

SEIRIDIUM CANCKER

What is Seiridium Canker?

While pest and disease are a continual part of a tree's natural life cycle, one disease in particular that should be expected to become a bigger problem through the hot, dry summer months is Seiridium canker disease.

Seiridium canker disease is caused by one of three fungal pathogens and it most commonly affects Leyland and Italian cypress trees. Plants of all sizes and ages are affected. Cankers may form on stems, branches and in branch axils causing twig, branch or stem dieback.

This fungus is spread via wind by the fruiting bodies or spores. The fruiting bodies are spread typically during spring, or periods of extreme moisture. Initially, the spores colonize in the bark of the tree, causing lesions and black colored blisters. With progression, red sunken lesions that produce sap will appear. Unfortunately, the first sign that homeowners notice are dying or "flagging" branches and, at that point, the tree is very infected and in need of treatment immediately. The dead branches are evident during the early spring and summer, as drought and stress begin taking a toll on trees. This fungus can be isolated to only one branch or multiple branches as the disease progresses. Without attention and care, the fungus can eventually kill the tree.



Symptoms and Signs

Symptoms include browning of individual branches which is called flagging. Often only one or two limbs initially exhibit symptoms, but following favorable weather periods (moderate temperatures, humid periods), the disease may spread so that many limbs are affected. If the shoots are followed down toward the trunk, a resinous oozing canker may be observed. The cankers are often not observed near the shoot tips, but are located several feet down the branch close to the trunk. These cankers may also be observed on branches which do not show the flagging symptom. Although the limb is infected, the canker has not yet reached the entire branch and it remains green. It is likely that these branches will discolor in a few weeks. Although resin production and oozing is common with Seiridium canker, trees that are old or growing slowly may not exude resin. Aggressive strains of the pathogen may kill small trees quickly (less than a year) while larger trees or weaker strains may take several years. Symptoms may be more pronounced in trees that are affected by environmental problems (winter injury, drought, poor nutrition, etc.)

Control

There are no chemical controls available for Seiridium canker. In areas where Seiridium has been a problem, resistant plants should be selected for replacement. Infected limbs should be removed and discarded in the trash (do not compost). Severely affected plants should be removed from the landscape to prevent spread of the disease to healthy plants in the area.

The fungus survives in infected bark tissue. During wet weather, spores are released and spread to nearby hosts or branches (see image). These spores are spread by splashing and water runoff. They can also be carried longer distances by contaminated pruning tools and movement of infected plants.



Sources

Alabama Cooperative Extension Service <http://www.aces.edu/pubs/docs/A/ANR-1160/>

University of Arkansas System Division of Agriculture Research & Extensions <https://www.uaex.edu/publications/pdf/FSA-7536.pdf>
Sinclair, W.A., and H.H. Lyon. 2005. Diseases of Trees and Shrubs, Second Edition. Cornell University Press, Ithaca and London

