

CAUTION

KEEP OUT OF REACH OF CHILDREN
READ SAFETY DIRECTIONS BEFORE OPENING OR USING

MacPhersons

Glyphosate 700 Soluble Granular Herbicide



ACTIVE CONSTITUENT: 700 g/kg GLYPHOSATE
(present as the mono-ammonium salt)

GROUP **M** HERBICIDE

A non-selective herbicide for the control of many annual and perennial weeds in certain situations as indicated in the directions for use

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Mac Phersons

DIRECTIONS FOR USE GENERAL WEED CONTROL ALL STATES

SITUATION	CRITICAL COMMENTS Read Application Checklist before using
For general weed control in Domestic areas (Home gardens), Commercial, Industrial and Public Service areas, Agricultural buildings and other farm situations. For specific weeds refer to the appropriate Weeds Controlled table.	<ul style="list-style-type: none"> For the control of many grasses and broadleaf weeds. RATE: 5 g per litre of water. Apply when weeds are actively growing. Apply to ensure complete and uniform wetting of foliage. Visible symptoms may take from 3 to 7 days to develop.

USE SITUATIONS All States (except where noted).
For rates of application and weeds controlled, see Weeds Controlled tables.

SITUATION	CRITICAL COMMENTS
NON-AGRICULTURAL AREAS Around buildings, Commercial and industrial areas, Domestic and public service areas, Right-of-ways.	<ul style="list-style-type: none"> MacPhersons GLYPHOSATE 700 Soluble Granular Herbicide does not provide residual weed control. For residual weed control of annual weeds, MacPhersons GLYPHOSATE 700 Soluble Granular Herbicide may be tank mixed with certain residual herbicides. See Tank Mixtures/Herbicides.
AGRICULTURAL AREAS	<ul style="list-style-type: none"> MacPhersons GLYPHOSATE 700 Soluble Granular Herbicide may be used for control of annual and perennial weeds as directed, in agricultural land prior to sowing of any edible or non-edible crop, but not prior to transplanting tomato seedlings.
DRY DRAINS AND CHANNELS (ETC).	Do NOT apply to weeds growing in or over water. Do NOT spray across open bodies of water, and do NOT allow spray to enter the water. Do NOT allow water to return to dry channels and drains within 4 days of application.
FORESTS	<ul style="list-style-type: none"> MacPhersons GLYPHOSATE 700 Soluble Granular Herbicide may be used prior to the establishment of nurseries, for site preparation prior to planting and amongst established trees using a directed or shielded spray. DO NOT allow spray or spray drift to contact foliage or green bark of desirable trees, since severe injury may result.
COTTON Shielded Sprayers QLD, NSW only.	<ul style="list-style-type: none"> Apply MacPhersons GLYPHOSATE 700 Soluble Granular Herbicide to weeds growing between crop rows using a shielded sprayer. Refer to the Weeds Controlled tables for rates of application. DO NOT apply in crops less than 20 cm high. DO NOT allow spray or spray drift to contact any part of the cotton plant as severe injury or destruction may result.

USE SITUATIONS ALL STATES (except where noted).
For rates of application and weeds controlled see Weeds Controlled tables.

SITUATION	CRITICAL COMMENTS
TREE AND VINE CROPS. Avocado, Banana, Blueberries, Citrus fruit, Custard apples, Duboisia, Figs - dessert, Guava, Kiwifruit, Litchi, Mango, Monstera - fruit, Nuts (including Almond, Pecan, Macadamia, Pistachio and Walnut), Olives, Pawpaw, Persimmons, Pome fruit, Raspberries, Stone fruit, Tea, Vineyards	<ul style="list-style-type: none"> Apply as directed or shielded spray. DO NOT apply as a spray near trees or vines less than 3 years old unless they are protectively shielded from spray and spray drift. Citrus fruit, Nuts, Olives, Pome fruit & Vineyards. DO NOT allow spray drift to contact green bark or stems, canes, laterals, suckers, fresh woodings, foliage or fruit. Tea. Apply a maximum of 2 kg/ha by shielded boom or directed off-centre nozzle or 3g/litre by directed handgun or knapsack to avoid application to the crop. All other crops. DO NOT allow spray or spray drift to contact any part of the plant including the trunk. CAUTION: Where split bark on Kiwifruit and green stems on Pawpaw occur, extreme care is required. For residual control of annual weeds, MacPhersons GLYPHOSATE 700 Soluble Granular Herbicide may be tank-mixed with compatible herbicides which are labelled for use in the above crops. See Tank Mixtures/Herbicides for directions.
PASTURE	<ul style="list-style-type: none"> DIRECTED (SPOT) APPLICATION: MacPhersons GLYPHOSATE 700 Soluble Granular Herbicide is non-selective and may damage or kill any plant in the sprayed area. Retreatment and/or pasture improvement may be necessary to restrict seedling re-establishment. BOOM APPLICATION: MacPhersons GLYPHOSATE 700 Soluble Herbicide Granular may be used to suppress or kill existing pasture species prior to re-seeding or establishment of other crops. Where spot application is undertaken, grazing stock need not be removed. CAUTION: Certain plants may be naturally toxic to stock. Where known toxic plants are present DO NOT allow stock to graze until complete browning of treated plants has occurred.
ONIONS Post-plant, pre-emergence application TAS only.	<ul style="list-style-type: none"> For control of annual weeds and suppression of perennial weeds, including Rope Twitch, apply MacPhersons GLYPHOSATE 700 Soluble Granular Herbicide at 530g - 1.6 kg/ha post sowing and at least 7 days before crop is due to emerge. DO NOT apply to emerging onion plants as severe injury will result. Use the lower rate on small actively growing growing annual weeds. Increase to the higher rate for larger annual weeds (over 15 cm tall) and for suppression of perennial weeds.

