



Product Name: Smart Fluroxypyr EC 400 Herbicide
APVMA Approval No: 95456/145721

Label Name:	Smart Fluroxypyr EC 400 Herbicide
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Signal Headings:	CAUTION KEEP OUT OF REACH OF CHILDREN READ SAFETY DIRECTIONS BEFORE OPENING OR USING
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Constituent Statements:	ACTIVE CONSTITUENT: 400 g/L FLUROXYPYR (present as the methyl heptyl ester) SOLVENT: 316 g/L LIQUID HYDROCARBON 100 g/L N-METHYL-2-PYRROLIDONE
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Mode of Action:	GROUP 4 HERBICIDE
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Statement of Claims:	For the Control of a Wide Range of Broadleaf Weeds in Fallow, Lucerne, Maize, Millets, Pastures, Sorghum, Sugar Cane, Sweet Corn, Winter Cereals. Also for the Control of Woody Weeds in Agricultural Non-Crop Areas, Commercial and Industrial Areas, Pastures and Rights-of-Way as Specified in the Directions for Use
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Net Contents:	CONTENTS 1L - 1000L
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Restraints:	<p>RESTRAINTS</p> <ul style="list-style-type: none">• DO NOT apply to plants that may be stressed (not actively growing) due to prolonged periods of extreme cold, moisture stress (water-logged or drought affected) poor nutrition, presence of disease, or previous herbicide treatment as reduced levels of control may result.• DO NOT spray if rain is likely to occur within one hour.
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- SPRAY DRIFT RESTRAINTS:
- Specific definitions for terms used in this section of the label can be found at apvma.gov.au/spraydrift
- DO NOT allow bystanders to come into contact with the spray cloud.
- DO NOT apply in a manner that may cause an unacceptable impact to native vegetation, agricultural crops, landscaped gardens and aquaculture production, or cause contamination of plant or livestock commodities, outside the application site from spray drift. Wherever possible, correctly use application equipment designed to reduce spray drift and apply when the wind direction is away from these sensitive areas.
- DO NOT apply unless the wind speed is between 3 and 20 kilometres per hour at the application site during the time of application.
- DO NOT apply if there are hazardous surface temperature inversion conditions present at the application site during the time of application. Surface temperature inversion conditions exist most evenings one to two hours before sunset and persist until one to two hours after sunrise.

Directions for Use:	This section contains file attachment.
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Other Limitations:	
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Withholding Periods:	<p>WITHHOLDING PERIODS</p> <p>Grazing: DO NOT GRAZE FAILED CROPS AND TREATED PASTURES OR CUT FOR STOCK FOOD FOR 7 DAYS AFTER APPLICATION.</p> <p>Harvest: Poppies - DO NOT SPRAY POPPIES LATER THAN 10 WEEKS BEFORE HARVEST. Other Crops – NOT REQUIRED WHEN USED AS DIRECTED</p>
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Trade Advice:	
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General Instructions:	This section contains file attachment.
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Resistance Warning:	<p>RESISTANT WEEDS WARNING</p> <p>GROUP 4 HERBICIDE</p> <p>Smart Fluroxypyr EC 400 Herbicide is a member of the pyridine group of herbicides. The product has a disrupters of plant cell growth mode of action. For weed resistance management, the product is a Group 4 Herbicide.</p> <p>Some naturally-occurring weed biotypes resistant to the product and other Group 4 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 this product or other Group 4 herbicides.</p> <p>Since the occurrence of resistant weeds is difficult to detect prior to use, Crop Smart Pty Ltd accepts no liability for any losses that may result from the failure of this product to control resistant weeds.</p> <p>Strategies to minimize the risk of herbicide resistance are available. Contact your farm chemical supplier, consultant, local Department of Agriculture, or Crop Smart Pty Ltd representative.</p>
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Precautions:	
Protections:	<p>PROTECTION OF CROPS, NATIVE AND OTHER NON-TARGET PLANTS</p> <p>Susceptible crops include but are not limited to clovers, cotton, fruit, hops, lupins, ornamentals, peas, pine tree, potatoes, navy beans, safflower, shade trees, soybeans, sunflower, tobacco, tomatoes, vegetables and vines.</p> <p>Smart Fluroxypyr EC 400 can be damaging to susceptible crops during both growing and dormant periods.</p> <p>Grasses are normally unaffected by Smart Fluroxypyr EC 400 and establish quickly after treatment. Transitory damage can occur on some species particularly those that spread by stolons such as cough grass (<i>Cynodon dactylon</i>), Kikuyu grass and carpet grass (<i>Axonopus sp.</i>)</p> <p>DO NOT allow spray to drift onto susceptible crops, shade trees and <i>Pinus spp.</i></p> <p>DO NOT use under weather conditions or from spraying equipment that could cause spray to drift onto nearby susceptible plants.</p> <p>PROTECTION OF LIVESTOCK</p> <p>DO NOT graze or cut treated crops for stock food except as specified under withholding periods.</p> <p>Poisonous plants may become more palatable after spraying.</p> <p>DO NOT allow stock to re-enter paddocks containing treated poisonous plants, until the plants have died down.</p> <p>PROTECTION OF WILDLIFE, FISH, CRUSTACEANS AND ENVIRONMENT</p> <p>DO NOT contaminate streams, rivers or waterways with the chemical or used containers. Alongside waterways, treat only noxious weeds and poisonous plants.</p>

