

Product Name: SUREFIRE GAMMA HERBICIDE
 APVMA Approval No: 66733/138077



Label Name:	SUREFIRE GAMMA HERBICIDE
Signal Headings:	CAUTION KEEP OUT OF REACH OF CHILDREN READ SAFETY DIRECTIONS BEFORE OPENING OR USING
Constituent Statements:	ACTIVE CONSTITUENT: 200 g/L GLUFOSINATE-AMMONIUM
Mode of Action:	GROUP 10 HERBICIDE
Statement of Claims:	For the non-residual control of broadleaf and grass weeds in various situations as indicated in the DIRECTIONS FOR USE table.
Net Contents:	1L-1000L
Restrains:	<p>Restrains DO NOT apply by aircraft. DO NOT apply when rain is expected within 6 hours. DO NOT apply to weeds under stress due to, for example, very dry, very wet, frosty or diseased conditions. DO NOT apply under hot dry conditions (temperatures above 33°C with a relative humidity below 50%). SUGARCANE DO NOT apply in areas where slope exceeds 4%.</p> <p>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.</p>
Directions for Use:	This section contains file attachment.

Other Limitations:	
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Withholding Periods:	<p>WITHHOLDING PERIOD (WHP):</p> <p>Harvest (H) Blackberry, blackcurrant, blueberries, boysenberry, citrus fruit, grapes, loganberry, olives, raspberry, strawberries, tomatoes, tree nuts, tropical and sub-tropical fruits – inedible peel (avocado, banana, feijoa, guava, kiwifruit, litchi, mango, passionfruit, pawpaw, pineapple, pitaya (dragon fruit), rambutan): NOT REQUIRED WHEN USED AS DIRECTED. Pome and stone fruit: DO NOT HARVEST FOR 21 DAYS AFTER APPLICATION. Green Beans: DO NOT HARVEST FOR 4 WEEKS AFTER APPLICATION. Date palms, green tea, native foods: DO NOT HARVEST FOR 1 DAY AFTER APPLICATION. DO NOT harvest leaves from native pepper or wattles that are close to the ground for food uses. Sugarcane: DO NOT HARVEST FOR 16 WEEKS AFTER APPLICATION.</p> <p>Grazing (G) Sugarcane: DO NOT GRAZE OR CUT FOR STOCK FOOD FOR 16 WEEKS AFTER APPLICATION. Green Beans: DO NOT GRAZE FOR 4 WEEKS AFTER APPLICATION. Other uses: DO NOT GRAZE OR CUT TREATED AREAS FOR STOCKFOOD FOR 8 WEEKS AFTER APPLICATION.</p>
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Trade Advice:	<p>Export of Treated Produce Growers should note that suitable MRLs or import tolerances may not be established in all markets for produce treated with Surefire Gamma Herbicide. If you are growing produce for export, please check with PCT Holdings Pty Ltd for the latest information on MRLs and import tolerances BEFORE using Surefire Gamma Herbicide.</p>
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General Instructions:	<p>GENERAL INSTRUCTIONS Surefire Gamma is a non-volatile herbicide with activity against many annual and perennial broadleaf weeds and grasses. Surefire Gamma is absorbed by plant foliage and green stems. It is not significantly translocated as an active herbicide throughout the plant, and therefore will only kill that part of a green plant that is contacted by spray. Surefire Gamma does not provide residual weed control. Visible symptoms of control appear in 3 to 7 days, but complete desiccation may take 20 to 30 days under cool conditions. Best results are achieved when application is made under good growing conditions. Application to weeds under stress (e.g., due to continuous severe frosts, dry or waterlogged conditions) should be avoided.</p> <p>Soil fumigation / sterilisation Surefire Gamma is metabolised (broken down) by microorganisms in the soil to become inactive. Soil fumigation or sterilisation will reduce the number of microorganisms present, thus slowing the breakdown of Surefire Gamma. As damage to transplants or seedlings may occur, it is not advisable to apply Surefire Gamma in conjunction with soil fumigation or sterilisation.</p> <p>Plastic mulches Surefire Gamma will remain active on inert surfaces such as plastic. Special care should be taken when applying Surefire Gamma over plastic mulches, as plant contact with the mulch after spraying may result in crop damage.</p> <p>Mixing</p>
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Surefire Gamma mixes easily with water. Clean water should always be used for mixing with Surefire Gamma. Ensure that the spray tank is free of any residues of previous spray materials. Two-thirds fill the spray tank with clean water, and with agitator operating add the required amount of Surefire Gamma. Add other relevant compatible products. Top the tank up to the required volume with clean water with agitator running.

