

Organic Farming of Potato

Potato, (*Solanum tuberosum*), annual plant in the nightshade family (*Solanaceae*), grown for its starchy edible tubers. At present the economic loss of cotton due to diseases and pests is 30 to 45 %. In the current yield situation, if no prevention and control measures are taken, the loss can be as high as 40% - 60%. Some plant diseases and pests can cause more than 60% damage. Which is very important to control.

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

- Use healthy tubers and treat the seed tubers with boric acid (3% for 30 minutes) before or after cold storage.
- Deep ploughing in summer to expose the soil born pathogen in a heat and control naturally.
- Practice crop rotation with wheat, peas, oats, barley, soybean, sorghum, bajra and green manures crops.
- Raised seed beds of more than 35cm height (for better water drainage). If possible, use a suitable irrigation method like Drip irrigation.
- Sowing of crops at appropriate recommended distances and maintain plant populations.
- Follow crop rotation. So, that soil borne diseases and pests can be controlled naturally.
- Grow repellent plant like African marigold around and between 2 or 3 rows of potatoes in field 15 days prior to sowing to control the nematodes.

- Keep the field weed free by inter weeding and hand weeding so that the crop gets adequate nutrients and make it free from nutrient competition at initial crop growth stage.
- Collect and destroy crop debris of previous seasons and also remove infected plants parts by disease and pests from field.
- Adopt judicious fertilizer and water management. Avoid excessive use of nitrogenous fertilizers. Add FYM @ 25 tonnes/ha.
- Installing pheromone traps @ 20 traps / acre area for monitoring and mass controlling of *Spodoptera litura*.
- Planting of trap crops like Marigold / Castor around the cotton field which is attracting the pests of main crop.
- Use of yellow sticky / blue sticky traps to control sucking pests. Which should be installed in 30 to 40 traps / acre area. And to install 1 solar light sticky trap in one acre area for cut worms and white grub management.
- Physical damage must be avoided as it encourages post-harvest rots.

Major Pests



Cutworm



Potato tuber moth



Spodoptera litura



White grub



Aphid



White Fly

Major Diseases



Early & Late blight



Common scab



Ring / Soft rot



Black scurf



Brown rot



Nematodes

Natural Enemies of Potato Pests



Encarsia spp



Braconii spp



Ladybird beetle



Trichograma spp

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
500 ml



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 the time of sowing	Monitor Sudozone Yorker	250 gm/acre 1 kg /acre 250 gm/acre	Apply in planting material or soil	For control of plant disease and plant parasitic nematodes
		Biofield combo Mycozone	3 kg /acre 100 gm /acre		For better sprouting of the seeds and the development of powerful root mass
2	45 days after sowing	Biofield liquid	30 ml / 15 liters of water	Use as spray	For overall development and plant growth
		Runoff 100	5 ml/15 liters of water		For better spread and enhance product efficiency at the time of spray
		Smart Zinc	15 ml / 15 liters of water		Reduce the Zn deficiency in plant and increase the nitrogen uptake
		NoMate sex pheromones traps	20 traps /acre	Install 1 foot above the height of the crop	Used to monitor and control of potato tuber moths and <i>Spodoptera litura</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
3.	60 days after sowing	Biosoft	15 gm /15 liters of water	Use as spray	For the control of <i>S. litura</i> , cutworm, tuber moth and sucking pests
		Saffron	50 gm /15 liters of water		It provide sulphur micronutrient and useful in control of aerial disease
		Runoff 100	5 ml /15 liters of water		For better spread and enhance product efficiency at the time of spray
4.	75 days after sowing	Antity	45 ml/15 liters	Use as spray	Use to control diseases like Early & Late Blight, common scab, and soft rot
		Lifeline	45 ml/15 liters of water		Use for providing micronutrient and plant growth
		Runoff 100	5 ml/15 liters of water		For better spread and enhance product efficiency at the time of spray
5.	90 days after sowing	Vanguard 1500 ppm	60 ml/15 liters of water	Use as spray	Used to control sucking type of pests
		Smart Zinc	15 ml / 15 liters of water		Reduce the Zn deficiency in plant and enhance the nitrogen uptake
		Runoff 100	5 ml/15 liters of water		For better spread and enhance product efficiency at the time of spray
6.	105 days after sowing	Vanguard 1500 ppm	30 ml /15 liters of water	Use as spray	For overall development and plant growth
		Lifeline	45 ml/15 liters of water		Use for providing micronutrient and plant growth
		Runoff 100	5 ml/15 liters of water		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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