Storage and Disposal:	<p>STORAGE AND DISPOSAL</p> <p>Keep out of reach of children. Store in closed, original container in a cool, well ventilated area. 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 containers to recycler or designated collection point.</p> <p>If not recycling, break, crush or puncture and deliver packaging for appropriate disposal 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>
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Safety Directions:	<p>SAFETY DIRECTIONS</p> <p>Avoid contact with eyes and skin. When opening the container, preparing the spray and using the prepared spray, wear cotton overalls buttoned to the neck and wrist and a washable hat, elbow-length PVC gloves and a face shield or goggles. Wash hands after use. After each day's use wash gloves, face shield or goggles and contaminated clothing.</p>
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First Aid Instructions:	FIRST AID If poisoning occurs, contact a doctor or Poisons Information Centre. Phone Australia 13 11 26. If swallowed, DO NOT induce vomiting. If in eyes wash out immediately with water.
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First Aid Warnings:	
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DIRECTIONS FOR USE

Table 1: Woody Weeds in Agricultural Non-Crop Areas and Rights-of-Way, Commercial and Industrial Areas, Forests and Pastures.

- Legumes present at the time of spraying will be severely damaged
- Thorough coverage of both foliage and stems, to the point of runoff, is essential for high volume applications (see GENERAL INSTRUCTIONS; application methods WOODY WEED SITUATIONS section).

HIGH VOLUME APPLICATION: Dilute product with water. See General Instructions – Application Method for application details				
WEEDS CONTROLLED	WEED GROWTH STAGE	STATE	RATE in WATER	CRITICAL COMMENTS
Bathurst burr, Noogoora burr	Seedlings and young plants up to 40 cm high	NSW, NT, Qld, WA only	38 mL/100L	
Black bindweed (Climbing buckwheat)	Seedlings and young plants before flowering	NSW, Qld only	150 mL/100L	
<i>Mimosa pigra</i>	Apply from mid to late summer	NT, WA only		Add an appropriate crop oil/surfactant adjuvant (see General Instructions; Oils and surfactants).
Common sensitive plant	Seedlings and young plants up to flowering	Qld, WA only	250 mL/100L	
Bellyache bush		Qld, NSW, WA only		
Blackberry nightshade, Bokhara clover		NSW, Qld only		
Caltrop (yellow vine) (<i>Tribulus terrestris</i>) (<i>T. micrococcus</i>)	Seedlings and young plants up to 30 cm diameter			
Cobblers pegs	Up to 15 cm high			
Cockspur thorn	Up to 3 m high			
Creeping lantana	At flowering			
Crofton weed, Mistflower	Seedlings and young plants up to flowering			
Docks (<i>Rumex</i> spp.)	Seedlings and rosettes up to 30 cm high			
Hexham scent	Seedlings and young plants up to flowering			Boom spray: SMART Fluroxypyr EC 400 at 0.3 L/ha + 0.5 L/ha of 2,4-D amine (500 g/L)
Honey locust	Seedlings and young plants up to 2 m high			
Small flowered mallow (Marshmallow) (<i>Malva parviflora</i>)	Seedlings and young plants up to flowering			
Yellowflower Devil's claw	Seedlings and young plants up to flowering			

Table 1 (cont): Woody Weeds in Agricultural Non-Crop Areas and Rights-of-Way, Commercial and Industrial Areas, Forests and Pastures.

HIGH VOLUME APPLICATION: Dilute product with water. See General Instructions – Application Method for application details				
WEEDS CONTROLLED	WEED GROWTH STAGE	STATE	RATE inWATER	CRITICAL COMMENTS
Lantana	Seedlings and regrowth 0.5 to 1.2 m high	NSW, Qld only	250 mL/100L	Apply to actively growing plants from October to April. Some regrowth may occur particularly when treating old woody plants with sparse canopies.
	Plants and regrowth 1.2 to 2 m high		500 mL/100L	
Blue heliotrope	Flowering			
Limebush	Infestations up to 1.5 m high only			
Madeira vine	Apply at time of active growth		250 mL/100L	
Milkweed (<i>Euphorbia heterophylla</i>)	3 leaf to flowering	Qld only	500 mL/100L	Repeat applications will be necessary to control subsequent germinations.
Common sowthistle	Seedlings and young plants up to bolting	NSW, Qld only	250 mL/100L	Add a surfactant (see GENERAL INSTRUCTIONS ; Oils and surfactants).
Mother-of-millions (<i>Kalanchoe spp.</i>)	Seedling and young plants before flowering		300 mL/100L	
Prickly acacia	Seedling and young plants up to 2 m high	Qld only	375 mL/100L	Add appropriate crop oil/surfactant adjuvant (see GENERAL INSTRUCTIONS ; Oils and surfactants). Consult Tropical Weeds Research Centre, Charters Towers, for specific advice on application
<i>Sida</i> spp.	Seedling and young plants up to flowering	NSW, NT, Qld, WA only	500 mL/100L	
Broadleaf Pepper tree (<i>Schinus terebinthifolius</i>)	Mature leaves, fruiting	Qld only	250 mL/100L	Winter application only. Contact Alan Fletcher Research Station for more information.
Flannel weed (<i>Sida cordifolia</i>)				
Snakeweed (Dark and light blue)	Seedling and young plants before flowering		375 mL/100L	Add appropriate crop oil/surfactant adjuvant (see GENERAL INSTRUCTIONS ; Oils and surfactants).
Stinking Passion Flower	Established plants and regrowth	Qld, NT, WA only	225 mL/100L	Use 70 mL/15 L for a knapsack.
Wandering jew (<i>Tradescantia albiflora</i>)	Young plants up to and including flowering	All States	750 mL/100L	Some regrowth will usually occur and will require retreatment.
Wattles (including <i>Acacia aulacocarpa</i> <i>A. decora</i> <i>A. harpophylla</i> <i>A. leiocalyx</i> <i>A. salicina</i>)	Seedling plants or regrowth 0.5 to 1.2 m high	NSW, Qld only	250 mL/100L	Apply to actively growing plants when soil moisture is plentiful. Some regrowth may occur particularly when treating old woody plants with sparse canopies and under dry conditions.
	Plants or regrowth 1.2 to 2.0 m high only		500 mL/100L	

