

RED BAND (DOTHISTROMA) NEEDLE BLIGHT

Mycosphaerella pini (Rost. in Munk)

DISTRIBUTION

Throughout the province, following the range of its hosts.



Figure 211. Thin discoloured crowns.

HOST SUSCEPTIBILITY:

All ages of lodgepole, ponderosa, and non-native pines.

SIGNS & SYMPTOMS:

Infected needles display small, yellow-brown bands or spots. Needle tips distal to the bands or spots become reddish-brown shortly following infection, while the base of the needles generally remains green. Small, black fruiting bodies are revealed as the outer layer or epidermis of the needle is ruptured. Needle tissue adjacent to the black fruiting bodies is usually coloured brick red to red-brown (the colour fades on older dead needles). Older infected needles are usually shed in summer or fall, producing thin crowns in infected stands with a lion's tail appearance (bunches of needles at the end branches with none to very few needles). Infections generally occur in the lower crown and on older needles. Needles of all ages may be infected, although infections are not



Figure 212. Black elliptical fruiting bodies on ponderosa pine needles.

DFS

uniform throughout the crown. Young trees are more commonly attacked than older trees. This disease is also commonly known as Dothistroma needle blight.

DAMAGE:

Exotic pine species planted in British Columbia have sustained heavy losses from this disease. Where environmental conditions favour infection, this disease can spread rapidly and cause significant damage. Trees can be defoliated within weeks, and mortality is common with repeated attacks, especially in young stands.

SIMILAR DAMAGE:

Lophodermella and *Elytroderma* needle casts may be confused with red band needle blight from a distance. Closer inspection shows the distinctive dead tips and red-coloured tissue, with live bases on needles infected by red band needle blight. For needle casts, only the previous year's needles show symptoms.



Figure 213. Necrotic needle tips.