

READ SAFETY DIRECTIONS BEFORE OPENING OR USING



Metsulfuron 600

HERBICIDE

ACTIVE CONSTITUENT: 600 g/kg METSULFURON-METHYL

GROUP B HERBICIDE

For the control of certain broadleaf weeds in winter cereals, certain brush and broadleaf species in commercial and industrial areas, native pastures and rights of way, and certain broadleaf weeds in grass pastures and pasture renovations as per the Directions for Use

IMPORTANT: Read the attached booklet before use

500 g NET

Syngenta Crop Protection Pty Limited
Level 1, 2-4 Lyon Park Road, North Ryde NSW 2113

In a transport emergency dial 000, Police or Fire Brigade
For specialist advice in an emergency only, call 1800 033 111 (24 hours)

APVMA Approval No: 61500/500/0107
Item number
UN-Free

The Syngenta logo, consisting of a stylized, flowing black and white wave shape that curves upwards from left to right. The word "syngenta" is written in a lowercase, sans-serif font below the wave, followed by a registered trademark symbol (®).

syngenta®

STORAGE AND DISPOSAL

Keep out of reach of children. Store in the closed, original container in a dry, cool, well ventilated area out of direct sunlight. 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 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

May irritate the eyes and skin. Avoid contact with eyes and skin. DO NOT inhale dust or spray mist. After use and before eating, drinking or smoking, wash hands, arms and face thoroughly with soap and water.

FIRST AID

If poisoning occurs, contact a doctor or Poisons Information Centre. Phone 131 126.

MATERIAL SAFETY DATA SHEET

If additional hazard information is required, refer to the Material Safety Data Sheet. For a copy visit our website at www.syngenta.com.au

MANUFACTURER'S WARRANTY AND EXCLUSION OF LIABILITY

Syngenta has no control over storage, handling and manner of use of this product. Where this material is not stored, handled or used correctly and in accordance with directions, no express or implied representations or warranties concerning this product (other than non-excludable statutory warranties) will apply. Syngenta accepts no liability for any loss or damage arising from incorrect storage, handling or use.

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Batch Number	
Date of Manufacture	

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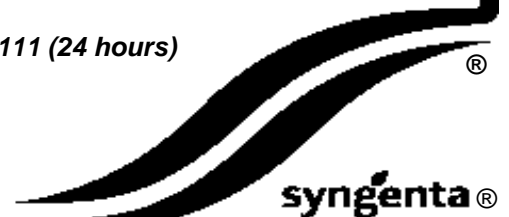


Table of Contents

BROADACRE APPLICATION	5
Directions For Use	5
Restraints	5
INNOVA METSULFURON 600 only	5
Post Crop and Weed Emergence by Ground and Aerial Application	
Tank Mixes	8
Post Crop and Weed Emergence by Ground and Aerial Application	
Tank Mix with Glyphosate	11
Fallow / Preplant Knockdown Weed Control	
Tank Mix with Glyphosate (540 g/L)	12
Chickpea Dessication and Knockdown Weed Control	
Withholding Periods	12
General Instructions	12
Crop Safety	13
Surfactant/Wetting Agent	13
Mixing	13
Compatibility	13
Application	14
Sprayer Cleanup	14
Crop Rotation	14
BRUSH APPLICATION	16
Directions For Use	16
Restraints	16
Ground Application for Control of Brush and Herbaceous Weeds in Commercial and Industrial Areas, Native Pastures and Rights of Way	16
Tank Mixes with Glyphosate (360 g/L)	19
Ground Application (Handgun Only) for Control of Brush and Herbaceous Weeds in Commercial and Industrial Areas, Native Pastures and Rights of Way	
Ground Application for Control of Certain Broadleaf Weeds in Tolerant Grass Pastures or in Pasture Renovation	20
Aerial Application by Helicopter	21
Withholding Period	21
General Instructions	21
Brush and Herbaceous Weed Control	21
Pasture or Pasture Renovation	22
Wetting Agents/Surfactants	22
Mixing	22
Compatibility	22
Application	22
Sprayer Cleanup	23
Crop Rotation	23
RESISTANT WEEDS WARNING	24
PROTECTION OF CROPS, NATIVE AND OTHER NON TARGET PLANTS	24
PROTECTION OF LIVESTOCK	24
PROTECTION OF WILDLIFE, FISH, CRUSTACEANS, ENVIRONMENT AND OTHERS	24
STORAGE AND DISPOSAL	24
SAFETY DIRECTIONS	24
FIRST AID	24
MATERIAL SAFETY DATA SHEET	25
MANUFACTURER'S WARRANTY AND EXCLUSION OF LIABILITY	25

BROADACRE APPLICATION

DIRECTIONS FOR USE

Restrains

DO NOT apply before the 3 leaf stage of the crop when used for post-emergent weed control

DO NOT apply to crops under stress

DO NOT apply if rainfall is expected within 2 hours

DO NOT use on furrow or flood irrigated crops

DO NOT store a suspension of INNOVA METSULFURON 600 for more than 2 days otherwise significant breakdown will occur

DO NOT store tank mixes of INNOVA METSULFURON 600

INNOVA METSULFURON 600 ONLY POST CROP AND WEED EMERGENCE BY GROUND AND AERIAL APPLICATION					
Crops	Weeds	State	Rate g/ha	Critical Comments	
Barley, Cereal Rye, Triticale, Wheat				All Weeds Where 2 rates are specified, use the higher rate for larger weeds and/or heavy infestations. Where weed growth stage is not specified, apply when weeds are small, ie no larger than 5 cm in height or diameter and actively growing. Refer to General Instructions and Crop Safety for further application instructions.	
	African Turnip Weed (<i>Sisymbrium thellungii</i>)	Qld only	5	Apply before weeds are at 6 leaf stage.	
	Amsinckia / Yellow Burweed (<i>Amsinckia</i> spp)	NSW, Vic, Tas, SA only	5 or 7	-	
		WA only	5		
	Ball Mustard (<i>Neslia paniculate</i>)	SA only	5		
	Boggabri Weed / Dwarf Amaranth (<i>Amaranthus macrocarpus</i>)	Qld only	7	Apply from cotyledon to 10 cm height or diameter stage.	
	Calomba Daisy (<i>Pentzia suffruticosa</i>)	SA only	5	-	
	Cape Tulip (<i>Homeria</i> spp)	NSW, Vic, Tas, SA, WA only			
	Charlock (<i>Sinapsis arvensis</i>)	NSW, Vic, Tas, SA only			
	Chickpeas (Volunteer) (<i>Cicer arietinum</i>)	Qld, NSW, Vic, SA only			
	Chickweed (<i>Stellaria media</i>)	NSW, Vic, Tas, SA only			
	Chicory (<i>Cichorium intybus</i>)	Qld only			
	Clover (Subterranean) (<i>Trifolium subterraneum</i>)	All States			
	Common Sowthistle (<i>Sonchus oleraceus</i>)	Qld, NSW, Vic, Tas only			Apply up to 4 leaf stage.
	Cutleaf Mignonette (<i>Reseda lutea</i>)	Tas, SA only			7
Deadnettle (<i>Lamium amplexicaule</i>)	All States	5			-
Denseflower Fumitory (<i>Fumaria densiflora</i>)	NSW, SA only				

