Product Name: KELPIE 2,4D PICLORAM FALLOW HERBICIDE

APVMA Approval No: 67490/137458v

RLP APPROVED

Label Name:	KELPIE 2,4D PICLORAM FALLOW HERBICIDE

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

Constituent Statements:	ACTIVE CONSTITUENTS: 300 g/L 2,4-D AS THE TRIISOPROPANOLAMINE SALT 75 g/L PICLORAM AS THE TRIISOPROPANOLAMINE SALT ALSO CONTAINS: 100g/L POLYETHANOXY (15) TALLOW AMINE

Mode of Action:	GROUP 4 HERBICIDE

Statement of Claims:	For the control of a wide range of annual and perennial broadleaf weeds, as specified in the directions for use. THIS IS A PHENOXY HERBICIDE THAT CAN CAUSE SEVERE DAMAGE TO NATIVE VEGETATION AND SUSCEPTIBLE CROPS SUCH AS COTTON, GRAPES, TOMATOES, OILSEED CROPS AND ORNAMENTALS.

Net Contents:	1-1000L

Restraints:	This section contains file attachment.

Directions for Use:	This section contains file attachment.

Other Limitations:	IN TASMANIA, THIS PRODUCT MAY ONLY BE USED FROM 15 APRIL TO 15 SEPTEMBER UNLESS OTHERWISE PERMITTED BY THE REGISTRAR OF PESTICIDES

Withholding Periods:	DO NOT GRAZE OR CUT CROPS (EXCEPT SUGAR CANE) OR PASTURES FOR STOCK FOOD FOR 7 DAYS AFTER APPLICATION. SUGAR CANE: DO NOT HARVEST FOR 8 WEEKS AFTER APPLICATION DO NOT GRAZE OR CUT FOR STOCK FOOD FOR 8 WEEKS AFTER APPLICATION

Trade Advice:	

General Instructions:	This section contains file attachment.

Resistance Warning:	RESISTANT WEEDS WARNING GROUP 4 HERBICIDE KELPIE 2,4D PICLORAM FALLOW HERBICIDE contains members of the pyridine and phenoxy groups of herbicides. The product has the disrupters of plant cell growth mode of action. For weed resistance management, the product is a Group 4 Herbicide. 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. Since the occurrence of resistant weeds is difficult to detect prior to use, Sinochem International Australia Pty Ltd accepts no liability for any losses that may result from the failure of this product to control resistant weeds. Strategies to minimise the risk of herbicide resistance are available. Contact your farm chemical supplier, consultant, local Department of Agriculture, or local Sinochem representative.

Precautions:	RE-ENTRY PERIOD If re-entering treated areas before the spray has dried, workers should wear overalls, elbow-length gloves and water-resistant footwear. Clothing must be laundered after each day's use.

Protections:	PROTECTION OF CROPS, NATIVE AND NON-TARGET PLANTS Crops susceptible to KELPIE 2,4D PICLORAM FALLOW HERBICIDE include but are not limited to: peas, lupins, lucerne, navy beans, soybeans and other legumes; cotton, fruit, hops, ornamentals, potatoes, safflower sugarbeet, sunflower, tobacco, tomatoes, vegetables and vines. DO NOT plant susceptible crops within 12 months of applying winter or summer cereal Use Rates of this product. Cereal crops and grasses can be sown safely after using KELPIE 2,4D PICLORAM FALLOW HERBICIDE. Rates in excess of these will result in more persistent soil residues. Therefore, do not rotate susceptible plants until an adequately sensitive bioassay or chemical test shows that no detectable picloram is present within soil. 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. Avoid spray drift and vapour movement onto susceptible crops such as cotton, tobacco, tomatoes, vines, lupins, fruit trees and ornamentals. PROTECTION OF LIVESTOCK

	DO NOT graze or cut treated crops or plants for stock food except as specified under withholding periods. Poisonous plants may become more palatable after spraying and stock should be kept away from these plants until they have died down. PROTECTION OF WILDLIFE, FISH, CRUSTACEANS AND ENVIRONMENT Very toxic to aquatic life. DO NOT contaminate wetlands or watercourses with this product or used containers.

