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

Bugmaster® Flowable

INSECTICIDE

Active Constituent: 500 g/L CARBARYL
(an anti-cholinesterase compound)

GROUP	1A	INSECTICIDE

For the control of certain insects in fruit, nuts, vegetables, crops and pastures and for certain other uses as specified in the DIRECTIONS FOR USE table

GENERAL INSTRUCTIONS

Insecticide Resistance Warning

For insecticide resistance management Bugmaster Flowable Insecticide is a Group **1A** insecticide.
Some naturally occurring insect biotypes resistant to Bugmaster Flowable Insecticide and other Group **1A** insecticides may exist through normal genetic variability in any insect population. The resistant individuals can eventually dominate the insect population if Bugmaster Flowable Insecticide or other Group **1A** insecticides are used repeatedly. The effectiveness of Bugmaster Flowable Insecticide on resistant individuals could be significantly reduced. Since the occurrence of resistant individuals is difficult to detect prior to use, Bayer CropScience Pty Ltd accepts no liability for any losses that may result from the failure of Bugmaster Flowable Insecticide to control resistant insects.
Bugmaster Flowable Insecticide may be subject to specific resistance management strategies. For further information contact your local supplier, Bayer CropScience representative or local agricultural department agronomist.

Export of Treated Produce

Growers should note that MRLs or import tolerances do not exist in all markets for edible produce treated with Bugmaster. If you are growing edible produce for export, please check with Bayer CropScience Pty Ltd for the latest information on MRLs and import tolerances BEFORE using Bugmaster.

Mixing

Shake container before use. Fill tank half full of water, add Bugmaster® Flowable and mix thoroughly, then add remainder of water and mix again. When using as a tank mix with spray oils, add the product AFTER thoroughly mixing the oil with water in the spray tank.

Application

Good pest control and fruit thinning (pome fruit) requires even, thorough coverage of the target area. Application should be made using appropriate spray equipment and sufficient water to provide adequate penetration and coverage. Equipment settings and water volume may need to vary, depending on the growth stage of the crop.

Do not apply under weather conditions, or from spraying equipment, which could be expected to cause spray to drift onto adjacent crops, crop lands, pastures or livestock.

Special Instructions for Tree and Vine Crops

Dilute Spraying

- Use a sprayer designed to apply high spray volumes, up to the point of run-off and matched to the crop being sprayed.
- Set up and operate the sprayer to achieve even coverage throughout the crop canopy. Apply sufficient spray volume to cover the crop to the point of run-off. Avoid excessive run-off.
- The required spray volume to achieve point of run-off may be determined by applying different test volumes, using different settings on the sprayer, or from industry guidelines or other expert advice.
- Add the amount of product specified in the Directions for Use table for each 100 L of water. Spray to the point of run-off.
- The required dilute spray volume to achieve point of run-off will change and the sprayer set up and operation may also need to be changed, as the crop grows.

Concentrate Spraying

- Use a sprayer designed and set up for concentrate spraying (that is a sprayer which applies spray volumes less than those required to reach the point of run-off) and matched to the crop being sprayed.
- Set up and operate the sprayer to achieve even coverage throughout the crop canopy using your chosen spray volume.
- Determine an appropriate dilute spray volume (see ***Dilute Spraying*** above) for the crop canopy. This is needed to calculate the concentrate mixing rate.
- The mixing rate for concentrate spraying can then be calculated in the following way:
  EXAMPLE ONLY

1. Dilute spray volume as determined above: For example 1500 L/ha
2. Your chosen concentrate spray volume: For example 500 L/ha
3. The concentration factor in this example is: 3 X (i.e. 1500 L ÷ 500 L = 3)
4. If the dilute label rate is 200 mL/100 L, then the concentrate rate becomes 3 x 200, that is 600 mL of product per 100 L water for concentrate spraying.

- The chosen spray volume, amount of product per 100 L, and the sprayer set up and operation may need to be changed as the crop grows.
- For further information on concentrate spraying, users are advised to consult relevant industry guidelines, undertake appropriate competency training and follow industry Best Practices.