ANNUAL WEEDS REGISTRATION IN ALL STATES/TERRITORIES UNLESS OTHERWISE SPECIFIED

WEEDS CONTROLLED	BOOM rate/ ha	HANDGUN/ KNAPSACK	CRITICAL COMMENTS Read Application Checklist before using.
Annual ryegrass Amaranth Barley grass Barnyard grass Bent grass ^{c d} Brome grass Caltrop Canary grass Capeweed Cereals Chickweed Cobbler's pegs Deadnettle Doublegee Fumitory Ground cherry Hedge Mustard Hoary Cress ^{b c d} Lesser Swinecress Liverseed grass Mintweed Noogoora burr ^{a b} Paradoxa grass Paterson's Curse Pigweed Potato weed Saffron thistle Silvergrass Sowthistle Spear thistle Spiny Burrgrass Spurge Thornapple Variegated thistle Wild oats Wild turnip Winter grass	1 - 1.6 kg	3 - 5 g/litre	<ul style="list-style-type: none"> Apply to weeds whenever they are not subject to stress due to drought or frost. Use higher rate on weeds over 15 cm in height or diameter or where dense weed cover limits spray coverage. Use higher spot spraying rate when applying less than 5L spray per 100sqm. MacPhersons GLYPHOSATE 700 Soluble Granular Herbicide does not provide residual weed control. Repeat treatments may be necessary to control later germinating weeds. For residual control of annual weeds, MacPhersons GLYPHOSATE 700 Soluble Granular Herbicide may be tank-mixed with certain residual herbicides. See Tank Mixtures/Herbicides for directions.

STATE REGISTRATION CODE

a- Queensland
b- New South Wales
c- Victoria
d- Tasmania
e- South Australia
f- Western Australia

PERENNIAL WEEDS REGISTRATION IN ALL STATES/TERRITORIES UNLESS OTHERWISE SPECIFIED

WEEDS CONTROLLED	BOOM rate/ ha	Handgun/ Knapsack	CRITICAL COMMENTS
Artichoke thistle ^{c e} African Lovegrass ^{b c f} Carpet grass Cocksfoot Flatweed Johnson grass Kikuyu Nutgrass Paspalum Phalaris ^{b c e} Plantain Prairie grass Rhodes grass Rope twitch ^{c d} *Tall sedge ^{b c d} Yorkshire fog	1.5 - 3 kg	5 g / litre	<p>Control of established perennials is best obtained when plants are at the seedhead stage (Early flower flatweed).</p> <p>In general best control of winter growing perennials is obtained with application during winter-spring.</p> <p>Best control of summer growing perennials is obtained with application late summer and autumn. For Nutgrass in cultivated situations apply sequential treatments when Nutgrass has a minimum of 6-8 leaves. Use the higher rate uncultivated situations.</p> <p>For Rhodes grass and Rope twitch, use the higher boom rate only.</p>
Blady grass ^{a b} Bracken Couch *Cumbungi *Glyceria ^d Guinea grass *Paragrass * See Dry Drains and Channel Use Situation	4.5 kg	7 g / litre	<p>For Bracken add Pulse at 200mL/100L spray mix.</p> <p>Best control of couch in WA and SA is obtained with spring treatment.</p> <p>Most effective control of couch in eastern states is obtained with summer and autumn treatments.</p> <p>In cultivated situations use sequential treatments of 2 - 4.5kg / ha for control.</p>

WOODY WEEDS REGISTRATION IN ALL STATES/TERRITORIES UNLESS OTHERWISE SPECIFIED

WEEDS CONTROLLED	Handgun / Knapsack	CRITICAL COMMENTS
Bamboo Bitou bush ^{a b c d} Boxthorn Gorse Groundsel bush ^{a b} Lantana ^{a b}	5 g / litre	For Gorse, add Pulse at 20mL/10L of spray mix
Blackberry Eucalyptus spa (seedlings <2m) ^{a b c d f} Hawthorn ^{b c d e f} Pampas grass Sifton bush ^{a b} Willow (<2m) ^{a b c d f}	5 - 7 g / litre	For Eucalyptus spp, add Pulse at 20mL/10L of spray mix.

