DANGEROUS POISON

KEEP OUT OF REACH OF CHILDREN

READ SAFETY DIRECTIONS BEFORE OPENING OR USING

CAN KILL IF SWALLOWED

DO NOT PUT IN DRINK BOTTLES

KEEP LOCKED UP

CHOICE PARAQUAT 250 HERBICIDE

ACTIVE CONSTITUENT: 250 g/L PARAQUAT

present as PARAQUAT DICHLORIDE

GROUP **L** HERBICIDE

For the control of a wide range of grasses and broadleaved weeds as per Directions for Use table.

APVMA APPROVAL No: 62096 / 0707

IMPORTANT: Read this leaflet before using this product

GROW CHOICE PTY LTD

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DIRECTIONS FOR USE

RESTRAINTS

DO NOT allow spray to drift onto susceptible crops.
DO NOT allow spray to contact foliage or green bark of trees or vines or flowers or fruit when spraying in orchards or vineyards.
DO NOT spray if weeds are stressed, wilted by dry or cold weather, are waterlogged or are covered by dust or soil.
DO NOT spray plants covered with heavy dew, but rain following spraying will not affect control.
DO NOT add any wetting agent unless spraying at high volume. Use a 600g/L non-ionic wetting agent as per the Direction for Use table.
DO NOT use alkaline or anionic wetting agents with Choice Paraquat 250 Herbicide.
DO NOT sow or cultivate for 1 hour after spraying. Commence operations within 7 days of spraying.
For ground application only – DO NOT use through aircraft, misting machines or hand-held ultra low volume controlled droplet applications (CDA units).

CROP USE OR SITUATION	WEED CONTROLLED	RATE	CRITICAL COMMENTS
Cultivation Aid to minimise cultivation and prepare a clean bed for sowing	Annual grass and broadleaf weed control Early autumn sowing	1.2 - 1.6 L/ha (see Note 1)	Cultivation following spraying can start one hour after spraying but should be completed within 7 days. However, a better seed bed will result if cultivation is delayed 3 - 5 days in situations where weed growth is dense at time of spraying. Use higher rates for dense, more mature weed stands. Wild oats must have at least two leaves. Where a registered formulation of diquat is used, the lower Choice Paraquat 250 rate should be adequate to control dense, mature weeds. Pasture: Old pasture residues should be removed by continuous heavy grazing. Remove stock 3 - 5 days before spraying to allow weeds to recover.
	Winter, spring and early summer sowing	1.6 - 2.4 L/ha	
	Wild oats at 2 - 5 leaf stage in autumn / winter	600 - 800 mL/ha	
Rice	Annual grass and broadleaf weed control	1.6 L or 800 mL/ha	Use 1.6 L/ha when applied pre-sowing. Use 800 mL/ha when applied post-sowing, pre-crop emergence.
Wild Oat control in Spring Fallows	Wild oats at 2 - 5 leaf stage	1.2 - 2 L/ha	For the control of summer growth apply at 2 L/ha. Avoid spraying under hot, dry conditions. Spraying in the late evening will produce best results.

(that is the folded leaflet size - opened out it's 168mm wide x 115mm deep) – THIS LEAFLET IS AT 100%