Crop Safety

Several days of high humidity or rain after spraying may result in some damage to tender foliage.

Pome Fruit

DO NOT use on Quinces. DO NOT use on McIntosh and York varieties of apples. DO NOT apply to Delicious and Williams Favourite apples before, during or shortly after frost as russet may occur. DO NOT apply in combination with summer oil on apples and pears as fruit spotting may occur.

Fruit Thinning

Applications may cause russet to Delicious and Williams Favourite when applied before, during or after frost. Some leaf burn may occur on tender foliage if humidity is very high for several days after application. Residues can affect colouring of red varieties.

Compatibility

This product may be combined in the spray vat with any one of the following products: copper oxychloride, dimethoate, Kelthane®, Rovral® Liquid, Spin® Flo, summer spray oil, wettable sulphur. DO NOT mix with Lime Sulphur, Bordeaux mixture or other alkaline materials.

As formulations of other manufacturers' products are beyond the control of Bayer CropScience Pty Ltd, all mixtures should be tested prior to mixing commercial quantities.

PRECAUTIONS

Re-entry period

Do not allow entry into treated areas until the spray deposits have dried. When prior entry is necessary, wear cotton overalls buttoned to the neck and wrist and elbow-length PVC gloves. Clothing must be laundered after each day's use.

PROTECTION OF LIVESTOCK

Dangerous to bees. DO NOT spray any plants in flower while bees are foraging.

PROTECTION OF WILDLIFE, FISH, CRUSTACEANS AND ENVIRONMENT

DO NOT contaminate streams, rivers or waterways with the chemical or used containers.

STORAGE AND DISPOSAL

Store in the closed, original container in a cool, well-ventilated area. Do not store for prolonged periods in direct sunlight.

Triple or preferably pressure rinse containers before disposal. Add rinsings to spray tank. Do not dispose of undiluted chemicals on site. If recycling, replace cap and return clean containers to recycler or designated collection point. If not recycling, break, crush, or puncture and bury empty containers in a local authority landfill. If no landfill is available, bury the containers below 500 mm in a disposal pit specifically marked and set up for this purpose clear of waterways, desirable vegetation and tree roots. Empty containers and product should not be burnt.

SAFETY DIRECTIONS
Product is poisonous if absorbed by skin contact or swallowed. Avoid contact with eyes and skin. Do not inhale spray mist. When preparing the spray wear elbow-length PVC gloves. If product on skin, immediately wash area with soap and water. After use and before eating, drinking or smoking, wash hands, arms and face thoroughly with soap and water. After each day's use, wash gloves.

FIRST AID
If poisoning occurs, contact a doctor or Poisons Information Centre (telephone 13 11 26). If swallowed, give one atropine tablet every 5 minutes until dryness of the mouth occurs - if poisoned by skin absorption or through lungs, remove any contaminated clothing, wash skin thoroughly and give atropine tablets as above. Get to a doctor or hospital quickly.

MATERIAL SAFETY DATA SHEET
Additional information is listed in the Material Safety Data Sheet, which can be obtained from www.bayercropscience.com.au.

EXCLUSION OF LIABILITY
This product must be used strictly as directed, and in accordance with all instructions appearing on the label and in other reference material. So far as it is lawfully able to do so, Bayer CropScience Pty Ltd accepts no liability or responsibility for loss or damage arising from failure to follow such directions and instructions.