INNOVA METSULFURON 600 ONLY POST CROP AND WEED EMERGENCE BY GROUND AND AERIAL APPLICATION <i>continued</i>				
Crops	Weeds	State	Rate g/ha	Critical Comments
Barley, Cereal Rye, Triticale, Wheat				All Weeds Where 2 rates are specified, use the higher rate for larger weeds and/or heavy infestations. Where weed growth stage is not specified, apply when weeds are small, ie no larger than 5 cm in height or diameter and actively growing. Refer to General Instructions and Crop Safety for further application instructions.
	Dock (Broadleaf) (<i>Rumex obtusifolius</i>)	Qld, NSW, Vic, Tas, SA only	5 or 7	-
		WA only	5	
	Faba Beans (<i>Vicia faba</i>)	Vic, SA only	5	Apply after 3 node stage.
	Field Peas (<i>Pisum sativum</i>)	NSW only	7	
		Vic, SA, Tas, WA only	5	
	Hare's Ear / Treacle Mustard (<i>Conringia orientalis</i>)	Vic only	5	Apply before 5 leaf stage.
	Hogweed / Wireweed (<i>Polygonum aviculare</i>)	Qld only	7	Apply when weeds are cotyledon to 3 leaf stage.
		NSW, Vic, Tas, SA only	5 or 7	Use the higher rate when weed populations are dense and majority of weeds are at 4 leaf stage.
		WA only	5	Apply before 4 leaf stage.
	Indian Hedge Mustard (<i>Sisymbrium orientale</i>)	All States	5	Heavy populations and/or those suffering cold or moisture stress may not be completely controlled, a tank mix with MCPA ester (500 g/L) is recommended.
	Lincoln Weed (<i>Diplotaxis tenuifolia</i>)	SA only	7	Apply to actively growing plants from late winter to spring. Plants emerging after spraying may not be controlled.
	Lupins (<i>Lupinus albus</i>)	NSW, Vic, SA, WA only	5	-
	Mallee Catchfly (<i>Silene apetala</i>)	SA only		
	Medic (<i>Medicago</i> spp)	All States		
	New Zealand Spinach (<i>Tetragonia tetragonoides</i>)	Qld only	7	Apply before 4 leaf stage.
	Parthenium Weed (<i>Parthenium hysterophorus</i>)		5 or 7	Use lower rate up to 4 leaf stage. Use higher rate from 4 leaf to rosette stage.
	Paterson's Curse / Salvation Jane (<i>Echium plantagineum</i>)	NSW, SA only	5 or 7	-
		Tas, WA only	5	
	Prickly Lettuce (<i>Lactuca serriola</i>)	Qld, Vic, Tas, SA only	5 or 7	-
WA only		5		
Red Pigweed (<i>Portulaca oleracea</i>)	Qld only	5 or 7	Use lower rate before 6 leaf stage. Use higher rate when weed population is dense and majority are at 6 leaf stage.	
Rough Poppy (<i>Papaver hybridum</i>)	NSW, Vic Tas, SA only	5	-	
Saltbush (<i>Atriplex Muelleri</i>)	Qld only	5 or 7	Use lower rate up to 4 leaf stage. Use higher rate from 4 to 6 leaf stage.	

INNOVA METSULFURON 600 ONLY				
POST CROP AND WEED EMERGENCE BY GROUND AND AERIAL APPLICATION <i>continued</i>				
Crops	Weeds	State	Rate g/ha	Critical Comments
Barley, Cereal Rye, Triticale, Wheat				All Weeds Where 2 rates are specified, use the higher rate for larger weeds and/or heavy infestations. Where weed growth stage is not specified, apply when weeds are small, ie no larger than 5 cm in height or diameter and actively growing. Refer to General Instructions and Crop Safety for further application instructions.
	Shepherd's Purse (<i>Capsella bursa-pastoris</i>)	NSW, Vic, Tas, SA only	5	-
	Skeleton Weed (<i>Chondrilla juncea</i>) (suppression only)	NSW, Vic, SA only	7	Some regeneration from underground rootstocks and new germinations may occur late in season. Spray after majority have emerged and are actively growing.
		WA only	5	
	Slender Celery (<i>Apium leptophyllum</i>)	Qld only		
	Smallflower Fumitory (<i>Fumaria parviflora</i>)	SA only		
	Sorrel (<i>Rumex acetoxella</i>)	NSW, Vic, Tas, SA, WA only		
	Soursob (<i>Oxalis pes-caprae</i>)			
	Spiny Emex / Doublegee / Threecornered Jack (<i>Emex australis</i>)	Qld, NSW, Vic, Tas, SA only	5 or 7	-
		WA only	5	
	Stagger Weed (<i>Stachys arvensis</i>)	All States		
	Stocksbill / Wild Geranium (<i>Erodium</i> spp)	Vic, Tas, SA, WA only		
	Turnip Weed (<i>Rapistrum rugosum</i>)	All States		
	Volunteer Sunflower (<i>Helianthus annuus</i>)	Qld only	5 or 7	Use lower rate from cotyledon to 4 leaf stage. Use higher rate from 4 to 8 leaf stage.
		NSW only	7	Apply from cotyledon to 8 leaf stage.
	Wild/Crow Garlic (<i>Allium vineale</i>)	Vic, Tas only		Apply at 1 to 2 leaf stage.
Wild Turnip (<i>Brassica tournefortii</i>)	All States	5	-	

TANK MIXES POST CROP AND WEED EMERGENCE BY GROUND AND AERIAL APPLICATION					
Crops	Weeds	State	Rate g/ha	Crop Growth Stage at Application	Critical Comments
	For control of weeds in addition to those listed above, the following mixtures with their appropriate timings are recommended				
Barley, Cereal Rye, Triticale, Wheat	Capeweed (<i>Arctotheca calendula</i>), Wild Radish (<i>Raphanus raphanistrum</i>)	NSW, Vic, only	5 g plus 500 mL diuron (500 g/L) plus 500 mL MCPA amine (500 g/L)	NSW only: 3 to 5 leaf (Growth stage (GS) 13– 15) Vic only: 5 leaf (GS 15)	DO NOT apply to Kamilaroi, Shortim or Olympic Wheat. Apply when weeds are at 2 to 5 leaf stage.
		SA only	5 g plus 500 mL diuron (500 g/L) plus 350 mL MCPA amine (500 g/L)	3 to 5 leaf (GS 13–15)	
		WA only	5 g plus 350 mL diuron (500 g/L) plus 400 mL MCPA amine (500 g/L)	3 to 4 leaf (GS 13-14)	
Barley, Wheat	Capeweed (<i>Arctotheca calendula</i>)		5 g plus 550 mL terbutryn plus 600 mL MCPA amine (500 g/L)	3 leaf to early tillering (GS 13- 21)	Apply when weeds are at 2 to 6 leaf stage.
			5 g plus 1.4 L bromoxynil+MCPA ester (200+200 g/L)	3 leaf to fully tillered	Apply when weeds are up to 6 leaf stage.
			5 g plus 2 L bromoxynil+MCPA ester (200+200 g/L)	Qld: Early tillering to fully tillered NSW, Vic, Tas, SA only: 5 leaf to fully tillered	Apply when weeds are at 6 to 8 leaf stage.
		NSW only	5 g plus 850 mL terbutryn	3 leaf to early tillering (GS 13- 21)	Apply when weeds are at 2 to 6 leaf stage.
		NSW, Vic, SA, WA only	5 g plus 1 L terbutryn+MCPA (275+160 g/L)	3 to 5 leaf (GS 13-15)	Spray actively growing weeds at 2 to 6 leaf stage.
	SA only	5 g plus 550 mL terbutryn	3 leaf to early tillering (GS 13- 21)	Apply when weeds are at 2 to 6 leaf stage.	

TANK MIXES					
POST CROP AND WEED EMERGENCE BY GROUND AND AERIAL APPLICATION <i>continued</i>					
Crops	Weeds	State	Rate g/ha	Crop Growth Stage at Application	Critical Comments
	For control of weeds in addition to those listed above, the following mixtures with their appropriate timings are recommended				
Barley, Wheat	Capeweed (<i>Arctotheca calendula</i>)	WA only	5 g plus 750 mL bromoxynil+MCPA ester (200+200 g/L)	3 leaf to fully tillered	Refer to Mixing in General Instructions for mixing instructions.
			5 g plus 1.4 L bromoxynil+MCPA ester (200+200 g/L)		Apply when weeds are up to 6 leaf stage.
Barley, Cereal Rye, Triticale, Wheat	Wild Radish (<i>Raphanus raphanistrum</i>)	Qld only	5 g plus 700 mL to 1 L MCPA amine (500 g/L)	Early tillering to before boot (GS 21-39)	Use lower rate on seedling weeds (3 to 6 leaf stage) and higher rate on well developed weeds up to rosette stage.
		NSW only		Use lower rate after 5 leaf stage. Use higher rate after first node can be felt at base of tiller and before swelling of head can be felt in tiller	
		NSW, Vic, Tas, SA, WA only	5 g plus 1 to 1.6 L MCPA ester (500 g/L)	5 leaf to commencement of flag leaf (GS 15-37)	Apply to weeds up to 2 to 3 leaf stage.
		SA only	5 g plus 1.4 L MCPA amine (500 g/L)	Early tillering to before boot (GS 21-39)	Apply to weeds from seedling to rosette stage.
		WA only	5 g plus 1.2 L MCPA amine (500 g/L)	5 leaf to tillering (GS 15-30)	
		Barley, Wheat			5 g plus 250 mL MCPA ester+diflufenican (250+25 g/L)

TANK MIXES					
POST CROP AND WEED EMERGENCE BY GROUND AND AERIAL APPLICATION <i>continued</i>					
Crops	Weeds	State	Rate g/ha	Crop Growth Stage at Application	Critical Comments
	For control of weeds in addition to those listed above, the following mixtures with their appropriate timings are recommended				
Barley, Cereal Rye, Triticale, Wheat	Saffron Thistle (<i>Carthamus lanatus</i>)	Qld only	5 g plus 1.4 to 2.1 L MCPA amine (500 g/L)	Early tillering to before boot (GS 21-39). Use rates of MCPA amine above 1.5 L/ha only on crops from mid tillering to before boot stage (GS 23-29)	Apply to weeds at seedling to rosette stage. Use lower rate on seedling weeds and higher rate on well developed weeds.
		NSW, Vic, Tas, SA, WA only	5 g plus 1.1 to 1.6 L MCPA ester (500 g/L)	5 leaf to start of flag leaf (GS 15-37)	Apply to young rosettes before leaves become spiny.
			5 g plus 300 mL clopyralid (300 g/L)	4 to 5 leaf stage (GS 14-15)	Spray when weeds are young and actively growing. DO NOT apply clopyralid to a cereal crop if field peas are to be sown the following season unless the cereal stubble is burnt.
	Variegated Thistle (<i>Silybum marianum</i>)	Qld only	5 g plus 1.1 L 2,4-D amine (500 g/L)	Mid tillering to before boot (GS 23-39)	Apply to weeds from seedling to rosette stage.
			5 g plus 1.5 L MCPA amine (500 g/L)	Early tillering to before boot (GS 21-39)	
		NSW only	5 g plus 700 mL to 1.7 L 2,4-D amine (500 g/L)	Apply after first node can be felt at base of tiller and before swelling of head can be felt in tiller	Apply to weeds from seedling to rosette stage. Use lower rate on seedling weeds and higher rate on well developed weeds.
NSW, Vic, Tas, SA, WA only		5 g plus 840 mL to 1.1 L MCPA ester (500 g/L)	Apply from 5 leaf to start of flag leaf (GS 15-37)	Spray weeds at pre-cabbage stage.	
Tas only		5 g plus 1.5 L 2,4-D amine (500 g/L)	5 leaf to early tillering (GS 15-21)	Apply to weeds from seedling to rosette stage. Note: 2,4-D can only be applied from 15 April to 15 September to minimise damage to grapevines through spray or vapour drift, unless otherwise permitted by the Registrar of Chemical Products.	

TANK MIXES					
POST CROP AND WEED EMERGENCE BY GROUND AND AERIAL APPLICATION <i>continued</i>					
Crops	Weeds	State	Rate g/ha	Crop Growth Stage at Application	Critical Comments
	For control of weeds in addition to those listed above, the following mixtures with their appropriate timings are recommended				
Barley, Cereal Rye, Triticale, Wheat	Slender Thistle (<i>Carduus tenuiflorus</i>)	NSW only	5 g plus 1 to 1.7 L 2,4-D amine (500 g/L)	Apply after the first node can be felt at the base of the tiller and before swelling of the head can be felt in the tiller	Apply to weeds at seedling to rosette stage. Use the lower rate on seedling weeds and the higher rate on well developed weeds.
	Slender Thistles (<i>Carduus tenuiflorus</i> , <i>Carduus pycnocephalus</i>)	Tas only	5 g plus 1.7 L 2,4-D amine (500 g/L)	5 leaf to early tillering (GS 15-21)	Apply to weeds at seedling to young rosette stage. Note: 2,4-D can only be applied from 15 April to 15 September to minimise damage to grapevines through spray or vapour drift, unless otherwise permitted by the Registrar of Chemical Products.
Wheat	Slender Thistle (<i>Carduus tenuiflorus</i>)	NSW, Vic, Tas, SA, WA only	5 g plus 2.1 L MCPA ester (500 g/L)	Apply from 5 leaf to start of flag leaf (GS 15-37)	Moderately susceptible. Spray young rosettes.
Barley, Triticale, Wheat	Climbing Buckwheat/ Black Bindweed (<i>Polygonum convolvulus</i>)	Qld, NSW only	5 to 7 g plus 1 L MCPA+picloram (420+26 g/L)	Apply from early tillering (4 to 5 leaves on main shoot plus 2 or more new tillers formed) to start of jointing (first node)	For best control apply to weeds at early tillering as this weed becomes increasingly difficult to control as it becomes larger.

TANK MIX WITH GLYPHOSATE					
FALLOW / PREPLANT KNOCKDOWN WEED CONTROL					
Crops	Weeds	State	Rate g/ha	Critical Comments	
Canola designated Imidazolinone herbicide tolerant canola varieties only, such as Pioneer* 44C73 and 45C75, Wheat	For weeds controlled and their recommended growth stage at application refer to first table, INNOVA METSULFURON 600 only, Post Crop and Weed Emergence by Ground and Aerial Application, and Glyphosate Directions for Use	All States except WA	5 or 7 g plus glyphosate at label rates	DO NOT apply less than 10 days prior to sowing as crop injury may occur, particularly under dry, cold conditions. Apply when weeds are actively growing. Refer to General Instructions and Critical Comments of the respective labels. Use the appropriate rate of each product for the target weed spectrum.	
		WA only	5 g plus glyphosate at label rates		
Barley, Cereal Rye, Triticale		All States except WA	5 or 7 g plus glyphosate at label rates	DO NOT apply less than 6 weeks prior to sowing as crop injury may occur, particularly under dry, cold conditions. Apply when weeds are actively growing. Refer to General Instructions and Critical Comments of the respective labels. Use the appropriate rate of each product for the target weed spectrum.	
		WA only	5 g plus glyphosate at label rates		

TANK MIX WITH GLYPHOSATE (540 g/L) CHICKPEA DESSICATION AND KNOCKDOWN WEED CONTROL				
Crops	Weeds	State	Rate g/ha	Critical Comments
Chickpeas pre-harvest application as a crop desiccant and for knockdown weed control (Application to crops intended for seed production or for sprouting may reduce germination percentage to commercially unacceptable levels)	For weeds controlled and their recommended growth stage at application refer to first table, INNOVA METSULFURON 600 only, Post Crop and Weed Emergence by Ground and Aerial Application, and Glyphosate (540 g/L) Directions for Use	All States	5 g plus 500 mL to 1.1 L glyphosate present as the potassium salt (540 g/L)	Apply when chickpeas are physiologically mature and less than 15% of green pods are present. Use higher rates of glyphosate (540 g/L) when crops or weeds are dense and where faster desiccation is required. Speed of desiccation is dependant on crop stage, growing conditions and weather conditions during and after application. This use should be part of an Integrated Weed Management Strategy that incorporates herbicides with different modes of action and alternative cultural weed practices.

