

4.1.2. Little Leaf of Brinjal

In 1938, the little leaf of brinjal was first reported in India and is considered to be a viral disease. It occurs mostly in India and Sri Lanka. 100% yield loss in diseased plants can be caused as it is a serious disease.

4.1.2.1. Etiology

In the phloem cells of roots of brinjal plant with minor leaf disease, Mycoplasma-Like Bodies (MLB) has been identified. MLBs vary from 230-770nm in size. Ribosomes and nuclear material which are suspended by 16.5nm wide triple-layered unit membrane are enclosed in each MLB.

4.1.2.2. Symptoms

- 1) Smallness of leaves, short petioles, and soft and pale yellow lamina of the leaves are the typical symptoms.
- 2) The affected plant appears bushy because the internodes of the top branches are reduced.
- 3) Flowers remain green.
- 4) Fruits of the diseased plant become hard, tough and do not mature.

4.1.2.3. Disease Cycle

Cestius phycitis is the vector that causes transmission of the disease. The disease has been artificially transmitted to tomato, potato and tobacco. The causative agent lives on weed hosts during the season of brinjal crop and from there the disease is transmitted to the main crop by its insect vector.

4.1.2.4. Control

- 1) Ekalox or Folidol are insecticides that should be sprayed fort-nightly to stop the spread of disease till the fruits set.
- 2) 1ml of Dimethoate (Rogor-30 EC) or Oxydemeton methyl (Metasystox 25 EG) or Monocrotophos (monocil) mixed with a litre of water should be sprayed on the crops to control the insect vectors.
- 3) Phorate (1.0kg/ha) should be applied to the seed beds and seedlings should be immersed in aqueous solution of 0.05% tetracycline and 0.05% monocrotophos for controlling disease.

- 4) Disease-resistant varieties (Brinjal round, Black beauty, Pusa purple cluster, etc.) should be cultivated.
- 5) Barriers of trap crops should be used.
- 6) Main flights of insects should be prevented by adjusting plantation.
- 7) Crop rotation should be followed.
- 8) Infected plants should be removed as soon as detected.

- 4) रोग प्रतिरोधी
पर्याप्त कल
- 5) ट्रैप फसल
- 6) वृक्षारोपण
को रोकना
- 7) फसल चक्र
- 8) संक्रमित