

Forest Disease Management Notes

United States
Department of
Agriculture

Forest Service
Pacific Northwest
Region



Western Dwarf Mistletoe

Western dwarf mistletoe, also called ponderosa pine dwarf mistletoe, *Arceuthobium campylopodum*, infests 26% of the ponderosa-Jeffrey pine type in the Pacific Northwest. Infected trees experience growth loss, wood quality reduction, and premature death.

Hosts: Principal- ponderosa, Jeffrey, and knobcone pine;
Secondary- lodgepole pine.

Recognition: Leafless, olive-green to yellow dwarf mistletoe shoots (3-8 in. long) on infected branches; basal cups remain after shoots die. Branch and stem swellings, witches'-brooms, branch flagging, dead tops, deformed trees.

Disease Spread: Seeds are sticky and forcibly shot from fruits in the fall (max. distance 100 ft.); seeds germinate in spring, infection occurs on thin bark wood; infections cause branch or stem swellings and eventual death of member; death of host results in death of parasite. Disease spread in dense stands is slow, is fastest at 9-foot tree spacings, and is reduced at 18-foot spacings.

Disease spread is most rapid in multi-storied stands; spread in single-storied stands averages 1-2 feet per year.

Management: Clearcut severely infested stands. Remove infested overstory to protect susceptible understory. Remove severely infected trees in lightly infested stands; favor nonhosts in mixed stands. Prune witches'-brooms to prolong tree life in recreation sites.

May be Confused With: Elytroderma needle blight.

Female dwarf mistletoe plants with seeds on ponderosa pine



Witches'-brooms caused by dwarf mistletoe