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

**Apparent** 

**Miyagi 250**

**INSECTICIDE**

ACTIVE CONSTITUENT: 250 g/L LAMBDA-CYHALOTHRIN

**GROUP 3A INSECTICIDE**

For the control of certain insect pests in Cotton, Barley, Wheat and various field crops as per the Directions for Use.

**IMPORTANT: Read this booklet before use.**

APVMA Approval No: 81257/116110

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## DIRECTIONS FOR USE

**For ULV application: Apparent Miyagi 250 Insecticide can be bulked up with spraying oils for all uses except those indicated in the critical comments in the Direction for Use table below.**

Crop	Pest Controlled	State	Application Rate/ha
Cotton	Native Budworm ( <i>Helicoverpa punctigera</i> ), Cotton Bollworm ( <i>Helicoverpa armigera</i> )	Qld, NSW, NT and WA only	60 mL
			70 mL
	Pink-spotted Bollworm ( <i>Pectinophora scutigera</i> )	Qld and NT only	70 mL
Barley, Wheat	Green Mirid ( <i>Creontiades dilutus</i> ), Brown Mirid ( <i>C. pacificus</i> ), Apple Dimpling Bug ( <i>Campylomma liebknecht</i> ), Broken backed Bug ( <i>Taylorilygus pallidulus</i> ), Cottonseed Bug ( <i>Oxycarenus luctuosus</i> ), Pale Cotton Stainer ( <i>Dysdercus sidae</i> ), Leafhoppers ( <i>Austroasca viridigrisea</i> and <i>Amrasca terraereginae</i> )	Qld, NSW, NT and WA only	60 mL
	Pasture Webworm ( <i>Hednota</i> spp)	NSW, Vic, Tas, SA and WA only	12 mL
	Pink or Brown Cutworm ( <i>Agrotis munda</i> ) Common Cutworm ( <i>Agrotis infusa</i> )	All States NSW only	12 or 18 mL
	Blackhead Pasture Cockchafer ( <i>Aphodius tasmaniae</i> )	NSW, Vic, Tas, SA and WA only	20 or 40 mL
	Redlegged Earth Mite ( <i>Halotydeus destructor</i> )		9 mL †
Lucerne	Native Budworm ( <i>Helicoverpa punctigera</i> )	All States	24 or 36 mL
	Lucerne Leaf Roller ( <i>Merophyas divulsana</i> )	All States	24 or 36 mL
	Pea Aphid ( <i>Acyrtosiphon pisum</i> )		24 mL
	Blackhead Pasture Cockchafer ( <i>Aphodius tasmaniae</i> )	NSW, Vic, Tas, SA and WA only	20 or 40 mL
	Redlegged Earth Mite ( <i>Halotydeus destructor</i> )		9 mL †

