blank page

READ SAFETY DIRECTIONS BEFORE OPENING OR USING

Broadblade

HERBICIDE

ACTIVE CONSTITUENT: 800 g/kg FLUMETSULAM

Apparent

GROUP

B HERBICIDE

A water dispersible granule formulation for the post-emergence and salvage control of certain broadleaf weeds in winter cereals (including those undersown with clover, luceme or medics); clover, fenugreek, lathyrus, lucerne, medic, seradella and vetch (Popany only) seed crops and pastures; chickpeas, field peas, lentils, maize, peanuts; and for the pre-emergence control of certain broadleaf weeds in maize, pigeon peas and soybeans as specified in the Directions for Use.

IMPORTANT: Read the attached booklet before use.

APPARENT PTY LTD A.C.N. 143 724 136 Suite G.08 | 762 Toorak Road, Hawthorn East VIC 3123 Australia T +61 3 9822 1321 F +61 3 9817 7845 Eenquiries@aparentag.com.au www.apparentag.com.au

DIRECTIONS FOR USE RESTRAINTS:

DO NOT apply to plants which may be stressed (not actively growing) due to prolonged periods of extreme temperature (less than 5°C or greater than 30°C), moisture stress (water-logged or drought affected), poor nutrition or previous herbicide treatment as reduced levels of control may result.

DO NOT apply to plants which have suffered frosting for extended periods. Allow at least 2 days frost free prior to treatment.

DO NOT apply post-emergence treatments if rain is likely within 4 hours.

DO NOT irrigate (any method) treated crop or pasture for 48 hours after application.

DO NOT apply to crops affected by disease or by previous herbicide treatment (eg triazines or sulfonylureas).

TABLE 1A. CHICKPEAS, FIELD PEAS, LENTILS, FENUGREEK, LATHYRUS, VETCH (POPANY only) AND SERRADELLA

CROP	GROWTH STAGES	CROP TOLERANCE	SPRAY ADDITIVES/TANK MIXES
Chickpeas	4 - 6 branches (no later than 6 weeks after emergence)		DO NOT use any spray additives, or tank mix any other chemicals with Broadblade Herbicide when using on chickpeas or field peas.
Field peas	2 to 6 nodes (no later than 6 weeks after emergence)	Broadblade Herbicide may cause transient crop yellowing and height suppression. On light soils in dry seasons flowering may be delayed resulting in yield suppression.	
Lentils	4 – 8 fully expanded leaves DO NOT apply later than 6 weeks after crop emergence		Uptake* Spraying Oil at 500 mL/100 L or BS-1000* at 200 mL/100 L may be applied with Broadblade to lentlis.
Fenugreek, Lathyrus, Vetch (Popany only)	3 fully expanded leaves onwards		Use Broadblade or Broadblade plus a wetter only. Tank mixtures with other herbicides are not recommended.
Serradella	3 fully expanded leaves onwards		Uptake* Spraying Oil at 500 mL/100 L or BS-1000* at 200 mL/100 L may be applied with Broadblade to serradella.

TABLE 1B. WEEDS CONTROLLED OR SUPPRESSED IN TABLE 1A CROPS

WEED	WEED GR	RATE g/ha	
	Up to Leaf No. or Up to Plant size (cm)		
CONTROLLED			
Amsinckia (Yellow burrweed)	10 leaf	10 cm diameter	25
Ball mustard	6 leaf	5 cm diameter	
Charlock	8 leaf	10 cm diameter	
Indian hedge mustard	6 leaf	5 cm diameter	
Lupins	10 leaf	10 cm high	
Marshmallow (Small flowered mallow)	4 leaf	10 cm diameter	
Pheasant's eye	8 leaf	10 cm diameter	
Shepherd's purse	8 leaf	10 cm diameter	
Three-horned bedstraw	6 whorls	10 cm high	
Turnip weed	8 leaf	5 cm diameter	
Volunteer canola	8 leaf	10 cm diameter	
Ward's weed	8 leaf	10 cm diameter	
Wild turnip	6 leaf	5 cm diameter	
SUPPRESSED			
Capeweed (WA only)	4 leaf	10 cm diameter	25
Doublegee (Spiny emex) (WA only)	4 leaf	10 cm diameter	
Wild radish	4 leaf	5 cm diameter	

TABLE 2A. WHEAT, BARLEY, OATS, TRITICALE, CEREAL RYE (INCLUDING THOSE UNDERSOWN WITH CLOVER, LUCERNE OR MEDICS), CLOVER, LUCERNE AND MEDIC CROPS AND MIXED GRASSES/ LEGUME PASTURES.

CROP/SITUATION	GROWTH STAGES
Wheat	3 leaf until start of jointing
	(Zadoks 13 - 31)

CRITICAL COMMENTS
Where recommended, use of either a wetter or Uptake Spraying Oil with Broadblade will provide better weed control.
Spray charlock as soon as possible after the autumn break. Larger plants and any affected by stress or grazing prior to treatment may re-grow and flower.
Under ideal growing conditions, Broadblade will provide useful suppression of capeweed and doublegee. Best results will be achieved when a pre-emergence herbicide has already been used.
Under ideal growing conditions, Broadblade without an adjuvant will give a biomass reduction of 50% - 70% of wild radish. Surviving plants may flower and set viable seed. Best results will occur with treatment in conditions of >5°C with bright sunny conditions and use of higher water rates of 75 - 100 L/ ha with fine-medium quality spray droplets to get excellent spray coverage.

