

# Fastac<sup>®</sup> Duo

## INSECTICIDE

Active Constituent: 100 g/L ALPHA-CYPERMETHRIN

Solvent: 751 g/L XYLENE

GROUP **3A** INSECTICIDE

For the control of certain insect pests, including heliothis (*Helicoverpa* spp.) on various crops and redlegged earth mite and blue oat mite on certain field crops and pastures and certain insect pests on fruit and vegetable crops as per the DIRECTIONS FOR USE table.

### FEATURES

Registered for use in a range of situations including field crops, pastures and horticulture.

### BENEFITS

Provides effective control of a range of economically damaging insect pests.

### MODE OF ACTION

FASTAC DUO kills insects by irreversible damage to the nervous system. The damage is caused by destruction of nerve fibres which causes intense electrical activity that results in blockage of nerve impulses. The poisoning occurs through cuticular penetration of oral uptake.

### PACK SIZES

5 L, 20 L, 200 L

U.N. Number	Correct Shipping Name	Class	Subsidiary Risk
2093	Flammable Liquid, Pesticides, Toxic N.O.S. (Contains Alpha-Cypermethrin & Xylene)	6.1	3
HAZCHEM Code	Poisons Schedule	Emergency Guide	Packaging Group
3W	6	17	3

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

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Active Constituent: 100 g/L ALPHA-CYPERMETHRIN  
Solvent: 751 g/L XYLENE

For the control of certain insect pests, including heliothis (*Helicoverpa* spp.) on various crops and red legged earth mite and blue oat mite on certain field crops and pastures and certain insect pests on fruit and vegetable crops as per the DIRECTIONS FOR USE table.

### GENERAL INSTRUCTIONS

FASTAC Duo is a contact and residual insecticide. It can be used as a protective treatment when applied at regular intervals or as a knockdown treatment to control existing infestations.

The product can be applied mixed either with water carrier or oil based bulking agents such as D-C-TRON<sup>+</sup> Cotton Spray Oil or compatible ULV products.

### MIXING

**Low Volume and High Volume applications by ground rig or aircraft when FASTAC Duo is applied with water carrier.**

Add the required quantity of FASTAC Duo to water in the spray tank and mix thoroughly. Maintain agitation during mixing and application.

**Ultra Low Volume (ULV) applications by aircraft when FASTAC Duo is applied with oil based bulking agents.**

This product can be mixed with D-C-TRON Cotton Spray Oil or other compatible products (See COMPATIBILITY section).

First add the mixing partner to the spray tank and then, with the agitator in motion, add the required quantity of FASTAC Duo direct to the spray tank. Do NOT mix with water and ensure that no water is in the spraying system.

### APPLICATION

**Low Volume and High Volume by ground rig or aircraft when FASTAC Duo is applied with water carrier.**

FASTAC Duo can be applied by ground or aircraft with a water carrier. Thorough coverage is essential to ensure adequate control. Always apply with a non-ionic surfactant unless detailed on the label of a tank mix partner. Apply during the cooler parts of the day or night.

**Ground application – water carrier**

For low volume spraying of field crops with ground rigs, use a total volume of 50-200 L/ha except for sweet corn, tomatoes and tobacco where higher volumes should be used. Drop arms should be used on ground rigs in row crops taller than 30 cm (0.3 m). The application should be made as a fine spray, preferably using hollow cone nozzles, unless otherwise directed in the Critical Comments.

### Aerial application – water carrier

Do NOT apply to trellis tomatoes by aircraft. Use a minimum spray volume of 20 L/ha. For spring/early summer application to cereals, linola, canola, rice and to other dense crops, apply in a total spray volume of 30 to 35 L/ha. If possible, spray in a crosswind. Avoid spraying in calm conditions or when wind is light and variable in direction. Apply as a spray of 100-150 microns VMD.

### Ultra Low Volume (ULV) application by aircraft

FASTAC Duo, mixed with D-C-TRON Cotton Spray Oil or other compatible products should be applied in a minimum total spray volume of 1.5 L/ha. It should only be applied by aircraft with suitable equipment to provide a droplet size of approximately 80-100 microns VMD. Applications should be made during the cooler parts of the day or at night. Avoid application in calm or very windy conditions. Preferably apply in light to moderate cross winds.

### INSECTICIDE RESISTANCE WARNING

For insecticide resistance management FASTAC is a **GROUP 3A INSECTICIDE** Group 3A insecticide. Some naturally occurring insect biotypes resistant to FASTAC 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 FASTAC or other Group 3A insecticides are used repeatedly. The effectiveness of FASTAC on resistant individuals could be significantly reduced.

Since occurrence of resistant individuals is difficult to detect prior to use, BASF Australia Ltd accepts no liability for any losses that may result from the failure of FASTAC to control resistant insects.

FASTAC may be subject to specific resistance management strategies. For further information, contact your local supplier, BASF Australia Ltd representative or local agricultural department agronomist.

In NSW and Qld, application of this product to *Helicoverpa armigera* larvae longer than 5 mm may not only be ineffective but it may increase the level of synthetic pyrethroid resistance.

This product should NOT be used to treat infestations that were not controlled by an earlier application of it or another synthetic pyrethroid. Infestations not controlled by this

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product should be treated with an insecticide from another chemical group. Application of this product with an insecticide from another chemical group such as NUDRIN® will assist with the management of synthetic pyrethroid resistant *Helicoverpa armigera*.

### COMPATIBILITY

#### Low Volume and High Volume applications by ground rig or aircraft when FASTAC Duo is applied with water carrier.

This product is compatible with AZODRIN® 400, D-C-TRON Cotton Spray Oil, Dithane®M45, dicamba, Kelthane® EC, Kocide®, NUDRIN® Insecticide, NUDRIN 225, Parathion 500 EC, Parathion M500, PHOSDRIN®, Predator® 300, Ridomil®, Wuxal®, Select®, dimethoate (ROXION®), paraquat, diquat, glyphosate, Tigrex®, Jaguar®, simazine, SPINNAKER®, 2,4-D amine and ester, 2,4-DB and MCPA.

Do NOT mix FASTAC Duo with wettable powders and water dispersible granules BEFORE addition to the spray tank.

FASTAC Duo can be mixed with Dithane WDG providing the mixture is agitated efficiently and used immediately.

#### Ultra Low Volume (ULV) application by aircraft

This product should be mixed only with specific ULV formulations of other insecticides, eg. AZODRIN 400, NUDRIN 225, Predator 300, and PBO synergists, when mixed according to the directions on the PBO synergist labels.

### PROTECTION OF LIVESTOCK

Dangerous to bees. Do NOT spray on any plants in flower while bees are foraging. FASTAC Duo is known to have a deterrent effect on foraging bees for a short period of time after spraying. Risk to bees is reduced by spraying in early morning and late evening while bees are not foraging.

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

Dangerous to fish and aquatic invertebrates such as yabbies. Do NOT contaminate fish ponds, dams, drains, rivers or streams with product or used containers. Drift and run-off from treated areas may be hazardous to fish or crustaceans in adjacent sites.

### STORAGE AND DISPOSAL

Store in the closed, original container, in a cool, well-ventilated area out of direct sunlight. Do NOT dispose of undiluted chemicals on-site.

The method of disposal of the container depends on the container type. Read the "Storage and Disposal" instructions on the label that is attached to the container.

#### FLAMMABLE - KEEP AWAY FROM NAKED FLAME

### SAFETY DIRECTIONS

Poisonous if swallowed. Will irritate the eyes and skin. Facial skin contact may cause temporary facial numbness. Avoid contact with eyes and skin. Avoid inhaling vapour or spray mist. When opening the container and preparing spray, wear cotton overalls buttoned to the neck and wrist, washable hat, elbow-length PVC gloves and face shield or goggles. If product on skin, immediately wash area with soap and water. If product in eyes, wash it out immediately with 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, face shield or goggles and contaminated clothing.

### FIRST AID

If poisoning occurs, contact a doctor or Poisons Information Centre. Telephone 131126 Australia-wide.

If swallowed, do NOT induce vomiting. Give a glass of water. If skin contact occurs, remove contaminated clothing and wash skin thoroughly. Remove from contaminated area. Apply artificial respiration if not breathing. If in eyes, hold eyes open, flood with water for

at least 15 minutes and see a doctor.

### MSDS

Additional information is listed in the Material Safety Data Sheet.



**CONDITIONS OF SALE:** All conditions and warranties rights and remedies implied by law or arising in contract or tort whether due to the negligence of BASF Australia Ltd or otherwise are hereby expressly excluded so far as the same may legally be done provided however that any rights of the Buyer pursuant to non excludable conditions or warranties of the Trade Practices Act 1974 or any relevant legislation of any State are expressly preserved but the liability of BASF Australia Ltd or any intermediate Seller pursuant thereto shall be limited if so permitted by the said legislation to the replacement of the goods sold or the supply of equivalent goods and all liability for indirect or consequential loss or damage of whatsoever nature is expressly excluded. This product must be used or applied strictly in accordance with the instructions appearing hereon. This product is solely sold for use in Australia and must not be exported without the prior written consent of BASF Australia Ltd.

