



Product Name: AGRO-ESSENCE TRIFLURALIN 480EC  
APVMA Approval No: 64732/126546

Label Name:	AGRO-ESSENCE TRIFLURALIN 480EC
-------------	--------------------------------

Signal Headings:	CAUTION KEEP OUT OF REACH OF CHILDREN READ SAFETY DIRECTIONS BEFORE OPENING OR USING
------------------	--

Constituent Statements:	480 g/L TRIFLURALIN
-------------------------	---------------------

Mode of Action:	GROUP <b>D</b> HERBICIDE
-----------------	--------------------------

Statement of Claims:	A Pre-Emergence Herbicide for the Control of Annual Grasses and Certain Broadleaf Weeds in Certain Horticultural and Agricultural Crops as Listed in the Directions for Use
----------------------	---

Net Contents:	1000L 100L-200L 20L
---------------	---------------------------

Restrains:	
------------	--

Directions for Use:	This section contains file attachment.
---------------------	--

Other Limitations:	NOT TO BE USED FOR ANY PURPOSE, OR IN ANY MANNER, CONTRARY TO THIS LABEL UNLESS AUTHORISED UNDER APPROPRIATE LEGISLATION
--------------------	--

Withholding Periods:	HARVEST Swedes, Turnips: NOT REQUIRED WHEN USED AS DIRECTED
----------------------	--

## GRAZING

Tea Tree: DO NOT GRAZE TREATED AREAS OR CUT FOR STOCK FOOD FOR 8 WEEKS AFTER APPLICATION

Industrial Hemp: DO NOT GRAZE LIVESTOCK ON TREATED AREA FOR 14 DAYS AFTER FINAL SPRAY APPLICATION

Swedes, Turnips: DO NOT GRAZE OR CUT TREATED CROPS FOR STOCK FOOD  
All other Uses: NOT REQUIRED WHEN USED AS DIRECTED

## Trade Advice:

### Export of Treated Produce

Growers should note that maximum residue limits (MRLs) or import tolerances may not exist in all markets for edible produce treated with this product. If you are growing edible produce for export, please check with Agro-Alliance (Australia) Pty Ltd for the latest information on MRLs and import tolerances before using this product.

## General Instructions:

THIS PRODUCT MUST BE INCORPORATED INTO THE SOIL WITHIN 4 HOURS OF APPLICATION EXCEPT IN WESTERN AUSTRALIA WHERE THE CROP IS SOWN WITH MINIMUM TILLAGE SOWING EQUIPMENT (FITTED WITH KNIFE POINTS OR BLADES LESS THAN 12mm WIDE, USUALLY WITH PRESS WHEELS) WHERE APPLICATION MAY OCCUR UP TO 24 HOURS BEFORE INCORPORATION BY THE SOWING PROCESS.

### INCORPORATION TABLE

1. Prior to furrowing out: 2 workings at an angle required using Offset or Tandem disc harrows.
2. After furrowing out: 2 workings required using Go-Devil discs or Lillion cultivators set at 10 cm depth.
3. Rotary Hoe: 1 working required at 5-7.5 cm depth. Sugar Cane: 7.5-13 cm depth.
4. Offset or Tandem Disc Harrows: (preferably with spiked harrows in tandem) 2 workings at an angle required at 7.5-15 cm depth at 6.5-10 km per hour.
5. Weighted Heavy Diamond or Stump Jump Harrows - (weighted 20-30 kg per section) at 10-13 km/hr speed. Then cross work with offset or tandem disc harrows set to 7.5-15 cm depth at speed 6.5-10 km per hour.
6. Weighted Heavy Diamond or Stump Jump Harrows (weighted with 20-30 kg per section) at 10-13 km per hour. Cross work with combine at 5-7.5 cm depth at speed of 10-13 km/hr.
7. Disc Ratoon Cultivator: 2 workings needed with discs and cultivator set at 7.5-13 cm depth.
8. Offset or Tandem Disc Harrows: set at 7.5-15 cm depth. A second discing is required working in opposite direction with discs set to throw treated soil into tree or vine row.
9. Rotary Hoe: 1 working needed at 5-10 cm depth.
10. Offset Discs (Bumpers): 2 workings needed at depth of 7.5-13 cm.
11. Incorporation By Sowing (IBS): On a suitable prepared seedbed with heavy diamond harrows trailing or as a separate operation.
12. Post-sowing pre-emergence: Use heavy diamond harrows cross working at right angles to the direction of sowing. DO NOT attempt this method of incorporation on poorly prepared, clumpy or cloddy soils.
13. Incorporation by Sowing (IBS) with knife or blade points. Use press wheels to avoid dragging treated soil back into the seed furrow. Maintain slow to moderate speed to ensure that soil throw is not into adjacent furrows. Note: Knife or blade point systems can result in poor weed control in the seed furrow as chemical displacement from this zone occurs. Stubble coverage above 40-50% ground cover can reduce weed control below acceptable levels. A Knife or blade point is 12mm or less, has no wings, inverted T or blade, and is generally placed on a minimum 8 inch tyne spacing.

