

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



Dow AgroSciences

Verdict™ 520

Herbicide

ACTIVE CONSTITUENT: 520 g/L HALOXYFOP present as the haloxyfop-R methyl ester

GROUP A HERBICIDE

For the post-emergent control of a wide range of annual and perennial grass weeds in grain legume and oilseed crops, lucerne, summer fallow, medic and clover pasture and seed crops, forestry, bananas, citrus, grapes, pineapples, pome and stone fruit, pyrethrum, tropical fruit and nut crops as specified in the Directions For Use.

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DIRECTIONS FOR USE

RESTRAINTS:

DO NOT apply to weeds which may be stressed (not actively growing) due to prolonged periods of extreme cold, moisture stress (waterlogged or drought affected), poor nutrition or previous herbicide treatment as reduced levels of control may result.

DO NOT spray if rain is likely to occur within one hour.

Table 1a: Winter crops - Canola, Chickpeas, Faba beans, Field peas, Lentils, Linola, Linseed, Lupins, Lucerne, Vetch, Medic and Clover pastures or seed crops

WEEDS CONTROLLED	WEED GROWTH STAGE	RATE (mL/ha)		CRITICAL COMMENTS
		with Uptake™ Spraying Oil ^①	with a non-ionic wetter ^②	
Annual ryegrass	2 to 4 leaf	75	100	CANOLA, LINOLA AND LINSEED DO NOT apply after the 8th leaf stage of the crop. DO NOT apply after the commencement of stem elongation.
	Early Tillering	100	100	
Barley grass Brome grass Paradoxa grass Volunteer cereals	2 to 4 leaf	50	75	This means that application must not occur after the 8th stage, or if stem elongation commences before the 8th leaf stage, application must not occur after stem elongation has commenced. DO NOT apply more than one application of herbicide containing haloxyfop per crop. DO NOT apply after grazing.
	Early Tillering	75	100	
Wild oats WA, SA, Vic, Tas, Southern and Central NSW	2 to 4 leaf	37.5	50	^① ^② See GENERAL INSTRUCTIONS, Spraying oils/wetters section.
	Early Tillering	50	75	
Wild oats Northern NSW & Qld	2 to 4 leaf	50	75	FIELD PEAS AND CANOLA: The only oil recommended for use with Verdict 520™ is Uptake™ Spraying Oil. Verdict 520™ + Lontrel™ 750 SG + Uptake™ Spraying Oil are compatible and selective to canola. This tank-mix is also compatible with atrazine and selective to triazine tolerant canola. LUPINS AND FIELD PEAS: Mixtures with Brodal® or simazine may cause crop yellowing and separate applications are recommended. CHICKPEAS, FABA BEANS, LENTILS AND VETCH, LINOLA, LINSEED: Broadleaf herbicides should not be added to Verdict 520. Apply Verdict 520 and broadleaf herbicides at least a week apart. LUCERNE, CLOVER OR MEDIC PASTURES: If grazed or cut for hay immediately prior to treatment delay application until all grasses have fully expanded leaves. Use 75 mL + spraying oil or 100 mL + wetter/ha. (See GENERAL INSTRUCTIONS, Spraying Oils/wetters section). If silver grass (<i>Vulpia</i> spp.) is present in pasture, simazine should be tank mixed with the higher rate of Verdict 520 plus a non-ionic wetter.
	Early Tillering	75	100	



Table 1b: Winter crop growth stage application windows

CROP	CROP GROWTH STAGE
Lucerne, Medic and Clover pastures or seed crops	Apply from 2nd trifoliate leaf onwards. For <i>Erodium</i> spp. spraying, apply from cotyledon crop stage onwards.
Canola, Linola, Linseed	Apply from 2nd leaf to 8 leaf stage of crop growth. DO NOT apply after the commencement of stem elongation. This means that application must not occur after the 8 leaf stage, or if stem elongation commences before the 8 leaf stage, application must not occur after stem elongation has commenced.
Chickpeas, Faba beans, Field peas, Lentils, Lupins, Vetch	Apply from 2nd leaf, 2nd node or 2nd branch to prior to flowering.

Table 2a: Lucerne, Medic and Clover seed crops and pastures. See Table 1b for crop stages.