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

WITHHOLDING PERIODS

Harvest

INNOVA METSULFURON 600 alone and in all nominated tank mixes except glyphosate (540 g/L)

***Barley, Cereal Rye, Triticale, Wheat:* NOT REQUIRED WHEN USED AS DIRECTED**

Tank mixed with glyphosate (540 g/L)

***Chickpeas:* DO NOT HARVEST FOR 7 DAYS AFTER APPLICATION**

Grazing

Tank mixes with bromoxynil+MCPA

***Barley, Cereal Rye, Triticale, Wheat:* DO NOT GRAZE OR CUT FOR STOCK FOOD FOR 14 DAYS AFTER APPLICATION**

Tank mixes with 2,4-D, MCPA

***Barley, Cereal Rye, Triticale, Wheat:* DO NOT GRAZE OR CUT FOR STOCK FOOD FOR 7 DAYS AFTER APPLICATION**

Tank mixes with MCPA+picloram

***Barley, triticale, wheat:* DO NOT GRAZE OR CUT FOR STOCK FOOD FOR 7 DAYS AFTER APPLICATION**

Tank mixes with diflufenican+MCPA, terbutryn

***Barley, wheat:* DO NOT GRAZE OR CUT FOR STOCK FOOD FOR 7 DAYS AFTER APPLICATION**

Tank mixes with glyphosate (540 g/L)

***Chickpeas:* DO NOT GRAZE OR CUT FOR STOCK FOOD FOR 7 DAYS AFTER APPLICATION**

Tank mixed with MCPA+terbutryn

***Barley, Wheat:* DO NOT GRAZE OR CUT FOR STOCK FOOD FOR 7 DAYS AFTER APPLICATION**

INNOVA METSULFURON 600 alone and in a tank mix with clopyralid or diuron

***Barley, Cereal Rye, Triticale, Wheat:* NOT REQUIRED WHEN USED AS DIRECTED**

Tank mixes with glyphosate

***Fallow/preplant:* NOT REQUIRED WHEN USED AS DIRECTED**

GENERAL INSTRUCTIONS

Apply early post crop emergence (3 leaf to before booting) when weeds are small (ie no greater than 5 cm in height or diameter) and actively growing.

Best weed control is obtained when rainfall wets the soil to a depth of 5 to 7.5 cm within 4 weeks of application.

Where treatment is delayed or where weeds are not actively growing due to adverse conditions, results may be slow to appear and weeds may be only stunted or suppressed (eg Indian Hedge Mustard).

INNOVA METSULFURON 600 will remain in the soil for a period of time (refer to Crop Rotation). The persistence of this product in the soil is dependent on various environmental conditions such as soil pH, temperature, soil moisture and organic matter. Wet, warm, acid soils high in organic matter favour breakdown of INNOVA METSULFURON 600 in the soil. It should be noted that this product does NOT provide a commercially acceptable level of soil residual weed control.

Crops other than barley, cereal rye, triticale and wheat may be extremely sensitive to low concentrations of INNOVA METSULFURON 600 residues in the sprayer or in the soil. Refer to Crop Rotation and Sprayer Cleanup.

The recommendation of the addition of INNOVA METSULFURON 600 to glyphosate as a pre-plant knockdown is to enhance the control of certain broadleaf weeds (eg Clover, Doublegee, Erodium, Medic Sorrel and Soursob) and to help prevent (or at least minimise) the risk of resistant weeds occurring. Its purpose is not to provide residual control of weeds.

Crop Safety

DO NOT use in winter cereal crops undersown with legume pasture species eg Clovers, Medics.

Care should be taken if it is intended to apply INNOVA METSULFURON 600 in the same season to a crop already treated with another sulfonylurea cereal herbicide, as crop damage may occur. Consult your local agronomist or Syngenta representative.

DO NOT apply another sulfonylurea cereal herbicide in a tank mix with INNOVA METSULFURON 600 as a pre-plant application.

Use of this product on land having a soil pH of 5.5 or less may result in some crop retardation, particularly if the crop is stressed, see comment below.

DO NOT apply to crops that are stressed by any cause (such as severe weather conditions, drought, waterlogging, excessive soil acidity or alkalinity, poor nutrient status, disease, nematode or insect damage) as crop injury may result. When treatment is followed by severe stress (such as drought, prolonged cold, waterlogging or frosty conditions) crop yellowing and growth retardation may occur. Crops normally recover without loss in yield. Disease, nematode or insect damage following application may also result in crop injury.

DO NOT apply to wheat varieties King, Jacup, Miling and Harrier.

Consult your local Syngenta representative or local Department of Agriculture or Primary Industries for latest information relating to variety tolerance to INNOVA METSULFURON 600.

Surfactant/Wetting Agent

Always add a non-ionic surfactant (1,000 g active constituent/L) at 100 mL/100 L of final spray volume (0.1 % volume/volume). The use of spraying oils is NOT recommended.

DO NOT add a surfactant/wetting agent when INNOVA METSULFURON 600 is tank mixed with diuron, metribuzin, terbutryn or with fertiliser solutions.

Mixing

INNOVA METSULFURON 600 is a dry flowable formulation to be mixed with water and applied as a spray. Partially fill the spray tank with water. Using the measuring cup provided measure the amount of product required for the volume to be sprayed. Add the correct amount of product to the spray tank with the agitation system engaged. Top up to the correct volume with water. The material must be kept in suspension at all times by continuous agitation.

When prepared spray solutions have been allowed to stand, thoroughly reagitrate before using.

In tank mixes INNOVA METSULFURON 600 must be in suspension before adding the companion herbicide or surfactant.

For application of INNOVA METSULFURON 600 in liquid fertiliser, slurry the product in water then thoroughly mix the slurry into the liquid fertiliser. Check compatibility before mixing INNOVA

METSULFURON 600 in fertiliser solutions. DO NOT add a surfactant/wetting agent in these situations.

Compatibility

INNOVA METSULFURON 600 is compatible with the commonly used broadleaf herbicides, 2,4-D, 2,4-D amine, bromoxynil, clopyralid, dicamba, diflufenican, diuron, flumetsulam, fluroxypyr, MCPA amine, MCPA ester, metosulam, metribuzin, picloram and terbutryn, and non-selective glyphosate herbicides.

Vic only: To extend the weed range, add MCPA amine, 2,4-D amine and terbutryn at label rates.

INNOVA METSULFURON 600 is compatible with the commonly used insecticides chlorpyrifos and omethoate. Some increased temporary crop yellowing may occur when this product is applied as a tank mix with these insecticides.

The compatibility of INNOVA METSULFURON 600 with grass herbicides varies between products and weed species (refer to following table). DO NOT mix with diclofop-methyl, diclofop-methyl+fenoxaprop-P-ethyl+mefenpyr-diethyl, flamprop-M-methyl or tralkoxydim.

INNOVA METSULFURON 600 and fenoxaprop-P-ethyl+mefenpyr-diethyl and Topik[®] 240 EC Selective Herbicide are physically compatible, but when these mixtures are used, some reduction in grass weed control can be expected.

