

Monitoring *Phytophthora ramorum* Distribution in Streams within Coastal California Watersheds

Shannon K. Murphy, John Bienapfl, and David M. Rizzo, Department of Plant Pathology, University of California, Davis, CA 95616; (530) 754-9894; skmurphy@ucdavis.edu
Yana Valachovic and Chris Lee, University of California Cooperative Extension Humboldt and Del Norte Counties, 5630 S. Broadway, Eureka, CA 9550

Thirty-five locations were established in winter-spring 2004 to monitor for the presence of *Phytophthora ramorum* (Pr) in perennial watercourses throughout coastal northern California. The areas of focus included Alameda, Contra Costa, Del Norte, Humboldt, and Mendocino counties. These counties have limited Pr detection but are high-risk areas for Pr infestation. Two sites in Sonoma County were included as a baseline for successful recovery of Pr.

Rhododendron leaves were placed in mesh bags and secured in watercourses for 1 to 3 week intervals year-round to bait for *Phytophthora* species. Recovered symptomatic leaves were plated on *Phytophthora*-selective media.

Pr was recovered at all sites with a priori knowledge of Pr forest infestation. We recovered Pr at three sites downstream of known forest infestations. One site is along the South Fork Eel River, approximately 8km downstream of known infestation near Redway. Additionally, Pr was recovered at two sites without prior known forest infestation in Briones Regional Park.

Stream monitoring provides a useful method of early detection for Pr infestation. Future work will include the additional monitoring at the southern extent of the known Pr range. In addition, we will address research questions related to spread and survival of this pathogen in watercourses.