

B.Thuringiensis Israelensis

BTI 1200 WP

Introduction

Bacillus thuringiensis israelensis (Bti) acts as a biological larvicide (biolarvicide) for larvae stages of mosquitoes (*Culiseta longiareolata*), fungus gnats (*Bradysia impatiens*) and black fly (*Simulium vittatum* Zetterstedt), when applied to almost any aquatic habitat where mosquitoes and black flies breed, this microbial insecticide is highly effective against these pests in the larval stage, but harmless to beneficial insects, wildlife, humans, pets or livestock. Bti can be used in any habitat that supports mosquito or black fly larvae in a variety of locations where water is present including man-made and natural ponds and lakes, wastewater treatment facilities, sewage lagoons, irrigation ditches, catch basins, rice fields and any standing water containing mosquito larvae in fields growing crops.



Specification

Bacteria type: *Bacillus Thuringiensis Israelensis*

Products model: IU 1200 WP / IU 7000 TP

Fineness: 60-80 mesh screen

1kg or 25 kg per bag, or as per customers request

Mosquito Control



Principle

- Produce a protein (insecticidal crystal protein – ICP) that is lethal to the pest larvae once it is ingested.
- In the basic gastrointestinal tract of insects, the intestine can be paralyzed within minutes, the insects stop feeding, and quickly destroy the intestinal lining, causing the vegetative cells of the bacteria to easily invade and penetrate the intestinal lining. Hemolymph, eventually insects die from starvation and sepsis.
- This deadly process occurs rapidly after application; some will die within hours with complete larval mortality within 24 hours.
- Since Bti must be ingested by the larvae to perform as an insecticide, this product will not be effective against insect pupae and adults. Insects in the late larval stages that are no longer actively feeding are also not affected.

Benefit

- Quickly kills mosquito larvae (2–24 hours)
- Highly specific activity on mosquitoes
- Mixes easily in water
- Sprays easily through many equipment types
- Not harmful to non-target organisms
- Results assessed quickly in field

Dosage & Method

- Water dispersible granules and other formulations of water spray after dilution, applied by hand broadcast or a hand/drop spreader in smaller areas, or by standard ground or aerial dispersing methods for larger areas, uniformly over the over the surface of standing water found.
- Apply 1 gram per square meter in the early stages of population development, higher mosquito populations require double dosage, Reapply after 8-12 days to extend Mosquito Control performance.
- Control of Lepidoptera pests larvae generally in the pest eggs before the incubation period in time medication, the best control effect.
- Apply the product in the morning or a cloudy day. Reapply the product if it is raining within 6 hours after application.

Notes

- It does not persist in water or soil. Its active ingredient of Bti is already found in the soil and the protein crystals it produces will separate naturally from the water and settle on the bottom. Once they settle, these crystals become food for other organisms or break down organically.
- No cross resistance to chemical insecticides.
- can apply to areas where resistance to organophosphates or pyrethroids has been observed.
- No poisonous to beneficial insects like lady bird beetles (ladybugs), dragonflies, honeybees, mayflies, damselflies, stoneflies, caddisflies, and true bugs.
- No harm aquatic creatures such as Crustacea (including Copepod species), oysters, shrimp, crabs, mollusks, flatworms and Amphibia.
- Bti-based larvicides have been used for more than 20 years in major mosquito and black fly eradication and control programs without any harmful side effects reported.

Packing and shelf life

12 months shelf life, 1 kg per bag or 25 kg per bag

Storage

Store in cool, dry location, keep out of direct sunshine and moisture. Once opened, should be use it within 30 days to prevent activation. Keep out of reach of children.