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<b>EMERGENCY INFORMATION PANEL</b>	
<b>PESTICIDES, LIQUID, TOXIC, FLAMMABLE, N.O.S.</b> flash point not less than 23oC <b>(CONTAINS ALPHA-CYPERMETHRIN AND XYLENE)</b> UN NO. 2903 PACKAGING GROUP III HAZCHEM 3W	
 <b>TOXIC</b> 6	 <b>FLAMMABLE</b> <b>LIQUID</b>
<b>IN A TRANSPORT EMERGENCY</b> DIAL: 000 <b>POLICE OR FIRE BRIGADE</b>	
FOR SPECIALIST ADVICE IN AN <b>EMERGENCY ONLY</b> <b>PHONE 1 800 033 111</b> TOLL FREE - ALL HOURS - AUSTRALIA-WIDE	

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**DIRECTIONS FOR USE**

**RESTRAINTS:** Do NOT apply if rain is expected within 6 hours after application.

**NOTE:** This product is ineffective against synthetic pyrethroid-resistant *Helicoverpa armigera* larvae longer than 5 mm. All *Helicoverpa armigera* in NSW and Qld should be treated as being resistant to synthetic pyrethroids. Refer to RESISTANCE MANAGEMENT under GENERAL INSTRUCTIONS.

This product is ineffective against synthetic pyrethroid-resistant *Plutella xylostella*.

CROP	INSECT PESTS	STATE	RATE	WHP	CRITICAL COMMENTS
Banksias	Banksia moth ( <i>Danima banksiae</i> )	WA only	20 mL/ 100 L	–	Apply on a regular programme at 2 week intervals at early flower development. Commence spraying when blooms are immature and continue until flowers are fully developed.
Broccoli, Brussels sprouts, cabbages, cauliflowers, Chinese cabbage, kale, kohlrabi, turnips	Cabbage moth ( <i>Plutella xylostella</i> ), cabbage white butterfly ( <i>Pieris rapae</i> ), <i>Helicoverpa punctigera</i> , <i>Helicoverpa armigera</i>	All States	<b>LOW VOLUME:</b> 400 mL/ha  <b>HIGH VOLUME:</b> 50 mL/ 100 L  <b>ULTRA LOW VOLUME:</b> 400 mL/ha	1 day (Harvest)	Apply according to pest incidence. When reinfestation is continuous, treatment every 7-10 days may be required. Add a non-ionic surfactant at registered label rates. <b>LOW VOLUME:</b> <b>Ground rig application:</b> Apply in 100 to 600 L of water per hectare as a fine spray, (ie. a droplet size of 100 to 200 microns). <b>Aerial application:</b> Apply in 20 to 60 L of water per hectare as a spray of 100 to 150 microns droplet size. <b>HIGH VOLUME:</b> Gradually increase the spray volume as the plants grow, from 600 L/ha just after transplanting to 1000 L/ha at maturity. Apply as a medium spray (ie. a droplet size of 200 to 400 microns VMD). <b>ULTRA LOW VOLUME:</b> see ULV application section in this label.
	Cluster caterpillar ( <i>Spodoptera litura</i> )	All States	400 mL/ha		<i>Helicoverpa armigera</i> in NSW and Qld. Follow the application directions for the pest above. Apply as required according to pest incidence. Thorough and frequent crop checks are essential. Preferably apply to eggs. Apply to larvae only if they are less than 5 mm long.
Canola	Native budworm ( <i>Helicoverpa punctigera</i> )	NSW, SA, Tas, Vic, WA only	200 or 300 mL/ha	21 days (Cutting for harvest or stockfeed or grazing)	<b>Do NOT apply more than a total 400 mL/ha per season to any one crop.</b> For ULTRA LOW VOLUME use, see application section in this label. Inspect the crop regularly during and immediately after flowering. Apply when damaging pest numbers first appear on the crop and repeat if necessary. For aerial application, use a total volume of 30-35 L/ha and apply in the cooler part of the day. Use the higher rate if larvae longer than 10 mm are present.

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CROP	INSECT PESTS	STATE	RATE	WHP	CRITICAL COMMENTS
Canola (continued)	Tobacco looper ( <i>Chrysodeixis argentifera</i> )	NSW, SA, Tas, Vic only	200 or 300 mL/ha	21 days (Cutting for harvest or stockfeed or grazing)	Do NOT apply more than a total 400 mL/ha per season to any one crop. For ULTRA LOW VOLUME use, see application section in this label. Inspect the crop regularly during and immediately after flowering. Apply when damaging pest numbers first appear on the crop and repeat if necessary. For aerial application, use a total volume of 30-35 L/ha and apply in the cooler part of the day. Use the higher rate if larvae longer than 10 mm are present.
	Vegetable weevil ( <i>Listroderes difficilis</i> )	NSW, ACT, Vic, Tas, SA, WA only	400 mL/ha		Crops should be inspected as they emerge. Border sprays are required to control invading adults. Apply when cotyledons and leaves are being eaten or the plant lopped. Repeat as necessary.
	Cabbage white butterfly ( <i>Pieris rapae</i> ), cabbage moth ( <i>Plutella xylostella</i> )				Apply according to pest incidence.
	Redlegged earth mite, ( <i>Halotydeus destructor</i> )	All States except NT and Qld	100 mL/ha		<b>Pre-emergence:</b> Apply by ground rig only. Treat infested paddocks after sowing but prior to crop emergence when soil is moist. Monitor redlegged earth mite numbers and re-treat if necessary. Do NOT apply as a ULV application.
	Redlegged earth mite, ( <i>Halotydeus destructor</i> ), blue oat mite ( <i>Penthaleus major</i> )		50 mL/ha		Apply when mite numbers reach damaging levels. Do NOT apply as a pre-emergence treatment.
Chickpeas	Native budworm ( <i>Helicoverpa punctigera</i> )	WA only	160 mL/ha	21 days (Harvest) 35 days (grazing)	Apply to open, less dense crops when numbers of newly hatched larvae first appear on the crop and repeat as necessary.
		NSW, Vic, Tas, SA, WA only	200 or 300 mL/ha		Apply when pest numbers reach damaging levels and repeat if necessary. Use the higher rate if larvae longer than 10 mm are present. Best results will be obtained by spraying at egg hatch.
	Redlegged earth mite, ( <i>Halotydeus destructor</i> )	NSW, Vic, Tas, SA, WA only	100 mL/ha		<b>Pre-emergence:</b> Apply by ground rig only. Treat infested paddocks after sowing but prior to crop emergence when soil is moist. Monitor redlegged earth mite numbers and re-treat if necessary. Do NOT apply as a ULV application.

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CROP	INSECT PESTS	STATE	RATE	WHP	CRITICAL COMMENTS
Chickpeas (continued)	Redlegged earth mite ( <i>Halotydeus destructor</i> ), blue oat mite ( <i>Penthaleus major</i> )	NSW, Vic, Tas, SA, WA only	50 mL/ha	21 days (Harvest) 35 days (grazing)	Apply when mite numbers reach damaging levels. Do NOT apply as a pre-emergence treatment. Do NOT use as a ULV application.
	Cutworm ( <i>Agrotis</i> spp.)		75 mL/ha		Check emerging or establishing crops in the late afternoon and evening for caterpillars crawling on the soil surface and feeding on the seedlings. Spray in the late afternoon and evening.
Cotton	Native budworm ( <i>Helicoverpa punctigera</i> )	NSW, NT, Qld, WA only		14 days (Harvest)	For ULTRA LOW VOLUME use, see ULV application section in this label. Apply as indicated by field checks using rates appropriate for the infestation level determined. Application should be timed to coincide with egg hatching and before larvae are in protected feeding sites.
			300 mL/ha		Apply when there are up to 75 eggs and/or up to 5 larvae less than 5 mm long per 100 terminals.
			400 mL/ha		Apply when there are up to 150 eggs and/or up to 10 larvae less than 5 mm long per 100 terminals and/or when larvae between 5 and 10 mm are present.
			500 mL/ha		Apply when there are up to 150 eggs and/or more than 10 larvae less than 5 mm long per 100 terminals and/or when larvae longer than 10 mm are present.
					Preferably apply to eggs. Apply to larvae only if they are less than 5 mm long.
	Cotton bollworm ( <i>Helicoverpa armigera</i> )		300 mL/ha	Apply when there are up to 75 eggs and/or up to 5 larvae less than 5 mm long per 100 terminals.	
			400 mL/ha	Apply when there are up to 150 eggs and/or up to 10 larvae less than 5 mm long per 100 terminals.	
			500 mL/ha	Apply when there are more than 150 eggs and/or more than 10 larvae less than 5 mm long per 100 terminals.	
	Rough bollworm ( <i>Earias huegeli</i> )		300 or 400 mL/ha	Apply when an average of 2 or more larvae are present per 100 bolls. It is essential to detect and treat infestations in the early stages before larvae are established or concealed in bolls deep in the canopy. Use the higher rate if larvae longer than 10 mm are present. Best results will be obtained by applying at egg hatch.	