### MIXING

This product is an emulsifiable concentrate, which mixes readily with water. Add the recommended amount to the spray tank during filing operation and apply 70-450L of water/ha (broadcast basis) dependent on soil type and stubble coverage level. For minimum tillage/stubble retention seeding systems use of the higher water volumes may reduce the impact of stubble.

Ensure adequate agitation is continued throughout the operation. Leaving the made up spray mixture for long periods of time without agitation is not recommended. Under hot conditions or where possible spray and incorporate into the soil in one operation. Delay may cause inferior weed control. Use properly calibrated standard low-pressure (170-340 kPa) boom type sprayer with fan tips.

#### CONDITIONS FOR BEST RESULTS

This product must be thoroughly incorporated as recommended. Soil should be well worked and free of weeds at time of application. Product effectiveness may be reduced by inadequate incorporation, high organic matter, excess clods, crop or trash residues, stones or other foreign matter and in areas of unnaturally high weed seed population such as header tracks or livestock rest areas. Trifluralin is volatile and disappears from exposed surfaces. Loss is hastened by high temperatures, winds or warm moist soil.

#### Integrated Weed Management

The use of Integrated Weed Management techniques in conjunction with Agro-Essence Trifluralin 480EC is always recommended. Agronomic practices that reduce the weed seed bank in the soil prior to the use of Agro-Essence Trifluralin 480EC will result in higher weed control levels from Agro-Essence Trifluralin 480EC. Failure to use Agronomic and Integrated Weed Management practices that reduce the weed seed bank in the soil will result in higher weed seed populations. Paddocks with excessively high weed seed banks may have sufficient weed numbers surviving such that final weed control may be considered below a commercially acceptable level and additional herbicide treatments may be necessary. The use of Integrated Weed Management techniques will also reduce the potential for the development or survival of Group D herbicide resistance weed biotypes.

#### WILD OATS

Germinating wild oat seeds lying on soil surface will be controlled. Therefore, specific wild oat control is only possible with shallow cultivation. Poor control will occur on self-mulching soils and all soil types where deep cultivation is practiced.

#### COMPATIBILITY

This product may be mixed in the spray tank with: Herbicides: tri-allate, chlorsulfuron, triasulfuron, diuron (900 g/kg & 500 g/L), simazine (900 g/kg & 500 g/L), diquat, paraquat, paraquat/diquat, Broadstrike, imazethapyr (700 g/kg), cyanazine (950 g/kg), mepiquat (38 g/L), metribuzin (750 g/kg). Insecticides: chlorpyrifos (550 g/L).

#### Note:

1. Information on compatibility is understood to be correct at the time of publication, however products may vary from time to time, therefore a small scale compatibility test should be carried out before mixing in the spray tank.
2. Observe any mixing sequence instructions for tank mix products.

#### EQUIPMENT MAINTENANCE AND USAGE

Keep the spray unit for herbicides only if possible. Otherwise, spray tanks, pumps, lines and nozzles should be thoroughly rinsed several times with clean water following application. Spray Sure Spray Tank Cleaner is suitable for this purpose and will also remove trifluralin stains.

#### Resistance Warning:

#### GROUP D HERBICIDE

Agro-Essence Trifluralin 480EC is a member of the dinitroaniline group of herbicides. Agro-Essence Trifluralin 480EC has the inhibitors of microtubule assembly mode of action. For weed resistance management Agro-Essence Trifluralin 480EC is a Group D herbicide. Some naturally occurring weed biotypes resistant to Agro-Essence Trifluralin 480EC and other Group D herbicides may exist through normal genetic variability in any weed population. The resistant individuals can eventually dominate the weed population if these herbicides are used repeatedly. These resistant weeds will not be controlled by Agro-Essence Trifluralin 480EC or other Group D herbicides. Since the occurrence of resistant weeds is difficult to detect prior to use Agro-Alliance (Australia) Pty Ltd accepted no liability for any losses that may result from the failure of Agro-Essence Trifluralin 480 to control resistant weeds.

