



United States Department of Agriculture

Animal and Plant Health Inspection Service

Pest Management - Plant Health Programs – Program Update

APHIS *Phytophthora ramorum* Program 2014, 1st Quarter Summary; March 31st, 2014

Background and History:

The APHIS-PPQ *P. ramorum* regulatory program initiated with the First Interim Rule February 14, 2002, is now in its 12th year. With the inclusion of Trinity County in 2014 as the new quarantine area, in total there will be 15 counties designated as quarantined for sudden oak death in California. In addition, 264 square miles in Curry County, in Oregon are also designated as quarantine areas. 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. There were no new reports of *P. ramorum* detection in nurseries between January 1st to March 31st, 2014. *P. ramorum* was reported in 18 host nurseries located in three regulated states and one non-regulated state (NY) in 2013.

APHIS-PPQ issues a Federal Order revising the *P. ramorum* regulatory framework and associated protocols.

On January 10, 2014 the Animal and Plant Health Inspection Service (APHIS) issued a Federal Order revising the *P. ramorum* domestic quarantine regulations by relieving and/or imposing regulatory requirements for the interstate movement of host nursery stock from nurseries located in the regulated and quarantine areas in California (CA), Oregon (OR), and Washington (WA). In addition, APHIS is defining regulatory requirements for nurseries in areas of the United States and its Territories that are outside the regulated or quarantined areas, that test positive for *P. ramorum*, and that move regulated, restricted, or associated *P. ramorum* host articles interstate. These actions are effective were March 31, 2014.

Impact on nurseries located in regulated areas of CA, OR and WA:

For nurseries located in the regulated areas of California, Oregon, and Washington, the revised regulations apply to nurseries moving *P. ramorum* host plants interstate and the requirements are based on when *P. ramorum* was last detected at the nursery on or after March 31, 2011. If *P. ramorum* has not been detected in a nursery on or after March 31, 2011, and the nursery is located in a *P. ramorum*-regulated area, the nursery is no longer required to be inspected, sampled, and certified as per USDA requirements in order to ship regulated and associated host plants interstate. State managed inspections and

certifications however will continue to apply to these nurseries. For those nurseries in the regulated areas, even if a nursery is no longer subject to USDA's annual testing and inspection requirements as a result of this Federal Order, in order for the nursery to ship regulated or associated articles interstate that were not propagated within the nursery, these articles must be obtained from a nursery in the regulated area that is certified pursuant to 7 CFR part 301.92 or that has been released from testing and inspection requirements as a result of this Federal Order. State departments of agriculture will maintain a public website listing all such nurseries in the regulated areas of their state.

Impact on nurseries located in Quarantine areas:

For nurseries located in quarantine areas of California and Oregon, all regulatory requirements for interstate shipments through annual certification survey and sampling will continue to apply. APHIS will, through compliance agreements, continue to regulate these nurseries under 7CFR 301.92-5(a) due to the presence of *P. ramorum* in the surrounding natural environment, which results in an inseparability of the areas for quarantine enforcement purposes and an increased risk of disease movement due to the lack of well-defined mitigation measures.

Impact on nurseries located outside the quarantine and regulated areas:

For nurseries located outside of regulated and quarantined areas, the revised regulations will apply to nurseries moving *P. ramorum* host plants interstate only if *P. ramorum* was detected at the nursery on or after March 31, 2014.

P. ramorum detection and regulatory actions:

If *P. ramorum* has been detected in a nursery, the nursery must be inspected, sampled, and certified in order to ship regulated and associated articles interstate. Regulatory samples will be taken from host plants, soil, standing water, drainage water, irrigation water, growing media, and any other articles designated by the inspector as a possible source of *P. ramorum* inoculum. The revised regulations will be enforced through compliance agreements and in the compliance agreement, the nursery must agree to address sources of *P. ramorum* identified by the testing in order to prevent its spread through interstate movement of regulated, restricted, or associated articles. To retain interstate shipping status, all critical control points identified by APHIS must be addressed by mitigation measures detailed in the compliance agreement. If all samples test negative for *P. ramorum*, the nursery may ship all regulated and associated articles interstate under a certificate pursuant to the current regulations at 7CFR 301.92-5(b). If all samples obtained from the nursery test negative for *P. ramorum* for three years from the effective date of the revised Federal Order, and the nursery is located in a regulated area, the nursery will be relieved of all Federal regulatory requirements for the interstate shipments of *P. ramorum* regulated, and associated articles following corroboration of the test results for all three years.