CONSERVATION TILLAGE

Restrictions: To ensure herbicide absorption. DO NOT disturb weeds by cultivation, sowing or grazing for 1 day after treatment of annual weeds and 7 days for perennial weeds, except where noted.

SITUATION	WEEDS CONTROLLED	RATE/ ha	CRITICAL COMMENTS		
SOUTHERN AUSTRALIA Prior to sowing a crop or pasture with full soil disturbance by cultivation or sowing with a tined implement WA, SA, Vic and NSW only	Barley grass Brome grass Volunteer cereals Wild oats	265g-530g pre-tillering 530g-660g post-tillering	<p>Treat only actively growing weeds not under stress from low moisture, frost, cold, disease or waterlogging. If heavy grazing has occurred, allow regrowth to 6-8 cm before spraying and use the higher rate.</p> <p>RATE SELECTION Increase to higher rates late in the season or when treating under cold/overcast conditions. Full disturbance with cultivation or sowing with a tined implement may start one day after treatment (7 days if Dock, Phalaris, Skeleton weed, Soursob or Sorrel are present) and should occur within 21 days after treatment. Where cultivation or sowing does not occur within 21 days, new weed growth may require further treatment. When treating light infestations of seedling annual grasses (pre tillering) and annual broadleaved weeds (less than 8cm dia/height), cultivation or sowing may start 6 hours after treatment and should occur within 21 days.</p> <p>CROP ESTABLISHMENT Sowing should not proceed until conditions allow the formation of a satisfactory seedbed. See Crop Establishment for directions.</p> <p>ANNUAL RYEGRASS, SILVERGRASS AND PERENNIAL GRASSES Addition of WETTER TX, 200 mL/100L spray solution, may improve control. When treating dense infestations of Silvergrass, use of low volume nozzles (eg SS11001, Hardi No.10) and a spray volume of 70L/ha or more is recommended to improve plant spray coverage.</p> <p>TANK MIXTURES For improved control of clover add Banvel (dicamba). Read and follow all label directions, restraints, plant-back periods, withholding periods, regional use restrictions and safety directions for the tank-mix products.</p> <p>PERENNIAL WEEDS For Perennial phalaris, Soursob, Skeleton weeds and Sorrel, MacPhersons GLYPHOSATE 700 Soluble Herbicide will provide knockdown, seasonal suppression and reduction in treated plant numbers.</p> <p>TASMANIA Use 790g/ha on annual weeds. Increase to 1.6 kg/ha where perennial weeds are being treated. To control White clover and improve control of Sorrel and Dock, add 1L/ha Banvel (dicamba). Observe label directions and plant-back periods.</p>		
	Annual phalaris (Canary grass) Annual ryegrass Silvergrass Winter grass	530g-660g pre tillering 660g-790g post tillering			
	Calomba daisy Capeweed Doublegee/Spin Emex	265g-530g less than 8 cm diam/height 530g-790g greater than 8 cm diam/height			
	Amsinckia Fumitory Paterson's Curse Saffron thistle Scotch thistle Spear thistle Variegated thistle Volunteer lupins Wild turnip	530g-660g less than 12 cm diam/height 660g-790g greater than 12 cm diam/height			
	Dock (seedling)	530g-790g			
	Perennial phalaris Sorrel Sub clover Soursob Skeleton weed-fully emerged rosettes. NSW only	790g			
	All the above weeds. TAS only	790g-1.6 kg			
	SOUTHERN AUSTRALIA Prior to establishing a crop or pasture with an implement that gives minimal or no soil disturbance. NSW, Vic, SA, WA only	Barley grass Volunteer cereals Wild oats		530g -790g 660g -1kg	<p>Treat only actively growing weeds not under stress from low moisture, frost, cold, disease or waterlogging. If heavy grazing of mature plants has occurred, allow regrowth to 6-8 cm before spraying and use the higher rate.</p> <p>RATE SELECTION Use the lower rate on young weeds; increase to the higher rate where grasses reach full tillering or where broadleaf weeds reach stem elongation/budding. Increase to higher rates in spring or when treating under cold/overcast conditions.</p> <p>AERIAL APPLICATION Use the higher rates. See Aerial Equipment.</p> <p>ANNUAL RYEGRASS, SILVERGRASS AND PERENNIAL GRASSES. Add WETTER TX, 200 mL/100L spray solution. When treating dense infestations of Silvergrass, use of low volume nozzles (eg. SS11001, Hardi No.10) and a spray volume of 70L/ha or more is recommended to improve plant spray coverage.</p> <p>TANK MIXTURES For improved control of Dock, Sorrel and Sub. clover, add Banvel (dicamba). Read and follow all label directions, restraints, plant-back periods, withholding periods, regional use restrictions and safety directions for the tank-mix products. See Tank Mixtures for directions. Addition of ammonium sulphate, 2kg/100L, may improve control when treating under adverse environmental conditions.</p> <p>PASTURE OR CROP ESTABLISHMENT. DO NOT sow into excessive trash. Trash may be removed by grazing after treatment. Grazing may commence one day after treatment of annual weeds (small) and 7 days for perennial weeds. Delay grazing for three days where annual weeds are large. Sowing may proceed when excessive trash is removed, but not sooner than one day after treatment of annual weeds and 7 days for perennial weeds. See also Crop Establishment.</p> <p>AERIAL (OR SURFACE) SEEDING Delay seeding until trash is completely removed by grazing and/or plant decay. When establishing pasture, ensure application of fertiliser and insecticides and follow-up management is undertaken as required.</p> <p>TASMANIA Use 790g/ha on annual weeds. Increase to 1.6 kg/ha where perennial weeds are being treated. To control White clover and improve control of Sorrel and Dock, add 1L/ha Banvel (dicamba). Observe Banvel label directions and plant-back periods.</p>
		Brome grass Canary grass Capeweed Variegated thistle Winter grass		790g -1 kg	
		Annual ryegrass Paterson's curse Saffron thistle Scotch thistle Spear thistle Silvergrass Wild mustard Wild radish		990g -1.3 kg	
Erodium Plantain Perennial-Phalaris Sorrel Sub clover Yorkshire fog		1.3 kg			
Dock Flatweed					
All the above weeds. TAS only		790g -1.6 kg			
SOUTHERN AUSTRALIA To commence a fallow. NSW, Vic, SA, WA only		Barley grass Volunteer cereals Wild oats	530g - 790g	<p>Treat only actively growing weeds not under stress from low moisture, frost, cold, disease or waterlogging. If heavy grazing has occurred, allow regrowth to 6-8 cm before spraying.</p> <p>RATE SELECTION Use lower rates in young weeds or where cultivation is to follow within 21 days. Increase to the high rates where grasses reach full tillering or where broadleaf weeds reach stem elongation/budding.</p> <p>ANNUAL RYEGRASS, SILVERGRASS AND PERENNIAL GRASSES. Add WETTER TX at 200 mL/100L spray solution. When treating dense infestations of Silvergrass, use of low volume nozzles (eg. SS11001), Hardi No.10) and a spray volume of 70L/ha or more is recommended to improve plant spray coverage.</p> <p>HOARY CRESS Treat from late-rosette to early flowering.</p> <p>SOURSOB Treat at tuber exhaustion.</p> <p>COUCH Use higher rate on dense infestations. Apply sequential treatments during summer and autumn with autumn being most effective. Repeat applications will be required for full control. For improved control, use in conjunction with cultivation.</p> <p>TANK MIXTURES For improved control of clover add Banvel (dicamba). Read and follow all label directions, restraints, plant-back periods, withholding periods, regional use restrictions and safety directions for the tank-mix products. See Tank Mixtures for directions.</p> <p>TASMANIA Use 790g/ha on annual weeds. Increase to 1.6 kg where perennial weeds are being treated. To control White clover and improve control of Sorrel and Dock, add 1L/ha Banvel label directions and plant back periods</p>	
		Annual Ryegrass Brome grass Capeweed Paterson's curse Saffron thistle Scotch thistle Silvergrass Spear thistle Wild mustard Wild radish Wild turnip	790g		
		Hoary cress Soursob	790g		
		Couch	790g - 1.6kg		
	All the above weeds. TAS only	790g - 1.6kg			