Table 1 (cont): Woody Weeds in Agricultural Non-Crop Areas and Rights-of-Way, Commercial and Industrial Areas, Forests and Pastures.

BASAL BARK AND CUT STUMP APPLICATION: Dilute product with diesel. See General Instructions – Application Method for application details				
WEEDS CONTROLLED	WEED GROWTH STAGE	STATE	RATE in diesel	CRITICAL COMMENTS
Celtis (<i>Celtis sinensis</i>)	Basal Bark only: Young plants up to 2 m high and 20 cm basal diameter	Qld only	1.8 L/100L	Treat stems from ground level to where multi-stemmed trunks branch.
Chinese apple	Up to 15 cm basal diameter		1.5 L/100L	With basal bark, treat circumference of stem to a height of 45cm from the ground. Contact the Land Protection Branch, Department of Lands, Qld, for further information on Chinese Apple.
Cockspur thorn	Basal Bark only: Up to 5 cm basal diameter		1 L/100L	
Mimosa bush (<i>Acacia farnesiana</i>)	Up to 5 cm basal diameter	Qld, WA only	1.5 L/100L	
Prickly acacia	Up to 10 cm basal diameter	Qld only	0.75 L/100L	
Honey locust	Plants up to 10 cm basal diameter	Qld, NSW only	0.75 L/100L	With basal bark, treat circumference of stem to a height of 45cm from the ground. For cut stump application use a rate of 5L/100 diesel for all plant sizes. Contact the Land Protection Branch, Department of Lands, Qld for further information on Honey Locust.
	Plants 10 to 20 cm basal diameter		1.5 L/100L	
	Plants >20cm basal diameter		2.5 L/100L	
Sisal hemp (<i>Agave spp.</i>)	All growth stages	Qld only	1.5 L/100L	Treat as an overall spray. Contact The Land Protection Branch, Department of Lands, Qld for advice to control large infestations.
			5 mL undiluted product per plant	Lever out centre of plant with crowbar and immediately treat the exposed cut area

BROADCAST AND AERIAL APPLICATION: Dilute product with water. See General Instructions – Application Method for application details				
WEEDS CONTROLLED	WEED GROWTH STAGE	STATE	RATE	CRITICAL COMMENTS
<i>Mimosa pigra</i>	Actively growing plants	NT, WA only	1.5 L/ha	Aerial application: Add appropriate crop oil/surfactant adjuvant at the rate of 1 L/100 L spray mix. Apply to actively growing plants from mid to late summer. Contact the Department of Primary Industries and Fisheries, NT for further information.

LOW VOLUME, HIGH CONCENTRATE APPLICATION: Use a drench gun or gas-powered gun. See General Instructions – Application Method for application details				
WEEDS CONTROLLED	WEED GROWTH STAGE	STATE	RATE in water	CRITICAL COMMENTS
Limebush	Isolated bushes up to 1.2 m high only	NSW, Qld only	500 mL/10L	Apply a 50 mL dose per 5m ² of bush surface area.
Tree violet (<i>Hymenanthera dentata</i>)	Apply from late flowering to green fruit up to 1.2 m high	NSW only		Apply a 50 mL dose per cubic metre of bush

Table 2: Established Grass Pastures

WEEDS CONTROLLED	WEED GROWTH STAGE	STATE	RATE	CRITICAL COMMENTS
Blue billygoat weed, Common sensitive plant, Giant sensitive plant, Spinyhead sida	Apply before flowering	Qld, WA only	750 mL/ha	Add appropriate crop oil/surfactant adjuvant at 1 L/ha
St John's wort	Apply from bud to full bloom (usually late Nov to early Jan)	ACT, NSW and Vic only	1.5 L/ha	Some regrowth will occur. Treat regrowth the following season for best results. Use at least 200L water/ha.
Silverleaf nightshade	From onset of flowering to early berry-set (usually spring to mid-summer)	NSW only	375 mL or 190 mL/ha + 1.2-1.6 L/ha 2,4-D amine (625 g/L)	Add appropriate crop oil/surfactant adjuvant at 1 L/ha. To ensure maximum effect, delay application until the majority of shoots have emerged. Follow-up treatment of regrowth is critical for best control.

