

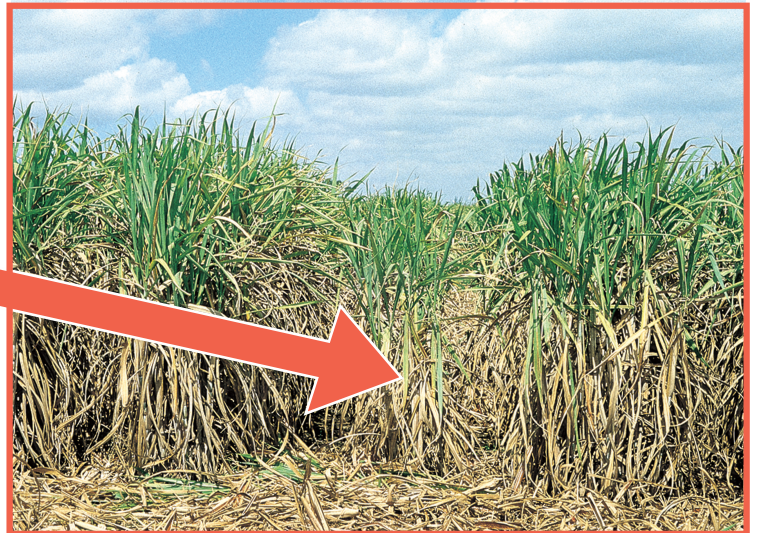
# Diseases of Sugarcane

2018

Page 1

The major diseases of sugarcane are:

## 1. Ratoon Stunting Disease (RSD)



## 2. Mosaic



## 3. Smut

# Diseases of Sugarcane

Page 2

## Ratoon Stunting Disease

- **RSD is found in all areas**
- **No variety is immune**
- **All SA varieties can get RSD**

### What does RSD do?

- Nearly half your yield can be lost
- Losses are greater if the cane is stressed

### Symptoms

- Stunted sugarcane stools (short, thin stalks)
- Fields look uneven
- Not easy to see



### How is RSD spread?

- Infected seedcane.
- Cane knives at harvest.
- Infected volunteers



### Control

- Healthy, hot-water treated seedcane
- Test seedcane for RSD
- Dip cane knives regularly in a 10% solution of Jeyes fluid
- Remove volunteer plants





## Mosaic

- Mosaic is found mainly in the cooler high altitude areas but can occur in all areas
- Many new varieties are resistant

### What does mosaic do?

- Causes loss of cane yield.

### Symptoms

- Plants have a yellow-green colour
- Infected leaves show small streaks of dark green. (Easiest to see at the base of young leaves).



### How is mosaic spread?

- Infected seedcane
- By aphids (insects) - particularly the maize aphid



### Control

- Resistant varieties.
- Disease-free seedcane.
- Control weeds and other grasses (these serve as hosts for the virus).
- Observe local LPD&VCC restrictions.

# Diseases of Sugarcane

Page 4

## Smut

- Smut is found mainly in the northern irrigated areas and Zululand.

### What does Smut do?

- Causes yield losses
- Losses increase with each ratoon
- Losses can be as high as 75% in poorly grown stressed cane
- Some varieties are more susceptible

### Symptoms

- Early - elongation of the stem
- Late - formation of a black whip
- Badly affected stools become grass-like and unmillable



Whip



Badly affected stool

### How is Smut spread?

- Infected seedcane
- Wind blown spores
- Planting healthy seedcane in contaminated soil

### Control

- Smut resistant varieties e.g. N27, N29, N35
- Healthy, disease-free seedcane
- Rogue out infected stools →
- Plough-out severely infected fields
- Remove volunteer plants
- Avoid stress conditions





# Diseases of Sugarcane

Page 5

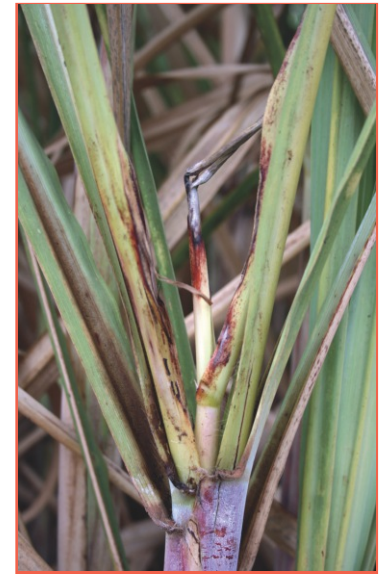
## Other common diseases



Pineapple Disease



Red Rot



Pokkah Boeng



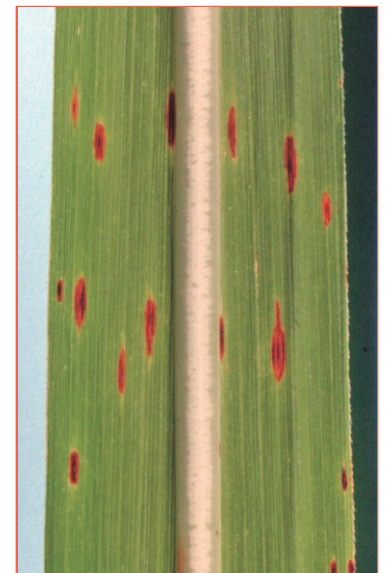
Tawny Rust



Brown Rust



Ring Spot



Brown Spot



# Diseases of Sugarcane

Page 6

## Less Common Diseases



Leaf Scald  
(bacteria)



Yellow Leaf Syndrome  
(virus)

## Non-Disease Symptoms



Ratoon  
Chlorosis



Banded  
Chlorosis



Herbicide  
Damage