Dr. Namita Kumari ,Associate Professor, Department of Botany, Magadh Mahila College, Patna University, Patna.

dr.namitakumari@gmail.com

Mobile No- 9472938409

CONTENT IS FOR B.Sc. STUDENTS.

## **Terminology in Plant Pathology:-**

- 1. **Plant pathology or phytopathology** plant pathology is that branch of agricultural, botanical or biological sciences which deals with the cause, etiology, resulting losses and control of plant disease.
- 2. **Disease (plant)** According to Stakman and Harrar (1957) plant disease is the physiological disorder or structural abnormality that is harmful to the plant or any of its part or product that reduces the economic value.
- 3. **Pathogen** Pathogen is any agent which causes damage. Here agent means living organism that is fungi, bacteria, viruses etc.
- 4. **Pathogenicity** It is the quality or characteristics of pathogen of being very able to cause disease.
- 5. **Pathogenesis** It is the sequence of progress in disease development from the initial contact between the pathogen and its host to the completion of syndrome.
- 6. **Host** An organism (plant) that bears or supports the activities of a parasite is known as host.

- 7. **Inoculum** Inoculum is the infectious material that can cause disease and it is that portion of the individual pathogens that is brought into contact with the host.
- 8. **Penetration** Penetration is the first step in the contact of the inoculum with the host. It refers to the initial invasion of the host by an organism.
- 9. **Infection** It implies the establishment of pathogen inside the host following penetration in which a parasitic relationship between the two organism is established.
- 10. **Incubation period** The time interval between the penetration of the host by a pathogen and the first appearance of symptoms on the host is known as incubation period.
- **11. Disease cycle-** A series of events involved in disease development, including the stages of development of the pathogen and the effect of the disease on the host, is called the disease cycle.
- 12. **Symptoms** The internal (physiological) or external (morphological) reactions or changes as a result of disease are referred to as symptoms.
- 13. **Syndrome** Diseased plants show various valuable symptoms by which a disease is recognized. These symptoms are collectively known as syndrome.
- 14. **Virulence** A virulent organism is considered to have a high capacity of pathogenicity.
- 15. **Predisposition** It may be defined as the effect of one or more environmental factors which makes a plant vulnerable (able to injury) to attack by pathogen.
- 16. **Susceptibility** It is the inability of a plant to resist the effect of a pathogen of any other damaging factor.

- 17. **Resistance** It is the inherent ability of a plant to prevent or restrict establishment and subsequent activities of a potential pathogen.
- 18. **Immunity** This implies exemption from infection by pathogen.
- 19. **Endemic disease** When the disease is constantly present in a moderate or severe from and is confined to a particular country or district. Ex.- wart disease of potato <u>Synchytrium</u> endobioticum is endemic in Darjeeling.
- 20. **Epiphytotic disease or epidemic** An epidemic or epiphytotic disease usually occurs widely, but periodically, in a destructive form. Ex.- cereal rusts, powdery mildews etc.
- 21. Pandemic disease These occur all over the world and result in a mass mortality. Ex.- late blight of potato ( <a href="Phytophora">Phytophora</a> infestans )