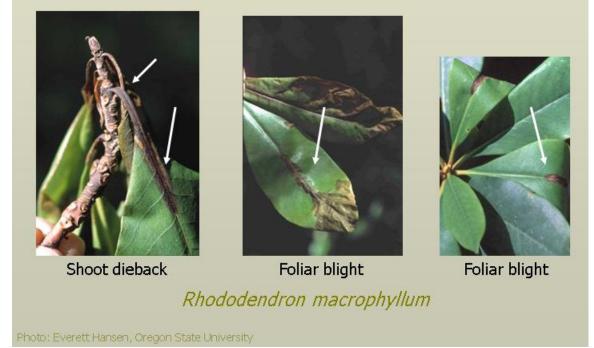
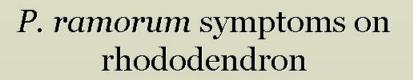
## P. ramorum symptoms on rhododendron



*Phytophthora ramorum* can infect both native rhododendrons and horticultural varieties of rhododendron. This slide shows shoot dieback (left) and foliar blight symptoms (center and right) on native Pacific rhododendron in the field. Note the dark discoloration that often follows the leaf midrib or petiole as shown by the white arrows.

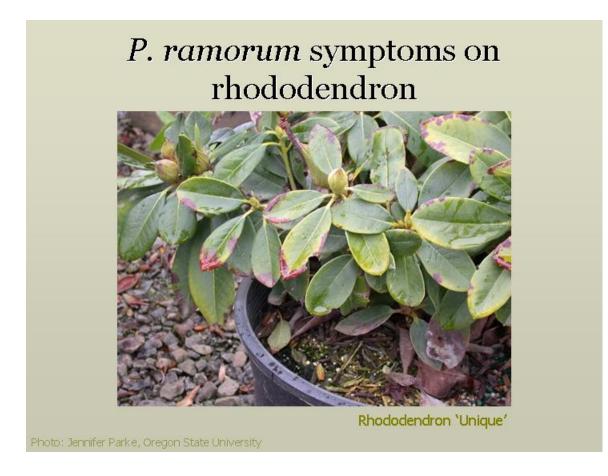


In this case it appears that the infection has moved from the shoot tip into the leaves.

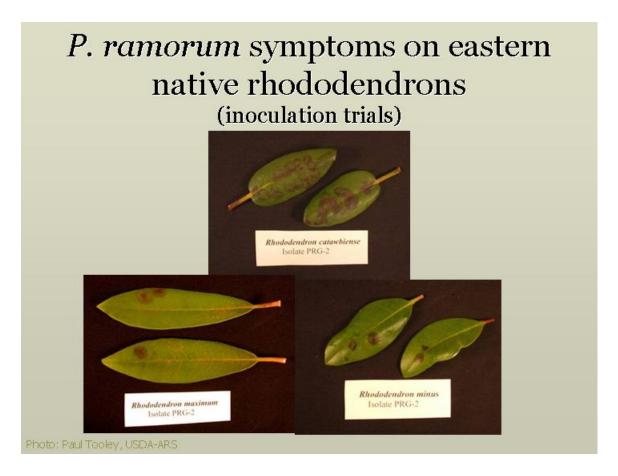




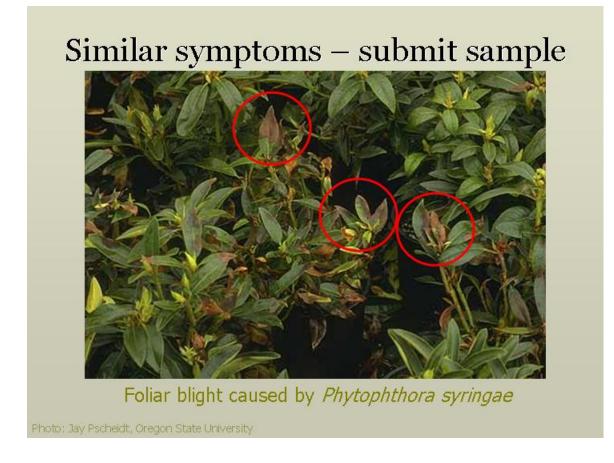
In the nursery, horticultural varieties of rhododendron infected with *P. ramorum* can develop symptoms like these.



*P. ramorum* symptoms may also occur where water (and spores) remain on the leaves for several hours. Note the brown lesions along the edges of the leaves where the water accumulated.



Infections on eastern native species of rhododendron have not been found in the wild, but artificial inoculation experiments in the greenhouse show us what symptoms may look like on these species.



There are several other species of *Phytophthora* that commonly infect rhododendron leaves and cause symptoms similar to those caused by *P. ramorum*. In this photo, disease is caused by *Phytophthora syringae*. Lab tests are necessary to identify the species of *Phytophthora* that cause foliar blight. If you see symptoms like these, submit a sample to determine if it is *P. ramorum*.

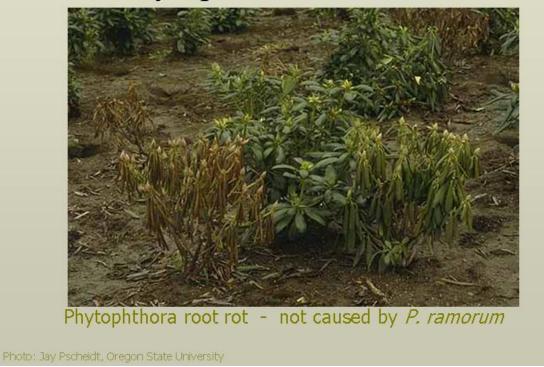
## Similar symptoms – submit sample



Foliar blight caused by Phytophthora species

Here are photos of rhododendrons in a North Carolina nursery infected with other species of *Phytophthora*. If you see a plant with similar symptoms - especially if it has been purchased since 2002 – submit a sample for testing.

## Similar symptoms – not P. ramorum



Several *Phytophthora* species can also cause root disease on rhododendron. The wilted plants in the foreground show symptoms of root disease, not leaf blight. If the whole rhododendron plant rapidly wilts and dies, it is likely caused by a root-infecting species of *Phytophthora*. *Phytophthora ramorum* is not known to cause root disease in a natural setting or in nurseries.

## Similar symptoms – not *P. ramorum*



Not all brown spots on rhododendrons are caused by *Phytophthora*. On the left is a leaf with symptoms of sun scorch. Note the brown spot in the center of the leaf which does not extend along the midrib or petiole. Sun scorched leaves are susceptible to gray blight (*Pestalotiopsis sydowiana*), which gives the leaves a silvery look (right). Rhododendron leaves that look like this do not need to be submitted for sampling for *P. ramorum*.