Storage and Disposal:	Store in the closed, original container in a cool, well-ventilated area. Do not store for prolonged periods in direct sunlight. Refillable containers Empty contents fully into application equipment. Close all valves and return to designated collection point for refill or storage. Non-refillable containers 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. drumMUSTER containers This container can be recycled if it is clean, dry, free of visible residues and has the drumMUSTER logo visible. Triple-rinse container for disposal. Dispose of rinsate by adding it to the spray tank. Do not dispose of undiluted chemical on site. Wash outside of the container and the cap. Store cleaned container in a sheltered place with cap removed. It will then be acceptable for recycling at any drumMUSTER collection or similar container management program site. The cap should not be replaced, but may be taken separately. SMALL SPILL MANAGEMENT Wear protective equipment (see SAFETY DIRECTIONS). Apply absorbent material such as earth, sand, cat litter or clay granules to the spill. Sweep up material for disposal when absorption is completed and contain in a refuse vessel for disposal (see STORAGE AND DISPOSAL section). If necessary wash the spill area with an alkali detergent and water and absorb the wash liquid for disposal as described above.

Safety Directions:	Harmful if inhaled or swallowed. Will damage the eyes. Will irritate the skin. Repeated exposure may cause allergic disorders. Avoid contact with the eyes and skin. When opening the container and preparing spray or using undiluted concentrate, wear cotton overalls buttoned to the neck and wrist and a washable hat, elbow-length chemical resistant gloves and face shield or goggles. When using the prepared spray, wear cotton overalls buttoned to the neck and wrist and a washable hat and elbow-length chemical resistant gloves. If applying by hand wear half facepiece respirator with organic vapour/gas cartridge or canister. If product on skin, immediately wash area with soap and water. If product in eyes, wash it out immediately with water. After use and before eating, drinking or smoking wash hands, arms and face thoroughly with soap and water. After each day's use, wash gloves, face shield or goggles and contaminated clothing.

First Aid Instructions:	If poisoning occurs, contact a doctor or Poisons Information Centre. Phone Australia 13 11 26. If skin contact occurs, remove contaminated clothing and wash skin thoroughly. If in eyes, hold eyes open, flood with water for at least 15 minutes and see a doctor.

First Aid Warnings:	

RESTRAINTS - all g of active (gae/ha) refer to 2,4-D only

DO NOT exceed maximum application rate of 15 L/ha (4500 g ae/ha)
DO NOT apply if heavy rains or storms are forecast within 3 days.
DO NOT irrigate to the point of runoff for at least 3 days after application.
DO NOT exceed the maximum daily application rate by backpack spraying of 13.3L/day.
DO NOT apply to crops or weeds which are not actively growing or to plants which may be stressed (not actively growing) due to prolonged periods of extreme cold, moisture stress (water-logged or drought affected) or previous herbicide treatment, as crop damage or reduced levels of control may result.
DO NOT apply close to, or on areas, containing roots of desirable vegetation, where treated soil may be washed into areas growing, or to be planted to, desirable plants, or on sites where surface water from heavy rain can be expected to run off to areas containing, or to be planted to, susceptible crops or plants.
DO NOT move soil which may have been sprayed to areas where desirable plants are to be grown. Picloram, one of the active constituents in this product remains active in the soil for extended periods depending on the rate of application, soil type, rainfall, temperature, humidity, soil moisture and soil organic matter. In some states, some uses of this product are controlled by legislation. Check with your local Department of Agriculture or Primary Industry for details.

Additional USAGE restrictions apply in some crops, states and seasons, see restriction tables 1, 2 and 3

SPRAY DRIFT RESTRAINTS

DO NOT apply by a vertical sprayer.

Specific definitions for terms used in this section of the label can be found at www.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**. The **buffer zones** in the relevant buffer zone tables below provide guidance but may not be sufficient in all situations. 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.

BOOM SPRAYERS

DO NOT apply by a boom sprayer unless the following requirements are met:

- Spray droplets are not smaller than a VERY COARSE **spray droplet size category**
- Minimum distances between the **application site** and downwind sensitive areas are observed (see '**Mandatory buffer zones**' section of the following table titled 'Buffer zones for boom sprayers') are observed.

Buffer Zones for Boom Sprayers

Application rate (/ha)	**Boom Height above target canopy**	**Mandatory buffer zones** (distances given in meters)				
		Bystander Areas	**Natural Aquatic Areas**	**Pollinator Areas**	**Vegetation Areas**	**Livestock Areas**
Up to 1 L (300 g ae/ha)	0.5m or lower	0	0	0	0	0
	1.0m or lower		25		25	
Up to 2 L (600 g ae/ha)	0.5m or lower		10		10	
	1.0m or lower		40		40	
Up to 5 L (1500 g ae/ha)	0.5m or lower		30		30	
	1.0m or lower		75		75	
Up to 15 L (4500 g ae/ha)	0.5m or lower		75		70	
	1.0m or lower		300		275	

AIRCRAFT

DO NOT apply by aircraft unless the following requirements are met:

- Spray droplets are no smaller than a VERY COARSE **spray droplet size category**
- For maximum release heights above the target canopy of 3m or 25% of wingspan or 25% of rotor diameter whichever is the greatest, minimum distances between the application site and downwind sensitive areas (see 'Mandatory buffer zones' section of the following table titled 'Buffer zones for aircraft') are observed

Buffer Zones for Aircraft

Application rate (/ha)	**Aircraft type**	**Mandatory buffer zones** (distances given in meters)				
		Bystander Areas	**Natural Aquatic Areas**	**Pollinator Areas**	**Vegetation Areas**	**Livestock Areas**
Up to 1 L (300 g ae/ha)	Fixed Wing	0	75	0	75	0
	Helicopter		60		60	
Up to 2 L (600 g ae/ha)	Fixed Wing		120		120	
	Helicopter		90		85	
Up to 5 L (1500 g ae/ha)	Fixed Wing		230		220	
	Helicopter		160		150	
Up to 15 L (4500 g ae/ha)	Fixed Wing		725		675	
	Helicopter		350		325	

Timing and Usage Restrictions Tables

Table 1: Application and timing restrictions for application to pastures

DO NOT apply above maximum rate (L/ha) below OR label rate, whichever is LOWEST

	State	Summer	Autumn	Winter	Spring
Pastures (prior to sowing, conservation tillage)	Queensland & NT	11	11	11	11
	New South Wales & ACT	11	11	11	11
	Victoria	1.2	3.5	11	3.5
	Tasmania	1.2	2.6	7.4	3.5
	South Australia	2.4	3.5	11	7.4
	Western Australia	3.5	7.4	11	7.4
Pastures (established)	**State**	**Summer**	**Autumn**	**Winter**	**Spring**
	Queensland & NT	15	15	15	15
	New South Wales & ACT	15	15	15	15
	Victoria	2.0	4.0	15	7.5
	Tasmania	1.4	3.5	10	6.6
	South Australia	3.0	6.6	15	11
	Western Australia	7.5	11	15	11

Table 2: Timing restrictions for spraying SUGARCANE

Situation	Rate (L/ha)	Region	Timing Restriction
			DO NOT APPLY DURING THE MONTHS
	Up to 3.2**L/ha**	Wet Tropics	No timing restriction
		Burdekin	No timing restriction
		Mackay/Whitsunday	October to November
		Mary/Burnett	No timing restriction
		Northern NSW	No timing restriction

Table 3: Risk mitigation measures for Dryland cropping, pre-emergent uses

Situation	Risk mitigation measures
Dryland cropping, Preparatory spray	Only apply in no-till farming systems (Tasmania, South Australia)
Winter cereals, pre-emergence uses	Only apply in no-till farming systems (Tasmania, South Australia, Western Australia)
Summer cereals, pre-emergent uses	Only apply in no-till farming systems (Tasmania, South Australia)

Directions for Use					
Table 1: Winter Cereals (Wheat, Barley, Oats and Triticale)					
CROP GROWTH STAGE	**WEEDS CONTROLLED**	**WEED GROWTH STAGE**	**STATE**	**RATE / ha**	**CRITICAL COMMENTS**
Apply from 3-4 tiller stage to start of jointing (first node) Z23 to Z31 for least effect on the crop	Climbing buckwheat (Black bindweed) New Zealand spinach docks, Doublegee (Spiny emex), Saffron thistle, Sow thistle	Young rosette or seedling plants up to 8 true leaves	Qld, NSW and , ACT only	300 mL +	Winter cereals may be treated using an aircraft or ground boom (see APPLICATION section) For best control of climbing buckwheat, apply early as this weed becomes increasingly difficult to control as it becomes larger.
	Mustards, Radish Turnip Weed Hexham scent Mintweed Variegated thistle Sunflower Wireweed		Qld and NSW only	300 mL + 375 mL 2,4-D amine (625g/L)	The additional 2,4-D is required for effective control of these weeds. Suppression only – spray early.
	Skeleton weed		SA only		

Table 2: Stubble or Fallow Land prior to sowing Winter Cereals				
USAGE RESTRICTIONS APPLY: See Table 3: Risk mitigation measures for Dryland cropping, pre-emergent use				
WEEDS CONTROLLED	**WEED GROWTH STAGE**	**STATE**	**RATE/ha**	**CRITICAL COMMENTS**
Amaranthus spp. Bathurst burr Bellvine Fat hen Morning glory Noogoora burr Parthenium weed Redroot amaranth Sesbania pea Stinking Roger Thornapple *(Datura* spp.)	Young rosette or seedling plants up to 25cm height or diameter	Qld only	1L	May be applied using an aircraft or ground boom (see APPLICATION section). This rate will provide control of weeds present at the time of application and residual control of later germinations. DO NOT apply two months prior to sowing winter cereals as some damage to the crop may occur, particularly if conditions are dry after application.
Fleabane (*Conzya* spp.)		Qld, NSW only	700 mL + glyphosate	Rate of glyphosate required determined by the grass species present at application.