Biological Compatibility			
	Wild Oats	Annual Ryegrass	Phalaris
diclofop-methyl	No	No	-
diclofop-methyl+fenoxaprop-P-ethyl+mefenpyr-diethyl	No	No	No
fenoxaprop-P-ethyl+mefenpyr-diethyl	Yes	-	No
flamprop-M-methyl	No	-	-
Topik 240 EC Selective Herbicide	Yes	No	Yes
tralkoxydim	No	No	-

As formulations of other manufacturers' products are beyond the control of Syngenta and water quality varies with location, all mixtures should be tested prior to mixing commercial quantities. Consult your local Syngenta representative for further information or advice.

Application

Boomspray: Use a boomspray properly calibrated to a constant speed and rate of delivery to ensure thorough coverage and a uniform spray pattern. Avoid overlapping and shut off spray booms while starting, turning, slowing or stopping as injury to the crop may result. Apply a minimum of 50 L prepared spray/ha.

Aerial: Apply in a minimum of 20 L/ha water. Application in a higher water volume of 30 L/ha will improve the reliability of weed efficacy. Avoid spraying in still conditions and in winds likely to cause drift onto adjacent sensitive crops or fallow areas likely to be planted to these crops (refer to see Crop Rotation). Turn off spray boom whilst passing over creeks and dams. DO NOT apply when a temperature air inversion is likely to occur. Use of Micronair equipment is not recommended due to greater drift potential.

Sprayer Cleanup

To avoid subsequent injury to crops other than barley, cereal rye, triticale or wheat, remove all traces of INNOVA METSULFURON 600 from mixing and spray equipment immediately after spraying.

1. Wash down exterior of sprayer before flushing tanks, lines, etc.
2. Drain tank, then flush tank, boom and hoses with clean water for a minimum of 10 minutes.
3. Fill the tank with clean water and add 300 mL household chlorine bleach (containing 4 % chlorine)/100 L water. Household bleach should be less than 12 months old and stored away from direct sunlight. Flush through boom and hoses then allow to stand for 15 minutes with agitation engaged, then drain.
4. Repeat step 2.
5. Nozzles, screens, relief valves, dump lines, caps and taps at the end of spray lines, tank lids, flow meters, lines to pressure gauges, external tank indicators, induction hoppers, etc, should be removed/pulled apart and cleaned separately.
6. To remove traces of chlorine bleach, rinse the tank thoroughly with clean water and flush through hoses and boom.

Caution: DO NOT use chlorine bleach with ammonia. All traces of liquid fertiliser containing ammonia, ammonium nitrate or ammonium sulphate must be rinsed with water from the mixing and application equipment before adding chlorine bleach solution. Failure to do so will release a gas with a musty chlorine odour which can cause eye, nose and lung irritation. DO NOT clean equipment in an enclosed area.

Crop Rotation

Land previously treated with INNOVA METSULFURON 600 should not be rotated to crops other than those listed in the table below. Tolerance of other crops (grown through to maturity) should be determined on a small scale before sowing into larger areas.

The INNOVA METSULFURON 600 treated area may be replanted to any of the specified crops after the interval indicated in the following table.

Soil pH ^Δ	Minimum Recropping Interval			
	10 days	6 weeks	9 months	14 months
5.6 to 8.5	Canola (designated Imidiazolinone tolerant Canola varieties only, such as Pioneer 44C73, 45C75 only), Wheat	Barley, Cereal Rye, Triticale	Canola/Rapeseed, Chickpeas, Faba Beans, Lentils, Linseed, Lucerne, Lupins, Medics [#] , Oats, Peas, Safflower, Subterranean Clover [#]	Japanese Millet, Maize, Panorama Millet, Sorghum, Soybeans, Sunflower, White French Millet
8.6 and above	Tolerance of crops (grown through to maturity) should be determined on a small scale in the previous season before sowing into larger areas.			
^Δ Soil pH is to be determined by laboratory analysis using the 1:5, soil water suspension method [#] Involves natural regeneration of medics and subterranean clover				

BRUSH APPLICATION

DIRECTIONS FOR USE

Restraints

- DO NOT treat newly sown pastures as severe damage may occur
- DO NOT use on pasture seed crops
- DO NOT apply to weeds that are under stress or not actively growing
- DO NOT apply if rainfall is expected within 4 hours
- DO NOT store a suspension of INNOVA METSULFURON 600 for more than 2 days otherwise significant breakdown will occur
- DO NOT store tank mix of INNOVA METSULFURON 600 and glyphosate for more than 1 day otherwise significant breakdown may occur
- DO NOT store other tank mixtures of INNOVA METSULFURON 600

GROUND APPLICATION FOR CONTROL OF BRUSH AND HERBACEOUS WEEDS IN COMMERCIAL AND INDUSTRIAL AREAS, NATIVE PASTURES AND RIGHTS OF WAY						
Situation	Weeds	State	Rate			Critical Comments
			Always add a surfactant/wetting agent, refer to Use of Surfactant/Wetting Agent in the General Instructions			
			Boomspray g/ha	Handgun g/100 L	Gas gun g/L	
Commercial and Industrial Areas, Native Pastures will damage legumes in pastures, Rights of Way	Aligator Weed (<i>Alternanthera philoxaroides</i>)	Qld, NSW only	80	10	-	DO NOT apply in aquatic situations. For complete control follow up applications are necessary for at least the next 2 seasons.
	Apple Box (<i>Angophora floribunda</i>), Messmate Stringybark (<i>E obliqua</i>), Peppermint Gum (<i>Eucalyptus radiata</i>), Red Gum (<i>E blakelyi</i>), Yellow Box (<i>E melliodora</i>)	Qld, NSW, SA only	-	10 plus 200 mL organosilicone penetrant/100 L	1 plus 10 mL organosilicone penetrant/5 L	Apply to plants up to 4 m high. Avoid spraying when plants are stressed. Ensure thorough coverage of foliage. Results cannot be guaranteed where suckers originate from large lignotubers.
	Australian Blackthorn (<i>Bursaria spinosa</i>)	Qld, NSW, Vic, Tas only	-	10	-	Apply when bushes are actively growing. Spray to thoroughly wet all foliage but not to cause runoff.
	Bellyache Bush (<i>Jatropha gossypifolia</i>)	Qld only	-	10 plus 200 mL organosilicone penetrant /100 L	-	-
	Bitou Bush / Boneseed (<i>Chrysanthemoides monilifera</i>)	Qld, NSW, Vic, SA only	-	10	1 plus 10 mL organosilicone penetrant/5 L	Spray to thoroughly wet all foliage. Minimise contact of desirable species.
	Blackberry (<i>Rubus</i> spp)	All States	-	10 plus 1 L mineral crop oil/100 L	1 plus 10 mL organosilicone penetrant/5 L	Apply when bushes are actively growing. Spray to thoroughly wet all foliage and canes. Ensure peripheral runners are sprayed. Vic only: Apply between December and April. Tas only: Apply after petal fall. DO NOT apply to bushes carrying mature fruit.