Table 3: Sorghum, Maize, Millets and Sweet corn (NSW & Qld only)

CROP	CROP GROWTH STAGE	WEEDS CONTROLLED	WEED GROWTH STAGE	RATE	CRITICAL COMMENTS
Sorghum	Apply when secondary roots are present, from 4 fully expanded leaves (15 cm tall) up to boot (also see CRITICAL COMMENTS)	Annual ground cherry, Wild gooseberry (<i>Physalis</i> spp.)	2 to 8 leaf Up to 15 cm tall	250 mL/ha	Sorghum: From 8 leaf to boot stage, use dropper nozzles to prevent herbicide coming in contact with the crop's leaves and the growing point (meristem). Maize and sweet corn: From 6 leaf to just before tasselling, use dropper nozzles to prevent the herbicides coming in contact with the crop's leaves and the growing point (meristem). Millets: DO NOT use mixes with atrazine products.
			15 to 30 cm tall	375 mL/ha	
		Apple-of-Peru	Seedling plants up to 15 cm tall		
		Bathurst burr, Noogoora burr	2 to 8 leaf Up to 20 cm tall	250 mL/ha	
			20 to 50 cm tall	375 mL/ha	
		Pigweed (<i>Portulaca oleracea</i>)	Up to 10 cm diameter	250 mL/ha	
			10 to 30 cm diameter	375 mL/ha	
		Sesbania pea	2 to 6 leaf Up to 10 cm tall	750 mL/ha	
		Silverleaf nightshade (NSW only) ⁽¹⁾	Full flower to early berry	375 mL/ha + LI700 at 300 mL/ha	
		Starburr (<i>Acanthospermum hispidum</i>) (Qld only)	Up to 12 leaf and before flowering	750 mL/ha or 375 mL/ha + 2 L/ha atrazine (500 g/L)	
Millets	Spray when secondary roots have developed, usually early to mid-tillering, and not later than before heads start to form at the base of tillers. (See CRITICAL COMMENTS)	Thornapples (<i>Datura</i> spp.)	2 to 8 leaf Up to 15 cm tall	375 mL/ha	⁽¹⁾ This treatment may be slightly damaging to the crop. To minimise crop damage apply using dropper nozzles at all crop stages.
		Volunteer sunflower	2 to 5 leaf Up to 20 cm tall	500 mL/ha	

Table 3 (cont): Sorghum, Maize, Millets and Sweet Corn (NSW & Qld only)

SMART Fluroxypyr EC 400 in tank-mixes with atrazine: Sorghum, Maize and Sweet corn.					
CROP	CROP GROWTH STAGE	WEEDS CONTROLLED	WEED GROWTH STAGE	RATE	CRITICAL COMMENTS
Sorghum, Maize & Sweetcorn (cont).	See above (See CRITICAL COMMENTS)	<i>Amaranthus</i> spp. including: Boggabri weed, Dwarf amaranth, Green amaranth, Redshank, Anoda weed, Bladder ketmia, Black pigweed (<i>Trianthema portulacastrum</i>), Calotrop (yellow vine), including <i>Tribulus terrestris</i> , <i>T. microoccus</i> and <i>T. maximus</i> Cowvine (peach vine) (<i>Ipomoea lonchophylla</i>), Hairy wandering jew (<i>Commelina benghalensis</i>), Mintweed	Seedling plants up to 15 cm tall or rosettes up to 15 cm diameter	250 mL/ha + 1.5 L/ha of atrazine flowable (500 g/L) or 375 mL/ha + 2 L/ha of atrazine flowable (500 g/L)	Use the low rate (250mL/ha + 1.5 L/ha) when weeds are small (5-7 cm tall/ diameter). Use the high rate (375mL/ha + 2 L/ha) when the weeds are larger (7 - 15 cm tall/ diameter). SMART Fluroxypyr EC 400 is generally more compatible with Liquid atrazine products (see GENERAL INSTRUCTIONS; compatibility section). Add a surfactant (See GENERAL INSTRUCTIONS; Oils and surfactants). DO NOT add an oil to mixtures of SMART Fluroxypyr EC 400 and atrazine.
		<i>Euphorbia davidii</i>	Cotyledons to 4 nodes up to 15 cm	0.5 + 2 atrazine flowable (500 g/L)	
		Volunteer peanuts	Up to 15 cm diameter	0.5 + 4.5 atrazine flowable (500 g/L)	

Sweet corn: Tasmania only					
CROP	CROP GROWTH STAGE	WEEDS CONTROLLED	WEED GROWTH STAGE	RATE L/ha	CRITICAL COMMENTS
Sweet corn only	3 to 5 leaf	Blackberry nightshade, Volunteer potatoes	3 to 5 leaf	0.5	

Table 4: Winter Cereals (Wheat, Barley, Oats and Triticale)

CROP GROWTH STAGE	WEEDS CONTROLLED	WEED GROWTH STAGE	STATE	RATE	CRITICAL COMMENTS
Apply from 3 leaf to flag (Zadoks 13 to 39)	Bedstraw (<i>Galium tricornutum</i>)	1 to 3 whorl	Vic, SA, WA only NSW, Vic only	500 mL/ha	(1) Add either an appropriate crop oil/surfactant adjuvant or a surfactant (see GENERAL INSTRUCTIONS: Oils and surfactants).
	Cleavers (<i>Galium aparine</i>)				
	Black bindweed (<i>Climbing buckwheat</i>)	2 to 4 leaf	NSW, Qld only	250 mL/ha ⁽¹⁾	
		2 to 6 leaf		375 mL/ha or 250 mL/ha + 5 g/ha Metsulfuron methyl 600 ⁽¹⁾	
	Common sowthistle (<i>Sonchus oleraceus</i>)	2 to 5 leaf		500 mL/ha	
		2 to 6 leaf		750 mL/ha or 250 mL/ha + 5g/ha Metsulfuron methyl ⁽¹⁾	
	Deadnettle	2 to 4 leaf	NSW, SA, Qld, WA only	500 mL/ha	
	Spiny emex (Doublegee, Three cornered jack)				
	Prickly lettuce	2 to 5 leaf	NSW, Qld, Tas, Vic, WA	750 mL/ha	Plants 15 to 30 cm tall will only be suppressed.
	Volunteer lupins	2 to 8 leaf	NSW, Vic, WA only		
	Volunteer potato	10 to 15 cm tall	WA and Tas only		
	Wireweed	2 to 3 leaf	NSW, Qld, SA, Tas, Vic and WA	250 mL/ha + 5g/ha Metsulfuron methyl ⁽¹⁾	
			NSW and Qld only		

