

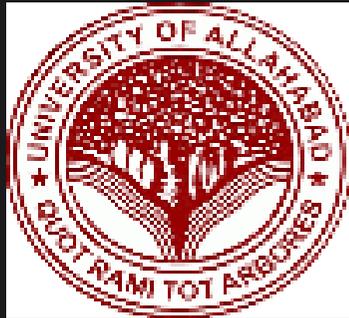
LATE BLIGHT OF POTATO

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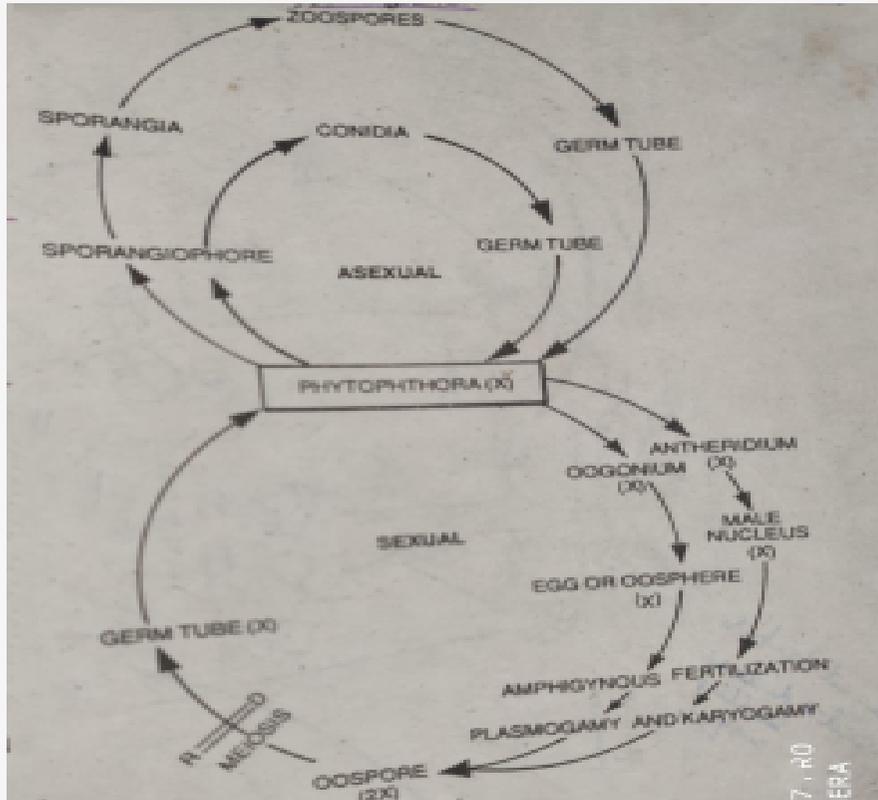
Department of Botany

B. Sc sem II, paper 2

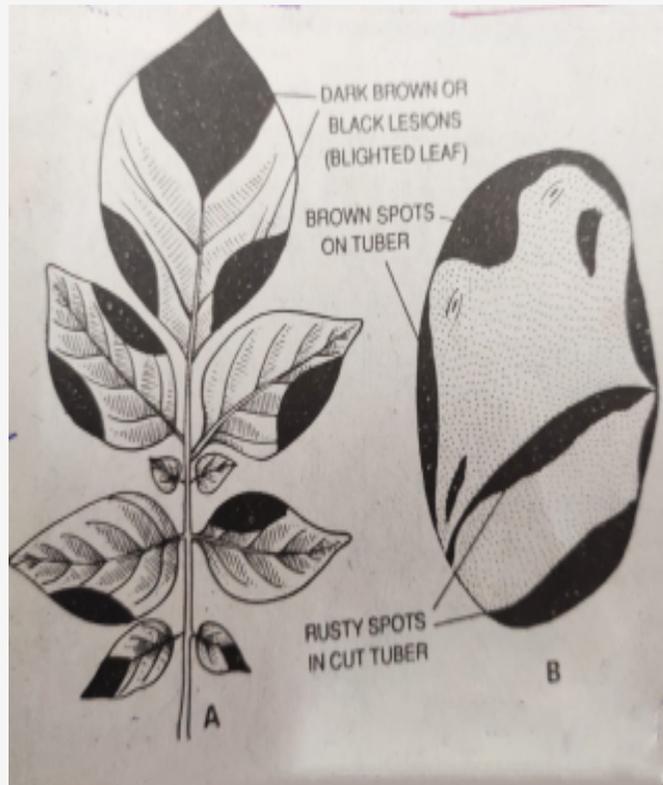
Title of the Paper- Mycology and Phytopathology



