

ANC ENZYME SOLUTIONS PTE LTD

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Bio-Muscle

(*Beauveria bassiana* 1.15% WP)

Bio-Muscle is a talc based biological insecticide contain spores and mycelia fragments (@ 1×10^8 CFU's / gm) of a naturally occurring entomopathogenic fungus *Beauveria bassiana*.

Mode of action

The spore of this fungus when comes in contact with the cuticle (skin) of target insect, pests they germinate and grow directly through the cuticle to the inner body of the host. The fungus proliferates throughout the insect's body, draining the insect of nutrients, eventually killing it in about 7-10 days.

Beauveria infect the insect with contact and do not need to be consumed by the host to cause infection.

Crop and target Pest

Crops	Target Pests	Application methods	Frequency of Application
Cereals, Pulses, Vegetables, Fruit crops, Cole crops, Orchards, Fibre crops, Cut flowers Ornamental in greenhouses; nurseries, lawns and landscape.	Caterpillars, Weevils, Leafhoppers, Bugs, Grubs, and Leaffeeding insects.	<u>Spray Methods (Borer& Cutworm)</u> The product should be sprayed on growing plants using hand, ground, or aerial equipment and also it can be incorporated in growth media. <u>Soil application (For root grubs)</u> Bio-Muscle can be sprinkled around the root-zone and incorporated into the soil either mechanically or through watering the plant, It can also be incorporated into the soil through irrigation systems during the pre or post planting stage after filtering with filters.	The frequency of application also depends on the pest and the crop. For greenhouse pest problems, application once in every 15-20 days are recommended. Again, all applications should be based on monitoring of pest populations.

Dosage

Foliar spray : 2.5 kg /hectare in 500 liters o water i.e. 5gm per liter of water. The spray volume depends on the crop canopy.

Soil Application : 2.5 kg/ Hectare

Drip system : 5 gm / litre of water in the case of mixed with water. After filtering with filters.

Toxicology

- Acute oral in rats : Non toxic and Non-Virulent
- Acute oral in Mice : Non toxic and Non-Virulent
- Acute Pulmonary toxicity : Non toxic and Non-Virulent
- Acute dermal toxicity : Non toxic and Non-Virulent
- Acute intraperitoneal : Non toxic and Non-Virulent
- Acute oral toxicity study (chicken) : Non-toxic. LD50 > 5000 mg/kg/B.wt
- Acute oral toxicity study (pigeon) : Non-toxic. LD50 >5000 mg/kg/B.wt
- Primary skin irritation : Non-irritant
- Irritation to mucous membrane : Mild-irritant
- Acute toxicity to fresh water fish : > 200 mg/l
- Toxicity to honey bees : Safe to honey bees
- Toxicity to earthworms : Non toxic
- Toxicity to Algae : Does not cause any effect on the growth of Algae

Compatibility with pesticides

Fungicides may affect *Beauveria bassiana* spores and mycelium in Bio-Muscle. Therefore, it must be used with great care. It is recommended to wait minimum a Bio-Muscle application and a fungicide treatment. Do not make tank mix of Bio-Muscle application and a fungicide treatment. Do not make tank mix of Bio-Muscle with fungicides.

Benefits

- Ecofriendly and Maintain the ecological balance.

Disclaimer-All suggestions and data presented are based on information and tests that are believed to be accurate and reliable, but are not to be taken as a guarantee, expressed or implied, for which seller assumes legal responsibility. It is recommended that the user carry out their own tests to determine the suitability of the product to his/her process before incorporating the product on a commercial scale. ANC Enzyme Solutions Pte Ltd

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- Does not create resistance, resurgence and residues problem.
- Does not affect the natural enemies and offers a long lasting pest control.
- Certified by IMO and EUREPGAP for use in organic agriculture.
- Forms a good molecule for use in IPM programme.

Salient feature

- Registered with Central Insecticide Board (CIB) Government of India.
- Certified by IMO for use in organic farming.

Shelf Life

- Eight months if stored at 20°C-25°C and if unopened.

Packing

- 5kg, 1kg, 500gms, 200gms, 100gm