Table 3: Summer Cereals (Sorghum and Maize) – NSW, ACT and Qld only				
CROP GROWTH STAGE	**WEEDS CONTROLLED**	**WEED GROWTH STAGE**	**RATE / ha**	**CRITICAL COMMENTS**
Spray when the crop has between 4 and 6 fully expanded leaves and secondary roots have developed	Thornapple *(Datura* spp) and other broadleaf weeds including: *Amaranthus* spp. Annual ground cherry Bathurst Burr Bladder ketmia Caltrop Bellvine Black pigweed Cobbler's Peg Docks Fat hen Lucerne Mexican Poppy Mintweed Morning Glory New Zealand Spinach Noogoora burr Parthenium weed Potato Weed Red pigweed Redroot Sesbania pea Wild gooseberry Wandering Jew	Young rosette or seedling plants up to 15 cm height or diameter	330 or 500 mL + 1.25 L Or 1.67 L Atrazine flowable (600 g/L) or an equivalent granular product.	Use the lower rate when weeds are small and actively growing. Use the higher rate for larger weeds. **Caution:** if rotating to Atrazine susceptible crops DO NOT apply later than November. Add either a wetter or crop oil as required according to the Atrazine label. DO NOT add crop oil when using on sorghum.
	Thornapple (Datura spp) and other broadleaf weeds including: A*maranthus* spp. Annual ground cherry Bladder ketmia Caltrop Bellvine Black pigweed Mintweed Noogoora burr Red pigweed Sesbania pea Wild gooseberry Wandering Jew		500 mL/ha + 280 mL 2,4-D amine (625g/L)	This mixture will result in reduced residual control of *Datura* spp. **Caution:** This mixture may cause crop damage. To minimise damage, avoid applying these chemicals when the crop is rapidly growing under high temperature and soil moisture conditions. Use droppers and avoid spraying the points of the crop. DO NOT cultivate for 10-14 days after application while plants are brittle. For further advice seek information from your State agriculture department or your local spray adviser.

Table 4: Sugar cane (Qld, NSW only)				
USAGE RESTRICTIONS APPLY: See Table 2: Timing restrictions for spraying SUGARCANE				
CROP GROWTH STAGE	**WEEDS CONTROLLED**	**WEED GROWTH STAGE**	**RATE / ha**	**CRITICAL COMMENTS**
Vegetative	Sicklepod	Less than 50 cm tall	700 mL + 800 mL 2,4-D amine (625g/L)	May be applied using an aircraft using at least 50 L/ha of water or ground boom using at least 200 L/ha of water (see APPLICATION section). **Always add Uptake* Spraying Oil at 1 L/200 L, or a 100% concentrate non-ionic surfactant at 200 mL/200 L of spray mixture.** **Apply only once per season.** **DO NOT add 2,4-D amine to known 2,4-D susceptible varieties.**
		50 to 100 cm tall	1 L + 800 mL 2,4-d amine (625g/L)	
		Greater than 100 cm tall	1.5 L + 800 mL 2,4-D amine (625g/L)	

Table 5: Stem Injection Application **Dilution Rate: Mix 1 part KELPIE 2,4D PICLORAM FALLOW HERBICIDE with 1.5 parts water.** **See GENERAL INSTRUCTIONS – APPLICATION section for application method details.**				
AGRICULTURAL NON-CROP AREAS, COMMERCIAL AND INDUSTRIAL AREAS, PASTURES AND RIGHTS-OF-WAY				
WEEDS CONTROLLED	**WEED GROWTH STAGE**	**STATE**	**APPLICATION RATE**	**CRITICAL COMMENTS**
Eucalyptus spp.	Seedling regrowth no more than 2 metres high	Qld, NSW, ACT, NT Vic, SA and WA only	**2 mL of diluted chemical per cut**	Most timber regrowth can be controlled by stem injection application.
Zamia palm	Any time	Qld, NT only		Inject 1 mL into growing point for every 2.5 cm of plant stem diameter.