Precautions:	
Protections:	<p><b>PROTECTION OF CROPS, NATIVE AND OTHER NON-TARGET PLANTS</b>  DO NOT use in high winds.  DO NOT exceed rates specified, to avoid crop damage.  DO NOT plant sensitive grasses such as oats, sorghum, millets, phalaris spp, ryegrass or wheat for 12 months following the use of this product except where wheat follows wheat or other winter crops.  DO NOT plant oilseed poppies when a detectable residue of trifluralin is present in the soil. Levels as low as 0.02 ppm may interact with other unfavourable factors (moisture, stress disease etc) to reduce poppy growth and vigour.  DO NOT apply to orchards and vineyards after first flush of growth or when residues can lodge on or in fruit. Reduced germination of wheat and barley may occur due to combination of following circumstances and use of this product:</p> <ul style="list-style-type: none"> <li>• Short Coleoptile cultivars</li> <li>• Use of seed dressings (except Vitavax)</li> <li>• Shallow or uneven seedling depth.</li> </ul> <p>Drift Warning: DO NOT apply under meteorological conditions or from spraying equipment, which could be expected to cause spray drift onto nearby susceptible plants adjacent crops, crop lands or pastures.</p> <p><b>PROTECTION OF WILDLIFE, FISH, CRUSTACEANS AND ENVIRONMENT</b>  DO NOT contaminate streams, rivers or waterways with the chemical or used containers.</p>
Storage and Disposal:	<p>Store in the closed, original container in a cool well-ventilated area away from children, animals, feedstuffs, seed and fertilisers. DO NOT store for prolonged periods in direct sunlight.</p> <p>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 container to recycler or designated collection point.</p> <p>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.'</p> <p>Refillable containers (110L, 1000L): Empty contents fully into application equipment. Close all valves and return to point of supply for refill or storage.</p>
Safety Directions:	<p>Harmful if swallowed. Poisonous if inhaled. Will damage eyes and may irritate the nose, throat and skin. Repeated exposure may cause allergic disorders. Avoid contact with eyes and skin. Do not inhale vapour or spray mist. When opening the container and preparing spray, wear cotton overalls buttoned to the neck and wrist and a washable hat, elbow-length chemical resistant gloves, goggles and half facepiece respirator. When using the prepared spray, wear cotton overalls buttoned to the neck and wrist and a washable hat, elbow-length chemical resistant gloves. If product or spray in eyes, wash it out immediately with water. If product or spray on skin, immediately wash area with soap and water. After use and before eating, drinking or smoking, wash hands, arms and face thoroughly with soap and water. After each day's use, wash gloves, goggles, respirator (and if rubber wash with detergent and warm water) contaminated clothing.</p>
First Aid Instructions:	<p>If poisoning occurs contact a doctor or Poisons Information Centre. Phone Australia 13 11 26. If swallowed DO NOT induce vomiting.</p>
First Aid Warnings:	

