# Organic Farming of Eggplant / Brinjal

Brinjal/Eggplant (*Solanum melongena*) is the most common and extensively grown vegetable all over the country (0.39 m ha). It's a tender and supple plant and its cultivation is done under high moisture, hence it's more prone to pest attack which, at a conservative estimate, causes about 35-40% losses. Fruit and shoot borer, jassids, whitefly, aphids, thrips, mealybugs are the most serious pests while Phomopsis blight, little leaf of brinjal, bacterial wilt, leaf spots and root knot nematodes are serious threat to Brinjal crop.

## Adopt the following strategies for the management of various Eggplant / Brinjal pests & diseases and plant nutrition to get higher yield and residue free farm produces

- Destruction of debris, crop residues, weeds and other alternate hosts.
- Deep ploughing in summer.
- Adoption of proper crop rotation and avoid growing of malvaceous crops like cotton.
- Use of resistant and tolerant varieties according to area or region.
- Use well decomposed FYM @ 8-10 tones per acre or neem cake @ 5 tons per acre.
- Avoid excessive use of nitrogen-rich chemical fertilizers.
- Do not take the brinjal as ratoon crop.
- Little leaf disease is caused by mycoplasma and transmitted by jassids. Alternate spray of Vanguard and Biosoft will help to control insect vectors.
- Infestation of shoot and fruit borers is less in oval variety (Dolly-2) than round eggplant/brinjal variety, so such variety should be selected for sowing
- Transplanting eggplant/brinjal in the second fortnight of January and early September to reduce infestation of shoot and fruit borer.

- Collect and destroy the infested fruit and shoot borer infestation. and burry in a deep pit to reduce the infestation of shoot and fruit borer.
- Install 20 pheromone traps for Brinjal fruit and shoot borer and one solar sticky trap per acre on a mass basis for trapping the male moths of shoot and fruit borer at 30 DAS.
- Set up 30-40 yellow/blue sticky traps per acre 15 cm above the crop canopy for monitoring and mass trapping of thrips, white fly, aphids, jassids and leaf minors.
- Destroying the plants immediately after the completion of the crop instead of heaping them on the ridges of the field, which helps in reducing infestation of shoot and fruit borer to the newly planted eggplant/brinjal.
- If you use dry plants for fuel purposes, make a pile of them and cover them with agronet.
- Conserve the existing biocontrol agents like spiders, coccinellids, syrphid flies etc. in the field by delaying and reducing the use of chemical pesticides and using Biopesticides instead. The shoot and fruit borer have 55% of parasitism at larva stage so avoid chemical pesticides to maintain the population of such parasites.

#### **Major Pests**



Jassid



**Red Spider Mites** 



Fruit and Shoot borer



Aphid



White Fly

#### **Major Diseases**



Phomopsis blight



Little Leaf of Brinjal



Leaf spot Disease



**Bacterial Wilt** 



**Root Knot Nematodes** 

#### Natural Enemies of Brinjal Pests



Adult Ladybird



Adult Lacewing



Encarsia Farmosa



Aphelinids wasp



Trichogramma

## Recommended Products Per Acre of Land



Monitor 500 gm



Sudozone 500 gm



Yorker 250 gm



Biosoft 500 gm



Biofield Combo 3 kgs



Antity 500 ml



Lifeline Myco



Mycozone 100 gm



Saffron 1 kg



Biofield 1 litre



SmartZINC 500 ml



Runoff 100 250 ml



Vanguard 1500 ppm-1 litre



Yellow / Blue Sticky Traps 40 nos



Solar Light Sticky Trap 1 no



NoMate Pheromone Traps 20 nos

### **Application Method of Agriland Organic Products**

Sr. No	Time of applications	Product	Dose	Type of applications	Benefits
1.	At nursery seed bed preparation	Monitor Sudozone Yorker	20 gm/sq.m 40 gm/sq.m 20 gm/sq.m	Application in Seed bed	For control of plant diseases and plant parasitic nematodes
		Biofield combo Mycozone	50 gm/sq.m 05 gm/sq.m		For better sprouting of the seeds and the development of powerful root mass
2.	At the time of transplanting	Monitor Sudozone Yorker	250 gm/acre 01 kg/acre 250 gm/acre	Apply in soil	Use to control plant disease and plant parasitic nematodes
		Biofield combo Mycozone	03 kg/acre 100 gm/acre		NPK bacteria enhance the plant growth, where as Mycozone produces profuse root and nutrient solubilisations and mobilizations
	45 days after transplanting	Biosoft	15 gm/15 liters	Use as spray	For control of shoot & fruit borer and sucking type of pests
		Biofield liquid	30 ml/15 liters		For overall development and plant growth
		Runoff	05 ml/15 liters		For better spread and product efficiency at the time of spray
3.		NoMate Sex Pheromones traps	20 trap/acre	Install 1 foot above the crop canopy	Used to monitor and control of shoot and fruit borer
		Solar light sticky trap	1 trap/acre		Used for monitoring and controlling the male/female of shoot & fruit borer.
		NoMate sticky traps	40 traps/acre		Useful during night as well as day time
	60 days after transplanting	Vanguard 1500 ppm	60 ml/15 liters	Use as spray	Use to control shoot & fruit borer and sucking type of pests
4		Smart Zn	15 ml/15 liters		Reduce the Zn deficiency in plant and increase the nitrogen solubilisation.
4.		Saffron	50 gm/15 liters		It provide sulphur micronutrient and useful in control of powdery mildew
		Runoff	05 ml/15 liters		For better spread and enhance product efficiency at the time of spray
	75 days after sowing	Monitor	250 gm/acre	Use as soil drenching	Use to control plant disease and plant parasitic nematodes
5.		Yorker	250 gm/acre		For overall development and plant growth
		Biofield liquid	500 ml/acre		
6.	90 days after sowing	Antity	45 ml/15 liters	Use as spray	Use to control the diseases like alternaria and Cercospora
		Lifeline	45 ml/15 liters		Use for providing micronutrient and growth of plant
		Runoff	05 ml/15 liters		For better spread and enhance product efficiency at the time of spray
7.	105 days after sowing	Vanguard 1500 ppm	60 ml/15 liters	Use as spray	Use to control shoot & fruit borer and sucking type of pests
		Saffron	50 gm/15 liters		It provide sulphur micronutrient and useful in control of powdery mildew
		Runoff	05 ml/15 liters		For better spread and enhance product efficiency at the time of spray

Surface Technology





ISO

9001:2015



IMO

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DSIR Approved R&D Center



ZED Certification









We are the leading agri-biotechnology company in the nation, pioneering in the area of research and development of environmentally friendly plant protection products.



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