PP:401 Practical No 2

Collection and Preservation of diseased vegetables and fruits

Materials:

- 1. Clean, sharp scissors or pruners
- 2. Sterilized glass jars with lids
- 3. Soap and hot water for washing jars
- 4. Distilled water for rinsing jars
- 5. Towel for drying jars
- 6. Desiccant packets (optional)
- 7. Preservative solution (optional)
- 8. Permanent marker or labels for labeling jars
- 9. Notebook or data collection form for documentation

Procedure:

Identify plants showing symptoms of disease.

Choose representative samples that exhibit a range of symptoms, including early and advanced stages if possible.

Collection:

Use clean, sharp tools like scissors or pruners to collect samples.

Avoid touching healthy parts of the plant to prevent cross-contamination.

Collect samples from multiple areas of the plant to ensure representativeness.

Preparation of Glass Jars:

Wash glass jars thoroughly with soap and hot water to sterilize them.

Rinse jars with distilled water to remove any soap residue.

Air-dry the jars or use a clean towel to dry them completely.

Packaging in Glass Jars:

Place each sample in a separate sterilized glass jar.

Ensure that the jars are large enough to accommodate the samples without overcrowding.

Seal the jars tightly with sterilized lids.

Preservation:

Store the sealed glass jars in a cool, dark place to minimize microbial growth. Optionally, add a desiccant packet to each jar to absorb moisture and prevent mold growth.

Consider adding a small amount of preservative solution to the jars if necessary (e.g., ethanol for bacterial or fungal samples).

Documentation:

Label each glass jar with information including plant type, location, date of collection, and symptoms observed.

Maintain detailed records of each sample, including collection date, location, symptoms observed, and any relevant environmental conditions.