

# POISON

KEEP OUT OF REACH OF CHILDREN  
READ SAFETY DIRECTIONS BEFORE OPENING OR USING

eChem

# BIFENTHRIN 100 EC

INSECTICIDE

ACTIVE CONSTITUENT: 100 g/L BIFENTHRIN  
SOLVENT: 763 g/L HYDROCARBON LIQUID

GROUP **3A** INSECTICIDE

For the control of *Helicoverpa* spp. in cotton, tomatoes, lucerne seed crops, navy beans; carpophilus beetle in stone fruit (except cherries); certain species of mites in bananas, cotton and tomatoes; longtailed mealy bug in pears; banana weevil borer and banana rust thrips in bananas; mirids in cotton; whitefly in tomatoes; redlegged earth mite, blue oat mite, bryobia mite, webworm and brown pasture looper in faba beans, subterranean clover, clover, canola, wheat, barley, field peas, lupins and lucerne; vegetable weevil in canola; and certain species of wireworms in cotton and sugarcane; fig longicorn in grapes and citrus leafeating weevil in citrus as per the Directions for Use.

IMPORTANT: READ THIS LEAFLET BEFORE USE.

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## DIRECTIONS FOR USE

### RESTRAINTS:

DO NOT use as a foliar spray in banana plantations and orchards where mite predators and other beneficials are established and providing effective mite control and/or other pest control.

DO NOT apply as foliar treatment if rainfall is expected before spray deposits dry on leaf surfaces.

DO NOT apply to bananas by aircraft.

Crop	Pest	State	Rate	WHP	Critical Comments
Bananas	Banana weevil borer ( <i>Cosmopolites sordidus</i> ) Banana rust thrips ( <i>Chaetanaphothrips signipennis</i> )	QLD, NSW, WA, NT only	<b>Seasonal Program</b> <u>Stool Treatment Method</u> 250 - 330 mL/100 L twice per year OR 660 mL/100 L once per year Band Treatment Method 250 mL/100 L twice per year.  <b>Monitoring Program</b> <u>Stool Treatment Method</u> 330 mL/100 L Band Treatment Method 250 mL/100 L	1 day	<b>Seasonal Program</b> <b>Twice per year timing</b> - Apply in October/November (spring/early summer) and March/April (late summer/autumn). Use the higher rate (concentration) when borer pressure or damage is high. <b>Once per year Timing</b> - Apply in October/November OR March/April. <b>Monitoring Program</b> Monitor weevil borer populations carefully by trap counts and/or corm damage ratings, beginning in September when pest activity is on the increase and continue until April. Apply treatment when banana weevil borers reach or exceed acceptable threshold levels. Monitor borer control after application and re-treat as required. <b>Banana Weevil borer:</b> Application should be made <b>after rain or irrigation</b> during periods of high adult borer activity. <b>Banana rust thrips:</b> Application against banana weevil borer will give coincident rust thrips control, particularly when application is made when thrips activity is on the increase usually beginning September and into the summer months. <b>Application Method</b> <u>Stool Treatment Application</u> - Remove trash from the base of stools and apply 500 – 700 mL of spray solution to each stool, depending on stool size. Treat the bottom 30 cm of each stool as well as the soil in a 30 cm band around each stool, ensuring thorough treatment of both butt(s) and follower(s). Use the lower spray volume of 500 mL on small stools less than 50 cm across the entire base. <u>Band Treatment Application</u> - Apply as a band application with a side delivery boom and offset nozzles on both sides of the row with the spray pattern positioned to spray 30 cm of soil on either side of the row and 30 cm in height. Aim to apply a total spray volume of 1 L/stool area. For single sucker row configurations apply 28 L of solution per 100 meters of row in a band 0.5 m wide on each side of the row overlapping in the centre. For double sucker configurations apply 56 L of solution per 100 metres of row in a band 1 m wide on each side of the double row with the spray pattern overlapping between the rows.

## MATERIAL SAFETY DATA SHEET

Additional information is listed in the Material Safety Data Sheet, which is available from the supplier.

### NOTICE TO BUYER

Seller warrants that the product conforms to its chemical description and is reasonably fit for the purpose stated on the label when used in accordance with directions under normal conditions of use. No warranty of merchantability for a particular purpose, express or implied, extends to the use of the product contrary to label instructions, or under abnormal conditions.