## DIRECTIONS FOR USE

### FIELD CROPS

Situation & Crop	Weeds	State	Rate L/ha Soil Type			Critical Comments
			Light	Medium	Heavy	
Chickpeas	Annual Ryegrass, Paradoxa Grass (Canary Grass), Wireweed (Hogweed), Black Pigweed, Suppression of Climbing Buckwheat (Black Bindweed), Wild Oats	Qld only	1.25-1.7 L/ha	1.25-1.7 L/ha	1.25-1.7 L/ha	Use 1.25 L/ha when applying immediately prior to sowing. Use 1.7 L/ha when applying to dry soil before the planting rain
	Annual Ryegrass, Wireweed (hogweed), Deadnettles, Wild Oats	Vic only	800 mL/ha plus 1.6 L/ha triallate (500 g/L)			Incorporate as per recommendations for wheat, barley and triticale.
	Red & White Fumitory, Rough Poppy, Wireweed, Annual Ryegrass, Barley Grass, Canary Grass, Sand Fescue, Suppression of Deadnettle, Speedwell, Three Cornered Jack, Yellow Burrweed, Brome Grass, Cereal Oats and soil surface Wild Oats	SA only	1.25 L/ha	1.25 L/ha	1.25 L/ha	Apply to level seedbed 0 to 4 weeks before sowing. Incorporate as per Incorporation Table 6.
Adzuki Beans, Cowpeas, Lablab, Mung Beans, Borlotti Beans, Red Kidney Beans	Amaranthus, Annual Ryegrass, Barnyard Grass, Caltrop, Crab Grass, Paradoxa Grass (Canary Grass), Pigweed, Wild Oats, Winter Grass, Wireweed, Suppression of Fumitory	NSW, ACT only	1.2 - 1.5 L/ha	1.5 L/ha	1.7 L/ha	Apply from 4 weeks up to just prior to sowing. Refer Incorporation Table 3, 4 or 5 for suitable method of incorporation
		NSW, ACT, Qld only				
Faba Beans	Annual Ryegrass, Barley Grass, Capeweed, Corn Gromwell (Sheepweed), Fumitories, Geranium, Ivy Leaf, Speedwell, Mustards, Turnips, Wireweed, Suppression of Brome Grass, Soursob and Wild Oats	SA, WA only	800 mL/ha plus 1.8 - 2.0 L/ha simazine flowable (500 g/L)			Apply to bare moist soil and grate to a depth of 5cm just prior to sowing. Incorporation should be made within 4 hours of application. Application should not be made to ridged or excessively cloddy soil. For full reliable results, significant rainfall (20 or 30 mm) is necessary within 2 - 3 weeks of application.

Situation & Crop	Weeds	State	Rate L/ha - Soil Type			Critical Comments
			Light	Medium	Heavy	
Pigeon Peas	Amaranthus, Barnyard Grass, Canary Grass, Crowsfoot Grass, Pigweed, Spiny Burrgrass, Summer Grass, Wild Oats, Wireweed (Hogweed), Suppression of Yellow Vine (Caltrop), From seed only: Columbus Grass, Guinea Grass, Johnson Grass, Liverseed Grass ( <i>Urochloa</i> )	NSW, ACT only	1.2 L/ha	1.5 L/ha	1.7 L/ha	Apply between 4 weeks and just before sowing. Refer to Incorporation Table 3, 4 or 6 for suitable method of incorporation.
Navy Beans Soybeans	Annual Ryegrass, Barnyard Grass, Canary Grass, Caltrop (Bullhead, Yellow Vine), Crab Grass, Mossman River Grass (Innocent Grass), Pigweed, Redroot (Amaranthus), Redshank (Prince of Wales feather), Summer Grass, Wild Oats, Winter Grass, Wireweed (Hogweed)  From seed only: Columbus Grass, Guinea Grass, Johnson Grass, Liverseed Grass ( <i>Urochloa</i> )	All states	1.2 L/ha	1.7 L/ha	2.3 L/ha	Spray between 4 weeks and just before sowing takes place. Refer to Incorporation Table 3, 4 or 5 for suitable method of incorporation.
Lentils	Annual Phalaris, Annual Ryegrass, Wild Oats, Wireweed	NSW, ACT only	800 mL/ha	1.2 L/ha	1.2 L/ha	Apply 1 to 4 weeks before sowing
	Fumitory - Red and White, Rough Poppy, Wireweed, Barley Grass, Canary Grass, Annual Ryegrass, Sand Fescue	SA only	1.25 L/ha	1.25 L/ha	1.25 L/ha	Apply 1 to 4 weeks before sowing.
Vetch	Annual Ryegrass, Deadnettle, Wireweed, soil surface Wild Oats, suppression of Brome Grass, Rough Poppy, Speedwell, Three Cornered Jack, Yellow Burr Weed, Sheepweed	SA, WA only	1.7 L/ha	1.7 L/ha	1.7 L/ha	Apply to level seedbed 0 to 4 weeks before sowing. Refer to incorporation Table 6 for method of incorporation

