

Oak Tree Diseases

By Caroline Fritz

There are over 600 different species of oak trees found in temperate zones throughout the world. Easily identifiable by their acorns, oaks are also known for their brilliant displays in the fall, when its leaves change from green to red, yellow and orange. The diseases that affect oak trees manifest as either cankers on the bark or as spots or holes on leaves.

Fungus and Parasites

Fungus from diseases can attack leaves and branches of the red and white oak trees, specifically anthracnose, which occurs during wet weather, according to "The Garden Trees Handbook," by Alan Toogood, causing cankers to develop on shoots and spots to develop on the leaves. Powdery mildew is another fungal disease which affects oaks, appearing as a powdery coating on leaves and shoots. Tanoak death is a root rot disease caused by a fungus which kills otherwise healthy trees. In oak wilt, the fungus enters the tree through a wound that has broken the bark, clogging the vessels that carry water and causing the death of the tree. Root rot is caused by a fungus that attacks the root of oak trees showing as wilted, yellow leaves and wet bark. In the fall, clumps of mushrooms grow around the bases of affected trees.

Mistletoe is a parasitic plant that burrows into the bark of an oak tree to steal its water and nutrients. The two-lined chestnut borer is an insect that burrows into the bark of oak trees weakened by drought, slowly killing the tree.

Oak Tatters

Oak tatters is another disease which causes leaves in the white oak family to develop holes during their formation, giving them a lacy appearance. The United States Department of Agriculture reports this disease was first observed in the 1980s in few states, but has spread since then. The disease appears when new leaves form in May and can be caused by injury from frost, insect infestation or damage from herbicide.

Oak Decline

Oak decline is a condition that results from several injuries to oak trees, including deforestation, insect infestation, drought and fungus, according to the State of Tennessee Department of Agriculture. The combination of these injuries causes the trees to weaken over the period of several years, eventually leading to the death of the tree.

The Garden Trees Handbook; Alan Toogood; 1990

The United States Department of Agriculture
http://www.na.fs.fed.us/spfo/pubs/pest_al/oaktatters/oaktatters.htm

The State of Tennessee Department of Agriculture
<http://www.state.tn.us/agriculture/forestry/oakdecline.html>