USAGE RATE APPLICATION SPRAY VOLUME PLACES/SITUATION **PESTS** TECHNIQUE 10 Liter Water **PER HECTARE** Hectare 12.5 mL 125 mL 100 Liter Deserted Larvae Knapsack sprayer with "Flat Fan" water-storage, (Aedes aegypti, container, lake, Aedes albopictus, size 5/64" Culex quinquefasciatus, pond, drain, trench or mosquitoes' Culex gelidus, breeding sites. Culex fuscanus) Mosquitoes **Ultra Low Volume** Public health, 2 Liter 200 mL 1 Liter Domestic areas (Aedes aegypti, (ULV) Aedes albopictus, 4 Liter 200 mL 500 mL Culex quinquefasciatus, Culex gelidus, Thermal fogging Culex fuscanus) 400 mL 200 mL 5 Liter

LAVERMATE is ideal for use in mosquito breeding sites such as deserted water-storage container, lake, pond, drain, trench, swamp, standing water, tire piles etc.

Example of Common Breeding Ground of Mosquito:







Lake

Tire piles

Rain filled styrofoam







Tree hollow

Drain

Clogged rain gutter

Registered by:





Dual Action

Control LARVAE and ADULTS Mosquitoes in One-Shot Application



READ LABEL BEFORE USE JIRP. P/0718/315



MOSQUITO

There are thousands of mosquito species worldwide. Adult female mosquitoes are harmful as they feed on blood of living vertebrates including humans, and some even transmit severe infectious human and livestock diseases such as dengue, malaria, yellow fever and Japanese encephalitis. Male mosquitoes consume plant juices as their daily food source while adult females consume blood for egg development.

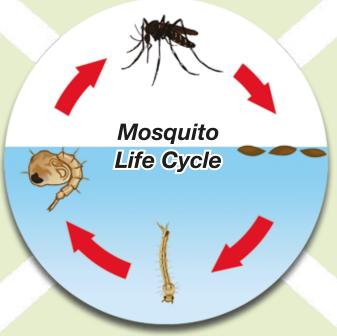
A MOSQUITO'S LIFE CYCLE

Adul

The life span of the adult mosquito varies among species and depends on several other factors such as temperatures, humidity, sex of the mosquito and time of year. Most males live about 2 weeks, relatively shorter than females who live about a month.

Pupa

A pupa shapes like a comma. It is a non-feeding and resting stage where it develops into an adult within 2 days. A fully developed adult mosquito splits the pupal skin and emerges.



Egg

A mosquito can lay 100-200 eggs in water throughout its adult stage. Depending on the mosquito species, some eggs float on water in rafts, while others are laid singly. The eggs hatch into larvae within 48 hours.

Larva

A mosquito larva lives in water and feeds on organic matter and microorganisms in water. Most larvae come with siphon tubes for breathing and attachment to the water surface. A larva sheds its skin (moulting) four times as it grows larger after each moulting. A larva develops into a pupa after the fourth moult.

Picture courtesy by : IMASPRO & Institute for Medical Research (IMR), Malaysia

LAVERMATE is introduced as larvicide to break the mosquitoes life cycle for killing the larvae in their aquatic habitat before they reach maturity. **LAVERMATE** can be used in any period of time in any water bodies to kill the larvae. Recent study showed that **LAVERMATE** is effective to control adult mosquitoes too.

(Lee, H. L. and Nazni, W. A. (2016). Field Evaluation of the Combined Adulticidal and Larvicidal Activity of ULV Applied Lavermate against the Dengue Vector, Aedes aegypti (L.). Institute for Medical Research. Unpublished paper.)

LAVERMATE

LAVERMATE is an insecticide containing temephos in the form of emulsifiable concentrate (EC). Temephos is an organophosphate with relative low toxicity of its kind. It is effective against larvae and may be used on any of the larval growth stages. When use as space spray, it will suppress adult mosquitoes population effectively.



FEATURES

- One shot application to control both adult and larvae of mosquitoes.
- An organophosphate insecticide with contact action.
- Suitable for spot treatment and space spraying.

BENEFITS

- ✓ Labor saving.
- ✓ Residual effect for 2 months.
- ✓ Recommended for clear and polluted water as larvicidal activity.
- ✓ Recommended for deserted water-storage, lake, pond, drain, trench or mosquitoes' breeding sites, public health and domestic areas.

IMPORTANCE OF CONTROLLING MOSQUITOES BREEDING SITES

- To control the population of mosquito larvae to become adults which capable for reproduction.
- Preventing the new mosquitoes generations become disease-carrying insects from developing to spread of the vector-borne disease.