

Forest Disease Management Notes

United States
Department of
Agriculture

Forest Service
Pacific Northwest
Region



Lophodermella Needle Casts

Several species of fungi in the genus *Lophodermella* cause needle casting of Pacific Northwest pines. Appearance of the disease is sporadic and strongly influenced by weather conditions. Trees are seldom killed directly by *Lophodermella* needle casts.

Hosts: Pines.

Recognition: Affected needles turn brown in spring of year following infection; trees take on a scorched appearance; needles are cast; if infected for several years, trees have a "lion tailed" appearance and are weak and unthrifty.

Short, elliptical fruit bodies are produced (hysterothecia) on the needles after they die.

Disease Spread: New host needles are infected by windborne and rain-splashed spores in early summer; only succulent, young-needles are infected; symptoms appear the following year; infection is greatly favored by moist conditions; disease is most serious on young or small trees.

Management: Usually none warranted. Avoid planting offsite pine stock, especially in damp areas (canyons, basins, fog belts, etc.). Nursery or ornamental trees may be protected by spraying with two applications of bordeaux mixture, once when new needles are half-grown and again when growth ceases.

May be Confused With: Dothistroma needle blight, environmental damage, Elytroderma needle blight, root diseases.

Ponderosa pines infected by
Lophodermella morbida



Lodgepole pines infected by
Lophodermella concolor



Dead ponderosa pine needle
bearing hysterothecia of
Lophodermella morbida