CROP USE OR SITUATION	WEED CONTROLLED	RATE	CRITICAL COMMENTS
Kikuyu / Paspalum Pasture	To suppress growth when oversowing winter seed	1.6 or 2.4 L/ha	Apply 2.4 L/ha when spraying in mid summer and 1.6L/ha when spraying in late summer or autumn.
Selective Weed Control Autumn / early Winter - annual clover - perennial clover	Annual grass plus control of broadleaf weeds except Paterson's Curse, Sorrel, Dock, Shepherd's Purse and some thistles	600 mL or 1.2 L/ha (see Note 1) 1.2 - 1.6 L/ha	Use the higher rate for dense weed stands.
Late Winter / early Spring - Annual clover - Perennial clovers - Cocksfoot - Perennial ryegrass - Phalaris - Demeter fescue only	For the control of these weeds, other methods including Spray-graze techniques with 2,4-D or MCPA should be considered.	1.6 - 2.4 L/ha (see Note 1)	Apply higher rates in winter / early spring when barley grass is present. All Applications: Graze pastures continuously after the seasonal break to a height of 2 - 4 cm. Remove stock 2 - 3 days before spraying to allow weeds to recover. Mixed pastures will be scorched initially but should show good recovery and beneficial changes in composition following spring rainfall and growth. Do not apply until clover has reached the 6 leaf stage or if clovers are affected by insect attack, disease or moisture stress. Do not use on clover pastures which are subject to moisture stress at time of application or immediately following treatment e.g. those growing in water repellent sands as recovery of such clovers will be poor. Use the lower rate for cocksfoot and perennial ryegrass and the higher rate for Phalaris and Demeter Fescue. The perennial grasses must be at least 12 months old at spraying. **DO NOT APPLY TO MEDICS.**
	Yorkshire Fog grass	1.2 L/ha	Apply in early spring to reduce Yorkshire fog grass and increase the clover and desirable grass component. Mixed pastures will be scorched initially but should show good recovery following spring rains. In lower rainfall areas it is advisable to apply the product in mid to late winter as this will allow better pasture recovery although control may not be as good as early applications. If pastures have been grazed allow sufficient time for pasture and Yorkshire fog grass to recover before application. Use water volumes of at least 100 to 250 L/ha. Use the higher water rates in tall or dense ungrazed pastures. Add non-ionic surfactant at recommended rates.

CROP USE OR SITUATION	WEED CONTROLLED	RATE	CRITICAL COMMENTS
Lucerne Autumn / early Winter	Annual grass and some broadleaf weeds	1.2 or 1.6 L/ha (see Note 1)	Apply higher rates to dense weed stands. Do not spray Lucerne stands under 12 months old. For residual weed control or if Paterson's Curse, Shepherd's Purse and some other broadleafed weeds are present, add Diuron 900g/kg Herbicide at 1.1kg or 1.9kg. If mintweed is present, use an 900g/kg atrazine product at 600g/ha. **WARNING:** In certain areas, an uncommon species of barley grass *(H. glaucum)* which is more tolerant to Paraquat-based products has become established. It may re-grow after an initial scorch by Choice Paraquat 250. Where this problem is suspected, use an alternative approved product for grass weed control.
Late winter / early spring	Annual grass and some broadleaf weeds	1.6-2.4 L/ha (see Note 1)	
Perennial Grass Seed Crops Cocksfoot, Perennial Ryegrass, Phalaris and Demeter Fescue only	Annual grass and some broadleaf weeds	600 mL-1.2 L/ha (see Note 1)	Apply the low rate for cocksfoot and perennial ryegrass and the higher rate for Phalaris and Demeter Fescue. Spray after the autumn break and about 4 weeks after a full weed germination. The perennial grasses must be at least 12 months old at spraying.
Spray topping to reduce seed set Chickpeas Faba Beans Field peas Lentils Lupins Vetch	Annual Ryegrass	400 mL or 800 mL/ha	**As an aid to managing annual ryegrass resistance. For use on escapes from a pervious herbicide application in the current crop.** Spray the crop when the ryegrass seed heads at the bottom of the plant have emerged and the majority are at or just past flowering (with anthers present or glumes open) but before haying off is evident – usually October to November. Use of the higher rate in these crops is usually more reliable and gives a greater reduction in seed set. Reduction in crop yield may occur especially if the crop is less advanced relative to the ryegrass, that is if crops have a majority of green immature pods. The higher rate may also increase any yield reduction. In practice, crop losses in excess of 25% may occur. Apply by ground boom only in 50-100L/ha. Spray with a calibrated boom spray raised to give double overlap at the level of the ryegrass seed heads. Pressures of 250-350 kPa and use of 110015 or 02 nozzles or equivalent will aid coverage.

