

DUTCH ELM DISEASE

Overview

- >Name refers to the identification of the disease in the Netherlands in the 1920's
- >Introduced to North America in 1928 on imported lumber
- >Fungal disease spread by the elm bark beetle or by "root grafting" by trees in close proximity
- >Infected tree reacts to presence of the fungus by plugging its own cambial tissue in an attempt to block the fungus from spreading
- >Blocked cambial tissue prevents water and nutrients from reaching upper branches
- >Roots die starved of nutrients from the leaves
- >Effects all American elm species (Asian elms seem to be resistant)

Symptoms

- >Wilting and yellowing of leaves in the upper crown if introduced by beetles
- >Wilting and yellowing of leaves in the lower crown on the side of the graft if introduced by root grafting

Prevention

- >Insecticides to kill the beetles
- >Removal of infected branches and/or trees
- >Breaking of root grafts

Treatment

- >Injections with Arbotect or Alamo every 2-3 years (the fungus cannot be eradicated from an infected tree)