

# **Chapter Twenty One**

## **Crop Protection And Farm Animals**

### **Crop protection:**

- This is the study of the living and non living things that cause damage to our crops, and how to control them. -

These therefore include pests and diseases.

### **Pests:**

- A pest is anything that causes damage to our crops.
- There are four groups of pests and these are:
  - (1) Rodent.                      (3) Nematodes.
  - (2) Birds.                      (4) Insects.

### **Rodents:**

- They are small animals which have strong teeth.
- Examples are grasscutters, rats and mice.
- Rodents chew farm produce such as rice, maize and yam.

### **Control of rodents:**

- Rodents can be controlled on a farm by:
  - (i) Catching them with traps.
  - (ii) Fencing our farms.

### **Birds:**

- This group of pests feed mainly on grains or cereals and fruits.
  - They also eat seeds which are germinating or have started growing. -
- Because of them, a farmer may harvest less crops than he should do.

### **Control of birds:**

- They can be controlled on the farm by:
  - (1) Creating noise to frighten them away.
  - (2) Using scarecrow to drive them away.

### **Nematodes:**

- They are also called ellworms.
- They are very tiny or small and look like a thread.
- They live in the soil.
- They cause damage to the roots of crops.
- They attack crops such as pineapple and tomato.

### **Insects:**

- They form the largest group of pest.

Insects are divided into three groups and these are:

- (a) Chewing and biting insects.
- (b) Sucking and piercing insects.
- (c) Boring insects.
- Biting and chewing insects bite and chew leaves and so on.
- Examples are grasshopper and cockroach.
- Sucking and piercing insects use their mouth to pierce into fruits, leaves and stems.
- An example is the whitefly.
- Boring insects create holes in the stems or the fruits of plants.
- Examples are the weevil and the beetle.
- Insects can be controlled by using chemicals.

### **Storage pests:**

- These are those pests which are found in the place where harvested crop produce, are stored or kept after harvesting them.
- Examples are the mice, weevil, cockroach and rat.

### **Field pest:**

- These are those pests which are found at the places or the farms where the crops are growing.
- Examples are birds, monkeys and grasscutters.

### **Diseases of crops:**

- A plant is said to have been attacked by a disease, if any of its parts does not work well, or if the plant does not grow well.

### **Types of crop diseases:**

- There are two groups of diseases which attack plants, and these are:
  - (i) Pathogenic diseases.

- (ii) Non – pathogenic diseases.

#### **(1) Pathogenic diseases:**

- These are those diseases caused by micro organisms called pathogens.
- Examples of pathogens are virus and bacteria.

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## **(2) Non – pathogenic diseases:**

- These are those diseases which are not caused by pathogens.
- These diseases may be caused in the plant, as a result of factors such as the lack of light, or the lack of certain nutrients.

## **Farm animals:**

- These are animals which are kept or raised by farmers.

## **The importance of farm animals:**

- Farm animals are important because of the following reasons:
  - (1) They provide us with meat.
  - (2) They provide us with milk.
  - (3) They can be sold for money.

## **Pests in farm animal production:**

- Pests are living organisms that depend on other living organisms.
- These living organisms on which pests depend , are called the hosts.
- When we think of farm animals, then pests can be divided into two groups and these are:
  - (i) Endoparasites.
  - (ii) Ectoparasites.

## **Endoparasites:**

- These are those pests or parasites which live inside the bodies of their hosts.
- Examples are tape worm and round worm.

## **Methods of controlling endoparasites:**

- Endoparasites can be controlled by:
  - (a) Giving the animals medicine, so as to kill any worm in them.
  - (b) Giving the animals clean water and food.

## **Ectoparasites:**

- These are pests or parasites which live outside the bodies of their hosts and examples are mite and lice.

## **Methods of controlling ectoparasites:**

- Ectoparasites can be controlled by:
  - (a) Washing the animals always or regularly.
  - (b) Using the hand to pick them if they are few.

## **Signs shown by healthy farm animals:**

- When farm animals are healthy, there are certain signs which they show. -Some of these signs are that:

