

Rhabdocline pseudotsugae

Rhabdocline needle cast (Engl.), rostige Douglasienschütte (Deut.), flétrissement des aiguilles du sapin Douglas (Franc.), ? (Ital.), Rdeči osip duglazije (Slowen.)

Host species

Douglas fir (Pseudotsuga menziesii)

Symptoms

Autumn small yellow dots form on the upper and lower surface side of current-year needles. In winter the spots colour turns from orange to later brown. In spring fruiting body of the fungus (*Apothecia*) development appear on each side of the needles midrib of the lower surface. The epidermis lifts off and exposes an orange to brown fungus structure. Infected needles fall off by June to July.

Causal agent

Of local importance as a needle cast fungus, following rainy springs. In moist weather and low temperature re-infection only of the new growing needles by spores from the infected needles which remained at the twig. The needle turns brown and falls off after the spores release The disease occurred epidemic in the last past decades.

Possibilities of errors

Effects The tree is

The tree is more sensitive to frost than usual. Repeated, heavy infestation leads to significantly lower growth and the gradual death of trees.

Control

In general not necessary. Proper choice of seed origin, use soils with good drainage, space plants for good air circulation, dispose of heavily infested individual trees.