VERSATILE VALOR FOR SUMMER CROPPING

The three distinct use patterns of Valor® make it a very flexible tool in cotton production

VALOR COTTON CONSCIOUS

As a non-volatile spike with glyphosate and other non selective herbicides prior to sowing a range of summer and winter crops

To control volunteer cotton plants (including Roundup® Ready varieties) pre- or post-sowing pre-emergence to the crop

As a lay-by treatment to control vines and other weeds in cotton

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Valor as a non-volatile spike with glyphosate and other non selective herbicides prior to sowing a range of summer and winter crops

Valor gives excellent control of key summer weed species such as peachvine, volunteer cotton, etc. when used with knockdown sprays.

- Valor's low volatility and contact action make it a safer option for summer fallow spraying in cotton growing areas, with the risk of damage to nearby cotton crops minimised.
- Valor is not limited by restrictive environmental conditions that highly volatile herbicides require to avoid spray drift. Waiting for these conditions can take over a week in summer with the weeds still growing.

This make it a valuable summer herbicide for cotton growers **and their neighbours**.

- ✔ **Be conscious of cotton and other crops sensitive to 2,4D**
- ✔ **Be conscious of your neighbours**
- ✔ **Be conscious that Valor is non-volatile and only causes a slight risk of drift**
- ✔ **Be conscious of weather conditions during spraying even when using Valor**

Typical 2,4D drift damage to cotton

Valor can be used in knockdown tankmixes prior to sowing: **Barley, chick peas, cotton, faba beans, field peas, lentils, lupins, maize, mung beans, oats, sorghum, soybeans, sunflowers and wheat.**

A mixture of Valor at 30 g/ha plus the full rate of the tank-mix partner will accelerate the symptoms (bleaching effect) and improve final control of the following weeds:

Bellvine (*Ipomoea plebeia*)	Bladder ketmia (*Hibiscus trionum*)
Caltrop (*Tribulus terrestris*)	Capeweed (*Arctotheca calendula*)
Cow vine (*Ipomoea lonchophylla*)	Doublegee (*Emex australis*)
Erodium	False castor oil (*Datura stromonium*)
Liverseed grass (*Urochloa panicoides*)	Marshmallow (*Malva parviflora*)
Medicago spp.	Noogoora burr (*Xanthium occidentale*)
Paterson's Curse (*Echium plantagineum*)	Seedling lucerne (*Medicago sativa*)
Shepherd's Purse (*Capsella bursa-pastoris*)	Sowthistle (*Sonchus oleraceus*)
Sunflower (*Helianthus annus*)	Redroot amaranth (*Amaranthus retroflexus*)
Subterranean clover* (*Trifolium subterraneum*)	Volunteer canola (*Brassica napus*)
Wild radish (*Raphanus raphanistrum*)	Wireweed (*Polygonum aviculare*)
Spurred vetch (*Vicia monantha*)	Turnip weed (*Rapistrum rugosum*)
Annual polymeria (*Polymeria pusilla*)	Dead nettle (*Lamium amplexicaule*)
Black bindweed (*Fallopia convolvulus*)	Red pigweed (*Portulaca oleracea*)
Black pigweed (*Trianthema portulacastrum*)	Tarvine (*Boerhavia dominii*)

** Suppression only.*

Valor to control volunteer cotton plants (including Roundup Ready varieties) pre- or post-sowing pre-emergence to the crop

VALOR® 500 WG HERBICIDE

Valor at 45 g/ha, applied prior to planting cotton and its traditional summer rotation crops (maize, mung beans, sorghum, soybeans and sunflowers) gives excellent control of volunteer cotton seedlings up to the four leaf stage. Additionally, in cotton crops Valor can be applied post sowing pre-emergence to the crop. In this use pattern, glyphosate may be added at the appropriate rate to control other weeds present.

BEST TIMING FOR POST-SOW, PRE-EMERGENCE APPLICATION

Provided Valor application occurs no later than two days before emergence of the first crop seedlings, choose a timing when:

- The maximum number of cotton volunteers have emerged and are smaller than 4 leaf stage.
- The least number of emerging cotton volunteers are obscured by trash or clods.
- Conditions are suitable and the cotton volunteer plants are not under stress from drought, frost, disease or insect damage.
- Other weeds to be controlled by a partner herbicide are at a susceptible stage.