Situation & Crop	Weeds	State	Rate L/ha - Soil Type			Critical Comments
			Light	Medium	Heavy	
Cotton	Annual Ryegrass, Barnyard Grass, Canary Grass, Caltrop, (Bullhead/ Yellow Vine), Crab	Qld NSW, ACT, WA only	1.2 L/ha	1.7 L/ha	1.7 L/ha	Spray between 6 weeks and just before sowing takes place. Refer incorporation Tables 1 & 2 for method of incorporation.
Legume Seed Crop Establishment - Annual Medics - Clover Berseem, Red, Strawberry (Sub & White)	grass, Fumitory, Mossman Player Grass (Innocent Weed), Pigweed, <i>Phalaris spp.</i> , Redroot (Amaranthus), Redshank (Prince of Wales Feather), Summer Grass, soil surface Wild Oats, Winter Grass, Wireweed	NSW, ACT, SA, WA, Vic, Tas only	1.2 L/ha	1.2 L/ha	1.7 L/ha	<b>Autumn Sowing</b> - Apply from 4 weeks to 7 days before sowing takes place. Refer Incorporation Table 6 for method of incorporation.  <b>Spring Sowing</b> - Apply between 4 weeks and 3 days before sowing takes place. Refer Incorporation Table 6 for method of incorporation.
Lucerne for hay and seed crop	(Hogweed), Black Pigweed (Qld only), From seed only: Columbus - Guinea Grass, Johnson Grass, Liverseed Grass (Urochloa)	All states				In both cases seedling disease, cold weather, excessive moisture, high salt concentrations and drought could weaken crop seedlings and damage could occur from the use of this product. Temporary drop suppression could result.
Linseed		NSW, ACT, SA, WA, Vic only	1.2 L/ha	1.5 L/ha	1.7 L/ha	Spray 2-4 weeks before sowing. Sowing depth should be 1.3 to 2.5cm. Deeper sowing may result in some stand reduction. Refer incorporation Table 6 for method of incorporation
Parsnips	Winter grass ( <i>Poa annua</i> )	All states	1.4 L/ha			Broadcast spray to the soil surface between 4 weeks prior to, and just before sowing, using calibrated boom sprayer or similar equipment. Product must be incorporated into the soil within 4 hours of application using either a rotary hoe or disc technique. Apply a maximum one (1) application per crop using spray volume between 70-450 L/ha.
Peanuts	Annual Ryegrass, Barnyard Grass, Canary Grass, Caltrop, (Bullhead/ Yellow Vine), Crab	WA, Qld only	1.2 L/ha	1.5 L/ha	1.7 L/ha	Spray between 4 weeks and just before sowing takes place. Refer Incorporation Table 3, 4 or 5 for suitable method of incorporation.
Peas	grass, Fumitory, Mossman Player Grass (Innocent Weed), Pigweed, <i>Phalaris spp.</i> , Redroot	All States				Spray between 4 weeks and just before sowing takes place. Refer Incorporation Table 6 or 11 for method of incorporation.
Canola, Safflower, Mustard (oilseed cultivars) ( <i>Brassica juncea</i> )	(Amaranthus), Redshank (Prince of Wales Feather), Summer Grass, soil surface Wild Oats, Winter Grass, Wireweed	All states	1.2 L/ha	1.7 L/ha	2.3 L/ha	Spray between 4 weeks and just before sowing takes place. Refer incorporation Table 3, 4 or 5 for suitable method of incorporation.
Peppers (including Capsicum, Chillies, Paprika), Eggplant	(Hogweed), Black					