WEEDS CONTROLLED	WEED GROWTH STAGE	RATE (mL/ha) with Uptake™ Spraying Oil ^①	CRITICAL COMMENTS
Prairie grass (<i>Bromus catharticus</i>)	Up to early tillering	100	① See GENERAL INSTRUCTIONS, Spraying oils/wetters section.
Musky or ferny leaf Storksbill: (<i>Erodium moschatum</i>) Common Crowsfoot or Common Storksbill (<i>Erodium cicutarium</i>)	Up to 6 leaf or 5 cm diameter	50 - 75 ^①	① Use lower rate when growing conditions and crop or pasture competition are good and when weed populations are below 100 plants/m ² . Use the higher rate when weed populations are above 100 plants/m ² or when crop or pasture competition is poor. NOTE: Storksbill may not be controlled if simazine or Broadstrike™ are tank-mixed with Verdict 520.
Long or shiny leaf storksbill (<i>E. botrys</i>)	Up to 8 leaf or 5 cm diameter	75-100	LUCERNE, CLOVER OR MEDIC PASTURES: If grazed or cut for hay immediately prior to treatment delay application until all grasses have fully expanded leaves. Use 75 mL + spraying oil or 100 mL + wetter/ha. (See GENERAL INSTRUCTIONS, Spraying Oils/wetters section). If silver grass (<i>Vulpia</i> spp.) is present in pasture, simazine should be tank mixed with the higher rate of Verdict 520 plus a non-ionic wetter.

Table 2b: Lucerne, Medic and Clover seed crops only - not to be used for stockfeed. See Table 1b for crop stages.

WEEDS CONTROLLED	WEED GROWTH STAGE	RATE (mL/ha) with Uptake™ Spraying Oil ^①	CRITICAL COMMENTS
Couch grass (suppression), Rhodes grass (control)	Tillering seedlings	150 + 150 ^①	① For best suppression of couch or control of Rhodes grass, make 2 applications of Verdict 520 2-4 weeks apart. Time second application to coincide with tillering stage of weeds and just after irrigation or significant rain.
Couch grass (control) Rhodes grass (control)	Established stands	400 - 800	Only treat actively growing weeds which are not moisture stressed. Use these rates for control of couch and Rhodes grass.



Table 3a: Summer crops - Cotton, Cowpea, Lucerne, Mung beans, Navy beans, Peanuts, Soybeans, Sunflowers.

WEEDS CONTROLLED	WEED GROWTH STAGE	RATE (mL/ha) with Uptake™ Spraying Oil ^①	CRITICAL COMMENTS
Australian millet	2 leaf to tillering up to 15 cm	150	<p>① See GENERAL INSTRUCTIONS, Spraying oils/wetters section.</p> <p>NAVY BEANS, PEANUTS, SOYBEANS: For broadleaf weed control, Verdict 520 at 150 mL/ha plus wetter may be tank mixed with Blazer® (except on Navy beans) or Basagran®. Tank mixtures may cause transient leaf spotting on the crop but do not normally affect yield. DO NOT tank mix broadleaf herbicides with Verdict 520 if grasses have begun tillering or if the grasses are under moisture stress. DO NOT add Uptake Spraying Oil when mixing with Blazer or Basagran. DO NOT use Blazer or Basagran tank-mixes on cowpea.</p>
Barnyard grass	2 to 5 leaf	100	
	tillering up to 15 cm	150	
Crowsfoot grass Green panic Johnson grass (rhizome)	2 leaf to tillering up to 15 cm	150	
Johnson grass (seedling) Liverseed grass (seedling) Mossman river grass	2 to 5 leaf	100	
	tillering and up to 15 cm	150	
Summer grass	2 leaf to tillering up to 15 cm	150	
Volunteer cereals	2 to 4 leaf	100	
	tillering up to 15 cm	150	

Table 3b: Summer crop growth stage application windows

CROP	CROP GROWTH STAGE
Lucerne	Apply from 2nd trifoliate leaf onwards.
Cowpea, Mung beans, Navy beans, Soybeans	Apply from 2nd leaf to flowering.
Peanuts	Apply from 2nd leaf to pegging.
Cotton	Apply from 2nd leaf to before the onset of flowering.
Sunflowers	Apply from 2nd leaf to head initiation.



Table 4: Annual and Perennial grasses and *Erodium* spp. in Orchard, Vine and Plantation crops, forestry and pyrethrum.

