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**A community-based stream monitoring program in western Washington for early detection of invasive *Phytophthora* spp.**

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To supplement state agencies in their monitoring for *Phytophthora ramorum*, the sudden oak death (SOD) pathogen, a community-based stream monitoring program was begun in 2010. This project will expand on the streams currently being sampled by the WA Dept. of Natural Resources (WADNR) as part of the national *P. ramorum* survey and on nursery surveys by WA State Department of Agriculture (WSDA) and will allow for early detection of *P. ramorum* and other invasive *Phytophthora* species, as well as examining the biodiversity of *Phytophthora* spp. in stream ecosystems. Sites were chosen based on input from WSDA and WADNR and on volunteer availability. The baiting process involves placing *Rhododendron* 'Nova Zembla' leaves in mesh bags and deploying them in the stream for two weeks. Four sites are being monitored for six intervals and three sites for one two-week baiting period. After bait retrieval the leaves are cultured on *Phytophthora*-selective media and colonies of *Phytophthora* are isolated onto V8 agar *Phytophthora* species are identified using molecular and cultural methods. Volunteers consist of Master Gardeners, high school and college students, and others. In addition to baiting, some of the student groups are doing research projects on *Phytophthora* in the lab as part of their class requirements. More baiting sites are planned for 2011.