



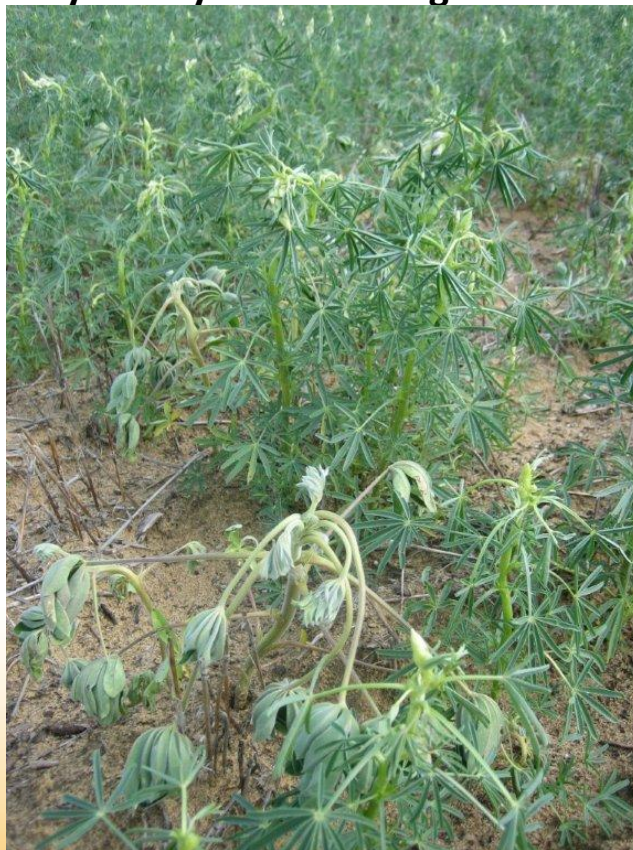
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Selective Control of Blue Lupins in Mandelup Crops

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Selective Control of Blue Lupins in Mandelup Crops



What we have learnt

- Which Herbicide
- Rate
- Timing
- Yield Response
- Crop Damage (weed free control)
- Where to use it
- Registration – there is none





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Selective Control of Blue Lupins in Mandelup Crops

Which Herbicide

- Landmark Trial 1998 – Grant Thompson

Treatments	Crop Stage	Yield kg/ha	Yield (% Control)
Control -	IBS	970	100%
Broadstrike – 10 g/ha	8lf	130	13%
2,4-D Ester 80 – 70 ml/ha	flowering	654	67%
Lontrel – 30 ml/ha	8lf	1337	138%
lsd 0.01		282	
lsd 0.05		186	





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Selective Control of Blue Lupins in Mandelup Lupins

Which Herbicide

2009 Trial results. TOS1: Big Bud Stage (6 Aug): TOS2: Flowering (17 Aug). Higher than 4 crop damage rating is likely to be unacceptable.

Treatment	Blue Lupin Control Rating (Harvest)	Crop Damage Rating (31 st August)	Average t/ha
40ml Garlon TOS 2	9	3	1.96
20ml Garlon	7.5	1	1.94
40ml MCPA Amine TOS 2	7	2	1.93
40ml MCPA Amine + 20ml Garlon TOS 2	10	3	1.89
40ml MCPA Amine	6.7	1	1.78
50ml Lontrel TOS 2	2	2	1.67
40ml Garlon	9	4	1.61
5ml MCPA Amine	1	1	1.54
25ml Lontrel	3	1	1.54
10ml MCPA Amine	3	1	1.50
Control	1	1	1.46
50ml Lontrel	3	5	1.35
40ml Garlon +500mL Select	9.5	8	1.22
60ml Garlon	9.5	7	1.15
40ml Garlon + 50 ml Lontrel	9.5	9	0.87
100ml Lontrel	6	8	0.69
120ml Garlon	10	9	0.67
LSD 5%			0.26
CV%			10.7





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2009 yield data : Sprayed at Flowering (17 Aug)

