

* small scale epidemic caused by the variant pathogen and same variety of host into the large scale.

* The large scale epidemic is caused by the favourable moisture, wind should be favourable, susceptible stage of the host, penetration, Reproduction and infection of pathogen should be done.

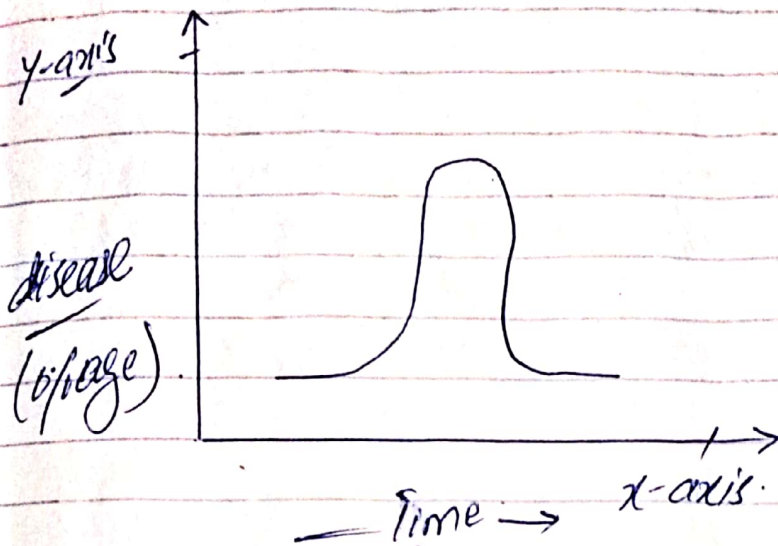
3. Wind is required for the spread of the pathogen inoculum for the dispersal from 1 place to another.

The moisture and temperature also should be favourable for growth infection penetration. They should be favourable and optimal. Firstly for reproduction again for the dispersal/spread again for the infection and reproduction in new susceptible host.

4. In the southern hemisphere, the epidemic is from north-south b/c the season and weather are favourable.

5. The most epidemic disease are potato late blight, Apple scab, cereal rust (small scale). The chemical should be applied for the management.

It mostly occurs over the late stages of the plant host. eg. verticillium wilt, alternaria leaf blight.



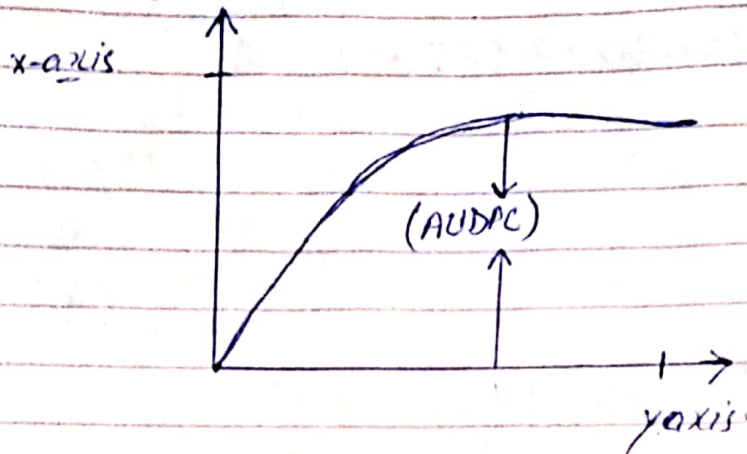
There are two types of Diseases, Monocyclic disease and poly cyclic disease.

1. Monocyclic Disease:-

1. They have the inherent ability of pathogen to cause the disease.
2. It should be favoured by the Environment and the cultural practices to become the epidemic.
3. The monocyclic depend upon the years time.
4. The examples of monocyclic are as

1) Phymatotrichum root rot	$\tau = 164 \text{ years}$
2) Verticillium wilt	$\tau = 0.24 \text{ year}$

stages of the plant. If you don't do so, the (AUDPC) Area under disease progressive curve should be taken.



When there is more AUDPC, then there will be more yield loss.

If more are the yield losses then more will be the Economic losses.

Economic threshold levels-

If the inputs are increased, then the output/yield will be increase. But when by increasing input, the yield remains same and don't increase then there will be the loss of input. The level where the critical input cost is just equal to the output cost. It is threshold level.

It depends upon the tolerance/damage threshold level.