CROP TOLERANCE	SPRAY ADDITIVES/TANK MIXED
	Always apply with Uptake Spraying Oil at 500 mL/100 L or a 100% concentrate non-ionic wetting agent such as BS-1000 at 200 mL/100 L.

TABLE 2A. WHEAT, BARLEY, OATS, TRITICALE, CEREAL RYE (INCLUDING THOSE UNDERSOWN WITH CLOVER, LUCERNE OR MEDICS), CLOVER, LUCERNE AND MEDIC CROPS AND MIXED GRASSES/LEGUME PASTURES.

GROWTH STAGES	CROP TOLERANCE	SPRAY ADDITIVES/TANK MIXED
Mid-tillering to start of jointing (Zadoks 23 – 31) Apply no earlier than Zadoks 31	Transient stem shortening and crop discolouration may occur, although yields are normally unaffected. Where barley and oats are undersown, a vigorous legume component may lengthen the time needed for the cereal to recover, especially if the cereal is stressed by lack of moisture, trace element deficiency or disease. In severe cases, yields may be suppressed.	Use only with a wetting agent such as BS- 1000 when either applying Broadblade alone or with partner products in barley and oats.
Mid-tillering to start of jointing (Zadoks 23 – 31)		Always apply with Uptake Spraying Oil at 500 mL/100 L or a 100% concentrate non-ionic wetting agent such as BS-1000 at 200 mL/100 L.
2 to 3 trifoliate leaves onwards	Medic, lucerne abd subterranean clover – When Broadblade is applied at 25 g/ha + Uptake or wetter, yield reduction may occur when treating Serena or Paraggio medic or Nungarin sub-clover. D0 N0T apply to lucerne seed crops less than 8 weeks before flowering.	Always apply with Uptake Spraying Oil at 500 mL/100 L or a 100% concentrate non-ionic wetting agent such as BS-1000 at 200 mL/100 L. In lucerne D0 NOT use with MCPA . In medics D0 NOT use with MCPA .
4 trifoliate leaves onwards	Use the 50 g/ha rate in grazing lucerne only. DO NOT apply at 50 g/ha to lucerne used for seed production.	
2 to 3 trifoliate leaves onwards (see Crop Tolerance)		Use Uptake Spraying Oil at 500 mL/100 L.
Flowering (anthesis) to early dough (Zadoks 61 – 83)	Do not use more than 25 g/ha.	
Advanced seedling or re-growth after cutting or grazing.		
	Mid-tillering to start of jointing (Zadoks 23 – 31) Apply no earlier than Zadoks 31 Mid-tillering to start of jointing (Zadoks 23 – 31) 2 to 3 trifoliate leaves onwards 4 trifoliate leaves onwards 2 to 3 trifoliate leaves onwards (see Crop Tolerance) Flowering (anthesis) to early dough (Zadoks 61 – 83)	Mid-tillering to start of jointing (Zadoks 23 – 31) Apply no earlier than Zadoks 31 Transient stem shortening and crop discolouration may occur, although yields are normally unaffected. Where barley and cats are underscown, a vigorous Bigume component may lengthen the time needed for the cereal to recover, especially if the cereal is stressed by lack of molistic recover, especially if the cereal is stressed by lack of molistic recover, especially if the cereal is stressed by lack of molistic recover, especially if the cereal is stressed by lack of molistic recover, especially if the cereal is stressed by lack of molistic recover, especially if the cereal is stressed by lack of molistic recover, especially if the cereal is stressed by lack of molistic recover, especially if the cereal is stressed by lack of molistic recover, especially if the cereal is stressed by lack of molistic recover, especially if the cereal is stressed by lack of molistic recover, especially if the cereal is stressed by lack of molistic recover, especially if the cereal is stressed by lack of molistic recover, especially if the cereal is stressed by lack of molistic recover, especially if the cereal is stressed by lack of molistic recover. 2 to 3 trifoliate leaves onwards Medic, lucerne abd subterranean clover – When Broadblade is applied at 25 g/ha + Uptake or wetter, yield reduction may occur when treating Serena or Paraggio medic or Nungarin sub-clover. 4 trifoliate leaves onwards (see Crop Tolerance) Use the 50 g/ha rate in grazing lucerne only. D0 NOT apply at 50 g/ha to lucerne used for seed production. Flowering (anthesis) to early dough (Zadoks 61 – 83) Do not use more than 25 g/ha.

TABLE 2B. WEEDS CONTROLLLED IN TABLE 2A CROPS

WEED	WEED GROWTH STAGE		RATE g/ha
	Up to Leaf No. or	Up to Plant size (cm)	
Amsinckia (Yellow burrweed)	10 leaf	10 cm diameter	25 + Uptake or wetter
Ball mustard	6 leaf	5 cm diameter	