Application Equipment

Ground Sprayers

Aim to apply a thorough and even coverage of spray to the target plant. Dense stands of weeds should be thoroughly wetted with spray. Incomplete coverage may result in poor control. Equipment should be such that adequate coverage, penetration and volume of spray liquid can be achieved.

Boom or Directed Sprayer Equipment

Surefire Gamma should be applied at label rates (refer to specific column in the lists of weeds controlled) in sufficient water to give thorough coverage of weeds. It has been found that 300 to 500 L/ha has given good results under most weed conditions. Special care must be taken when using sprayer/slasher combination units not to cause dust and turbulence, which can carry spray into non-target areas.

For use in sugarcane, shielded or hooded sprayers should be set up in such a way to ensure that no spray intercepts susceptible parts of the crop being sprayed, but provides good coverage of weeds. Directed spraying equipment should be set up in such a way that practically no spray intercepts susceptible parts of the crop being sprayed, but provides good coverage of weeds.

Knapsack and Handgun Equipment

Surefire Gamma should be applied at label rates (refer to specific columns in the lists of weeds controlled) in adequate water to thoroughly wet the weeds being sprayed, i.e., 500 to 1000 L/ha. Dense stands will require up to 1000 L/ha of spray mixture, whereas less dense stands will require less water. High volume application using hollow-cone nozzles for hand spraying is recommended.

Controlled Droplet Application (CDA) Equipment

Surefire Gamma may be applied through CDA row spraying equipment fitted with a solid (impermeable) shroud or skirt, at rates as recommended for boom or directed sprayers (refer to specific column in the lists of weeds controlled), provided thorough spray coverage of weeds can be achieved. Apply preferably when weeds are less than 15 cm in height, with the equipment set up so that the spray dome only just touches the tops of the weeds. A total spray volume of 20 to 30 L/ha has been found to give good results. Do not mix residual herbicides or any spray adjuvants with Surefire Gamma when using CDA equipment.

Warning: Because the spray solution is highly concentrated particular care must be taken when using Surefire Gamma through CDA equipment to avoid contact of the spray solution with any part of the crop trunk or canopy. DO NOT apply Surefire Gamma through equipment fitted with bristle skirts. Particular care should be taken when using CDA equipment around green or uncalloused bark.

Please refer to PROTECTION OF CROPS, NATIVE AND OTHER NON-TARGET PLANTS. CDA equipment must not be used for application in cherry orchards.

Sprayer cleanup

Clean all equipment after use by thoroughly flushing with water.

Aircraft

Do not apply by aircraft.

Resistance Warning:

Resistant Weeds Warning

	<p>GROUP 10 HERBICIDE</p> <p>Surefire Gamma Herbicide (“Surefire Gamma”) is a member of the phosphinic acid group of herbicides. Surefire Gamma has the inhibitor of glutamine synthetase mode of action. For weed resistance management Surefire Gamma is a Group 10 herbicide. Some naturally occurring weed biotypes resistant to Surefire Gamma, and other Group 10 herbicides which inhibit glutamine synthetase, 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 Surefire Gamma or other Group 10 herbicides. Since the occurrence of resistant weeds is difficult to detect prior to use, PCT Holdings Pty Ltd accepts no liability for any losses that may result from the failure of Surefire Gamma to control resistant weeds.</p>
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<p>Precautions:</p>	<p>PRECAUTIONS Re-entry period Do not allow entry into treated areas until the spray has dried. When prior entry is necessary, wear cotton overalls buttoned to the neck and wrist (or equivalent clothing) and chemical resistant gloves. Clothing must be laundered after each day’s use.</p>
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<p>Protections:</p>	<p>PROTECTION OF WILDLIFE, FISH, CRUSTACEANS AND ENVIRONMENT Very toxic to aquatic wildlife. DO NOT contaminate streams, rivers or watercourses with this product or the used container.</p> <p>PROTECTION OF CROPS, NATIVE AND OTHER NON-TARGET PLANTS DO NOT apply under weather conditions, or from spraying equipment, that may cause spray to drift onto nearby susceptible plants/crops, cropping lands or pastures. DO NOT apply on desirable foliage or allow spray to drift onto the foliage of desirable plants, trees or vines, as damage will occur. DO NOT allow product to contact green or uncalloused bark (such as on desirable young trees and vines) or cut, cracked, damaged or wounded tissue, where the affected surface is not adequately healed. Surefire Gamma may be used around desirable trees/vines less than two years old provided they are effectively shielded from spray and spray drift. DO NOT allow desirable plant foliage to contact any inert surface, such as plastic mulches, which have been treated with Surefire Gamma. DO NOT apply Surefire Gamma to recently fumigated or sterilised soil.</p>
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<p>Storage and Disposal:</p>	<p>STORAGE AND DISPOSAL Store in the closed, original container in a cool, well-ventilated area. Do not store for prolonged periods in direct sunlight. Triple rinse containers before disposal. Add rinsings to spray tank. Do not dispose of undiluted chemicals on site. If recycling, replace cap and return clean containers to recycler or designated collection point. If not recycling, break, crush or puncture and deliver empty packaging to an approved waste management facility. If an approved waste management facility is not available, bury the empty packaging 500 mm below the surface in a disposal pit specifically marked and set up for this purpose clear of waterways, desirable vegetation and tree roots, in compliance with relevant local, state or territory government regulations. Do not burn empty containers or product. For refillable containers: Empty contents fully into application equipment. Close all valves and return to point of sale for refill or storage.</p>
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<p>Safety Directions:</p>	<p>SAFETY DIRECTIONS Harmful if absorbed by skin contact or swallowed. Will irritate the eyes and skin. Avoid contact with the eyes and skin. When opening the container, preparing spray and using the prepared spray, wear cotton overalls buttoned to the neck and wrist (or equivalent clothing) and a washable hat, elbow length PVC or nitrile gloves and face shield or goggles.</p>
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	If product on skin, immediately wash area with soap and water. If product in eyes, wash out immediately with water. Wash hands after use. After each day's use, wash gloves, face shield or goggles, and contaminated clothing.
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First Aid Instructions:	
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FIRST AID

If poisoning occurs, contact a doctor or Poisons Information Centre. Phone Australia 13 11 26, New Zealand 0800 764 766.

First Aid Warnings:	
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DIRECTIONS FOR USE

CROP/ SITUATION	WEEDS	STATE	RATE	WHP	CRITICAL COMMENTS
Tropical and sub-tropical fruits – inedible peel, including, avocado, banana, feijoa, guava, kiwifruit, litchi, mango, pawpaw, passionfruit, pineapple, rambutan plantations Pitaya (dragon fruit) <i>Hylocereus</i> spp	See list of weeds controlled in Table 1.	All States	1 to 5 L/ha	H: Nil G: 8 weeks	<p>Apply as a directed or shielded spray. Refer to the label section Application Equipment for specific information on application methods.</p> <p>Warnings: DO NOT apply spray or spray drift to contact desirable foliage or green (un-calloused) bark. To avoid potential crop damage, refer to the label sections on Application Equipment and PROTECTION OF CROPS, NATIVE AND OTHER NON-TARGET PLANTS.</p> <p>Controlled Droplet Application equipment must not be used for application in cherry orchards. Surefire Gamma Herbicide may be used around trees/vines less than two years old provided they are effectively shielded from spray and spray drift. The recommended rate of use is determined by the following criteria: WEED SPECIES WEED STAGE OF GROWTH WEED DENSITY CLIMATIC CONDITIONS</p> <p>WEED SPECIES Apply the appropriate rate to control the least susceptible weed present as per the lists of weeds controlled in the accompanying tables.</p> <p>WEED STAGE OF GROWTH Use the lower rate when weeds are young and succulent (grasses: pre-tillering; broadleaves: cotyledons to 4-leaf) or the population is very sparse. A median rate should be used for medium sized plants (grasses: tillering; broadleaves: 4-leaf to advanced vegetative) and the high rate should be used when weeds are mature (grasses: nodding to flowering; broadleaves: budding to flowering).</p> <p>WEED DENSITY Use the higher rates when the weed population is dense. Thorough coverage of weeds is essential for good control.</p> <p>CLIMATIC CONDITIONS Best results are achieved when applied under warm humid conditions (temperatures below 33°C with a relative humidity above 50%). Control will be reduced and/or slower under cold conditions. Good results will be achieved under most other conditions, however poor results may occur under hot, dry conditions. Weeds that have been hardened or stunted in growth due to stressed conditions should be treated at the maximum rate.</p> <p>COVERAGE Complete coverage of weeds is essential for good control. Poor coverage may result in re-growth.</p> <p>PERENNIAL WEEDS Apply when weeds are actively growing. Follow-up treatments will be necessary to control re-growth of perennial weeds in most cases.</p>
Citrus orchards		All States		H: 21 days G: 8 weeks	
Olive plantations				H: Nil	
Pome and stone fruit orchards				G: 8 weeks	
Tree nut plantations					
Vineyards					

