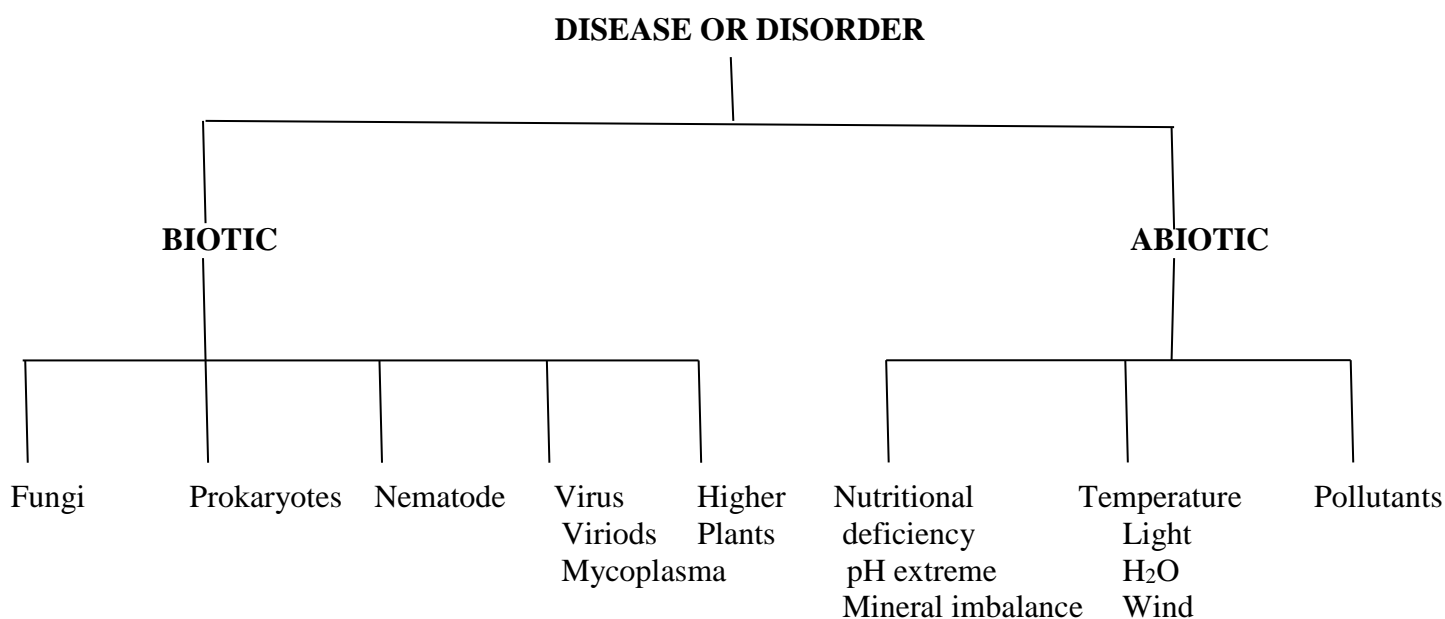


**INTRODUCTION TO PLANT PATHOLOGY**

Plant pathology is a science which covers all the aspects related to diseased plants such as causal organisms, their life cycle, diagnosis, physiology, population dynamics and management.

Any abnormal functioning in the physiology of plants is designated as “disease”. This may be caused by biotic factors or “disorder” due to Abiotic factors. Generally these two words can be used alternatively. Biotic and Abiotic factors have been classified as follows:



All the biotic factors include microscopic and submicroscopic organisms. Followings are some terms related to study of microorganisms:

**PARASITES (BIOTROPHS):**

These are the microorganisms which take their nutrition from living organisms.

**PATHOGENS:**

These are the parasites which cause diseases in humans, animals and plants.

**OBLIGATE PARASITES:**

These are parasites which strictly live only on living organism for their nutrition and multiplication.

**SAPROPHYTES:**

These are microorganisms which get their nutrition from dead organic matter. These are also known as saprotrophs.

**OBLIGATE SAPROPHYTES:**

These are microorganisms which live only on dead organic matter to obtain their nutrition.

**FACULTATIVE SAPROPHYTES:**

The organisms which are originally parasites but can live saprophytically i.e. on dead organic matter in the absence of living host.

**FACULTATIVE PARASITE:**

The organisms which are originally saprophyte but can get nutrition from living host in the absence of dead organic matter.

**SYMBIOSIS:**

Mutual beneficial relation of host and parasite.

**ANTAGONISM:**

Counter action of two microorganisms against each other e.g. fungus *Trichoderma harzianum* is antagonist to many fungi.

**SYNERGISM:**

It is the combined effect of two microorganisms on host plant.

**PATHOGENESIS:**

All the disease events in host plant starting from infection to development of symptoms.

**INFESTATION:**

It is just the presence of microorganism on the surface of the host.

**INFECTION:**

When pathogens get entry, start getting nutrition and disturb the normal physiology of the plant.

**SYMPTOM:**

Physiological expression of the host as result of infection is called symptom.