Situation & Crop	Weeds	State	Rate L/ha - Soil Type			Critical Comments
			Light	Medium	Heavy	
Sugarcane Early season  Late season	Pigweed (Qld only), From seed only: Columbus - Guinea Grass, Johnson Grass, Liverseed Grass (Urochloa)	Qld, NSW, only	3.0 L/ha	3.0 L/ha	3.0 L/ha	Apply to plant cane after emergence to 'out of hand' stage. Apply to ratoon cane immediately after harvest. Refer Incorporation Table 3, 7 or 10 for suitable method of incorporation.
			2.3 L/ha	2.3 L/ha	2.3 L/ha	
Sunflowers		All States	1.2 L/ha	1.5 L/ha	1.7 L/ha	Spray between 4 weeks and just before sowing takes place. Refer Incorporation Table 3, 4 or 5 for method of incorporation.
Lupins					Spray between 4 weeks and just before sowing takes place. Refer Incorporation Table 6 for method of incorporation.  <b>WA only:</b> Use higher rate for heavier stubble coverage. Stubble coverage above 40-50% ground cover can reduce weed control below acceptable levels. Refer Table 13 for method of incorporation.	
	Annual Grasses and Broadleaf Weeds	NSW, ACT, Vic, Qld only	800 mL/ha plus 3 L/ha of simazine (500 g/L)			Use a low volume boom applying 50-100 litres spray mixture per hectare. Apply to bare moist soil and incorporate to a depth of 5cm just prior to sowing the drop. Incorporate within 4 hours of application. DO NOT spray to a ridged soil.
	Capeweed, Turnip, Radish, Doublegee and Suppression of Annual Ryegrass and Wild Oats	WA only	1.25 L/ha plus 1-1.5 L/ha of simazine (500 g/L)			Rate for Yellow Sands. Refer to incorporation Tables 11, 12 or 13.
	As above plus suppression of Brome Grass	WA only	1.25 L/ha plus 2 L/ha of simazine (500 g/L)			Rate for all other soil types. Apply to bare moist soil and incorporate to a depth of 5 cm just prior to sowing. Incorporation should be made within 4 hours of application. Application should not be made to rigid or excessively cloddy soil. For Simazine to be effective sufficient rainfall (20 to 30 mm) to wet the soil through the weed root zone is necessary within 2-3 weeks of application. Results with Simazine can be variable if seasonal conditions are dry prior to sowing and Lupins are sown into dry or low moisture seedbeds.
	Capeweed, Doublegee, Wild Radish Wild Turnip plus suppression of Annual Ryegrass, soil surface Wild Oats and Brome Grass		1.25 L/ha plus 2 L/ha of diuron (500 g/L)			DO NOT use on white or grey sands as severe crop damage may result. Use tank mix of & Trifluralin where Annual Ryegrass is present. Apply at pre-sowing stage. Apply pre-sowing stage when using Incorporation method in Table 13. For Post-sowing Pre-emergent application, ensure seed is adequately covered with soil. Refer to Incorporation Table 12.



Situation & Crop	Weeds	State	Rate L/ha - Soil Type			Critical Comments
			Light	Medium	Heavy	
	Red & White Fumitory, Rough Poppy, Wireweed, Barley Grass, Canary Grass, Annual Ryegrass, Sand Fescue, suppression of Deadnettle, Speedwell, Three Cornered Jack, Yellow Burr Weed, Brome Grass, Cereal Oats, soil surface Wild Oats	SA only	1.25 - 1.7 L/ha	1.25- 1.7 L/ha	1.25- 1.7 L/ha	Spray between 4 weeks and just before sowing takes place. Refer Incorporation Table 6 for method of incorporation.
	Above weeds plus Capeweed, Common Fumitory, Geranium, Indian Hedge Mustard, Sheepweed, Shepherd Purse, Toadrush, Turnips, suppression of Ice Plant & Soursob	SA only	1.25 L/ha to 1.7 L/ha plus 2 to 4 L/ha of simazine (500 g/L)			Use a low volume boom applying 50-100 litres spray mixture per hectare. Apply to bare moist soil and incorporate to a depth of 5 cm just prior to sowing the crop. Incorporate within 4 hours of application. DO NOT apply to ridged soil.
Quinoa ( <i>Chenopodium quinoa</i> )	Annual Ryegrass, Wireweed, Phalaris spp, Fumitory, Canary Grass, Wild Oats, Wireweed	All states	1.5 to 2 L/ha			Spray between 4 weeks and just prior to sowing using a boom spray or equivalent in 50 - 100 L water/ha. Product must be thoroughly incorporated into the soil within 4 hours of application using Knife point, No-till seeding systems or equivalent. DO NOT apply more than 1 application per crop. The sensitivity of some species and varieties of quinoa has not been fully evaluated. It is advisable to treat a small number of plants to ascertain their reaction before treating the whole crop.
Oil Tea Tree	Fat Hen, Potato Weed, Wireweed, Barnyard Grass, Geranium, Needle Burr, Red Shank, Annual Thistles, Sow Thistles, Creeping Oxalis		1.2 L/ha	1.7 L/ha	2.3 L/ha	Apply to bare moist soil. Apply up to 4 weeks before planting and incorporate within 4 hours of application. Use the lower rate of simazine for light textured soils.
			plus Simazine at a rate of: 3-4 L/ha (500 g/L simazine products) or 1.5 – 2.2 kg/ha (900 g/kg simazine products)			
Tobacco	Summer Grass, Crowsfoot Grass, Red Natal Grass, Love Grass, Button Grass, Rhodes Grass, Pigweed	Qld only	800 mL/ha	1.2 L/ha	-	Apply to soil 3 - 4 weeks prior to transplanting. The longer period to be used for applications made during June & July. Incorporate to a depth of 10 cm.