CROP USE OR SITUATION	WEED CONTROLLED	RATE	CRITICAL COMMENTS
Spray topping to reduce seed set Pastures	Grasses generally (particularly annual ryegrass)	400 mL/ha	Paddocks should be heavily grazed during spring flush to encourage even head development. Stock should be removed 2 - 3 weeks before the anticipated maturity date of the target species. If stock numbers are insufficient, allow pasture to mature ungrazed. Delay spraying until the last seed-heads at the bottom of the plant have emerged and initial signs of haying off appear. Spray with a calibrated boom spray raised to give double overlap at the level of the seed heads.
Spray topping to reduce seed set Pastures	Barley grass	400 mL/ha	Manage paddocks as above. Spray when all seed heads have emerged and are green with no sign of haying off. Inspect paddocks before returning stock. Provided spraying was carried out before hardening of grass seeds, stock (excepting horses) may be returned 24 hours after spraying. When hardening seeds are present harrow to knock seeds from the heads. Do not introduce lambs into the sprayed paddock until risk of seed injury has been mitigated. In situations favouring regeneration, return stock to selectively graze new shoots. A calibrated boom spray raised to give double overlap at the level of the seed heads should be used for application.
	Saffron thistle		Spray before flowering but after the plant begins to run to head.
Prevention of annual ryegrass toxicity	Spray top – Graze to destroy seed heads	400 mL/ha	Follow directions above for management of grazing when spray topping. Remove stock 3 - 4 weeks before anticipated maturity date of the weeds. Spray must be applied within 10 days after emergence of the first ryegrass seed heads. Heavy, continuous grazing sufficient to eat off all regrowth (to prevent production of seed heads which could become toxic) is essential from 1 day after spraying until pasture has completely hayed off to ensure adequate control of toxin development.
Hay freezing	Maximum retention of protein in standing dry feed	800 mL/ha	Graze paddocks as for spray topping above. Remove 3 - 4 weeks before the anticipated maturity date. Apply prior to commencement of haying off regardless of the grass species involved. Spray with a calibrated boom spray raised to give double overlap at the level of the seed heads.

CROP USE OR SITUATION	WEED CONTROLLED	RATE	CRITICAL COMMENTS
Hops	Annual grasses	1.2 - 1.6 L/ha plus 1.1 kg/ha 900 g/kg simazine product and / or 750 mL - 1.4 L/ha Diquat 200 g/L product	Apply as directed inter-row spray prior to crop emergence from winter dormancy, using a minimum of 250 L/ha of spray volume to ensure good and even coverage of weeds.
Bananas	Annual weed control	100 mL/100 L	After emergence and before weeds reach 15 cm in height using spray pressure less than 240 kPa. Spray should not be allowed to contact the roots or peepers near the pseudo stem. Repeat application as necessary.
Orchards and Vineyards	Annual weed control	1.6 - 3.2 L/ sprayed ha (see Note 2) 160 to 320 mL per 100 L (see Note 1)	Spray as necessary for control of annual weeds. Avoid contacting crop foliage. Choice Paraquat 250 will not harm trees or vines with mature brown bark, if this alone is sprayed. Use the higher rate for dense weed growth. If Fat Hen *Chenopodium album* or *Portulaca* spp. are present and Choice Paraquat 250 rate is less than 800 mL/100 L, add a non ionic wetting agent. Note: Spot spray rate assumes 1000 L water/ha. For lower water volumes increase dilution rate as below: Water volume 250 L/ha: use 640 to 1280 mL/100 L Water volume 500 L/ha: use 320 to 640 mL/100 L Water volume 750 L/ha: use 210 to 430 mL/100 L OR Measure how much spray is required to cover an area of 100 square metres using your normal application volume. Use 16 to 32 mL of Choice Paraquat 250 in the volume required to cover 100 square metres.