NRA Approval No.: 40146/0603

FOR 24 HOUR SPECIALIST ADVICE
IN EMERGENCY ONLY
PHONE 1800 033 111

PEST INDEX

Pest		Pest	
28-Spotted Ladybird	*Epilachna virgintisex punctata*	Leafminer Caterpillars	O. LEPIDOPTERA
Ants	F. FORMICIDAE	Leafroller Moths	F. TORTRICIDAE
Armyworms	F. NOCTUIDAE	Lightbrown Apple Moth	*Epiphyas postvittana*
Australian Plague Locust	*Chortoicetes terminifera*	Loopers	F. GEOMETRIDAE
Beetles	O. COLEOPTERA	Lucerne Flea	*Sminthurus viridis*
Black Sunflower Scarab	*Pseudoheteronyx* spp.	Lucerne Leafroller	*Merophyas divulsana*
Bronze Orange Bug	*Musgraveia sulciventris*	Macadamia Cup Moth	*Comana fasciata*
Brown Planthopper	*Nilaparvata lugens*	Macadamia Nutborer (Macadamia Nut Moth)	*Cryptophlebia ombrodelta*
Cabbage Moth	*Plutella xylostella*	Macadamia Twig-girdler	*Neodrepta luteotactella*
Cabbage White Butterfly	*Pieris rapae*	Mealybugs	*F. PSEUDOCOCCIDAE*
Castor Oil Looper	*Achaea janata*	Migratory Locust	*Locusta migratoria*
Caterpillars	O. LEPIDOPTERA	Monolepta Beetle (See Redshouldered Leaf Beetle)	
Chewing Insects	Various	Moths	O. LEPIDOPTERA
Citrus Leafeating Caterpillar	Various	Orange Fruitborer	*Isotenes miserana*
Cluster Caterpillar	*Spodoptera litura*	Oriental Fruit Moth	*Cydia molesta*
Codling Moth	*Cydia pomonella*	Pasture Cockchafer	F. SCARABAEIDAE
Common Mango Scale	*Aulacaspis tubercularis*	Pasture Leafhopper	*Toya* spp.
Cornelian (Butterfly)	*Deudoryx epijarbas diovis*	Pear and Cherry Slug	*Caliroa cerasi*
Cucurbit Stemborer	*Apomecyna histrio*	Pearleaf Blister Mite	*Phytoptus pyri*
Cutworms	*Agrotis spp.; Noctuidae*	Pink Wax Scale	*Ceroplastes rubens*
Early Fruit Caterpillars (Heliothis)	*Helicoverpa* spp.	Potato Moth	*Phthorimaea operculella*
Elm Leaf Beetle	*Pyrrhalta luteola*	Pumpkin Beetle	*Aulacophora hilaris*
European Earwig	*Forficula auricularia*	Raspberry Fruit Caterpillar	*Lobesia* spp.
False Wireworms	F. TENEBRIONIDAE	Redshouldered Leaf Beetle (Monolepta Beetle)	*Monolepta australis*
Fig Leafhopper	*Austroasca australica*	Rough Bollworm	*Earias huegeli*
Flattid Planthoppers	F. FLATIDAE	Rutherglen Bug	*Nysius vinitor*
Fleas	O. SIPHONAPTERA	Sandal-box Hawk Moth	*Coenotes eremophilae*
Fruit-tree Borer	*Cryptophasa melanostigma*	Sitona Weevil	*Sitona discoideus*
Fruitpiercing Moth (Fruitsucking Moth)	Various	Sorghum Midge	*Contarinia sorghicola*
Fullers Rose Weevil	*Asynonychus cervinus*	Spined Citrus Bug	*Biprorulus bibax*
Grapeleaf Blister Mite	*Colomerus vitis*	Sucking Insects	Various
Grapevine Hawk Moth	*Hippotion celerio*	Swarming Leaf Beetles	*Rhyparida* spp.
Grapevine Moth	*Phalaenoides glycinae*	Threelined Potato Beetle	*Lema trivittata*
Grass Caterpillar	*Herpetogramma licarsisali*	Tobacco Beetle	*Lasioderma serricorne*
Grasshoppers	F. ACRIDIDAE	Tobacco Leaf Miner	*Phthorimaea operculella*
Green Treehopper	*Sextius virescens*	Vegetable Weevil	*Listroderes difficilis*
Green Vegetable Bug	*Nezara viridula*	Vespulid (European and English) Wasps	F. VESPULIDAE
Heliothis (Budworms)	*Helicoverpa* spp.	Wasps	O. HYMENOPTERA
Honey Bees in concealed hives	*Apis mellifera*	Weevils	F. CURCULIONIDAE
Jassids (See Leafhoppers)		White Wax Scale	*Gascardia destructor*
Leafeating Beetles	F. CHRYSOMELIDAE	Wingless Grasshopper	*Phaulacridium vittatum*
Leafeating Ladybirds	*Epilachna* spp.	Yellow Peach Moth	*Conogethes punctiferalis*
Leafeating Loopers	F. GEOMETRIDAE	Yellow-winged Locust	*Gastrimargus musicus*
Leafhoppers (Jassids)	F. CICADELLIDAE		

