P. ramorum PPA 7721 Survey 2023 Accomplishment Report Template

Year:	2023		
State:	Louisiana		
Cooperative Agreement Name:	Sudden Oak Death (SOD) Survey		
Cooperative Agreement Number:	AP23PPQFO000C282		
Project Funding Period:	April 1, 2023 to December 31, 2023		
Project Report:	PPA 7721 <i>P. ramorum</i> Nursery/Environs Survey Report		
Project Document Date:	April 8, 2024		
Cooperators Project Coordinator:	State Survey Coordinator (SSC)		
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Quarterly Report	
Semi-Annual Accomplishment Report	
Annual Accomplishment Report	

A. Write a brief narrative of work accomplished. Compare actual accomplishments to objectives established as indicated in the work plan. When the output can be quantified, a computation of cost per unit is required when useful.

The Louisiana Department of Agriculture and Forestry (LDAF) entered into a Cooperative Agreement with the United States Department of Agriculture (USDA), Animal Plant Health Inspection Service (APHIS), Plant Protection and Quarantine (PPQ) in 2023 to conduct a visual and water baiting survey for *Phytophthora ramorum*. LDAF conducted this survey according to survey guidelines set forth by the USDA APHIS PPQ in 2023. This PPA 7721 funded project executed by LDAF is strengthening its relationships with a state wide network of cooperators that are helping to identify exotic pest threats, determining and implementing the most effective means of preventing, detecting, and responding to new exotic pests. LDAF is also communicating risks and needs to land management personnel, relevant industries and the public.

LDAF's Agriculture and Environmental Science (AES) division is divided into 8 districts across the state and each district was utilized to conduct this survey. LDAF began this survey in the spring of 2023 and concluded this survey in November of 2023. LDAF inspectors have conducted 32 Sudden Oak Death (SOD) inspections thus far including 6 locations where an environmental survey was performed due to their previously positive status from 2004. There have been 73 tissue samples collected and submitted to Dr. Singh's lab at Louisiana State University (LSU). Five of the 73 tissue samples tested ELISA positive. DNA was extracted from the 5 ELISA positive samples using Dneasy Plant Mini Kits by Dr. Singh and then was forwarded to Cornell University. Four of the five ELISA positive samples were tested and found to be negative using the USDA APHIS PPQ realtime PCR protocol with all controls performing as expected. One sample tested positive and was shipped to USDA APHIS PPQ Plant Pathogen Confirmatory Diagnostics Laboratory (PPCDL) in Maryland. The PPCDL confirmed this sample was positive for *P. Ramorum*. This positive sample was taken at a retail nursery in East Baton Rouge parish. The confirmed nursery protocol for retail nurseries was conducted by LDAF at this nursery establishing the D-zone (destroying 59 plants) and Q-zone (60 plants), disinfecting the Dzone, and taking 25 tissue samples that were sent to LSU for ELISA testing. Dr. Singh at LSU reported 5 ELISA positive samples which were shipped to Cornell University for further testing. Cornell University reported these 5 samples to be negative for *p. ramorum*. The 45-day inspection of the Q-zone was conducted with no symptomatic material being observed and the owner later decided to destroy all Q-zone plant material. LDAF witnessed the destruction of these plants and the disinfection of the Q-zone and surrounding area.

The water baiting portion of our survey was conducted in November of 2023 when water temperatures decreased to between 46- and 71-degrees Fahrenheit. LDAF AES inspectors deployed baited traps at 5 of our larger nurseries that have retention ponds. Camellia leaves were allowed to set on the surface of the retention ponds for 10 consecutive days. Samples were submitted (including 6 control samples) to Dr. Singh at LSU for analysis. There were 46 samples submitted to the LSU lab resulting in 11 Elisa positives. Dr. Singh reported these samples all negative for *Phytophthora ramorum* through morphology of sporangia.

Outreach continues to be a major objective for the Sudden Oak Death Survey and is performed prior to every inspection. LDAF AES inspectors educate each nursery grower, nursery stock dealer or property owner about *Phytophthora ramorum* and the symptoms associated with this disease, thus increasing public awareness and communication of the threat posed.

Funding Amount	Total Number of Sites	Cost Per Unit
Proposed = \$20,532	Proposed = 30	Proposed= n/a
Actual = \$18,000	Actual = 32	Actual = n/a

1. Survey dates:

	Proposed	Actual	
Survey Dates:	04/01/2023 to 12/31/2023	04/01/2023 to 12/31/2023	

2. Counties surveyed:

Number of Counties:	18
Counties:	Bossier, Caddo, Ouachita, Union, Lincoln, Lafourche, East
	Baton Rouge, West Baton Rouge, St. Tammany, Jefferson,
	Orleans, St. Landry, Iberia, Lafayette, Beauregard, Calcasieu,
	Rapides, Tangipahoa.

3. Survey Results:

Α	В	С	D	E	F	G	Н	I
Split	Number	Number	Number	Number	Number	Number	Number	Number
surveys	of	of other	of	of	of soil	of soil	of plant	of plant
by	nurseries	sites	water	water	samples	samples	samples	samples
which	surveyed	surveyed	samples	samples	tested	positive	tested	positive
calendar			tested	positive				
year								
they								
occurred								
in								
CY15	32	0	44	0	0	0	105	0
CY16	32	0	44	0	0	0	85	0
CY17	32	0	46	0	0	0	68	0
CY18	36	0	46	0	0	0	52	0
CY19	32	0	46	0	0	0	104	0
CY20	35	0	0	0	0	0	708	1
CY21	32	0	45	0	0	0	60	0
CY22	33	0	46	0	0	0	74	0
CY23	32	0	46	0	0	0	73	1

4. Database submissions:

All survey data was entered into the IPHIS database at the conclusion of the survey by PPQ Louisiana.

B. If appropriate, explain why objectives were not met. All objectives were obtained during this survey. C. Where appropriate, explain any cost overruns or unobligated funds in excess of \$1,000.

The Sudden Oak Death Survey had cost overruns of \$5,648.67. This was a result of more than expected personnel, fringe benefits, travel and sample charges.

Sudden Oak Death Survey AP23PPQFO000C282

Approved and signed by:

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Cooperator

Date: _____

ADODR

Date: _____