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CROP	INSECT PESTS	STATE	RATE	WHP	CRITICAL COMMENTS
Cereals (Winter)	Cutworm ( <i>Agrotis</i> spp.)	NSW, ACT, Vic, SA, WA only	75 mL/ha	7 days (Harvest) 14 days (stubble grazing)	Do NOT apply more than a total of 540 mL/ha per season to any one crop. For ULTRA LOW VOLUME use, see ULV application section in this label. Check emerging and establishing crops in the late afternoon and evening for caterpillars crawling on the soil surface and feeding on the seedlings. Spray in late afternoon or evening.
		Qld only	75 or 150 mL/ha		In Qld, use the higher rate when the infestation is severe, or when there are larvae longer than 10 mm, or when longer residual activity is required.
	Webworm ( <i>Hednota</i> spp.)	NSW, Vic, SA, WA only	75 mL/ha		Do NOT use as a ULV application. <b>Pre-planting:</b> May be applied with knock-down herbicides prior to planting. Apply from the last week in May when the larvae have emerged. Do NOT apply to dense pasture. All pasture should be closely grazed prior to application to ensure adequate spray penetration. Apply in a minimum of 100 L of water per hectare. Repeat as required. <b>Post crop emergence:</b> Inspect crop regularly from emergence and apply at the first sign of pest activity. Repeat as required.
	Common armyworm ( <i>Mythimna convecta</i> ), southern armyworm ( <i>Persectania ewingii</i> )	All States	240 mL/ha		Apply before "head lopping" occurs and when there are 2 or more larvae per square metre. Spray in the cool of the day (usually late afternoon) when larvae are most active. Ensure the spray penetrates the crop. This rate is effective on larvae up to 20 mm in length. Monitor crop closely and re-treat if necessary. Poor control may occur in crops that have lodged. See application section for correct water rates.
	Redlegged earth mite ( <i>Halotydeus destructor</i> )	NSW, ACT, Vic, Tas, SA, WA only	100 mL/ha		<b>Pre-emergence:</b> Apply by ground rig only. Treat infested paddocks after sowing but prior to crop emergence when soil is moist. Monitor redlegged earth mite numbers and re-treat if necessary. Do NOT apply as a ULV application.

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CROP	INSECT PESTS	STATE	RATE	WHP	CRITICAL COMMENTS
Cereals (Winter) (continued)	Redlegged earth mite ( <i>Halotydeus destructor</i> ), blue oat mite ( <i>Penthaleus major</i> )	NSW, ACT, Vic, Tas, SA, WA only	50 mL/ha	7 days (Harvest) 14 days (stubble grazing)	Apply when mite numbers reach damaging levels. Spray seedling crops if silvering or whitening (bleaching) of the leaves is causing a reduction in crop growth. If possible, spray on a calm, mild morning when mites are actively feeding on crop leaves. Do NOT apply as a pre- emergence treatment. Do NOT use as a ULV application.
	Aphids ( <i>Rhopalosiphum</i> spp.) (barley yellow dwarf virus vectors)		125 mL/ha		
Eucalypt plantations	Adults and larvae of Tasmanian eucalyptus leaf beetle ( <i>Chrysophtharta bimaculata</i> )	Tas only	250 mL/ha	–	Apply by fixed wing aircraft or by helicopter, using hydraulic or Micronair equipment, to the crowns of eucalypt trees. Micronair application in 5 litres of water/ha has proved effective. Apply before insect damage causes severe defoliation. Treatment will control small and large larvae as well as adult beetles. For ULTRA LOW VOLUME use, see ULV application section in this label.
Faba beans	Native budworm ( <i>Helicoverpa punctigera</i> )	WA only	160 mL/ha	4 weeks (Harvest) 35 days (Grazing)	Apply to open, less dense crops when numbers of newly hatched larvae first appear on the crop and repeat as necessary.
		NSW, Vic, Tas, SA, WA only	200 or 300 mL/ha		Apply when pest numbers reach damaging levels and repeat if necessary. Use the higher rate if larvae longer than 10 mm are present. Best results will be obtained by spraying at egg hatch.
	Redlegged earth mite ( <i>Halotydeus destructor</i> )	NSW, Vic, Tas, SA, WA only	100 mL/ha	<b>Pre-emergence:</b> Apply by ground rig only. Treat infested paddocks after sowing but prior to crop emergence when soil is moist. Monitor redlegged earth mite numbers and re-treat if necessary. Do NOT apply as a ULV application.	
	Redlegged earth mite ( <i>Halotydeus destructor</i> ), blue oat mite ( <i>Penthaleus major</i> )		50 mL/ha	Apply when pest numbers reach damaging. Do NOT apply as pre-emergence treatment. Do NOT use as a ULV application.	
	Cutworm ( <i>Agrotis</i> spp)		75 mL/ha	Check emerging or establishing crops in the late afternoon and evening for caterpillars crawling on the soil surface and feeding on the seedlings. Spray in the late afternoon and evening.	

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CROP	INSECT PESTS	STATE	RATE	WHP	CRITICAL COMMENTS
Field peas	Native budworm ( <i>Helicoverpa punctigera</i> )	WA only	160 mL/ha	4 weeks (Harvest)	For ULTRA LOW VOLUME use, see ULV application section in this label. Apply to open, less dense crops when damaging numbers of newly hatched larvae first appear on the crop and repeat as necessary.
		NSW, Vic, Tas, SA, WA only	200 or 300 mL/ha		Apply when pest numbers reach damaging levels and repeat if necessary. Use the higher rate if larvae longer than 10 mm are present. Best results will be obtained by spraying at egg hatch.
	Pea weevil ( <i>Bruchus pisorum</i> )	NSW, ACT, Vic, SA, WA only	160 or 200 mL/ha		Apply during flowering prior to egg laying when the adult weevil population reaches one or more per 25 sweeps of a sweep net. Use the higher rate for longer residual protection.
	Cutworm ( <i>Agrotis</i> spp.)		75 mL/ha		Check emerging and establishing crops in the late afternoon and evening for caterpillars crawling on the soil surface and feeding on the seedlings. Spray in late afternoon and evening.
	Redlegged earth mite ( <i>Halotydeus destructor</i> )	NSW, Vic, Tas, SA, WA only	100 mL/ha		<b>Pre-emergence:</b> Apply by ground rig only. Treat infested paddocks after sowing but prior to crop emergence when soil is moist. Monitor redlegged earth mite numbers and re-treat if necessary. Do NOT apply as a ULV application.
	Redlegged earth mite ( <i>Halotydeus destructor</i> ), blue oat mite ( <i>Penthaleus major</i> )		50 mL/ha		Apply when mite numbers reach damaging levels. Do NOT apply as a pre-emergence treatment. Do NOT use as a ULV application.
Grapevines (non bearing)	Pink cutworm ( <i>Agrotis munda</i> ), apple weevil (Curculio beetle) ( <i>Otiorynchus cribricollis</i> ), garden weevil ( <i>Phlyctinus callosus</i> )	NSW, Vic, Tas, SA, WA only	100 mL/ 100 L	–	Monitor young vines during spring and early summer and apply at the first signs of leaf damage. Spray the leaves, canes and the soil around each vine to a diameter of 30 cm. 70-80 mL of dilute spray should be sufficient for each vine. If pest infestation persists, a second application may be required after three weeks.
Lettuce	<i>Helicoverpa</i> spp.	All States	<b>LOW VOLUME:</b> 400 mL/ha <b>HIGH VOLUME:</b> 50 mL/ 100 L	3 days (Harvest)	Thoroughly and regularly check the crop. Apply at the first sign of pest activity. Preferably apply to eggs. Apply to <i>H. armigera</i> ONLY if larvae are less than 5 mm long. Repeat according to pest incidence.

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CROP	INSECT PESTS	STATE	RATE	WHP	CRITICAL COMMENTS
Linola	Native budworm ( <i>Helicoverpa punctigera</i> )	WA only	160 or 200 mL/ha	12 weeks (Harvest)	<p>Do NOT apply more than a total 400 mL/ha per season to any one crop.</p> <p>For ULTRA LOW VOLUME use, see ULV application section in this label.</p> <p>Inspect the crop regularly during and immediately after flowering. Apply when damaging pest numbers first appear on the crop.</p> <p>For aerial application, apply during the cooler part of the day in a total volume of 30-35 L/ha. Use the higher rate if larvae longer than 10 mm are present. Refer to application section for water rates.</p>
Linseed	Native budworm ( <i>Helicoverpa punctigera</i> )	NSW, Vic, Tas, SA, WA only	200 or 300 mL/ha	14 days (Harvest)	<p>For ULTRA LOW VOLUME use, see ULV application section in this label.</p> <p>Inspect the crop regularly during and immediately after flowering. Apply when damaging pest numbers first appear on the crop and repeat if necessary.</p> <p>Use the higher rate if larvae longer than 10 mm are present. Best results will be obtained by spraying at egg hatch. Refer to application section for water rates.</p>
	Cutworm ( <i>Agrotis</i> spp.)	NSW, ACT, Tas, SA only	75 mL/ha		<p>Check emerging and establishing crops in the late afternoon and evening for caterpillars crawling on the soil surface and feeding on seedlings.</p> <p>Spray in late afternoon and evening.</p>
Lucerne (Seed and forage crops)	Native budworm ( <i>Helicoverpa punctigera</i> )	NSW, Vic, Tas, SA, WA only	160 mL/ha	14 days (Grazing or cutting for stockfeed)	<p>For ULTRA LOW VOLUME use, see ULV application section in this label.</p> <p>Do NOT apply more than one application per cut or grazing for animal feed.</p> <p>Apply when pest populations reach economically damaging levels.</p> <p>Apply to larvae less than 5 mm in length.</p>
	Green mirid ( <i>Creontiades dilutus</i> )				<p>Do NOT apply more than one application per cut or grazing for animal feed.</p> <p>Apply when pest populations reach economically damaging levels.</p>