DIRECTIONS FOR USE

TREE AND VINES CROPS

RATE In the following table, all rates given are for dilute spraying. Where appropriate, for concentrate spraying, refer to the **Application** section in the **GENERAL INSTRUCTIONS.**					**CRITICAL COMMENTS** Where appropriate apply by dilute or concentrate spraying equipment. Apply the same total amount of product to the target crop whether applying this product by dilute or concentrate spraying methods.
CROP	**PEST**	**STATE**	**RATE (dilute spraying)**	**WHP**	
Avocados	Redshouldered Leaf Beetle	Qld, NSW, NT, WA only	200 mL/100 L water	3(H) days	Apply when infestation is first observed and repeat as swarms re-infest.
Citrus	Lightbrown Apple Moth, Yellow Peach Moth	All States	160 to 200 mL/ 100 L water		Apply at first sign of pest activity and repeat at intervals of 2 weeks or as necessary. Use higher rate when higher insect pressure occurs.
	Fruitpiercing Moth (Fruitsucking Moth)	Vic, Tas, SA, WA only			
	Orange Fruitborer	Qld, NSW, Vic, SA, WA only			
	Spined Citrus Bug		100 mL/100 L water		
	Bronze Orange Bug	Qld, WA only			
	Citrus Leaf-eating Caterpillar, Fuller's Rose Weevil	NSW, Vic, Tas, SA, WA only	160 to 200 mL/ 100 L water		Apply at first sign of pest activity and repeat as necessary. Use higher rate where high insect pressure occurs. Fullers Rose Weevil: Spray lower parts of the trees and ground beneath.
	Pink Wax Scale, White Wax Scale	Qld, NSW, WA only	140 mL plus 1.0 L summer spray oil per 100 L water		Spray trees thoroughly to dripping point in late November to early December followed by a second application in late January to early February. Add the summer oil to water in vat before Bugmaster® Flowable. Keep the mixture agitated while spraying. **Note:** Concentrate spraying is not appropriate for this use.
	White Wax Scale	Vic, Tas, SA only	100 mL plus 1.0 L summer spray oil per 100 L water		
Feijoa, Guavas	Orange Fruitborer	Qld, WA only	200 mL/100 L water		
Fruit - General	Wingless Grasshopper	Qld, Tas, SA, WA only	175 mL/100 L water		Spray infested area thoroughly as required.
Grapes	Grapeleaf Blister Mite, Grapevine Hawk Moth, Grapevine Moth, Lightbrown Apple Moth	All States	160 to 200 mL/ 100 L water		Apply at first sign of pest activity and repeat at intervals of 2 weeks or as necessary. For cutworms spray around base of plants when attack first noticed. Use higher rate where high insect pressure occurs.
	Cutworms, Mealybugs	Vic, Tas, SA, WA only			
Jaboticaba, Jackfruit	Swarming Leaf Beetle	Qld, WA only	200 mL/100 L water		Several applications may be needed. DO NOT apply during flowering.
Kiwi Fruit	Lightbrown Apple Moth	Vic, WA only	160 to 200 mL/ 100 L water		Apply when pests appear and repeat as necessary. Apply as high volume spray at 7 to 10 day intervals when pests present. Use higher rate where high insect pressure occurs.
	Caterpillars	NSW, WA only	160 mL/100 L water		
Loquats	Lightbrown Apple Moth	Qld, WA only	200 mL/100 L water		Apply at first sign of pests and repeat as required.
Lychees	Castor Oil Looper, Leafeating Looper, Macadamia Nutborer, Redshouldered Leaf Beetle, Swarming Leaf Beetle				

TREE AND VINE CROPS (continued)

