

# Forest Disease Management Notes

United States  
Department of  
Agriculture

Forest Service  
Pacific Northwest  
Region



## White Pocket Root and Butt Rot

White pocket root and butt rot is caused by the fungus *Inonotus (Polyporus) tomentosus*. This disease is seen most frequently in Engelmann spruce, but it is not widespread in the Pacific Northwest. It can cause serious damage within infected stands.

**Hosts:** Spruces, true firs, lodgepole and ponderosa pine.

**Recognition:** Crown symptoms (stunting, yellowing) appear in severely infected trees; presence of disease indicated primarily by uprooted trees and stand openings; decay of root and stem appears as small, square pockets separated by firm wood (honeycombed).

Small (1 - 2.5-inch diameter) yellow to rusty brown mushrooms with a central stalk appear on the ground or on the tree in the fall; upper surface is velvety to hairy; undersurface is white.

**Disease Spread:** The fungus spreads from tree to tree by root contacts; fungus growth is slow, hence above ground symptoms may be delayed several years after infection; windborne spores may function in the spread of the disease.

**Management:** Harvest visibly infected and nearby “high risk” trees in severely infected areas. Trees with basal conks should be treated in recreational areas. Not commonly found in Oregon and Washington.

**May be Confused With:** Brown cubical butt rot, other root diseases.



Decay by *I. tomentosus* on ponderosa pine



Fruiting body of *I. tomentosus*