CRITICAL COMMENTS

TABLE 2B. WEEDS CONTROLLED IN TABLE 2A CROPS continued

WEED	WEED GR	OWTH STAGE	RATE g/ha	CRITICAL COMMENTS
	Up to Leaf No. or	Up to Plant size (cm)		
Buchan weed	8 leaf	10 cm diameter	Lucerne and/or clover only	
			25 + wetter + 1.5 - 2.5 L/ ha 2.4-DB (500 g/L)	
			Grazing lucerne only	Use the 50 g/ha rate in grazing lucerne only and apply from 4 trifoliate leaves onwards. DO NOT apply a
			50 + Uptake or wetter	50 g/ha to lucerne used for seed production.
Calepina (White ball mustard)	8 leaf	10 cm diameter	25 + Uptake or wetter	
Capeweed	4 leaf	10 cm diameter	25 + Uptake or wetter + 700 mL/ha bromoxynil (200 g/L)	Optimum results are obtained in a competitive pasture. For best results follow up with moderate grazing two weeks after application. In pasture, spray as soon as possible after the autumn break. Larger plants and any affected by stress or grazing prior to treatment may re-grow and flower.
Charlock	8 leaf	10 cm diameter	25 + Uptake or wetter	Spray as soon as possible after the autumn break. Larger plants and any affected by stress or grazing prior to treatment may re-grow and flower.
Cotula (WA only)	4 leaf	10 cm diameter	25 + Uptake or wetter	Use Uptake Spraying Oil at 500 mL/100 L or wetting agent such as BS-1000 at 200 mL/100 L.
Doublegee (Spiny emex)	6 leaf	15 cm diameter	25 + Uptake or wetter + 700 mL/ha bromoxynil (200 g/L)	Optimum results are obtained in a competitive pasture. For best results follow up with moderate grazing two weeks after application. In pasture, spray as soon as possible after the autumn break. Larger plants and any affected by stress or grazing prior to treatment may re-grow and flower.
			or	Broadblade + bromoxynil tank mix – use Uptake Spraying Oil or a wetter.
			25 + wetter + 1.5 - 2.5 L/ ha 2.4-DB (500 g/L)	
Dwarf marigold (Poverty weed)	10 leaf	15 cm high	15 + Uptake or wetter	
Fat hen	15 leaf	20 cm high	Spring/summer pasture and lucerne only	Spring and summer pasture and lucerne application only.
			25 + Uptake or wetter	
			Grazing lucerne only	Use the 50 g/ha rate in grazing lucerne only and apply from 4 trifoliate leaves onwards. DO NOT apply a
			50 + Uptake or wetter	50 g/ha to lucerne used for seed production.
Fumitory	6 leaf	8 cm diameter	25 + 300 mL/ha terbutryn (500 g/L) + wetter	Broadblade + terbutryn tank mixes – only use a wetter.
Hedge mustard Indian hedge mustard	8 leaf	10 cm diameter	25 + Uptake	Note: This mixture is only approved for use in NSW, Vic and Tasmania on pastures.
Lupins	10 leaf	10 cm high	25 + Uptake or wetter	
WA blue and narrow leaf lupins (WA only)	4 to 8 leaf		10 + Uptake or wetter	

TABLE 2B. WEEDS CONTROLLED IN TABLE 2A CROPS continued

WEED	WEED GR	OWTH STAGE	RATE g/ha	CRITICAL COMMENTS
	Up to Leaf No. or	Up to Plant size (cm)		
Marshmallow	4 leaf	10 cm diameter	25 + Uptake or wetter	Broadblade + MCPA/terbutryn or Broadblade + bromoxynil-MCPA tank mixes - only use a wetter.
(Small flowered mallow)			or	
seedlings			15 + wetter + 700 mL/ha bromoxynil-MCPA (200g/L + 200 g/L),	Only use bromoxynil/MCPA and terbutryn + MCPA mixes in cereals that are NOT undersown with clovers, medics or lucerne.
			or	
			15 + wetter + 350 mL/ha terbutryn (500 g/L) +	
			700 mL/ha MCPA amine (500 g/L)	
	10 leaf	20 cm diameter	25 + 1.5 - 2.5 L/ha 2,4-DB	For older plants see Weeds Suppressed.
			(500 g/L)	Broadblade + 2,4-DB tank mixes - only use a wetter.
			Grazing lucerne only 50 + Uptake or wetter	Use the 50 g/ha rate in grazing lucerne only and apply from 4 trifoliate leaves onwards. DO NOT apply at 50 g/ha to lucerne used for seed production.
Paterson's curse (Salvation Jane)	8 leaf	10 cm diameter	25 + Uptake or wetter + 700 mL/ha bromoxynil (200g/L)	In pasture, larger plants and any affected by stress or grazing prior to treatment may re-grow and flower. For best results follow up with moderate grazing two weeks after application. With terbutryn, apply in a minimum spray volume of 100 L/ha from the ground or 50 L/ha from aircraft.
			or	
			25 + wetter + 300 mL/ha terbutryn (500 g/L)	
Peppercress seedlings	8 leaf	10 cm diameter	25 + Uptake or wetter	
	10 leaf	15 cm diameter	25 + wetter + 1.5 - 2.5 L/ ha 2,4-DB (500 g/L)	
Pheasant's eye	7 leaf	10 cm high	25 + Uptake or wetter	
Shepherd's purse	8 leaf	10 cm diameter		
Three-horned bedstraw	6 whorls	10 cm high		
Turnip weed	8 leaf	5 cm diameter	15 + Uptake or wetter	
	12 leaf	10 cm diameter	25 + Uptake or wetter	
Volunteer canola	8 leaf	10 cm diameter		
Ward's weed				
Wild radish	6 leaf	15 cm diameter	25 + Uptake or wetter + 700 mL/ha bromoxynil	When conditions at spraying are less than ideal (See Restraints above), or when the crop is not competitive, some radish plants may survive to flower and set viable seed.
			(200 g/L)	DO NOT use MCPA amine in cereals undersown with clover, medics or lucerne.
			or	In lucerne DO NOT use MCPA.
			25 + wetter + 500 mL/ha MCPA amine (500 g/L)	

