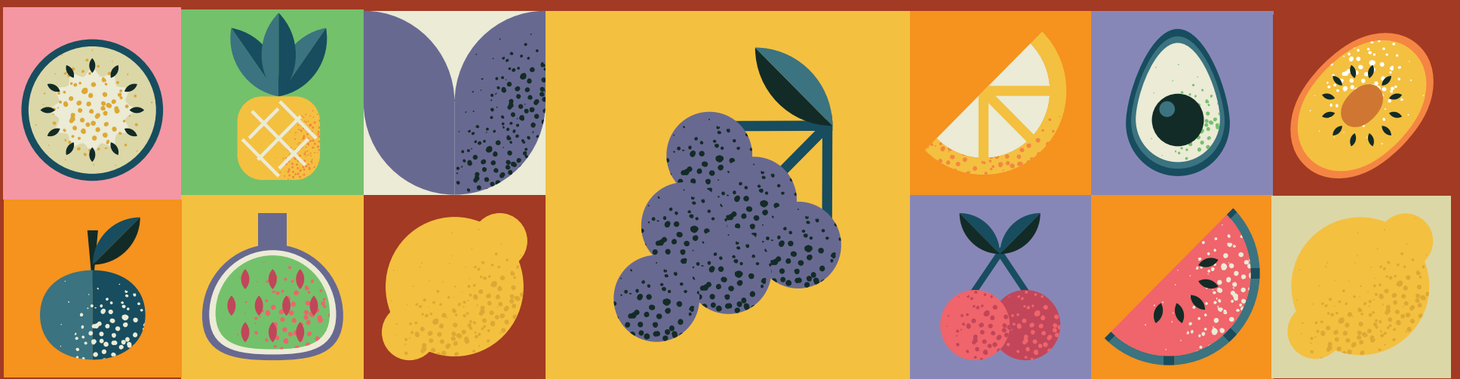
NEMATURAL BOTANICAL

Parasitic Nematode Control



Intro

NEMATURAL BOTANICAL is a naturally derived bionematicide for control of parasitic nematodes in agricultural and ornamental crop. May be applied by ground spray applications, drip irrigation, overhead irrigation system or fertirrigation systems.

The product is formulated based on different plant extracts with ovicidal properties that also inhibit the oviposition of females. Parallel has a repellent and toxic effect for adults.

The way of acting is by inhibiting the reproductive capacity of the females and by the degradation power they have on the eggs, limiting the proliferation of the coming populations.

Aspe NEMATURAL BOTANICAL

How Nematural botanical works

Control and prevents plant parasitic nematodes using several modes of action:

Direct action

Nematural botanical goes to work immediately to suffocate the nematode and damage its cuticle. Causes nematode immobilization and disorientation, making it more difficult for them to reach plant roots.

No direct action

Unlike conventional nematicides, stimulates plant growth and increases beneficial microorganism populations in the soil. These organisms use Nematural botanical as an energy source which allows them attack nematode eggs/juveniles. Beneficial organisms also use Nematural botanical to produce enzymes and organic acids, which improve root and plant health.

Repellency

Nematural botanical helps repel nematodes so that they are unable to reach plant roots. Without being able to reach roots and feed, nematodes will die after they have depleted their lipid reserves.

Characteristics

Composition	%w/w
Plant extract (Gramineae Sp.)	70,0
Phosphorus ($P_2 0_5$)	8,0
Potassium ($K_2 0$)	2,0
L-Amino Acids	2,0
Organic Matter	18,0

Advantages

Due to its mode of action by contact, Nematural botanical has the advantage of not causing resistance to the application of the product, that is, by using an all-natural active principle.

ECTO AND ENDOPARASITIC NEMATODE EFFECTIVE

Parasitic Nematode

Nematodes are microscopic, thread-like eel/worms which attack a wide range of plants. They tend to prefer well drained sandy soil conditions, typical of that which many crops are grown in. Nematodes cause direct damage to the roots of target plants. With their piercing and sucking mouth parts, plant cells are damaged resulting in tissue breakdown and death of roots.

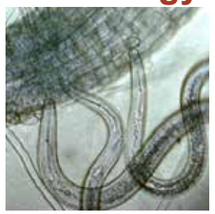
Many soil samples assessed by diagnostic laboratories are showing the presence of one or more species of parasitic nematodes.