CROP	INSECT PESTS	STATE	RATE	WHP	CRITICAL COMMENTS
Lupins	Native budworm ( <i>Helicoverpa punctigera</i> )	NSW, ACT, Vic, SA only	200 or 300 mL/ha	4 weeks (Harvest)	Do NOT apply more than a total of 600 mL/ha per season to any one lupin crop. For ULTRA LOW VOLUME use, see ULV application section in this label. Apply when damaging pest numbers first appear on the crop and repeat if necessary. Use the higher rate if larvae longer than 10 mm are present. Best results will be obtained by spraying at egg hatch.
		WA only	120 or 200 mL/ha		Spraying should be timed to precede the first visible damage to the pods. Use the higher rate when the infestation is severe, or when residual activity is required.
	Cutworm ( <i>Agrotis</i> spp.)	NSW, ACT, Vic, Tas, SA, WA only	75 mL/ha		Check emerging and establishing crops in the late afternoon and evening for caterpillars crawling on the soil surface and feeding on seedlings. Spray in late afternoon and evening.
	Common armyworm ( <i>Mythimna convecta</i> ), southern armyworm ( <i>Persectania ewingii</i> )	ACT, NSW only	240 mL/ha		Spray in the cool of the day (late afternoon) when larvae are most active.
	Redlegged earth mite ( <i>Halotydeus destructor</i> )	NSW, Vic, Tas, SA, WA only	100 mL/ha		<b>Pre-emergence:</b> Apply by ground rig only. Treat infested paddocks after sowing but prior to crop emergence when soil is moist. Monitor redlegged earth mite numbers and re-treat if necessary. Do NOT apply as a ULV application.
	Redlegged earth mite ( <i>Halotydeus destructor</i> ), blue oat mite ( <i>Penthaleus major</i> )		50 mL/ha		Apply when mite numbers reach damaging levels. Do NOT apply as a pre-emergence treatment. Do NOT use as a ULV application.
	Maize	Corn earworm ( <i>Helicoverpa armigera</i> )	Qld, NSW, ACT, Vic, NT only		300 or 400 mL/ha

CROP	INSECT PESTS	STATE	RATE	WHP	CRITICAL COMMENTS
Maize (continued)	Native budworm ( <i>Helicoverpa punctigera</i> )	All States	300 or 400 mL/ha	7 days (Harvest)	Thoroughly and regularly check the crop. Apply when infestation reaches an economically damaging level and repeat if necessary. Best results will be obtained by applying at egg hatch. Use the higher rate if larvae longer than 10 mm are present.
Mung beans, navy beans	Native budworm ( <i>Helicoverpa punctigera</i> )	Qld, NSW, ACT, NT only	300 or 400 mL/ha	7 days (Harvest)	For ULTRA LOW VOLUME use, see ULV application section in this label. Crop checking should be aimed to detect larvae as they hatch. Small larvae are easier to kill than large larvae. Apply when the number of larvae feeding on flowers or pods reaches 1 to 2 per metre of row. Repeat as required. Use the higher rate when larvae larger than 10 mm are present or when canopy is dense. Best results will be obtained by spraying at egg hatch.
	Corn earworm ( <i>Helicoverpa armigera</i> )				Thoroughly and regularly check the crop. Apply when the infestation reaches an economically damaging level and repeat as required. Preferably apply to eggs. In Qld and NSW, apply to larvae only if they are less than 5 mm long. Use the higher rate when pest pressure is high.
Pastures (legume and grass based pastures)	Wingless grasshopper ( <i>Phaulacridium vittatum</i> )	All States	160 mL/ha	3 days (Grazing) 14 days (Cut for stockfeed)	<b>Do NOT apply more than a total 320 mL/ha per season.</b> For ULTRA LOW VOLUME use, see ULV application section in this label. Apply to infested areas and repeat as necessary. Spraying is most effective on newly emerged hoppers before they begin dispersing. Spray in the warmer parts of the day when hoppers are exposed. Later sprays should be applied before the start of egg laying. Good coverage is essential.
	Brown pasture looper ( <i>Ciampa arietaria</i> )	NSW, Vic, Tas, SA, WA only	50 mL/ha		Apply when pest infestation reaches an economically damaging level.
	Blackheaded pasture cockchafer ( <i>Aphodius tasmaniae</i> )	NSW, Vic, Tas, SA only	100 mL/ha		Spraying is most effective when larvae are detected and treated early. Suspect paddocks should be dug after the first substantial rain in April/May and inspected to ensure grubs are present in sufficient numbers to warrant treatment. Spraying after June will give poorer results.

# BASF

CROP	INSECT PESTS	STATE	RATE	WHP	CRITICAL COMMENTS
Pastures (legume and grass based pastures) (continued)	Redlegged earth mite ( <i>Halotydeus destructor</i> )	ACT, NSW, SA, Tas, Vic, WA only	100 mL/ha	3 days (Grazing) 14 days (Cut for stockfeed)	<p><b>Pre-emergence:</b> Apply by ground rig only. Treat infested paddocks after sowing but prior to crop emergence when soil is moist.</p> <p>Monitor redlegged earth mite numbers and re-treat if necessary.</p> <p>Do NOT apply as a ULV application.</p>
	Redlegged earth mite ( <i>Halotydeus destructor</i> ), blue oat mite ( <i>Penthaleus major</i> )		50 mL/ha		<p>Apply when mite numbers reach damaging levels.</p> <p>Do NOT use as a ULV application.</p> <p><b>Autumn/Winter:</b> Apply 4 to 7 weeks after the opening rains in late autumn/early winter when RLEM are present (2-3 weeks after egg hatch occurs). FASTAC is rainfast after spray deposits have dried on the leaf surface. FASTAC can be mixed with herbicides used for winter cleaning of sub clover pastures. Consult the compatibility section of this label for details.</p> <p><b>Spring:</b> If RLEM/BOM numbers increase in the spring, spray when damage is observed and again before diapause egg production begins. FASTAC can be mixed with herbicides used for spray topping pastures if timing coincides.</p> <p>Consult the compatibility section of this label for details.</p> <p>Do NOT apply as a pre-emergence treatment.</p>
Pome fruit: apples, pears	Apple weevil ( <i>Otiorhynchus cribricollis</i> ), garden weevil ( <i>Phlyctinus callosus</i> )	NSW, Vic, SA, WA only	100 mL/ 100 L water	14 days (Harvest)	<p>Spray approx. 1-2 litres of solution onto the crotch, trunk and the soil at the base of each tree at peak weevil emergence. This is usually late October-late November for garden weevil, and late November-mid December for apple weevil.</p> <p>Monitor weevil emergence using a single sided cardboard trunk band.</p> <p>Continue monitoring after spraying as a second spray may be needed 3-4 weeks later.</p>

CROP	INSECT PESTS	STATE	RATE	WHP	CRITICAL COMMENTS
Rice (both aerial and drill sown)	Common armyworm ( <i>Mythimna convecta</i> )	NSW only	200 mL/ha	7 days	Do NOT apply more than a total 400 mL/ha per season to any one crop. Inspect crops regularly for the presence of grubs from flowering onwards. Apply when rice- damaging pest numbers first appear. Apply by aircraft in 20-30 litres of water/ha to drained fields only. Spray in the cool of the day (early morning or late afternoon) when larvae are most active. Monitor crop closely and re-treat if necessary. Poor control may occur in crops that have lodged. See application section for correct water rates.
Sorghum	Corn earworm ( <i>Helicoverpa armigera</i> ), native budworm ( <i>Helicoverpa punctigera</i> )	Qld, NSW, ACT, NT only	300 or 400 mL/ha	7 days (Harvest)	For ULTRA LOW VOLUME use, see ULV application section in this label. Crop checking should commence when the head emerges from the boot and continue at daily intervals until the end of flowering for midge and at weekly intervals until maturity for <i>Helicoverpa armigera</i> . Do NOT apply to tight headed varieties. Apply when there are 2 or more actively feeding larvae per head, or when numbers are sufficient to cause economic damage. Use the higher rate if longer residual control is required. Preferably apply to eggs. Apply to <i>H. armigera</i> larvae only if they are less than 5 mm long. Repeat as required.
	Sorghum midge ( <i>Contarinia sorghicola</i> )		100 or 200 mL/ha		Apply when numbers reach 1 to 2 per head, between head emergence and the end of flowering. Repeat as required. Use the higher rate for increased residual protection.
Soybeans	Native budworm ( <i>Helicoverpa punctigera</i> )	Qld, NSW, ACT, NT only	300 or 400 mL/ha	7 days (Harvest)	For ULTRA LOW VOLUME use, see ULV application section in this label. Thoroughly and regularly check the crop. Apply when the number of larvae feeding on flowers plus pods reaches 1 to 2 per metre of row. Repeat as required. Use the higher rate if larvae longer than 10 mm are present. Best results will be obtained by applying at egg hatch.
	Corn earworm ( <i>Helicoverpa armigera</i> )				Thoroughly and regularly check the crop. Apply when numbers are sufficient to cause economic damage. Preferably apply to eggs. In Qld and NSW, apply to larvae only if they are less than 5 mm long. Repeat as required. Use the higher rate when pest pressure is high.

