



Orgo

Blended Organic Fertiliser

ORGO is made by the scientific blending of natural organic substances in such a way that it provides the nutrients and micronutrients necessary for crop growth and soil health / fertility, such as Nitrogen, Phosphorus, Potassium, Sulphur, Calcium, Magnesium as well as Iron, Zinc, Copper etc; giving an organic content of 65% (minimum), which perform the important function of preserving the organic, chemical and physical characteristics of the soil. The fertility of the soil increases and it becomes soft and porous. The humidity is also protected.

ORGO can be used by itself or can be blended with conventional fertilizers to augment the results and improve soil fertility.

Nutrient Content of Orgo

Organic matter	65 – 85 %
Nitrogen (N)	2.75 - 3.75 %
Phosphorus (P_2O_5)	2.5 – 3.5 %
Potassium (K_2O)	1.0 – 3.0 %
Calcium (CaO)	2.1 – 2.8 %
pH	6 - 7
C/N Ratio	<15

It also contains micronutrients such as Iron – Zinc – Magnesium– Manganese, etc. in ppms

ORGO has a three tier effect on soil

1) Nutrient supply (2) Protects soil health (3) Soil conditioner

It increases the enzymatic activity in the plant giving rise to increased chlorophyll synthesis. This results in LUSH GREEN GROWTH in plant which increases solar energy utilization and thus helps the net photosynthesis and crop growth at key stages.

A natural growth promoter present in **ORGO** helps in enhancing plant growth in a natural way which allows plants to make sufficient use of available moisture and plant nutrients to enhance crop growth at key stages.

ORGO minimizes the use of synthetic pesticides because of the presence of natural repellants in its formulation due to the presence of bio-active oil cakes of *Neem*, *Castor* and *Karanj*.

ORGO contains some natural soil nitrification inhibitors like *Epinimbin* (Neem Cake) and *Karanjin* (Karanj Cake). These bio-chemicals minimize nitrification, leaching and run off.

ORGO remains in the root-zone for a longer time, therefore plants can make more efficient and effective use of available nutrients. Its use leads to consistently improved crop yield from 5-25% or even more.





Use of **ORGO** in the fertilizer mix (suggested dose 50:50) reduces the need for split application of inorganic/chemical fertilizers, thus assuring overall economy in production as well as minimizing environmental pollution through leaching loss and ground water contamination.

The use of **ORGO** helps produce a good harvest particularly of fruits and vegetables, which are nutritionally superior, taste good, have a good luster & better keeping quality.



Application Guidelines

- ♦ Recommended as a basal dose followed by a 2nd application in mid season
- ♦ Working **ORGO** into soil by ploughing and mixing with the soil gives better results than surface application.
- ♦ Apply with any standard fertilizer spreader and incorporate into top 10-15 cm of soil.
- ♦ **ORGO** can be used by itself or can be combined with chemical fertilizers or other organic fertilizers such as farm yard manure, poultry manure, compost etc. The quantity of chemical fertilizers can be reduced gradually.
- ♦ **ORGO** can also be combined with potting compost for good results.
- ♦ A soil application of **ORGO** combined with **NICODERMA** (*Trichoderma viride* 1% W.P) helps in managing soil borne pathogens.

- ♦ A soil application of **ORGO** combined with **BIONICONEMA** (*Paecilomyces lilacinus* 1% W.P) helps in nematode control.



Dosage

250kg/acre

Formulation :

Available in pellet form and as a coarse powder

Packaging

- 1 ton jumbo bag
- 50 kg HDPE /LDPE bag
- 25 kg HDPE/LDPE bag

For gardens

- 7 Kg plastic bucket
- 2 Kg plastic bucket
- 2 Kg cardboard box

Storage

Store in cool & dry place away from direct sunlight





Approved Input for organic agriculture
 Attested by ECOCERT-India Pvt Ltd./NPOP/
 NAB/002 as per NPOP/EC/NOP regulations

Nicoderma

含有木黴菌

Trichoderma viride 1% w.p.

Trichoderma viride 1% WP (2×10^6 cfu/gm. Minimum) (Mother culture: Tamil Nadu Agricultural University, Coimbatore) Talc based formulation.

Trichoderma viride is an antagonistic fungal organism present in the soil and is highly effective for the control of seed and soil borne diseases of a majority of economically important crops, especially pulses and oil seeds.