CROPS	CROP GROWTH STAGE	WEEDS CONTROLLED	WEED GROWTH STAGE	RATE (mL/ha) with Uptake™ Spraying Oil①	CRITICAL COMMENTS
Orchard, vine and plantation crops including: Apples Avocado Banana Blueberry Citrus Custard apple Feijoa Grapevines Guava Kiwifruit Litchi (Lychee) Longan Mango Nashi Nut trees Passionfruit Paw paw Pear Persimmon Pineapple Rambutan Stone fruit	All growth stages	<u>Perennial grasses:</u> Couch Rhodes grass Slender rats tail grass	Established stands	400 - 800	① See GENERAL INSTRUCTIONS, Spraying oils/wetters section. Spray should be directed to the base of the tree or vine avoiding contact with fruit and foliage. Spot spray: Use 25 mL to 50 mL/100 L of water. Use higher rate on late tillering mature grasses. Annual Grasses: Where treated in association with perennial grasses, these annual grasses will be controlled.
		Buffel grass Green panic Johnson grass Kikuyu <i>Paspalum</i> spp. <i>Setaria</i> spp.	Vegetative to early tillering	200	
			Late tillering	400	
Forestry: <i>Pinus radiata</i> <i>Eucalyptus</i> spp.		<u>Annual grasses:</u> Annual ryegrass Barley grass Barnyard grass Brome grass Crowsfoot grass Lesser canary grass Liverseed grass Mossman river grass Paradoxa grass Summer grass Volunteer cereals Wild oats	2 leaf to tillering	200	
		Annual grasses as above	Vegetative to tillering	125 - 250	
Pyrethrum Barley grass		Brome grass Rope twitch Barynard grass <i>Erodium</i> spp. Volunteer cereals	Vegetative to tillering	100 - 250	Pyrethrum Tasmania only: For <i>Erodium</i> spp. apply 75-100 mL/ha if the main weed is <i>E. botrys</i> . Use 50 - 75 mL/ha if either <i>E. cicutarium</i> or <i>E. moschatum</i> are the main weeds.



Table 5: Verdict 520 and Select® Herbicide tank mixes - Canola, Chickpeas, Faba beans, Field peas, Lupins, Lentils

WEEDS CONTROLLED	WEED GROWTH STAGE	RATE (mL/ha)		CRITICAL COMMENTS
		Verdict 520	Select Herbicide	
FOP/DIM susceptible Annual ryegrass + Volunteer barley Volunteer wheat Brome grass Wild oats Barley grass Phalaris	2 to 4 leaf	25	150	See GENERAL INSTRUCTIONS, Spraying oils/wetters section. Use Uptake Spraying Oil at 500 mL/100 L or Hasten® at 1 L/100 L. Apply at the same crop growth stages as those in Table 1b Winter Crops. Lentils: Apply up to 7 node-early branching crop growth stage only. Lupins: Not for Qld.
	Early tillering	38	150	
FOP resistant Annual ryegrass + Volunteer barley Volunteer wheat Brome grass Wild oats Barley grass Phalaris	2 to 4 leaf	25	200	
	Early tillering	38	250	

Table 6. Summer fallow situations

WEEDS CONTROLLED	WEED GROWTH STAGE	RATE (mL/ha) with Uptake™ ① Spraying Oil	CRITICAL COMMENTS
Awnless barnyard grass (<i>Echinochloa colona</i>), Barnyard grass (<i>Echinochloa crus galli</i>), Button grass (<i>Dactyloctenium radulans</i>), Crowfoot grass (<i>Eleusine indica</i>) Feathertop Rhodes grass (<i>Chloris virgata</i>) Liverseed grass (<i>Urochloa panicoides</i>), Rhodes grass (<i>Chloris gayana</i>) Summer grass (<i>Digitaria ciliaris</i>), Sweet summer grass (<i>Brachiaria eruciformis</i>) Stink grass (<i>Eragrostis cilanensis</i>) Windmill grass (<i>Chloris truncata</i>)	2 leaf to early tillering (Z12 to Z22)	150	① See GENERAL INSTRUCTIONS, Spraying oils/wetters section. Only treat actively growing weeds which are not temperature or moisture stressed.
		As above followed by 1.6-2.4 L/ha paraquat	Apply a following application of paraquat, 7-14 days after the haloxyfop application. The sequential application of paraquat is required for resistance management purposes. For adequate coverage use a minimum application water volume of 70 L/ha with medium spray droplets. Apply only one application per season.

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

CEREAL CROPS

DO NOT PLANT CEREAL CROPS INTO THE TREATED AREA FOR A PERIOD OF 12 WEEKS AFTER APPLICATION.