**BASF**

CROP	INSECT PESTS	STATE	RATE	WHP	CRITICAL COMMENTS
Stone fruit: apricots, nectarines, peaches, plums	Apple weevil ( <i>Otiorhynchus cribricollis</i> ), garden weevil ( <i>Phlyctinus callosus</i> )	WA only	100 mL / 100 L water	14 days (Harvest)	Spray approx. 1-2 litres of solution onto the crotch, trunk and soil at the base of each tree at peak weevil emergence. This is usually late October-late November for garden weevil, and late November-mid December for apple weevil. Monitor weevil emergence using a single sided cardboard trunk band. Continue monitoring after spraying as a second spray 3-4 weeks later may be needed.
Sunflowers	Native budworm ( <i>Helicoverpa punctigera</i> )	Qld, NSW, Vic, ACT, NT only	300 or 400 mL/ha	21 days (Harvest)	TO PROTECT BEES and ensure adequate pollination, application during flowering should be avoided. If application is necessary at flowering, apply early morning or late afternoon when bees are not actively foraging. For ULTRA LOW VOLUME use, see ULV application section in this label. Crop checking should be aimed to detect larvae as they hatch. Small larvae are easier to kill than large larvae. Apply when the infestation reaches an average of 2-3 larvae per head or when economic damage is occurring. Repeat as required. Apply before the heads turn downwards to ensure adequate coverage. Use the higher rate if larvae longer than 10 mm are present. Best results will be obtained by applying at egg hatch.
	Corn earworm ( <i>Helicoverpa armigera</i> )				Thoroughly and regularly check the crop. Apply when numbers are sufficient to cause economic damage. Preferably apply to eggs. In NSW and Qld, apply to larvae only if they are less than 5 mm long. Repeat as required. Use the higher rate under heavy pest pressure.
	Grey cluster bug ( <i>Nysius clevelandensis</i> ), Rutherglen bug ( <i>Nysius vinitor</i> )				Apply from budding when adult numbers per plant reach 10 to 15 in dryland crops and 20 to 25 in irrigated crops. After flowering, apply when adult numbers on the face of heads reach 20 to 25. Repeat as required. The higher rate should be used when numbers are very high.
	Rutherglen bug ( <i>Nysius vinitor</i> )	Vic, Tas, WA only			250 mL/ha

**BASF**

CROP	INSECT PESTS	STATE	RATE	WHP	CRITICAL COMMENTS
Sweet corn	Native budworm ( <i>Helicoverpa punctigera</i> ), corn earworm ( <i>Helicoverpa armigera</i> )	All States	300 or 400 mL/ha	7 days (Harvest)	<p>For ULTRA LOW VOLUME use, see ULV application section in this label.</p> <p>Thoroughly and regularly check the crop. The level of cob damage tolerated varies with market requirements.</p> <p><b>Fresh Market Corn:</b> Apply at 5-8 day intervals, accordingly to pest incidence, from tassel emergence until the silks wither.</p> <p><b>Processing Corn:</b> Apply from early silking according to pest incidence.</p> <p>Larvae in protected feeding sites within the cob are not effectively controlled. Apply before this situation occurs.</p> <p>Best results will be obtained by applying at egg hatch.</p> <p>Use the higher rate if larvae longer than 10 mm are present.</p> <p>To help contain pyrethroid resistance in <i>Helicoverpa armigera</i> in summer crops, do NOT apply to corn earworm longer than 5 mm.</p>
Tobacco	Native budworm ( <i>Helicoverpa punctigera</i> ), tobacco budworm ( <i>Helicoverpa armigera</i> )	Vic only	30 or 40 mL/100 L	7 days (Harvest)	<p>Apply from just after transplanting on a 7 to 10 day schedule, according to pest.</p> <p>Apply as a medium to fine spray using hollow and/or solid cone nozzles.</p> <p>The spray volume should be gradually increased as the plants grow, from 200 L/ha just after transplanting to 1000 L/ha at maturity.</p> <p>Use the higher rate when larvae longer than 10 mm are present or when egg laying is intense.</p>



CROP	INSECT PESTS	STATE	RATE	WHP	CRITICAL COMMENTS
Tomatoes (bush and trellis)	Native budworm ( <i>Helicoverpa punctigera</i> )	All States	<b>ULTRA LOW VOLUME:</b> 300 or 400 mL/ha <b>LOW VOLUME:</b> 200, 300 or 400 mL/ha <b>HIGH VOLUME:</b> 20, 30 or 50 mL /100 L	1 day (Harvest)	Do NOT apply to trellis tomatoes by aircraft. Apply on a 7 to 10 day schedule while the pests are active. Use the middle rate when pest activity is high and/or when larvae between 10 and 20 mm in length are present. Use the highest rate when larvae longer than 20 mm are present and/or when interruption of the schedule enables a very severe infestation to develop. <b>ULTRA LOW VOLUME:</b> see ULV application section in this label. <b>LOW VOLUME:</b> <b>By ground-rig:</b> apply in 100 to 400 L of water per hectare as a fine spray. <b>By aircraft:</b> apply in a minimum of 10 L of water per hectare as a spray of 100 to 150 microns VMD. <b>HIGH VOLUME:</b> Apply as a medium to fine spray. Gradually increase the spray volume as the plants grow, from 200 L/ha just after transplanting establishment to 1000 L/ha at maturity.
	Tomato grub ( <i>Helicoverpa armigera</i> )	Vic, Tas, SA, WA only			
	Cluster caterpillar ( <i>Spodoptera litura</i> )	Qld, NSW, ACT, WA, NT only			
	Tomato grub ( <i>Helicoverpa armigera</i> )	Qld, NSW, NT only	<b>ULTRA LOW VOLUME:</b> 300 mL/ha <b>LOW VOLUME:</b> 300 mL/ha <b>HIGH VOLUME:</b> 30 mL/ 100 L		
Plague thrips ( <i>Thrips imaginis</i> )	Qld, NSW, ACT, Vic, Tas, WA, NT only	<b>ULTRA LOW VOLUME:</b> 130 mL/ha <b>LOW VOLUME:</b> 130 mL/ha <b>HIGH VOLUME:</b> 18 mL/ 100 L	The crop should be frequently checked when it is flowering for the presence of the pest. Apply when the infestation reaches an economically damaging level, using the application methods described for native budworm above.		

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

**BASF**

**WITHHOLDING PERIODS:**

BROCCOLI, BRUSSELS SPROUTS, CABBAGES, CAULIFLOWERS, CHINESE CABBAGE, KALE, KOHLRABI, TOMATOES, TURNIPS: DO NOT HARVEST FOR 1 DAY AFTER APPLICATION.

LETTUCE: DO NOT HARVEST FOR 3 DAYS AFTER APPLICATION.

PASTURES: DO NOT GRAZE FOR 3 DAYS AFTER APPLICATION.  
DO NOT CUT FOR STOCKFEED FOR 14 DAYS AFTER APPLICATION.

MAIZE, MUNG BEANS, NAVY BEANS, RICE, SORGHUM, SOYBEANS, SWEET CORN, TOBACCO:  
DO NOT HARVEST FOR 7 DAYS AFTER APPLICATION.

WINTER CEREALS: DO NOT HARVEST FOR 7 DAYS AFTER APPLICATION.  
DO NOT GRAZE TREATED STUBBLE FOR 14 DAYS AFTER APPLICATION.

LUCERNE: DO NOT GRAZE OR CUT FOR STOCKFEED FOR 14 DAYS AFTER APPLICATION.

COTTON, LINSEED, POME FRUIT, STONE FRUIT:

DO NOT HARVEST FOR 14 DAYS AFTER APPLICATION.

CANOLA: DO NOT GRAZE OR CUT FOR STOCKFEED FOR 21 DAYS AFTER APPLICATION.  
DO NOT CUT AND WINDROW FOR HARVEST FOR 21 DAYS AFTER APPLICATION.

CHICKPEAS: DO NOT HARVEST FOR 21 DAYS AFTER APPLICATION  
DO NOT GRAZE OR CUT FOR STOCKFEED FOR 35 DAYS AFTER APPLICATION

SUNFLOWERS: DO NOT HARVEST FOR 21 DAYS AFTER APPLICATION.

FIELD PEAS, LUPINS: DO NOT HARVEST FOR 4 WEEKS AFTER APPLICATION.

FABA BEANS: DO NOT HARVEST FOR 4 WEEKS AFTER APPLICATION.  
DO NOT GRAZE OR CUT FOR STOCKFEED FOR 35 DAYS AFTER APPLICATION.

LINOLA: DO NOT HARVEST FOR 12 WEEKS AFTER APPLICATION.

