California Department of Food and Agriculture (CDFA) *Phytophthora ramorum* Program 2021 Summary Report

The California Department of Food and Agriculture (CDFA) receives funding from the United States Department of Agriculture (USDA) to administer the cooperative *Phytophthora ramorum* (*P. ramorum*) program. The CDFA assists and reimburses the county agricultural commissioners as they enforce Federal Domestic Quarantine 7 CFR 301.92 and California Code of Regulations 3700 at the 292 establishments regulated for *P. ramorum* in California (Table 1). Funding for the CDFA *P. ramorum* program remains at \$1,505,591 for fiscal year 2021/2022.

Table 1. Total Establishments Under Compliance for P. ramorum in California.

Establishment Type	Number of Establishments
Host/Nonhost Nursery Stock in Soil	
(Exhibit B and Exhibit J)	169
Greenery, Garland, and Wreaths (Exhibit D)	9
Soil (Exhibit F)	1
Tree Farm (Exhibit I)	11
Wood and Wood Products (Exhibit C), Green Waste Origin Facility (Exhibit E), Compost Facility (Exhibit G), Green Waste Transporter (Exhibit H)	102
Total	292

In 2021, approximately 6,800 *P. ramorum* regulatory samples were submitted to the CDFA Plant Pest Diagnostics Laboratory. A total of 156 samples were determined to be positive for *P. ramorum*, all from foliar samples. Positive plant species consisted of *Camellia* sp., *Loropetalum chinense*, *Rhododendron* sp., and *Viburnum tinus*.

Three nurseries were confirmed to be positive with *P. ramorum* in California in 2021. This is down from five positive nurseries in 2020 (Table 2). The USDA "Official Regulatory Protocol for Nurseries Containing Plants Infected with *Phytophthora ramorum* Confirmed Nursery Protocol" (CNP) was implemented at all the positive nurseries as directed by the CDFA Nursery Advisory No. 02-2018 published in May 2018. The CNP outlines known and vetted enforcement actions to prevent the further spread of *P. ramorum* through nursery stock trade, including delimitation, mitigation, and disposal of nursery stock, soil, and other articles at nurseries which are infested with or may have been exposed to *P. ramorum*.

Table 2. P. ramorum-Positive Nurseries by Year.

Year	Nonquarantine Counties		Quarantine Counties		Total
	Production	Retail	Production	Retail	
2021	1		2		3
2020	2		3		5
2019	2	3	5	5	15
2018	2	3	2	4	11
2017	1	3	5	7	16
2016	1			1	2
2015					0

One nursery shipping *P. ramorum* host material interstate from California was found to be positive for *P. ramorum* in 2021. The positive interstate shipper is currently in compliance with quarantine regulations. This nursery will continue to receive enhanced inspections where over 300 foliar samples are collected biannually. During the enhanced biannual inspections, water and soil samples are also collected. There are currently eight California nurseries receiving enhanced biannual inspections. The other two positive interstate shipper nurseries had not shipped stock out of state within the trace forward window (six months previous to positive detection).