

(revision date:4/23/2014)

## ***Cedar: Port Orford cedar root rot***

*Use Integrated Pest Management (IPM) for successful plant problem management.*

### ***Biology***

Phytophthora root rot on Port Orford cedar is usually a problem only in areas with poor drainage or where flooding occurs. The fungus attacks the roots, which rot and die. The infection moves up into the crown, where the cambium (soft inner bark) turns reddish-brown or caramel in color instead of the normal white to greenish color. Older trees may develop cankers on the trunk, which are a dark reddish-brown when cut. The cankers may be accompanied by split bark and oozing pitch. Lower branches wilt, turn dark red, and die back. Younger trees are often killed outright, while infected mature trees may show wilting, branch dieback, and/or gradual decline.

### ***Management Options***

#### **Non-Chemical Management**

- ~ Avoid soil compaction which reduces drainage. Construction, heavy foot traffic, or machinery can compact soil.
- ~ Do not plant in waterlogged, poorly drained, or frequently flooded areas.
- ~ Improve soil drainage by incorporating organic material or using raised beds.
- ~ Plant resistant species in infected areas. Your county Extension agent or WSU Master Gardeners can make recommendations.
- ~ Prevent disease by planting only disease-free materials.
- ~ Remove and destroy all infected plants and plant debris.

*Select non-chemical management options as your first choice!*

#### **Chemical Management**

***IMPORTANT: Visit Home and Garden Fact Sheets for more information on using pesticides***

None recommended

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***Images***



*~ Caption: Phytophthora root rot infecting trunk  
~ Photo by: R.S. Byther*



*~ Caption: Phytophthora root rot on juniper  
~ Photo by: R.S. Byther*



*~ Caption: Phytophthora root rot on cedar  
~ Photo by: R.S. Byther*