Date - 15 - 08 - 2025 Department of Botany B.Sc - part - III Hons Time - 10:00 - 11:00 AM

online class J. J. College, Ara Dr Sunil pandit

paper - XI . Group - B, plant phathology

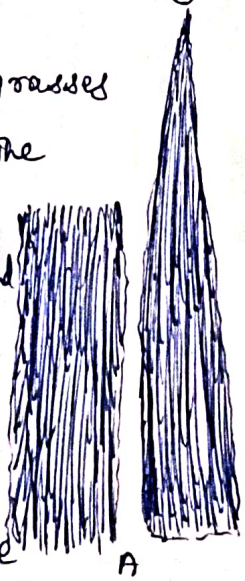
Question → Describe the symptoms, etiology and Control of Blast disease of Rice (paddy)

Ans → The Blast disease of rice is also known as Blast of rice. The disease is Worldwide in distribution but it is more prominent in the humid areas of the world having high annual rainfall.

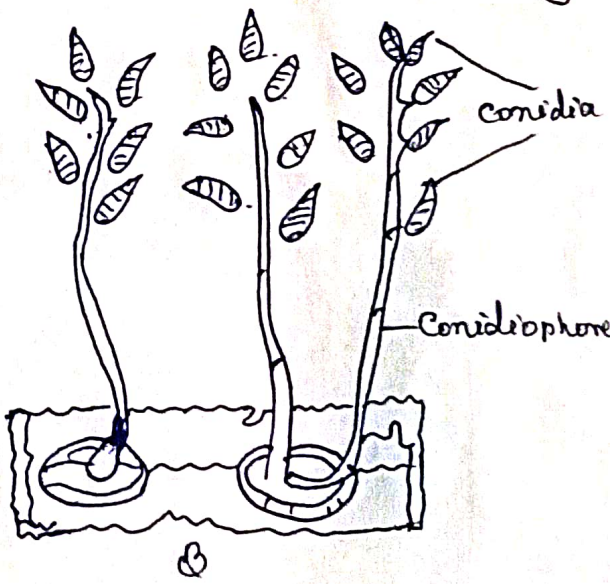
Symptoms of disease → The disease appears on leaves, leaf sheaths, raches and even on glumes. on younger leaves it appears as small bluish patch which enlarge Considerabley to several Centimeter long in the later stage. In a large spot the central part is pale green or dull green and the outer rim is dark brown in Colour.

Etiology → The disease is Caused by Pyricularia oryzae. The mycelium of the Fungus is septate, branched with multinucleate cells. The reproduction takes place through Conidia. The Conidia are produced apically on Conidiophore. The Conidiophores are unbranched on rarely branched, septate, slender and grey in colour

The Fungus survives in grasses and early sown paddy Crops. The stag, (b) rapid tillering stage (15-30) day after transplantation and (c) ear or neck emergence stage when the ear or neck is attacked and damaged.



A



B

Humidity and temperature are the important environmental factor that play key role in the spread of disease. Subramanian (1967) and Suryanarayan (1967) have investigated that 30°C day temperature and 20°C night temperature and 10 hours of darkness favour the growth of Fungus.

Control → The disease is Controlled by :-

(i) Field Sanitation

(ii) Seed treatment (Agrosan GN, Mixture of antifungus and Copper sulphate)

(iii) Foliar spray : by variety of chemical like Copperson, Blitox-50, Cuprosan.

(iv) Antibiotics like kitazen, Inazin, Blastin and kausumin etc.