SITUATION	WEEDS CONTROLLED	RATE/ ha	CRITICAL COMMENTS
PASTURE TOPPING For annual grass Capeweed and Calomba daisy seed set reduction	Barley grass Brome grass Capeweed Silvergrass	160g - 240g	Remove stock prior to treatment to allow even regrowth. Apply to Capeweed and Annual ryegrass at FLOWERING. For other grasses, apply from HEAD to MILKY DOUGH stage. Use the higher rate for dense infestations or where Annual Ryegrass is present. Apply before signs of plants "haying off". Reduction in pasture legume population may occur as a result of treatment. DO NOT apply to clover or medic crops intended for seed or hay.
	Annual ryegrass Calomba daisy	240g	
Seed-head suppression of Perennial grasses	Bentgrass	200g - 330g	TIMING Treat from late October to late November. Apply before seedheads have emerged. Use the higher rate where growth is excessive and renovation is intended the following autumn. FOLLOW-UP MANAGEMENT: Graze hard after spraying.
POA TUSSOCK INFESTED PASTURE For reduction of ground cover allowing pasture renovation	Most annual weeds and suppression of Poa tussock	1.6 - 2.1 kg	TIMING Graze heavily, then remove at least 14 days before spraying to allow fresh regrowth. Apply to actively growing plants after the autumn break but before heavy frosts (March-May). APPLICATION Increasing to the higher rate may give more effective reductions. If aerial spraying, see Aerial Equipment . FOLLOW-UP MANAGEMENT: Sowing may start from 14 days after spraying. It is essential that correct follow-up pasture establishment and management occurs after treatment. Spot treatment will limit re-infestation.

