

## SUMMER WEED CONTROL TRIAL

*Felicity Pedley, Facilitator, BCDS*

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### Aim

To investigate the effectiveness of a number of herbicide treatments for the control of summer weeds such as heliotrope, padi melons and medic.

### Design

Plot size: 2.5 m wide x 10 m long  
Treatments: 14 plus a control plot, each treatment replicated 3 times  
Size of trial: 38 m wide x 40 m long (5 m buffers between each replicate)

### Treatments

1. Logran 20 g/ha
2. Ester 700 mls/ha + wetter 0.1%
3. Sprayseed 750 mls/ha + wetter 0.1%
4. Sprayseed 1 L/ha + wetter 0.1%
5. Sprayseed 1 L/ha + Ester/ha 300 mls + wetter 0.1%
6. Sprayseed 1 L/ha + Diuron 500 mls/ha + wetter 0.1%
7. Glyphosate 1 L/ha + wetter 0.2%
8. Glyphosate 1 L/ha + Ester 200 mls/ha + wetter 0.2%
9. Glyphosate 800 mls/ha + Ester 500 mls/ha + wetter 0.2%
10. Glyphosate 600 mls/ha + Banvel 200 500 mls/ha + wetter 0.2%
11. Amine 500 mls/ha + Diuron 500 ml/ha + wetter 0.1%
12. Amine 2 L/ha + wetter 0.1%
13. Garlon 100 mls/ha + Glyphosate 600 mls/ha + wetter 0.1% + oil 0.5%
14. Garlon 80 mls/ha + uptake oil 0.5%
15. Control

### Method

Applied with 2m wide hand boom spray, water rate 100L/ha  
All treatments applied on 6/1/95, except Logran on the 2/12/94  
Soil was moist, winds south westerly 10km.

### Results

A field day was held on February 3, 1995 to discuss the results of the trial. The results were very disappointing as only one or two of the fourteen treatments were effective. The Logran 20 g/ha treatment was most noticeable with little weed growth. From discussion the following comments were noted:-

**Rates:**

Rates of Gramoxone, Sprayseed, Glyphosate and Ester could have been increased.

Examples of possible mixes:-

Ally 5 /ha + Gramoxone 1/ha

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Sprayseed 1.5 L/ha + Ester 400 ml/ha

Atrazine 1.2 L/ha + Amine 1.2 L/ha + Ally 5 g/ha

ramoxone 1 L/ha + Ester 80 400 ml/ha

**Note:** Use of Ally in one year may effect a grain legume sown in the same year. Logran will carry over in the soil for up to 2 years in high p.H soils and medics may be affected particularly in the first year after spraying. Glean has the greatest effect on vetch, while Amberpost effects legumes.

**Spray conditions:**

- Leaves must be clean, free of dust or soil particles, to allow the herbicide contact with the plant, particularly when using Sprayseed and Glyphosate as these products are broken down or bound by clay particles.
- The temperature when spraying should not be too hot. If too hot the herbicide will evaporate off the leaves.
- A water rate of 100 litres minimum should be used to decrease the effect of evaporation and help coverage of products such as Sprayseed and Gramoxone as these products are dessicants not translocated herbicides.
- Most summer weeds have a hairy or waxy leaf covering. To overcome the effect of a hairy leaf wetter should be used, to overcome the effect of a waxy leaf oil should be used. The use of oil also helps to reduce evaporation and minimise spray drift.

**Weeds:**

Suggested rates for:-

Bindi-eye: Ester and Roundup

Skeleton weed: Roundup 1L/ha in March or two weeks prior to sowing  
Lontrel 500mls/ha + MCPA 500 1.5L/ha only at rosette stage  
Ally 5g/ha in some situations has only given suppression of the weed

Horehound: Spot spray rates only:-  
Grazon DS 50ml/100Litres  
Barrel + Roundup  
Glean + Ester (in crops opposed to Ally)  
Ester + Amitrole  
Roundup + Ally  
All need good coverage of weed.

## SUMMER WEED SPRAYING GUIDE

Listed below are some common summer weeds and suggested control measures. Limited trial data from South Australia suggests useful control or suppression can be achieved. For further information refer to your local IAMA dealer.

WEED	POST EMERGENT TREATMENT
<b>Afghan Melon</b> (large smooth fruit)	<b>Garlon</b> - 120 ml/ha (up to 20 cm diameter) plus oil larger plants 160 ml/ha <b>Amine 2 4-D</b> - small plants 1.4 L/ha plus oil
<b>Padi Melons</b> (small prickly fruit)	<b>Garlon 80mls</b> - 160 ml/ha plus oil depending on size
<b>Heliotrope</b>	<b>Sprayseed</b> - 1 L/ha up to 15 cm high plus oil -1.5 L/ha or 1 L/ha plus 500 ml/ha Diuron on larger plants <b>Gramoxone</b> - 750 ml/ha up to 15 cm high plus oil
<b>Skeleton Weed</b>	<b>**Lontrel</b> - 500 ml/ha plus 1 L/ha MCPA - Amine * - 500 ml plus 1L MCPA - Amine/100L water <b>Tordon</b> - *1 vol - 100 vol treat 2 m radius around plant
<b>Prickly Lettuce</b>	<b>Amine 2, 4-D</b> - 1.4 L/ha plus oil
<b>Caltrop</b>	<b>Reglone</b> - 1.5 vol:100vol plus wetter. For larger plants add Amine 2, 4-D 1:1000 <b>**Ally</b> - 10 gm/100L water plus wetter <b>**Glean</b> - 7-10 g/ha
<b>Volunteer Cereals</b>	<b>Gramoxone</b> - 500 ml - 1 L/ha plus oil
<b>Volunteer Peas</b>	<b>Ester 80</b> - 700 ml/ha <b>Sprayseed</b> - 1 L/ha plus oil
<b>Saffron Thistles</b>	<b>**Lontrel</b> - 100 ml/ha plus 1-1.5 L/ha MCPA Amine
<b>Silver Leaf Night Shade</b> (tomato weed)	<b>Starane</b> - 1 L/ha * - 1vol:100vol

\* Spot spray recommendations only

\*\* Can have some residual effect on certain crops - please observe plant back periods.

Glean 5-10 gm pre-emergent on heliotrope gives good control.

**Oils** The addition of 1% by volume of spraying oil will assist all summer spraying when using Garlon, Sprayseed and Amine 2, 4-D.

**Water Volume** Use water volumes of at least 100 L/ha in broadacres when spraying under summer conditions.

**REMEMBER: BCDS Field Day - 20 September**