The goal of the above revisions is to allow both APHIS and state regulatory agencies to focus their resources on high-risk nurseries where *P. ramorum* has been detected, while reducing the burden on nurseries that pose minimal risk for moving the pathogen through shipments of regulated, restricted, or associated articles. Details are available through the APHIS web links below:

http://www.aphis.usda.gov/plant_health/plant_pest_info/pram/downloads/pdf_files/DA-2014-02.pdf

Links to revised *P. ramorum* protocols:

Inspections and sampling protocols for nurseries under the revised Federal Order DA-2014-02:

http://www.aphis.usda.gov/plant_health/plant_pest_info/pram/downloads/pdf_files/Inspection_Sampling_Protocol.pdf

Water sampling Protocol:

http://www.aphis.usda.gov/plant_health/plant_pest_info/pram/downloads/surveyplan/appendixI.pdf

Official Regulatory Protocol for Nurseries Containing Plants Infected with Phytophthora ramorum:

http://www.aphis.usda.gov/plant_health/plant_pest_info/pram/downloads/pdf_files/ConfirmedNurseryProtocol.pdf

Summary of *P. ramorum* program activities funded through Farm Bill in 2014:

http://www.aphis.usda.gov/newsroom/2014/04/pdf/fy14_farm_bill_spending_plan.pdf

For fiscal year 2014, several *P. ramorum* suggestions were funded through Farm Bill program under various categories. Approximately \$2.0 m were made available to Universities, State Departments of Agriculture, USDA Agriculture Research Service and APHIS-PPQ laboratories to support *P. ramorum* related activities.

The major themes are;

- 1) *P. ramorum* surveys in the non-regulated states
- 2) Support for the National Ornamental Research Site (NORS) activities at Dominican University of California (DUC)
- 3) Research on mitigation of *P. ramorum* using physical, chemical and biological control methods
- 4) Host-range studies
- 5) Improved detection methods
- 6) Epidemiology of the pathogen
- 7) Supply chain evaluation
- 8) Outreach activities

More details are shown in the table below.

P. ramorum Farm Bill projects FY 2014

Category	State	\$ Funding	Total funding by category
<i>P. ramorum</i> Survey in non-regulated states	Alabama	50,000.00	\$509,305.00
	Georgia	65,000.00	
	Kentucky	25,106.00	
	Louisiana	15,405.00	
	Maryland	44,950.00	
	Michigan	59,000.00	
	North Carolina	12,204.00	
	Nevada	36,979.00	
	New York	52,300.00	
	Ohio	23,653.00	
	Rhode Island	9,708.00	
	Tennessee	40,000.00	
	Texas	30,000.00	
	Virginia	25,000.00	
West Virginia	20,000.00		
<i>Phytophthora</i> species survey	California	110,426.00	\$110,426.00
National Ornamental Research Site activities at Dominican University of California (DUC)	DUC	399,916.00	461,166.00
	California/State Liaison	50,000.00	
	Bio-control	5,650.00	
	Disinfectants	5,600.00	
Mitigation (Physical/Chemical)	Academia, OR	83,531.00	\$254,118.00
	USDA-APHIS	140,549.00	
	USDA-APHIS	18,000.00	
	Academia, CA	12,038.00	
Biological control	Washington / Academia	29,350.00	\$64,350.00
	Maryland / USDA-ARS	35,000.00	
Host range study	Academia/Colorado	75,000.00	
Molecular detection	APHIS	11,780.00	\$377,698.00
	APHIS	64,700.00	
	APHIS	50,050.00	
	Academia / NC	12,800.00	
	USDA-ARS / OR	45,000.00	
Epidemiology	USDA/ARS / OR	167,720.00	\$377,698.00
	Academia/WA	25,648.00	
Shipments	NY	68,508.00	\$137,015.00
	OR	68,507.00	
Outreach activities	Alabama	17,500.00	\$67,500.00
	California	40,000.00	
Total Funding			\$2,056,578

Program Updates: Nursery Detections to date (2000 – March 2014)

There were no detections of *P. ramorum* in nurseries from January until 31 March 2014.

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	

Year	# Nurseries	# States	Notes
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-Dec	18	4	15 detections in CA (1), OR (10) and WA (6), NY (1). Detections were in 14 inter-state shippers and 4 retail, non-interstate shipping nurseries
2014 Jan-Mar	0	0	No reports of positive nurseries

Dated: March 31, 2014, Prakash K. Hebbar *Phytophthora ramorum* National Policy Manager, USDA-APHIS-PPQ, APHIS Headquarters, Riverdale, Maryland; Stacy Scott, National Operations Manager, USDA-APHIS-PPQ, Ft. Collins, Colorado.

www.aphis.usda.gov/plant_health/plant_pest_info/pram