Valor at 45 g/ha PSPE

UTC

Valor applied as a lay-by treatment to control vines and other weeds in cotton

CROP/ SITUATION	WEED CONTROLLED	WEED GROWTH STAGE	RATE	CRITICAL COMMENTS
COTTON Lay-by application	Noogoora burr Caltrop Yellowvine (*Tribulusterrestris & T. micrococcus*)	< 4 leaf <10 cm Ø	60 g/ha plus an adjuvant*	Apply as a shielded spray underneath cotton foliage and to inter rows to control late germinating weeds, or weeds that have escaped previous herbicide operations. Best results are obtained when applied to young weeds between the 2- and 6-leaf stage. Vines that have commenced climbing may not be controlled. CAUTION: Valor 500 WG will defoliate any cotton foliage that is contacted by the spray. Shielded sprayers must be operated to ensure that spray does not make contact with cotton foliage. DO NOT apply in conditions conducive to drift. DO NOT apply until cotton plants are 40 cm tall. DO NOT allow contact with green bark on stems or trunks. ** Always apply with Hasten™ Spray Adjuvant or Kwickin™ Spray Adjuvant at 0.5 - 1 L/100 L (use the lower rate on smaller, actively growing weeds), or Uptake™ Spraying Oil at 500 mL/100 L.*
	Bellvine Bladder ketmia Cow/Peachvine Spiked malvastrum (*Malvastrum americanum*) Black pigweed Red pigweed Annual polymeria (*Polymeriapusilla*) Sow thistle Dwarf amaranth (*Amaranthus macrocarpus*)	<12 leaf <6 leaf <12 leaf <10 cm Ø <12 leaf <15 cm Ø <6 leaf <4 leaf <4 branch	90 g/ha plus an adjuvant*	

Lay-by application using drop-arms. Note how the spray pattern is adjusted away from the stems.

The minimum length of stem that must be covered by brown bark before contact with Valor can occur, and that would allow for the directed spray pattern to overlap at the base of the stem.

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VALOR® 500 WG HERBICIDE

How to get the best results from Valor

- ✔ 100 L water/ha
- ✔ Hasten oil
- ✔ Flat fan nozzles
  - Air induction nozzles can give poor coverage when an oil is used
- ✔ Appropriate size weeds
  - Young/small
  - Look at roots
- ✔ Correct rate of mixing partner

Plant back and crop rotations

The registered rates for cotton are 30 to 90 g/ha, and are intended as foliar applications, post emergent of the target weeds. At these rates there are no plant back restrictions for the following crops, even after a lay-by application:

Summer crops:

Cotton, maize, sorghum, soybeans, mung beans and sunflower.

Winter field crops:

Wheat, barley, oats, faba beans, chickpeas, lentils and lupins.

Recommendations for removal of Valor residues from spray equipment

Equipment with Valor residue remaining in the system may result in crop injury to the subsequently treated crop. Spray equipment, including mixing vessels and nurse tanks, must be cleaned following Valor application. After Valor is applied, the following steps must be used to clean the spray equipment:

1. Completely drain the spray tank, rinse the sprayer thoroughly, including the inside and outside of the tank and all in-line screens.

2. Fill the spray tank with clean water and flush all hoses, booms, screens and nozzles.

3. Top off tank, add 1 litre of 3% household ammonia for every 100 litres of water, circulate through sprayer for five minutes, and then flush all hoses, booms, screens and nozzles for a minimum of 15 minutes. If diaphragms are being used on the spray boom, loosen diaphragms before flushing the spray system, allowing cleaning solution to spray through the open diaphragm. If spray lines have any end caps, they must be loosened before flushing the system, allowing cleaning solution to spray through the loosened caps.

To enhance removal of Valor from the spray system, add a tank cleaner such as All Clear™ DS or Kleenup™ Granular in place of ammonia. Follow the instructions on the product label for these products. All-Clear DS has very clear and detailed instructions on how to achieve effective decontamination. They can be viewed on the AgNova website here: http://www.agnova.com.au/content/custom/products/downloads/All-Clearflowchart-AgNote.pdf

4. Drain tank completely.

5. Add enough clean water to the spray tank to allow all hoses, booms, screens and nozzles to be flushed for 2 minutes.

6. Remove all nozzles and screens and rinse them in clean water.

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