominican.edu/academics/hns/sciencemath/community-partnerships-and-initiatives/norsduc/research-at-nors-duc>

***P. ramorum* program obtains Farm Bill funding to conduct surveys in non-regulated states and continue research on Best Management Practices at NORS-DUC:**

In fiscal year 2013, Farm Bill Section 10201 provided approximately \$1.6 million for *Phytophthora ramorum* work. The two major initiatives funded are, a) the *P. ramorum* National Survey and b) research on Best Management Practices at the National Ornamentals Research Site at Dominican University of California (NORS-DUC) (see section above).

Details on the funding can be obtained at

http://www.aphis.usda.gov/plant_health/plant_pest_info/pest_detection/downloads/farmbill/FY13-SpendingPlan.pdf.

The *P. ramorum* National Surveys will be conducted in states that are currently not regulated for the pathogen. The goals of these surveys are aimed at a) filling gaps in our knowledge about the distribution of the pathogen and its risk to the natural environment and b) to protect native biodiversity and natural resources of states with high risk environments. To facilitate this goal, the objectives of the Farm Bill National Survey of *P. ramorum* are to:

- survey nurseries that ship *P. ramorum* host plants interstate, particularly the high risk genera (*Camellia*, *Rhododendron*, *Viburnum*, *Pieris*, *Kalmia*) as these nurseries may ship to areas considered to be at high risk to disease (e.g. SOD-like) outbreak,
- survey propagation, wholesale and broker nurseries containing *P. ramorum* host plants, particularly the high risk genera (*Camellia*, *Rhododendron*, *Viburnum*, *Pieris*, *Kalmia*) that are located in states with areas considered to be at high risk to disease (e.g. SOD-like) outbreak, and
- survey the environment adjacent to nurseries with a history of *P. ramorum* detection (in plants, soil, water and streams).

Nursery Detections to date (2000 – March 2013)

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-Dec	23	5	23 nursery detections, 1 residential, 1 landscape
2012 Jan-Dec	33	8	33 Detections were in nurseries located in CA, OR, WA, NC, ME, NY, PA. IN and 3 Residential finds (ME, OR, CA)
2013 Jan-Mar	1	1	Detection in 1 retail, non-interstate shipping nursery locate in WA

Details of detections from January to December March 31st, 2013:

Between, January 1st to March 31st, 2013 *P. ramorum* has been reported in only one, retail and non-interstate shipping nursery in Washington State.

Detections in plants, soil and/or water: January to March 31st 2013: High Risk Hosts:

Rhododendron (5), *Kalmia* (1).

Positive Detections vs. Plant Species Jan – March 31st, 2013

Plant Genus/Species/Variety	State	County	County Status	Date Confirmed
<i>Kalmia</i> 'Bullseye'	WA	Kitsap	Regulated	2/28/2013
<i>Rhododendron</i> 'Anah Kruschke'	WA	Kitsap	Regulated	2/28/2013
<i>Rhododendron</i> 'Lee's Dark Purple'	WA	Kitsap	Regulated	3/8/2013
<i>Rhododendron</i> 'PJM'	WA	Kitsap	Regulated	3/8/2013
<i>Rhododendron</i> 'Baden Baden'	WA	Kitsap	Regulated	3/8/2013
<i>Rhododendron</i> 'Daphnoides'	WA	Kitsap	Regulated	3/15/2013
<i>Rhododendron augustinii</i> 'Electra'	WA	Kitsap	Regulated	3/15/2013

Dated: March 31, 2013 Prakash K. Hebbar *Phytophthora ramorum* National Program Manager, USDA-APHIS-PPQ, APHIS Headquarters, Riverdale, Maryland; Stacy Scott, National Operations Manager, USDA-APHIS-PPQ, Ft. Collins, Colorado; Russ Bulluck, Associate Director, Emergency Response, Center for Plant Health Science and Technology, Raleigh, NC. www.aphis.usda.gov/plant_health/plant_pest_info/pram