

BEAUVITECH® WP is a biological insecticide used to control thrips and other soft bodied insects such as whiteflies.

BEAUVITECH® WP is a biological insecticide containing a naturally occurring insect killing fungus that is used to control thrips and other soft bodied insects such as whiteflies. The fungus causes the white muscadine disease of insects.

Product specification

BEAUVITECH® WP contains spores of *Beauveria bassiana* strain J25 at a concentration of 1.0×10^{10} CFU per gram in an inert carrier.

Mode of action

BEAUVITECH® WP kills the insect by mechanical damage (resulting from tissue invasion), depletion of nutrients and release of toxins. The infection process is as follows:

- **Attachment:** Spores of *B. bassiana* attach to the insect body and germinate.
- **Penetration:** Fungal hyphae through enzymatic action break the insect cuticle and penetrate the insect body.
- **Multiplication:** The fungus obtains nutrients from the insect and multiplies inside the insect body, destroying the internal tissues.
- **Death:** The insect reduces its feeding and mobility and eventually dies after 3 – 5 days, depending on insect species, age and conidial dose.
- **Spore emergence:** After insect death, spores emerge through the cuticle forming a white covering around the insect cadaver.

Relative humidity of above 70% and temperature of between 18 – 30°C are essential for spore germination and infection. Infection occurs within 24 – 48 hours of contact with the fungal spores. The infected insect may live for 3 – 5 days after hyphal penetration.



Directions for use

- Mix the required amount of **BEAUVITECH® WP** with water using 2 litres for every 250 g product; stir well to form a uniform suspension.
- Add the suspension to the required volume of water in the spray tank and mix well.
- Add the required amount of an appropriate wetter at recommended rates and mix thoroughly (information on the appropriate wetter may be obtained from **DUDUTECH**).
- After mixing with water, the product should be sprayed as soon as possible.
- **DO NOT** store overnight.
- Thorough coverage of the leaf surfaces where the insects are to be found is a must to obtain good efficacy.
- Apply using high volume spray equipment.
- Maintain a minimum Relative humidity of 70% for at least 12 hours. Highest infection levels are achieved at temperatures of between 20 – 28°C. Best results will be achieved when applications are done late afternoon.
- Avoid spraying between 11am and 4pm when the UV light concentration is high and the relative humidity is low, as these factors affect *B. bassiana* spore germination.

Rate and frequency of application

Depending on crop canopy, it is recommended to apply **BEAUVITECH® WP** at 250 g per hectare with 1,500 – 2,000 litres of water with the aim of

having the fungal spores evenly distributed on the leaf surfaces. Frequency of application varies with the pest pressure and their susceptible life stages. Generally

it is recommended to spray every 5 – 7 days with between 2 – 4 repeat applications.

Compatibility

BEAUVITECH® WP is compatible with most biopesticides and insecticides; however it is generally recommended that the grower refers to the Dudutech pesticide side-effects compatibility guide since some chemicals may have detrimental effects to *B. bassiana*, as it is a living organism. Avoid chemical fungicide spray at least 24 hours before and after using **BEAUVITECH® WP**.

Facts about **BEAUVITECH® WP**

- No resistance development.
- Self propagates in the field.
- Active against a wide variety of soft bodied pests and mites.
- No residues on crops, no re-entry period and no post harvest interval.
- High percent kill of pests.
- Safe to the environment, users and beneficial organisms.
- Good synergy with various insecticides and miticides – can be tank mixed with most insecticides and miticides.
- Fits in with the conventional chemical application techniques and does not require special equipment.

Storage conditions and shelf life

Store **BEAUVITECH® WP** in a cool, dry place in tightly closed original pack. Do not freeze and do not allow the product to undergo thermal shock. May be stored in original unopened container for six months at temperatures of 10 – 20°C.

Dudutech

Kingfisher Farm,
Moi South Lake Road
P. O. Box 1927 - 20117,
Naivasha, Kenya.

M +254 704 491 120
T +254 50 20 20 859
E info@dudutech.com
www.dudutech.com

