

7

Infected plants do not recover even after pruning and/or stumping. When pruned or stumped, any suckers that may sprout later will wilt and dry up.



8

An affected and dried up coffee plant remains firmly rooted in the ground, unlike plants affected with other fungi, which easily topple over when pushed

Transmission and spread:

Fusarium xylarioides has limited persistence in soil up to about 6 months. Its spores enter the plant through wounds or cracks on the stems just above ground level or the root system. The disease can be spread by:-

- Wind and running water. Spores from the stem are washed by rain and move in rain water from one plant to another.
- Dragging infected dead trees through the field for use as firewood, fencing or staking of other crops.
- Movement of infected soil or planting materials.
- Human beings through handling crops in field from infected to healthy plants.
- Movement and/or use of infected coffee husks (as mulch) and dried plants (as firewood).
- Use of contaminated tools such as hoes, pangas, slashers and secateurs which have been used in infected fields.

Disease control:

Control measures currently in use aim at reducing disease spread and destruction of inoculum through the following means;-

1. Inspecting fields regularly to identify coffee trees with disease symptoms.
2. Destroying infected coffee trees on site by chopping, uprooting and burning the whole plant.
3. Do not plant immediately, allow 12-24 months before replanting to allow disease in soil to decline.
4. Avoid transporting infected coffee plant materials and soil around the farm, to other farms or villages.
5. Sterilizing garden tools used in infected fields by flaming the metal parts over the fire.
6. Remove soil and clean tools well followed by flaming as in (5) before using them in a fresh field.
7. Purchasing seedlings/cuttings from reputable coffee nurseries. Do not use seedlings uprooted from forests. They could be infected.
8. Avoid wounding coffee trees during weeding/hoeing, slashing or through tethering livestock (goats, sheep, cattle, pigs) on coffee trees. Open wounds provide easy entry into the plant tissues.
9. **Contact your local agriculture staff for advice when you see the signs shown earlier.**

Acknowledgement

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Coffee Wilt Disease

Prepared for Higher Education Institutions



INTERNATIONAL COFFEE ORGANIZATION

Coffee Wilt Disease (CWD)

Background:

Two types of coffee are grown in Uganda. Robusta coffee is grown in areas 1000-1300m above sea level while arabica is cultivated in higher altitude areas, 1300-1800 masl.



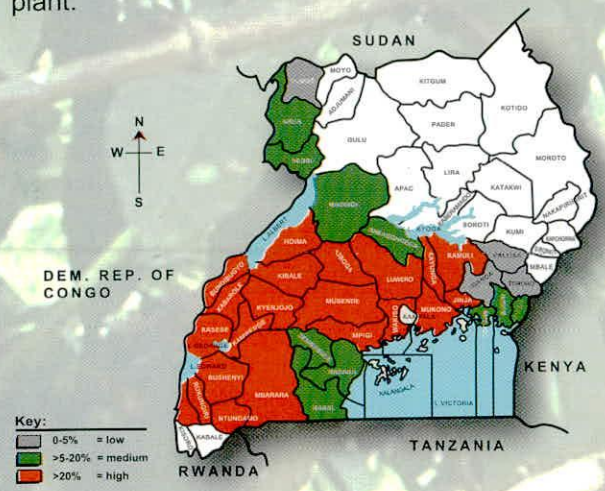
Robusta coffee tree



Arabica coffee tree

What is coffee wilt disease?

The coffee wilt disease, also called Tracheomycosis is a vascular wilt disease caused by a fungus Fusarium xylarioides (Gibberella xylarioides). The fungus attacks the vascular system of the coffee plant, causing blockage of water and nutrient transportation system from roots to other parts of the plant.



This causes wilting and death of all affected plant.

Disease symptoms:

The disease can be recognized by the symptoms indicated below:-



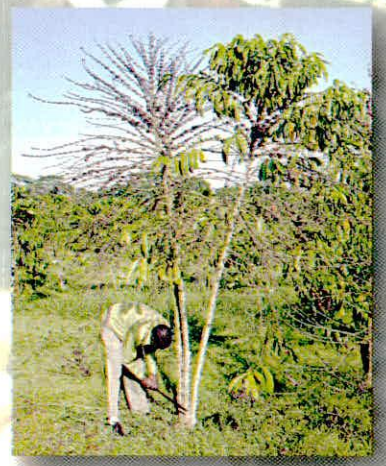
1

The affected coffee tree may start by yellowing and/or curling of leaves, wilting and rapid leaf defoliation.



2

The affected tree begins to die back at the tips of the main stem. Dieback spreads down all primary branches, eventually killing the plant. Primary branches are the smaller branches which come from the main stems



3

On a coffee plant, with more than one stem, stems die in sequence (one after the other) until the whole plant completely dries up.

4

Coffee berries on the affected tree ripen prematurely and dry up, but remain attached to the bearing branches.





5

When the bark is peeled back, black/ brown or violet streaks are observed on the interior wood of affected trees.

6

At advanced stages, cracks or cankers often occur around the collar region of the stems of affected plants.

