

Insect Pests of Vegetables and their Management

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Major Insect Pests of Cole Crops

Common name	Scientific name	Nature of damage
Cabbage butterfly	<i>Pieris brassicae</i>	Defoliation
Dimond back moth	<i>Plutella xylostella</i>	Skeletonisation and defoliation
Cabbage flea beetle	<i>Phyllotreta cruciferae</i>	Shot holes on leaves, buds and stem
Cabbage aphid	<i>Brevicoryne brassicae</i>	Yellowing, curling, drying and sooty mould formation
Painted bug	<i>Bagrada cruciferarum</i>	Yellowing and drying of leaves
Leaf caterpillar	<i>Spodoptera litura</i>	Defoliation

Management

- Hand picking and destruction of butterfly eggs and larvae
- Spraying with Dipel @ 0.2% or Karanjin @ 2 ml/lit, at 15 days interval after 22-25 DAT controls cabbage butterflies and dimond back moths effectively
- Avoid persistent synthetic insecticides and encourage bio agents like, *Hyposoter ebeninus*, *Cotesia glomeratus*, Pb Granulosis Virus (local strain).
- In heavy infestation, alternate spraying of Dipel @0.2%, Karanjin @2 ml/lit and endosulfan @0.07% at 15 days interval after 22-25 DAT manage cabbage pests



Cabbage butterfly



Dimond back moth



Flea beetle



Painted bug



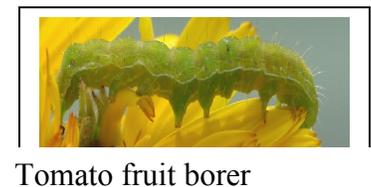
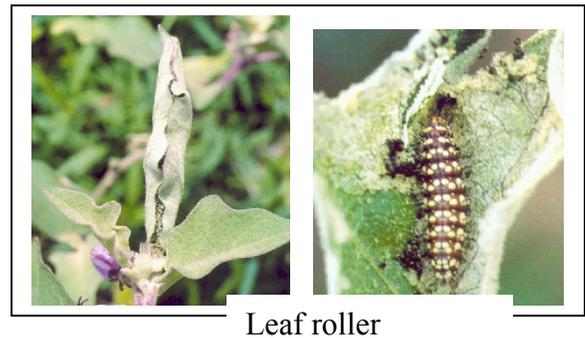
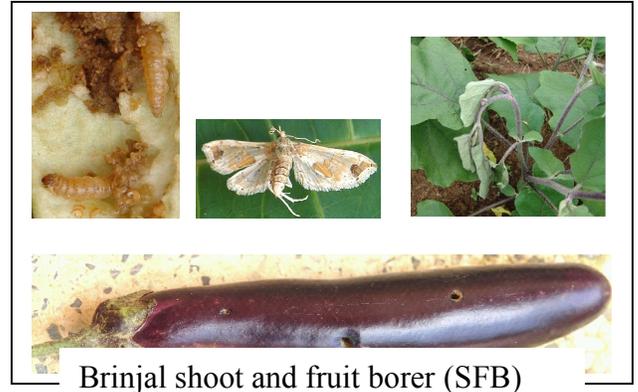
Tobacco caterpillar

Major Insect Pests of Solanaceous Crops

Common name	Scientific name	Nature of damage
Brinjal shoot and fruit borer	<i>Leucinodes orbanalis</i>	Drying and drooping of shoot and holes on fruit
Brinjal leaf roller	<i>Eublemma olivacea</i>	Leaf rolling
Hadda beetle	<i>H. vigintioctopunctata</i> <i>E. dodecastigma</i>	Leaf skeletonisation, browning and drying
Mealy bug	<i>Coccidohystrix insolita</i>	Yellowing, wilting and drying of leaves
Tomato fruit borer	<i>Helicoverpa armigera</i>	Holes on fruit
Patato aphid	<i>Myzus persicae</i>	Yellowing and drying of leaves

Management

- Regular clipping and burning of withered dead shoots, leaves and plant residue reduce further incidence of SFB, stem borers and mites
- Use of lucilure sex pheromone @ 100 traps/ha at 20-25 DAT and replacing the lure at monthly interval till the harvest of the crop, effectively controls the SFB.
- Application of thuricide dust @ (3×10^6 spores/ml) and one spraying of entomopathogenic fungus *Verticillium lecanii* Zimm. @ 48×10^6 spores/ml controls epilachna beetles.
- Two sprays at fifteen days of interval with deltamethrin @ 10-15 g/ha or endosulfan @ 0.15% starting at the onset of the fruits control SFB effectively.
- Use of HaNPV @ 350 LE/ha is highly effective against tomato fruit borer
- Marigold as a trap crop with tomato is helpful for attraction of fruit borers from main crop and also effective against root knot nematodes



Hadda beetle