CROP	PEST	STATE	RATE (dilute spraying)	WHP	CRITICAL COMMENTS
Macadamias	Macadamia Nutborer, Macadamia Twig-girdler, Redshouldered Leaf Beetle	Qld, NSW, WA only	200 L/100 L water	–	Apply a preventative spray after moths have been flighting.
	Cornelian (Butterfly), Macadamia Cup Moth, Macadamia Nut Moth, Yellow Peach Moth	Qld, WA only			
Mangoes	Fig Leafhoppers	Qld, NSW, WA only	200 mL/ 100 L water	3(H) days	Apply when large populations appear on leaf stalks (October - November).
	Flatid Planthoppers, Pink Wax Scale		140 mL/ 100 L water		Apply in December.
	Common Mango Scale	Qld, WA only			
Pecans	Orange Fruitborer, Yellow Peach Moth	Qld, NSW, WA only	200 mL/ 100 L water		Apply to mature trees carrying nuts. Direct spray to clusters of nuts where pests build up.
POME FRUIT Apples, Pears	Early Fruit Caterpillars (Heliothis)	NSW, Vic, Tas, SA, WA only	160 to 200 mL/ 100 L water		Apply at first sign of pest activity. Repeat spray at 21 day intervals during the season. Use higher rate where high insect pressure occurs. A reduction in fruit set may occur if application is made within 30 days after full bloom. DO NOT apply to apples and pears within 30 days AFTER full bloom if reduction in fruit set is not desired.
	Codling Moth, Lightbrown Apple Moth, Pearleaf Blister Mite	All States			
	Fruit thinning				A careful appraisal of all factors likely to thin the crop should be made before spraying. If reduction in fruit set is desired apply between 7 to 28 days after full bloom.
Pears	Pear and Cherry Slug	Qld, WA only	200 mL/ 100 L water		Apply as pest populations indicate.
Rambutans	Castor Oil Looper, Redshouldered Leaf Beetle, Swarming Leaf Beetle				Apply at first sign of pests and repeat as required.
Raspberries	Grasshoppers, Lightbrown Apple Moth, Raspberry Fruit Caterpillar				
STONE FRUIT Apricots, Nectarines, Peaches, Plums, Prunes	Green Treehopper, Lightbrown Apple Moth, Oriental Fruit Moth, Pear and Cherry Slug	All States	160 to 200 mL/100 L water		Apply at first sign of pest activity and repeat at intervals of 2 weeks or as necessary. Use higher rate where high insect pressure occurs.
	Redshouldered Leaf Beetle, Orange Fruitborer	Qld, WA only			Apply as necessary. Spot spraying may be all that is required to control Redshouldered Leaf Beetle.
	Heliothis (Budworms)	NSW, Vic, SA, WA only			Apply at first sign of pest activity and repeat at intervals of 2 weeks or as necessary. Use higher rate for higher insect pressure.
	Green Treehopper, Pear and Cherry Slug	Qld, WA only			
	Fruit-tree Borer	NSW, WA only	290 mL/ 100 L water		Apply to areas of trunks and limbs showing damage by borer. Ensure that protective webbing and surrounding bark is saturated. Allow spray to enter larvae tunnel. Apply by coarse spray twice at 21 day intervals during winter. **Note:** Concentrate spraying is not appropriate for this use.
	European Earwig		200 mL/ 100 L water		Apply when pests are present and repeat as necessary.