Table 6: Cut Stump Application **See GENERAL INSTRUCTIONS – APPLICATION section for application method details**				
AGRICULTURAL NON-CROP AREAS, COMMERCIAL AND INDUSTRIAL AREAS, PASTURES AND RIGHTS-OF-WAY				
WEEDS CONTROLLED	**WEED GROWTH STAGE**	**STATE**	**RATE 10 L / WATER**	**CRITICAL COMMENTS**
Eucalyptus spp.	Seedling regrowth no more than 2 metres high	Qld, NSW, ACT, NT Vic, SA and WA only	500 mL	Most timber regrowth can be controlled by cut stump application.
Hawthorn	During full leaf	Vic only	Undiluted	Apply undiluted to freshly cut stump.
Tree-of-Heaven		Qld, NSW, Vic, SA and WA only		
Zamia palm	Any time	Qld, NT only	500 mL	Inject 1 mL into growing point for every 2.5 cm ofplant stem diameter.

Table 7: High Volume Application

See GENERAL INSTRUCTIONS – APPLICATION section for application method details

AGRICULTURAL NON-CROP AREAS, COMMERCIAL AND INDUSTRIAL AREAS, PASTURES AND RIGHTS-OF-WAY

USAGE RESTRICTIONS APPLY: See Table 1: Application and timing restrictions for application to pastures

WEEDS CONTROLLED	WEED GROWTH STAGE	STATE	RATE 100 L / WATER	CRITICAL COMMENTS
Alkali Sida	Pre-flowering	Qld, NSW, Vic and WA only	300 mL	
		SA only	150 mL	
Amsinckia (Yellow burr weed)	During rosette stage	Vic and SA only	75 mL	
Apple-of-Sodom	Flowering to early fruiting	Vic only	650 mL	
		SA only	300 mL	
Artichoke thistle	Late winter to spring before flowering	Vic only	200 mL	
		SA only	125 mL	Use double rate at flowering
Bindweed	During budding	Qld, NSW, Vic, SA, and WA only	1.3 L	
Blackberry	December - January	Vic only	1.3 L	Spray regrowth in autumn
Black knapweed			650 mL	Spray plant and soil for 1 metre around base of plant.
Bladder campion	August Pre-flowering	SA only		
Boneseed (Bitou bush)	Flowering to fruiting	Qld, NSW, Vic, SA and WA only	650 mL	Treat freshly cut stumps with 1 L/10 L water at any time.
Borreria (Square weed)		Qld only	150 – 300 mL	Use higher rate on older plants. Add a non-ionic wetting agent.
Boxthorn, African	Prior to bud burst	Qld, NSW, Vic, WA only	1.3 L	Treat small plants only. Thorough coverage essential. Spray soil to drip line.
Broom, Cape	Prior to pod formation	SA only	300 mL	Thoroughly wet foliage and soil around base of plant.
Broom, English		Vic, SA only		
Burr, Ragweed		Qld only	650 mL	
Californian (perennial) thistle	During budding stage	Qld, NSW, Vic, SA, WA only		
Camel thorn		SA & Vic only	1.3 L	
Cape honey flower	At flowering stage	Qld, NSW, Vic, SA, WA only	650 mL	
Chilean or Green cestrum	During full leaf			
Chinese shrub	Autumn	Vic only		
Colocynth	Seedling and established plants	Qld, NSW, Vic, SA, WA only	300 mL	
Crofton weed	All stages		650 mL	Very susceptible
Cut leaf mignonette	Before flowering	SA only		

Devil's fig		Qld, NSW, Vic, SA, WA only	650 mL	
Docks	Full leaf to early flowering		75 – 150 mL	Use lower rate on seedlings only
Dog rose	During summer	SA only	650 mL	
Eucalypts	NA	Qld, NSW, Vic, SA, WA only		Do not treat seedlings more than 2 metres high
Garlic, Wild	Before new bulbils form	Vic only	300 mL	
		SA only	250 mL	
Golden thistle	Seedling and rosette stage	Qld, NSW, SA, WA only	300 mL	
		Vic only	500 mL	
Gorse (Furze)	Spring			
Groundsel bush		Qld, NSW only	650 mL	Thorough coverage needed.
Heliotrope, Blue			1 L	
Hoary cress	Rosette to pre-flowering	SA only	1.3 L	
Inkweed	During full leaf	Qld, NSW, Vic, SA, WA only	500 mL	
Khaki Weed	During full leaf in summer		650 mL	
Knapweed, Creeping	During late spring to summer	Vic, SA only	1.3L	
		Qld, NSW, WA only	1.3 – 2 L	
Lantana	March - May	Qld, NSW, Vic, SA, WA only	650 mL	Thoroughly wet foliage and soil around base of plant.
Limebush		Qld only	1.3L	Thorough coverage to point of run-off
Mayne's pest			600 mL	Thorough coverage essential
Mistflower		Qld, NSW, Vic, SA, WA only	650 mL	
Onion weed	Pre-flower	Vic, SA only	75 mL + 125 mL diquat (200 g/L)	
Ox-eye Daisy	Up to early flowering	Vic only	150 mL	Respraying will be necessary.
Pampas Lily-of-the-valley		Vic, SA only	650 mL	
Parthenium weed	During rosette stage	Qld, NSW only	125 mL	See Table 2: **Stubble or Fallow Land prior to sowing Winter Cereals** Use at least 3,000 L water/ha in denseinfestations.
Paterson's curse (Salvation Jane)	Rosette to pre-flowering	Qld, NSW, Vic, SA, WA only	150 mL	
Pimelea sp.		All States	100mL + wetter	Spot Spray. Thoroughly wet all foliage to the point of run-off. (approximately 1500L/ha spray volume)