SITUATION	WEEDS CONTROLLED	RATE/ ha	CRITICAL COMMENTS
NORTHERN AUSTRALIA In fallows or prior to sowing a crop. QLD, NSW only	Annual phalaris (Canary grass) Barley grass Volunteer cereals Wild oats	265g-530g	Treat only actively growing weeds not under stress from low moisture, frost, cold, disease or waterlogging. If heavy grazing has occurred, allow regrowth to 6-8 cm before spraying. Note that under summer (hot) conditions, dense infestations of Barnyard grass and Liverseed grass may require follow-up treatment for complete control. In winter (cold) conditions symptoms on Deadnettle may be slow to develop. RATE SELECTION Use the lower rate on young weeds; increase to the higher rate where grasses reach full tillering or where broadleaf weeds reach stem elongation/budding. At more advanced stages of growth certain broadleaf weeds require a higher rate range or the addition of 2,4-D ester.
	Barnyard grass Columbus grass (seedling) Liverseed grass Native Millet Stinkgrass (Lovegrass) Volunteer sorghum	530g-1kg	
	Australian bluebell (Old Only) Cudweed Fumitory Mexican poppy New Zealand spinach Saffron thistle Spear thistle Spurge Stinking goosefoot	530g-790g	CROP ESTABLISHMENT Sowing should not proceed until conditions allow the formation of a satisfactory seedbed. See Crop Establishment for directions. TANK MIXTURES Read and follow all label directions, restraints, plant-back periods, withholding periods, regional use restrictions and safety directions for the tank-mix products. DO NOT tank mix with atrazine when spraying Barnyard grass or Liverseed grass.
	Black (giant) pigweed Boggabi weed Caltrop (Yellowvine) Indian hedge mustard Mintweed Summer grass	265g-530g up to 5 true leaves or 3 cm dia/height 530g-790g greater than 5 true leaves or 3 cm dia/ height	
	African turp weed Deadnettle Sweet summer grass Variegated thistle Volunteer sunflower	400g-530g up to 5 true leaves or 3 cm dia/ height 530g-1kg greater than 5 true leaves or 3 cm dia/ height	AERIAL APPLICATION For instructions on aerial application under hot conditions, see Aerial Equipment . DO NOT apply by aircraft when temperature is above 30C.
	Annual ground cherry (Gooseberry) Bladder ketmia Carmel melon False castor oil plant (Thornapple) Noogoora burr Turnip weed Wild lettuce Wild turp Wireweed	530g-790g prior to stem elongation/budding After that use 265g-790g plus 500-700mL 2,4-D ester (800 g/L) or 790g-1kg	
	Sowthistle Milkthistle	400g-530g rosettes up to 3cm dia. 530g-1kg greater than 3cm dia	Previously grazed plants may be difficult to control without allowing full recovery.
	Couch	790g-1.6kg	Use the higher rate for dense infestations. Apply sequential treatments during summer and autumn, with autumn being the most effective. Repeat applications will be required for full control. For improved control use in conjunction with cultivation.
	Johnson grass	1kg-1.6kg	Use the higher rate on plant approaching seedhead stage. Apply to plants with a minimum of 30cm new growth. Sequential treatments will be required for long term control.
	Nutgrass	1.6kg + 1.6kg	Make the first application to actively growing plants when at least 20% have reached the head stage (normally about Feb). After allowing maximum re-emergence to occur (normally 6-8 weeks), it is essential to make a second application. Note Follow up treatments should be made as part of a Nutgrass control program.

SITUATION	WEEDS CONTROLLED	RATE/ ha	CRITICAL COMMENTS
SORGHUM CONTROL (Pre-harvest) QLD, NSW only	Sorghum (grain sorghum)	790g-1kg	Apply when grain moisture is less than 25%. Pre-harvest treatments may increase the likelihood of crop lodging. Apply treatments to previously slashed/grazed stubble when at least 20cm of new growth has occurred.
SORGHUM CONTROL (Post-harvest) QLD, NSW only	Sorghum stubble (grain sorghum)	530g-790g for fresh regrowth from slashed stubble. 790g-1kg for standing stubble if sufficiently green. 790g-1kg fresh spring regrowth.	CAUTION Sorghum may be naturally toxic to stock.

