

## Trial Name:

Pre-Emergent application trial in Lupins

Trial Number:

50MIG13

Researcher:

Debbie Gillam, Sebastian Recabarren, Brooke Forsyth

Organization:

Mingenew-Irwin Group

## Why do the trial?

To compare the efficacy on weeds and effect on Lupins of pre-emergent herbicides

## Crop management

Grower and Location:

MIG Main Trial Site, Horwoods, Mingeneu

Soil Type:

Yellow Sand

Soil test results:

Depth	PH	EC	Organic Carbon	Ammonium CaCl	Nitrate Nitrogen	Phosphorus Colwell	Potassium Colwell	Sulphur	Aluminium (CaCl <sub>2</sub> )
(cm)	(H <sub>2</sub> O)	(dS/m)	(%)	(mg/Kg)	(mg/Kg)	(mg/Kg)	(mg/Kg)	(mg/Kg)	(mg/Kg)
0-10	6.2	0.042	0.58	<1	13	17	48	4.5	0.34
10-20	5.0	0.021	0.21	1	5	16	34	4.6	3.90

Total Annual Rainfall:

369.3 mm

GSR (Apr-Oct):

283.3 mm

Paddock History:

2012	2011	2010	2009	2008
Wheat	Lupins	Wheat	Lupins	Wheat

Plot size:

3.0m x 20m (1.54x20m sown)

Seeding Date:

21<sup>st</sup> May 2013

Seeding Rate:

90 Kg/ha (Wyalkatchem)

Seeding Machinery:

DAFWA Small plot cone seeder, Knife points and press wheel

Plant Counts:

20<sup>th</sup> June

Vigor Ratings:

15<sup>th</sup> August

## Paddock Inputs

Fertilizer

Pre:

40 kg/ha MAP

Post:

nil

Total Fertilizer Cost:

\$28/ha

Herbicide

Pre:

1.2L/ha SpraySeed + as per treatment

post:

100ml Brodal + 100ml Metribuzin

Insecticide

200ml/ha Talstar and 100ml/ha Dominex, at seeding

Pre:

# Key Messages

Table 1.

Variety	Yield t/ha	Plants per m <sup>2</sup>	Weed Control Rating	Vigour	Retuns \$/ha
2.5L BoxerGold + 300g Metribuzin	4.07 a	18	7	6	LUP1 \$1254
2.5L Trifluralin + 300g Metribuzin	3.71 ab	16	7	7	LUP1 \$1142
1.0L Edge + 300g Metribuzin	3.70 ab	16	6	6	LUP1 \$1138
1.5L Simazine + 300g Metribuzin	3.64 abc	16	6	6	LUP1 \$1120
1.0L Edge	3.62 abc	16	6	7	LUP1 \$ 1115
2.5L Trifluralin	3.17 bc	14	4	5	LUP1 \$ 976
1.5L Simazine	3.11 bc	14	2	6	LUP1 \$ 956
2.5L BoxerGold	2.96 bc	13	2	6	LUP1 \$ 912
Nil	2.90 c	13	2	5	LUP1 \$ 892
cv%	5.7	5.7	21	9.4	
I.s.d.	0.77	3.43	4.39	1.98	

Weed control rating: 1 = no control, 10 = total control , Vigour: 1=poor , 10 = very good vigour

## Price Notes:

All prices EPR delivered Geraldton, not including delivery and handling charges and GST exclusive, Refer to appendix 3.

## Comments:

\* This site had a heavy radish burden and treatments with Metribuzin controlled radish early and showed a significant increase in yield.

- Early control of radish also contributed to a better establishment with more plants per m square.
- Boxergold was the only herbicide treatment that significantly increased yield in this trial when combined with metribuzin

**Acknowledgements:** Many thanks to the Horwood Family for the trial site and assistance