

Forest Disease Management Notes

United States
Department of
Agriculture

Forest Service
Pacific Northwest
Region



Incense Cedar Rust

Incense cedar rust is caused by the fungus *Gymnosporangium libocedri*. Incidence of the disease is sporadic in southern Oregon. Damage is seldom serious.

Hosts: Incense cedar; alternate hosts- serviceberry, hawthorn, apple, pear, quince, and mountain ash.

Recognition: Red-orange, gelatinous spore pustules (telia) appear on infected incense cedar foliage in spring. On incense cedar, causes spindle-shaped Spring and trunk swellings with numerous small dark-brown flecks often in a fan- or wedge-shaped pattern in wood, witches'-brooms and death of small sprays of foliage; heavy infection results in crown deformation; small black fruiting bodies on the alternate host produce an orange colored liquid (pycnial exudate) in early summer; later, whitishyellow spore cups (aecia) are produced in clumps usually on the undersurfaces of infected leaves; on alternate hosts causes light-yellow, circular spots on leaves, fruits, and tender green shoots.

Disease Spread: Teliospores germinate in place, producing basidiospores that are windborne and infect alternate hosts in spring-, aeciospores released during the summer are also windborne, and infect incense cedar leaves or young stems; high humidity favors infections on both hosts; symptoms appear on cedars 1 year after infection; mycelium of the fungus survives in cedar tissues for many years.

Management: Prune infected branches of ornamental or nursery trees; no control is warranted in the forest.

May be Confused With: True mistletoe.

Witches'-broom on
incense cedar caused by
Gymnosporangium libocedri



Telia of *Gymnosporangium libocedri*
on cedar foliage