

New website shares information about deadly tree pathogens

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Sudden oak death, Port-Orford-cedar root disease and other deadly tree diseases caused by *Phytophthora* species (pronounced fy-TOF-ther-uhs) are threatening forest ecosystems worldwide. These microorganisms, which are related to algae and diatoms, spend part of their life cycle in soil or water but once they infect trees, they can kill them. A new web site, developed jointly by the USDA Forest Service Pacific Southwest Research Station and Oregon State University, hopes to put knowledge and resources in the hands of scientists and land managers as they look for ways to fight these deadly diseases.

Some *Phytophthoras* have likely been introduced to forests through the planting of infested ornamental [nursery plants](#), such as rhododendrons and Lawson's cypress. The diseases are difficult to control in part because infected plants show only indistinct leaf spots, which go unnoticed until the pathogen escapes a garden and kills a neighboring [forest](#) tree.

The Forest *Phytophthoras* of the World web site (www.forestphytophthoras.org/) is part of a worldwide effort to protect forests by preventing the spread of these exotic microbes. Information on forest *Phytophthoras* is currently scattered, making it difficult and time consuming for professionals to keep up with scientific literature, regulatory programs, management activities and educational materials on the topic.

Funded by the USDA Forest Service Pacific Southwest Research

Station, and created and maintained by Jennifer Parke at Oregon State University, the site will serve as an international resource where scientists, students, [forest managers](#), regulators, policy makers and the public can share the latest information on species of *Phytophthora* that affect the world's forests.

The web site currently features profiles of 10 forest *Phytophthora* species and the diseases they cause, with several additional species profiles to be added each year. Management and educational materials for each species are included, often in multiple languages. Other features include a disease finder, an illustrated glossary, a photo gallery, and a section on *Phytophthora* "basics" to help inform non-experts. A searchable reference system with links to scientific publications is also available. The website is paired with a newly created open access scientific journal, *Forest Phytophthoras* (www.journals.oregondigital.org/ForestPhytophthora/issue/current).

"Of all types of plant pathogens, fungi, bacteria, viruses, the *Phytophthora* are among the most damaging, and are very difficult to combat," says Susan Frankel, a biologist at the Pacific Southwest Research Station. "With this website and journal, we aim to improve communication needed to get ahead of this battle to protect our natural resources."

Provided by USDA Forest Service

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