GROUND APPLICATION FOR CONTROL OF BRUSH AND HERBACEOUS WEEDS IN COMMERCIAL AND INDUSTRIAL AREAS, NATIVE PASTURES AND RIGHTS OF WAY <i>continued</i>						
Situation	Weeds	State	Rate			Critical Comments
			Always add a surfactant/wetting agent, refer to Use of Surfactant/Wetting Agent in the General Instructions			
			Boomspray g/ha	Handgun g/100 L	Gas gun g/L	
Commercial and Industrial Areas, Native Pastures will damage legumes in pastures, Rights of Way	Bridal Creeper (<i>Myrisphyllum asparagoides</i>)	SA only	-	5	-	Apply from mid June to late August. Follow up applications over at least 2 seasons will be required for complete control. Use water volumes of 500 to 800 L/ha to minimise the risk of damage to native vegetation.
	Common Bracken (<i>Pteridium esculentum</i>)	All States	60	10	-	Apply after full frond expansion. Spray to thoroughly wet all foliage but not to cause runoff. Avoid spraying when plants are stressed or in conditions of prolonged dry weather when soils are dry. Boomspray: Adjust boom height to ensure correct spray overlap.
	Crofton Weed (<i>Eupatorium adenophorum</i>)	Qld, NSW only	-	15	-	Spray to thoroughly wet all foliage but not to cause runoff. Ensure good spray penetration when bushes are in thickets. Apply to actively growing weeds up to early flowering. Best results are obtained on younger plants. If regrowth occurs, retreat in next growth period.
	Darling Pea (<i>Swainsona</i> spp)	NSW only	10	-	-	Apply in spring.
	Fennel (<i>Foeniculum vulgare</i>)		-	10	-	Apply to actively growing plants.
	Golden Dodder (<i>Cuscuta australis</i>)	Qld, NSW, Vic, SA only	-	1	-	Spot spray to point off runoff at pre-flowering stage. Ensure thorough coverage of infested area.
	Great Mullein (<i>Verbascum thapsus</i>)	NSW only	20 plus 200 mL organosilicone penetrant /100 L	-	-	Apply to rosettes before stem elongation during spring when soil moisture is good. Regrowth may occur if growing conditions are not good.
	Harrisia Cactus (<i>Eriocereus</i> spp)	Qld only	-	20	-	Spray to thoroughly wet using water volumes of 1,000 to 1,500 L/ha. A follow up treatment may be necessary.
	Hawthorn (<i>Crataegus laevigata</i>)	NSW, Vic, Tas only	-	10	-	Apply when bushes are actively growing. Avoid spraying when bushes are stressed. Spray to thoroughly wet all foliage but not to cause runoff.
	Inkweed (<i>Phytolacca octandra</i>)	Qld, NSW only	-	5	-	Spray to thoroughly wet all foliage but not to cause runoff.
	Japanese Sunflower (<i>Tithonia diversifolia</i>)	NSW only	-	10	-	Apply to bushes up to 2.5 m high when actively growing.
Kangaroo Thorn (<i>Acacia paradoxa</i>)	-		-	-		

GROUND APPLICATION FOR CONTROL OF BRUSH AND HERBACEOUS WEEDS IN COMMERCIAL AND INDUSTRIAL AREAS, NATIVE PASTURES AND RIGHTS OF WAY <i>continued</i>						
Situation	Weeds	State	Rate			Critical Comments
			Always add a surfactant/wetting agent, refer to Use of Surfactant/Wetting Agent in the General Instructions			
			Boomspray g/ha	Handgun g/100 L	Gas gun g/L	
Commercial and Industrial Areas, Native Pastures will damage legumes in pastures, Rights of Way	Mistflower (<i>Eupatorium riparium</i>)	Qld, NSW only	-	5	-	Spray to thoroughly wet all foliage but not to cause runoff. Apply to actively growing weeds up to early flowering.
	Noogoora Burr (<i>Xanthium pungens</i>)	NSW only		7.5		Apply to actively growing weeds. Plants under moisture stress will not be controlled.
	Parthenium (<i>Parthenium hysterophorus</i>)	Qld only	7	5		Boomspray (pastures only): Apply up to rosette stage. Spray to thoroughly wet all foliage. Adjust boom height to ensure complete overlap. Handgun: Spray to thoroughly wet all foliage but not to cause runoff.
		NSW only	-			
	Paterson's Curse / Salvation Jane (<i>Echium plantagineum</i>)	All States	15			Boomspray: Spray to thoroughly wet all foliage. Adjust boom height to ensure complete overlap. Handgun: Spray to thoroughly wet all foliage but not to cause runoff. WA only: Spray plants at early flowering stage from August to September.
	Privet (<i>Ligustrum</i> spp)	Qld, NSW only	-	10	1 plus 10 mL organosilicone penetrant/5 L	Apply to bushes up to 3 m in height. Complete foliar coverage is essential for control, partial spray coverage will result in recovery. DO NOT spray when bushes are stressed.
	Ragwort (<i>Senecio jacobaea</i>)	NSW, Vic, Tas only	15	5	-	Apply to actively growing plants from rosette to cabbage stage.
	Rubber Vine (<i>Cryptostegia grandiflora</i>)	Qld only	-	15		Apply to bushes up to 3 m in height. Apply from October to April, ensuring thorough coverage of all foliage and leaders. Incomplete coverage will result in regrowth.
	Smartweed (<i>Polygonum</i> spp)	Qld, NSW only	10	10		Apply to actively growing plants.
	Sweet Briar (<i>Rosa rubiginosa</i>)	NSW, Vic, Tas, SA only	-		1 plus 10 mL organosilicone penetrant/5 L	Apply when bushes are actively growing. Avoid spraying when bushes are stressed, when leaf fall has commenced or after the end of February. Handgun: Spray to thoroughly wet all foliage but not to cause runoff. Vic only: Gasgun: Apply to bushes less than 2 m in height as application to bushes taller than 2 m may produce variable results. Apply with shots of 25 mL of dilute product.
Wait-a-While (<i>Caesalpinia decapetala</i>)	Qld, NSW only				-	
Wild Turnip (<i>Brassica tournefortii</i>)	NSW only		5	-	Apply to actively growing plants.	

TANK MIXES WITH GLYPHOSATE (360 g/L) GROUND APPLICATION (HANDGUN ONLY) FOR CONTROL OF BRUSH AND HERBACEOUS WEEDS IN COMMERCIAL AND INDUSTRIAL AREAS, NATIVE PASTURES AND RIGHTS OF WAY				
Situation	Weeds	State	Rate	Critical Comments
			Handgun g/100 L	
			Always add a surfactant/wetting agent, refer to Use of Surfactant/Wetting Agent in the General Instructions	Refer to glyphosate (360 g/L) label for Directions for Use
Commercial and Industrial Areas, Native Pastures will damage legumes in pastures, Rights of Way	Blackberry (<i>Rubus</i> spp)	All States	10 g plus 200 mL glyphosate (360 g/L)	Apply between January and April when bushes are actively growing. Spray to thoroughly wet all foliage and canes. Ensure peripheral runners are sprayed. Tas only: Apply after petal fall. DO NOT apply to bushes carrying mature fruit.
	Gorse (<i>Ulex europseus</i>)	NSW, Vic, Tas, SA only		Use 200 mL organosilicone penetrant/100 L. Apply to bushes up to 2 m in height. Ensure thorough penetration and coverage of the whole plant.
	Lantana (<i>Lantana camara</i>)	Qld, NSW only		Apply to bushes up to 2 m in height. Spray to thoroughly wet all foliage and stems. Ensure thorough penetration of the bush.
	St John's Wort (<i>Hypericum perforatum</i>)	NSW, Vic, SA, WA only		Add 100 mL non-ionic surfactant /100 L. Spray to thoroughly wet all foliage but not to cause runoff.
	Tree of Heaven (<i>Ailanthus altissima</i>)	NSW only		-

