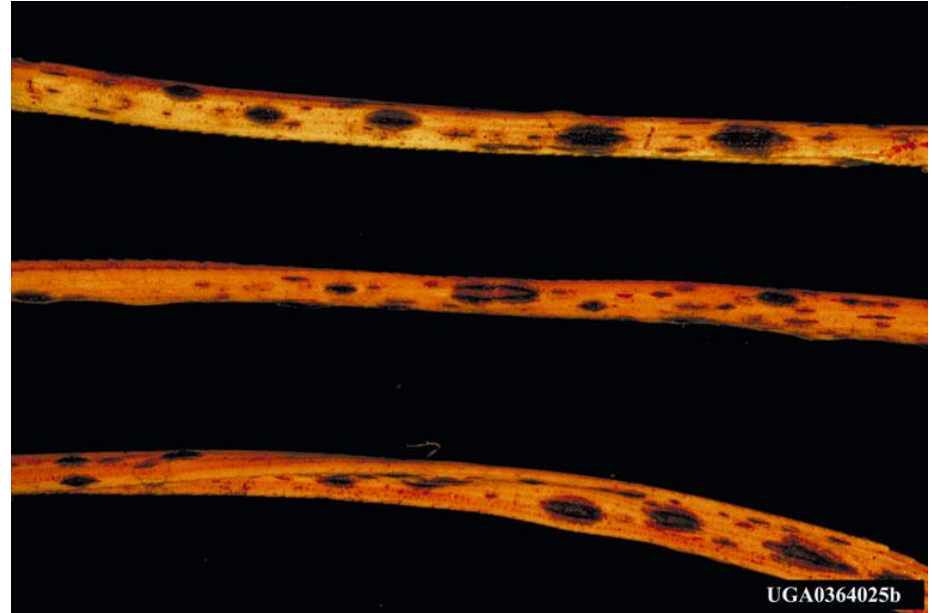


needle cast fungi (numerous species)



needle spots on many different species  
(for this test **NOT** on longleaf pine)

## **needle cast fungi**

### **numerous species**

Needle cast fungi are common diseases of conifers throughout the South. Infected trees in forest stands normally recover. However, losses to non-forest conifers, such as Christmas trees and nursery seedlings, can be substantial. Eastern white, loblolly, slash, shortleaf, Virginia, and Scotch pines, as well as spruce and firs, are susceptible.

Depending on the identity of the infecting fungus, needles begin to turn yellow-brown by winter or early spring. Later, the browning progresses, and fungal fruiting bodies are produced. These small, black, fruiting bodies may be bordered by brown or yellow margins, or both. In the more advanced stages, the tree has a scorched appearance.

Generally, new needles are infected in the spring or summer. The fungi colonize the needle tissue, turning it yellow and later brown. Fruiting bodies are formed in these brown areas, which produce spores that are spread during wet weather to re-infect new needles on other trees.