

Panama fusarium wilt prevention in banana

Recognize the problem

Panama wilt is a fungal disease affecting banana. The first sign of the disease is yellowing of leaves. The older leaves are the first to turn yellow followed by the younger leaves. Yellowed leaves remain upright for up to 2 weeks before wilting and collapsing against the trunk. Later some of the leaves turn brown and dry.

The stool of the affected banana shows purple-brown patches when cut across. Infected plants slowly die and can lead to the total loss of the crop.

Background

The Panama wilt fungus grows inside the stem of the banana plant stopping water from being transferred from the roots to the leaves. This causes plants to wilt. The fungus lives in the affected plants. The fungus can be easily spread to healthy plants by contact through working tools. Leaving the affected banana stools in the farm increases chances of the spread of the disease. The fungus is also spread via infected banana planting materials, as well as by running water from the infected banana farm areas towards the uninfected farm areas. The fungus can also live in the soil for several years.

Management

The disease is difficult to control as it can survive for long periods in the soil.

- Chemical pesticides are not effective against this disease.
- Use resistant varieties like Kimalindi, Kinguruwe and Jamaika. This is the most effective disease management method.
- Use always clean planting materials.
- Uproot the affected banana stools in the farm and leave them on the surface to dry. Alternatively, bury them or put into bags and burn.
- Sterilize working tools by dipping 0.5 minutes into bleach (hypo chloride = NaOCL) after having attended infected plants. Wear gloves, or wash hands with lots of water after using bleach, because it is toxic.
- Use only clean suckers from plants that are healthy.

Yellowing of the elder banana leaves due to Panama wilt. (Photo by David Jones)



Purple and brown patches in affected banana stem. (Photo by P. Karanja)



Scientific name(s) > *Fusarium oxysporum fsp cubense*

The recommendations in this factsheet are relevant to: Ghana, Kenya, Tanzania

Authors: Mwangi Jubilant, Didasi J Moshy, Leonard Kiwelu
Plantwise

Edited by Plantwise