CROP GROWTH STAGE	WEEDS CONTROLLED	WEED GROWTH STAGE	STATE	RATE	CRITICAL COMMENTS
	Bittercress (<i>Coronopus didymus</i>), Mustards, Shepherd's purse, Turnip weed, Wild radish, Wild turnip	Up to 8 leaf and up to 15 cm diameter	Qld, NSW, Vic, SA, Tas, WA only	250 mL/ha to 750 mL/ha + Metsulfuron methyl ⁽¹⁾ or Eclipse ⁽¹⁾ or MCPA LVE or MCPA amine	The SMART Fluroxypyr rate depends on what other weeds are present as listed above. See Mixtures comment above. Metsulfuron methyl (600g/kg) @ 5 g/ha (this mix does not control wild radish). Eclipse @ 5-7 g/ha (use the 5 g rate on turnip weed only). MCPA LVE (500 g/L) @ 700 mL/ha. MCPA Amine (500 g/L) @ 1.0 L/ha.

Table 5: Summer Fallow

WEEDS CONTROLLED	WEED GROWTH STAGE	STATE	RATE	CRITICAL COMMENTS
Annual ground cherry, Wild gooseberry (<i>Physalis</i> spp.)	2 to 8 leaf, up to 15 cm tall	NSW, Qld only	375 mL/ha ⁽²⁾	⁽¹⁾ Add an appropriate crop oil/surfactant adjuvant (see GENERAL INSTRUCTIONS ; Oils and surfactants).
Bathurst burr, Noogoora burr	2 to 8 leaf, up to 20 cm tall	NSW, Qld, Vic, WA only		When mixing with Glyphosate 450g/L to control both grass and broadleaf weeds, refer to the Glyphosate 450g/L label for use rates and adjuvants recommended for the grasses (see GENERAL INSTRUCTIONS ; compatibility section).
Bellvine	Pre-flowering	NSW, Qld only	250 mL/ha + 1.2 L/ha Glyphosate 450g/L	
Bladder ketmia	4 to 8 leaf, up to 10 cm tall		250 mL/ha + 1.0 mL/ha Glyphosate 450 g/L	⁽²⁾ Delay treatment until the maximum number of shoots have emerged, but before the onset of fruiting (late summer). DO NOT treat plants showing symptoms from previous treatment. Use the high rate when longer-term weed control (6-10 months) is required and delay planting crops during this period. The low rate will require follow-up treatments.
Cowvine (Peach vine) <i>Ipomoea lonchophylla</i>	2 to 10 leaf up to 10 cm diameter		375 mL/ha ⁽¹⁾	
Caltrop (Yellow vine), including <i>Tribulus terrestris</i> , <i>T. maximus</i> and <i>T. micrococcus</i>	Up to 15 cm diameter		375 mL/ha + 1.0 mL/ha Glyphosate 450 g/L	
Pigweed (<i>Portulaca oleracea</i>)	Up to 10 cm diameter		500 mL/ha ⁽¹⁾ or 190 mL/ha + 800 mL/ha Glyphosate 450 g/L	
	Up to 60 cm diameter		250 mL/ha + 1.2 L/ha Glyphosate 450 g/L	
<i>Polymeria pusilla</i>	2 to 10 leaf up to 20 cm diameter		500 mL/ha ⁽¹⁾ or 190 mL/ha + 800 mL/ha Glyphosate 450 g/L	
Rhynchosia	Seedlings to early flowering			

WEEDS CONTROLLED	WEED GROWTH STAGE	STATE	RATE	CRITICAL COMMENTS
Smallflower mallow or Marshmallow (<i>Malva parviflora</i>)	Up to 8 leaf up to 20 cm diameter		500 mL/ha ⁽¹⁾	
Thornapples (<i>Datura</i> spp.)	2 to 8 leaf up to 15 cm diameter	NSW, Qld, WA only	375 mL/ha ⁽¹⁾ or 250mL/ha + 1.2 mL/ha Glyphosate 450g/L	
Sesbania pea	2 to 6 leaf up to 10 cm tall	NSW Qld only	750 mL/ha ⁽¹⁾ or 250 mL/ha + 1.2 mL/ha Glyphosate 450g/L	
Perennial Ground Cherry (<i>Physalis virginiana</i>) ⁽²⁾	Bud to early flowering up to 20 cm tall		750 mL or 1.5 mL/ha ⁽¹⁾	
Silverleaf nightshade	Full flower to early berry-set (usually Dec – Feb)	NSW only	375 mL/ha or 190 mL/ha + 1.5 L – 2 L/ha 2,4-D amine (500 g/L)	Add an appropriate crop oil/surfactant adjuvant at the rate of 1 L/100 L spray mixture. To ensure maximum effect, delay application until the majority of shoots have emerged. Follow-up treatment will be required to control regrowth and is critical for optimum control. If wanting to prevent seed set repeat applications may be needed in the same season, although this does not lead to better long-term control.
Volunteer peanuts	Up to 15 cm diameter	Qld only	500 mL/ha + 4.5 L/ha atrazine flowable (500 g/L)	Add a surfactant (see General Instructions; Oils and surfactants). Important: see GENERAL INSTRUCTIONS; compatibility section).
Volunteer sunflowers	2 to 5 leaf up to 20 cm	NSW, Qld only	500 mL/ha	Add an appropriate crop oil/surfactant adjuvant (see General Instructions; Oils and surfactants section).

