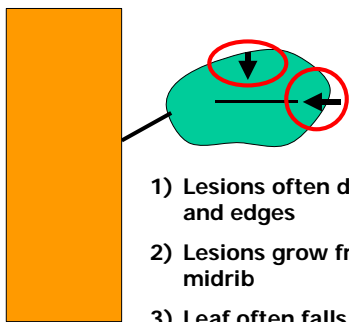


Recognizing *Phytophthora ramorum*-like symptoms¹

For nursery professionals who own, manage, or work in nurseries that sell known and associated hosts of *P. ramorum*.

Rhododendrons and camellias account for most (>90%) of the positive *P. ramorum* finds in Washington state nurseries. Typical symptoms on these high-risk genera include leaf lesions often associated with the midrib or leaf tip of rhododendrons and camellias, and the petiole of rhododendrons. Because fungi and other species of *Phytophthora* can cause similar symptoms, *P. ramorum* cannot be visually diagnosed; samples must be sent to a lab for isolation and/or molecular testing. Though you will not be able to diagnose *P. ramorum* in the field, you can learn to recognize potential symptoms in your nursery and send them in for diagnosis. For information about having leaves tested for *P. ramorum* please contact the WSU Plant Clinic (253) 445-4582. This sheet is meant to serve as a guide to help nursery professionals recognize typical *P. ramorum*-like symptoms on camellias and rhododendrons. Please note that symptoms can be diverse and, and vary by host. To view additional pictures of symptoms please visit the California Oak Mortality Task Force webpage (http://nature.berkeley.edu/comtf/html/image_library.html).

Summary of typical *P. ramorum* symptoms on camellia

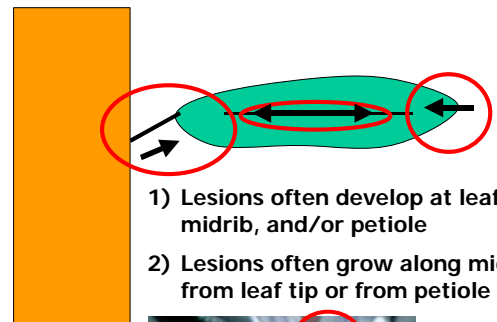


- 1) Lesions often develop at leaf tips and edges
- 2) Lesions grow from leaf tip up midrib
- 3) Leaf often falls off before lesion reaches stem



Photo: Oregon Dept. of Agriculture

Summary of typical *P. ramorum* symptoms on rhododendron



- 1) Lesions often develop at leaf tip, midrib, and/or petiole
- 2) Lesions often grow along midrib from leaf tip or from petiole



Photo: Missouri Dept. of Conservation

¹ Developed by Norm Dart, Washington State University (normdart@wsu.edu). Please contact Dr. Gary Chastagner (chastag@wsu.edu) or Norm Dart for more information or questions.

Leaf lesions on rhododendron caused by *Phytophthora ramorum*²

Note: Holes in leaves are where a sample of leaf tissue was collected for diagnostic testing.



² Photos by Norm Dart, Washington State University; Leaf samples were provided by the WDSA, and had previously tested positive for *P. ramorum* based on culturing and/or PCR testing.