

Lupin Variety Trial 2013

DAFWA- Jennifer Garlinge

Report: Alan Meldrum, Pulse Australia

Purpose:	Measure yield improvement in varieties from the Lupin breeding program
Location:	WMG Main trial site, Peter Negus
Soil Type:	Sand
Soil Test Results:	
Rotation:	

BACKGROUND SUMMARY

This is a Stage 4 variety trial. It is the final stage of testing varieties before considering any for release.

TRIAL DESIGN

Please insert methodology and any design details which could include:

Plot size: 1.8m x 20m

Machinery use: DAFWA come seeder, knife points and presswheels

Repetitions: 4

Crop type and varieties used: Angustifolius lupins

Seeding rates and dates: 15 May 2013

Fertilizer rates and dates:

Herbicide rates and dates:

Other applications/ treatment rates and dates:

TRIAL LAYOUT

Randomised block design



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RESULTS/STATISTICS

Region	Lupin Zone 1	
Nearest Town	Dandaragan	
Variety Name	t/ha	%
PBA Barlock ^A	3.81	107
PBA Gunyidi ^A	3.68	104
Mandelup ^A	3.46	98
Jenabillup ^A	4.14	117
Tanjil ^A	3.46	98
Danja	2.41	68
Site Mean (t/ha)	3.55	
CV (%)	7.30	
Probability	<0.001	
LSD (t/ha)	0.43	
Harvest Date	20-Nov-2013	
Sowing Date	15-May-2013	
GS Rainfall, 2013, average (mm)	339.5	422.3

FINANCIAL ANALYSIS OF RESULTS

At \$300/tonne, the yield improvement in this trial of PBA Barlock over Tanjil represents a \$105/ha increase in gross receipts.

OBSERVATION/ DISCUSSION/ MEASUREMENTS

- The analysis of the results must take into account the Least Significant Difference (LSD) of 0.43 t/ha.
- The LSD of 0.43 t/ha indicates that Jenabillup was statistically better yielding than all varieties except PBA Barlock.
- All other varieties except Danja were not statistically significantly different in yield.
- The yield trend shows PBA Barlock was second highest yielding.
- While Jenabillup was the highest yielding variety, which is not unusual for this variety, it is not recommended for the WMG region as it is susceptible to Anthracnose.

PEER REVIEW

ACKNOWLEDGEMENTS

Stephen Cosh and Trevor Bell, Geraldton DAFWA, for the excellent conduct of the trial.