Table 6: Winter Fallow

WEEDS CONTROLLED	WEED GROWTH STAGE	STATE	RATE	CRITICAL COMMENTS
Bedstraw (<i>Galium tricornutum</i>)	Up to 5 whorl	Vic, SA, WA only	500 mL/ha ⁽¹⁾	⁽¹⁾ Add an appropriate crop oil/surfactant adjuvant (see GENERAL INSTRUCTIONS; Oils and surfactants section). ⁽²⁾ Add an appropriate crop oil/surfactant adjuvant or a surfactant (see GENERAL INSTRUCTIONS; Oils and surfactants section).
Cleavers (<i>Galium aparine</i>)		NSW, Vic only		
Black bindweed (Climbing buckwheat)	2 to 8 leaf up to 10 cm diameter	NSW Qld only	375 mL/ha ⁽¹⁾	

WEEDS CONTROLLED	WEED GROWTH STAGE	STATE	RATE	CRITICAL COMMENTS
Common sowthistle (<i>Sonchus oleraceus</i>)	2 to 5 leaf up to 10 cm diameter		500 mL/ha ⁽¹⁾ or 250 mL/ha + 600 mL/ha Glyphosate 450 g/L	When mixing with Glyphosate 450g/L to control both grass and broadleaf weeds, refer to the Glyphosate 450g/L label for use rates and adjuvants recommended for the grasses ((see GENERAL INSTRUCTIONS ; Compatibility Section).
Prickly lettuce			750 mL/ha ⁽¹⁾ or 250 mL/ha ⁽²⁾ + 5 g/ha Metsulfuron methyl (600g/kg)	
Spiny emex (Doublegee, Three cornered jack)	2 to 8 leaf		750 mL/ha ⁽¹⁾ or 250 mL/ha ⁽²⁾ + 5 g/ha Metsulfuron methyl (600 g/kg) or 500 mL/ha ⁽²⁾ + 600 mL/ha Glyphosate 450 g/L	
Wireweed	2 to 3 leaf up to 10 cm tall			

Table 7: Sugar cane (Qld, NSW, NT and WA only)

CROP STAGE GROWTH	WEEDS CONTROLLED	WEED GROWTH STAGE	RATE	CRITICAL COMMENTS
From early tillering to maturity	Balsam pear, Blackberry nightshade, Blue billygoat weed, Centro, Cowpea, Giant sensitive plant, Lablab bean, Noogoora burr, Phasey bean, Pinkburr, Prickly African cucumber, Spinyhead sida, Stinking passion flower (seedlings only)	Apply from 2 to 3 leaf until flowering	Ground: 650 mL/ha Aerial: 750 mL/ha	For optimal weed control, delay application until just before the "close-in" stage. Aerial application: Apply in not less than 60 L/ha water and add an appropriate crop oil/surfactant adjuvant at 1L/100L spray mixture. Ground application: Apply in 100 – 400 L/ha water and add an appropriate crop oil/surfactant adjuvant at 500 mL/100L of spray mixture.
	Bellvine, Morning glory, Red or pink convolvulus, Star-of-Bethlehem		As above + 1L/ha 2,4-D amine (500 g/L)	

CROP STAGE GROWTH	WEEDS CONTROLLED	WEED GROWTH STAGE	RATE	CRITICAL COMMENTS
	Stinking passion flower	Established or ratoon plants with at least 1.0 m of regrowth	High volume: 225 mL/100 L water Knapsack 35 mL/15 L water	Thoroughly wet plants to the point of run-off.
	Milkweed (<i>Euphorbia heterophylla</i>)	Seedlings and young plants up to flowering.	1.5 or 1.15 + 4 atrazine flowable (500 g/L)	Better control will be achieved with the atrazine mixture. Delay application until just before the cane reaches the "close-in" stage. This will improve control and minimise the number of seedlings that germinate.

Table 8: Lucerne (NSW only)

CROP STAGE GROWTH	WEEDS CONTROLLED	WEED GROWTH STAGE	RATE	CRITICAL COMMENTS
Established crops at least eighteen months old	Annual ground cherry, Bathurst burr, Noogora burr, Wild gooseberry	2 to 8 leaf up to 15 cm high	250 mL/ha	To minimise crop injury and to maximise weed control, cut, slash or heavily graze the lucerne before application. Wherever possible, irrigate before application to stimulate weed growth. DO NOT treat crops growing on sandy or stony soils DO NOT treat crops after the summer growing season (after end of March). To broaden the spectrum of weeds controlled, SMART Fluroxypyr EC 400 can be mixed with 2,4-DB Amine
	Pigweed	Up to 10 cm diameter		

Table 9: Poppies (Tas only)