Situation & Crop	Weeds	State	Rate L/ha - Soil Type			Critical Comments
			Light	Medium	Heavy	
	Crowsfoot Grass	NSW, ACT, only	800 mL/ha	1.2 L/ha	1.2 L/ha	Apply to light sandy soil 14 to 21 days before transplanting. DO NOT incorporate to a depth greater than 6 cm. Apply to loam (medium soil) 14 to 21 days before transplanting. DO NOT incorporate to a depth of greater than 6 cm.
Industrial Hemp	Annual Ryegrass, Wireweed, Phalaris spp, Fumitory, Fescue, Winter Grass, Paradoxa grass, Corn Gromwell, Rough poppy, canary grass	All states	1.2 L/ha	1.7 L/ha	2.3 L/ha	<p>Pre-sowing: Apply one application before weeds emerge to control annual grasses and broadleaf weeds and incorporate into the top 5 cm of soil prior to sowing.</p> <p>or</p> <p>Post-planting: Apply one application before, with rainfall or irrigation to closely follow to achieve effective incorporation into soil.</p> <p>Use suitable ground application equipment. Ensure equipment is correctly calibrated.</p> <p>Use lower rates when short residual control is required.</p> <p>Increase the application rate when longer residual control is required.</p> <p>The sensitivity of some species and varieties has not been fully evaluated. Test a small number of plants before applying to the whole crop.</p>
Wheat, Barley & Triticale  1. Pre-Sowing Only	Annual Ryegrass, Wireweed (Hogweed), Phalaris spp.	NSW, ACT WA & Vic only	800 mL/ha	800 mL/ha	800 mL/ha	Apply 1-4 weeks before sowing. Sowing depth should be at least 5 cm. Use cover harrows behind combine.  Ground should be left flat. DO NOT use pre-sowing on self-mulching soils as damage may occur from wheel tracking and poor control of wild oats. Refer Incorporation Table 6 for method of incorporation.
	Fumitory	WA only				
	Canary Grass	Vic only				
	As above except for Fumitory	Vic only				
2. Pre-Sowing & Post-sowing (self mulching soils)						Pre - sowing - Apply more than 4 weeks before sowing to prevent crop damage.  Post sowing- Apply within 2 days after sowing to well prepared seedbed. Refer Incorporation Table 6 for suitable method of incorporation.
Wheat	Annual Ryegrass, Paradoxa Grass (Canary Grass), soil surface Wild Oats, Wireweed (Hogweed)	Qld only	800 mL/ha	800 mL/ha	800 mL/ha	On non-self mulching soils apply 1-4 weeks before sowing. Sowing depth should be at least 5 cm. Use cover harrows behind combine. Ground should be left flat.  On self mulching soils as above except apply more than 4 weeks before sowing to prevent crop damage. Refer incorporation Table 6 for method of incorporation.

Situation & Crop	Weeds	State	Rate L/ha - Soil Type			Critical Comments
			Light	Medium	Heavy	
Barley						Apply to self-mulching and non-self mulching soils from 1-4 weeks before sowing. Sowing depth should be at least 5 cm. Use cover harrows behind combine. Ground should be left flat. Refer Incorporation Table 6 for suitable method of incorporation.
Wheat, Triticale, Rye	Annual Ryegrass, Red & White Fumitory, Phalaris spp, Wireweed, suppression of Deadnettlles, Rough Poppy, Yellow Burr Weed	SA only	800 mL/ha	800 mL/ha	800 mL/ha	Apply 1 - 4 weeks before sowing. Sowing depth should be at least 5 cm. Use cover harrows behind combine. Ground should be left flat. DO NOT use pre-sowing on self-mulching soils as damage may occur from wheel tracking and poor control of wild oats.
Barley	As above for SA plus Sand Fescue and suppression of Brome Grass		1.25 L/ha	1.25 L/ha	1.25 L/ha	Refer Incorporation Table 6 for method of incorporation.
Wheat & Triticale only	Annual Phalaris	NSW, ACT only	800 mL/ha plus 20 g/ha of a chlorsulfuron (750 g/kg)			If possible, spray and incorporate into the soil in one operation. If this is not possible incorporation should take place within 4 hours of spraying. Delay may cause inferior weed control.

