COFFEE BERRY DISEASE A THREAT TO ARABICA COFFEE IN UGANDA

Introduction

Arabica coffee accounts for 20% of the total coffee production in Uganda. The Uganda government depends on Arabica coffee for its foreign exchange while many people find employment in cultivation, marketing, transportation and processing.

Disease constraints to Arabica coffee production

Arabica coffee productivity is threatened by two major diseases; coffee berry disease (CBD) and coffee leaf rust. The disease was first observed in Kenya before 1922 (Nut man, 1970). In Uganda the disease was first recorded in 1959 at an altitude of 1800m.a.s.l on slopes of Mt. Elgon.

Causes of coffee berry disease

The disease is caused by fungus, *Colletotrichum coffeanum*

Symptoms of CBD

All commercial varieties currently grown in Uganda are susceptible to the Coffee Berry Disease.

- It affects flowers and coffee berries at all stages; pinheads
  Expanding green, mature green and ripe berry Stage.
- It can cause loss of up to 90% if not controlled or if the variety is susceptible.
- Affected berries form two types of lesions;

- Affected berries turn black and the bean inside dies.

Effects of coffee berry disease on Arabica yield and production

- CBD destroys the coffee beans which is the source of income.
- In ripe berries causes condition known as brown blight which make pulping difficult.

How is the disease spread?

- Spread through infected berries left on ground and those left on trees.
- Lack of knowledge on symptoms and mode of transmission.
- Poor field management practices.
- Spores can be dispersed by wind or rain water.

Management of Coffee Berry Disease

1) Use of resistant varieties

- Ruiru 11.
- SL 14 and KP 162 have relative tolerance.

2) Cultural control

- Inspecting the field regularly to identify the disease.
- Ensure complete stripping off of berries and removal of Buni.
- Pruning opens up the bush reducing on wetness and for proper spray penetration.
- Ensure regular weeding to avoid micro-climate which can favor the disease.
- Collect infected berries which have fallen on ground and burry or burn them.
- Always ensure that there is a sheet under the tree during harvesting.

3) Chemical

- Use of fungicides.
- Copper based fungicides applied at 140g per 15 litres water.

For convenience of small holder farmers who may not have the facilities to weigh chemicals, rates are provided using kiwi shoe polish tins (small tin = 15ml, medium tin = 40ml, large tin = 100ml).

Application

- The effective control period is 4 -16 weeks after coffee flowering.
- Begin the spray before the onset of the long rains. The optimum date for completing the first spray should be mid- February and continue at an interval of four weeks up to around June to prepare for harvesting a fly crop. This minimizes the residual effects of chemicals in the coffee products.

e-mail: directorbugizardi@rocketmail.com