Withholding Period	Critical Comments
21 days after harvest	<p>Apply when egg laying is light less than 25 eggs/100 terminals and no larvae are present.</p> <p>Apply when egg laying is moderate greater than 25 eggs/100 terminals and/or when less than 12 newly hatched larvae/100 terminals are present.</p> <p>Apply when egg laying is heavy and continuous and/or when <i>H. punctigera</i> larvae are greater than 10 mm in length. For <i>H. armigera</i>, apply only to larvae less than 5 mm in length.</p> <p>Controlled with the <i>Helicoverpa</i> spp. program when used at this rate. If the pink-spotted bollworm is the only pest present, apply when more than 10 adult moths are caught in pheromone traps on two consecutive nights.</p> <p>Apply at the recommended threshold levels as indicated by field checks.</p>
14 days after harvest/ grazing	<p><b>Pre-seeding</b> the product can be tank mixed with knock down herbicides.</p> <p><b>Post crop emergence</b> inspect crop regularly from sowing. Spray at first sign of damage. Use a minimum of 50 L water/ha. Apply at first sign of infestation before larvae are 10 mm long.</p> <p>For best results apply at first sign of infestation before larvae are 10 mm long. If larvae are larger than 10mm use the higher rate. Use a minimum of 50 L of water.</p>
14 days after harvest/ grazing	<p>Treat as soon as possible after the autumn rains stimulate egg hatching and activity of existing larvae. This can be ascertained by monitoring soil populations in known areas. For best results spray when the larvae have surfaced to feed after rain.</p> <p>Preferably use a boom spray delivering 70 to 100 L water/ha. Use the lower rate until early June and the higher rate after mid-late June.</p> <p><b>DO NOT USE ULV APPLICATION FOR THIS PEST.</b></p> <p>If mites are present on an establishing crop, apply at first sign of crop emergence. Monitor crop regularly for re-infestation and re-spray if necessary.</p>
14 days after harvest/ grazing	<p>For best results apply at hatching or soon after. Use higher rate if the crop is dense or the larvae are larger than 10 mm.</p>
14 days after harvest/ grazing	<p>For best results apply at hatching or soon after. Use higher rate if the crop is dense or the larvae are larger than 10 mm. Apply the first spray when about 30% of the terminals are rolled.</p> <p>Good coverage, particularly the stems, is essential. Use hollow cone nozzles.</p> <p>Treat as soon as possible after the autumn rains stimulate egg hatching and activity of existing larvae. This can be ascertained by monitoring soil populations in known areas. For best results spray when the larvae have surfaced to feed after rain.</p> <p>Preferably use a boom spray delivering 70 to 100 L water/ha. Use the lower rate until early June and the higher rate after mid-late June.</p> <p><b>DO NOT USE ULV APPLICATION FOR THIS PEST.</b></p> <p>If mites are present on an establishing crop, apply at first sign of crop emergence. Monitor crop regularly for re-infestation and re-spray if necessary. Control of Lucerne Flea will not be obtained with this application.</p>

Crop	Pest Controlled	State	Application Rate/ha
Pasture	Pasture Webworm ( <i>Hednota</i> spp.)	NSW, Vic, Tas, SA and WA only	12 mL
	Brown Pasture Looper ( <i>Ciampa arietaria</i> )	All States	
	Pink or Brown Cutworm ( <i>Agrotis munda</i> )	All States	12 to 18 mL
	Common Cutworm ( <i>Agrotis infusa</i> )	NSW only	
	Blackhead Pasture Cockchafer ( <i>Aphodius tasmaniae</i> )	NSW, Vic, Tas, SA and WA only	20 or 40 mL
	Redlegged Earth Mite ( <i>Halotydeus destructor</i> )		9 mL †
Sorghum	Sorghum Midge ( <i>Contarinia sorghicola</i> )	Qld, NSW and NT only	18 or 36 mL
	Corn Earworm ( <i>Helicoverpa armigera</i> )		60 or 70 mL
Sunflower	Rutherglen Bug and Grey Cluster Bug ( <i>Nysius</i> spp.)	All States	36 mL
	Native Budworm ( <i>Helicoverpa punctigera</i> ), Corn Earworm ( <i>Helicoverpa armigera</i> )	Qld and Nth NSW only Sth NSW and Vic only	60 or 70 mL 48 or 60 mL
Soybeans	Native Budworm ( <i>Helicoverpa punctigera</i> ), Corn Earworm ( <i>Helicoverpa armigera</i> )	Qld, NSW, Vic and NT only	60 or 70 mL
Navy Beans, Mung Beans	Native Budworm ( <i>Helicoverpa punctigera</i> ), Corn Earworm ( <i>Helicoverpa armigera</i> )	Qld, NSW and NT only	60 or 70 mL
Canola	Cabbage Moth ( <i>Plutella xylostella</i> ), Cabbage White Butterfly ( <i>Pieris rapae</i> )	All states	24 mL
	Rutherglen Bug and Grey Cluster Bug ( <i>Nysius</i> spp.)		36 mL
	Thrips ( <i>Thrips tabaci</i> )	Qld, NSW, Vic, Tas, WA and NT only	
	Native Budworm ( <i>Helicoverpa punctigera</i> )	NSW, Vic, Tas, SA and WA only	24 or 36 mL
	Redlegged Earth mites ( <i>Halotydeus destructor</i> )	NSW, Vic, Tas, SA and WA only	9 mL †
Forage brassica	Cabbage Cluster Caterpillar ( <i>Crociodolomia pavonana</i> )	Qld, NSW, Vic, WA and NT only	24 or 36 mL Add Agral At 10mL/100L of spray volume