CROP/ SITUATION	WEEDS	STATE	RATE	WHP	CRITICAL COMMENTS
Blackberry, boysenberry, loganberry, raspberry	Primocane and sucker control	ACT, NSW, Vic, Tas only	500 mL /100 L water	H: Nil G: 8 weeks	Apply as a directed spray to suckers and primocanes. Contact with flowers, developing fruit or desirable foliage will cause damage. Ensure complete coverage of primocanes / suckers by spraying to the point of runoff, preferably when they are less than 15 cm high. Wetting agent e.g., a non-ionic wetting agent such as PCT REACTOR WETTER 1000 WETTING AGENT or equivalent may be added at a rate of 25 mL/100 L.
Blackcurrant	See list of weeds controlled in Table 1	All States	1 to 5 L/ha	H: 1 day G: 8 weeks	The spray should not contact foliage, flowers, fruits or young stems. DO NOT make more than 2 applications per season.
Blueberries		All States			DO NOT apply to young, green or uncalloused and damaged blueberry plants. DO NOT apply to weeds under stress. DO NOT apply in unfavourable weather conditions.
Date Palms (<i>Phoenix dactylifera</i>)		All States			DO NOT allow spray, including drift, to contact any part of the crop as severe damage or crop destruction may result. It is recommended to use shielded sprayer or hooded spray nozzles when spraying between crop rows or near the emerged crops to avoid crop damage from direct spray and drift. Apply as necessary to actively growing weeds, free from environmental stresses, up to a maximum three (3) applications per season. Rotate herbicide mode of action groups within and across growing seasons. Use suitable ground application equipment, including boom sprayer, back-pack sprayer, hand-lance sprayer, knapsack, or CDA. Ensure equipment is correctly calibrated. Use higher rates for perennial grass weeds. Increase the application rate for glufosinate-ammonium as the size, age and/or density of the weeds increase and become more established. Avoid spraying when crops are in flower or fruiting. DO NOT harvest leaves from native pepper or wattles that are close to the ground for food uses.
Green Tea (<i>Camellia sinensis</i>)					
Native Foods (Refer to list in Table 3 below)					
Duboisia	All States	G: 8 weeks	Spray should be directed to the base of the plants avoiding contact with the foliage. Best results are achieved when applied under warm humid conditions. Complete coverage of weeds is essential for good control.		
Pyrethrum	White clover, capeweed, milk thistle, spear thistle, cleavers, hawkbit, cats ear, dandelion	All States	30 – 75 mL/15 L water		Apply directly to weeds by knapsack only. Avoid direct contact with pyrethrum.

