

# 92MIG15

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Supported by: NACC and the National Landcare Programme

## GROWER: GABYON PASTORAL CO, IRWIN

Location: Midlands Road, Irwin

Soil Type: light grey sand over gravel

Total Annual Rainfall: 285ml

GSR (Apr-Sept): 211ml

Paddock History: Long term perennial trial site

Plot Size: 2.0m x 20m

Trial Size: 22m x 60m

Sowing Date: 21/5/15

Sowing Rate: Plot specific

Sowing Machinery: DAFWA cone seeder, knife points and press wheels

Variety: As per treatment

Date of plant counts: 15/07/15

## PADDOCK INPUTS

### Fertiliser

Pre seeding: 160kg/ha Big Phos

At seeding: 80kg/ha Agstar (banded) 50 kg/ha MAP (Topdressed)

Total cost: \$196.68/ha (\$108 for Agstar and MAP only)

### Chemical

Knockdown: 2.0L/ha Roundup  
 Post emergent: 500ml/ha Select (Lupin Plots)

Total cost: \$11.40/ha, Lupins \$17.40/ha

Insecticide: 200ml/ha Dominex

## WHY DO THE TRIAL?

This demonstration aims to identify techniques for the successful establishment and management of annuals in a predominately perennial pasture. Local growers have had success in sowing annuals into paddocks sown to perennial grasses, however there is a knowledge gap surrounding how this technique performs as the size of the perennial plant increases over time. Pasture cropping is an innovative technique growers on the white non-wetting sands have been using to increase the productivity of their paddocks.

## KEY MESSAGES:

- This trial was established in a 4 year old perennial grass stand
- Knockdown herbicide application removed pressure from the perennials during seedling establishment but unfortunately very low rainfall following seeding converted to a very low seedling establishment in some plots and some seedling deaths.

Table 2.

TREATMENT	ppm <sup>2</sup>	YIELD t/ha	PROTEIN %	WEIGHT kg/ha	SCREENINGS %	RETURNS \$/ha
Narrow Row – Scope Barley	72.7	0.97	11.8	62.9	22.75	BFED \$230
Narrow Row – Mace wheat	80.7	0.6	11.9	77.6	5.6	AUH2 \$174
Wide Row – Mace Wheat	81.8	0.48	10.4	74.7	8.13	AGP1 \$130
Wide Row – Scope Barley	62.9	0.4	10	64.2	19.68	BFED \$95
Wide Row, Paired Row – Mace wheat	87.9	0.36	11.5	76.4	6.73	AUH2 \$103
Narrow Row – Serradella and Scope Barley	37.5	0.15	10.6	62.5	16.4	BFED \$36
Wide Row – Barlock lupins	12.5	0				DNF
Narrow Row – Barlock Lupins	17.8	0				DNF
Narrow Row – Serradella and Barlock Lupins	16.7	0				DNF
P Value	<.001	<.001				
CV	4.6	7.00				
L.S.D 5%	19.45	0.26				

Price Notes: All prices net delivered Geraldton and GST Exclusive

DNF – did not finish

## COMMENTS:

- The white Barlock lupins and serradella did not establish at this site due to very low rainfall after seeding and dry conditions following July rainfall.
- More basal fertilizer was applied than required at this site. The narrow row Scope barley treatment returned \$110.60/ha with fertilizer (Agstar and MAP only) and herbicide costs removed. The narrow row Mace wheat treatment returned \$54.60.
- Scope Barley is definitely a viable option for increasing the return from established perennial grass stands and vigour was strong throughout the season.

## ACKNOWLEDGEMENTS:

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