Withholding Period	Critical Comments
14 days after harvest/ grazing	Apply once larvae are present using adequate water to ensure good penetration.
	DO NOT USE ULV APPLICATION FOR THIS PEST. For best results apply at first sign of infestation before larvae are 10 mm long. If larvae are larger than 10 mm, use the higher rate. Use a minimum of 50 L water.
	Treat as soon as possible after the autumn rains stimulate egg hatching and activity of existing larvae. This can be ascertained by monitoring soil populations in known areas. For best results spray when the larvae have surfaced to feed after rain. Preferably use a boom spray delivering 70 to 100 L water/ha. Use the lower rate until early June and the higher rate after mid-late June. DO NOT USE ULV APPLICATION FOR THIS PEST.
14 days after harvest/ grazing	If mites are present on an establishing crop, apply at first sign of crop emergence. Monitor crop regularly for re-infestation and re-spray if necessary. Control of Lucerne Flea will not be obtained with this application.
14 days after harvest/ grazing	Apply when midge numbers reach 1 to 2 per head. Use the higher rate for residual protection
	Apply when larval numbers reach 2 per head. Use the higher rate if pest pressure is severe. Best results are achieved on small larvae.
28 days after harvest	Apply when numbers reach 10 to 15 adults per plant at budding in dry land crops or 20 to 25 in irrigated crops. If <i>Helicoverpa armigera</i> are also present in northern NSW or Queensland, use a minimum of 60 mL product.
28 days after harvest	Apply when an average of 2 to 3 larvae are present per head or when larvae are damaging plants. Use the higher rate if pest numbers are high and/or <i>H. punctigera</i> larvae are larger than 10 mm in length. In Northern NSW and Qld, DO NOT apply to resistant <i>H. armigera</i> larvae larger than 5 mm in length.
	GENERAL COMMENTS: If flowering has started, application should be deferred until after flowering but before the heads turn down. If treatment is unavoidable during flowering, and bees are actively foraging in the crop, there will be minimal effect in the colony if spraying occurs early morning or late afternoon.
21 days after harvest/ grazing	Apply when flower or pod feeding larvae reach a population of 2 per metre of row in soybeans. Use the higher rate if pest numbers are high or if larvae are larger than 10 mm. In northern NSW and Qld DO NOT apply to resistant <i>H. armigera</i> larvae larger than 5 mm in length.
Harvest/grazing 1 day if harvested green, 14 days if harvested dry	Apply when flower or pod feeding larvae reach a population of 1 to 2 per metre of row in navy beans and 1 per metre of row in mung beans. Use the higher rate if pest numbers are high or if larvae are larger than 10 mm. In northern NSW and Qld where corn earworm has established resistance to pyrethroids DO NOT apply to corn earworm larvae larger than 5 mm.
	Apply as soon as larvae reach threshold numbers. Check with local officer of the Department of Primary Industries for thresholds applicable to the particular growth stage of the crop. Apply only near maturity when severe infestations are likely to down grade yields.
7 days after harvest/ grazing	For best results, apply at hatching or soon after. Use higher rate if the crop is dense or the larvae are larger than 10 mm.
7 days after harvest/ grazing	If mites are present on establishing crop, apply at the first sign of crop emergence. Monitor the crop regularly for reinfestation and respray if necessary.
2 days after harvest/ grazing	Apply at first sign of infestation. For schedule spraying on a weekly basis, use the lower rate For spraying as needed use the higher rate for longer persistence. Use a minimum of 500 L water/ha.