CROP/ SITUATION	WEEDS	STATE	RATE	WHP	CRITICAL COMMENTS
Oil Tea Tree	See lists of weeds controlled in Table 1	All States	Boom spray: 1 – 5 L/ha Hand-gun: 300 – 500 mL/100 L	G: 8 weeks	Apply spray treatment along the sides of crops and between rows of crops. Avoid overspray or incidental spray drift onto crop, as damage or death of plants may occur. Apply as necessary to actively growing weeds up to a maximum three applications per season. Use suitable ground application equipment. Ensure equipment is correctly calibrated. Use higher rates for perennial grass weeds. Increase the application rate as the size of target weeds increases.
Nursery stock [(non-food): seedlings, plugs, potted colour, trees, shrubs, foliage plants, palms, grasses, fruit trees (non-bearing)], Cut flowers including wildflowers and foliage. (Refer to list in Table 4 below)	See lists of weeds controlled in Table 1	All States	Boom spray: 1 – 5 L/ha Hand-gun: 300 – 500 mL/100 L	G: 8 weeks	Only apply spray to actively growing grass weeds free from environmental stresses. Avoid spraying when crops are in flower or fruiting.
Strawberries, cane berry fruits (inter-row)		All States	1 to 5 L/ha	H: Nil G: 8 weeks	Apply as a directed or shielded spray to the inter-row area. Take care not to allow spray or spray drift to contact the crop, including strawberry runners. Refer to GENERAL INSTRUCTIONS for warnings concerning plastic mulch and fumigated/sterilised soil. Determine the recommended rate of use by considering the criteria WEED SPECIES, WEED STAGE OF GROWTH, WEED DENSITY and CLIMATIC CONDITIONS, as described above.
Tomatoes (inter-row)					
Green Bean (French Bean) (Field use only)		All States		H: 4 weeks G: 8 weeks	Use inter-row shielded sprayer with a fan nozzle delivering coarse droplets. Use lower rates when weeds are young, or the population is sparse and higher rates when weeds are mature or weed population is dense. Apply to actively growing weeds. Do not apply more than 1 foliar application per season.
Commercial & Industrial areas, rights-of-way and other non-agricultural areas	See lists of weeds controlled in Tables 1 and 2.	All States	1 to 6 L/ha	-	Determine the recommended rate of use by considering the criteria WEED SPECIES, WEED STAGE OF GROWTH, WEED DENSITY and CLIMATIC CONDITIONS as described above.
Fence lines in agricultural areas				8 weeks (G)	Warnings: Do not allow spray or spray drift to contact desirable plants. To avoid potential crop damage, refer to the label sections on Application Equipment and PROTECTION OF CROPS, NATIVE AND OTHER NON-TARGET PLANTS.

Sugarcane

CROP/ SITUATION	WEEDS	STATE	RATE	WHP	CRITICAL COMMENTS
Sugarcane	See lists of weeds controlled in Table 1	Qld, NSW, WA, NT only	1 to 3 L/ha (directed application) 1 to 5 L/ha (shielded/hooded application)	16 weeks (H) 16 weeks (G)	<p>Determine the recommended rate of use by considering the criteria WEED SPECIES, WEED STAGE OF GROWTH, WEED DENSITY and CLIMATIC CONDITIONS, as described above.</p> <p>Apply as a directed or shielded spray.</p> <p><u>Directed application:</u> Refer to recommendations for weed control in Table 1 to check that a label rate in the range 1-3 L/ha for directed application is suitable for control of the target weed at its current stage of growth. Plant cane - Do not apply earlier than just prior to out-of-hand stage. Apply spray mixture across the inter-row area between cane rows. Avoid all contact with cane shoot growing points and minimise spray contact with green cane foliage. Excessive contact with sugarcane plants may result in damage. Ratoon cane - Apply spray mixture across the inter-row area between cane rows. Do not apply until cane reaches 100 cm overall cane height (top of plants) or 20 cm to dewlap (growing point). Avoid all contact with ratoon shoot growing points and minimise spray contact with green cane foliage. Excessive contact with sugarcane plants may result in damage. Use nozzles that deliver coarse to very coarse droplets and minimise drift, whilst ensuring complete coverage of weeds. The Irvin spray boom has been found to be suitable for the application of Surefire Gamma in sugarcane. Use of a bar at the front of the boom to knock down taller weeds may help ensure good coverage and increase performance.</p> <p><u>Shielded or hooded application:</u> Refer to recommendations for weed control in Table 1 to check that a label rate in the range 1-5 L/ha for shielded or hooded applications is suitable for control of the target weed at its current stage of growth. Can be applied at all sugarcane stages provided that the shield is set up so as to completely avoid spray contact with sugarcane plants. Use nozzles that deliver coarse to very coarse droplets and minimise drift, whilst ensuring complete coverage of weeds. Take care to prevent spray contact with green cane foliage and avoid contact with growing point. Excessive contact with sugarcane plants may result in damage.</p> <p><u>Directed, shielded or hooded application:</u> To avoid potential crop damage, refer to the label sections on: 1. Application; 2. PROTECTION OF CROPS, NATIVE AND OTHER NON-TARGET PLANTS.</p>