VEGETABLES

CROP	PEST	STATE	RATE	WHP	CRITICAL COMMENTS
Beans, Cucurbits	Heliothis (Budworms), Pumpkin Beetle, 28-Spotted Ladybird	Qld, WA only	200 mL/100 L water	3(H) days	Apply at first sign of pest activity and repeat as necessary.
Capsicum	Beetles, Weevils	NSW, WA only			
Carrots	Vegetable Weevil	Qld, WA only			
Cucurbits	Cucurbit Stemborer				
Leafy and Root Vegetables	Vegetable Weevil		300 mL/100 L water		
Rosella	Leafeating Beetles		200 mL/100 L water		Apply at first sign of pests and repeat as necessary.
Sweet Corn	Redshouldered Leaf Beetle		1.6 to 2.0 L/ha		
Vegetables - General	Wingless Grasshopper	Qld, Vic, Tas, SA, WA only	175 mL/100 L water		Spray infested areas thoroughly as required.
	Vegetable Weevil	Qld, WA only	320 mL/100 L water		Apply when pest appears and repeat as necessary. Use higher rate where high insect pressure occurs. DO NOT use on watermelons if high humidity and rain is likely to prevail for several days.
	Cabbage White Butterfly, Green Vegetable Bug, Heliothis (Budworms), Leafeating Ladybird, Pumpkin Beetle	Qld, NSW, Vic, SA, WA only	160 to 200 mL/ 100 L water **OR** 1.8 to 2.2 L/ha		
	Cutworms, European Earwig, Potato Moth, Rutherglen Bug	All States			
	Armyworms, Cabbage Moth	NSW, Vic, SA, WA only			
	Armyworms	Tas, WA only			
	Wingless Grasshopper	Vic, WA only			
Potatoes	Potato Moth	All States	200 mL/100 L water **OR** 2.2 L/ha		Apply at first sign of moth activity. Use sufficient water for good coverage. One or two later sprays at 3 to 4 week intervals could be required.
Tomatoes	False Wireworm	Qld, WA only			Adult: Apply after seedling establishment.
	Leafminer Caterpillars	All States			Spray plants thoroughly to the point of wetness at first sign of attack.

FIELD CROPS AND PASTURES

CROP	PEST	STATE	RATE	WHP	CRITICAL COMMENTS
Cereals, Sorghum, Sunflower	Armyworms, Cutworms	All States	160 to 200 mL/ 100 L water **OR** 1.8 to 2.2 L/ha	1(G) day	Apply when pest appears and repeat as necessary. Use higher rate where high insect pressure occurs.
	Heliothis (Budworms), Rutherglen Bug	Qld, NSW, Vic, SA, WA only			
	Wingless Grasshopper	Vic only	160 mL/100 L water		
Cereals, Pastures		Qld, Vic, Tas, SA, WA only		-	Spray infested areas thoroughly as required.
Cereals, Sorghum, Maize, Pasture Seed Crops	Australian Plague Locust, Migratory Locust, Yellow-winged Locust	Qld, WA only	1.2 to 1.4 L/ha	1(G) day	Apply when pest appears and repeat as necessary. Use higher rate on adults.

FIELD CROPS AND PASTURES (continued)

CROP	PEST	STATE	RATE	WHP	CRITICAL COMMENTS
Cotton	Rough Bollworm	NSW, WA only	200 mL/ 100 L water **OR** 2.2 L/ha	1(G) day	Apply when pest appears and repeat at 7 to 14 day intervals as necessary. DO NOT use on cotton after 25% of bolls have opened.
Duboisia	Australian Plague Locust, Cluster Caterpillar, Grasshoppers, Leafeating Ladybirds, Sandal-box Hawk Moth	Qld, WA only			Apply when pest appears and repeat as necessary.
Kenaf	Redshouldered Leaf Beetle		2.2 L/ha		Apply as pest pressure indicates.
Linseed	Heliothis (Budworms)			3(H) days	Apply when pest appears and repeat as necessary.
Lucerne	Lucerne Leafroller	Qld, Vic, Tas, SA, WA only	1.8 L/ha	1(G) day	Apply at first sign of pest activity and repeat as necessary. Use sufficient water for adequate coverage.
		NSW only	1.7 L/ha		
	Heliothis (Budworms), Leafhoppers (Jassids)	Qld, NSW, Vic, SA, WA only	2.2 L/ha		
	Sitona Weevil	NSW, Vic, SA, WA only	1.8 L/ha		
	Lucerne Flea		500 mL/ha		
Pastures, Pasture Seed Crops	Grass Caterpillar	Qld, WA only	1.1 L/ha		Apply when pest appears and repeat when necessary. DO NOT use excessively in areas where grass is germinating. Use higher rate on adult locusts or when high insect pressure occurs.
	Pasture Leafhopper		200 mL/ 100 L water **OR** 1.6 L/ha		
	Migratory Locust, Yellow-winged Locust		1.2 to 1.4 L/ha		
	Australian Plague Locusts	Qld, SA, WA only			
	Cutworms, Sitona Weevil	Vic, WA only	2.2 L/ha		
	Pasture Cockchafer	Vic, Tas, SA, WA only			Pasture Cockchafer: Apply about 4 weeks after opening rains.
	Armyworms, Heliothis (Budworms)	Vic, SA, WA only			
	Lucerne Leafroller	SA, only	1.8 to 2.2 L/ha		**WARNING**: Some cultivars of tropical pasture legumes may develop phytotoxic symptoms after use.
		WA only	200 mL/ 100 L water		
	Armyworms, Cutworms, Lucerne Leafroller	Tas only			
	Armyworms, Lucerne Leafroller, Sitona Weevil	NSW only			
	Lucerne Flea	NSW, Tas, WA only			Lucerne Flea: Apply 3-5 weeks after opening autumn rains and repeat as necessary.
		Vic, SA only	500 mL/ha		
Rice	Brown Planthopper	Qld, WA only	2.2 L/ha	3(H) days	Apply as pest populations indicate. Under heavy pressure, re-treatment after 14 days may be necessary. Phytotoxicity may occur if applied within 15 days before or after use of propanil. DO NOT apply before heading if propanil has been or will be applied.

