

# Diversity of Foliar *Phytophthora* Species on *Rhododendron* in Oregon Nurseries<sup>1</sup>

B.J. Knaus,<sup>2</sup> K.A. Graham,<sup>2</sup> Niklaus J. Grünwald,<sup>2</sup> and Valerie J. Fieland<sup>3</sup>

## Abstract

The genus *Phytophthora* contains some of the most notorious plant pathogens affecting nursery crops. Given the recent emergence of the sudden oak death pathogen *Phytophthora ramorum*, particularly in association with *Rhododendron* spp., characterization of *Phytophthora* communities associated with this host in nursery environments is prudent. Many taxa may present symptoms similar to *P. ramorum* but we do not necessarily know their identity, frequency, and importance. Here, we present a survey of *Phytophthora* taxa observed from seven nurseries in the U.S. state of Oregon. Incidence and diversity of *Phytophthora* communities differed significantly among nurseries and among seasons within nursery (Knaus and others 2015). The taxa *P. syringae* and *P. plurivora* were widespread and detected at most of the nurseries sampled. Nine other taxa were also detected but were found either in a single nursery or were shared among only a few nurseries. Characterization of the *Phytophthora* communities present in nurseries is an important step toward understanding the ecology of these organisms as well as an aid to nursery managers in determining what risks may be present when symptomatic plants are observed. This study builds on an increasing literature, which characterizes *Phytophthora* community structure in nurseries.

## Literature Cited

Knaus, B.J.; Fieland, V.J.; Graham, K.A.; Grünwald, N.J. 2015. Diversity of foliar *Phytophthora* species on *Rhododendron* in Oregon nurseries. *Plant Disease*. 99: 1326-1332.

---

<sup>1</sup> A version of this paper was presented at the Sixth Sudden Oak Death Science Symposium, June 20-23, 2016, San Francisco, California.

<sup>2</sup> USDA ARS, Corvallis, OR.

<sup>3</sup> Oregon State University, Corvallis, OR.

Corresponding author: [grunwaln@science.oregonstate.edu](mailto:grunwaln@science.oregonstate.edu).