

# Lupin Crop Variety Trial – Wongan Hills

Australian Crop Accreditation System Limited

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National  
Variety  
Trials

## Aim/ Background

To evaluate yields and quality of new and existing lupin varieties.

## Trial Details

Property	Wongan Hills Research Station	
Plot size & replication	1.54m x 20m x 3 replications	
Soil type	Sandy loam	
Soil pH (CaCl <sub>2</sub> )	0-10cm: 5.8	10-20cm: 4.6
EC (dS/m)	0.048	
Paddock rotation	2010: pasture, 2011: pasture, 2012: wheat	
Variety	As per protocol	
Seeding date	14/05/13	
Fertiliser	14/05/13: 80 kg/ha Big Phos Manganese	
Herbicides	13/05/13: 1.1 kg/ha Simazine, 1.5 L/ha Trifluralin, 2 L/ha Paraquat, 2 L/ha Diquat 14/05/13: 100 mL/ha Bifenthrin 04/06/13: 150 mL/ha Diflufenican 17/06/13: 500 mL/ha Clethodim, 100 mL/ha Hasten	
Growing Season Rainfall	256mm	

## Results

**Table 1:** Average yield data of six lupin varieties grown in 2013 at the Wongan Hills Research Station.

Variety	Yield (t/ha)	Percentage of site mean (%)
PBA Barlock	3.88	107
PBA Gunyidi	3.84	106
Mandelup	3.77	104
Jenabillup	3.54	98
Tanjil	3.45	95
Danja	3.25	90
Site Average	3.62 t/ha	
LSD	0.21 t/ha	6
CV	3.20%	
Probability	<0.001	

## Comments

- PBA Barlock was released in 2013 and is to replace Tanjil / Wonga in the higher rainfall zones where anthracnose pressure is greatest.
- PBA Barlock compares favourably with PBA Gunyidi for yield through all lupin zones. It produces higher yields than PBA Gunyidi in high rainfall districts and similar or less in medium and low rainfall districts respectively.
- PBA Barlock has similar agronomic characteristics to Tanjil but with much higher yield.
- Is slightly later flowering and maturing than Mandelup.
- More resistant to pod shatter than Mandelup, similar to PBA Gunyidi.
- This variety shows equivalent herbicide tolerances to registered herbicides as Mandelup.

The NVT trials are just one source of information on which growers can base management decisions on retention release or adoption of new varieties. Growers must use more than one information source when making significant management decisions in relation to cropping varieties.

## Acknowledgments

Bevan Buirchell in the breeding and release of PBA Barlock, congratulations Bevan and team.