TABLE 2B. WEEDS CONTROLLED IN TABLE 2A CROPS continued

WEED	WEED GR	OWTH STAGE	RATE g/ha
	Up to Leaf No. or	Up to Plant size (cm)	
Wild radish (cereals)	6 leaf	15 cm diameter	15 + wetter +700 mL/ha bromoxynil/MCPA
			(200 g/L + 200 g/L)
			or
			15 + Uptake or wetter + 700 mL/ha MCPA amine (500 g/L)
			or
			15 + wetter + 700 mL/ ha MCPA amine (500 g/L) + 350 mL/ha terburtryn (500 g/L)
Wild turnip	10 leaf	10 cm diameter	25 + Uptake or wetter
Wireweed	10 leaf	15 cm diameter	Pasture and lucerne only
			25 + wetter + 1.5 - 2.5 L/ ha, 2,4-DB (500 g/L)

TABLE 2C. WEEDS SUPPRESSED IN TABLE 2A CROPS

TABLE 20. WELDS SOFT RESSED IN TABLE 24 CHOPS					
WEED	WEED GROWTH STAGE		RATE g/ha		
	Up to Leaf No. or	Up to Plant size (cm)			
Buchan weed	8 leaf	10 cm diameter	25 + Uptake or wetter		
Deadnettle	6 leaf	5 cm diameter	25 + wetter + 1.5 - 2.5 L/ ha 2,4-DB (500 g/L)		
Doublegee (Spiny emex)	4 leaf	10 cm diameter	25 + Uptake or wetter		
	6 leaf	15 cm diameter	Grazing lucerne only		
			50 + Uptake or wetter		
Marshmallow (Small flowered mallow)	5 – 8 leaf	10 cm diameter	25 + Uptake or wetter		
New Zealand spinach	4 leaf	5 cm diameter			
Paterson's curse (Salvation Jane)	8 leaf	10 cm diameter			
Peppercress	10 leaf	15 cm diameter			
Stagger weed	6 leaf	5 cm diameter	25 + wetter + 1.5 - 2.5 L/ ha 2,4-DB (500 g/L)		
Wild radish	4 leaf	5 cm diameter	25 + Uptake or wetter		

CRITICAL COMMENTS

In medics DO NOT use MCPA.

Broadblade + MCPA amine tank mixes - use Uptake Spraying Oil or a wetter.

Broadblade + MCPA/terbutryn or Broadblade + bromoxynil/MCPA tank mixes - only use a wetter. DO NOT use MCPA amine or MCPA amine + terbutryn in cereals undersown with clover, medics or Jucerne.

Undersown clovers and lucerne, spring and summer sown pasture and lucerne crops only.

CRITICAL COMMENTS
Broadblade + 2,4-DB tank mixes - only use a wetter.
Broadblade + 2,4-DB tank mixes - only use a wetter.
Use the 50 g/ha rate in grazing luceme only and apply from 4 trifoliate leaves onwards. DO NOT apply at 50 g/ha to luceme intended for seed production. Broadblade + 2,4-DB tank mixes – only use a wetter.

TABLE 3. SALVAGE SPRAY IN WHEAT, BARLEY, OATS, TRITICALE, CEREAL RYE, MIXED GRASS/ LEGUME PASTURES, LUCERNE, CLOVER AND MEDICS.

WEED	WEED GROWTH STAGE	RATE g/ha
Wild radish	Early flowering of the youngest weeds to	25 or 50 + Uptake or wetter
Turnip weed	early pod formation of the oldest weeds	Use 50 g/ha only in
Paterson's curse		established grazing lucerne clover, medic and legume/grass pastures.

TABLE 3A. DIURON TANK MIXES: WHEAT, BARLEY, OATS, TRITICALE, CEREAL RYE

TANK MIXTURES: Read all label directions including restraints, spray drift restraints, mandatory no-spray zones, critical comments, withholding periods, regional use restrictions and safety directions for the tank mix products

CROP/SITUATION	GROWTH STAGES	CROP TOLERANCE
Wheat	3 leaf until start of jointing (Zadoks 13 – 31)	
Barley, Oats	Mid-tillering to start of jointing (Zadoks 23 – 31)	Transient stem shortening and crop discolouration may occur, although yields are normally unaffected. In severe cases, yields may be suppressed.
Stirling barley (WA only)	Apply no earlier than Zadoks 31	
Triticale Cereal rye	Mid-tillering to start of jointing (Zadoks 23 – 31)	
SALVAGE SPRAY		
Cereals: Wheat, Barley, Oats, Triticale, Cereal rye	Flowering (anthesis) to early dough (Zadoks 61 – 83)	Do not use more than 25 g/ha.

