

Delfin® WG Biological Insecticide

A water dispersible granule for the control of a range of caterpillars in
Vegetables, Tomatoes, Vines, Fruit Trees, Kiwifruit and Tobacco

Composition:

**Bacillus thuringiensis, subspecies kurstaki solids,
Spores and lepidopteran active toxins 85.0%**

Characteristics:

- Delfin has exceptionally effective and fast action strain of Bt on most of lepidopterous larve
- DELFIN can safely be used for the protection of most crops in the field of Agriculture, forestry and Ornamentals..
- Delfin is exempted from tolerance requirements in USA
- Delfin is formulated in newly top quality WG formulation
- Delfin is certified for organic agriculture by **OMRI**

Mode of action:

DELFIN WG is a biological insecticide based on the SA-11 strain of *Bacillus thuringiensis* (Bt) subspecies *kurstaki*. (Bt) is a spore-forming bacterium which produces, in addition to spores, crystals of a protein endotoxin. This endotoxin is specifically toxic to lepidopteran larvae.

DELFIN WG acts within the gut of the target larvae. DELFIN WG causes feeding inhibition within a few minutes of ingestion. Eventually disintegration of the gut wall and larval death occur. Dying larvae can be expected to be found for several days after application.

DELFIN WG is a selective agent that provides fast and effective control of lepidopteran larvae, without harmful effects on humans, domestic animals, honey-bees, wildlife, fish and beneficials. Thorough spray coverage is essential as DELFIN WG is active only if ingested by the caterpillar. Coverage of the underside of the leaf is important.



Recommendations of use:


The given recommended uses and rates are to be considered as guidelines and may have to be adapted to local conditions and regulations.

Favorable results were also obtained in some other segments, but further testing is necessary

Main recommended uses and rates are given in the subsequent table:

Crop	Pests	Rate		Critical Comments
		High Volume /100 L water	Low Volume /ha	
Cole Crops Cabbage Cauliflower Broccoli Brussels Sprouts	Cabbage Moth (<i>Plutella xylostella</i>), Cabbage White Butterfly (<i>Pieris rapae</i>)	25 g	500 g	Apply at first sign of infestation and repeat at 7 to 10 day intervals or as required to maintain control of pests. Higher volume sprays will improve coverage and performance. For low volume applications, use a minimum of 400 L/ha of water.
Vines	Vine Moth (<i>Phalaenoides glycinæ</i>) Lightbrown Apple Moth (<i>Epiphyas postvittana</i>)	12.5 g	-	Apply at first sign of infestation, as high volume spray and repeat as required to maintain control of pests, or spray as cover sprays complimentary to commonly used pesticides in an adequate spray program.
Fruit Trees	Lightbrown Apple Moth (<i>Epiphyas postvittana</i>)			
Tobacco	Tobacco Looper (<i>Chrysodeixis argentifera</i>)	25g		Apply as required by presence of Loopers.



Kiwi Fruit	Leaf Roller Caterpillar (<i>Cryptoptila immersana</i>), Lightbrown Apple Moth (<i>Epiphyas postvittana</i>)	25 to 50 g	Use on early instar caterpillars. Use the higher rate on larger caterpillars. Apply after bud burst during periods of Lightbrown Apple Moth activity at 10 to 14 day intervals. Application during flowering is suitable as spray is non-toxic to bees.
Ornamentals	Loopers (<i>Chrysodeixis</i> spp.) Lightbrown Apple Moth (<i>Epiphyas postvittana</i>), Native Budworm (<i>Helicoverpa punctigera</i>), Corn Earworm (<i>Helicoverpa armigera</i>), Dayfeeding Armyworm (<i>Spodoptera exempta</i>), Lesser Armyworm (<i>Spodoptera exigua</i>), Cluster Caterpillar (<i>Spodoptera litura</i>)	25g	Ensure a thorough coverage of the foliage at first sign of infestation and repeat at 10 to 14 day intervals or as required.
Strawberries	Loopers (<i>Chrysodeixis</i> spp.) Lightbrown Apple Moth (<i>Epiphyas postvittana</i>), Leaf Roller Caterpillar (<i>Cryptoptila immersana</i>), Budworms (<i>Helicoverpa</i> spp.), Native Budworm (<i>Helicoverpa punctigera</i>), Corn Earworm (<i>Helicoverpa armigera</i>), Dayfeeding Armyworm (<i>Spodoptera exempta</i>), Lesser Armyworm (<i>Spodoptera exigua</i>), Cluster Caterpillar (<i>Spodoptera litura</i>)	25g	

Apply when monitoring reveals significant infestation. Repeat at 7 to 10 day intervals as necessary.			Leaf Eating Caterpillars	Macadamias
Use the higher rate when <i>Helicoverpa</i> spp. pressure is high. Apply at first sign of infestation and repeat at 4 to 7 day intervals while crop is susceptible to pest damage. Higher volume sprays will improve coverage and performance. For low volume applications, use a minimum of 200 L/ha of water.	0.5 to 1.0 kg	50 to 100 g	<i>Helicoverpa</i> spp.	Tomatoes
Use the higher rate when <i>Helicoverpa</i> spp. pressure is high. Add Larvin 375 with heavy egg pressure. Use the high rate of Larvin for larger larvae. Higher volume sprays will improve coverage and performance.	0,5 to 1.0 kg plus 0.5 to 1.0 L Larvin 375	50 to 100 g plus 50 to 70 mL Larvin 375		
The presence of the predatory wasp, <i>Copidosoma</i> spp. may improve Potato Moth control.		100 g	Potato Moth (<i>Phthorimaea operculella</i>)	

