MANAGEMENT OF FUSARIUM BARK AND FUSARIUM ROOT DISEASES IN COFFEE

Disease Management/Control
There is no cure for infected trees, however, there is need to observe field hygiene by:
• Uprooting and burning all infected trees
• Leaving the hole exposed to sunlight for at least six months OR
• Sterilizing the holes using Basamid (Razomet) at 150 gm/per hole.

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Characteristic pink staining of stem caused by FRD
1.0 Fusarium Bark Disease (FBD)
- A fungal disease caused by Fusarium stilboides
- Leaves wilt, turn brown but remain attached to the branches
- The fungus causes three distinct forms of the disease namely:
  - Storeys
  - Scaly
  - Collar

1.1 Storey’s Bark Disease
**Symptoms**
- Suckers attacked at base.
- Depressed dark brown lesions appear on attacked base.
- Lesions girdle the stem
- Girdled older suckers continue growing with constriction, “bottle neck” at base.

1.2 Scaly Bark
**Symptoms**
- Rising up and flaking of bark on mature stems.
- Cankerous lesions may develop.
- Die-back may develop.

1.3 Collar Rot
**Symptoms**
- Infection spreads downwards from infected suckers gradually girdling the tree.
- Cankerous lesions develop round the stem base at soil level.
- Constriction appearance may occur and die-back begins from top of tree.

**Conditions favouring disease development**
- Widespread distribution of wood boring pests e.g., Yellow Headed Borer, Tip Borers, White Borers, Black Borers etc.
- Warm wet weather
- Poor nutrition and unbalanced soils.
- Excessive weed growth.
- Mechanical damage e.g. during weeding (slashing).
- Presence of infected plant material in the soil.
- Poor change of cycle (Flat cuts)

**Disease Control/Management**
- Good Agricultural Practices (GAP) and Good Hygiene Practices (GHP) through;
  - Regular leaf and soil sampling for good well fed coffee trees.
  - Proper weed control by use of integrated approaches.
  - Cleaning of pruning tools with methylated spirit once used on infected trees.
  - Careful pruning, uprooting and burning of diseased heads.
  - Control of wood boring insects.

2.0 Fusarium Root Disease (FRD)
FRD is caused by the fungi *Fusarium Solani*.

**Symptoms**
- Symptoms appear when tree is water stressed.
- Sudden wilting of leaves and death of tree.
- Section of stem near soil level shows pink purplish colouration (see picture overleaf).

**Disease Control/Management**
- Uproot infected plants and sterilize hole with Dazomet at the rate of 150g/hole.
- Expose the hole for at least 6 months before replanting.
- Burn infected trees.