This bio control agent when applied along with seed, colonizes the seed and multiplies on its surface. It kills not only the pathogens present on the surface of the seed but also gives protection against soil borne pathogens through the life of the crop by action of mycoparasitism and antibiosis.

Seed treatment with *Trichoderma viride* has registered higher germination in a number of studies and was at par with "Captan".

It is effective for control of soil borne diseases caused by *Rhizoctonia solani*, *Macrophomina phaseolina* and *Fusarium spp*; and is a very important weapon against diseases such as root rot, seedling diseases, charcoal rot, wilt, damping-off, collar rot, etc.

The potential of *Trichoderma viride* in managing soil

borne pathogens has been demonstrated in many crop

diseases like seedling disease of cotton (Ramakrishna and Jeyarajan, 1986; Agarsamy et al., 1987a and b) root rot of soyabean (Jharia and Khare-1986), root rot of Cowpea (Alagarasami Shivaprakasam, 1988), charcoal rot of sorghum (Sekhar and Analosur, 1986) and root rot of mung bean caused by *Macrophomina phaseolina* (Samiyyapan et. al, 1987).

NICODERMA may also serve plants as a biofertilizer due to its Phosphorus solubilizing activity and its ability to decompose organic matter into growth promotary humic matter, resulting in increased availability of micro nutrients to plants.

Dosage & uses:

4 kg/ha preferably mixed with 2 tons of ORGO blended organic fertiliser/FYM and broadcast on soil.

Appearance & Packing:

White to off-white fine powder packed in 250gm, 500gm and 1Kg LDPE bag.



With NICODERMA



Without NICODERMA



With NICODERMA



Without NICODERMA



含有木黴菌

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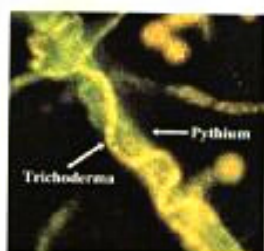
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Antagonistic to *Sclerotium rolfsii*



Trichoderma dissolving wall of *Pythium*



Without
NICODERMA

With
NICODERMA



Without
NICODERMA

With
NICODERMA





Bioniconema

Paecilomyces lilacinus 1% W.P

Paecilomyces lilacinus 1% W.P. (2×10^6 cfu/gm. minimum) (Mother culture: Indian Institute of Horticultural Research, Bangalore) Talc based Formulation.

Paecilomyces lilacinus is one of the principal genera of importance in bio-control studies in recent years. *Paecilomyces lilacinus* is a species which is a bio-control fungus that protects the root system against diseases caused by plant parasitic nematodes, specifically root-knot nematodes (*Meloidogyne* spp.), reniform nematode (*Rotylenchulus reniformis*), banana nematodes (*Radopholus similis*) and citrus nematodes (*Tylenchulus semipenetrans*).

These nematodes infect agricultural and horticultural crops of economic importance. This bio-agent colonizes the root surface and is an antagonistic fungus, strongly parasitic to eggs and egg-masses of plant parasitic nematodes. Fungal parasitization can destroy upto 90% of eggs and 75%-80% of egg-masses of nematodes.

It is particularly effective against the following nematodes:

Root-knot nematode	<i>Meloidogyne</i> spp.
Golden cyst nematode	<i>Globodera pallida</i> & <i>G. rostochiensis</i>
Cyst nematode	<i>Heterodera</i> spp.
Citrus nematode	<i>Tylenchulus semipenetrans</i>
Burrowing nematode	<i>Radopholus similis</i>
Reniform nematode	<i>Rotylenchulus reniformis</i>

Dosage & uses :

For treatments of nursery beds :
Use 50 gm/sq m of the formulation.

Enrichment of ORGO blended fertilizer/ FYM with bio-agent:

Add 1kg. of **BIONICONEMA** to 1 ton of ORGO/ FYM /compost to enrich.
This enriched formulation should be used in farms @ 1-2 tons/ha.

Seed treatment:

Treat the seeds with **BIONICONEMA** W.P @ 10gm/kg seeds and apply enriched ORGO/ FYM @ 2tons/acre to the soil before seeding/ transplanting.



on agar plate.



Picture of fungus microscopic image of fungus conidia



Picture of fungus microscopic



Paecilomyces lilacinus colonized root knot nematode egg (electron microscopy photo)