**FIELD CROPS: FOR USE IN NO-TILL CROPPING SYSTEMS, PRE-SOWING OR INCORPORATED BY SOWING (IBS) (Using Table 13)**

Situation & Crop	Weeds	State	Rate	Critical Comments
Wheat, Barley, Triticale	Annual Ryegrass, Wireweed, Phalaris spp. Fumitory	WA, SA, Vic, NSW, ACT only	1.5 to 2 L/ha	Use the higher rate on lighter sandy loam soils. DO NOT use on heavy soils. Use with Knife/Blade point sowing equipment. Use the higher rate for heavier stubble coverage. ·Stubble coverage above 40-50% ground cover can reduce weed control below acceptable levels. Refer Table 13 for method of incorporation. W A only: Application can occur 0 - 24 hours prior to incorporation by sowing. For best results apply as close as possible to sowing (within 12 hours). Application 12 - 24 hours before sowing may be more adversely affected by above average Soil moisture., warm temperatures and high weed seed densities. These factors individually or combined may reduce final weed control levels.
Chickpeas		WA only	1.25 to-1.7 L/ha Plus 2 L/ha simazine (500 g/L)	Incorporate as per Incorporation Table 13.

**VEGETABLES, ORCHARDS AND VINEYARDS**

Situation & Crop	Weeds	State	Rate / Soil Type			Critical Comments
			Light	Medium	Heavy	
Transplants only Broccoli, Cabbage, Cauliflowers, Tomatoes	Annual Ryegrass, Barnyard Grass, Canary Grass, Caltrop, (Bullhead Yellow Vine), Crab Grass, Mossman River Grass (Innocent Grass) Pigweed, Redroot (Amaranthus) Redshank (Prince of Wales feather), Summer Grass, Wild Oats, Winter Grass, Wireweed (Hogweed)	All states	1.2 L/ha	1.7 L/ha	2.3 L/ha	Spray between 4 weeks and just before sowing takes place. Refer Incorporation Table 3, 4 or 5 for suitable method of incorporation.
Direct Seeded Only Broccoli, Brussels, Sprouts, Cabbage, Cauliflower		All states				
Carrots		Vic, Qld only				
Chicory		All states				
<b>Culinary Herbs</b> Basil, Bay leaves, Borage, Chives, Coriander, Dill, Fennel, Lemon balm, Lemon grass, Kaffir lime leaves, Marigold flowers, Marjoram (oregano), Mints, Nasturtium leaves, Parsley, Rosemary, Sage, Salad Burnett, Sorrel, Tarragon, Thyme <b>Root Herbs</b> Galangal <b>Leafy Vegetables</b> Rucola (rocket) Chervil Mizuna <b>Teas</b> Lemon Verbena <b>Spices</b> Turmeric <b>Edible Flowers</b> Dianthus, Roses	From seed only: Columbus Grass, Guinea Grass, Johnson Grass, Liverseed Grass ( <i>Urochloa</i> )	All states	1.2 L/ha	1.7 L/ha	2.3 L/ha	Apply one pre-emergence (of weeds) treatment prior to sowing and incorporate into the top 5 cm of soil. Use suitable ground application equipment. Ensure equipment is correctly calibrated. Use lower rates of trifluralin when short residual control is required. Increase the rate when longer residual control is required. Rotate herbicide mode of action groups within and across growing seasons. The sensitivity of some species and varieties of the crops to be treated with this product have not been fully evaluated. It is advisable to treat a small number of plants to ascertain their reaction before treating the whole crop.

Situation & Crop	Weeds	State	Rate / Soil Type			Critical Comments
			Light	Medium	Heavy	
Green Beans,		All states	1.2 L/ha	1.5 L/ha	1.7 L/ha	Spray between 4 weeks and just before sowing takes place. Refer Incorporation Table 3, 4 or 5 for suitable method of incorporation
Swedes, Turnip			1.2 L/ha	1.7 L/ha	2.3 L/ha	Apply between 4 weeks and just prior to sowing. Apply by boom spray in a spray volume of 70 – 450 L water/ha depending on soil type. Refer incorporation points 3, 4 or 5 for suitable method of incorporation. DO NOT apply more than one (1) application per crop.
Dubosia		All states	1.2 L/ha	1.7 L/ha	2.3 L/ha	Apply to new planting during pre-plant cultivation. Apply to established crops in spring after weeds and green manure crop has been ploughed into the ground. This product must be incorporated into the soil within 4 hours of application. Refer to incorporation points 8 and 9 for suitable methods of incorporation.
Orchards and Vineyards						Qld, SA, WA, Vic, Tas only