

Mycosphaerella pini

Red band needle blight, Dothistroma needle blight (Engl.), Dothistroma – Kiefernschütte (Deut.), ? (Franc.), ? (Ital.), Rdeč pegavost (obrobljenost) borovih iglic (Slowen.)

Host species

Different species of pines, especially common on Austrian pines (*Pinus nigra*).

Symptoms

Living needles of different age with small yellow, yellow-brown spots who are getting bigger with time are the first symptom. The needles become yellowed with one to several brown bands up to one mm broad, later with black shining dots in the bands; frequently, above all in Austrian pines, orange to salmon red shades in the bands. necrotic areas, abnormal colours, abnormal leaf fall, fungal growth.

Causal agent

The needle fungus overwinters on infected needles, which remain hanging on the tree or fall to the ground. In the spring from about March / April, the pine needles are infected by ascospores or conidia, which have arisen during the winter and early spring. This disease can be observed mainly in warmer regions with dry summers at low altitudes. Infection however takes place under moist conditions (fog, rain). The spore bearing structures of the asexual stage (Dothistroma) show up in the bands after a few months.

Possibilities of errors

The disease can be mistaken for Brown spot-disease (Lecanosticta-needle cast) and the first symptom for damage by needle sucking insects.

Effects

Increment losses; crown thinning, slight shoot dieback; disposition to other damaging factors. Endangering the lives of young plants only.

Control

Application of fungicides only in nurseries with young plants or gardens; avoidance of dense and moist stands and light deficiency. Avoiding of too close planting. Forest nursery not in adjacency of old Pinus populations. The type of tree plantedshould be carfully selected. Some pine species are much more susceptible than others and some show resistance to infection upon maturity.