



OAK WILT,

caused by *Ceratocystis fagacearum*

Importance. - Oak wilt is the most destructive disease of oaks in the upper Mississippi Valley. It also occurs throughout most of the South and can kill oaks rapidly, causing heavy losses. Red oaks are affected more frequently and severely than white oaks.

Identifying the Fungus. - The fungus can be identified in the field by the presence of fungal mats which form cushions under the bark of infected trees. However, these fungal mats are infrequently found in the South. Identification can also be made by observing laboratory isolates of the fungus.

Identifying the Injury. - Symptoms are bronzing or browning of green leaves from tips and margins downward toward the leaf base, premature defoliation, and eventually death of the tree. The red oaks develop symptoms over the entire crown shortly after infection, but white oaks develop symptoms slowly, a few limbs at a time.



Oak wilt infected tree.



Oak wilt symptoms on live oak.

Biology. - The wilt fungus is favored by moderate temperatures. It spreads from infected to noninfected

trees through root grafts. In addition, insects can carry spores of the fungus over long distances.

Control. - In the forest, kill infected trees with silvicides to reduce inoculum and prevent root graft transmission of the disease. In urban areas, sanitation by removing infected trees and trenching to eliminate root grafts will minimize the losses.
