Rhododendron Leaf Baiting of Coastal California Watersheds for *Phytophthora*[1]

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Abstract

For more than a decade, the Rizzo lab and collaborators have monitored northern and central coastal California watersheds each spring and early summer for the presence of *Phytophthora* using submerged *Rhododendron* leaves as bait. This served as an early detection tool for the sudden oak death (SOD) pathogen, *P. ramorum*, but other species of *Phytophthora* were encountered and notable isolates occasionally saved; in recent years a more concerted effort was made to isolate species of *Phytophthora* other than *ramorum*. Twenty-three species were identified using a combination of morphological traits and ITS nrDNA sequences. Three provisional taxa, taxon mendostream (a novel member of *Phytophthora* clade 9), taxon obispostream (a member of the *P. citricola* species complex) and taxon sequoiasoil (a close relative of *P. cactorum*) are introduced based on unique ITS, mtCOX1 and mtCOX2 sequences. Due to the ongoing SOD epidemic, the exotic, invasive *P. ramorum* was the most common species isolated, followed by members of *Phytophthora* clades 3 and 6. This is consistent with studies performed in Alaska and Oregon, suggesting that many of these species are native to the area. Maps of infested watersheds are presented, spanning more than 750 km of the California coast.

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