

Dieback in Pine: Pitch Canker

Pitch canker was first observed in Mississippi in a loblolly pine seed orchard near McNair, MS in the 1970's. At that time the causal organism and subsequent disease was unknown other than the trees in the orchard were dieing back like in the figure. In subsequent years the causal organism was determined to be the fungus moniliforme Fusarium subglutinans and the disease has been reported more frequently with increasing incidences in the past five years in Mississippi and other regions of the south. An interesting side bar is that plantations adjacent to chicken houses are often infected with the pitch canker fungus. The fungus apparently likes the high concentration of ammonia that's absorbed by pine needles and shoots.

Pitch canker in Mississippi, thus far, has been primarily associated with young loblolly pine plantations less than 20 years of age in the central and southern part of the state. The disease has been found in association with all of the commercially important southern pines. Loblolly and slash pine have been particular hard hit where the disease is present.



Figure 1: Pitch Canker

Mortality can occur but loss of growth through growth suppression is also common.

Portions of the tree impacted have ranged from terminal dieback to whole tree when the canker is located just above the root collar. At the canker site just below the dieback area abundant resin flow is often observed. The wood beneath the bark is resin-soaked blocking the water and nutrient flow to the canopy. The fungus gains entry into the tree through feeding sites of insects such the pine tip moths, deo-

dar weevil and/or other organisms that feed on the tender bark of the tree. These feeding sites provide infection courts, entry points, for the spores of the pathogen that are wind dispersed.

Management suggests have varied to doing thing and see if the trees recover, which they have in a few cases, to removing infected trees during thinning. More information can be found easily by doing a search on the internet by typing in pitch canker in your favorite search engine.

For additional information contact:

Mississippi Forestry Commission Local Office or T. Evan Nebeker tevannebeker@bellsouth.net.