

Extension Fact Sheet 12: Pink Disease of Cocoa



Common name: Pink disease

Scientific name: *Phanerochaete salmonicolor* (also known as *Corticium salmonicolor*)

Host: Cocoa is a major host, but it occurs on *Agathis* (kauri), *Citrus*, *Cordia* and *Hibiscus* (*fou*).

Damage

Branch dieback occurs, and occasionally death of the tree when infections occur at the fork or jorquette. Often, patches of infected trees are seen as the disease spreads. If management is poor, and weather conditions encourage the disease, losses can be high, but usually the disease is of minor importance. Trees between the ages of 2 to 6 years are said to be more severely infected.

Biology and Life Cycle

Spores of the fungus are spread by wind and rain. They need water to germinate; they can infect through healthy bark. The first sign of the disease is white threads of the fungus over the bark; they look like cobwebs. White pustules appear through cracks and through the natural openings in the bark. Later, a pink crust develops which produces spores. Later still, the colour fades and orange-red pustules, which contain another type of spore, are occasionally seen. At this stage, the bark is often sunken, split and gum is present; these areas are called cankers. The leaves on the infected branches die, but remain attached.

When it is too dry and unfavourable for growth, the fungus remains alive in the branch and trunk cankers.

Signs and Symptoms

Look for the pink crust on the stems and trunk. The fungus is often seen on the main fork or jorquette. Regular surveys to detect infections are very important. Often the first sign of the disease is the sudden death of a branch, with the brown leaves remaining attached.

Management

Cultural control:

- Prune out the infected branches as soon as the fungus is seen. If the fungus has infected the fork or jorquette, then consider a chemical treatment, otherwise the tree will have to be cut down and allowed to regrow from the stump. It is important to prune during dry weather. The pruned branches should not be left in the plantation, but taken out and burnt. Always prune at least 30 cm below any sign of the fungus;
- The health of the trees may be important in preventing outbreaks of this disease. If trees are stressed, because they are too close or growing in soils with poor nutrition, then they may be more susceptible;
- Shade is another important factor: heavy shade creates conditions of high humidity, which is ideal for infection and spore production. Therefore, make sure shade is properly controlled.

Chemical control:

Copper fungicides are useful if applied as a paste. Prune the branches and apply the paste to the cut ends and along the remaining parts. Apply to infections at the fork or jorquette.