

WHOPES-recommended compounds and formulations for control of mosquito larvae

Insecticide compounds and formulation(s) ¹	Class group ²	Dosage (active ingredient)		
		General (open water bodies)		Container-breeding (mg/L)
		(g/ha)	(mg/m ²)	
<i>Bacillus thuringiensis israelensis</i> , strain AM65-52, WG (3000 ITU/mg)	BL	125–750 ³	12.5–75 ³	1–5 ³
<i>Bacillus thuringiensis israelensis</i> , strain AM65-52, GR (200 ITU/mg)	BL	5,000–20,000 ³	500–2000 ³	-
Chlorpyrifos EC	OP	11–25	1.1–2.5	-
Diflubenzuron DT, GR, WP	BU	25–100	2.5–10	0.02–0.25
Novaluron EC	BU	10–100	1–10	0.01–0.05
Pyriproxyfen GR	JH	10–50	1–5	0.01
Fenthion EC	OP	22–112	2.2–11.2	-
Pirimiphos-methyl EC	OP	50–500	5–50	1
Temephos EC, GR	OP	56–112	5.6–11.2	1
Spinosad DT, EC, GR, SC	SP	20–500	2–50	0.1–0.5
Spinosad 83.3 monolayer DT	SP	250–500	25–50	-
Spinosad 25 extended release GR				
<i>Open bodies of water</i>	SP	250–400	25–40	-
<i>Control of Culex quinquefasciatus in open bodies of water with high organic matter</i>	SP	1000–1500	100–150	-

¹ DT = tablet for direct application; GR = granule; EC = emulsifiable concentrate; WG = water-dispersible granule; WP = wettable powder.

² BL = Bacterial Larvicide; BU = Benzoylureas; JH = Juvenile Hormone Mimics; OP = Organophosphates; SP = Spinosyns.

³ Formulated product.

Notes:

1. Reports of the WHOPES Working Group Meetings (available at: <http://www.who.int/whopes/recommendations/en/>) and the WHOPES publication “Pesticides and their application for control of vectors and pests of public health importance” (available at http://whqlibdoc.who.int/hq/2006/WHO_CDS_NTD_WHOPES_GCDPP_2006.1_eng.pdf) should be consulted for guidance on use and recommendations;
2. The WHO Guidelines for drinking-water quality (http://www.who.int/water_sanitation_health/dwq/gdwq3rev/en/) provides authoritative guidance and should be consulted for application of insecticides in potable water for mosquito larviciding; and
3. WHO recommendations on the use of pesticides in public health are valid ONLY if linked to WHO specifications for their quality control (available at: <http://www.who.int/whopes/quality/en/>).