## 2022 USDA APHIS PPQ *Phytophthora ramorum* Program Summary

In 2022, the USDA Animal and Plant Health Inspection Service (APHIS), Plant Protection and Quarantine (PPQ) *Phytophthora ramorum* Program supported compliance activities, diagnostics, and surveys in 25 states. *P. ramorum* was detected at 18 different establishments: 12 were new and six were previously positive (see Table 1). Confirmed positive samples were collected at interstate shipping nurseries, at intrastate shipping nurseries including big box stores, a small botanical garden, and four residential locations.

Seven interstate nurseries had confirmed positive detections of *P. ramorum* (see Table 2). Five of the nurseries were previously positive and in compliance agreements. The other two nurseries were new: one is under compliance. The other was placed under a compliance agreement, which was later withdrawn. Samples confirmed positive were collected during trace investigations, annual surveys, and compliance inspections, and in response to a residential detection. Table 2 summarizes these results by nursery type.

Table 1: Summary of establishment by type within the U.S. with APHIS confirmed positive detections of *P. ramorum* in 2022.

Establishment Type	Number First Confirmed in 2022	Number Previously +	Total Number Nurseries
Big Box	3	0	3
Other Intrastate Nurseries	2	1	3
Residential/ Botanical Garden	5	0	5
Interstate shipper	2	5	7
Total	12	6	18

Table 2. Summary of establishments by type and reason for sample collection.

	Reason samples were collected				
Type of Nursery	Number Trace	Number Annual Survey	Number Compliance	Total Number Nurseries	
Big Box	2	1	0	3	
Other Intrastate	0	2	1	3	
Residential/Botanical Garden	4	1	0	5	
Interstate	1	1	6	7	
Total	7	5	7	18	

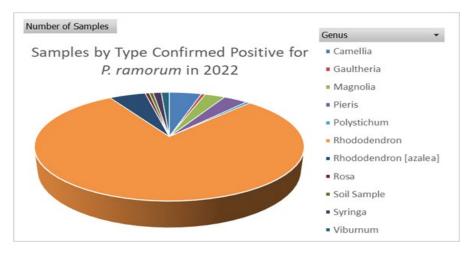
During 2022, four nurseries were released from federal compliance agreements because *P. ramorum* was not detected during six compliance inspections (2 per year), or because they stopped selling host plants interstate. Three of the nurseries fulfilled all requirements and were released from compliance agreements in 2022. One positive nursery stopped shipping plants interstate.

Phytophthora ramorum accredited diagnosticians detected the pathogen from 174 samples in 2022 (See Table 3 and Figure 1). The most detections were from Rhododendron leaves, including azaleas, followed by Camellia, Pieris, and Magnolia. No samples were confirmed positive from the high-risk genus Kalmia.

Table 3: Samples confirmed positive for *P. ramorum* in 2022 by host or sample type.

Sample Type	Number of Samples		
Camellia	8		
Gaultheria	1		
Magnolia	5		
Pieris	6		
Polystichum	1		
Rhododendron	138		
Rhododendron (azalea)	9		
Rosa	1		
Soil	1		
Syringa	2		
Viburnum	2		
<b>Grand Total</b>	174		

Figure 1. Number of samples positive for Phytophthora ramorum by type (genus, soil, water) in 2022.



## **Cooperative funding**

USDA provides funds to states for annual nursery surveys, compliance activities, and diagnostics. Two sources fund *P. ramorum* surveys in nurseries: PPA Section 7721 (formerly called "the Farm Bill"), and Cooperative Agricultural Pest Survey (CAPS) program. Table 4 lists the states receiving survey funds for FY22 from these two funding sources. In addition to funding annual surveys through PPA 7721 and CAPS in FY22, USDA provided financial support for compliance and diagnostic activities in California, Florida (diagnostic support to other states), Louisiana, Oklahoma, Oregon, Pennsylvania, and Washington.

Table 4: States receiving funds for annual *P. ramorum* surveys from PPA Section 7721 and CAPS in FY22.

State	FY 22 Funding Source for Survey		State	FY 22 Funding Source for Survey
AL	CAPS		NV	PPA 7721
AK	CAPS		NY	CAPS
AR	PPA 7721		ОН	PPA 7721
IN	CAPS		OR	PPA 7721
KY	PPA 7721		RI	PPA 7721
LA	PPA 7721		SC	PPA 7721
MA	PPA 7721		TN	PPA 7721
MD	PPA 7721		TX	PPA 7721
MI	PPA 7721		VA	PPA 7721
MN	PPA 7721		VT	PPA 7721
MO	CAPS		WI	PPA 7721
NC	PPA 7721		WV	PPA 7721
NM	CAPS			
Total states with funding 25				