TABLE 3B. DIURON TANK MIXES: WEEDS CONTROLLLED IN TABLE 3A CROPS

WEED	WEED GROWTH STAGE		RATE g/ha
	Up to Leaf No. or	Up to Plant size (cm)	
Capeweed	4 leaf	10 cm diameter	25 + wetter + 100 mL/ha diuron (500 g/L)
Doublegee (Spiny emex)	4 leaf	10 cm diameter	25 + wetter + 100 mL/ha diuron (500 g/L)

CRITICAL COMMENTS

Use Uptake Spraying Oil at 500 mL/100 L or wetting agent such as BS-1000 at 200 mL/100 L. For prevention of wild radish and turnip weed seed set, apply in a minimum spray volume of 100 L/ha from the ground or 50 L/ha from aircraft.

Some re-growth may occur when wet conditions prevail after treatment. Do not use this technique if you have already applied a Group B herbicide to the crop or pasture this season. Only use this salvage spray technique with Broadblade once per cropping cycle to minimize the development of herbicide resistance. If you suspect herbicide resistance in broadleaved weeds do not use this technique.

DO NOT use a Broadblade salvage spray in pastures for seed production.

WARNING: Weeds that have not started to flower at application time may not be controlled by the salvage spray technique. For wild radish, time treatment to coincide with green, soft pods prior to embryo maturation in seeds. Squeeze pod between finger rails to see if any 'green/ white seeds' are present. Best time to treat is before seeds are visible.

Use 50 g/ha only in established lucerne and legume/grass pastures.

with Uptake Spraying Oil at 500 mL/100 L or a 100% concentrate non-ionic wetting agent 1000 at 200 mL/100 L.
a wetting agent such as BS-1000 when either applying Apparent Broadblade alone or with ucts in barley and oats.
with Uptake Spraving Oil at 500 mL/100 L or a 100% concentrate non-ionic wetting agent

CRITICAL COMMENTS

Optimum results are obtained in a competitive pasture. For best results follow up with moderate grazing two weeks after application. Larger plants and any affected by stress or grazing prior to treatment may re-grow and flower.

Optimum results are obtained in a competitive pasture. For best results follow up with moderate grazing two weeks after application. Larger plants and any affected by stress or grazing prior to treatment may re-grow and flower.

TABLE 4. AGRICULTURAL NON-CROP AREAS

WEED	WEED GROWTH STAGE	RATE
Caltrop, Capeweed, Marshmallow (Small flowered mallow) (suppression), Paterson's curse (Salvation Jane), Wild radish	Rosette stage prior to running up to flower	Spot spray: 25 g/100 L

TABLE 5A. SEED CROPS (Tasmania only): SUBTERRANEAN CLOVER, RED CLOVER, WHITE CLOVER, ARROWLEAF CLOVER AND LUCERNE

Crop	Growth Stages	Crop Tolerance
Seed crops of Subterranean clover Red clover White clover Arrowleaf clover Lucerne		DO NOT apply to lucerne or clover seed crops less than 8 weeks before flowering. DO NOT apply at 40 g/ha to lucerne intended for seed production.

TABLE 5B. WEEDS CONTROLLED OR SUPPRESSED IN TABLE 5A CROPS

WEED	WEED GROWTH STAGE	RATE g/ha
WEEDS CONTROLLED		
Charlock	Up to 31/2 leaf stage	25 + Uptake or wetter
Fat hen, Lesser swinecress, Mustards, Shepherd's purse, Wild radish, Wild turnip	Beyond 3½ leaf stage and up to 10 leaf stage	40 + Uptake or wetter
WEEDS SUPPRESSED		
Capeweed, Chickweed, Fumitory, Spurrey, Wireweed	Beyond 3½ leaf stage and up to 10 leaf stage	40 + Uptake or wetter

TABLE 6 A. SOYBEANS, LUCERNE, MAIZE, PEANUTS AND PIGEON PEAS

Crop	Growth Stages	Application Methods
Maize	Post-plant pre-emergence (PPPE)	Apply Broadblade after planting and before emergence of crop and weeds. Apply to moist soil only.
	Post-emergent. Up to 8 leaf stage	
Soybean	Pre-plant Incorporated (PPI)	Incorporate into the soil within 4 hours by making two passes in opposite directions using a combine with trailing harrows or similar equipment, to ensure thorough incorporation.
	Incorporated By Sowing (IBS)	Ensure the planting ipoeration is done within 4 hours using a combine with trailing harrows or similar equipment, to ensure thorough incorporation.

CRITICAL COMMENTS

Apply to actively growing rosettes. To ensure complete coverage, spray to the point of runoff. Use Uptake Spraying Oil at 500 mL/100 L.

Spray Additives/Tank Mixes

Use Uptake Spraying 0il at 500 mL/100 L or a wetting agent such as BS-1000 at 200 mL/100 L. In clover and luceme Broadblade may be tank-mixed with 2,4-DB and/or bromoxynil at their respective label rates for complete control of suppressed weeds.

CRITICAL COMMENTS

Use Uptake Spraying Oil at 500 mL/100 L or wetting agent such as BS-1000 at 200 mL/100 L.

In clover and lucerne, seedlings of these weeds will be suppressed with Broadblade alone. In clover and lucerne, Broadblade may be tank-mixed with 2,4-DB and/or bromoxynil at their respective label rates for complete control of suppressed weeds. Only use a wetting agent at 200 mL/100 L with these tank mixes.

Spray Additives/Tank Mixes	Crop Tolerance
May be tank mixed with pendimethalin.	
Apply with Uptake Spraying Oil at 500 mL/100 L spray volume or with a 100% concentrate non-ionic wetter such as BS-1000 at 200 mL/100 L.	Some transitory crop yellowing and height suppression should be expected but yields will be unaffected.
May be tank mixed with Treflan 600 or pendimethalin.	
May be tank mixed with Treflan 600 or pendimethalin.	