Prairie ground cherry	Flowering to fruiting	Vic only	300 mL	Retreatment will be necessary.
Quena (Tomato weed)		Qld, NSW, Vic, SA, WA only	650 mL	
Ragwort	Rosette to cabbage stage	Qld, NSW, Vic, WA only	300 mL	
		SA only	150 mL	
Rubber vine		Qld only	1.3L	Thoroughly wet leaves and also the soil around the base of plant.
St John's wort	Late spring to early summer, during flowering to early seed set	ACT, Qld, NSW, SA, Vic and WA only	500 mL	Apply by cal brated handgun with D5 or D6 (203mm) nozzle plate and operated at 400-500 kPa (60-70psi). Apply 3000 L/ha (i.e. 3 L/10 square metres) to dense infestations. Regrowth and seedlings may be retreated the following season.
Sicklepod		Qld only	300 mL	See also Table 4: **Sugar cane**. In pastures a repeat spray maybe necessary for control of subsequent seedling germination.
Silverleaf nightshade		NSW, Vic, SA only	650 mL	
Skeleton weed	Summer and autumn	Qld only	1.3 – 2 L	
	Winter	Vic, SA only	650 mL	See Table 1: **Winter Cereals**
	Summer and autumn	NSW, WA only	1.3 – 2L	
Smartweed	Seedling to pre-flowering	Qld, NSW, Vic, SA, WA only	150 mL	Very susceptible
Spiny broom	During full leaf stage	Vic only	650 mL	N/A
Doublegee (Spiny emex)		Qld, NSW, Vic only	300 mL	See Table 1: **Winter Cereals**
Star thistle	Seedling to rosette	Qld, NSW, Vic, SA, WA only	300 – 500 mL	Use higher rate for older plants.
Sweet briar	Full leaf to ripe fruit		650 mL	Spray thoroughly
Tangled hypericum		Vic only		N/A
Thornapple *(Datura* spp.)		Qld, NSW only	150 – 300 mL	Use higher rate on older plants.
Tree-of-Heaven	Plants during full leaf up to 1.5 m high	Qld, NSW, Vic, SA, WA only	650 mL	
Tufted honey flower	All growth stages	Vic only	650 mL	N/A
Tutsan	During full leaf			Results can be variable
Variegated thistle	Rosette to pre-flowering	Qld, NSW, Vic, SA, WA only	150 – 300 mL	Use higher rate on mature plants. See Table 1: **Winter Cereals**
Wild tobacco tree	During full leaf	Qld only	650 mL	Very susceptible.

Table 8: Boom Application

See GENERAL INSTRUCTIONS – APPLICATION section for application method details.

AGRICULTURAL NON-CROP AREAS, COMMERCIAL AND INDUSTRIAL AREAS, PASTURES AND RIGHTS-OF-WAY

USAGE RESTRICTIONS APPLY: See Table 1: Application and timing restrictions for application to pastures

WEEDS CONTROLLED	WEED GROWTH STAGE	STATE	RATE /ha	CRITICAL COMMENTS
Alkali Sida	Pre-flowering	Qld, NSW, Vic, SA and WA only	3.5 L	
Amaranthus spp.		Qld, NSW only	1 L	See Table 2. **Stubble or Fallow Land prior to sowing Winter Cereals**
Amsinckia (Yellow burr weed)	During rosette stage	Vic and SA only	2L	
Annual ground cherry		Qld, NSW only	1 L	
Artichoke thistle	Late winter to spring before flowering	Vic only	7.5 L	SA – use double rate at flowering.
		SA only	2.5 L	
Bathurst burr		Qld, NSW only	1 L	See Table 3: **Summer Cereals (Sorghum and Maize)**
Bellvine				
Bindweed	During budding	Qld, NSW, Vic, SA and WA only	7.5 L	
Bladder ketmia	N/A	Qld, NSW only	300 mL + 375 mL 2,4-D amine (625 g/L)	
Borreria (Square weed)	Flowering to fruiting	Qld only	1 – 2.5 L	Use higher rate on older plants. Add a non-ionic wetting agent.
Caltrop (Yellow vine)		Qld, NSW only	300 mL + 375 mL of 2,4-D amine (625 g/L)	
Camel thorn		Vic only	30 L	
Climbing buckwheat (Black bindweed)	Early growth stage	Qld, NSW only	300 mL	See Table 1: **Winter Cereals**
Cobbler's peg			1 L	
Fat hen				See Table 2:**Stubble or Fallow Land prior to sowing Winter Cereals**
Garlic, Wild	Before new bulbis form	Vic only	7.5 L	
		SA only	5.5 L	
Golden thistle	Seedling and rosette stage	Qld, NSW, SA, WA only	3.5 L	
		Vic only	4 L	
Heliotrope, Common		Qld, NSW only	300 mL	
Hexham scent			300 mL + 375 mL 2,4-D amine (625 g/L)	See Table 1: **Winter Cereals**
Knapweed, Creeping	During late spring to summer	Vic only	7.5 L	

