

## Verticillium Wilt

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**What is Verticillium wilt?** Verticillium wilt is a typically fatal disease that affects a wide range of deciduous woody ornamentals in Wisconsin. Trees most commonly and severely affected are maple and ash. Other trees and shrubs such as barberry, catalpa, elm, linden, Russian olive, smoke-tree and redbud can also be infected.



**Internal streaking in the sapwood typical of a Verticillium wilt infection.**

### **What does Verticillium wilt look like?**

The first signs of Verticillium wilt that you may notice are individual branches that suddenly wilt and die. Affected branches may occur on one side of the tree or may be scattered throughout the tree. If you carefully peel away the bark of these branches, you may see brown or green streaking in the sapwood. Streaking is common in trees such as maple or redbud, but often is not visible in ash.

### **Where does Verticillium wilt come from?**

Verticillium wilt is caused primarily by two fungi, Verticillium dahliae and Verticillium albo-atrum. These fungi are commonly found in Wisconsin soils and in roots of infected plants.

### **How do I save a tree or shrub with Verticillium wilt?**

Trees infected with Verticillium cannot be cured and will eventually die. However, you can extend the life of your tree by making sure that you are watering and fertilizing it properly. Also, prune out dead

branches. Be sure to clean your pruning shears between cuts by dipping them for at least 30 seconds in a 10% bleach solution or alcohol (spray disinfectants that contain at least 70% alcohol can also be used). This will prevent movement of the fungus from branch to branch, or more importantly, from tree to tree.

**How do I avoid problems with Verticillium wilt in the future?** The best way to avoid Verticillium wilt is to plant trees that are resistant. Resistant deciduous trees include beech, birch, ginkgo, hackberry, hawthorn, hickory, honey locust, mountain ash, white and bur oak, poplar, serviceberry, sycamore, and willow. Conifers are also resistant. DO NOT use mulches that may have been produced from infected trees. Also, immediately collect and discard leaves that have fallen from symptomatic trees. Both mulch and leaves are potential sources of Verticillium.

**For more information on Verticillium wilt:** See UW-Extension Bulletin A2537 or contact your county Extension agent.