

Kansas Plant Pest Alert

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Sudden Oak Death

What is it?

Sudden oak death and ramorum blight are diseases caused by the water mold *Phytophthora ramorum*. They are major problems on the coasts of California and Oregon where they have killed millions of tanoaks and other oak species.

Sudden oak death is the name given to the disease when it affects oaks.

Ramorum blight is the name given to the disease when it affects non-oak species including azalea, bay laurel, camellia, lilac, pieris, rhododendron, viburnum, and many other native and cultivated plants. Ramorum blight is non-lethal but contributes to the spread of sudden oak death.



Bleeding cankers on oak caused by *Phytophthora ramorum*. Bruce Moltzan, USDA Forest Service, Bugwood.org

Symptoms on oak trees

P. ramorum infection causes cankers on the trunks of susceptible oaks and subsequent decline. Cankers have defined margins and a reddish-brown, "bleeding" appearance. Tanoaks and oaks in the red and intermediate groups are susceptible.

Symptoms on non-oak species

On species other than oak, *P. ramorum* causes leaf scorch, foliar blight, and stem cankers. Symptoms are easily confused with other common problems and presence of *P. ramorum* can only be confirmed in a lab.



Leaf scorch and blight on rhododendron.

What is the risk to Kansas oaks?

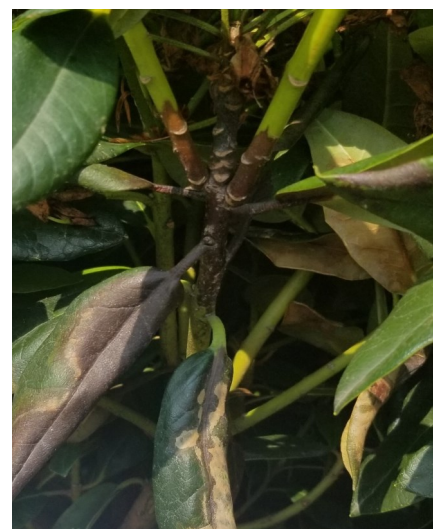
P. ramorum was confirmed in 2019 on rhododendrons sold at various retail locations across the U.S., including stores in Kansas. This was the first known introduction of *P. ramorum* into the state. Oak species in Kansas which may be susceptible to *P. ramorum* infection are black, northern red, pin, shingle and Shumard. Trees in the eastern part of the state are most at risk due to greater annual rainfall and greater density of susceptible species in that portion of the state. To date, *P. ramorum* has not been detected outside of the retail locations where it was found in 2019 and is not believed to have established in the environment. Kansas Department of Agriculture staff are focused on early detection and exclusion of the pathogen.

Disease Development

The pathogen survives in infected soil, plant tissue, and water. It develops most favorably during wet, rainy conditions. It spreads short distances by splashing rain and irrigation water, in contaminated soil, and on contaminated clothing or equipment. It spreads long distances via interstate nursery trade.

Best Management Practices

Inspect host plants on arrival. Monitor new and established plantings. Avoid overhead irrigation and promote good air circulation between plants. When pruning, disinfect tools between plants using 70% alcohol or 10% bleach solution. If sudden oak death or ramorum blight is suspected, contact your local county Extension office or the Kansas State University Plant Diagnostic Lab for testing.



Stem canker on rhododendron.