

# Control of Moko disease

## Recognize the problem

Moko is a disease that affects bananas and other crops within the banana family causing a reduction in yield and sometimes total death of the plant.

Plants wilt, leaves turn yellow and drop off, brown streaks and patches occur on the stem. Symptoms include the navel (male bud) becoming black and dropping, uneven and pre-mature ripening of fruits, blackening of the inside of the fruit and death of plants.

## Background

The disease passes from infected plant to suckers and followers in the same mat.

Farmers can transfer the disease from infected plants to clean plants during field sanitation operations; disease is carried on cutlasses and saws on pruning and de-suckering tools.

Insects that visit flowers and freshly cut plant surfaces spread the disease from plant to plant.

The diseases also enter plants via damaged roots, either from soil to root or root to root.

## Management

There is no chemical or other cure for Moko. A number of things can be done to prevent or restrict the spread of this disease.

- Use uninfected seedlings raised from tissue culture.
- Sleeve bunches at an early stage before fingers emerge.
- Deflower bunches at the correct stage and remove navel (male bud).
- Sterilize tools with a small amount of bleach (concentrated enough so that you can smell it) between pruning operations, even if the crop you are working on appears to be disease free.
- Destroy any diseased plants by cutting and composting.
- A fallow period of 6-12 months will ensure the disease dies out in the soil.

Uneven ripening in Bluggoes caused by Moko. These bananas cannot be eaten. (Photo by Thaddeus Peters)



Internal fruit blackening due to Moko disease. The disease is in the banana plants and will spread onto healthy ones from the tools that you work with. (Photo by Thaddeus Peters)



Scientific name(s) > *Ralstonia solanacearum* race 2, biovar 1

The recommendations in this factsheet are relevant to: Grenada



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