

# Forest Disease Management Notes

United States  
Department of  
Agriculture

Forest Service  
Pacific Northwest  
Region



## Atropellis Canker

Atropellis canker of pines is caused by two fungi, *Atropellis piniphila* and *A. pinicola*. The disease occurs in many lodgepole pine stands, but only a relatively few are severely infected. Infection can result in reduction of wood quality, stem breakage, and occasionally tree killing. Bark is difficult to remove from cankers.

**Hosts:** Especially damaging on lodgepole pine; also affects western white, ponderosa, and sugar pines.

**Recognition:** Elongated, flattened depressions, covered with roughened bark on stems and branches; heavy resin flow; dead branches; misshapened stems; occasional mortality of small trees.

Small black or dark brown fruit bodies (apothecia and conidial stromata) form on dead bark in the cankers, dark, bluish stain in the wood behind cankers (the fungus invades the ray cells and the stain is wedgeshaped in cross section).

**Disease Spread:** Windborne spores infect new hosts throughout the growing season; spores are not released until fruiting bodies are moistened; cankers may continue to produce spores several years after tree death; most infection occurs through unbroken bark in the nodal region, though some infection occurs through branch stubs; open-grown trees are less subject to infection than trees in overstocked stands.

**Management:** Remove infected trees during thinning; thin heavily stocked stands early to make conditions less favorable for the disease; clearcut heavily-infected stands in wide strips or large blocks and destroy small unmerchantable trees in the clearcuts; encourage development of mixed species stands; plant non-susceptible tree species in areas where infection has been severe; after cutting unmerchantable infected trees, it may be desirable to burn or chip them as cankers may continue to produce inoculum for several years after host death. Trees with deeply indented stem cankers should be treated in recreation areas.

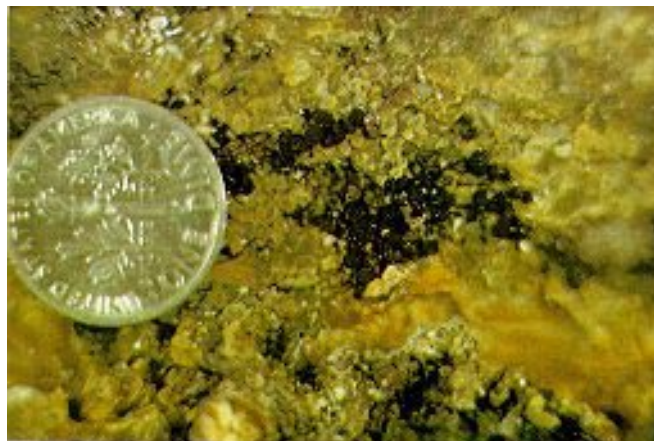
**May be Confused With:** Stalactiform rust on lodgepole, white pine blister rust on western white and sugar pines.



Atropellis canker on lodgepole pine



Stain under Atropellis canker



Fruit bodies of *Atropellis piniphila*