CROP STAGE GROWTH	WEEDS CONTROLLED	WEED GROWTH STAGE	RATE	CRITICAL COMMENTS	
4 to 6 leaf	Cleavers, Fumitory	2 to 6 leaf	500 mL/ha	DO NOT apply SMART Fluroxypyr EC 400 to poppies later than the 8 to 10 leaf growth stage as a reduction of alkaloid content could occur.	
	Shepherd's purse, Wireweed		500 mL/ha + 5 L/ha Asulox *		
8 to 10 leaf	Common sowthistle, Prickly lettuce	2 to 5 leaf	500 mL/ha	DO NOT apply SMART Fluroxypyr EC 400 to poppies later than the 8 to 10 leaf growth stage as a reduction of alkaloid content could occur.	
	Black nightshade	Cotyledon to 4 leaf	750 mL/ha		
	Fumitory	6 to 10 leaf			
	Volunteer potato	From tuber initiation to flower bud		This rate will provide season long control of volunteer potato, but will not control all daughter tubers and will only suppress potatoes over 15 cm tall.	

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

GENERAL INSTRUCTIONS

MIXING

SMART Fluroxypyrr EC 400 may be mixed with water or diesel.

Mix only sufficient chemical for each day's use and avoid storing.

Mixing in Water: Half fill the spray tank with water and add the required quantity of SMART Fluroxypyrr EC 400 and complete filling. Agitate continuously to ensure thorough mixing before and during application.

Mixing in Diesel: Half fill the tank with diesel and add the required quantity of SMART Fluroxypyrr EC 400.

Add the remainder of the diesel and agitate or shake to mix contents.

Tank mixtures: Wettable powder or dry flowable formulations (e.g. water dispersible granules) should be added to the spray tank first, followed by suspension concentrates (flowables), water soluble salts and then emulsifiable concentrate formulations (SMART Fluroxypyrr EC 400). Add spraying oils and surfactants (wetters) last.

OILS AND SURFACTANTS

Oils

Use an appropriate crop oil/surfactant adjuvant at the rate of 500 mL/100 L of spray mix. When using less than 100 L/ha spray volume, ensure a minimum of 250 mL/ha of this adjuvant is used, unless 1 L/100 L or 1 L/ha is specified.

Surfactants (wetters)

Use a 1000g/L non-ionic surfactant such at 100 mL/100 L of spray mix where required.

COMPATIBILITY

ATRAZINE

AVOID USING HARD WATER WHEREVER POSSIBLE.

Where hard water cannot be avoided, the addition of CALGON water conditioning agent to the spray tank, at 100 g/100 L water, before adding any herbicide may improve compatibility.

AGITATION IS VERY IMPORTANT WHEN MIXING SMART FLUROXYPYR AND ATRAZINE.

SMART Fluroxypyr plus atrazine tank mixes must be agitated vigorously and continuously during mixing and application. After mixing DO NOT allow to stand without agitation. Ensure that the time from mixing to the end of application is not more than 2 hours. If settling out occurs re-suspension is difficult, even with vigorous agitation.

Agitation using only the pump's by-pass is usually inadequate, particularly with larger tanks (more than 2000 L). Additional mechanical agitation will be necessary in large tanks, computer sprayers and mixing tanks.

When additional surfactant is required, add a 100% concentrate non-ionic surfactant at 100 mL/100 L of spray mix. DO NOT use a spraying oil when tank mixing SMART Fluroxypyr EC 400 and atrazine.

Guidelines For Tank-Mixing SMART Fluroxypyr EC 400 and Common Atrazine Formulations

Tank Mix	Rate/ha	Water Hardness			Minimum Water Volume (L/ha)		Critical Comments
		Soft	Medium	Hard	Ground	Aerial	
SMART Fluroxypyr	375mL	✓	✓	✓	50	35	
SMART Fluroxypyr + Gesaprim 500FW	375mL + 2L	✓	✓	✓	50 – 100	35	Precipitate can be easily resuspended
SMART Fluroxypyr + Atradex 900WG	375mL + 1.1L	✓	✗	✗	100	Do not use	Precipitate may be difficult to resuspend and may block nozzles.
SMART Fluroxypyr + Nu-Trazine DF	375mL + 1.1L	✓	✗	✗	100	Do not use	Sediment may be difficult to resuspend and may block nozzles
SMART Fluroxypyr + Nu-Trazine 500FW	375mL + 2L	✓	✓	✗	100	Do not use	Precipitate may be difficult to resuspend and may block nozzles.

Clodinafop 240 EC Herbicide

Always use an appropriate crop oil/surfactant adjuvant with SMART Fluroxypyr EC 400 + Clodinafop 240 EC tank-mixes at 500 mL/100 L of spray mix with a minimum of 250 mL/ha.

DO NOT mix SMART Fluroxypyr EC 400 with Clodinafop 240 EC if the grass weeds are not actively growing. Always use the maximum label rate of Clodinafop 240 EC for the appropriate grass growth stage.

DO NOT use SMART Fluroxypyr at more than 0.375 L/ha in tank mixes with Clodinafop 240 EC.

GLYPHOSATE 450g/L

When mixing SMART Fluroxypyr with Glyphosate 450g/L to control both grass and broadleaf weeds, refer to the Glyphosate 450g/L label for use rates and adjuvants recommended for the grasses. DO NOT use Glyphosate 450g/L at less than 1.2 L/ha in tank mixes with SMART Fluroxypyr EC 400, when barnyard grass, buttongrass, crowsfoot grass, native millet and liverseed grass are the target species.

