

CERCOSPORA NEEDLE BLIGHT (CNB)

Description

Caused by the fungal pathogen *Pseudocercospora pini-densiflorae*, CNB was confirmed present in Queensland in 2021.

Thought to be native to pine forests in eastern Asia and Central America. This tropical and sub-tropical pathogen affects the needle leaves of pine (*Pinus*) species globally. It can become a major obstacle to the production of pine seedlings, being particularly problematic at the later nursery stage.

Affected tree species

At least 46 pine (*Pinus*) species worldwide are known to be susceptible. *Pinus canariensis*, *P. contorta*, *P. halepensis*, *P. jeffreyi*, *P. lambertiana*, *P. muricata*, *P. nigra*, *P. pinaster*, *P. pinea*, *P. ponderosa*, *P. radiata* and *P. sylvestris* are all highly susceptible.

Other conifer species such as *Abies*, *Cedrus*, *Larix*, *Picea* & *Pseudotsuga* have proved to be susceptible via artificial inoculation.

Symptoms

CNB first appears as pale-green spots or bands, which rapidly turn yellow and then brown, black. At late development, the dark bands are often broad (5+ mm), sometimes bordered by yellow halos.

Can cause severe needle blight, pre-mature needle cast, slowed growth, seedling mortality, and result in high nursery discard rates.

Known for its ability to persist in infected plant material and debris. Remains viable in cast diseased needles even when dry. Re-moistened needles will rapidly induce spore production.

Part of the tree affected

Foliage of all ages is susceptible.



Severe infection and needle cast on *Pinus radiata*.
Credit: Emily Lancaster



Branch with low-level infection showing needles with distinctive black banding. Credit: Michael Ramsden

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Branches with high-level infection showing needles with distinctive black banding (top) and close-up (below).
Credit: M. Ramsden.

Further Information

EFSA (European Food Safety Authority), Tramontini S, Gilioli G, Baldassarre F, Scala M, Haegi A, Valente MT, Sánchez B, Nougadère A and Vos S (2025) "Pseudocercospora pini-densiflorae – Pest Report to support the ranking of EU candidate priority pests. EFSA supporting publication 2025:EN-9401". 34 pp.
<https://doi.org/10.2903/sp.efsa.2025.EN-9401>

Age of trees affected

All ages can be affected but susceptibility is greatest at 1–2-years of age.

Time most likely to be seen

It thrives during times where warm, humid conditions persist.

What can it be confused with

Early symptoms can mimic general discoloration and mottling associated with site drainage/nutrient interactions.

Symptoms can be confused with those produced by other needle blight fungi such as *Dothistroma* spp. (present in Australia) *Lecanosticta acicola* (exotic to Australia).

Prevention and control

Where possible source seeds from confirmed uninfested areas.

Seeds sourced from infested areas should be free of needle debris before sowing.

Quarantine any new plant material entering a nursery (i.e., withholding period).

Removal and destruction of all diseased plant material in a nursery.

Minimise water splash and increase between-plant spacing.

Isolate susceptible older seedlings (i.e., >12 months old).

If infestation is detected, use approved fungicides during periods optimal for development and spread.

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