**PERMIT DETAILS FOR NUMBER – PERMIT 2717**

# Fastac<sup>®</sup> Duo

**INSECTICIDE**

Active Constituent: 100 g/L ALPHA-CYPERMETHRIN  
Solvent: 751 g/L XYLENE

Registered to: **AGRICULTURE WESTERN AUSTRALIA  
Manjimup Horticultural Research Centre  
South-West Hwy  
MANJIMUP 6258 WA**

**FOR MINOR OFF-LABEL-USE OF A REGISTERED AGVET CHEMICAL PRODUCT**

**PERMIT NUMBER - PER2717**

This permit is issued under the Agvet Code, of the relevant jurisdictions, to the person stated above. The holder of the permit must comply with all requirements as specified in the Agvet Code. A summary of the key requirements are that the holder must:

- supply any requested information to the NRA;
- inform the NRA if they become aware of any relevant information concerning the uses dealt with by this permit;
- comply with a lawful direction or requirement of an inspector.

This permit for the reasons given below, allows any person listed in **1. Persons** to use the products listed in **2. Products** for the minor off-label use specified in **3. Directions for Use** in the jurisdictions listed in **4. States**.

If this permit were not issued use of the products as specified in this permit would constitute an offence under the Agvet Codes.

The persons listed in **1. Persons** must comply with all conditions listed in CONDITIONS OF PERMIT to be effectively covered by this permit.

**THIS PERMIT IS IN FORCE FROM 9 JULY 1999 TO 9 JULY 2002.**

It is in force until it expires or it is cancelled, suspended or surrendered.

**REASON FOR ISSUE OF PERMIT**

This permit is a renewal of PER1951. Garden weevil is an important pest of asparagus in certain states, particularly Western Australia. Adult weevils feed directly on asparagus spears resulting in them being downgraded or rejected. No products are currently registered for the control of this pest on asparagus. This permit is issued to allow the off-label use of registered products containing alpha-cypermethrin in various states of Australia where the crop is grown and the pest is (or may become) a problem.

**1. Persons**

Persons generally.

**2. Products**

FASTAC DUO INSECTICIDE

Containing: 100 g/L ALPHA-CYPERMETHRIN as their only active constituent.

**3. Directions for Use**

Crop	Pest	Rate
ASPARAGUS	GARDEN WEEVIL	Apply at a rate of 100 mL product per 100 L water.

**Critical Use Comments:**

Apply at up to 500L spray solution per hectare to control weevil adults.

Day time spraying is effective but superior control may be achieved if spray is applied at night. Repeat applications as required, depending upon pest pressure.

**Withholding Period:**

DO NOT HARVEST ASPARAGUS SPEARS FOR ONE DAY AFTER APPLICATION.

**4. States**

ACT, NSW, SA, TAS, NT, WA

(Note: Victoria is not included in this permit because their 'control-of-use' legislation allows that a permit is not required to legalise this off-label use in VIC).

**CONDITIONS OF PERMIT**

**General Conditions**

- THIS PERMIT provides for the use of a product in a manner other than specified on the approved label of the product. Unless otherwise stated in this permit, the use of the product must be in accordance with instructions on its label.
- PERSONS who wish to prepare for use and/or use the products for the purposes specified in this permit must read, or have read to them, the permit particularly the information included in DETAILS OF PERMIT and CONDITIONS OF PERMIT.
- **Export of Produce:** Exported produce or animals must have appropriate residue tolerance limits established in the importing countries and any residues must not exceed the tolerance limits.

**PERMIT DETAILS FOR NUMBER – PERMIT 3494**

# Fastac<sup>®</sup> Duo

**INSECTICIDE**

Active Constituent: 100 g/L ALPHA-CYPERMETHRIN  
 Solvent: 751 g/L XYLENE

Registered to: **INDUSTRY PEST MANAGEMENT GROUP  
 Plantation Forestry Growers of WA  
 Western Australia**

**FOR MINOR OFF-LABEL-USE OF A REGISTERED AGVET CHEMICAL PRODUCT**

**PERMIT NUMBER - PER3494**

This permit is issued under the Agvet Code, of the relevant jurisdictions, to the person stated above. The holder of the permit must comply with all requirements as specified in the Agvet Code. A summary of the key requirements are that the holder must:

- supply any requested information to the NRA;
- inform the NRA if they become aware of any relevant information concerning the uses dealt with by this permit;
- comply with a lawful direction or requirement of an inspector.

This permit for the reasons given below, allows any person listed in **1. Persons** to use the products listed in **2. Products** for the minor off-label use specified in **3. Directions for Use** in the jurisdictions listed in **4. States**.

If this permit were not issued use of the products as specified in this permit would constitute an offence under the Agvet Codes.

The persons listed in **1. Persons** must comply with all conditions listed in CONDITIONS OF PERMIT to be effectively covered by this permit.

**THIS PERMIT IS IN FORCE FROM 5 APRIL 2001 TO 31 MARCH 2002.**

It is in force until it expires or it is cancelled, suspended or surrendered.

**REASON FOR ISSUE OF PERMIT**

This permit is issued to allow the control of various insects pests of *Pinus radiata*, *Pinus pineaster* and *Eucalyptus* spp. plantations in the South West WA using cypermethrin-alpha based products. This is a renewal of a previously issued NRA permit PER1559.

**1. Persons**

Members of the Industry Pest Management Group.

**2. Products**

FASTAC DUO INSECTICIDE  
 Containing: 100 g/L ALPHA-CYPERMETHRIN  
 as their only active constituent.

**3. Directions for Use**

Crop	Pest	Rate
<i>Pinus radiata</i> , <i>Pinus pineaster</i> and	RUTHERGLEN BUG	Apply up to a maximum rate of
	WINGLESS GRASSHOPPER	
<i>Eucalyptus</i> spp. PLANTATIONS IN SOUTH WEST, WA	APPLE WEEVIL	300 mL product per hectare.
	GARDEN WEEVIL	
	NATIVE BUDWORM	
	CHRYSOMELID	
	BETLE	
	PASTURE DAY MOTH	
	AUTUMN GIN MOTH	
	CUTWORM	
	AUSTRALIAN LOCUST	
	LEAF TIER	

**Critical Use Comments:**

Use higher rates on adults and when larvae exceed 20 mm in length.

**4. States**

WA only.

**CONDITIONS OF PERMIT**

Apart from the uses dealt with in this permit users must comply with the instructions on the approved label of the registered product, particularly those instructions relating to protection, precaution, safety directions, first aid and storage and disposal.

PERSONS who wish to prepare for use and/or use the products for the purposes specified in this permit must read, or have read to them, the permit particularly the information included in DETAILS OF PERMIT and CONDITIONS OF PERMIT.

**PERMIT DETAILS FOR NUMBER – PERMIT 3832**

# Fastac<sup>®</sup> Duo

**INSECTICIDE**

Active Constituent: 100 g/L ALPHA-CYPERMETHRIN

Solvent: 751 g/L XYLENE

Registered to: AUSTRALIAN OLIVE ASSOCIATION LTD  
PO Box 397  
ADELAIDE 5001 SA

**FOR MINOR OFF-LABEL-USE OF A REGISTERED AGVET CHEMICAL PRODUCT**

**PERMIT NUMBER - PER3832**

This permit is issued under the Agvet Code, of the relevant jurisdictions, to the person stated above. The holder of the permit must comply with all requirements as specified in the Agvet Code. A summary of the key requirements are that the holder must:

- supply any requested information to the NRA;
- inform the NRA if they become aware of any relevant information concerning the uses dealt with by this permit;
- comply with a lawful direction or requirement of an inspector.

This permit for the reasons given below, allows any person listed in **1. Persons** to use the products listed in **2. Products** for the minor off-label use specified in **3. Directions for Use** in the jurisdictions listed in **4. States**.

If this permit were not issued use of the products as specified in this permit would constitute an offence under the Agvet Codes.

The persons listed in **1. Persons** must comply with all conditions listed in CONDITIONS OF PERMIT to be effectively covered by this permit.

**THIS PERMIT IS IN FORCE FROM 9 MAY 2001 TO 31 DECEMBER 2003.** It is in force until it expires or it is cancelled, suspended or surrendered.

**REASON FOR ISSUE OF PERMIT**

Very few products are currently approved for use on olives. The Australian olive industry is currently in it's infancy in many states and it is expected that many pest and disease problems will be discovered over the coming seasons as more and more research is conducted into commercial olive production. This permit is issued to allow the off-label use of an insecticide alpha-cypermethrin to control two pests that are considered a problem in the olive industry. Under this permit it is the aim that the industry will further investigate various pests and diseases and appropriate/effective and sustainable methods of control. This permit is issued to enable pest control whilst that work continues into this new emerging industry.

**1. Persons**

Persons generally.

**2. Products**

FASTAC DUO INSECTICIDE

Containing: 100 g/L ALPHA-CYPERMETHRIN as their only active constituent.

**3. Directions for Use**

Crop	Pest	Rate
OLIVES (NON-BEARING TREES ONLY).	CURCULIO BEETLE AND CUTWORMS.	Apply as a butt drench at a rate of 100 mL product per 100 L water.