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

DIRECTIONS FOR USE (continued)

Table 1: Recommendations for weed control (except when referred to Table 2).

COMMON NAME	SCIENTIFIC NAME	APPLICATION RATES		
		Boom or directed sprayer L/ha	Handgun mL/100 L	Knapsack mL/15 L
ANNUAL WEEDS				
Amaranthus spp.	<i>Amaranthus</i> spp.	2.0 to 5.0	500	75
Apple of Peru	<i>Nicandra physalodes</i>	1.5 to 3.0	300	45
Argentine peppergrass	<i>Lepidium bonariense</i>	2.0 to 3.0	300	45
Awnless barnyard grass	<i>Echinochloa colona</i>	2.5 to 3.5	350	53
Barley grass	<i>Hordeum leporinum</i>	2.0 to 3.0	300	45
Barnyard grass	<i>Echinochloa crus galli</i>	2.0 to 5.0	500	75
Billy goat weed	<i>Ageratum conyzoides</i>	2.0 to 5.0	500	75
Bitter cress	<i>Cardamine hirsuta</i>	2.0 to 5.0	500	75
Black bindweed (buckwheat) (refer Note 2)	<i>Fallopia convolvulus</i>	1.8 to 5.0	500	75
Bladder ketmia	<i>Hibiscus trionum</i>	3.0 to 5.0	500	75
Bordered panic	<i>Entolasia marginata</i>	2.0 to 4.0	400	60
Brome grass (refer Note 1)	<i>Bromus</i> spp.	2.0 to 3.0	300	45
Calopo	<i>Calopogonium mucunoides</i>	2.0 to 5.0	500	75
Caltrop burr (refer also Table 2)	<i>Tribulus terrestris</i>	3.0 to 5.0	500	75
Capeweed	<i>Arctotheca calendula</i>	1.5 to 5.0	500	75
Clover (subterranean)	<i>Trifolium subterraneum</i>	1.8 to 3.0	300	45
Cobbler's peg	<i>Bidens pilosa</i>	2.0 to 5.0	500	75
Common storksbill	<i>Erodium cicutarium</i>	1.5 to 4.0	400	60
Crowsfoot grass	<i>Eleusine indica</i>	3.0 to 5.0	500	75
Deadnettle (refer also Table 2)	<i>Lamium amplexicaule</i>	2.0 to 5.0	500	75
Dwarf crumbweed	<i>Chenopodium pumilo</i>	3.0 to 5.0	500	75
Fat hen	<i>Chenopodium album</i>	3.0 to 5.0	500	75
Fumitory	<i>Fumaria officinalis</i>	1.8 to 5.0	500	75

DIRECTIONS FOR USE (continued)