Crop	Pest Controlled	State	Application Rate/ha
Faba Beans, Chick Peas, Vetch	Native Budworm ( <i>Helicoverpa punctigera</i> )	NSW, Vic, SA and WA only	24 or 36 mL
	Redlegged Earth Mite ( <i>Halotydeus destructor</i> )	NSW, Vic, Tas, SA and WA only	9 mL †
Field Peas	Native Budworm ( <i>Helicoverpa punctigera</i> )	NSW, Vic, SA and WA only	24 or 36 mL
	Pea Weevil ( <i>Bruchus pisorum</i> )	NSW and SA only	24 mL
		Vic and WA only	36 mL
Redlegged Earth Mite ( <i>Halotydeus destructor</i> )	NSW, Vic, Tas, SA and WA only	9 mL †	
Lupins	Native Budworm ( <i>Helicoverpa punctigera</i> )	NSW, Vic, SA and WA only	24 mL
	Brown Pasture Looper ( <i>Ciampa arietaria</i> )	NSW, Vic, Tas, SA and WA only	12 mL
	Redlegged Earth Mite ( <i>Halotydeus destructor</i> )	NSW, Vic, Tas, SA and WA only	9 mL †

Withholding Period	Critical Comments
7 days after harvest/ grazing	For best results, apply at hatching or soon after. Use the higher rate if the crop is dense or the larvae are larger than 10 mm.
	If mites are present on an established crop, apply at first sign of crop emergence. Monitor crop regularly for reinfestation and respray if necessary. Control of Lucerne Flea will not be obtained with application.
7 days after harvest/ grazing	For best results, apply at hatching or soon after. Use higher rate if the crop is dense or the larvae are larger than 10 mm.
7 days after harvest/ grazing	Follow State Department of Agriculture ( <b>South Australia</b> only) guidelines for controlling Pea Weevil. If these are unavailable, monitor the crops regularly once flowering commences and apply as soon as adult weevils are detected. Adults must be controlled before egg laying begins. Both native Budworm and Pea Weevil populations can be easily monitored using a sweep net in the top section of the crop. <b>WA only:</b> Commence monitoring the crop for Pea Weevil presence using a sweep net, prior to flowering. Spray when one weevil per one hundred sweeps is found for milling grade seed, or one weevil per twenty-five sweeps for feed grade seed. Continue monitoring after spraying and respray if necessary. Use either a border spray (most cases) or whole crop spray, depending on Pea Weevil penetration of the crop.
	7 days after harvest/ grazing
14 days after harvest/grazing	For best results, apply at hatching or soon after when larvae are small.
	<b>WA only:</b> Environmental factors may cause populations of small caterpillars to decline, reducing damage potential. Spraying should commence once caterpillars are 12 mm in length. Once crop has emerged, inspect regularly and apply at the first signs damage. Use a minimum of 50 L water/ha. <b>DO NOT USE ULV APPLICATION FOR THIS PEST.</b>
	If mites are present on an establishing crop, apply at the first sign of crop emergence. Monitor crop regularly for reinfestation and respray if necessary. Control of Lucerne Flea will not be obtained with application.

† Blue Oat Mites often co-occur with Red-Legged Earth Mites and the 9 mL/ha rates of Apparent Lambda-Cyhalothrin 250 Insecticide may be less effective against Blue Oat Mites.

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

## WITHHOLDING PERIODS:

### Harvesting:

Mung Beans (if harvested green), Navy Beans (if harvested green): **DO NOT HARVEST FOR 1 DAY AFTER APPLICATION.**

Field peas, Canola, Faba Beans, Chick Peas, Vetch: **DO NOT HARVEST FOR 7 DAYS AFTER APPLICATION.**

Lupins, Sorghum, Mung Beans (if harvested dry), Navy Beans (if harvested dry), Barley, Wheat, Pasture: **DO NOT HARVEST FOR 14 DAYS AFTER APPLICATION.**

Cotton, Soybeans: **DO NOT HARVEST FOR 21 DAYS AFTER APPLICATION.**

Sunflower: **DO NOT HARVEST FOR 4 WEEKS AFTER APPLICATION.**

### Grazing:

Navy Beans (if harvested green), Mung Beans (if harvested green): **DO NOT GRAZE OR CUT FOR STOCK FOOD FOR 1 DAY AFTER APPLICATION.**