GROUND APPLICATION FOR CONTROL OF CERTAIN BROADLEAF WEEDS IN TOLERANT GRASS PASTURES OR IN PASTURE RENOVATION				
Situation	Weeds	State	Rate g/ha	Critical Comments
			Always add a non-ionic surfactant/wetting agent, refer to Use of Surfactant/Wetting Agent in the General Instructions	
Established Pastures Tolerant Grass Species Perennial phalaris, Perennial Cocksfoot (stands older than 1 year), Pasture Renovation Use in rundown pastures to reduce weeds before sowing a new pasture the following season	Annual Clover (<i>Trifolium</i> spp)	Qld, NSW, Vic, Tas, SA, WA only	5	Apply before flowering.
	Annual Medics (<i>Medicago</i> spp)	NSW, Vic, SA, Tas, WA only		For best results apply before flowering.
	Cape Tulip (<i>Homeria</i> spp) 1 and 2 leaf	NSW, Vic, SA, Tas, WA only		Apply at bulb exhaustion usually during July to early August. Repeat applications may be required to obtain control.
	Docks (<i>Rumex</i> spp)	Qld, NSW, Vic, Tas, SA, WA only	Seedlings: 5 Established: 10	For best results apply in spring prior to bolting.
	Doublegee / Spiny Emex / Three Cornered Jack (<i>Emex australis</i>)	WA only	5 or 10	Apply up to 6 leaf stage. Use higher rate on dense infestations.
	Erodium / Storksbill / Wild Geranium (<i>Erodium</i> spp)	NSW, Vic, SA, Tas only		Apply before flowering. Use higher rate on dense infestations.
	Onion Grass / Guildford Grass (<i>Romulea rosea</i>)	NSW, Vic, Tas, SA, WA only	15	Apply at bulb exhaustion usually from late June to July before onset of browning off caused by <i>Helminthosporium</i> fungus. If mixing with glyphosate use 10 g/ha.
	Paterson's Curse / Salvation Jane (<i>Echium plantagineum</i>)	Qld, NSW, Vic, Tas, SA, WA only	10 or 15 g	Use lower rate on small weeds and higher rate before bolting/flowering.
	Ragwort (<i>Senecio jacobaea</i>)	NSW, Vic, SA, Tas only	15	Apply to actively growing weeds from rosette to cabbage stage.
	Sorrel (<i>Rumex acetosella</i>)	NSW, Vic, SA, Tas, WA only	Seedlings: 5 Established: 10	For best results apply in spring before seed heads appear.
	Soursob (<i>Oxalis pes-caprae</i>)		5 or 10	Apply before flowering for best results. Use higher rate on dense stands.
	Wild Garlic (<i>Allium vineale</i>)		15	Apply at bulb exhaustion usually during July to early August. Repeat application may be required to obtain control.

AERIAL APPLICATION BY HELICOPTER				
Situation	Weeds	State	Rate g/ha	Critical Comments
			Always add a non-ionic surfactant/wetting agent, refer to Use of Surfactant/Wetting Agent in the General Instructions	
Commercial and Industrial Areas, Native Pastures legumes in pastures will be damaged, Rights of Way	Blackberry (<i>Rubus</i> spp)	NSW, Vic, Tas only	160	Apply when bushes are actively growing. Use a minimum 100 L prepared spray/ha. Vic only: Apply between December and April. Tas only: Apply after petal fall. DO NOT apply to bushes bearing mature fruit.
Flood Plains	<i>Mimosa pigra</i>	NT only	50 or 60	Use higher rate when air temperature exceeds 35°C. Apply in a minimum 60 L/ha of clean water. Use D6 or D8 nozzles with 45 swirl plates pressurised at 210 kPa to give a large droplet size. Apply when weeds are actively growing. Avoid spraying when plants are stressed.

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

Always add a non-ionic surfactant/wetting agent, refer to Use of Surfactant/Wetting Agent.

Allow weeds to recover from grazing before application. Docks and Sorrel in particular require fresh leaf growth for adequate uptake of chemical.

Some grasses will be damaged in pasture sprayed with the product and biomass production may be reduced for several months. INNOVA METSULFURON 600 used on established Perennial Phalaris and/or established Perennial Cocksfoot may cause temporary yellowing and some stunting. INNOVA METSULFURON 600 can severely damage introduced grass species. INNOVA METSULFURON 600 does not control or damage Silver Grass (*Vulpia* spp), Barley Grass (*Hordeum* spp), Brome Grass (*Bromus* spp) or Winter Grass (*Poa* spp). All grasses and legumes can be damaged and/or removed by an INNOVA METSULFURON 600/glyphosate mixture. Legumes will be removed from pasture if over sprayed with INNOVA METSULFURON 600.

Some crops are extremely sensitive to low concentrations of this product. Refer to Sprayer Cleanup.

Where treatment is delayed or where weeds are not actively growing due to adverse conditions, results may be slow to appear and weeds may only be stunted or suppressed.

Brush and Herbaceous Weed Control

Apply when bushes/plants are actively growing. Where treatment is delayed or bushes/plants are not actively growing due to adverse conditions, such as a period of prolonged dry weather, or if partial spray coverage occurs, results may be slow to appear and subsequent regrowth may occur. Should regrowth occur, retreatment at the recommended rate is advised.

Retreatment of Blackberries should only be undertaken once regrowth has reached 1 m in height, this may not be until 2 years after the initial application.

For control of bushes previously sprayed with other brush control herbicides or for bushes which may have been burned or slashed, ensure 2 years has elapsed.

Due to the widespread picking of Blackberries by the public, it is recommended that the product is not applied to bushes bearing mature fruit.

Pasture or Pasture Renovation

Sorrel seedling may germinate after the break in the following year, particularly after cultivation.

The ungerminated clover seed bank is not affected by INNOVA METSULFURON 600 application. Clover vigour is often increased in the year following application where seed banks are reasonable. The seed set of clover in the year of application of INNOVA METSULFURON 600 will be significantly reduced particularly from the winter to spring application. This effect may impact on the clover seed bank, therefore, resowing may be necessary. Where clover seed banks are high, resowing is not necessary.

For pasture topping situations a combination of INNOVA METSULFURON 600 plus glyphosate can be used, however, the Crop Rotation recommendations should be observed. Refer to the Directions for Use for each product for the appropriate rate and critical comments for the target weed spectrum.

Wetting Agents/Surfactants

Always add a surfactant/wetting agent.

Bush and Herbaceous Weed Control: If a specific surfactant/wetting agent is not listed in the Directions for Use or when mixing with glyphosate, use a non-ironic surfactant (1,000 g active/L) at 100 mL/100 L final spray volume (ie 0.1% volume/volume).

When an organosilicone penetrant is recommended in the Directions for Use and with all gas gun applications, use 10 mL/5 L or 200 mL/100 L final spray volume (ie 0.2% volume/volume).

When a mineral spray oil is recommended in the Directions for Use, use 1 L/100 L final spray volume (ie 1% volume/volume).

Pasture or Pasture Renovation: Always add a non-ionic surfactant (1,000 g active/L) at 200 mL/100 L final spray volume (0.2% volume/volume).

Mixing

INNOVA METSULFURON 600 is a dry flowable formulation to be mixed with water and applied as a spray. Partially fill the spray tank with water. Using the measuring cup provided measure the amount of product required for the volume to be sprayed. Add the correct amount of product to the spray tank with the agitation system engaged. Top up to the correct volume with water. The material must be kept in suspension at all times by continuous agitation.

When prepared spray solutions have been allowed to stand, thoroughly reagitrate before using.

In tank mixes INNOVA METSULFURON 600 must be in suspension before adding the companion herbicide or surfactant. Before spraying calibrate equipment to determine the quantity of water necessary to uniformly cover the measured area to be treated.

When tank mixing with glyphosate, DO NOT mix in a galvanised steel or unlined steel container. Such tanks can react with glyphosate to produce hydrogen gas, which can form a combustible gas mixture which may explode when ignited.

Compatibility

INNOVA METSULFURON 600 is compatible with the commonly used pasture herbicides 2,4-D amine, clopyralid, dicamba, fluroxypyr, MCPA amine, MCPA ester and the non-selective herbicide glyphosate. It is also compatible with the commonly used pasture insecticides chlorpyrifos and omethoate.

Refer to the label of the other product being mixed with INNOVA METSULFURON 600 and follow any instructions and/or restrictions surrounding use.

