

# Organic Farming of Chilli/Capsicum

Chilli (*Capsicum annum*) is an important spice crop of India. India is the world's largest producer, consumer and exporter of chilli peppers. Chilli is more prone to pest attack and at a conservative estimate cause about 35-70% losses. This crop is very sensitive in terms of crop protection. When we go to the chilli crop, one can see some disease like Fruit rot, Bacterial leaf spot, Nematodes, Wilt, Powdery mildew, Leaf curl virus and pests like Thrips, Whitefly, Aphids, American bollworm, Armyworm and Mites. So, every farmer who grows the chilli crop has to be an expert.

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

- **Select** a variety resistant/tolerant to major pests according to the locality.
- Conduct deep ploughing in summers to expose the soil in heat for destroying soil borne pathogens.
- **Soil solarization**: Cover the beds with polythene sheet of 45-gauge (0.45 mm) thickness for three weeks before sowing for soil solarization which will help in reducing the soil borne pests.
- Digging a foot trench around nursery to reduce the infestation of the insect-pests.
- Sowing in appropriate direction so that the nursery gets full sunlight.
- Keep surrounding area of the fields free from the weeds.
- Crop rotations with leguminous plants which enhance nitrogen content.
- Pick up the diseased plant from the field, burn it or bury it in the soil
- Use organic manure as much as possible. Make maximum use of Neem cake and Castor cake which help in reducing the nematodes' incidence.
- Adding organic matter in the form of FYM, Vermicomposting, crop residue which enhance below ground biodiversity and nutrient.
- Disease is more common in low-lying areas where water is being filled, crops should not be grown in the lower reaches and the discharge of excess water should be done.
- Stagnation of water should not be allowed in nursery beds and fields in order to avoid fungal infection. The field should have good drainage and be free from infected plant debris.
- Flowering plants that attract natural enemies as well as plants that repel pests can be grown as border/intercrop.
- Sowing of marigold to attract *Helicoverpa* and castor to attract *Spodoptera* around the farm or as a border crop, at blossom stage
- Do not use chemical pesticides to protect *Chrysoperla*, Ladybird beetles, *Encarsia*, *Trichogama* and other parasites and predators.
- Surveillance through pheromone trap catches for *Spodoptera* and *Helicoverpa*.
- In main field sow in rows at optimum depths under proper moisture conditions for better establishment of plants.
- Maintain optimum and healthy crop stand which would be capable of competing with weeds at a critical stage of crop weed competition.
- Avoid spray at the time of flowering to promote pollinators. Spray early morning or at evening time to enhance the efficacy of spray.

### Major Pests



American Bollworm



Armyworm



Thrips



Aphid



White Fly

### Major Diseases



Die Back/Fruit rot



Nematode



Bacterial Leaf Spots



Powdery Mildew



*Fusarium Wilt*



Leaf Curl Viruses

### Natural Enemies of Chilli/Capsicum Pests



Ladybird Beetle



Chrysoperla



*Encarsia spp*



*Prospeltella*



*Brumoides suturalis*

# Recommended Products Per Acre of Land



Monitor  
500 gms



Sudozone  
500 gms



Yorker  
250 gms



Biosoft  
500 gms



Biofield Combo  
3 kgs



Antity  
500 ml



Lifeline  
500 ml



Mycozone  
100 gms



Saffron  
1 kg



Biofield  
1 ltr



SmartZINC  
500 ml



Runoff100  
250 ml



Vanguard  
1500 ppm-1 ltr



Yellow / Blue  
Sticky Traps 40 nos



Solar Light Sticky  
Trap 1 nos



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 preparation	Monitor Sudozone Yorker	20 gm/sq.m 40 gm/sq.m 20 gm/sq.m	Application in soil	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		For better sprouting of the seeds and the development of powerful root mass
3.	30 days after transplanting	Biosoft	15 gm/15 liters	Use as spray	For the control of <i>Spodoptera</i> , <i>Helicoverpa</i> and sucking pests.
		Biofield liquid	30 ml/15 liters		For overall development and plant growth
		Runoff	05 ml/15 liters		For better spread and enhance product efficiency at the time of spray
		NoMate Sex Pheromones traps	20 trap/acre	Install 1 foot above the crop canopy	Used to monitor and control <i>Spodoptera</i> and <i>Helicoverpa</i>
		NoMate sticky traps	40 traps/acre		Used for control of sucking pests
		Solar light trap	1 trap/acre		Used for monitoring and controlling the male insects during night as well as daytime
4.	45 days after transplanting	Vanguard 1500 ppm	60 ml/15 liters	Use as spray	Use to control caterpillars and sucking type of pests
		Smart Zn	15 ml/15 liters		Reduce the Zn deficiency in plant and enhance enzymatic and metabolic activities of plants
		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
5.	65 days after sowing	Monitor	250 gm/acre	Use as soil drenching	For control of plant disease and plant parasitic nematodes
		Yorker	250 gm/acre		
		Biofield liquid	500 ml/acre		For overall development and plant growth
6.	85 days after sowing	Antity	45 ml/15 liters	Use as spray	To control the diseases like Bacterial Leaf Spots (leaf spot) and Dieback/Fruit rot
		Lifeline	45 ml/15 liters		Use for providing micronutrient and plant growth
		Runoff	05 ml/15 liters		For better spread and enhance product efficiency at the time of spray
7.	95 days after sowing	Vanguard 1500 ppm	60 ml/15 liters		Use to control caterpillars 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 Approved



GeM Approved



DSIR Approved R&D Center



ZED Certification



CRISIL MSE 2 Rated Company



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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