Forage Brassicas: **DO NOT GRAZE OR CUT FOR STOCK FOOD FOR 2 DAYS AFTER APPLICATION.**

Field peas, Canola, Faba Beans, Chick Peas, Vetch: **DO NOT GRAZE OR CUT FOR STOCK FOOD FOR 7 DAYS AFTER APPLICATION.**

Lupins, Sorghum, Navy Beans (if harvested dry), Mung Beans (if harvested dry), Barley, Wheat, Pasture, Lucerne: **DO NOT GRAZE OR CUT FOR STOCK FOOD FOR 14 DAYS AFTER APPLICATION.**

Soybeans: **DO NOT GRAZE OR CUT FOR STOCK FOOD FOR 21 DAYS AFTER APPLICATION.**

## GENERAL INSTRUCTIONS

### INSECTICIDE RESISTANCE WARNING

**GROUP 3A INSECTICIDE**

For insecticide resistance management Apparent Miyagi 250 Insecticide is a Group 3A insecticide. Some naturally occurring insect biotypes resistant to Apparent Miyagi 250 Insecticide and other Group 3A insecticides may exist through normal genetic variability in any insect population. The resistant individuals can eventually dominate the insect population if Apparent Miyagi 250 Insecticide or other Group 3A insecticides are used repeatedly. The effectiveness of Apparent Miyagi 250 Insecticide on resistant individuals could be significantly reduced. Since occurrence of resistant individuals is difficult to detect prior to use, Apparent Pty Ltd accepts no liability for any losses that may result from the failure of Apparent Miyagi 250 Insecticide to control insects.

Apparent Miyagi 250 Insecticide may be subject to specific resistance management strategies. For further information contact your local supplier, Apparent representative or local agricultural department agronomist. *Helicoverpa* (*Heliothis armigera*) resistance in Northern New South Wales and Queensland: To help contain pyrethroid resistance in *Helicoverpa armigera*, the Summer Crop Insecticide Strategy as developed by AIRAC, Queensland Department of Primary Industries and the New South Wales Department of Agriculture and Fisheries should be adhered to. Failure to observe the strategy may result in widespread resistance affecting the future viability of summer cropping.

### MIXING

#### SHAKE WELL BEFORE USING.

**For ground or aircraft application with water:** Apparent Miyagi 250 Insecticide mixes readily with hard or soft water. Add the required quantity of product to water whilst under agitation to ensure thorough mixing. Agitate while spraying. It is not advisable to allow the mixed solution to stand longer than 24 hours before use. In extremely alkaline water (pH 9) spray immediately after mixing.

**For ULV (ultra low volume) application with oil:** It is recommended that Apparent Miyagi 250 Insecticide be mixed with a mineral, spraying oil. See Compatibility section for a list of recommended mineral spraying oils. Add the required quantity of product to oil whilst under agitation to ensure thorough mixing. Agitate while spraying. It is not advisable to allow the mixed solution to stand longer than 24 hours before use.

### APPLICATION

Good coverage is essential to ensure adequate control. The product may be applied by ground rig or aircraft. DO NOT apply if rain is expected within 6 hours. Acceptable "threshold" values for eggs and larval numbers may vary according to the stage of crop development and the pest management program undertaken. Alternative higher thresholds may be acceptable under certain circumstances.

**Diluted with water:** For ground rigs the volume of liquid applied should be 30 to 100 L/ha. Aerial application should be under conditions normally suitable for water-based insecticides. Apply in at least 10 to 20 L water/ha.

**Mixed with oil:** Apply the recommended rate of Apparent Miyagi 250 Insecticide bulked with oil to total volume of 3 to 5 L/ha for cotton, sorghum and sunflowers. The total volume for all other crops should be 1.5 L/ha.

### TIMING

This product is a contact and residual insecticide. Best result will be obtained if Apparent Miyagi 250 Insecticide is applied as a protective treatment at regular intervals. However, if spraying frequency based on scouting, then for *Helicoverpa* spp. application at egg hatch will give optimum results.