The major species include:

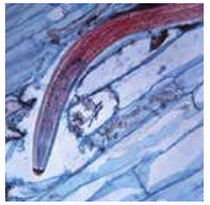
- Belonolaimus spp. (Sting)
- Hoplolaimus galeatus (Lance)
- Heterodera spp. (Cyst)
- Helicotylenchus spp. (Spiral)
- Hemicycliophora spp. (Sheath)
- Macroposthonia spp. (Ring)
- Meloidogyne spp. (Root-knot)
- Paratrichodorus spp. (Stubby-root)
- Pratylenchus spp. (Lesion)
- Xiphinema spp (Dagger)

NEMATURAL BOTANICAL controls an important variety of Parasitic Nematode, but specifically:

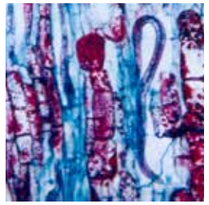
- Paratrichodorus spp. (Stubby-root)
- Helicotylenchus spp. (Spiral)
- Hemicycliophora spp. (Sheath)
- Meloidogyne spp. (Root-knot)



Belonolaimus spp.



Hoplolaimus galeatus



Pratylenchus spp.

Dosage and application

Doses and applications

Crops	L/Ha	Applications (1,2 or 3)
Garlic	10-20	Transplant - at 30 days
Aubergine	10-30	Transplant - at 30 days
Zucchini	10-20	At the beginning of crop
Onion	10-20	Transplant - at 30 days
Lawn	10-20	After cut - at 21 days - at 21 days
Citrus	20-40	After fruit curd - at 30 days - at 30 days
Ornamental	10-40	After cutting - at 30 days - at 30 days
Strawberry	20-40	Transplanting - at 21 days
Fruit	10-20	After fruit set - at 30 days
Green bean	10-25	Beginning of crop
Melon, watermelon	10-25	Transplant - at 21 days
Potato	10-25	Seeding - at 21 days
Cucumber	10-20	Transplant - at 30 days - at 30 days
Pepper	15-30	Transplant - at 30 days - at 30 days
Pineapple	40-60	February - July
Banana	40-60	April - September
Tobacco	20-30	Transplant - at 30 days
Tomato	20-40	Transplant - at 30 days - 30 at days
Grape	15-40	After flowering - at 30 days

Application instructions

If irrigation (the preferred application) is not available, soils may be sprayed with conventional spray equipment. After spray application, water thoroughly both plant and soil to assist Nematural Botanical reaching the root level of the infected plants and not to remain on the leaf.

Tomato Trials

DEMOSTRATIVE TRIAL

Location: Greenhouse under Polycarbonate in VALENCIA.

Cultivation and Variety : tomato var Naxos long life

Initial conditions : high level of infestation (18 eggs + juveniles / ml soil) by the nodular nematode Meloidogyne incognita

Dose used: 10 L / ha

Time of application : 5 days after trasplanting

CONTROL 45 DAYS AFTER APPLICATION

NEMATURAL BOTANICAL 45 DAYS AFTER

Banano Trials

TEST OBJECTIVES

The main objective of the trial is to evaluate the effectiveness in the control of nematodes in an infected soil of a banana plantation. The response of the plant will be controlled by observing the vigor of the child.

The reduction of the number of nematodes in soil will be controlled.

DEMOSTRATIVE TRIAL

LOCATION: QUEVEDO, ECUADOR

Controlled surface: 2 Ha
Plantation density: 1200 plants / Ha
Treatment dose: 8 L / Ha

A single treatment via soil at the beginning of the cycle. Population count of nematodes before treatment. Final nematode count, 55 days after

	COUNTS	
	Before treatment	55 days after treatment
Radopholus	23 000	10 200
Pratylenchus	2 300	1 100
Meloidogyne	3 100	1 650
Helycotilenchus	7 900	3 150

NEMATURAL BOTANICAL

Parasitic Nematode Control

ASPEAGRO GLOBAL S.L.
(Alicante) Spain

For more information:

export@aspeagro.com
gm@aspeagro.com
www.aspeagro.com