

## PEST ALERT

### WEST VIRGINIA DEPARTMENT OF AGRICULTURE

Gus R. Douglass, Commissioner

### Sudden Oak Death

*Phytophthora ramorum* ((S. Werres, A.W.A.M. de Cock)



A common landscape now in central coastal California (J. Hoff)



Canker in coast live oak caused by *P. ramorum* (J. O'Brien)



Infected mountain laurel in Europe (S. Ashby)

#### Host Plants that are found in West Virginia

Oak	Buckeye
Rhododendron	Chestnut
Mountain laurel	Beech
Witchhazel	
Japanese honeysuckle	
<i>Acer</i> spp. (i.e., maples, boxelder)	
<i>Vaccinium</i> spp. (i.e., blueberry)	
Viburnum	

The causal agent of sudden oak death (SOD), *Phytophthora ramorum*, also known as *Phytophthora* canker disease, was first identified in 1993 in Germany and The Netherlands on ornamental rhododendrons. *P. ramorum* was isolated in June 2000 from dying trees in California. Since its discovery in North America, *P. ramorum* has been confirmed in forests in California and Oregon and in nurseries in California, Oregon, Washington, British Columbia and several nurseries in the eastern U.S. where infected plant material was received from the West Coast nurseries. Currently, SOD has not been detected in West Virginia.

#### Life Cycle

It is currently believed that infections on foliar hosts, such as arbutus, bay laurel, huckleberry, rhododendron and buckeye, may contribute to a rapid build-up of the fungus in the environment, and serve as an inoculum reservoir which in turn infects woody tissues of oaks and tanoaks. It is possible that the understory infection on the leaves of multiple hosts occurs prior to the infection of woody tissues of oak species. There is evidence that *P. ramorum* spores spread short distances through the air or by wind-blown rain. The SOD fungus is a cool temperature organism that develops best at a temperature of 68° F and relatively high moisture.

#### Symptoms

General symptoms include:

- Flamed out crowns, meaning that the leaves turn brown suddenly and stay on the branch for up to a year following death
- Cankers form on main trunk and branches
- Ooze from cankers is sticky, very dark reddish and smells fermented
- When the surface of the cankered bark is chipped away, the infected bark tissue below shows thick dark zone lines clearly separating the affected tissue from the uninfected area in the cankered region
- Cankers and ooze are most easily seen during dry weather and become difficult to detect in rain.

For more information contact:

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