

Organic Farming of Groundnut/Peanut

Groundnut (*Arachis hypogea*) is an important cash crop. Groundnut accounts about 25% of the world's peanut production. Complete neglect of pest and disease control in groundnut crop can result in loss of yield up to 57%, whereas if soil pest control especially white grub, stem and leaf diseases and leaf pest control is ignored or abandoned, yield is reduced by 27%. Therefore, it is very important to control such diseases and pests.

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

- Planting resistant varieties according to local adaptations.
- Deep ploughing in summer to expose soil borne pathogens, white grubs, nematodes, hibernating defoliators and underground bulbs and rhizomes of perennial weeds.
- Injured and fungal seeds should be removed at the time of sowing and used only healthy seeds for sowing of groundnut.
- Crop rotation with sorghum or pearl millet or rice or maize after Kharif crop may reduce the incidence of Early leaf spot, Late leaf spot, Rust.
- Two hand hoeing at 15-20 days and 30 to 45 days after sowing for effective weed control.
- Collection and destruction of hairy caterpillar egg masses round from the field as well as from light traps.
- Use of Monitor and Sudozone for control of the stem rot of groundnut caused by *Sclerotium rolfsii*.

- Border trees like Baval, Bordi, Sargavo, Neem etc. are source of providing food and shelter to hibernated white grubs, adults of grubs come out of soil in the evening to eat the leaves of such trees at the time of first shower of rainfall. At that time, capture the adults and kill them by dipping into kerosene solution.
- Soil amendment with neem cake or castor cake @ 1 tone/ha preferably seven days prior to sowing has been found to reduce nematode population.
- Use of aggregating pheromones on the preferred hosts of white grub beetles.
- Conserve the natural bio-control populations (Natural Enemies) by adopting organic farming.
- Plough the field to demolish the rodent habitat and maintain weed free field to reduce alternate source of food and habitat.
- Drench soil with *Metarhizium anispliae* at sowing or soon after sowing to control grubs and other soil inhabiting insects pests.

Major Pests



White grub



Termites



Leaf miner



Armyworm



Aphid



Thrips

Major Diseases



Stem Rot



Collar Rot



Early Leaf Spot



Late Leaf Spot



Rust



Nematodes

Natural Enemies of Groundnut/Peanut Pests



Ladybird beetle



Chrysoperla



Chelonus blackburni



Braconid Wasp

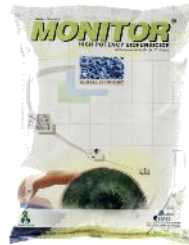


Trichogramma chilonis



Aphidius colemani

Recommended Products Per Acre of Land



Monitor
500 gm



Sudozone
500 gm



Mr. Sulphur
2kg/acre



Metasoft
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



Runoff100
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 application	Product	Dose	Type of application	Benefits
1	At the time of sowing	Monitor Yorker Metasoft	250 gm /acre 250 gm /acre 250 gm /acre	Apply in soil	For control of pant disease and plant parasitic nematodes For control of white grubs
		Biofield combo Mycozone	3 kg /acre 100 gm /acre		For better sprouting of the seeds and the development of powerful root mass
		Mr. Sulfur	2 kg / acre		It helps to reduce Sulphur deficiency and uptake of nitrogen during oil synthesis in plants
2	30 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 and protein synthesis
		NoMate sticky traps	40 traps/acre	Install 1 foot above the height of the crop	Used for control of sucking pests
		NoMate sex pheromones traps	20 traps /acre		Used to monitor and control Armyworm (<i>Spodoptera litura</i>)
		Solar light trap	1 traps/acre		Used for monitoring and controlling the male insects during night as well as daytime
3	45 days after sowing	Monitor	15 gm /15 liters of water	Soil application	For the control of stem rot of groundnut
		Saffron	50 gm /15 liters of water		It provide Sulphur micronutrient and useful in control of powdery mildew
4	60 days after sowing	Antity	45 ml/15 liters	Use as spray	Used to control diseases like Early & late leaf spots and Rust diseases
		Lifeline	45 ml/15 liters of water		Use for providing micronutrient and overall plant growth
		Runoff 100	5 ml/15 liters of water		For better spread and enhance product efficiency at the time of spray
5	75 days after sowing	Vanguard 1500 ppm	60 ml/15 liters of water	Use as spray	Used to control sucking pests
		Smart Zinc	15 ml /15 liters of water		Reduce the Zn deficiency in plant and enhance the nitrogen uptake and protein synthesis
		Runoff 100	05 ml/15 liters of water		For better spread and enhance product efficiency at the time of spray
6	90 days after sowing	Biofield liquid	30 ml /15 liters of water	Use as spray	For overall development and plant growth
		Biosoft	15 gm/15 liters of water		For control of sucking pests and caterpillars
		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



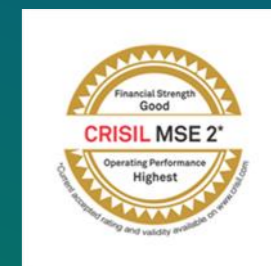
DSIR Approved R&D Center



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.



36, Prince Industry Estate,
Mota-Motipura, 391520 (Samlaya),
Taluka - Savli, District - Vadodara,
Gujarat, India