HARVESTING WITHHOLDING PERIODS

NOT REQUIRED WHEN USED AS DIRECTED FOR:

Canola, Chickpeas, Cotton, Cowpea, Faba beans, Field peas, Lentils, Linola, Linseed, Lupins, Mung beans, Navy beans, Orchard crops, Peanuts, Plantation crops, Soybeans, Sunflowers, Vetch or Vine crops.

DO NOT HARVEST FOR:

Medic and Clover seed crops: **7 DAYS AFTER APPLICATION**

STOCK FOOD WITHHOLDING PERIODS

DO NOT GRAZE OR CUT FOR STOCK FOOD FOR:

Canola, Chickpeas, Cotton, Cowpea, Faba beans, Field peas, Lentils, Linola, Linseed, Lupins, Mung beans, Navy beans, Peanuts, Soybeans, Sunflowers and Vetch: **28 DAYS AFTER APPLICATION**

Lucerne: **21 DAYS AFTER APPLICATION**

Medic and Clover pasture: **7 DAYS AFTER APPLICATION**

COTTON GIN TRASH MUST NOT BE FED TO ANIMALS.

PLANTBACK PERIOD

Cereal crops or grasses planted within twelve weeks of application may be damaged by the residual effects of Verdict 520 Herbicide, particularly on light and red soils.



GENERAL INSTRUCTIONS

MIXING

Add water to the spray tank to 10 cm above the level of agitation and ensure the agitation device is working vigorously. (There must be a minimum of 100 L of water in the tank before any pesticide is added.)

If tank mixing, firstly, add any soluble liquid formulations (e.g. LORSBAN™ Herbicide) and allow agitation for approximately one minute.

Then add Verdect 520 at the point where agitation is strongest. (**Do not add Verdect 520 through a strainer or sieve**). Allow further agitation for one minute.

Half fill the spray tank.

If using wettable powder or water dispersible granules, or other emulsifiable concentration formulations (e.g. LORSBAN™ 750 WG or LE-MAT®, these should be **added after the Verdect 520** to the half full spray tank ensuring vigorous agitation.

Finally add Uptake™ Spraying Oil or approved alternate spraying oil/wetter. (See section on spraying oils/wetters) and continue filling the tank to the required volume maintaining agitation at all times.

Only mix sufficient solution for immediate use. Verdect 520 and any other tank mixes should be applied immediately for best results.

Spraying Oils/wetters

① **Spraying Oils:** It is essential to add an adjuvant to Verdect 520. Best results will be achieved with Uptake Spraying Oil at 0.5 L/100 L of spray solution. Alternatively, other oils plus a non-ionic wetter may also be used. When other crop spraying oils are used, mix at 1 L/100 L and add a non-ionic wetter (surfactant) at 200 mL/100 L of spray solution. **Use of an oil is not always recommended.** See **CRITICAL COMMENTS** for specific situation recommendations.

② **Non-ionic Wetters:** When Uptake or other oils are not used, a 100% concentrate non-ionic wetting agent such as BS-1000® at 200 mL/100 L must be used along with the higher rate of Verdect 520 as specified in the Directions For Use.

Where water volumes of less than 50 L/ha are used, **DO NOT** use less than 250 mL/ha of Uptake or 500 mL/ha for oils other than Uptake or less than 100 mL/ha of wetter.

CANOLA, LUCERNE, MEDIC AND CLOVER PASTURES AND SEED CROPS:

When tank mixing Verdect 520 with Lontrel herbicides (canola only) or Broadstrike (lucerne, clover and medics), use Uptake Spraying Oil with the lower rates of Verdect 520 or a wetting agent with the higher rates of Verdect 520 unless otherwise specified. When mixing Verdect 520 with other broadleaf herbicides on these crops, DO NOT use an oil use a wetter instead.

FIELD PEAS AND CANOLA:

The oil recommended is Uptake Spraying Oil. Hasten® is also recommended for use with tank-mixtures of Verdect 520 and Select Herbicide.

For canola, Verdect 520 + Lontrel 750 SG + Uptake Spraying Oil are compatible and selective to canola. This tank-mixture is also compatible with atrazine or simazine and selective to triazine tolerant canola.

NAVY BEANS, PEANUTS, SOYBEANS:

When mixing with Blazer® or Basagran® DO NOT add spraying oil to these mixtures. **DO NOT** use these tank-mixes on cowpea.

