## 2013 NATIONAL PHYTOPHTHORA RAMORUM EARLY DETECTION SURVEY SUMMARY REPORT

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The standard *Phytophthora ramorum* baiting protocol was broadened in 2013 to include both in situ (bait bags) and in vitro (Bottle O' Bait—BOB) methods. Most cooperating states in the east, plus Washington, opted for BOB, while California and Oregon used bags. Texas used both methods.

*Phytophthora ramorum* was detected for the first time from five new waterway locations in 2013, two of which were via bait bags at California sites associated with forest infestations. The remaining three sites were in Washington (2 via BOB) and Texas (1 via bags). One of the Washington sites was in the same watershed as a formerly positive nursery, but the inoculum pathway to the stream (under tidal influence) is unclear. The other Washington site was not in a watershed associated with a positive nursery, suggesting the inoculum source is an ornamental landscape or forest infestation. Additional BOB sampling was conducted in the sample area in an attempt to delineate the inoculum source, with 13 sites sampled July 22<sup>nd</sup>, November 11<sup>th</sup>, and November 19<sup>th</sup>, all of which were negative. The Texas site was closely associated with a former positive nursery (5-7 years ago); no recent *P. ramorum* introduction has been detected at the facility.

In addition to the new detections identified in 2013, *P. ramorum* was recovered from 11 of the 24 previously positive waterways that were surveyed across the US (104 waterways were surveyed in all) – 50 percent in the south (5/10) and 43 percent in West Coast states (6/14). For the south, this was the first year that any sites were unconfirmed for an entire survey year since initial detection. One unconfirmed positive site was in Florida where access was denied until December 3<sup>rd</sup>, when new locations were sampled, despite being outside the optimal baiting window. Samples collected from the new locations on December 3<sup>rd</sup>, 10<sup>th</sup>, and 17<sup>th</sup> were negative. Of the two unconfirmed Alabama sites, one was regularly positive via BOB during methods development in 2009, 2010, 2011, and 2012 but never by in situ baiting (bags), the standard protocol during this period. The other has been positive once or twice a year since 2009, as was one of the Georgia sites. The final unconfirmed site in Georgia was first positive in 2012, once each in spring and fall via bags.

In addition to baiting, streamside vegetation surveys conducted at unconfirmed sites in Georgia (1 site - 25 plant samples) and Washington (1 site - 9 plant samples) were all negative for the pathogen.

## 2013 National *Phytophthora ramorum* Early Detection Survey

Region State		Baiting Periods or Collections				Ramorum Detections			Positive Sites Surveyed		
West Coast	Sites	Bags	BOB	Total	Total	Past Positive	<b>New Positive</b>	Past Total	Past Confirmed	New 2013	
CA	37	5		179	6	3	3	6	2	2	
OR	11	18		187	23	23	0	6	4	0	
WA	11	1	6	69	3	0	3	2	0	2	
South											
AL	7		7	61	5	5	0	4	2	0	
FL	1		3	9	0	0	0	1	0	0	
GA	12		6	90	0	0	0	2	0	0	
MS	5		6	30	1	1	0	1	1	0	
NC	5		6	30	3	3	0	1	1	0	
SC	5		6	30	0	0	0	0	0	0	
TX	3	4	6	13	2	1	1	1	1	1	
Northeast											
NY	3		6	13	0	0	0	0	0	0	
PA	4		6	24	0	0	0	0	0	0	
12 States	104	28	58	735	43	36	7	24	11	5	