

Management

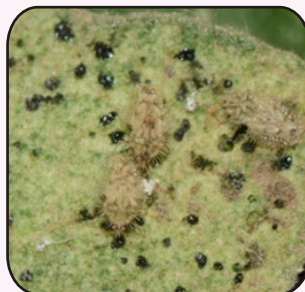
- ❖ Remove infected plants and destroy them
- ❖ Before transplantation dip the seedlings in 0.2% carbofuran 50 STD solution (control insect vectors)
- ❖ Spray with dimethoate 0.3%

Lacewing bug: *Urentius hystricellus*

Symptoms of damage: Yellowing of leaves, affected leaves covered with exuviae and excreta.

Identification of pest: Egg is white, nibble shaped. Nymph is yellowish white with prominent spines. Dorsal side of adult is straw coloured. Ventral side is black coloured. Pronotum and forewings reticulated.

Management: Spray dimethoate 30 EC @ 1 lit/ha or methyl demeton 25 EC @ 1 lit/ha



Lacewing bug



Mealybug



Redspider mite



Ladybird beetle



Fruit borer larva



Fruit borer adult



Fruit borer



Stem borer



Hadda beetle



Little leaf

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Indian Council of Agricultural Research

भारतीय कृषि अनुसंधान परिषद

PESTS OF BRINJAL AND THEIR MANAGEMENT



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Insect pests: Shoot and fruit borer, *Leucinodes orbonalis* (Lepidoptera:Crambidae); stem borer, *Euzophera perticella* (Lepidoptera:Pyralidae); hadda/spotted beetle, *Henosepilachna vigintioctapunctata* (Coleoptera:Coccinellidae); brown leafhopper, *Cestius phycitis* (Homoptera:Cicadellidae); Lacewing bug, *Urentius hystricellus* (Homoptera:Tingidae)

Shoot and fruit borer: *Leucinodes orbonalis*

Symptoms of damage: Withering of terminal shoots/dead hearts, bore holes on shoots and fruits plugged with excreta, shedding of flower buds, withering and drying of leaves.

Identification of pest: Eggs are creamy white. Larva is in pink colour. Pupa is greyish boat shaped cocoon. Adult is medium sized moth. Forewings has black and brown patches and dots on white colour, hind wings are opaescent with black dots

Management

- ❖ Remove the affected terminal shoot showing boreholes.
- ❖ Remove the affected fruits and destroy.
- ❖ Avoid continuous cropping of brinjal crop
- ❖ Grow the varieties with long and narrow fruits in endemic areas
- ❖ Install pheromone trap @ 12/ha
- ❖ Encourage the activity of larval parasitoids: *Pristomerus testaceus*, *Cremastus flavoorbitalis*
- ❖ Avoid use of synthetic pyrethroids
- ❖ Avoid using insecticides at the time of fruit maturation and harvest

- ❖ Neem seed kernel extract (NSKE) 5 %

Spray any one of the following chemicals starting from one month after planting at 15 days interval

Insecticide	Dose
Azadirachtin 1.0% EC (10000 ppm)	3.0 ml/lit.
Azadirachtin 0.03 % WSP (300 ppm)	5.0 g/lit.
Chlorpyrifos 20 % EC	1.0 ml/lit.
Dimethoate 30 % EC	7.0 ml/10 lit.
Emamectin benzoate 5 % SG	4 g/10 lit.
Flubendiamide 20 WDG	7.5 g/10 lit.
Phosalone 35 % EC	1.5 ml/lit.
Quinalphos 25 % EC	1.5 ml/lit.
Thiodicarb 75 % WP	2.0 g/lit.
Thiometon 25 % EC	1.0 ml/lit.
Trichlorofon 50 % EC	1.0 ml/lit.
Triazophos 40 % EC	2.5 ml/lit.

Stem borer: *Euzophera perticella*

Symptoms of damage: Top shoots of young plants droop and wither, older plants become stunted, fruit bearing is affected.

Identification of pest: Egg is cream, scale-like. Fully grown larva is creamy white. Adult is greyish brown, Forewings has transverse line and hind wings are white in colour.

Management

- ❖ Collect and destroy the damaged and dead plants
- ❖ Light trap @1/ha to attract and kill adults

- ❖ Spray neem oil 2ml/lit
- ❖ Avoid using synthetic pyrethroids causing resurgence

Hadda / spotted beetle: *Henosepilachna vigintioctapunctata*

Symptoms of damage: Scrapping of chlorophyll, skeletonization and drying of leaves

Identification of pest: Eggs are cigar shaped, yellow in colour. Grub is yellowish bearing six rows of longitudinal spines. Pupa is yellowish with spines on posterior part and anterior portion being devoid of spines. Adult has 14 spots on each elytra, deep red.

Management

- ❖ Collect damaged leaves with grubs and egg masses and destroy them
- ❖ Shake plants to dislodge grubs, pupae and adults and destroy
- ❖ Conserve natural enemies in brinjal ecosystem
- ❖ Spray carbaryl 50 WP @ 3g/lit

Brown leaf hopper: *Cestius phycitis*

Symptoms of damage: Reduction in size of leaves, shortened petioles, excessive growth of branches, general stunting of plants, conversion of floral parts into leafy structures. Plants become bushy, fruiting is rare, vector of little leaf of brinjal.

Identification of pest: Adult is small light brown leaf hopper