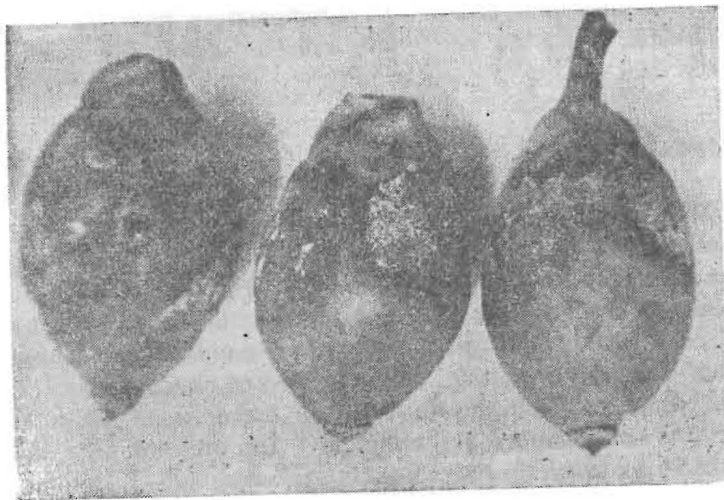


Extension Folder No. 17

KOLEROGA (MAHALI) OF ARECANUT



Fruit symptoms



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OCCURRENCE

Koleroga (rotting disease) or Mahali (heavy devastation) is the rotting of arecanut fruits and is the most dreaded disease occurring in all regions receiving heavy rainfall. It is caused by a fungus *Phytophthora arecae*. It was first recorded in the erstwhile Mysore State during the first decade of this century. The disease is seasonal and occurs during the South-West monsoon period in Kerala, Karnataka and Maharashtra. Though the exact total crop loss due to this disease is not available, annual loss of 10-75% has been recorded in different gardens in the above States. Low temperature, high humidity and alternate sunshine and heavy rain fall favour the disease development.

SYMPTOMS

The first visible symptom is the appearance of water soaked lesions on the surface of fruits near the calyx. The infected nuts lose their lustre. The infected portion of the fruit will be dark green against light green background of the healthy portions. The lesions gradually spread covering the entire surface resulting in rotting and shedding of affected nuts. A felt of white mycelium develops on the fallen nuts. Fruits at all stages of maturity are affected. The infected nuts are unsuitable for chewing due to quality deterioration.

CONTROL

Prophylactic spraying with 1% Bordeaux mixture gives satisfactory control of the disease. Two sprayings are generally required, first after the premonsoon showers and the second 40-45 days thereafter. If the monsoon prolongs, a third spraying will be required. Infected and fallen fruits must be collected periodically and destroyed to reduce the inoculum and further spread of the disease.

Since Bordeaux mixture is a protective fungicide, care should be taken to cover the entire surface by giving a very fine spray.

PREPARATION OF BORDEAUX MIXTURE

Dissolve 1 kg of Copper Sulphate in 50 litres of water and 1 kg of lime in 50 litres of water separately and mix just before spraying. If the quality of lime is inferior, 1 kg of lime may not be sufficient to neutralise the copper sulphate. To test the excess copper in the Bordeaux mixture solution, a polished iron knife or nail may be dipped into the solution. If copper is in excess a brownish coating will appear on the knife in which case lime may be added till such coating disappears.

Copper, wooden or plastic vessels may be used for preparation of this mixture. Do not use other metallic vessels.

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August 1989

Printed at: Sharada Press, Mangalore.