

AGRICULTURAL SCIENCE

ASSIGNMENT

1. DEFINE CROP PLANT DISEASE

Plant disease is defined as the state of local or systemic abnormal physiological functioning of a plant, resulting from the continuous, prolonged 'irritation' caused by phytopathogenic organisms (infectious or biotic disease agents).

2. STATE THE FOUR TYPE OF DISEASE ORGANISMS THAT ATTACK CROPS

- Fusarium head blight.
- Head smut of corn – regulated (Crop Protection Network, US)
- Seedling blight.
- Septoria complex (Crop Protection Network, US)

3. DISCUSS SOME IMPORTANT DISEASES OF MAJOR CROPS

Bacterial leaf spot of ornamentals and vegetables. Symptoms of bacterial **leaf spot** can occur on flowers and leaves of some ornamental and vegetable crops.

Powdery mildew is an easy one to identify. Infected plants will display a white powdery substance that is most visible on upper leaf surfaces, but it can appear.

Downy mildew refers to any of several types of oomycete microbes that are obligate parasites of plants. Downy mildews exclusively belong to the Peronosporaceae family. In commercial agriculture, they are a particular problem for growers of crucifers, grapes and vegetables that grow on vines.

Fusarium wilt is a serious vascular wilt disease in crop plants. It is caused by *Fusarium oxysporum* which may be morphologically indistinguishable.