FIELD CROPS AND PASTURES (continued)

CROP	PEST	STATE	RATE	WHP	CRITICAL COMMENTS
Sorghum	Sorghum Midge	Qld, WA only	160 to 200 mL/ 100 L water **OR** 1.8 to 2.2 L/ha	-	Make first application when 1 to 2 midges are present per head and when 90% heads emerged. Further applications at 4 day intervals may be required depending on crop potential. Aerial Application: Apply in not less than 15 to 20 L water.
	Heliothis (Budworms)				For aerial application apply in at least 15 to 20 L of water.
Sunflower	Black Sunflower Scarab		1.0 L/ha	3(H) days	Apply to newly emerged plants when pest appears and repeat as necessary.

ORNAMENTALS

SITUATION	PEST	STATE	RATE	CRITICAL COMMENTS
Ornamentals	Cabbage Moth, Cabbage White Butterfly, Cutworms, European Earwig, Green Vegetable Bug, Heliothis (Budworms), Leafeating Ladybirds, Potato Moth, Pumpkin Beetle, Rutherglen Bug, Tobacco Leaf Miner	Qld, NSW, Vic, SA, WA only	200 mL/100 L water **OR** 2.2 L/ha	Apply when pests appear and repeat as necessary. NOTE: Because of the wide range of ornamentals and their pests, phytotoxicity and efficacy of this product cannot be guaranteed, so use a small test area before widespread use.
	Wingless Grasshopper	Qld, Vic, Tas, SA, WA only	175 mL/100 L water	Spray infested areas thoroughly as required. NOTE: Because of the wide range of ornamentals and their pests, phytotoxicity and efficacy of this product cannot be guaranteed, so use a small test area before widespread use.
	Beetles, Caterpillars, Chewing Insects, Sucking Insects	Qld, WA only	200 mL/100 L water	Apply when pests appear and repeat as necessary. The product may be used as often as necessary with predatory mites *(Phytoseiulus persimilis)*. NOTE: Because of the wide range of ornamentals and their pests, phytotoxicity and efficacy of this product cannot be guaranteed, so use a small test area before widespread use.
	European Earwig, Heliothis (Budworms)	Tas, WA only	160 to 200 mL/ 100 L water	Apply when pests appear and repeat as necessary. Use the higher rate where high insect pressure occurs. NOTE: Because of the wide range of ornamentals and their pests, phytotoxicity and efficacy of this product cannot be guaranteed, so use a small test area before widespread use.
	Cutworms, Leafroller Moths, Loopers	NSW, Vic, Tas, WA only		
		SA only	1.8 to 2.2 L/ha	
	White Wax Scale	Qld, WA only	150 mL **PLUS** 1.0 L summer spray oil per 100 L water	Apply in late Nov. to early Dec. An additional application in late Jan to early Feb. may be required. NOTE: Because of the wide range of ornamentals and their pests, phytotoxicity and efficacy of this product cannot be guaranteed, so use a small test area before widespread use.
Roses	Cluster Caterpillar, Lightbrown Apple Moth	NSW, WA only	200 mL/100 L water	Apply at first sign of pest activity and then as necessary. Spray to point of wetness. Some plant damage may occur with close interval spraying.
Elm Trees in non-crop situations	Elm Leaf Beetle	Vic only		Apply when pests appear and repeat as necessary.

