

# ANC ENZYME SOLUTIONS PTE LTD

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## Health-Magic

(*Metarhizium anisopliae* 1.15%WP)

Health-Magic a talc based biological insecticide contain spores and mycelial fragments (@ 1x10<sup>8</sup> CFU's /gm) of a naturally occurring entomopathogenic fungus *Metarhizium anisopliae*.

### Mode of action

The spores of this fungus when come in contact with the cuticle (skin) of susceptible insects, they germinate and grow directly through the cuticle to the inner body of their host. The fungus proliferates throughout the insect's body and draining the insect of nutrients, eventually killing it.

*Metarhizium anisopliae* infect the insect with contact and are not consumed by their host to cause infection.

### Crops and target pest

Crops	Target Pests	Application Methods	Frequency of Application
Cereals, Pulses, Vegetables, Fruit crops, Cole crops, Orchards, Fibre crops, Cut flowers Ornamentals in greenhouses, nurseries, lawns and landscape.	Root weevils, plant hoppers Japanese beetle, Black vine weevil, Spittlebug and white grubs.	<u>Spray Method</u> (For hoppers & Bugs) The product should be sprayed on the growing plants using hand, ground, or aerial spray equipment  <u>Soil Application</u> (Root grubs & vine weevils) Health-Magic can be sprinkled around the root zone and incorporated into the soil either mechanically or through watering plants. It can also incorporated into the soil through irrigation systems after filtering with filters.	Applications should be repeated at least once per week for four weeks. If insect pressure if high, the label recommends continued weekly applications.  For greenhouse pest problems, application once in every 10-15 days are recommended.  Again, all applications should be based on monitoring of pest populations.

### Dosage

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

Soil application : 2.5kg/hectare

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

Agitate to maintain suspension.

### Preparation of Spray solution

Suspend 2.5kg of Health-Magic in 500 liters of water. Stir well and applied through low pressure watering nozzles such as fan nozzles or other watering systems after filtering with filters.

### Compatibility with pesticides

Fungicides may affect spores and mycelium in Health-Magic. Therefore, it must be used with great care. It is recommended to wait minimum 7-10 days between a Health-Magic application and a fungicide treatment. Do not make tank mix of Health-Magic with fungicides.

### Toxicology

- Acute oral toxicity in Rat : Non Toxic and Non-Virulent
- Acute oral toxicity in mice : Non Toxic and Non-Virulent
- Acute dermal toxicity in Rabbit : Non Toxic and Non-Virulent
- Primary skin irritation in Rabbit : Non-irritant
- Irritant to mucous membrane in Rabbit : Non-irritant
- Acute intraperitoneal toxicity in Rat : Non Toxic and Non-Virulent
- Acute pulmonary toxicity in Rat : Non Toxic and Non-Virulent
- Ecotoxicity
- Acute oral toxicity in chicken : Non Toxic and Non-Virulent
- Acute oral toxicity in pigeon : Non Toxic and Non-Virulent
- Acute toxicity to fresh water fish : > 100mg/l
- Toxicity to Earthworm : Non Toxic
- Toxicity to Silkworm : Non Toxic
- Toxicity to Honeybee : Non Toxic
- Natural enemies of cotton pest : Non Toxic

### Benefits

- Ecofriendly and Maintain the ecological balance
- Does not create resistance, resurgence and 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

Certified by IMO use in organic farming

### Shelf Life

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

### Packing

1 Kg, 500gms, 250 gms.