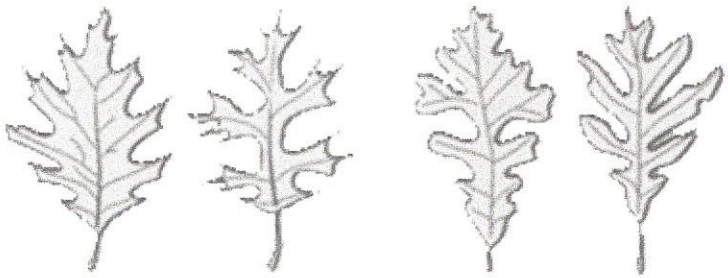
The cause of oak wilt

Oak wilt is caused by a fungus, *Ceratocystis fagacearum*. The fungus invades areas inside the tree where water moves. Later, balloon-like bumps called tyloses are formed and they plug up the water's path through the tree. As water movement inside the tree is slowed, the leaves wilt and drop off the tree.

Trees that can get oak wilt



Oaks in the red oak group (black, northern red, northern pin and others with pointed leaf edges) get this disease most easily. Oaks in the white oak group (white, swamp white, burr and others with rounded leaf edges) are less susceptible.

Oak wilt spreads both above and below ground

Underground

Most oak wilt moves from diseased trees to healthy trees through roots that have become interconnected (root grafts). Most root grafts form between oaks of the same species; grafts between red and white oaks are very rare. In general, red oak roots graft more than white oak roots.

Overland

Oak wilt can also spread above ground by sap-feeding beetles. In the spring, fungal mats (small masses of *Ceratocystis fagacearum*) develop under the bark of some trees that have died from oak wilt the year before. These mats force the bark to crack open. The fungus produces a sweet odor that attracts sap-feeding beetles to the mats. The beetles then fly to healthier oaks to feed on sap flowing from fresh wounds, carrying the fungus on them and thus infecting healthy trees.

Oak wilt also spreads when firewood or logs from infected trees with fungal mats are moved. Fungal mats hide easily in firewood and often go unnoticed.