COMMON NAME	SCIENTIFIC NAME	APPLICATION RATE		
		Boom or directed sprayer L/ha	Handgun mL/100 L	Knapsack mL/15 L
ANNUAL WEEDS (continued)				
Green crumbweed	<i>Chenopodium carinatum</i>	2.0 to 5.0	500	75
Lesser canary grass (refer also Table 2)	<i>Phalaris minor</i>	3.0 to 5.0	500	75
Liverseed grass (refer also Table 2)	<i>Urochloa panicoides</i>	1.5 to 5.0	500	75
Medics (annual)	<i>Medicago</i> spp.	1.0 to 5.0	500	75
Milk thistle	<i>Sonchus oleraceus</i>	2.0 to 5.0	500	75
Mint weed	<i>Salvia reflexa</i>	3.0 to 5.0	500	75
New Zealand spinach	<i>Tetragonia tetragoniodes</i>	2.0 to 5.0	500	75
Patterson's curse	<i>Echium plantagineum</i>	1.0 to 3.0	300	45
Peanuts	<i>Arachis hypogaea</i>	1.5 to 3.0	300	45
Pigweed	<i>Portulaca oleracea</i>	3.0 to 5.0	500	75
Pinkburr	<i>Urena lobata</i>	2.0 to 5.0	500	75
Potato weed	<i>Galinsoga parviflora</i>	2.0 to 5.0	500	75
Prairie grass (refer Note 1)	<i>Bromus unioloides</i>	4.0 to 5.0	500	75
Prickly lettuce	<i>Lactuca serriola</i>	3.0 to 5.0	500	75
Red natal grass	<i>Rhynchelytrum repens</i>	2.0 to 5.0	500	75
Ryegrass (annual)	<i>Lolium rigidum</i>	2.0 to 5.0	500	75
Saffron thistle	<i>Carthamus lanatus</i>	1.5 to 5.0	500	75
St. Barnaby's thistle	<i>Centaurea solstitialis</i>	1.5 to 5.0	500	75
Sago weed	<i>Plantago cunninghamii</i>	2.0 to 3.0	300	45
Scarlet pimpernel	<i>Anagallis arvensis</i>	2.0 to 5.0	500	75
Setaria	<i>Setaria italica</i>	2.0 to 5.0	500	75
Sheep thistle	<i>Carduus tenuiflorus</i>	2.5 to 5.0	500	75
Silver grass	<i>Vulpia myuros</i>	2.0 to 5.0	500	75
Sorghum/sudax	<i>Sorghum bicolor</i>	2.0 to 5.0	500	75
Square weed	<i>Spermacoce latifolia</i>	2.0 to 5.0	500	75
Stagger weed	<i>Stachys arvensis</i>	2.0 to 5.0	500	75
Star of Bethlehem	<i>Ipomoea quamoclit</i>	2.0 to 5.0	500	75
Summer grass	<i>Digitaria ciliaris</i>	2.0 to 5.0	500	75
Thickhead	<i>Crassocephalum crepidioides</i>	3.0 to 5.0	500	75
Three cornered jack	<i>Emex australis</i>	2.0 to 5.0	500	75
Tomato	<i>Lycopersicon esculentum</i>	2.0 to 5.0	500	75
Turnip weed	<i>Rapistrum rugosum</i>	3.0 to 5.0	500	75
Variiegated thistle (refer also Table 2)	<i>Silybum marianum</i>	2.5 to 5.0	500	75
Wheat	<i>Triticum aestivum</i>	4.0 to 5.0	500	75
Wild carrot	<i>Daucus glochidiatus</i>	2.0 to 5.0	500	75
Wild gooseberry	<i>Physalis minima</i>	2.0 to 5.0	500	75

Wild mustard	<i>Sisymbrium orientale</i>	2.0 to 5.0	500	75
Wild oats (refer also Table 2)	<i>Avena</i> spp.	3.0 to 5.0	500	75
Wild radish	<i>Raphanus raphanistrum</i>	5.0	500	75
Wire weed (refer also Table 2)	<i>Polygonum aviculare</i>	1.5 to 5.0	500	75
Perennial Weeds				
Blady grass	<i>Imperata cylindrica</i>	3.0 to 4.0	400	60
Cape tulip	<i>Homeria</i> spp.	2.0 to 3.0	300	45
Centro	<i>Centrosema pubescens</i>	1.0 to 5.0	500	75
Clover glycine	<i>Glycine latrobeana</i>	1.0 to 3.0	300	45
Couch grass	<i>Cynodon dactylon</i>	2.5 to 5.0	500	75
Cow pea	<i>Vigna unguiculata</i>	1.0 to 3.0	300	45
Giant sensitive plant	<i>Mimosa invisa</i>	2.0 to 5.0	500	75
Greenleaf desmodium	<i>Desmodium intortum</i>	1.0 to 3.0	300	45
Johnson grass	<i>Sorghum halepense</i>	3.0 to 5.0	500	75
Panicum spp.	<i>Panicum</i> spp.	2.0 to 5.0	500	75
Paspalum spp.	<i>Paspalum</i> spp.	3.0 to 5.0	500	75
Perennial bindweed	<i>Convolvulus arvensis</i>	2.0 to 3.0	300	45
Shamrock	<i>Oxalis corymbosa</i>	3.0	300	45
Sida weed (refer also Table 2)	<i>Sida retusa</i>	3.0 to 5.0	500	75
Silver leaf desmodium	<i>Desmodium uncinatum</i>	4.0 to 5.0	500	75
Siratro	<i>Macroptilium atropurpureum</i>	1.0 to 3.0	300	45
Stink grass	<i>Eragrostis cilianensis</i>	3.0 to 5.0	500	75
White clover	<i>Trifolium repens</i>	3.0 to 5.0	500	75
White eye	<i>Richardia brasiliensis</i>	3.0 to 5.0	500	75
Willow herb	<i>Epilobium</i> spp.	4.0 to 5.0	500	75

