



Extension

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University of Wisconsin Garden Facts

Oak Wilt

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What is oak wilt? Oak wilt is a lethal fungal disease that affects virtually all species of oaks. Oaks in the red oak group (oaks with pointed leaf lobes) such as red, scarlet, black and Northern pin oak are most susceptible. Oaks in the white oak group (those with rounded leaf lobes) such as white, bur, post, and swamp white oak are less susceptible.

What does oak wilt look like? Initially, single branches on infected trees wilt and die. Leaves on these branches often bronze, or turn tan or dull green, starting at the tips or outer margins. Leaves may also droop, curl, or fall from the tree. Infected trees eventually die. Oak wilt can kill oaks in the red oak group in less than one month. Oaks in the white oak group usually have less severe symptoms and are rarely killed in one season.



Marginal leaf bronzing or tanning is often an early symptom of oak wilt.

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Where does oak wilt come from? Oak wilt is caused by the fungus *Ceratocystis fagacearum* which survives in infected living oaks and in oaks recently killed by oak wilt. Picnic beetles are attracted to mats of the oak wilt fungus in infected trees, pick up spores of the fungus on their bodies, then carry spores to healthy trees. Beetles are attracted to trees that have been recently wounded by wind or storm damage, or by pruning. Natural grafts between roots of oak trees growing near each other can also serve as a means by which the fungus moves from tree to tree.

How do I save a tree with oak wilt? Removing infected oaks is often the best way to manage oak wilt. Before removing trees, be sure to disrupt root grafts between infected and other nearby oaks. Destroy the wood from diseased oaks

by burning or burying it. If you decide to keep the wood, remove the bark, pile it in one place and cover it with a heavy tarp, burying the tarp edges with soil until it is to be used. Injections of propiconazole are often recommended as treatments for infected oaks (and also as preventative treatments for healthy oaks). Unfortunately there has been little research indicating how effective such treatments will be for oaks commonly grown in Wisconsin.

How do I avoid problems with oak wilt in the future? Prune oak trees only during the dormant season when picnic beetles are not active. If pruning during the growing season is required (e.g., due to storm damage) immediately cover wounds with pruning paint. Carefully monitor oaks for oak wilt and remove infected trees promptly.

For more information on oak wilt: See UW-Extension Bulletin G3590 or contact your county Extension agent.

*Completed as partial fulfillment of the requirements for a BS in Plant Pathology at the University of Wisconsin Madison.

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