

# SUGERCANE CROP DISEASES

## Red Rot Diseases:

**Causal Organism=** *Colletotrichum falcatum*

## **Symptoms=**

- i. The first external symptom appears mostly on third or fourth leaf which withers away at tips along margins.
- ii. Typical symptoms of red rot are observed in the internodes of a stalk.
- iii. The disease cane also emits acidic sour smell.
- iv. The pathogen also produced Tish reddish lesions on the upper surface of leaves with dark dot in the centre.
- v. The lesions are initially blood red with dark margins and later on with straw-coloured centres.





### **Favourable condition=**

- i. Mon-culturing of sugarcane
- ii. Water logged condition and injuries caused by insects.
- iii. Relative humidity: 4.2-4.5 PH.
- iv. Optimum Temperature: 29.4-31 degree.

### **Disease cycle=**

#### **Perennation:**

- though plant debris, soil, weed host.
- Fungus is sets- borne also persists in soil on the diseased dumps and stubbles as chlamydospores.

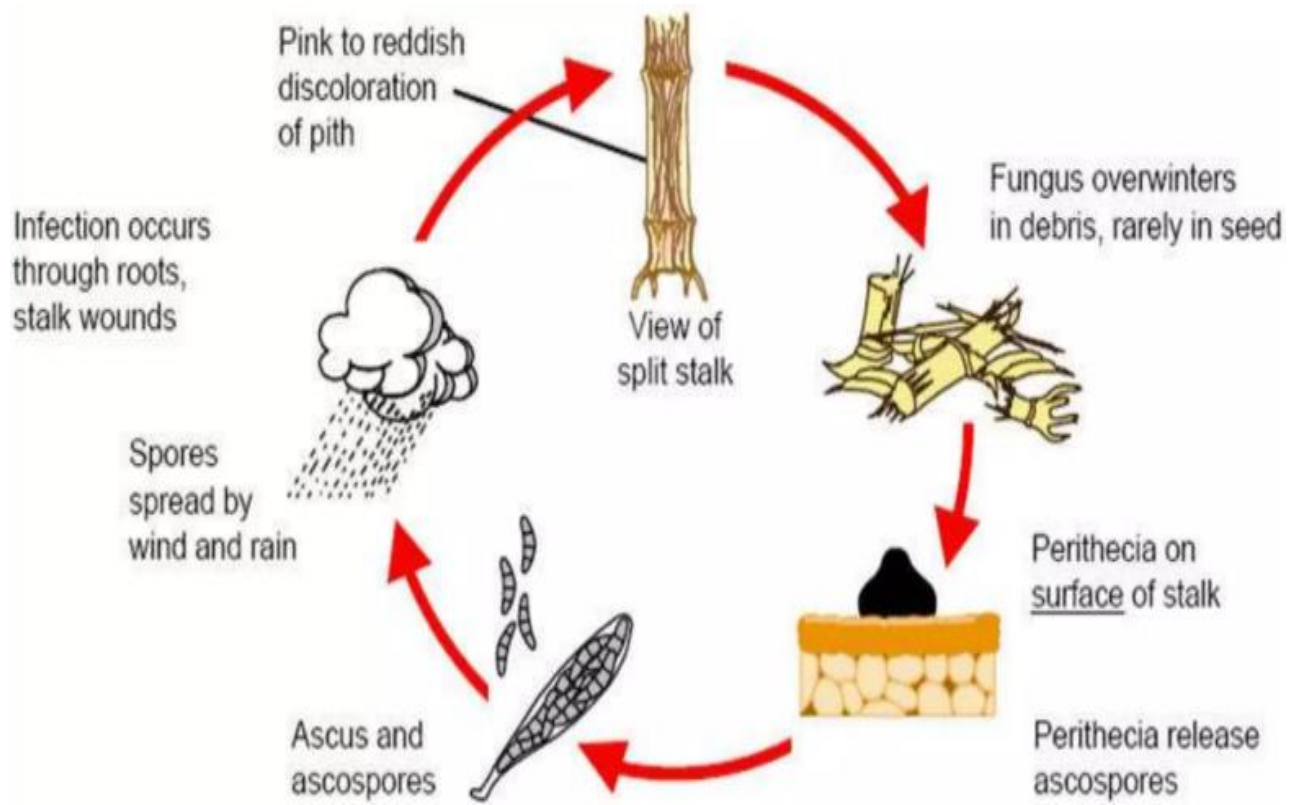
## Primary infection:

- thought mainly from infected setts.

## Secondary infection:

- thought spread in the field through irrigation water and cultivated tools.

## Diagram of red rot disease in sugarcane =



## **Management=**

### **Cultural method**

- i. Adopt crop rotation.
- ii. Grow resistant varieties: CO62198, CO7704.
- iii. Avoid ratooning of the diseased crop.
- iv. Maintain proper moisture in the field.
- v. Avoid water logging condition.
- vi. Use proper deranged application in the field.
- vii. Proper sanitation application applies in the field. E.g.: soil solarization.
- viii. Proper spacing maintain row to row and plant to plant.
- ix. Remove infarcted part of the plant.
- x. Apply good weed management practices.
- xi. Apply good irrigation application in the filed area.

### **Chemical method**

- i. Soak setts in 0.4%carbendazium solution for 15 min. before planting.
- ii. Setts can be treated with aerated stem at 52 degrees from 4-5 hours and by moist air at 54degree for 2 hours.