DISEASES Affecting Yellow Yam (round leaf)

Several fungal diseases may affect yellow yam (Round Leaf) resulting in:

- **COMPLETE LOSS OF CROP WHEN EARLY GROWTH AFFECTED**
- **POOR YIELD AND QUALITY OF YAM HEADS**

Affected plant

These conditions are often overlooked by farmers

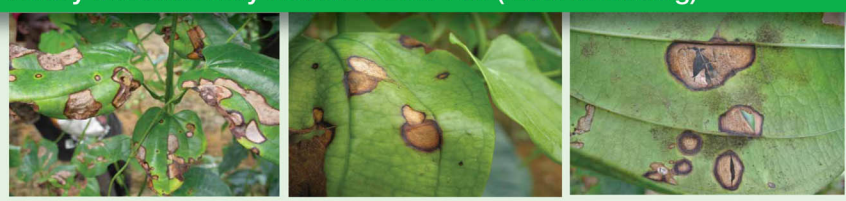
During Wet Periods Phomopsis Leaf Spot And Anthracnose Pathogens:

- Rapidly Invade Young Leaves, Tips And Vines
- Causing Death Of Plant Tissues, (Burn)

Necrosis on the young leaf (left) and tip die back

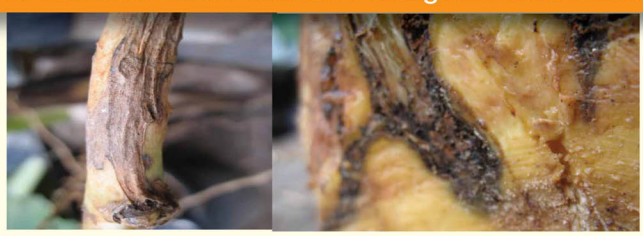
Early symptoms of leaf spot

Heavy Infection May Result In Leaf Fall ('Leaf Shedding)

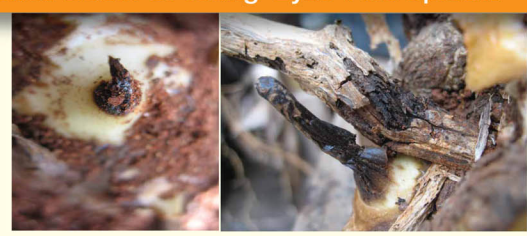


Symptoms of Phyllosticta Leaf Spot appears as light brown lesions surrounded with the dark brown border on upper and lower surfaces of the leaf

Anthracnose And Fusarium Pathogens Affect Stems, Cause Death Of Young 'Eyes' And Sprouts



Stem showing symptoms of necrosis and rot



Necrosis of 'eye' and young sprouts
Occur as result of leaf infection

Misshaped appearance of yam heads commonly called by farmers as 'pum pum' on the infected plants

Symptoms of root necrosis and dry rot

Diseases Management Strategies:

- Ensure that planting sets are diseases free
- Crop rotation & adequate plant nutrition
- Post harvest treatment of heads with fungicides (Topsin® or Amistar®)
- Spraying of yam with fungicides to prevent & / reduce disease infection
- Cultural measures (weed control, removal & burning of plant residues after harvest)

For Diagnosis And Advice
Call Your Nearest Rada Office

Publication prepared by: Technology, Training & Technical Information Division, RADA. Hope Gardens, Kingston 6, Jamaica.
For further information contact: Tel: (876) 927- 1780(1); FAX: (876) 977-4077; E-mail: training@abisjamaica.com.jm

People Land & Opportunity
www.rada.gov.jm
RADA RURAL AGRICULTURAL DEVELOPMENT AUTHORITY

Research and Development Plant Protection Sheet 6

Yam Anthracnose

Updated July 2011

Dark brown to black roughly circular anthracnose lesions surrounded by chlorotic halo on "sweet yam" cultivar

Blackening of upper leaf surface of mature sweet yam leaf

- Yam anthracnose is caused by the fungal pathogen *Colletotrichum gloeosporoides.*
- *Dioscorea alata* (sweet yam) cultivars are highly susceptible to yam anthracnose with *Dioscorea cayenensis* (yellow yam) being less susceptible.
- The disease manifests itself by the dieback of vines, lesions on leaves and reduction in the size of tubers. Yield reduction can be as high as 90%.
- The pathogen can be introduced on infected yam heads, debris left in the field, nearby infected alternative hosts or older yam plantings.

Poorly developed sweet yam tubers.

The impact on yield is highly dependent on the susceptibility of the cultivar, timing of disease onset and prevailing environmental conditions.

Die back of yam vines infected with anthracnose pathogen

Yellow yam leaf left, showing no symptoms of anthracnose; sweet yam leaf right, showing symptoms. Images were taken from field intercropped with yellow and sweet yam on the same hills

For any queries, please contact:
Crop and Plant Protection Research
Bodles Agriculture Research Station
Old Harbour P.O.
St. Catherine, Jamaica

Phone: 876-983-2267
Fax: 876-983-2822
E-mail: ppu@moa.gov.jm