### CROP CHECKING

Frequent and thorough checking of whole plants, terminals, squares, flowers, bolls or fruiting bodies as required, should be made over a random sample of plants, representative of the whole crop area. Inspect crops after spraying to ensure a thorough kill has been obtained. However, note that a maximum kill may not be achieved until 48 hours after treatment. Then check at frequent intervals, not more than 2 days apart when insect pressure is heavy. Apply the recommend treatment as soon as a crop check indicates spraying is necessary.

### COMPATIBILITY

This product, when applied, as a water-based spray is compatible with the following actives: Fluazifop-P, Pirimiphos-methyl 900SF, Procyimdone\*, Pirimicarb, Paraquat /Diquat, Glyphosate-trimesium and paraquat.

This product when used in an ultra low volume application is compatible with the following mineral spraying oils: DC-Tron Cotton\*, DC-Tron\*, Ulvapron\*, Trycol\*, Caltex Summer Spray Oil\* and Omex\*.

## **PRECAUTIONS**

Human flagging is not supported unless flaggers are protected by engineering control such as vehicles with cabs.

### **Re-entry Period**

DO NOT allow entry into treated areas until the spray has dried. If prior entry is necessary wear cotton overalls and chemical resistant gloves.

## **PROTECTION OF LIVESTOCK**

Toxic to bees. DO NOT spray when bees are actively foraging. Risk is reduced by spraying in the early morning or late evening.

## **PROTECTION OF WILDLIFE, FISH, CRUSTACEANS AND ENVIRONMENT**

Dangerous to fish and aquatic invertebrates. DO NOT contaminate streams, rivers or waterways with Apparent Miyagi 250 Insecticide or used container. Tail waters which flow from treated areas should be prevented from entering river systems. In case of spillage on floor or paved surfaces, soak up with sand, earth or synthetic absorbent and dispose of waste according to Australian Standards 2507, Storage and Handling of Pesticides. A strategy to minimise spray drift should be employed at all times when aerially applying sprays near sensitive areas. Such a strategy is illustrated by the cotton industry's Best Management Practice Manual.

## **STORAGE AND DISPOSAL**

Store in the closed, original container in a cool, well-ventilated area. DO NOT store for prolonged periods in direct sunlight. Store in a locked room or place away from children, animals, food, feedstuffs, seed and fertilizers. Triple-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 deliver empty packaging to an approved waste management facility. If an approved waste management facility is not available, bury the empty packaging 500 mm below the surface in a disposal pit specifically marked and set up for this purpose, clear of waterways, desirable vegetation and tree roots, in compliance with relevant local, state or territory government regulations. Do not burn empty containers or product.

## **SAFETY DIRECTIONS**

Harmful if inhaled or swallowed. Will irritate the eyes and skin. Repeated exposure may cause allergic disorders. Facial skin contact may cause temporary facial numbness. Avoid contact with eyes and skin. When opening the container, preparing the spray and using the prepared spray wear:

- Cotton overalls buttoned to the neck and wrist:
- Washable hat;
- Elbow-length PVC gloves; and
- Face shield.

If product on skin, immediately wash area with soap and water. Wash hands after use. After each day's use, wash gloves, face-shield and contaminated clothing.

## **FIRST AID**

If poisoning occurs, contact a doctor or Poisons Information Centre. Telephone Australia 13 11 26. If in eyes, hold eyes open, flood with water for at least 15 minutes and see a doctor.

## **SAFETY DATA SHEET**

Additional information is listed on the Safety Data Sheet (SDS), which may be obtained from the supplier.

## **CONDITIONS OF SALE**

The use of Apparent Miyagi 250 Insecticide being beyond the control of the manufacturer no warranty expressed or implied is given by Apparent Pty Ltd regarding its suitability, fitness or efficiency for any purpose for which it is used by the buyer, whether in accordance with the directions or not and Apparent Pty Ltd accepts with no responsibility for any consequences whatsoever resulting from the use of this product.

\*Other trademarks