

**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, Mingenew

**Soil Type:** Yellow Sand

**Soil test results:**

Depth	PH	EC	Organic Carbon	Ammonium CaCl	Nitrate Nitrogen	Phosphorus Colwell	Potassium Colwell	Sulphur	Aluminium (CaCl2)
(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