CROP USE OR SITUATION	WEED CONTROLLED	RATE	CRITICAL COMMENTS
Peanuts Post-emergence (in-crop)	*Datura spp.* (2-4 leaf) Annual ground cherry (2-3 leaf) Apple-of-Peru (2-4 leaf) Milkweed (2-3 leaf) Stagger weed (2-3 leaf) Blue heliotrope (2-3 leaf) Wandering jew (2-3 leaf) Anoda weed (2-4 leaf) Bellvine (2-3 leaf) Common morning glory (2 leaf)	400mL/ha 600mL/ha 600mL/ha 600mL/ha 800mL/ha 800mL/ha 800mL/ha 800mL/ha 1L/ha 1L/ha	Spray peanuts up to 8 leaf stage and before majority of plants are flowering. Foliage will be scorched but plants recover quickly after application. Best coverage of foliage is achieved with water volumes of 200-250 L/ha. However, in dense canopies, weed control may be reduced as a result of some plants shielding others from the spray. Use half the normal rate of a non-ionic surfactant. Do not spray peanuts in hot dry conditions. In far North Queensland and other areas where similar conditions exist, use the lower rates.
Potatoes	General weed control (in-crop)	1.2-1.6L/ha (see Note 1)	Spray at early crop emergence (no later than 25% emergence of potato shoots). Use the higher rate for dense weed growth.
	Pre-harvest weed control	2.8L/ha (see Note 1)	Spray about one week before digging and after tops have died down.
Row Crops, Vegetables and Market Gardens	Pre-planting and pre-crop emergence	1.2-1.6L/ha or 200mL/100L	To control weeds in seed beds. Treat no less than 3 days before sowing or before crop emergence. Use the lower rate for early autumn applications.
	Post-emergence inter-row weed control	1.2-1.6L/ha or 200mL/100L (see Note 1)	Apply after emergence of crop seedlings or when transplanted crops are established. Avoid spray contacting crop by using shielded nozzles or other appropriate means.
	Seedling weeds		Use the lower rate for early autumn applications.
	Older weeds	2.4L/ha or 400mL/100L (see Note 1)	More mature stages of weed growth.

CROP USE OR SITUATION	WEED CONTROLLED	RATE	CRITICAL COMMENTS
Sugar Cane	Plant and ratoon cane Grasses and some broadleaf weeds	1.2 - 1.6 L per sprayed ha	**When spraying cane up to the 3 - 4 leaf stage:** Apply as a broadcast spray over the top of crop. Cane foliage will be scorched but new leaves will appear in 7 - 10 days. **When spraying cane between the 3 - 4 leaf stage and formation of the true stem:** Use a directed interspace spray with droppers and / or shields or leaf deflectors to avoid excessive spray on crop foliage. Use coarse nozzles such as flood jets (reflex nozzles) with a pressure of 100 - 200 kPa. **After the formation of the true stem:** Overlap the spray pattern by raising the droppers to give weed control in the stool. Use the higher rate for dense, more mature weeds.
Non - Agricultural situations, around sheds, roadways, paths	Annual weed Control	1.6 - 4 L / ha or 200 mL / 100 L (see Note 1)	Thoroughly wet weed growth with spray. Choice Paraquat 250 can be combined with registered formulations of the soil herbicides Diuron, Simazine or Atrazine to give rapid knockdown and prolonged weed control. Use the higher rate for dense weed growth.
	Columbus grass	Spot spraying 160 mL / 100 L plus 1 L Tussock Herbicide (Flupropanate 745 g / L) Boomspray 2.3 - 4.5 L / ha plus 12 - 22 L Tussock Herbicide (Flupropanate 745 g / L)	
Firebreaks	Knockdown weed growth to eliminate fire hazard or assist firebreak turn	1.6 - 4 L / ha (see Note 1)	Apply mid - winter to early summer. Apply the higher rate where weed growth is dense. The sprayed area may be burnt (normally 7 - 10 days after spraying) after desiccation is complete. Choice Paraquat 250 can be combined with registered formulations of the soil herbicides Diuron, Simazine or Atrazine to give rapid knockdown and prolonged weed control.

Note 1 If Capeweed or Erodium spp. are present add a 200g/L Diquat formulation at the rate of 750mL to 1.5L/ha (125mL to 250mL/100L for high volume spraying). Use higher rate for plants more than 10cm in diameter.

Note 2 When applying Choice Paraquat 250 at rates less than 400mL/100L, add a 600g/L non-ionic wetter at the rate of 100mL/100L.