COMPATIBILITY

Ground use only: Verdect 520 Herbicide can be tank-mixed with:

Insecticides: dimethoate
endosulfan
Lorsban™ 500 EC Insecticide
Lorsban™ 750 WG Insecticide
omethoate

Herbicides: atrazine
Basagran®
Blazer®
Broadstrike™ Herbicide
Lontrel™ Herbicide
Lontrel™ 750 SG
MCPA ester (LVE) – **DO NOT** exceed
700 mL/ha of MCPA LVE

Oryzalin
Select® Herbicide
simazine
Starane™ Advanced Herbicide

Fungicides: Dithane™ Rainshield Neo Tec™

Trace elements: magnesium sulphate
zinc sulphate

Verdect 520 Herbicide is NOT COMPATIBLE with 2,4-D or MCPA as sodium or amine salts.

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Aerial use: No product other than a recommended crop oil or wetter should be mixed with Verdect 520 Herbicide when applied by air except for addition of Lontrel Forestry Herbicide for use in forestry and Lontrel 750 SG for use in canola only.



APPLICATION

Apply Verdict 520 Herbicide in sufficient water to obtain good coverage. It should be applied by an accurately calibrated ground rig or aircraft delivering droplets with a VMD of 200-300 microns.

The following spray volumes are recommended.

Ground application 50-150 L/ha

Aerial application 30 L/ha minimum

Use higher water volumes in orchards and in dense crops where the weeds may be shielded by the crop canopy.

CLEANING SPRAY EQUIPMENT

If broadleaf herbicides, particularly sulfonylureas, have been used in the spray equipment at any time prior to Verdict 520, particular care should be taken to follow the directions on the relevant broadleaf herbicide label for equipment cleaning, or damage to susceptible crops may occur.

After using Verdict 520, 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, hose, line and nozzles.

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

To decontaminate. Before spraying cereals, maize, sorghum or other sensitive crops, wash the tank and rinse the system as above. Then 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 of water, 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.

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

RESISTANT WEEDS WARNING

GROUP A HERBICIDE

Verdict 520 Herbicide is a member of the aryloxyphenoxy propionate group of herbicides. The product has the acetyl CoA carboxylase inhibitor mode of action. For weed resistance management Verdict 520 Herbicide is a Group A herbicide. Some naturally occurring weed biotypes resistant to the product and other Group A 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 the product or other Group A herbicides.

Since the occurrence of resistant weeds is difficult to detect prior to use, Dow AgroSciences 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 Dow AgroSciences representative.

PROTECTION OF CROPS, NATIVE AND OTHER NON-TARGET PLANTS

Verdict 520 Herbicide damages cereals and grasses.

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.

Cereal crops or grasses planted within twelve weeks of application may be damaged by the residual effects of Verdict 520 Herbicide, particularly on light and red soils.

PROTECTION OF LIVESTOCK

DO NOT graze or cut treated crops for stock food except as specified under withholding periods.

PROTECTION OF WILDLIFE, FISH, CRUSTACEANS AND ENVIRONMENT

Verdict 520 Herbicide is toxic to fish.

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

STORAGE AND DISPOSAL

Store in the closed original container in a cool, well-ventilated area. **DO NOT** store for prolonged periods in direct sunlight.

DO NOT store near feedstuffs, fertilisers or seeds.

The method of disposal of the container depends on the container type. Read the STORAGE AND DISPOSAL instructions on the label that is attached to the container.

SPILL AND LEAK MANAGEMENT

Do 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 Dow AgroSciences Emergency Services at 1-800 033 882.



SAFETY DIRECTIONS

- Harmful if swallowed.
- Will irritate the eyes and skin.
- Avoid contact with the eyes and skin.
- When preparing spray wear cotton overalls buttoned to the neck and wrist and a washable hat, elbow-length PVC gloves and face shield or goggles.
- After each day's use, wash gloves, face shield or goggles and contaminated clothing.
- Wash hands after use

FIRST AID

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

If in eyes, hold eyes open, flood with water for at least 15 minutes and see a doctor.

MATERIAL SAFETY DATA SHEET

Additional information is listed on the Material Safety Data Sheet for **VERDICT™ 520 HERBICIDE** which is available from Dow AgroSciences on request. Call Customer Service Toll Free on 1-800 700 096 or visit www.dowagrosciences.com.au

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**IN A TRANSPORT
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FOR POLICE OR
FIRE BRIGADE**



Specimen Label



Dow AgroSciences