Treatment	Blue Lupin Control Rating (Harvest)	Crop Damage Rating (31 st August)	Average t/ha
40 mL/ha MCPA Amine	6	1	2.182
40 mL/ha MCPA Amine + 25 mL/ha Lontrel	7	2	2.102
40 mL/ha MCPA Amine + 100 g/ha Metribuzin + 100mL/ha Brodal	6	1	2.052
80 mL/ha MCPA Amine	8.3	2	2.035
120 mL/ha MCPA Amine	9	5	1.742
Control	1	1	1.669
240 mL/ha MCPA Amine	10	7	0.666
LSD 5%			0.152
CV%			4.80%





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Rate

- 20-30 mL/ha Garlon (no more) or
- 20 mL/ha Garlon + 40-80 mL/ha MCPA Amine





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Selective Control of Blue Lupins in Mandelup Crops

Timing

- Selectivity between blues and narrow leaf lupins increases with age.
- Early timings (2-4leaf or 6-8leaf or 8-10leaf) of Garlon caused large yield reductions (80%) and losses in plant numbers.





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Selective Control of Blue Lupins in Mandelup Crops



Timing

- Big bud stage – Too early





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Timing

- Flowering on Primary– Too early





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Timing

- Pods on Primary– Ideal.





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Timing

- Pods on secondary – Too Late





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Yield Response – With Blues Present

2009 Trial results for the blue lupin control in narrow leaf lupin trial. TOS 1 – Big Bud, TOS2(red) – Flowering. Higher than 4 crop damage rating is likely to be unacceptable.

Treatment	Blue Lupin Control Rating (Harvest)	Crop Damage Rating (31 st August)	Average t/ha
40ml Garlon TOS 2	9	3	1.96
20ml Garlon	7.5	1	1.94
40ml MCPA Amine TOS 2	7	2	1.93
40ml MCPA Amine + 20ml Garlon TOS 2	10	3	1.89
40ml MCPA Amine	6.7	1	1.78
50ml Lontrel TOS 2	2	2	1.67
40ml Garlon	9	4	1.61
5ml MCPA Amine	1	1	1.54
25ml Lontrel	3	1	1.54
10ml MCPA Amine	3	1	1.50
Control	1	1	1.46
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40ml Garlon +500mL Select	9.5	8	1.22
60ml Garlon	9.5	7	1.15
40ml Garlon + 50 ml Lontrel	9.5	9	0.87
100ml Lontrel	6	8	0.69
120ml Garlon	10	9	0.67
LSD 5%			0.26
CV%			10.7





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What we have learnt

- Broad acre crop sprayed at flowering crop 2009.
- Sprayed – 2.2 t/ha
- Unsprayed – 1.4 t/ha





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- To use it in
- Registration





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Selective Control of Blue Lupins in Mandelup Lupins

2010 yield data Red treatments are the 2nd time of spraying (pods 2cm long on the main stem). Weed Free tolerance trial

Treatment	Blue lupin control Rating from Broads*	Weight (kg/ha)
Control	1	1599
20 mL/ha Garlon	5	1562
80 mL/ha MCPA Amine TOS2	4	1541
40 mL/ha MCPA Amine TOS2	2	1539
80 mL/ha MCPA Amine	3	1537
40 mL/ha MCPA Amine	1	1530
20 mL/ha Garlon TOS2	5	1503
20 mL/ha Garlon + 40 mL/ha MCPA Amine TOS2	7	1479
20 mL/ha Garlon + 40 mL/ha MCPA Amine	7	1437
20 mL/ha Garlon + 80 mL/ha MCPA Amine TOS2	10	1428
40 mL/ha Garlon TOS2	9	1401
20 mL/ha Garlon + 80 mL/ha MCPA Amine	10	1238
40 mL/ha Garlon	9	1162
LSD 5%		66
CV		2.7





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Selective Control of Blue Lupins in Mandelup Crops

When to use it

- Bad blue lupin paddock – wait for a germination and then seed.
- Patchy blue on 20% of paddock – dry seed and use Garlon
- Low numbers of blues across the paddock – dry seed and use Garlon
- Have got some of the lupins to germinate but expect more to come ??





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Thanks to:
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