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

FOR USE ONLY AS AN AGRICULTURAL AND HORTICULTURAL HERBICIDE. DO NOT USE THIS PRODUCT IN THE HOME GARDEN.

VICTORIA: APPLICATION BY BACKPACK MOUNTED KNAPSACK IS PROHIBITED.

WITHHOLDING PERIOD:

FIELD PEAS, CHICKPEAS, FABA BEANS, LENTILS, LUPINS – DO NOT HARVEST FOR 14 DAYS AFTER APPLICATION.

Stockfeed:

DO NOT GRAZE OR CUT FOR STOCK FOOD FOR AT LEAST 1 DAY, OR GRAZE HORSES FOR 7 DAYS AFTER APPLICATION.

Pre-Slaughter Interval:

REMOVE STOCK FROM TREATED AREAS 3 DAYS BEFORE SLAUGHTER.

GENERAL INSTRUCTIONS

This product quickly dessicates green plant tissues resulting in a rapid kill of most annual grasses and broadleaf weeds (except capeweed).

As Choice Paraquat 250 is quickly inactivated by contact with soil, only clean water should be used for spraying the product.

Best results are obtained if Choice Paraquat 250 is applied to actively growing weeds and if application is made in cloudy weather or at the end of the day. Light rainfall following application will not affect results. Application to stressed weeds should be avoided. At spraying, weeds should be growing vigorously and must not be covered with soil or heavy dew.

The principle of selective weed control with Choice Paraquat 250 is that annual weeds are killed but perennial plants and clovers recover after the initial scorch. The control of annual weeds by spraying with this product will allow the desirable perennial species to thicken up at the expense of the weeds. Moisture and fertility should not be limiting at time of spraying and the proportion of desirable species must be great enough for them to fill in the areas previously occupied by weeds. Long-term weed control can be achieved following the quick knockdown given by this product if Choice Paraquat 250 is combined with soil residual chemicals.

RESISTANT WEEDS WARNING

GROUP **L** HERBICIDE

Choice Paraquat 250 Herbicide is a member of the bipyridyl group of herbicides. Choice Paraquat 250 Herbicide has the "photosynthesis at photosystem I inhibitor" mode of action. For weed resistance management, Choice Paraquat 250 Herbicide is a Group L herbicide. Some naturally occurring weed biotypes resistant to Choice Paraquat 250 Herbicide and other Group L 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 Choice Paraquat 250 Herbicide or other Group L Herbicides. Since the occurrence of resistant weeds is difficult to detect prior to use, Grow Choice Pty Ltd accepts no responsibility for any losses that may result from failure of Choice Paraquat 250 Herbicide to control resistant weeds.

Mixing

After adding the required amount of Choice Paraquat 250 to the water in the spray tank agitate to give even mixing. The spray mix should be agitated if it has been left to stand.

Application

Use a properly calibrated boom spray to deliver a minimum of 100 L water/ha. Apply in 100 L/ha for control of seedling weeds, 150 L/ha for weeds up to 2.5 cm and 200 L/ha for weeds 6 - 10 cm in height. Up to 700 Litres/ha may be used for orchards and vineyards. When high volume spraying, add a 600 g/L non-ionic wetting agent at a rate of 100 mL/100 L of spray mix. DO NOT use alkaline or anionic wetting agents.

For cereals and broadacre spraying, a properly calibrated boom spray should be used. The boom spray should be set to a height to give at least double overlap of the spray at the top of the weeds to be controlled and should be fitted with flat-fan jets. Spraying pressures should be maintained between 200 - 300 kPa. Speed of travel should be 6 - 15 km/hr. A good marking system is essential. If using a disc marker, it should be mounted so that the soil is turned back onto the area already sprayed. It is essential to obtain good coverage of the foliage with the spray.

Spray volumes should be adjusted according to density. 100 L/ha may be used for seedlings or well grazed weeds up to 2cm in height. Increase water volumes to 150 L/ha for weeds to 5cm in height. Spray volumes may be as low as 50 L/ha (30 L/ha in WA) for weed growth below 5 cm high, or for spray topping and hay freezing may be used. However, spray equipment should be appropriate low volume application. It should be calibrated and fitted with spraying tips designed to give droplets with a Volume Median Diameter of 200 - 250μ.

