

Date - 02-02

online class

Time - 9:30 - 10:30

Department of Botany B.Sc part - III Honr, E. copy
Dr Sunil Pandey, J.J. College, Ara Group-B, paper - III
plant pathology

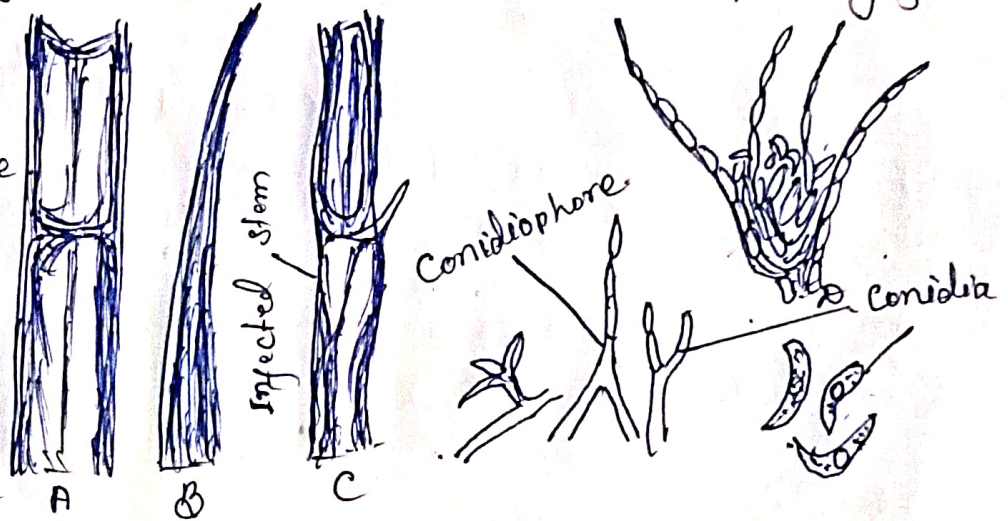
Question → Describe the red rot disease of sugarcane and its methods of control?

Ans → The Red rot disease of sugarcane is caused by the fungus *Colletotrichum falcatum*, which is a perfect stage of *Glomerella lacumonesis*. This is a very harmful disease and found almost in all the sugarcane growing countries of the world. In India it is very common in Bihar and U.P.

Structure and reproduction: - The fungus belongs to the class *Deuteromycetes*. Its mycelium is branched profusely and the hyphae of mycelium are cylindrical and septate. The mycelium may be intercellular or intracellular and usually found in pith region.

Symptoms of disease →

The appearance of the disease is very evident and is seen on stem and leaves giving following symptoms:-



(i) In the primary stage of infection the colour of the leaves changed from green to grey and turned downward.

(ii) The shrinkage of stem at nodes appeared. As a result length of the plant shortens.

(iii) The Internodes become deep red

(iv) The juice of sugarcane gives foul smell.

(v) The plant loses its weight, becomes weak and broken easily.

Control of disease → The disease is very harmful and destroys the whole crop but to check the disease following measures may be taken.

(i) Growing of resistant varieties. The resistant varieties for Bihar are CO 313, CO 513, BO 3, B 10, BO 14 and BO 17.

(ii) Long rotation of crop should be adopted

(iii) The infected plants should be burnt.

(iv) Healthy seeds should be sown.

(v) Water logging should be avoided.