

Management of Oak Wilt

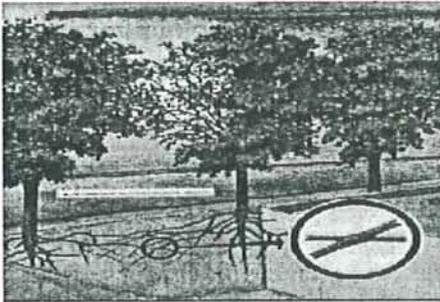
...Once oak wilt is determined or presumed to be the problem there are several key components of an oak wilt management program.

Prevention:

- Education: inform your family, neighbors and friends,
- No Pruning during the warm Season, typically, **April 1st - October 15th**
- Prompt repair of storm injury.

Trenching:

- Root graft disruption is necessary to prevent continued spread and infection of nearby oaks. Presume roots of neighboring trees are grafted if trees are within 1.5 X the distance from their trunk to their drip-line.



Root graft slide, American Phytopathological Society '62

Injections:

- Trees can be injected with the fungicide Alamo. The fungicide will have no inhibition against red oak group trees already exhibiting symptoms. Only inject symptomless red oaks

which may be root grafted to nearby infected trees. Infected white oaks may be cured with Alamo injections.

Removal:

- It is imperative that infected trees be removed. Do not use for firewood unless the wood is sealed under a tarp during the warm season, or debarked, or wood can be chipped.

Monitoring:

- If oaks are present on your property and you value them, it would be prudent to hire a qualified arborist to manage them; this management includes monitoring for oak wilt and for prompt repair of storm injury. It will be far more costly to manage oak wilt once established on a property than it is to keep it out.



...For more information contact your local MSU Extension Office or visit the web site:

www.msue.msu.edu/reg_se/roberts/oakwilt

David L. Roberts, Ph.D.
Michigan State University Extension (248) 347-0269
2 8115 Meadowbrook Rd., Novi, MI 48377

Editor: Sandy Rosa Photo Credits: Dr. Roberts

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OAK WILT



Oak Wilt near Ann Arbor, MI; trees were pruned and died one to two months later.

in
Michigan

“A Guide to Identification
and
Management”

by David L. Roberts, Ph.D.
Michigan State University Extension

What is Oak Wilt?

...Oak wilt is a fungal disease which kills trees by initiating blockage of the water conducting vessels, thereby causing a wilt. All oak species are susceptible but in varying degrees. Members of the **red oak group** often die very quickly, within one to two months after becoming infected. Members of the **white oak group** decline slowly while other species within the group are virtually resistant.

How to differentiate between members of the Red Oak and White Oak groups:

...Members of **red oak group** possess leaf lobes that are very pointed. Such members include Northern red oak, pin oak, black oak, scarlet oak, etc.



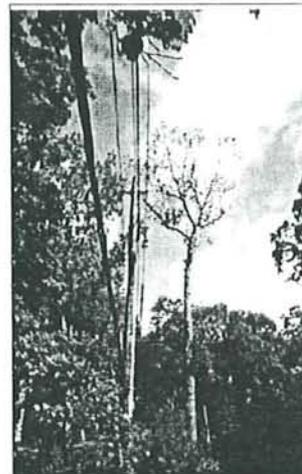
...Members of the **white oak group** possess rounded leaf lobes and include: white oak, swamp white oak, burr oak, etc.



How is oak wilt spread?

...Oak wilt is spread by insects (mainly sap beetles) and through root grafts between healthy and infected trees.

...One of the most common methods of introducing oak wilt into healthy trees is by pruning during the warm season. Wounds created by pruning, or by storm injury, attract sap beetles which transmit the disease.



Power line trimming resulted in rapid death of this oak from Oak Wilt.



Small red oak seedlings were cut for clearing and oak wilt was transmitted to large oaks in residents back yards.

Diagnosis of Oak Wilt:

...Oak wilt is very difficult to diagnose. Be suspicious of oak wilt if all or some of the following apply:

- *Rapid death occurs in **red oak**,
- *Slow decline occurs in **white oak**,
- *Evidence of pruning or storm injury,
- *Proximity to other oaks, especially root grafted trees which previously died,
- *Elimination of other causes of tree death or decline.

Lab Diagnosis:

...Lab diagnosis can be difficult because the oak wilt fungus is quickly displaced by other secondary organisms. Samples collected from at least 1 inch diameter wood, from actively wilting branches should be taken as quickly as possible to a qualified lab. Keep samples cool for best survivability of the fungus. **A negative lab result should not be interpreted as a definite negative for oak wilt.**