SITUATION	WEEDS CONTROLLED	RATE/ ha	CRITICAL COMMENTS
SUGARCANE Ratoon spray out QLD, NSW only	Sugarcane ratoon regrowth	2.1kg-4.8 kg	APPLY UNDER GOOD GROWING CONDITIONS ONLY to actively growing ratoons 60-120 cm tall. DO NOT apply if plants are under stress from low moisture or waterlogging. Use the lower rate for suppression or where cultivation is to follow. Use the higher rate for control.
RICE Direct drilling NSW only	Annual phalaris (Canary grass) Annual ryegrass Barley grass Burr medic Sub clover Winter grass	530g-660g	MacPhersons GLYPHOSATE 700 Soluble Granular Herbicide is less effective on drought-stressed plants. In drought conditions a pre-watering prior to spraying is recommended. In grazed situations, if heavy grazing has occurred, allow regrowth to 6-8 cm before spraying. ANNUAL RYEGRASS Add Wetter TX at 200 mL/100L of spray solution and where dominant, use the higher rate. SOWING Direct drilling may take place 1-14 days after spraying. MacPhersons GLYPHOSATE 700 Soluble Granular Herbicide does not provide residual weed control. Permanent water and approved selective herbicides should be used to provide continuing control of weeds.
COTTON Preharvest DO NOT use on crops intended for seed production QLD, NSW only	Bathurst burr Noogoora bur Winter annual weeds including sowthistle/milkwhistle	660g-1.3kg	Use lower rate on light infestations of small weeds, where the crop canopy allows adequate spray coverage of the weeds. Increase to the higher rate when the crop canopy may limit spray coverage, when treating dense infestations, or when treating larger weeds. Apply alone or in tank mixtures with Dropp or Harvarde. Apply when at least 60% of bolls are open and immature bolls cannot be easily cut with a knife. When a leafy canopy limits spray coverage, reduced weed control can be expected. For best results under these conditions, delay application until canopy re-opens following initial conditioning treatment.
	Nutgrass, seasonal suppression only	1.3kg	Where control of Nutgrass and Noogoora burr is required, treatments should be applied prior to the onset of frosts. When tank mixed with defoliant, a slightly higher proportion of cotton leaf may be retained, particularly where the higher rate is used. Read and follow all label directions for the tank mix products.

NOT TO BE USED FOR ANY PURPOSE, OR IN ANY MANNER, CONTRARY TO THIS LABEL UNLESS AUTHORISED UNDER APPROPRIATE LEGISLATION.
WITHHOLDING PERIOD : Not required when used as directed.

GENERAL INSTRUCTIONS PRODUCT INFORMATION

MacPhersons GLYPHOSATE 700 Soluble Granular Herbicide is a non-volatile, water soluble product with non-selective herbicidal activity against many annual and perennial broadleaf weeds and grasses. MacPhersons GLYPHOSATE 700 Soluble Granular Herbicide may be used for weed control in agricultural land prior to sowing any edible or non-edible crop, but not prior to transplanting tomatoes. MacPhersons GLYPHOSATE 700 Soluble Granular Herbicide is absorbed by plant foliage and green stems. It is inactivated immediately in the soil and does not provide residual weed control. MacPhersons GLYPHOSATE 700 Soluble Granular Herbicide moves throughout the plant from the point of contact to and into the root system.

Visible effects on annual weeds take 3-7 days, but on perennial weeds may not be obvious for 2-3 weeks or longer in some cases. Visible effects of control may be delayed by cool or cloudy weather at and following treatment. MacPhersons GLYPHOSATE 700 Soluble Granular Herbicide will control emerged weeds only, and provides no residual weed control. Apply treatments to weeds which have at least one true leaf (broadleaf weeds) or two leaves (grasses) to provide an adequate surface area for herbicide uptake.

RESISTANT WEEDS WARNING

GROUP M HERBICIDE

MacPhersons GLYPHOSATE 700 Soluble Granular Herbicide is a member of the Glycines group of herbicides. MacPhersons GLYPHOSATE 700 Soluble Granular Herbicide has the inhibition of EPSP synthase mode of action. For weed resistance management MacPhersons GLYPHOSATE 700 Soluble Granular Herbicide is a Group M herbicide.

Some naturally occurring weed biotypes resistant to MacPhersons GLYPHOSATE 700 Soluble Granular Herbicide and other inhibitors of EPSP synthase mode of action 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 MacPhersons GLYPHOSATE 700 Soluble Granular Herbicide or other inhibitors of EPSP synthase herbicides. Since the occurrence of resistant weeds is difficult to detect prior to use, RONIC International Pty Ltd accepts no liability for any losses that may result from the failure of MacPhersons GLYPHOSATE 700 Soluble Granular Herbicide to control resistant weeds.

CROP ESTABLISHMENT

MacPhersons GLYPHOSATE 700 Soluble Granular Herbicide is recommended for control of emerged weeds prior to crop establishment. Suitable cultivation and/or sowing operations are required to provide seedbed conditions satisfactory for crop germination and development. Spraying early to control young weeds will favour preparation of suitable seedbeds. On friable soils and where there is only light cover of young weeds, sowing may proceed satisfactorily from one day after spraying. In situations of heavy weed growth, sowing should be delayed until weed decay and soil conditions allow formation of a satisfactory seedbed. Incorporation of green or decaying vegetation and roots into the seedbed by cultivation or sowing may cause retarded crop emergence, particularly in cold and/or wet conditions. Vegetation may be reduced by grazing and weed decay may be assisted by cultivation to leave trash on the surface. In marginal seedbed conditions, take care to achieve seeding depth and avoid use of pre-emergence herbicides where label directions advise risk of retarded crop emergence.

MIXING

For boom application, water volumes should not be less than 6 litres per 1 kg of MacPhersons GLYPHOSATE 700 Soluble Granular Herbicide. Reduced results may occur if water containing soil is used, eg water from ponds and unlined ditches, or if hard water containing calcium salts is used. Do not mix, store or apply this product or spray solutions of this product in galvanised steel or unlined steel containers or spray tanks, since a highly flammable gas mixture may be formed. Use stainless steel, aluminium, brass, copper, fibreglass, plastic-lined containers or spray tanks.

