Forest Disease Management Notes

United States Department of Agriculture

Forest Service
Pacific Northwest Region

Stalactiform Rust

Stalactiform rust is caused by the fungus *Peridermium stalactiforme*. This disease is quite common in Pacific Northwest lodgepole pine stands, however, the percentage of trees infected is usually quite low. Infection causes stem malformation, and breakage, but

seldom tree killing. Lumber recovery from infected trees is poor because the wood is pitch-soaked at canker sites.

Hosts: Primary host lodgepole pine; alternate hosts Indian paintbrush and other members of the Scrophulariaceae.

Recognition: Young infections appear as slight spindle-shaped swellings on stems and branches. Older infections produce diamond-shaped cankers that can be up to 30 feet long. Cankers are pitch-soaked and yellow. Bark on canker faces sloughs off, leaving ridges; rodents frequently gnaw bark around infections. Small inconspicuous blister-like swellings with clear ooze appears on young cankers. Yellow spore pustules (aecia) form on the edge of active cankers in early summer. Orange spore pustules (uredia and telia) are produced on leaves of alternate hosts in the summer.

Disease Spread: Aeciospores produced in May through August are windborne and infect the alternate host; pines are infected during late summer and fall by Windborne spores; infection of both hosts is favored by moist conditions.

Management: Remove infected trees during thinning and stand improvement projects; removal of alternate host is impractical.

May be Confused With: Atropellis canker, western gall rust, wounds.

Aecial stage of stalactiform rust on pine

Stalactiform rust canker on lodgepole pine