EXPERIMENT 13   IDENTIFICATION OF IMPORTANT LEAF EATING PESTS OF MULBERRY

Structure

13.1   INTRODUCTION

Among the several leaf-eating pests of mulberry, leaf roller (*Diaphania pulverulentalis*), Bihar hairy caterpillar (*Spilosoma obliqua*), wingless grasshopper (*Neorthocris acuticeps nilgirensis*) and cutworm (*Spodoptera litura*), are considered important. Due to their rapid feeding activity they cause extensive leaf yield reduction. In this experiment, identification of different leaf-eating pests of mulberry and recording the level of pest incidence are discussed.

Objective

After studying and performing this experiment, you should be able to:

●   identify the important leaf eating insect pests of mulberry based on their symptoms and calculate their incidence.

13.2   EXPERIMENT

13.2.1   Principle

The leaf-eating pests are medium to large in size. They increase rapidly during rainy season and their attack continues till the end of winter season. Therefore, the identification of these pests and recording the level of their incidence is important to assess the extent of damage caused by each of them to know whether or not the incidence level is above the economic injury level.

13.2.2   Requirements

●   Mulberry garden

●   Leaf-eating pests / pest attacked plant parts

●   Polythene bags

●   Forceps

13.2.3   Procedure

● Select a few plots of mulberry garden randomly.

● Observe the plants for pest infestation.

● Collect the pest attacked plant parts.

● Identify the important leaf eating pests of mulberry.

● Record the pest incidence and calculate their incidence level.

● Repeat the same during different months.

● Analyze the attack incidence and its distribution.

13.2.4   Observations

Pest	Scientific Name	Symptoms of Attack
Leaf roller		
Bihar hairy caterpillar		
Wingless grasshopper		
Cutworm		

13.2.5   Results

● Based on the presence of pest / symptoms of attack, the leaf-eating pests are identified as _____, _____, _____ and _____.

● The per cent incidence of leaf roller, Bihar hairy caterpillar, wingless grass hopper and cutworm was _____, _____, _____ and _____, respectively.

13.3   PRECAUTIONS

● Observe the distinct morphological features for the identification of the pests.

● Observe the pest attacked plant parts carefully for the typical symptoms of pest attack.