Spray tanks, pumps, line and nozzles should be thoroughly cleaned with clean water following application to prevent corrosion. Ensure the spray tank is free of any residue of previous spray materials. Use spray solutions promptly and certainly within 5 days, since a gradual loss of activity will occur. Good agitation is required, particularly under cold conditions, to ensure all of the MacPhersons GLYPHOSATE 700 Soluble Granular Herbicide dissolves when first added to the tank.

Full Agitation in Pre-filled Spray Tank

- Fill the tank with one-half the required amount of clean water and set the pump on full agitation.
- Add the required amount of MacPhersons GLYPHOSATE 700 Soluble Granular Herbicide slowly to ensure that it is well dispersed through-out the tank and none collects on the bottom. Suggested rate is 10 kg in 2-3 minutes.
- Continue water addition and fully agitate until all the MacPhersons GLYPHOSATE 700 Soluble Granular Herbicide is completely dissolved.

SURFACTANT ADDITION

Additional surfactant is not required except where the rate of MacPhersons GLYPHOSATE 700 Soluble Granular Herbicide is less than 6g/L when applied by boom.
Rate: Add Turbo® Plus at 100mL per 100L water. Results with other surfactants may be variable. Do not mix with spraying oils, agricultural chemicals or any other material except as directed on the label.

TANK MIXTURES

MacPhersons GLYPHOSATE 700 Soluble Granular Herbicide may be tank mixed with the following herbicides, insecticides and additives. Read and follow all label directions, restraints, plant-back periods, withholding periods, regional use restrictions and safety directions for the tank-mix products.

Mixing Instructions For All Tank Mixtures

- Fill the spray tank 1/3 to 1/2 full with clean water and start agitation.
- Add MacPhersons GLYPHOSATE 700 Soluble Granular Herbicide. Mix thoroughly and continue water addition.
- Where crystalline ammonium sulphate is recommended, wash the ammonium sulfate through a top mesh screen into the tank and mix thoroughly.
- Add recommended herbicide/insecticide/additive to the spray tank and mix thoroughly.
- Add surfactant near the end of the filling process to minimise foaming.
- Always maintain adequate agitation during application and use the tank-mix promptly.

Tank Mixtures - Herbicides

Atrazine* flowable or granular (Agricultural uses only. DO NOT apply the tank-mix for control of Barnyard grass or liverseed grass), 2,4-D Ester, dicamba, Express, Garlon 600, Glean®, simazine* Flowable or granular, Oust®, Yield®, Stomp® 330E, Tillmaster® CT, Ally®, Logran® 750WG, Flandor® 500, LVE MCPA, and Striker.

*Ammonium sulfate may improve the performance of tank mixtures of MacPhersons GLYPHOSATE 700 Soluble Granular Herbicide and atrazine and simazine. See directions below. The addition of Striker at 75mL/ha to recommended rates of MacPhersons GLYPHOSATE 700 Soluble Granular Herbicide prior to planting wheat or barley will improve knockdown and increase the speed at which treated weeds develop visible symptoms of phytotoxicity.

Tank Mixtures - Additives

Ammonium Sulphate (crystalline or liquid 500g/L)

RATE: 2L or 1kg/100L spray solution The addition of crystalline ammonium sulphate to MacPhersons GLYPHOSATE 700 Soluble Granular Herbicide, when used to control ANNUAL weeds, MAY improve the performance of MacPhersons GLYPHOSATE 700 Soluble Granular Herbicide under adverse environmental conditions such as cool, cloudy weather. Ammonium sulphate may also improve the performance of tank mixtures of MacPhersons GLYPHOSATE 700 Soluble Granular Herbicide and atrazine and simazine. Use only crystalline or liquid (500g/L) ammonium sulphate, NOT prilled or granular forms. Ammonium sulphate may be corrosive to metal parts of the sprayer. Thoroughly flush tanks, pumps and nozzles with water after use.

Pulse® Penetrant

RATE: 20 mL/10L spray solution.
Add when treating Bracken (boom application).

Wetter TX Surfactant

RATE: 20 mL/10L spray solution.
Add when treating Annual ryegrass in spring (from beginning of August to end of October, Silvergrass and perennial grasses - see critical comments section. Wetter TX is not a general purpose surfactant and should be used only where recommended.

Tank Mixtures - Insecticides

This product is compatible with the following insecticides: Dimethoate, Imidan®, Le-Mat®, Lorsban® 500, Metasystox®, Perlethion® EC 400, Sumithion® ULV, and emulsifiable concentrates of dimethoate and fenitrothion. Other insecticides have not been tested.

APPLICATION

MacPhersons GLYPHOSATE 700 Soluble Granular Herbicide is a non-selective translocated herbicide. Direct spray contact, or even slight drift, may cause severe injury or destruction of any growing crops or other desirable plants including trees. Clean all equipment after use by thoroughly washing with water.

