

Did You Know...

Bti was discovered in 1976 by Israeli scientists when they discovered a large number of dead mosquito larvae in ponds



For further enquiries, please contact us
at:

362, Upper Paya Lebar Road
Blk A, #02-14 Da Jin Factory Building
Singapore 534963
Tel: +65 6358-1040
Fax: +65 6358-1041

enquiries@geckopestcontrol.com.sg

**BIOLOGICAL
MOSQUITO
CONTROL
WITH
Bti**

What Is Bti?

Bti, *Bacillus thuringiensis israelensis*, is NOT a chemical; it is a naturally occurring soil bacterium specific ONLY to mosquito larvae, black fly larvae and fungus gnats larvae.

Bti is most effective when used in the early larval stage when the larvae are actively feeding.

When ingested by the larvae, Bti disrupts their gut cells and cause death.

The trade name for Bti used widely in Singapore is Vectobac 12AS

It is registered as a restricted product by NEA and for use by licensed Pest Control Operators only

Application



Backpack ULV mister



Vehicle-Mounted ULV mister

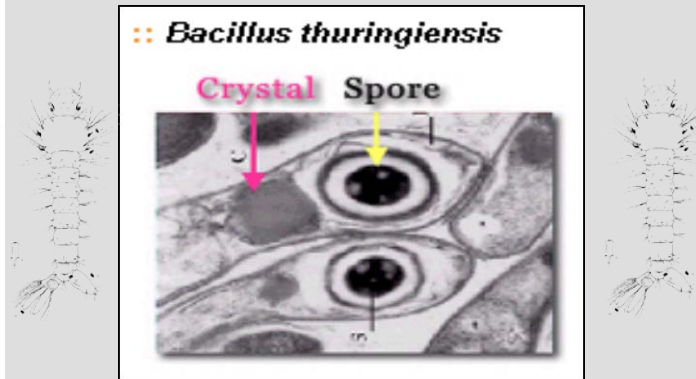
Bti can be dispensed uniformly from an Ultra Low Volume (ULV) mister that generates fine mist droplets by using a high volume of air at low pressure.

The minute droplets (aerosols) simulate rain or mist droplets. This ensures a uniform coverage of all areas including hard-to-reach places such as roof gutters, tree top ferns, tree holes, and that of leaves and bushes.

For areas accessible by road, the Bti misting is carried out using a *vehicle-mounted ULV* mister. For areas that are not accessible by road, the misting of Bti is carried out on foot using *backpack ULV mist blower*.

How Does It Work?

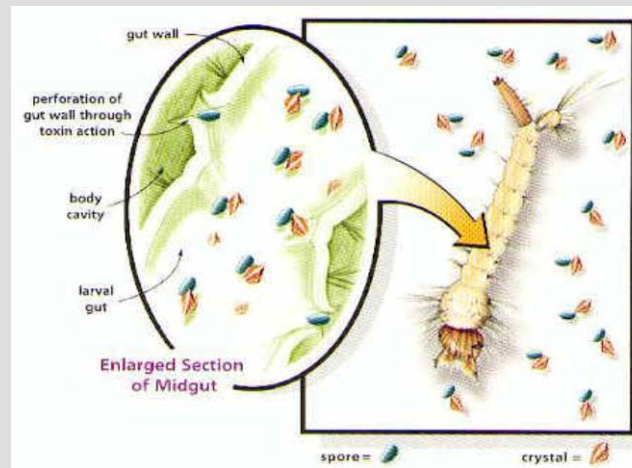
The bacterium produces spores that are eaten by mosquito larvae.



Bti works like a “**Lock & Key**” arrangement. These spores release crystallized toxins (**KEY**) into the mosquito larvae’s gut.

The toxins released attach to the larvae's intestinal wall (**LOCK**) and form perforations (holes) in the gut, killing the larvae, usually within 24-48 hours.

Bti is only effective against actively feeding larvae, and does not affect the pupae or adults.



Advantages

- ✓ Bti is non-pathogenic (not harmful to humans).
- ✓ Specific only to larvae of mosquito and black fly
- ✓ The only larvicide in the market capable of being delivered through air space SAFELY
- ✓ A combined 2-in-1 application of Bti & an adulticide provides a synergistic effect in mosquito control, whereby Bti disrupts the life cycle while the adulticide kills the adults, thus preventing the current generation of mosquitoes from laying eggs.

What is the Frequency of Treatment

Repeated application at 10-day intervals is recommended for an effective control of the mosquito population.

This is the optimal interval between treatments because it targets the life cycle of the mosquito, disrupting the early larval stage.