Crop	Pest	State	Rate	WHP	Critical Comments
Bananas	Strawberry spider mite ( <i>Tetranychus lambi</i> )	QLD & WA only	40 mL/100 L	8 days	Monitor mite population on old leaves particularly during hot dry conditions. Apply eChem Bifenthrin 100 EC Insecticide as a preventative rather than a curative treatment before damage occurs, and before mite numbers build up to damaging levels. Follow up applications may be required at 10 to 14 day intervals. Thorough coverage of the lower leaf surface is essential to ensure good control. Use a total spray volume of 300 – 500 L/ha.
Cotton	Native budworm ( <i>Helicoverpa punctigera</i> ) Cotton bollworm ( <i>Helicoverpa armigera</i> ) Two spotted mite ( <i>Tetranychus urticae</i> ) Green mired ( <i>Creontiades dilutus</i> ) Apple dimpling bug ( <i>Campylomma liebknechti</i> )	QLD, NSW, WA only	600 - 800 mL/ha	14days	Apply as indicated by field checks. Use the higher rate when pest pressure is high, conditions favour pest development and when increased residual protection is required. <b>Budworm and Bollworm:</b> Applications should be timed to coincide with egg hatch and when small larvae up to 5 mm are present. Do not apply this product to <i>Helicoverpa</i> (= <i>Heliothis</i> ) <i>armigera</i> larvae larger than 5 mm in length. <b>Two spotted mite:</b> Applications against <i>Helicoverpa</i> spp will give good control of coincident two spotted mite, particularly when applied on low mite populations (around 10% leaf infestation). If conditions continue to favour mite development a second application may be required 14 - 20 days later. <b>Green mirid &amp; Apple dimpling bug:</b> Apply at recommended threshold levels as indicated by field checks. Use the higher rate for increased pest pressure and longer residual protection. <b>Wireworms:</b> Apply as a spray into the furrow at planting. Use a spray nozzle which will deliver a coarse spray in a total volume of 60 - 100 L/ha in a 10 cm band over the seed before soil is brought in behind covering tyres in front of the press wheel. <sup>1</sup> The rate is based on a 1 metre row spacing. If row spacing varies from 1 m then apply at the use rate according to mL/100 m of row.
	False wireworm ( <i>Pterohlaeus alternatus</i> ) Sugarcane wireworm ( <i>Arypnus variabilis</i> )		375 mL/ha <sup>1</sup> or 3.8 mL/100 m of row		
Canola, Faba beans, Subterranean clover, Clover, Barley, Field Peas, Lupins, Lucerne & Wheat	Redlegged Earth Mite ( <i>Halotydeus destructor</i> ) Brown pasture looper ( <i>Ciampa arietaria</i> ) Blue oat mite ( <i>Penthaleus major</i> ) Pasture webworm ( <i>Hednota</i> spp.) Bryobia mites ( <i>Brvobia</i> spp.)	All states	50 – 100 mL/ha	4 weeks (grazing)	Apply as a broadcast ground rig application in a total water volume of 50 – 200 L/ha or by air in a minimum total water volume of 20 L/ha. Apply to bare soil after conventional cultivation and sowing or onto well grazed or sprayed pasture after direct drilling. Treat infested paddocks after sowing and before or soon after seedling emergence. Use the higher rate on heavier infestations and for longer residual protection. eChem Bifenthrin 100 EC Insecticide is compatible with some herbicides. See compatibility statement for details.  Use the 100 mL rate when pest pressure is low. Monitor adjacent habitat and edges of the field for the presence of vegetable weevil prior to making a decision whether to spray.
			100 mL/ha		
			200 mL/ha		
Canola	Vegetable weevil ( <i>Listroderes difficilis</i> )	All states	100 – 200 mL/ha		
Peaches, Nectarines, Plums, Apricots	Carpophilus beetles ( <i>Carpophilus</i> spp.)	All states	Dilute spraying 50 mL/100 L  Concentrate spraying Refer to the mixing/ application section	1 day	Monitor stone fruit orchards for Carpophilus beetle as fruit approach maturity and becomes susceptible to attack. Apply eChem Bifenthrin 100 EC Insecticide as a dilute spray before beetles reach damaging levels. Apply to the foliage and fruit of trees. Continue to monitor beetle numbers and if necessary reapply eChem Bifenthrin 100 EC Insecticide up to 1 day before harvest or use another insecticide registered for this purpose. Apply no more than 2 applications per season. <b>There must be a minimum of 10 days between re-treatment and the initial application.</b> Apply the same total amount of product to the target crop whether applying this product by dilute or concentrate spraying methods. Do not use at rates greater than 100 mL per 100 L water when using concentrate spraying. Cultural methods (eg destruction of fallen fruit by mulching) should be used to prevent excessive build up of Carpophilus beetle.
Citrus	Leafeating weevil ( <i>Eutinophaea bicristata</i> )	All states	<b>Pre-emergence program</b> 12.5 or 25 mL/tree <b>Post-emergence monitoring program</b> 6 mL/tree	-	Apply as a high volume band application in a 1.5 to 2 metres wide swath, to the ground, sides of the row, under each tree. Aim to apply a total spray volume of 5 to 10 L/tree (eg at 250 trees/ha = 1250 to 2500 L/ha). <b>Pre-emergency program:</b> Apply just prior to, or at the first sign of major beetle emergence in mid-October. Use the higher rate in blocks with a history of high beetle numbers or when longer residual control is required. <b>Post-emergence monitoring program:</b> Apply at peak beetle emergence in October/November as indicated by field monitoring. (Refer to monitoring statement on label). Follow up treatment may be necessary based on a threshold of 25 beetles per 10 sites per orchard in consecutive counts 1 - 2 weeks apart.
Grapes	Fig longicorn ( <i>Acalolepta vastator</i> )	NSW, ACT & WA only	1000 mL/100 L	-	The application MUST be made at late dormancy after pruning and before bud burst. Apply a single high volume spray, with nozzles directing the spray solution to the trunk and cordons (arms) of grape vines to achieve thorough wetting of the bark. Total spray volume should be about 500 mL/vine achieved by hand application.
Lucerne seed crops	Native budworm ( <i>Helicoverpa punctigera</i> )	All states	400 – 600 mL/ha	-	Do not treat lucerne seed crops for alfalfa sprout production. Apply as indicated by field checks after the commencement of flowering. Use the higher rate when pest pressure is high, conditions favour pest development and when increased residual protection is required. <b>Native Budworm:</b> Applications should be timed to coincide with egg hatch and when small larvae up to 5 mm are present.
Navy beans	Native budworm ( <i>Helicoverpa punctigera</i> ) Corn earworm ( <i>Helicoverpa armigera</i> )	All states	600 – 800 mL/ha	14 days (harvest and grazing)	Apply as indicated by field checks from flowering onwards. Use the higher rate when pest pressure is high, conditions favour pest development and when increased residual protection is required. <b>Budworm and Earworm:</b> Applications should be timed to coincide with egg hatch and when small larvae up to 5 mm are present. Do not apply this product to <i>Helicoverpa</i> (= <i>Heliothis</i> ) <i>armigera</i> larvae larger than 5 mm in length.