TABLE 6 A. SOYBEANS, LUCERNE, MAIZE, PEANUTS AND PIGEON PEAS continued

Crop	Growth Stages	Application Methods
Soybean (cont)	Post-plant pre-emergence (PPPE)	Apply Broadblade after planting and before emergence of crop and weeds. Apply to moist soil only.
Lucerne	Post-emergent Up to 6 trifoliate leaf stage	
Peanuts	Post-emergent Up to 6 leaf stage	
Pigeon pea (GM Cotton refugia)	Post-plant pre-emergence (PPPE)	Apply Broadblade after planting and before emergence of crop and weeds. Apply to moist soil only. Results will be improved by light irrigation or rain to incorporate.

TABLE 6B. WEEDS CONTROLLED OR SUPPRESSED IN TABLE 6A CROPS

WEED	WEED GROWTH STAGE	RATE g/ha		
WEEDS CONTROLLED				
Annual ragweed, Boggabri weed	Pre- emergent	25 or 50		
Fat hen, Wild radish (IBS and PPPE only)				
Caltrop, Fat hen, Turnip weed,	Post- emergent	25 or 50 + Uptake or wetter		
Wild radish	Up to 4 leaf			
Volunteer cotton (including Roundup	Pre- emergence	50		
Ready* Cotton)				
WEEDS SUPPRESSED				
Black pigweed, Bladder ketmia, Caltrop, Cobbler's pegs	Pre- emergent	25 or 50		
Annual ground cherry, Anoda weed,	Post- emergent	25 or 50 + Uptake or wetter		
Bladder ketmia, Boggabri weed,	Up to 4 leaf			
Fierce thornapple (Qld only), Red pigweed, Wild gooseberry				
pigweeu, wiiu gooseberry				

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

HARVEST WITHHOLDING PERIODS

Chickpeas, field peas, lentils, maize, peanuts, pigeon peas and soybeans: NOT REQUIRED WHEN USED AS DIRECTED

Winter cereals (barley, cereal rye, oats, triticale, wheat): DO NOT HARVEST FOR 4 WEEKS AFTER APPLICATION.

GRAZING/STOCK FOOD WITHHOLDING PERIODS

Winter cereals (barley, cereal rye, oats, triticale, wheat), Chickpeas, field peas, lentils, peanuts, pigeon peas, soybeans, Popany vetch:

DO NOT GRAZE OR CUT FOR STOCK-FEED FOR 4 WEEKS AFTER APPLICATION.

Note: This 4 week WHP covers the use of Broadblade tank mixed with bromoxynil (200 g/L) at

Spray Additives/Tank Mixes	Crop Tolerance
May be tank mixed with pendimethalin.	Some transitory crop yellowing and height suppression should be expected but yields will be unaffected.
DO NOT apply at 50 g/ha to lucerne intended for seed production. Apply with Uptake Spraying Oil at 500 mL/100 L spray volume or with a 100% concentrate non-ionic wetter such as BS-1000 at 200 mL/100 L. May be tank mixed with Treflan 600 or pendimethalin.	

CRITICAL COMMENTS					
totton (including Roundup Ready* Cotton) - may be banded (>40%) over the row or broadcast					
otton (including Roundup Ready* Cotton) - may be banded (>40%) over the row or broadcast					

WEED CONTROL:

Minimum spray volume 150 L/ha for optimum results.

In pre-emergent situations use the higher rate for longer soil residual effect and better suppression of more tolerant weeds (see weeds suppressed).

In post-emergent situations use 25 g/ha on weeds up to 2 leaf stage and 50 g/ha on larger weeds up to 4 leaf stage and where more residual control is required.

700 mL/ha (Table 2B) on cereals.

Maize: DO NOT GRAZE OR CUT FOR STOCK FOOD FOR 14 DAYS AFTER APPLICATION. Fenugreek, lathyrus, luceme, medic, serradelia: DO NOT GRAZE OR CUT FOR STOCK FOOD OR HARVEST FOR SEED FOR 3 DAYS AFTER APPLICATION.

Note: When tank mixing Broadblade with bromoxynil (200 g/L) at 700 mL/ha (Table 2B) a 2 week WHP is required.

Pastures (unless otherwise specified): DO NOT GRAZE OR CUT FOR STOCK FOOD FOR 7 DAYS AFTER APPLICATION.

Note: When tank mixing Broadblade with bromoxynil (200 g/L) at 700 mL/ha (Table 2B) a 2 week WHP is required.

LIVESTOCK DESTINED FOR EXPORT MARKETS

The grazing withholding period only applies to stock slaughtered for the domestic market. Some export markets apply different standards. To meet these standards, ensure that in addition to complying with the grazing withholding period, that the Export Slaughter Interval is observed before stock are sold or slaughtered.

EXPORT SLAUGHTER INTERVAL (ESI) - 7 DAYS:

After observing the withholding period for grazing or cutting for stock food, livestock that have been grazed on or fed treated crops should be placed on clean feed for 7 days prior to slaughter.

