

Comparison of Pine Tip Blight and Pine Wilt: a look at hosts, environment, symptoms and control.

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- Pine tip blight is caused by a fungus. It attacks the new growth in the spring and if conditions are favorable (frequent rains) kill branches. The fungus girdles trunks by perennial cankers causing death of the tree over a period of time.
- The disease attacks primarily Austrian pines but also Scots and ponderosa.
- Control can be achieved with fungicide application and cultural methods.
- It is found almost statewide but more prevalent in central and eastern Kansas.



Infected tips scattered but more near bottom and thick branching; resin flow heavy

Advanced tree decline from pine tip blight, note some green needles throughout crown and misshapen trunk from perennial cankers; resin flow heavy



Black fruiting bodies of the fungus can be seen with the aid of a hand lens embedded in tissue of needles and the back of the scales of the cones



- Pine wilt is caused by a nematode which is vectored by the adult *Monochamus* pine sawyer beetle.
- It affects primarily Scots pine and secondly Austrian pine in Kansas. Ponderosa is thought to be resistant.
- The established range of the disease and vector is central and eastern Kansas.
- Stressed trees may attract the sawyer.
- Trees die rapidly within 6 to 12 weeks after infection. This occurs in late summer and the fall. Needles change from a light green to yellow to tan.
- The wood is dry and generally has little resin.
- Diagnosis is by cutting the branch and submitting a few 1" disks to a qualified person.
- Control is by removing and destroying the tree as soon as possible after testing.



Figure 1. Pinewood nematode adult male with spicule (see arrow) at posterior end.



Figure 2. Adult *Monochamus* beetle.

Trees die completely as opposed to tip death and slow overall decline as seen with pine tip blight. Occasional flagging may be seen.



Austrian pines



Scotch pines