Notes:

1. Well established clumps of Prairie grass and Brome grasses may only be suppressed at these rates. Follow-up treatments may be necessary to control regrowth.
2. Good control will be achieved on small and medium sized plants only in non-crop situation.

Table 2: For control of weeds in Commercial and Industrial areas, fence lines in agricultural areas, rights of way and other non-agricultural areas (when referred from Table 1).

COMMON NAME	SCIENTIFIC NAME	APPLICATION RATE		
		Boom or directed sprayer (L/ha)	Handgun (mL/100 L)	Knapsack (mL/15 L)
ANNUAL WEEDS				
Caltrop burr	<i>Tribulus terrestris</i>	4.0 to 5.0	500	75
Dead nettle	<i>Lamium amplexicaule</i>	6.0	600	90
Lesser canary grass	<i>Phalaris minor</i>	4.0 to 6.0	600	90
Liverseed grass	<i>Urochloa panicoides</i>	1.5	150	23
Variegated thistle	<i>Silybum marianum</i>	6.0	600	90
Wild oats	<i>Avena</i> spp.	5.0 to 6.0	600	90
Wire weed	<i>Polygonum aviculare</i>	2.0 to 5.0	500	75
PERENNIAL WEEDS				
Sida weed	<i>Sida retusa</i>	4.0 to 5.0	500	75

CROP LISTS

Table 3 Native food crops

COMMON NAME	SCIENTIFIC NAME
Wattles	<i>Acacia</i> spp.
Lemon myrtle	<i>Backhousia citriodora</i>
Finger lime	<i>Citrus australasica</i>
Desert lime	<i>Citrus glauca</i>
Mullumbimby plum	<i>Davidsonia jerseyana</i>
Davidson's plum	<i>Davidsonia johnstonii</i>
Queensland Davidson's plum	<i>Davidsonia pruriens</i>
Muntrie berry	<i>Kunzea pomifera</i>
Desert quandong	<i>Santalum acuminatum</i>
Desert raisin	<i>Solanum centrale</i>
Anise myrtle	<i>Syzygium anisatum</i>
Small Red Apple	<i>Syzygium fibrosum</i>
Lilly pilly	<i>Syzygium leuhmannii</i>
Kakadu plum	<i>Terminalia ferdinandiana</i>
Native pepper	<i>Tasmannia lanceolata</i>

Table 4 Wildflower crops

COMMON NAME	SCIENTIFIC NAME	COMMENTS
Banksia species	<i>Banksia</i> spp.	cultivars and hybrids
Berzelia or button bush	<i>Berzelia</i> spp.	
Black kangaroo paw species	<i>Macropidia</i> spp.	cultivars and hybrids
Christmas bells	<i>Blandfordia grandiflora</i>	
Christmas bush	<i>Ceratopetalum gummiferum</i>	
Geraldton wax, Waxflower species	<i>Chamelaucium</i> spp.	cultivars and hybrids
Kangaroo paw species	<i>Anigozanthos</i> spp.	cultivars and hybrids
Leucadendron species		cultivars and hybrids
Leucospermum species	<i>Leucospermum</i> spp.	cultivars and hybrids (pincushions)
Protea species	<i>Protea</i> spp.	cultivars and hybrids
Riceflower	<i>Ozothamnus diosmifolius</i>	
Waratah species	<i>Telopea speciosissima</i>	cultivars and hybrids