Lucerne		Qld, NSW only	1 L	
Mexican Poppy				
Mintweed			300 mL + 375 mL 2,4-D amine (625 g/L)	See Table 1: **Winter Cereals**
Morning glory		Qld only	1 L	See Table 2: **Stubble or Fallow Land prior to sowing Winter Cereals**
Mustards		Qld, NSW only	300 mL + 375 mL 2,4-D amine (625 g/L)	See Table 1: **Winter Cereals**
New Zealand spinach			1 L	
Noogoora burr				See Table 2: **Stubble or Fallow Land prior to sowing Winter Cereals**
Onion weed	Pre-flower	Vic, SA only	2 L + 3 L diquat (200 g/L)	NA
Ox-eye Daisy	Up to early flowering	Vic only	4 L	Respraying will be necessary
Parthenium weed	During rosette pre-flowering	Qld, NSW only	3 L	See Table 2: **Stubble or Fallow Land prior to sowing Winter Cereals**
Paterson's curse (Salvation Jane)	Rosette to pre-flowering	SA only	4 L	
Pigweed, black		Qld, NSW only	1 L	
Pimelea sp.	When plant is green	All States	1.5L / ha + wetter	Boom Spray at 1500 L/ha spray volume. DO NOT apply more than 2 applications per year with a minimum re-treatment interval of 21days between consecutive applications. This product can be used to create and maintain hospital areas for livestock suffering from Pimelea poisoning. Pimelea may become more palatable after herbicide application; stock should be excluded from herbicide-treated areas until sprayed Pimelea plants are leafless, seedless and obviously dead.
Potato weed		Qld, NSW only	1 L	
Prairie ground cherry	Flowering to fruiting	Vic only	7.5 L	Retreatment will be necessary
Radish, Wild		Qld, NSW only	300 mL + 375 mL 2,4-D amine (625 g/L)	See Table 1: **Winter Cereals**
Ragwort	Rosette to cabbage stage	Qld, NSW, WA only	3.5 L	
		Vic, SA only	4 L	
Redroot (*Amaranthus* spp.)		Qld, NSW only	1 L	See Table 2: **Stubble or Fallow Land prior to sowing Winter Cereals**
Redshank (*Amaranthus* spp.)				
Saffron thistle			300 mL	See Table 1: **Winter Cereals**
Sesbania pea			1 L	See Table 2: **Stubble or Fallow Land prior to sowing Winter Cereals**
Sicklepod		Qld only	700 mL – 1.5 L + 800 mL 2,4-D amine (625 g/L)	See also Table 4: **Sugar cane** In pastures a repeat spray maybe necessary for control of subsequent seedling germination.
Silverleaf nighshade		NSW, Vic, SA only	15 L	
Skeleton weed	Summer and autumn	Qld only		See Table 1: **Winter Cereals**

	Winter	Vic only		
		SA only	300 mL + 375 mL 2,4-D amine (625 g/L)	
	Summer and autumn	NSW, WA only	15 L	
Sowthistle		Qld, NSW only	300 mL	See Table 1: **Winter Cereals**
Doublegee (Spiny emex)				
Star thistle	Seedling to rosette	Qld, NSW, Vic, SA, WA only	3.5 – 7.5 L	Use higher rate for older plants.
Stinking Roger		Qld, NSW only	1 L	See Table 2: **Stubble or Fallow Land prior to sowing Winter Cereals**
Sunflower			300 mL + 375 mL 2,4-D amine (625 g/L)	See Table 1: **Winter Cereals**
Thornapple *(Datura* spp.)			1 L	See Table 2: **Stubble or Fallow Land prior to sowing Winter Cereals**
		Qld only	500 mL + 280 mL 2,4-D amine (625 g/L)	See Table 3: **Summer Cereals (Sorghum and Maize)**
Turnip weed		Qld, NSW only	300 mL + 375 mL 2,4-D amine (625 g/L)	See Table 1: **Winter Cereals**
Variegated thistle	Rosette to pre-flowering	Vic, SA, WA only	2 – 4 L	Use higher rate on mature plants.
		Qld, NSW only	300 mL + 375 mL 2,4-d amine (625 g/L)	See Table 1: **Winter Cereals**
Wandering Jew			1 L	
Wireweed			300 mL + 375 mL 2,4-D amine (625 g/L)	See Table 1 : **Winter Cereals**