**Critical Use Comments:**

- Drench spray to the butts of non-bearing trees and the ground around the butt.
- Avoid spraying in excessively wet conditions with irrigation, rain or dew.
- It is recommended that this treatment NOT be applied to trees older than 2 years to maximise beneficial predators and parasites that may be adversely affected from use of this product.

**Withholding Period:**

NOT REQUIRED WHEN USED AS DIRECTED.

**4. States**

ACT, NSW, QLD, SA, TAS, NT & WA ONLY.

(Note: Victoria is not included in this permit because their 'control-of-use' legislation means that a permit is not required to legalise this off-label use in VIC).

**CONDITIONS OF PERMIT**

THIS PERMIT provides for the use of a product in a manner other than specified on the approved label of the product. Unless otherwise stated in this permit, the use of the product must be in accordance with instructions on its label. PERSONS who wish to prepare for use and/or use the products for the purposes specified in this permit must read, or have read to them, the permit particularly the information included in DETAILS OF PERMIT and CONDITIONS OF PERMIT.

THIS TEMPORARY permit will only be renewed for a further period, or extended indefinitely, if appropriate residue data generated in Australia is submitted to the NRA. Contact the NRA to ascertain the appropriate type and extent of residue data required to allow continued use of the permit.

DO NOT Export treated produce

NO produce treated under this permit may be exported.

**FOR A FULL COPY OF THIS PERMIT,  
PLEASE CONTACT BASF AUSTRALIA LTD ON 1800 501 940**

**BASF**

**PERMIT DETAILS FOR NUMBER – PERMIT 4309**

# Fastac<sup>®</sup> Duo

**INSECTICIDE**

Active Constituent: 100 g/L ALPHA-CYPERMETHRIN  
 Solvent: 751 g/L XYLENE

Registered to: AGRICULTURAL WESTERN AUSTRALIA  
 Manjimup Horticultural Research Institute  
 South-Western Hwy  
 MANJIMUP 6258 WA

**FOR MINOR OFF-LABEL-USE OF A REGISTERED AGVET CHEMICAL PRODUCT**

**PERMIT NUMBER - PER4309**

This permit is issued under the Agvet Code, of the relevant jurisdictions, to the person stated above. The holder of the permit must comply with all requirements as specified in the Agvet Code. A summary of the key requirements are that the holder must:

- supply any requested information to the NRA;
- inform the NRA if they become aware of any relevant information concerning the uses dealt with by this permit;
- comply with a lawful direction or requirement of an inspector.

This permit for the reasons given below, allows any person listed in **1. Persons** to use the products listed in **2. Products** for the minor off-label use specified in **3. Directions for Use** in the jurisdictions listed in **4. States**.

If this permit were not issued use of the products as specified in this permit would constitute an offence under the Agvet Codes.

The persons listed in **1. Persons** must comply with all conditions listed in CONDITIONS OF PERMIT to be effectively covered by this permit.

**THIS PERMIT IS IN FORCE FROM 29 JANUARY 2001 TO 31 MARCH 2003.**

It is in force until it expires or it is cancelled, suspended or surrendered.

**REASON FOR ISSUE OF PERMIT**

Garden weevil is an important pest of avocados in Western Australia because adult weevils feed directly on avocados resulting in the fruit being downgraded or rejected. There is no pesticide currently registered to protect avocado crops from weevil pests.

This current permit PER4309 is a renewal of previously issued permit PER2735 which expired on 31st December 2000.

**1. Persons**

Persons generally.

**2. Products**

FASTAC DUO INSECTICIDE  
 Containing: 100 g/L ALPHA-CYPERMETHRIN  
 as their only active constituent.

**3. Directions for Use**

Crop	Pest	Rate
AVOCADOS	GARDEN WEEVIL ( <i>Phlyctinus callosus</i> )	50 mL/ 100 mL

**Critical Use Comments:**

After peak weevil emergence in spring, apply at up to 2,500L spray solution per hectare to tree canopy. Volume applied will depend upon tree age and size. Day time spraying is effective but superior control may be achieved if spray is applied at night.

**Withholding Period:**

DO NOT HARVEST FOR 7 DAYS AFTER APPLICATION

**4. States**

WA only.

**PERMIT DETAILS FOR NUMBER – PERMIT 4309****CONDITIONS OF PERMIT****General Conditions:**

To be used in accordance with restrictions as stated in attachment 1.

THIS PERMIT has been granted in response to requests from persons other than the manufacturer of products which have been included in this permit. When assessing the proposed use the NRA will offer seek advice from these manufacturers. As these manufacturers have not sought this permit, they should not be held responsible for the use of their products as specified in this permit.

THIS PERMIT provides for the use of product in a manner other than specified on the approval label of the product. Unless otherwise stated in this permit, the use of the product must be in accordance with instructions on its label.

PERSONS who wish to prepare for use and/or use the products for the purposes specified in this permit must read, or have read to them, the permit particularly the information included in DETAILS OF PERMIT and CONDITIONS OF PERMIT.

IN DECIDING whether or not to issue this permit the NRA must assess the use against many known and uncertain scientific and other factors. The NRA is satisfied that the approved use will not cause an undue hazard to human health and the environment. However, users should undertake the use knowing there is no guarantee that the use will be effective to the extent expected by users, that no crop damage may result, or the use would not jeopardise trade.

**RESIDUES:**

DO NOT allow more than twice per season with a minimum re-treatment interval of 14 days.

To allow produce from treated plants or animals to be supplied or otherwise made available for human or animal consumption the NRA has established the following temporary maximum residue limits (TMRLs): T0.2 mg/kg.

**Fate of produce from treated plants:**

Produce from plants treated during the trial can only be supplied to or otherwise made available for human or animal consumption if the resulting residues are at or below the established maximum residue limit (MRL) of T0.2 mg/kg.

**Export of Produce:**

Exported produce or animals must have appropriate residue tolerance limits established in the importing countries and any residues must not exceed the tolerance limits.

**PERMIT DETAILS FOR NUMBER – PERMIT 4375**

# Fastac<sup>®</sup> Duo

**INSECTICIDE**

Active Constituent: 100 g/L ALPHA-CYPERMETHRIN  
 Solvent: 751 g/L XYLENE

Registered to: PULSE AUSTRALIA  
 Suite 1, Level 17, Bligh Street,  
 Sydney NSW 2000

**FOR MINOR OFF-LABEL-USE OF A REGISTERED AGVET CHEMICAL PRODUCT**

**PERMIT NUMBER - PER4375**

This permit is issued under the Agvet Code, of the relevant jurisdictions, to the person stated above. The holder of the permit must comply with all requirements as specified in the Agvet Code. A summary of the key requirements are that the holder must:

- supply any requested information to the NRA;
- inform the NRA if they become aware of any relevant information concerning the uses dealt with by this permit;
- comply with a lawful direction or requirement of an inspector.

This permit for the reasons given below, allows any person listed in **1. Persons** to use the products listed in **2. Products** for the minor off-label use specified in **3. Directions for Use** in the jurisdictions listed in **4. States**.

If this permit were not issued use of the products as specified in this permit would constitute an offence under the Agvet Codes.

The persons listed in **1. Persons** must comply with all conditions listed in CONDITIONS OF PERMIT to be effectively covered by this permit.

**THIS PERMIT IS IN FORCE FROM 25 JANUARY 2001 TO 30 APRIL 2001.**

It is in force until it expires or it is cancelled, suspended or surrendered.

**REASON FOR ISSUE OF PERMIT**

A locust outbreak is currently damaging mung bean crops in certain shires within Queensland, and potential exists for these populations to also affect other areas. No products are currently registered for the control of locusts on mung beans. This permit is issued to allow the off-label emergency use of alpha-cypermethrin based products for the control of locusts in the 2001 season.

**1. Persons**

Persons generally.

**2. Products**

FASTAC DUO INSECTICIDE  
 Containing: 100 g/L ALPHA-CYPERMETHRIN  
 as their only active constituent.

**3. Directions for Use**

Crop	Pest	Rate
MUNGBEANS	AUSTRALIAN PLAGUE LOCUST ( <i>Chortoicetes terminifera</i> )	Apply at a maximum rate of 160-200 mL/ha
	SPUR-THROATED LOCUST ( <i>Austracris guttulosa</i> )	
	MIGRATORY LOCUST ( <i>Locusta migratoria</i> )	

**Critical Use Comments:**

Apply when locusts are attacking. Apply ground or aerial equipment.

**Withholding Periods:**

HARVESTING:

DO NOT APPLY LATER 7 DAYS BEFORE HARVEST.

GRAZING (LIVESTOCK FOR LOCAL CONSUMPTION):

Adhere to the above withholding period and as specified on the registered product labels.

Avoid spraying of grazing livestock in areas being treated. If overspraying of grazing livestock is unavoidable and does occur, withhold them from slaughter for a period of 28 days (4 weeks). If further advice is required, contact the National Registration Authority (NRA) or the State Department of Agriculture or Primary Industries

**GRAZING (LIVESTOCK FOR EXPORT MARKETS):**

The above withholding period for grazing only applies to animals for the Australian domestic market. Some export markets apply different standards which may require an export slaughter interval. If livestock may be sold for export markets seek advice before using this chemical. If meat from livestock has been oversprayed may be sold to an overseas market, advice must be sought before selling



**PERMIT DETAILS FOR NUMBER – PERMIT 4375**

these animals. A vendor declaration detailing the treatment should accompany the stock.