EXPORT ANIMAL FEED INTERVAL (EAFI) – 28 days (Fenugreek, lathyrus, lucerne, pasture and serradella only)

A minimum period of 28 days must elapse between the application of Broadblade Herbicide and grazing or cutting the treated pasture as stockfeed for livestock intended for export.

MINIMUM RECROPPING PERIODS:

Broadblade is broken down in the soil by microbial activity, Warm, moist soil conditions favour highest microbial activity and quickest residue breakdown. For the re-cropping periods NNSW & Old refers to summer dominant rainfall areas, where crops are grown on deep black earth soils (wrtisbol), with no impermeable sub-horizon in the top 30 cms. SNSW, Vic, Tas, SA and WA refers to winter dominant rainfall areas on soils with no impermeable sub-horizon in the top 30 cms. Also see the comments on rainfall and soil type below.

Crop	Rate (g/ha)	Region	
		NNSW, QId	SNSW, Vic, Tas, SA, WA
Cereal rye, medics, triticale, wheat, maize or soybeans	25 or 50	May be planted at any time after Broadblade application	May be planted at any time after Broadblade application
Barley, chickpeas, clover, field peas, lucerne, oats and peanuts	25	3 months	3 months
	50	6 months	9 months
Cotton, sorghum or sunflowers	25	6 months	-
	50	9 months	-
Canola, faba beans, fenugreek, lathyrus, lentils, lupins, serradella or Popany vetch	25	6 months	9 months
	50	9 months	12 months

Rainfall - is required to maintain soil wetness for at least one week over the warm months to enable microbial degradation of herbicide residues to allow safe planting of sensitive crops. For SNSW, Victoria, Tasmania, SA and WA a minimum of 25 mm and preferably 50 mm or more rain must have fallen over the warm months of the year. FOR NNSW and Old a minimum of 50 mm and preferably 100 mm rain or more must have fallen over the warm months of the year.

Soil type - on shallow, duplex, low organic matter soils with an impermeable sub-horizon within the root zone (30 cm deep or less) and alkaline surface soil, sensitive crops should NOT be planted until 2 years after application of Broadblade at either 25 or 50 g/ha. (For crops grown in NNSW and Old on soils other than vertisols, call Apparent Pty Ltd or your local reseller for more advice).

GENERAL INSTRUCTIONS

Broadblade granules in water soluble bags readily disperse in water and will do so once added to fast moving water. Maintain agitation <u>at all times</u>, including during mixing as well as spraying. Only mix sufficient spray solution for immediate use and avoid storing.

MIXING

Spray rigs with premix hoppers

For spray rigs that have a drop down chemical induction hopper, three-quarter fill this hopper with water and have the rinsing sprinkler operating. Add the Broadblade water soluble bags and when they are dissolved and the granules are dispersed, transfer this batch into the quarter filled main tank. Continue to rinse the hopper until the entire product has washed through.

Spray rigs with limited bypass agitation

When Broadblade is added to the spray tank in water soluble bags, for spray rigs that have limited bypass agitation, then as for most granulated formulations, re-disperse the Broadblade in a bucket before adding them to the main tank. Add Broadblade while stirring until the granules have dispersed.

Tankmixes - this order should be followed:

1. Quarter fill the spray tank and agitate.

2. Add Broadblade using the mixing procedure above.

3. Add Verdict*520 if to be used.

4. Half fill the spray tank.

5. Add wettable powders, dry flowables, suspension concentrates, soluble liquids and/or emulsifiable concentrates.

6. Add Uptake* Spraying Oil when half full.

7. Other adjuvants add according to their label.

8. Add water to fill the spray tank.

APPLICATION

Ground application: Apply Broadblade in 50 to 150 liftes of water per hectare through a calibrated sprayer that delivers at least medium quality spray as defined by the American Society of Biological Engineers Standard SST2.

DO NOT apply Broadblade under conditions likely to cause drift onto waterways, susceptible crops or land to be planted with susceptible crops. Unsuitable conditions are dead calm, excessive wind and/or small droplets. Best results are achieved where applications are made on warm (greater than 5°C), sumy days applying more than 50 L/ha of total spray volume (preferably more than 75 L/ha) and where spray coverage is maximised.

COMPATIBILITY

Always allow 7 days between application of a grass herbicide and Broadblade in chickpeas and field peas. In lentils, adjuvant, broadleaf or grass herbicide, insecticide and folar fertiliser tank mixes may result in transient height reduction, crop discolouration and delayed flowering, although yields are normally unaffected. However, stress conditions after application (eg. frost, drought) may lengthen the time needed for lentils to recover and in years where a dry spring occurs, yields may be suppressed.

Broadblade is compatible with the following:

Adjuvants

Uptake* Spraying Oil, Hasten* Spray Adjuvant, BS-1000

Broadleaf herbicides

Atrazine	Diuron (liquid or wettable granule)	Spinnaker* Herbicide
Basagran* Herbicide	Lontrel*750 SG Herbicide	Starane* Advanced Herbicide
	Lontrel Herbicide	
Bromoxynil	MCPA amine	Stomp*330E Herbicide
2,4-DB	MCPA ester	Terbutryn
Diflufenican (lentils and field	MCPA sodium salt	Tordon*242 Cereal Herbicide
peas only)		
Jaguar* Herbicide	Metsulfuron	Treflan* 600 Herbicide

Grassweed herbicides

Clethodim (lentils only)	Simazine	Hoegrass* Selective Herbicide (ryegrass only)
Paraquat	Treflan*600	Tristar* Advance Selective Herbicide
clodinafop	Verdict* 520 Herbicide	Wildcat* Selective Herbicide (wild oats only)

Insecticides

Dimethoate, esfenvalerate (lentils only), Lorsban* Insecticides, omethoate.