OTHERS

CROP	PEST	STATE	RATE	WHP	CRITICAL COMMENTS
Strawberry	Grasshoppers	Qld, WA only	200 mL/100 L water	3(H) days	Apply at first sign of pests and repeat as required.
Blueberries	Grasshoppers	Qld, NT, WA only			Apply at first sign of pest activity and repeat at intervals of 2 weeks or as necessary.
Cape Goosberry	Threelined Potato Beetle				

INDUSTRIAL AND DOMESTIC AREAS

CROP	PEST	STATE	RATE	CRITICAL COMMENTS
Non-crop, Commercial and Industrial Areas, Rights of Way	Wingless Grasshoppers	Qld, WA only	160 mL/100 L water	Thoroughly spray infested areas as required. Apply by high volume ground spray using sufficient spray to get good coverage (220 to 1100L per ha).
	Grasshoppers	Qld, Vic, Tas, SA, WA only	1.1 to 1.4 L/ 100 L water	
	European Earwig	All States	80 mL/15 L knapsack	Spray exterior walls of houses and outbuildings liberally. Spray boundary fences and breeding places such as rockeries and wood piles.
	Ants, Fleas, Moths, Weevils	Qld, Vic, Tas, SA, WA only	2.2 L/100 L water	Spray thoroughly surfaces to be treated. DO NOT use as a space spray.
Industrial and Domestic Areas	Ants, Fleas, Weevils			Apply to surfaces to be treated. DO NOT use as a space spray.
	Wasps	Qld, Tas, SA, WA only		
	European Earwig	All States	80 mL/15 L water	Apply liberally to exterior surfaces of buildings, fences, wood piles, rockeries and other breeding areas. Repeat application 4 weeks later.
	Grasshoppers	Qld, Vic, Tas, SA, WA only	1.1 to 1.4 L/ 100 L water	Apply by high volume ground equipment to control swarms. Use sufficient water for good coverage, usually 220 to 1100 L per ha.
	Vespulid (European and English) Wasps in concealed nests	Vic, SA, WA only	130 to 320 mL per L water	Pour or squirt into entrance of underground nest, or spray semi-concealed nest. Apply preferably at night and wear protective clothing and veil to avoid stings.
	Honey Bees in concealed hives		1.1L/100 L water	Spray into nests in the open and in enclosed cavities where the nest is close to the entrance used by the bees. Destroy the nest if accessible. DO NOT use honeycomb - destroy or bury it. Apply preferably at night and wear protective clothing and veil to avoid stings.
Tobacco Bulk Sheds	Ants European Earwig Fleas Moths Tobacco Beetle Weevils	Qld, NT, WA only	200 mL/10 L water	Spray thoroughly surfaces to be treated. Five litres of spray should cover 100 m^2.

NOT TO BE USED FOR ANY PURPOSE OR IN ANY MANNER CONTRARY TO THIS LABEL UNLESS AUTHORISED UNDER APPROPRIATE LEGISLATION

WITHHOLDING PERIODS (WHP)
H = Harvest, G = Grazing.
Cereals, sunflowers, pastures and lucerne: DO NOT GRAZE OR CUT FOR STOCK FOOD FOR 1 DAY AFTER APPLICATION.
Fruit and vegetables: DO NOT HARVEST FOR 3 DAYS AFTER APPLICATION.