High volume application will generally be required in most situations other than broad acre spraying.

Spray equipment should be washed with clean water immediately after use. The product is highly corrosive to metals, particularly galvanized iron and aluminium. It should not be left for long periods in tanks made of these materials.

For ground application only:

DO NOT apply through misting machine or hand held ultra low volume controlled droplet applicators or by aircraft.

Compatibility

Where prolonged weed control is required in addition to quick knockdown, Choice Paraquat 250 can be used in tank mixes with registered formulations of Diuron, Simazine and Atrazine.

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.

PROTECTION OF LIVESTOCK

Domestic pets and poultry should be kept away from treated areas. This product should not be applied on or near water that is to be used for irrigation purposes or livestock watering.

PROTECTION OF WILDLIFE, FISH, CRUSTACEANS AND THE ENVIRONMENT

DO NOT contaminate streams, rivers or waterways with the chemical or used container. This product should not be applied on or near water which is used for human consumption, livestock watering, or irrigation purposes or water used for commercial or recreational fishing.

STORAGE AND DISPOSAL

Store in the closed, original container in a dry, cool, well-ventilated, locked area out of direct sunlight and away from children, animals, food, feedstuffs, seed and fertilisers.

Triple or (preferably) pressure 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 bury empty containers in a local authority landfill. If no landfill is available, bury the containers below 500mm in a disposal pit specifically marked and set up for this purpose, clear of waterways, desirable vegetation and tree roots. Empty containers and product should not be burnt.

For refillable containers (110 L) – Empty contents fully into application equipment. Close all valves and return to point of supply for refill or storage.

SPRAY APPLICATION

DO NOT work in spray mist.

DO NOT continue to use if skin irritation or nosebleed occurs. This may be caused by exposure to spray mist resulting from incorrect use of equipment or adverse climatic conditions. Stop and review handling and spraying techniques before further spraying. If symptoms persist, seek medical advice.

When there is a risk of exposure to spray mist, wear waterproof footwear and waterproof protective clothing, impervious gauntlet-length gloves (rubber or PVC), goggles and a face mask and respirator covering nose and mouth and capable of filtering spray droplets. A high efficiency type particulate respirator is recommended.

Any respirator worn should comply with the requirements of AS1716 (Standards Association of Australia). Additional advice on safety equipment should be obtained from a safety equipment supplier.

Avoid contacting vegetation wet with spray. If necessary, to enter crops wet with spray, wear waterproof footwear and waterproof protective clothing and gloves.

SAFETY DIRECTIONS

Very dangerous, particularly the concentrate. Product is poisonous if swallowed. Will irritate the nose, throat and skin. Attacks eyes. Protect eyes while using. Avoid contact with eyes, skin and clothing.

When opening the container and preparing product for use, wear elbow-length PVC gloves, face shield or goggles. If product on skin, immediately wash area with soap and water. If clothing becomes contaminated with product, remove clothing immediately. If product in eyes, wash it out immediately with water. Avoid contact with spray mist. Do not inhale spray mist. 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 and face shield or goggles and contaminated clothing.

FIRST AID

If poisoning occurs get to a doctor or hospital quickly. If in eyes, hold eyes open, flood with water for at least 15 minutes and see a doctor.

MATERIAL SAFETY DATA SHEET

For further information, refer to the Material Safety Data Sheet (MSDS) which is available from the supplier.

NOTICE TO BUYER

Grow Choice Pty. Ltd. will not be held liable for any loss, injury or damage, indirect or consequential, arising from the sale, supply, use or application of this product. The product is not to be used for any purpose or in any way contrary to label instructions.

[1] Not a Grow Choice Trademark

UN No: 3016
BIPYRIDILIUM PESTICIDES
LIQUID, TOXIC, N.O.S
(contains paraquat)
PKG III, Hazchem 2X

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