Boom Equipment

For broadcast application, a spray volume of 60L/ha or less is recommended for optimum performance. Fan nozzles equipment is recommended, using pressures in the range 240-280 kPa. Boom height must be set to ensure double overlap of nozzle patterns at the top of the weed canopy.

High Volume Application

(eg. Knapsack/Handgun Equipment)
The dilution rate is given as g/litre eg: 5 grams MacPhersons GLYPHOSATE 700 Soluble Granular Herbicide per 1 litre of water. This is equal to 75g MacPhersons GLYPHOSATE 700 Soluble Granular Herbicide per 15 litres of water or 500g per 100 litres of water. Adjust equipment to achieve an even spray pattern. Apply to ensure complete and uniform wetting of all foliage. For handgun equipment, a D6 spray tip (Spraying Systems Australia P/L) or equivalent and an operating pressure of 400-700 kPa are recommended.

Aerial Equipment

Aerial equipment may be used to apply MacPhersons GLYPHOSATE 700 Soluble Granular Herbicide only in pasture or fallow situations prior to establishment of field crops, fodder crops, or new pasture and for pre-harvest application to sorghum and cotton crops. DO NOT use in intensive horticultural cropping areas.

Use recommended rates of MacPhersons GLYPHOSATE 700 Soluble Granular Herbicide specified in this label up to a maximum limit of 2.1 kg/ha. For Micronair and boom equipment, apply in a minimum spray volume of at least 20L/ha. Droplets with an average size (VMD) of 250-350 micron diameter are recommended. Swath width should be 15-17m. Thoroughly wash aircraft, especially landing gear, after each day of spraying to remove herbicide residues.

Application on hilly terrain:

As spraying height may vary, to maximise target contact, increase water volume to 30-80L/ha and increase droplet size to at least 300 micron VMD.

Application under summer conditions:

High temperatures and/or low relative humidity cause excessive evaporation of spray droplets which may reduce results. When temperature reaches 25°C, increase water volume to at least 30L/ha and increase droplet size to at least 300 micron VMD. DO NOT apply MacPhersons GLYPHOSATE 700 Soluble Granular Herbicide by aircraft when temperature is above 30°C.

Avoid Drift:

DO NOT use with spraying equipment or under meteorological conditions which could be expected to cause spray drift onto nearby susceptible plants, adjacent crops, crop lands or pastures. Equipment settings which produce fine droplets (150 microns or less), winds over 8 km/h, inversion conditions, still air and hot dry days all contribute to drift.

APPLICATION CHECKLIST

- Do not treat weeds under poor growing or dormant conditions (such as occur in drought, waterlogging, disease, insect damage or following frosts) as reduced weed control may result. Reduced efficacy may also occur when treating weeds heavily covered with dust or silt.
- Do not add additional surfactant or mix with any other agricultural chemicals, herbicide, oils or other materials except as specifically directed on this label.
- MacPhersons GLYPHOSATE 700 Soluble Granular Herbicide is absorbed by plant foliage and green stems. Rainfall soon after application may wash the herbicide off the weeds, particularly if the weeds are not actively growing, under stress or conditions of low light intensity or darkness.
- Delay treatment of plants wet with dew or rain if water droplets run off when plants are disturbed.
- Do not disturb treated weeds by cultivation sowing or grazing for one day after treatment of annual weeds and 7 days for perennial weeds, to ensure herbicide adsorption except where noted.
- A Withholding Period for grazing stock is not required. However, it is recommended that grazing of treated plants be delayed (as recommended above) to ensure herbicide adsorption. Certain plants such as, Soursob, St John's Wort and Bracken, may be naturally toxic to stock. Where known toxic plants are present, grazing should be delayed until complete browning of treated plants has occurred.

PROTECTION OF CROP, NATIVE AND OTHER NON-TARGET PLANTS

Avoid contact with foliage, green stems or fruit of crops, desirable plants and trees, since severe injury or destruction may result. 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 WILDLIFE, FISH, CRUSTACEANS AND ENVIRONMENT

Do NOT contaminate dams, rivers or streams with the product or used container. Do NOT apply to weeds growing in or over water. Do NOT spray across open bodies of water.

STORAGE AND DISPOSAL

Store in the closed, original container in a dry, cool, well-ventilated area out of direct sunlight. Do not contaminate seed, feed or foodstuff. Shake empty bag into spray tank. Do not dispose of undiluted chemicals on site. Puncture or shred and bury empty containers in a local landfill. If no landfill is available, bury the containers below 500 mm 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.

SAFETY DIRECTIONS

Harmful if swallowed. Will damage eyes and will irritate the skin. Avoid contact with eyes and skin. When opening the container and preparing the product for use wear elbow-length PVC gloves and goggles. 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, goggles and contaminated clothing.

FIRST AID

If poisoning occurs, contact a doctor or Poisons Information Centre. **Phone Australia 131126.**

MATERIAL SAFETY DATA SHEET

Additional information is listed in the Material Safety Data Sheet which can be obtained from the supplier.

APVMA Approval No: 61850/0507

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