Application

Aerial (helicopter only): Apply a minimum of 100 L/ha on Blackberries (*Rubis* spp) or 60 L/ha on *Mimosa pigra* and up to 200 L prepared spray/ha. Higher water volumes may be necessary to ensure adequate control coverage where bushes are large and terrain is steep. Spray with a properly calibrated helicopter using the half overlap opposite pass technique. Avoid spraying in still conditions and where conditions favour temperature inversions. Avoid spraying where drift can move onto crops or areas likely to be planted to crops and non target pastures as injury may occur. Turn off spray booms whilst passing over creeks and dams.

Boomspray: Ensure the boomspray is properly calibrated to a constant speed or rate of delivery to ensure thorough coverage and uniform spray pattern. Adjust the boom height to ensure correct spray overlap. Avoid spraying where drift can move onto crops, areas likely to be planted to crops and non target pastures as injury may occur. Apply in a minimum of 150 L prepared spray/ha. Increase to 200 L prepared spray/ha or more in dense stands. In pasture applications apply a minimum of 70 L prepared spray/ha.

Gas Gun: Ensure thorough coverage of all foliage. The use of a suitable marker dye is recommended.

Handgun: Spray foliage and canes until wet. Ensure coverage is uniform and complete. Use pressures of 550 to 750 kPa (80 to 100 psi) depending on target species and size of bush. Use larger nozzles and higher pressures for larger bushes

- No 4 or 5 nozzles for small individual bushes or broadleaf weeds less than 1 m high
- No 5 or 6 for medium sized bushes 1 to 2 m high
- No 7 or 8 nozzles for large bushes 2 to 3 m high or of a large diameter

Blackberries: Use large nozzle/high pressure for Blackberry regrowth. Spray using a wide cone setting as much as possible. Use even, side-by-side spray pattern moving up from base to the top of the bush as leaves are wet. DO NOT ignore runners to the side or the top of the bush and ensure spray penetrates larger bushes to wet foliage and canes.

Sprayer Cleanup

Remove all traces of INNOVA METSULFURON 600 from mixing and spray equipment immediately after spraying.

1. Drain the tank, then flush tank, boom and hoses with clean water for at least 10 minutes.
2. Fill tank with clean water and add 300 mL of 4% chlorine solution/100 L water. Flush through boom and hoses then allow to stand for 15 minutes with agitator running, then drain.
3. Repeat step 2.
4. Remove nozzles and screens and clean separately.
5. To remove traces of the chlorine bleach, rinse tank thoroughly with clean water and flush through hoses and boom.

DO NOT use chlorine bleach with ammonia. All traces of ammonia, ammonium nitrate, ammonium sulphate and liquid fertiliser must be removed with clean water before adding chlorine bleach. Failure to do this will release a gas with a musty odour which can irritate eyes, nose, throat and lungs. DO NOT clean equipment in an enclosed area.

Crop Rotation

The use of INNOVA METSULFURON 600 may prevent early re-establishment of legumes and grasses after treatment. The period that residues can persist in the soil will vary according to site conditions such as climate, soil pH, presence of soil microorganisms, soil temperature, soil moisture and the rate used.

Breakdown is fastest in warm wet acid soil and slower in cold dry alkaline soils.

INNOVA METSULFURON 600 treated areas may be replanted to any of the specified pasture species after the interval indicated in the following table.

Soil pH ^A	Pasture Species	Rate g/ha	Minimum Rainfall	Minimum Recropping Interval	
5.5 and below	Cocksfoot, Phalaris	5	150 mm	8 weeks	
		10		8 weeks	
		15		16 weeks	
	Haifa White Clover, Sub Clover ^a	5		12 weeks	
		10		20 weeks	
		15		20 weeks	
	Fescue, Perennial Ryegrass	5		100 mm	16 weeks
		10		16 weeks	
		15		150 mm	20 weeks
5.6 to 6.5	Cocksfoot, Phalaris	5	175 mm	12 weeks	
		10		12 weeks	
		15		Bioassay ^b	
	Fescue, Haifa White Clover, Perennial Ryegrass, Sub Clover ^a	Bioassay ^b			
6.6 and above	Bioassay ^b				

^ASoil pH is to be determined by laboratory analysis using 1:5 soil water suspension method. DO NOT replant to any other crop without first consulting a Syngenta representative

^aSub Clover varieties: Junee, Karridale, Seaton Park, Trikkala

^bTolerance of species should be determined on a small scale in the previous season, before sowing commercial areas

For rates higher than 15 g/ha the following applies

- For soils with a pH below 7 (1:5 soil water method) a minimum of 12 months should elapse before over sowing treated areas with grasses or legumes. It is suggested that a small area be oversown 1 to 2 months prior to the planned time to check for possible harmful residues.
- For soils with pH greater than 7 or if planting any other crop. DO NOT replant without first consulting a Syngenta representative.

Resistant Weeds Warning

GROUP B HERBICIDE

INNOVA METSULFURON 600 Herbicide is a member of the sulfonylurea group of herbicides. This product has the inhibitor of the enzyme acetolactate synthase (ALS) mode of action. For weed resistance management, this product is a Group B herbicide. Some naturally occurring weed biotypes resistant to this product and other Group B 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 B herbicides. Some populations of Annual Ryegrass and a few broadleaf weeds are already known to be resistant to INNOVA METSULFURON 600 and other ALS inhibitor herbicides. Since the occurrence of resistant weeds is difficult to detect prior to use, Syngenta Crop Protection Pty Limited accepts no liability for any losses that may result from the failure of this product to control resistant weeds. To prevent, or at least minimise, the risk of resistant weeds occurring, use INNOVA METSULFURON 600 in tank mixes (if appropriate) and/or rotations with other herbicides having different modes of action effective on the same weed species. Large numbers of healthy surviving weeds can be an indication that resistance is developing. Efforts should be taken to prevent seed set of these survivors.

DO NOT make more than 1 application of an ALS inhibitor herbicide to a crop or pasture in any 1 year. If the user suspects that an ALS inhibitor resistant weed is present, INNOVA METSULFURON 600 or other ALS inhibitor herbicides should not be used.

Advice as to strategies and alternative treatments that can be used should be obtained from your local supplier, consultant, local Department of Agriculture, Primary Industries Department or a Syngenta representative.

PROTECTION OF CROPS, NATIVE AND OTHER NON TARGET PLANTS

Injury to or loss of desirable trees or vegetation may result from failure to observe the following:
DO NOT apply, drain or flush equipment on or near native or non target trees, other plants, areas where their roots may extend or in locations where the chemical may be washed or moved into contact with their roots.
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

A nil withholding period is applicable for INNOVA METSULFURON 600. However, it is recommended not to graze treated areas for 2 to 3 days to ensure product efficacy.

PROTECTION OF WILDLIFE, FISH, CRUSTACEANS, ENVIRONMENT AND OTHERS

DO NOT contaminate streams, rivers or waterways with the chemical or used containers.

STORAGE AND DISPOSAL

Keep out of reach of children. Store in the closed, original container in a dry, cool, well ventilated area out of direct sunlight. 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 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

May irritate the eyes and skin. Avoid contact with eyes and skin. DO NOT inhale dust or spray mist. After use and before eating, drinking or smoking, wash hands, arms and face thoroughly with soap and water.

FIRST AID

If poisoning occurs, contact a doctor or Poisons Information Centre. Phone 131 126.

MATERIAL SAFETY DATA SHEET

If additional hazard information is required, refer to the Material Safety Data Sheet. For a copy visit our website at www.syngenta.com.au

MANUFACTURER'S WARRANTY AND EXCLUSION OF LIABILITY

Syngenta has no control over storage, handling and manner of use of this product. Where this material is not stored, handled or used correctly and in accordance with directions, no express or implied representations or warranties concerning this product (other than non-excludable statutory warranties) will apply. Syngenta accepts no liability for any loss or damage arising from incorrect storage, handling or use.

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