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

GENERAL INSTRUCTIONS

Mixing: Mix only with water. It will not mix with oil or diesel fuel. Mechanical or by-pass agitation in the spray tank is recommended and it should be maintained during spraying.

Quarter fill the spray tank and add the required amount of herbicide in the following order: Wettable powder or water dispersible granules; suspension concentrates (atrazine flowable); aqueous concentrates (e.g. KELPIE 2,4D PICLORAM FALLOW HERBICIDE, 2,4-D Amine); emulsifiable concentrates and finally surfactant or crop oil.

Adjuvants: DO NOT add surfactants (such as BS-1000) or crop oils (such as Uptake™ Spraying Oil) unless specifically recommended to do so in the DIRECTION FOR USE tables, 1 and 2.

APPLICATION

KELPIE 2,4D PICLORAM FALLOW HERBICIDE may be applied by:

Ground boom. Spray using accurately calibrated equipment delivering 50 – 100 L water/ha. DO NOT use less than 200 L/ha in sugar cane. When treating maize and sorghum, the risk of crop injury will be reduced if dropper nozzles are used to avoid spraying the growing point of the crop. Misting machines and boomjet sprayers should not be used for treating crops.

Aircraft. Use accurately calibrated equipment to deliver not less than 20 L water/ha. DO NOT use less than 50 L/ha in sugar cane.

High volume. Apply using a calibrated handgun with D5 or D6 (2 – 3 mm) nozzle plate and operated at 400 – 500 kPa. Spray to thoroughly wet the weed, usually 2,500 – 3,500 L water/infested ha is required.

Stem injection. Treat only trees with good sap flow. Make injection cuts at 13 cm spacing around the diameter of the tree at waist height or at 15 cm spacing at ground level. The cuts should be made using a 5 to 7 cm wide narrow bladed axe. The cut must be made through the bark and deep enough to place all the chemical in contact with the sap wood. Treat each stem of a multistem tree where possible. Inject the chemical mix into each cut immediately after the cut is made. Apply the mix with a vaccinator or similar equipment which can be accurately calibrated or a tree injector which can apply the measure dose at or near ground level. Injection at or near ground level is essential in the Traprock area of south-eastern Queensland and is preferred for optimum result in Bimble box (poplar box) areas.

Cut stump. Cut the trees as close to the ground as practicable, leaving stumps no higher than 10 cm. Spray, swab or brush the chemical mix immediately to the freshly cut surface so as to thoroughly wet the surface. If the cut surface is oily, add a non-ionic wetting agent to assist penetration.

Frilling. Make successive overlapping cuts into the sapwood around the entire circumference of the base of the tree. Spray to thoroughly wet the frilled area.

Injecting spray into centre of weed. Inject using a vaccinator or similar equipment. 1 mL of treatment mix into the growing point for each 2.5 cm of the plant stem diameter. (See Zamia palm).

CLEANING SPRAY EQUIPMENT

After using KELPIE 2,4D PICLORAM FALLOW HERBICIDE, empty the tank completely and drain the whole system. Thoroughly wash inside the tank using a pressure hose, drain the tank and clean any tank, pump, line and nozzle filters.

To rinse: After cleaning the tank as above, quarter fill the tank with clean water and circulate through the pumps, lines, hoses and nozzles. Drain and repeat the rinsing procedure twice.

To decontaminate: Before spraying sensitive crops (see PROTECTION OF CROPS, NATIVE AND OTHER NON-TARGET PLANTS section) wash the tank and rinse the system, as above. 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 of water) and circulate throughout the system for at least fifteen minutes. If using a concentrated laundry detergent, use 250g (or mL)/100 L water. DO NOT use chlorine based cleaners. Drain the whole system. Then remove filters, nozzles and clean them separately. Finally, flush the system with clean water and allow to drain.

Rinse water should be discharged onto a designated disposal area or if this is unavailable, onto unused (and away from plants and water courses).