Name of the Disease-
Late blight of Potato



Causal Organism *Phytophthora infestans*
Host *Solanum tuberosum*
Systemic position of pathogen- Eumycota
Mastigomycotina
Oomycetes
Peronosporales
Pythiaceae
Phytophthora



Phytophthora infestans-Late blight of potato. A. Symptoms on affected leaf B.Symptoms on affected Tuber

- **Symptoms**

The symptoms of the disease appear at the flowering time. During the initial stages, purplish brown spots appear on the foliage. During moist weather these areas extend rapidly and hyphal and sporangial development occurs.

During severe infections entire crown of leaves may perish within 2-3 days. After the destruction of the foliage(leaf), the infection advances on the underground parts specially the tubers which are below the soil surface.

Tubers may also catch infection at the time of harvesting or during storage. Primary infection is also responsible for reducing the size and number of tubers and is caused by zoospores or sporangia. The rot may be either dry or wet, depending upon the availability of moisture. Dry rot of tubers is usually expressed by formation of brownish areas which extend to about an inch below the surface. The decay of the tubers is very rapid when weather is moist and the surface of the infected tubers turn light creamy due to formation of sporangia.

Causal Organism *Phytophthora infestans*

Host *Solanum tuberosum*

Systemic position of pathogen- Eumycota

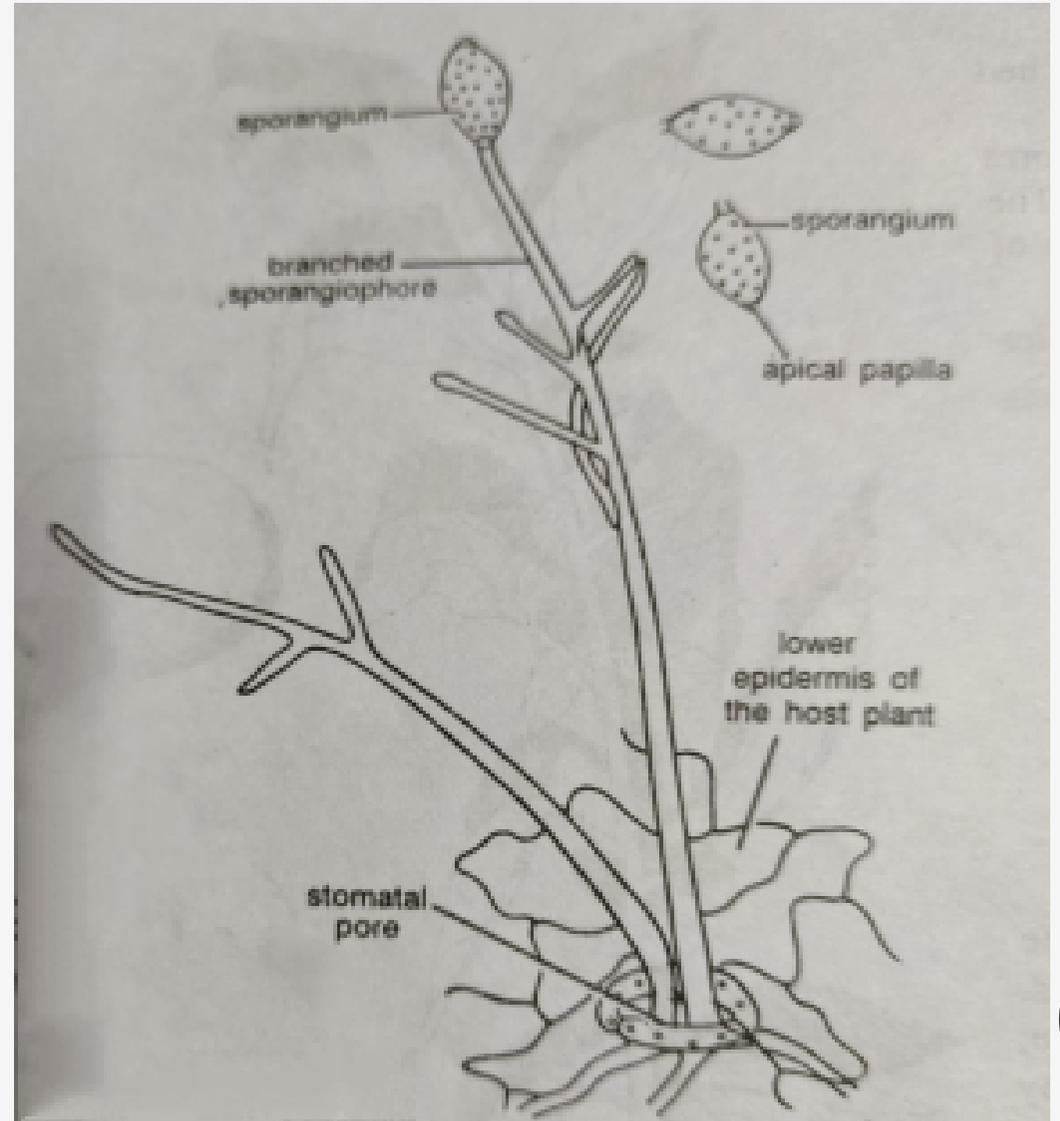
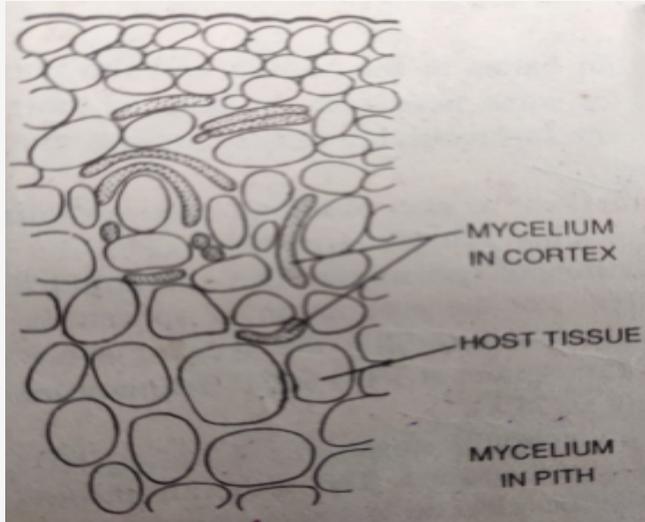
Mastigomycotina

Oomycetes

Peronosporales

Pythiaceae

Phytophthora



Control Measures

- Control measures: The control measures are as follows:
 - (1) Disease-free tubers should be used for seed purposes.
 - (2) Use of resistant varieties.
 - (3) The tubers should be given a 90 minutes dip in 1:1,000 mercuric chloride solution before the storage.
 - (4) In order to control the disease, it is better to start spraying of the crop with fungicides when it is about 8 inches tall. Fungicides like Blitox 50, Fytolan, Dithane Z-78, DithaneM-22, and Bordeaux mixture have proved more effective in controlling the disease
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