APPLICATION METHODS and WATER RATES

BROADCAST APPLICATION IN CROPPING, PASTURE AND FALLOW SITUATIONS

A. Ground application (Boom)

Apply SMART Fluroxypyr EC 400 with an accurately calibrated boom sprayer, in at least 50 L/ha water (100-400 L/ha for sugar cane).

Flat fan nozzles are recommended using pressures in the range 200 to 300 kPa.

Set the boom at a height to ensure a double overlap of the nozzle patterns.

B. Ground directed application (Dropper nozzles)

To minimise crop effects, dropper nozzles should be used in sorghum when the crop is beyond the 8 leaf growth stage and in maize and sweet corn when the crop is beyond the 6 leaf growth stage.

Adjust the nozzles to direct the spray into the base of the crop and away from the leaves and the growing point. See manufacturer's directions for setting up and calibration of dropper nozzles.

C. Aerial application

Apply in a minimum volume of at least 35 L/ha water (60 L/ha in sugarcane).

Use equipment calibrated to produce medium to coarse size droplets.

DO NOT apply when the temperature is above 30°C, when there is no wind or when the wind is blowing toward susceptible crops.

DO NOT use human flaggers unless they are protected by engineering controls such as enclosed cabs.

WOODY WEED SITUATIONS

Weeds must be actively growing to attain optimal effect. Delay the treatment of regrowth following bulldozing, slashing, burning, ploughing or a previous chemical treatment until it has at least 1 metre of new, vigorous, growth.

A. High Volume Application

Hand Gun

Apply the recommended mix to obtain full coverage of leaves and stems using a number 6–8 tip at 700 to 1500 kPa. To obtain good coverage, a spray volume of 1500 to 4000 L/ha (15 to 40 L/100m²) is required per infested hectare.

Ensure thorough coverage to the point of runoff.

Knapsack

Knapsack sprayers may be used on smaller infestations where penetration and coverage of the canopy is easier to achieve. Use the same use rate and spray techniques as for handgun application.

B. Low Volume, High Concentrate Application

Drench Gun or Gas-Powered Gun

Apply the recommended mixture uniformly across the foliage by applying 50mL shots to cover 4 to 5 m² of surface area of plant. This is approximately equivalent to 20 droplets per cm² of the leaf surface. Use a marking agent as recommended by the equipment manufacturer to check spray coverage.

C. Basal Bark and Cut Stump Application

Basal Bark

DO NOT apply to wet stems as this can repel the diesel mixture.

Spray or paint the recommended mixture around the base of each stem from ground level to a height of at least 30 cm from the ground, wetting the bark to the point of runoff.

Apply with a paint brush or a pressure sprayer with an approximate lance and solid cone nozzle.

If using spray equipment use low pressures (</_ 200 kPa) sufficient to form a cone of spray.

Old rough bark will require more spray than smooth or young thin bark.

Cut Stump

Apply the recommended mixture liberally to the freshly cut stump immediately after cutting.

Apply by spraying or painting the cut surface and sides of the stump.

Best results are obtained when the stems are cut less than 15 cm above the ground.

CLEANING SPRAY EQUIPMENT

Rinse water should be discharged onto a designated disposal area or, if this is unavailable, onto wasteland away from desirable plants and water-courses.

Cleaning equipment after using water-based sprays:

Rinsing: After using SMART Fluroxypyr EC 400 Herbicide, empty the tank completely and drain the whole system. Thoroughly wash inside the spray unit using a pressure hose. Drain and clean any filters in the tank, pump, lines, hoses and nozzles.

After cleaning the tank as above, quarter fill the clean water and circulate through the pump, lines and nozzles. Drain and repeat the rinsing procedure twice.

Decontamination (before spraying cotton and other sensitive crops; see PROTECTION OF CROPS): Wash the tank and rinse the system as above. Then quarter fill the tank and add an alkali detergent (e.g. liquid SURF, OMO, DRIVE) at 500 mL/100L of water or the powder equivalent at 500 g/100 L and circulate throughout the system for at least fifteen minutes.

Drain the whole system. Remove filters and nozzles and clean them separately. Finally flush the system with clean water and allow to drain.

Cleaning equipment after using diesel-based sprays:

On completion of spraying, use a degreaser such as Caltex Kwik-D-Grease to remove traces of diesel from the sprayer. Rinse tank and spray through nozzles with water to remove degreaser.

Then quarter fill the tank and add an alkali detergent (e.g. liquid SURF, OMO, DRIVE) at 50 mL/10L of water or the powder equivalent at 50 g/10 L of water. Shake sprayer to

circulate the washing solution throughout the sprayer, then spray the solution through the nozzles. Rinse well with clean water to remove the detergent.

To clean brushes and containers, spray liberally with degreaser. Hose off with clean water and repeat using detergents as above.

DO NOT use this equipment for any other purpose.

MINIMUM RE-CROPPING PERIODS

PLANT-BACK PERIODS FOR CROPS FOLLOWING THE APPLICATION OF SMART FLUROXYPYR EC 400 FOR RATES UP TO 750mL/ha			
RATE L/ha	0.188	0.375	0.75
CROP	DAYS		
Barley	7	7	7
Wheat	7	7	7
Chickpea	7	7	7
Cotton	14	14	28
Soybean	7	7	14
Sunflower	7	7	7
Maize	7	7	7
Sorghum	7	7	7

NOTE: Before using SMART Fluroxypyr EC 400 in tank mixes with other herbicides, check the plant-back information on all product labels. The time between spraying and planting will be determined by the most residual product, i.e. the product with the longest plant-back period.