

Field Pea, Germplasm, LRZ Northern Mallee (Werrimull), Victoria

Aim

To identify Pulse Breeding Australia (PBA) field pea genotypes which may offer yield improvements over current varieties grown in the low rainfall northern Mallee environment.

Treatments

Five commercial field pea varieties most commonly grown in the Mallee region were compared to five PBA lines (**Table Table**). The trial design was a complete randomised block with three replicates.

Table 1. Field pea genotypes for low rainfall Mallee environments trial treatment list

Variety	Target Plant Density (plants/m²)	Seed Weight (g/100 seed)	Seeding Rate (kg/ha)
'FP1'	45	21.0	104
'FP2'	45	16.9	84
OZP1502	45	17.0	84
OZP1602	45	18.2	90
OZP1701	45	19.2	95
PBA Gunyah	45	19.4	96
PBA Oura	45	20.0	99
PBA Pearl	45	18.0	89
PBA Wharton	45	18.2	90
PBA Butler	45	19.6	97

Table 2. Other Site Details

Sowing Date	15 May 2018
Plant Density (plant/m²)	45
Stubble (height cm)	5
Row Spacing (cm)	28
Fertiliser	50 kg/ha Granulock Z

Results and Interpretation

There were no significant differences in grain yield between treatments. The mean yield across all varieties was 0.79 t/ha (

- **Table**).

Table 3. Grain yield of field pea varieties and breeding lines at Werrimull in 2018.

Treatment	Grain Yield (t/ha)
'FP1'	0.79
'FP2'	0.75
OZP1502	0.85
OZP1602	0.82
OZP1701	0.78
PBA Butler	0.87
PBA Gunyah	0.84
PBA Oura	0.67
PBA Pearl	0.73
PBA Wharton	0.73
LSD (P<0.05)	NS