**GRAZING (LIVESTOCK FOR EXPORT MARKETS) ON TREATED DRY CROPS AND/OR PASTURES:**

This chemical may persist on dry pasture (or in harvested and stored animal feed, e.g. hay) for long periods. Livestock on pasture treated when drying off or while dry, may have residues at levels unacceptable to our overseas markets. Similarly livestock on feed harvested from pasture or crops treated when drying off or while dry, may have unacceptable levels of residues. The pasture, or crop, must be regarded as contaminated until such time as there has been substantial regrowth (i.e. following good rains or the Autumn break).

Livestock grazing or receiving contaminated feed will require a period of clean (untreated) feed to prevent chemical residues above export market requirements. Alternatively, where there is regrowth of the pasture or crop following good rains the livestock may remain on the treated area provided they are withheld from slaughter for a sufficient period after the commencement of regrowth. The appropriate periods to maintain livestock on clean feed or withhold from slaughter must be obtained prior to use of the products specified in this permit.

**4. States**

NSW & Qld only

**CONDITIONS OF PERMIT**

THIS PERMIT provides for the use of a product in a manner other than specified on the approved label of the product. Unless otherwise stated in this permit, the use of the product must be in accordance with instructions on its label, including:

- Mixing
- Application
- Protection of Livestock
- Protection of Wildlife, Fish, Crustaceans & Environment
- Restraints
- Storage & Disposal
- Safety Directions
- First Aid

PERSONS who wish to prepare for use and/or use the products for the purposes specified in this permit must read, or have read to them, the permit particularly the information included in DETAILS OF PERMIT and CONDITIONS OF PERMIT.

**PERMIT DETAILS FOR NUMBER – PERMIT 4446**

# Fastac<sup>®</sup> Duo

**INSECTICIDE**

Active Constituent: 100 g/L ALPHA-CYPERMETHRIN  
 Solvent: 751 g/L XYLENE

Registered to: Murray Riverina Farm Forestry  
 48 Fitzmaurice Street  
 Wagga Wagga NSW 2650

**FOR MINOR OFF-LABEL-USE OF A REGISTERED AGVET CHEMICAL PRODUCT**

**PERMIT NUMBER - PER4446**

This permit is issued under the Agvet Code, of the relevant jurisdictions, to the person stated above. The holder of the permit must comply with all requirements as specified in the Agvet Code. A summary of the key requirements are that the holder must:

- supply any requested information to the NRA;
- inform the NRA if they become aware of any relevant information concerning the uses dealt with by this permit;
- comply with a lawful direction or requirement of an inspector.

This permit for the reasons given below, allows any person listed in **1. Persons** to use the products listed in **2. Products** for the minor off-label use specified in **3. Directions for Use** in the jurisdictions listed in **4. States**.

If this permit were not issued use of the products as specified in this permit would constitute an offence under the Agvet Codes.

The persons listed in **1. Persons** must comply with all conditions listed in CONDITIONS OF PERMIT to be effectively covered by this permit.

**THIS PERMIT IS IN FORCE FROM 11 MAY 2001 TO 10 MAY 2003.**

It is in force until it expires or it is cancelled, suspended or surrendered.

**REASON FOR ISSUE OF PERMIT**

Commercial native trees, established in 2000, growing on farms in the South West slopes and Riverina regions of NSW have experienced extensive damage due to pasture cockchafer grub infestation. There is no currently registered product approved for this pest in this situation. The use of FASTAC DUO prior to planting and post-planting will generally improve the quantity and quality of surviving trees in the locations where the grub occurs. Two permits (PER3493 & 3493) have been issued previously for this use.

**1. Persons**

Landholders and contractors in direct association with Murray Riverina Farm Forestry.

**2. Products**

FASTAC DUO INSECTICIDE  
 Containing: 100 g/L ALPHA-CYPERMETHRIN  
 as their only active constituent.

**3. Directions for Use**

Crop	Pest	Rate
NATIVE TREE SPECIES	PASTURE COCKCHAFFER GRUB	Apply at the rate of 100 mL/ha as a pre-plant treatment.

**Critical Use Comments:**

A post-plant application may be required 12 months later. Use otherwise in accordance with the approved label instructions for pre- and post-plant treatments for this pest.

**Withholding Period:**

NOT REQUIRED WHEN USED AS DIRECTED.  
 DO NOT ALLOW STOCK TO GRAZE TREATED PLANTATIONS OR USE CUT GRASS FOR STOCK FEED.

**4. States**

NSW.

**CONDITIONS OF PERMIT**

THIS PERMIT provides for the use of a product in a manner other than specified on the approved label of the product. Unless otherwise stated in this permit, the use of the product must be in accordance with instructions on its label.

PERSONS who wish to prepare for use and/or use the products for the purposes specified in this permit must read, or have read to them, the permit particularly the information included in DETAILS OF PERMIT and CONDITIONS OF PERMIT.

**PERMIT DETAILS FOR NUMBER – PERMIT 4569**

# Fastac<sup>®</sup> Duo

**INSECTICIDE**

**Active Constituent:** 100 g/L ALPHA-CYPERMETHRIN

**Solvent:** 751 g/L XYLENE

**FOR MINOR OFF-LABEL-USE OF A REGISTERED AGVET CHEMICAL PRODUCT**

**PERMIT NUMBER - PER4569**

This permit is issued under the Agvet Code, of the relevant jurisdictions, to the person stated above. The holder of the permit must comply with all requirements as specified in the Agvet Code. A summary of the key requirements are that the holder must:

- supply any requested information to the NRA;
- inform the NRA if they become aware of any relevant information concerning the uses dealt with by this permit;
- comply with a lawful direction or requirement of an inspector.

This permit for the reasons given below, allows any person listed in **1. Persons** to use the products listed in **2. Products** for the minor off-label use specified in **3. Directions for Use** in the jurisdictions listed in **4. States**.

If this permit were not issued use of the products as specified in this permit would constitute an offence under the Agvet Codes.

The persons listed in **1. Persons** must comply with all conditions listed in **CONDITIONS OF PERMIT** to be effectively covered by this permit.

**THIS PERMIT IS IN FORCE FROM 10 MAY 2001 TO 31 DECEMBER 2001.**

It is in force until it expires or it is cancelled, suspended or surrendered.

**REASON FOR ISSUE OF PERMIT**

Locust outbreaks have the potential to continue to occur in 2001, following on from large populations in the previous summer season.

The main insecticide for such use, fenitrothion, can at times be difficult to obtain and may not be available to landholders, particularly when many hectares of crops and pastures will need to be treated.

This can often result in a shortage of reg'd products, especially for use on broad acre crops. Additionally, the major locust insecticides, fenitrothion and fipronil, are not reg'd for use on oilseeds and pulses, which can be at risk from locust attack.

Alternatives, such as synthetic pyrethroids, are required should the need arise in areas where a continued threat exists. This permit is one of six permits that allow the use of various synthetic pyrethroids for landholders to protect commodities that may become at risk from locust attack.

**1. Persons**

Persons generally.

**2. Products**

FASTAC DUO INSECTICIDE

**3. Directions for Use**

Crop	Pest	Rate
CROPS AND SITUATIONS SPECIFIED ON THE LABELS OF THE PRODUCTS LISTED IN PRODUCTS.	AUSTRALIAN PLAGUE LOCUSTS ( <i>Chortoicetes terminifera</i> )	100 g/L EC: 160-200 mL/ha

**NOTE:** FOR SPRAYING DRY CROPS AND/OR PASTURES SEE SPECIAL CONDITIONS.  
**NOTE:** APPLY AT HIGHEST LABEL RATE FOR THAT CROP IF ABOVE RATES ARE BELOW HIGHER THAN LABEL RATES.

Containing: 100 g/L ALPHA-CYPERMETHRIN as their only active constituent.

**Critical Use Comments:**

DO NOT APPLY HIGHER THAN LABEL RATE FOR CROP OR SITUATION BEING TREATED.

EC PRODUCT:

APPLY WHEN LOCUSTS ARE ATTACKING. APPLY BY GROUND OR AERIAL EQUIPMENT.

**Withholding Period:**

**HARVESTING:**

Adhere to the withholding periods for the crops as specified on the registered product labels.

**GRAZING (LIVESTOCK FOR LOCAL CONSUMPTION):**

Adhere to the grazing withholding periods as specified on the registered product labels.

Avoid spraying of grazing livestock in areas being treated. If overspraying of grazing livestock is unavoidable and does occur, withhold them from slaughter for a period of 42 days (6 weeks). If further advice is required, contact the National Registration Authority (NRA) or the State Department of Agriculture or Primary Industries.

**GRAZING (LIVESTOCK FOR EXPORT MARKETS):**

The product label withholding period for grazing only applies to animals for the Australian domestic market. Some export markets apply different standards which may require an export slaughter interval. If livestock may be sold for export markets seek advice before using this chemical. If meat from livestock that has been

***Acknowledgments:***

Collated by HerbiGuide. Phone 08 98444064 for more information.