



“बेटी बचाओ, बेटी पढ़ाओ”

JAYOTI VIDYAPEETH WOMEN'S UNIVERSITY, JAIPUR

(Format for Preparing E Notes)

Faculty of FEM

Faculty Name- **JV'n Anupama Goyal (Associate Professor)**

Program- **M. Sc BOTANY IST/Semester / 23**

Course Name - **Mycology**

Session No. & Name – **1.3/ 2023**

Academic Day starts with –

- Greeting with saying ‘**Namaste**’ by joining Hands together following by 2-3 Minutes Happy session, Celebrating birthday of any student of respective class and **National Anthem**.

Lecture Starts with-

Review of previous Session-

- Topic to be discussed today- Today We will discuss aboutLate blight of POTATO.....

Introduction & Brief Discussion about the Topic

Introduction to the Late Blight of Potato:

Late blight is a serious fungal disease of potatoes. It is worldwide in its distribution. It occurs in potato growing areas of the world. Winter is the main potato growing season in India. It is followed by hot summer months in the plains. The drought and high temperature kill the fungus in the soil

The late blight epidemics are thus rare in the plains in India. It is destructive to the crop grown in the rainy season. The disease occurs annually in the cooler Himalayan regions extending from Assam to Kashmir at an altitude of 6,000 ft. or more as the crop is grown in the rainy season.

Moreover, the temperature during the day is never above 22°-23°C which is favourable for the appearance of disease. The crops grown in the plains have been usually free from the epidemics of late blight because the chief predisposing factors (temperature and moisture) that render potato plants susceptible to disease are absent during the period of their growth.

The damage caused by the disease is frequently very high. Severe damage to the foliage shortens the growing season (Fig. 22.5). Consequently the tubers remain small and reduced in weight.

They are produced in smaller numbers. This results in the reduced yield. In severe cases of infection there is complete loss of the crop, Infection also results in the decay of tubers in the field and storage.

Symptoms of Late Blight:

The disease first appears on the tops of the plants generally after the blossoming period but mostly in the month of January. It may appear as well at any time during the growth period of the plant. The conditioning factor is the favourable environment.



The disease makes its appearance as small, dead, brownish to purplish black areas or lesions. These appear on the tips and margins of the leaflets, rachis, petiole and stem. Under favourable conditions (low temperature and high humidity) the lesions rapidly increase in size involving the whole surface of the leaf.

The disease generally first attacks the leaves, and petioles near the ground and the lesions appear on the lower surface of the leaflets on individual plants and then spreads upwards

Finally, a rapid and general blighting of foliage occurs. The blighted leaves curl and shrivel in dry weather. Under moist conditions they decay and emit a characteristic offensive odour

Examination of the lesions on the lower surface of the leaf on a dew morning reveals a delicate growth of the fungus parasite in the form of whitish powdery bloom. It consists of sporangiophores and sporangia of the pathogen pushing out through the stomata. The sporangia serve to spread the disease in the growing season.

Potato tubers are often infected in the field after the tops have been blighted. They get separate infections while in the hill. There is brownish discoloration of the skin of those parts of the tubers which lie nearest the surface of the soil.

These dry rot spots remain firm and extend to about half an inch below the surface. During storage, the bacteria assist to set in the wet rot phase. In cool and dry conditions the progress of the disease is slower and the wet rot phase is generally checked.

Under moist conditions hyaline mycelial hyphae and sporangiophores push out through the lenticels and appear on the surface of infected tubers.

- Online Reference if Any.
 - Google
 - Suggestions to secure good marks to answer in exam-
 - Explain answer with key point answers
 - Questions to check understanding level of students-
 - Small Discussion About Next Topic-
 - Academic Day ends with-
- National **song' VandeMataram'**