

PAECIOMITE

Paecilomyces fumosoroseus
Bio Insecticide/ Miticide/Acaricide

Introducing PAECILO MITE

PAECIOMITE is a biological insecticide / Acaricide/ Miticide based on a selected strain of naturally-occurring entomopathogenic fungus *Paecilomyces fumosoroseus* that infects and kills many types of insects and mites.

PAECIOMITE contains spores and mycelial fragments of *Paecilomyces fumosoroseus*. It is formulated as Powder with CFU count of 1×10^8 / g.

Mode of Action

Infection : *Paecilomyces fumosoroseus* on getting attached to the host cuticle penetrates inside it , germinates and grows densely inside it. The fungus produces hyphae inside insect body which proliferate and start feeding on insect's internal contents.

Enzyme production: *Paecilomyces fumosoroseus* produces enzymes that weakens the insect's defense mechanisms and pathogenises it from within.

Growth: Once inside, PAECIOMITE replicates and consumes the insects / mites ' internal organs and eventually kills it. PAECIOMITE infects the mites /insects on contact and does not need to be consumed by insect to cause infection.

Environment factors: Moisture is essential for the growth and multiplication of PAECIOMITE

Method of Application

Foliar application : Spray PAECIOMITE @ 5 g/ L of water. The product should be sprayed directly targeting the mite/ insect pest. The spray volume depends on the crop canopy.

Drip and Sprinkler system: Dissolve 5 g/L of water. Filter the solution for removal of extraneous mater. Use this solution for drip / sprinkler system.

Preparation of Spray Solution

Calculate the amount of water needed per acre / Ha . Measure the amount of PAECIOMITE needed (5g/L water dilution) into a container and add 20- 25 L water to dissolve the contents. Add a wetting agent if need be. Stir contents and add this to the rest of the water which will be used for an acre. Apply the spray fluid using low pressure watering nozzles such as fan nozzles or other watering systems (sprinkler or misters) after careful filtering.

Target Pests

Various types of mites like Red Spider Mite , Scarlet mite , Purple mite , Rust mite , Brown Wheat Mite, Blue oat mites, Pink Mite, Pale mite and sucking insects like Thrips, Aphids, Jassids and White flies

Crops

PAECILOMITE is suitable for application on Flowers, Vegetables, Fruits, Cereals , Millets , Pulses, Oilseeds, Fibre Crops , Sugar Crops , Forage Crops , Plantation crops , Spices , Medicinal crops , Aromatic Crops , Orchards and Ornamentals.

Compatibility

PAECILOMITE is compatible with BioPesticides and not with Chemical Pesticides. Do not mix along with any type of Fungicide.

Shelf Life

PAECILOMITE is stable for a period of 12 months from the date of manufacturing.

Mass Composition

CONSTITUENT	W/W %	FUNCTION
<i>Paecilomyces fumosoroseus</i> (Spores and Mycelia)	1.0%	Active
Carboxy Methyl Cellulose	0.50%	Inactive
Moisture	8.00% max	Inactive
Carrier Powder - Kaolin	q.s.	Inactive

Biological Composition

CONSTITUENT	CFU/g.	FORMULATION
<i>Paecilomyces fumosoroseus</i>	1*10 ⁸	Wettable Powder

Other Formulations available

<i>Paecilomyces fumosoroseus</i>	CFU/g	1*10 ⁹	Soluble Powder
<i>Paecilomyces fumosoroseus</i>	CFU/ml	1*10 ⁹	Liquid
<i>Paecilomyces fumosoroseus</i>			Lyophilized

Free from Salmonella, Shigella , E.Coli

Cautions for handling and use of product

1. Avoid inhalation and skin contact while diluting as there could be spillage / splashes of the product.

2. Mixing and spraying equipment is to be thoroughly rinsed with water and detergent before using the same equipment for use of other agricultural chemicals.
3. Surplus product should not be disposed in stagnant water / flowing water where there is a possibility of causing pollution to natural resources
4. Do not eat / drink / smoke during application.
5. Direct incidence of PAECILOMITE may cause irritation and therefore it is recommended that the operator should use protective gear viz gloves, apron, mask, eye gear and hood.

Symptoms and Antidotes

Symptoms: Occasional symptoms include head ache and nausea.

Antidote: In the case of ingestion: symptomatic treatment is advised In the case of contact with Eyes: Flush with water liberally for 20 minutes. In case of Skin contact, wash the affected area with plenty of water and soap.

Citations

There are many citations in public domain on effectiveness of *Paecilomyces fumosoroseus* as a BioPesticide and Acaricide

Commitment to Nature

- PAECILOMITE is safe to use along with bio fertilizers and biopesticides.
- PAECILOMITE is safe to natural parasites , pollinators and predators
- PAECILOMITE can be used as an effective component in IPM programmes, thereby leading to a reduction in use of chemical insecticides/acaricides and creating a safer environment.
- PAECILOMITE does not lead to residue problems and doesn't cause resistance or resurgence problems.

Benefits from PAECILOMITE

- PAECILOMITE effectively controls most of the economically important pests such as mites and sucking insects
- Pest reduction leads to improved plant health and thereby increased crop productivity.
- PAECILOMITE is pet friendly , eco friendly and infant friendly