EXPERIMENT 8 IDENTIFICATION OF FOLIAR DISEASES OF MULBERRY

Structure

8.1 INTRODUCTION

Mulberry is cultivated mainly for its leaf or foliage. The disease that attacks the leaf, directly affects the leaf quality. The most serious foliar diseases like leaf spot, powdery mildew, leaf rust and leaf blight, cause substantial leaf yield loss. These diseases occur during different seasons. In this experiment, you will learn to identify the foliar diseases of mulberry through visual observation of the affected portions for better understanding. This will help in taking steps to avoid / control them for better leaf yield.

Objectives

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

- identify the different foliar diseases of mulberry through visual observations of the affected portions; and
- understand, its occurrence season and symptom to take preventive steps.

8.2 EXPERIMENT

8.2.1 Principle

Foliar diseases are infectious and air-borne in nature and spread by conidia /spores primarily through rain droplets (rain splash)/ wind current. They start progressing 40-45 days after pruning (DAP)/leaf harvesting and become severe on 70th DAP. If suitable plant protection methods are not adopted, these diseases may become epidemic. Hence, identification of these diseases through symptoms are very much essential for adopting the appropriate control measures.

8.2.2 Requirements

- Mulberry garden
- Diseased samples
- Hand lens

8.2.3 Procedure

- Collect the diseased samples from the field.
- Observe visually the symptoms of the disease and record.

8.2.4 Observations

Disease	Causal Organism	Observed Symptoms
Leaf spot		
Powdery mildew		
Leaf rust		
Fungal leaf blight		
Bacterial leaf blight		

8.2.5 Results

- In the given sample, based on the symptoms, the disease is identified as _____
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8.3 PRECAUTIONS

- Observe critically the symptoms on foliage for diagnosis of various foliar diseases.