Fungicides (lentils only)

Carbendazim, chlorothalonil, Dithane* Rainshield* Neo Tec Fungicide.

Foliar Fertilisers

Broadacre Zinc (lentils only)

CLEANING SPRAY EQUIPMENT

After using Broadblade, empty the tank completely and drain the whole system. Thoroughly wash inside the tank using a pressure hose. Drain the tank and clean any filters in the tank, pump, lines and nozzles. **To rinse:** After cleaning the tank as above, quarter fill the tank with clean water and circulate through the pump, lines, hoses and nozzles. Drain and repeat the rinsing procedure twice.

To decontaminate: Before spraying sensitive crops (which include canola, cotton, faba beans, lupins, sorghum and sunflowers), wash the tank and rinse the system as above. Quarter fill the tank and add an alkali detergent at 500 mL/100 L of water or the powder equivalent at 500 g/100 L) and circulate throughout the system for at least fifteen minutes. Drain the whole system. Remove filters and nozzles and clean them separately. Finally flush the system with clean water and allow to drain. Chlorine based cleaners are not recommended.

Nufarm Tank and Equipment Cleaner* is not recommended.

Rinse water should be discharged onto a designated disposal area or, if this is unavailable, onto unused land away from desirable plants and watercourses.

RESISTANT WEEDS WARNING

GROUP **B** HERBICIDE

Apparent Broadblade Herbicide is a broadleaf herbicide with no annual ryegrass activity and is a member of the triazolopyrimidine sulfonanilide (sulfonamide) group of herbicides. The product has the acetolactate synthase (ALS) inhibitor mode of action. For wead resistance management, the product is a Group B herbicide. Some naturally occurring weed biotypes resistant to the product and other Group B Herbicides may exist through normal genetic variability in any weed population. These resistant weeds 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.

Since the occurrence of resistant weeds is difficult to detect prior to use, Apparent Pty Ltd accepts no liability for any losses that may result from the failure of the product to control resistant weeds. Strategies to minimise the risk of herbicide resistance are available. Contact your farm chemical supplier, consultant, local Department of Agriculture, or local Apparent Pty Ltd representative.

PROTECTION OF CROPS, NATIVE AND OTHER NON-TARGET PLANTS

Refer to MINIMUM RECROPPING PERIODS for crop rotation information. Crops susceptible to Broadblade include but are not limited to canola, cotton, faba beans, lupins, sorghum and sunflowers.

DO NOT flood irrigate any treated crop or pasture for 48 hours after application. Where other types of irrigation are used, for example sprinklers, DO NOT irrigate to the point of runoff for at least 48 hours after application.

DO NOT apply to water logged soils or if heavy rain is expected within 48 hours of application. Dangerous to aquatic plants and susceptible crops. DO NOT contaminate dams, waterways or drains with the product or its containers.

DO NOT apply under weather conditions, such as dead calm or excessive wind, or from spraying equipment producing small droplets that may cause spray to drift onto adjacent areas, particularly wetlands, waterbodies, watercourses, susceptible crops or land to be planted with susceptible crops.

PROTECTION OF LIVESTOCK

DO NOT graze or cut treated crops for stock food except as specified under withholding periods. Poisonous plants may become more palatable after spraying, therefore livestock should be kept out of the area until the plants have died down.

PROTECTION OF WILDLIFE, FISH, CRUSTACEANS AND ENVIRONMENT

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 securely locked, dry, cool, well ventilated place out of direct sunlight. D0 NOT store near food, feedstuffs, fertilisers or seed. Rinse container before disposal. Add rinsings to spray tank. Do not dispose of undiluted chemical on site. Dispose of at a local authority landfill. If no landfill is available, bury the packaging 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.

SPILL AND LEAK MANAGEMENT

D0 NOT touch or walk through spilled material. Wear a face shield or goggles, overalls buttoned to neck and wrist, chemical resistant gloves and footwear. Stop leak when safe to do so. Dam area and prevent entry into waterways, and drains. Small spills/leaks: Absorb with material such as sand, soil or sawdust. Collect spilled product and place in sealable container for disposal. Spill residues may be cleaned using water and detergent. Contain and absorb wash water for disposal. Absorb and collect washings and place in the same sealable container for disposal. Dam the area of large spills and report them to Apparent Ply Ltd.

SAFETY DIRECTIONS

Product will irritate the eyes. When handling the granules avoid contact with eyes. If product in eyes, wash it out immediately with water. Wash hands after use.

FIRST AID

If poisoning occurs, contact a doctor or Poisons Information Centre. Phone Australia 13 11 26.

SAFETY DATA SHEET (SDS)

Additional information is listed in the SDS which is available from the supplier.

CONDITIONS OF SALE

The use of Apparent Broadblade Herbicide being beyond the control of the manufacturer, no warranty expressed or implied is given by Apparent Pty Ltd regarding its suitability, fitness or efficiency for any purpose for which it is used by the buyer, whether in accordance with the directions or not and Apparent Pty Ltd accepts no responsibility for any consequence whatsoever resulting from the use of this product. "Other registered product.