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## Mealy Bug of Brinjal and their Management

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### Introduction

Mealy Bugs (*Coccidohystrix Insolita*) is a very common pest of families Malvaceae and Solanaceae as well. The insect is polyphagous in nature and they feed on wide range of host plants of Malvaceae, Solanaceae and Leguminosae families. It is a sucking type pest and they suck the plant sap by inserting their mouth parts in the tender foliage of the plant. They are wingless, soft, small pests and covered by a white waxy material. They can also be seen as in clusters of white cotton aggregates below the leaf surface. Generally, they do not cause injury to plants but they ground the curling and yellowing of leaves due to their sap sucking habits.

### Biology

1. Mealy Bugs can be easily identified by the presence as of white cotton with soft bodied.
2. The females bugs lay about 200-300 eggs and incubates it for about 4 to 5 days Fig. A.
3. Groups of bugs can be seen below the surface of leaves Fig. B.
4. They are covered by white mealy wax.
5. After 22 to 25 days they become adult; passing through three nymphal instars stages.
6. The first instar nymph are light yellow in colour which turns greenish and then darker with next instar stages.
7. The adults are soft and covered by white or greyish waxy like substances.



Fig.: A.



Fig.: B.

### Damage Symptoms

1. They suck the sap of plant leaves, tender shoots, and the fruits at both nymphal and adult stage.
2. They cause discoloration as well curling of leaves Fig. 1.
3. At initial stage they are found in large groups of white cottony bugs aggregated below the leaf surface and later they spread to entire plant Fig. 2.
4. If the insect attacked on flower blooms, the fruit set of plant is affected and the production can also be affected Fig. 3.
5. Generally they secrete waxy like sticky & sweet substances which results in growth of black sooty mould fungus.


**Fig.: 1.**

**Fig.: 2.**

**Fig.: 3.**

## Management

1. If the small area gets affected by this insect then remove the affected leaves and either burn them or bury them in soil.
2. Natural predators like ladybirds' beetles can be released in infested plant as biological control.
3. By using forceful stream of water on the leaf surface can also helpful to remove the bugs from the leaf surfaces.
4. Spray of insecticides like Monocrotophos @ 1.5ml/liter or Methyldemeton 25 EC @2ml/liter at 15 days intervals.

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