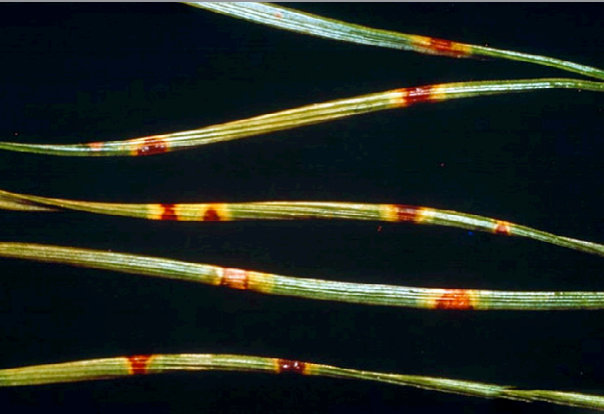


# *Mycosphaerella dearnessii*



# Mycosphaerella dearnessii

Brown spot needle blight (Engl.), Lecanosticta – Kiefernadelbräune (Deut.), tache brune des aiguilles du pin (Franc.), ? (Ital.), Rjavenje borovih iglic (Sloven.)

## Host species

Various Pinus species

## Symptoms

First symptom is that the needle becomes small yellow, yellow-brown spots who are getting bigger with time. Younger needles completely or partly yellow discoloured (typically the distal half of the needle only), frequently shortened, with blackish brown bands, from which greenish masses of spores are extruded (hand lens), never reddish shades in the bands. The necrotic area of the needle dies and it comes to abnormal leaf fall and fungal growth.

## Causal agent

In Europe up to now only asexual fruiting structures have been observed. The spores are formed during the summer months and they infect new needles under moist weather conditions. The spreading of the thermophilic species is comparatively slow since the temperature optima for the infection (30°C in daytime and 21°C in the night) are hardly reached in Central Europe.

## Possibilities of errors

Lophodermella needle cast (*Lophodermella sulcigena*), also only the distal half of the needle yellow. *Mychosphaerella pini* shows the same symptoms but with red coloring around the banding. First symptoms oft mistake for insects bites.

## Effects

Loss of increment; crown thinning, slight shoot and twig dieback, disposition to other damaging factors; a serious danger only to young plants. Tree will die after a long time with strong defoliation (BWF).

## Control

Quarantine-Organism

In case of suspicion the pest control authorities must be informed! Remove and burn all infected plants as soon as possible! By seeding enough space between the seedlings should be kept. Brown spot needle blight is easily suppressed by applications of bordeaux mixture, chlorothalonil, benomyl, copper hydroxide and captafol in nurseries, seed orchards, and plantations of longleaf pine and scots pine. Seedlings should be sprayed at 10- to 30-day intervals depending on the amount of rainfall, from the beginning of spring through late summer. It is also recommended to make a final spray just prior to planting. This will ensure protection during establishment of seedlings in the field.