





What is Oak Wilt?

Oak Wilt is a disease caused by a fungus called Ceratocystis fagacearum.

This fungus causes a clogging of the water conducting vessels of infected oak trees, causing the trees to wilt and die. Oak Wilt was officially identified in Dallas in 1961.

Since that date, the fungus has been identified in over 55 counties of Central Texas.





What Types of Oak Trees Are Most Likely to Get Oak Wilt?

Live Oak and oak trees in the RED OAK group are most susceptible to oak wilt

- Live Oak
- Spanish Oak
- Blackjack Oak
- Shumard Oak
- Water Oak
- Texas Red Oak



The Red Oaks





Spanish

Shumard







What Types of Oak Trees are RESISTANT to Oak Wilt?

Oak trees in the WHITE OAK group are least susceptible to oak wilt

- Post Oak
- Chinquapin Oak
- Bur Oak
- Monterey Oak
- Lacey Oak



Susceptible live oak Resistant post oak AUG 13 2003

Symptoms



Veinal necrosis is an important symptom of the disease in Live Oaks.

Tip Burn can be a foliar indicator of oak wilt.

Accompanying indicators such as a "pattern of mortality" should be considered when making an accurate field diagnosis.







How Does Oak Wilt Spread?

The Oak Wilt Fungus Can be Spread In Two Primary Ways:

Underground

Through grafted or joined root systems

Above Ground

Insects carry fungal spores from infected red oaks to fresh wounds on healthy oaks

Disease Transmission





Root Grafts (95%) Insect Vectors (5%) Root Grafting can also take place on individual (planted) trees.

Inter-species grafting is possible.











Current Treatments & Recommendations

 Utilize Proper Tree Care Precautions - (Prevention) (Avoid Wounds • Paint All Injuries • Hire Qualified Arborist)
Remove & Dispose of Infected Red Oaks - (Prevention)
Trench Around Expanding Centers - (Intervention)
Inject Fungicides into Threatened Oaks - (Therapeutic)

-Replant with Disease Resistant Trees (Favor a diversity of tree species in the landscape)

AVOID WOUNDING OAK TREES FROM FEBRUARY THROUGH JUNE

MAKE PROPER PRUNING CUTS





OPEN WOUNDS VULNERABLE TO OAK WILT



PAINT WOUNDS ON OAKS!!



STUMP CUT IS ONE OF LARGEST WOUNDS



Infected Red Oaks should be destroyed immediately by *Burning, Burying, or Chipping/Composting.*

This practice will help reduce the potential ABOVE GROUND

spread where the fungal spores are transported to healthy trees by insects.



Management - Root Graft Disruption



Physically isolate healthy trees from infected trees to prevent the disease from spreading.

OAK WILT TRENCHING

Expen\$ive

Disruptive

Not 100%



Trenching – Types and Placement



Belt Trencher

Back Hoe





Ripper Bar

Rock Saw



Fungicide Injections (Alamo™) Can Help Preserve Individual Trees of High Value





Preventative Measures

Avoid wounds Paint wounds Sanitize tools Destroy diseased red oaks



Oak Wilt Information Partnership

www.texasoakwilt.org

(Texas Forest Service, LBJ Wildflower Center, US Forest Service, and NBII)

http://texastreeplanting.tamu.edu www.austintexas.gov/page/oakwilt-suppression chris.dolan@austintexas.gov

