

2023 VARIETY TRIALS

Faba Bean Summary

Variety trials under irrigation provide key information on varieties in terms of yield potential, grain quality and also assess varietal characteristics such as maturity, height, disease resistance and lodging. The Kerang Research Centre is predominantly self-mulching grey clay, or a medium grey clay, with some red medium clay on the western section.



Sowing Date 9 May

Target Plant Population 25 plants/m²

Seeding Rates 166 - 260 kg/ha based on TGW

Irrigation 0.7 MI/ha - 7 April
0.8 MI/ha - 31 August
0.9 MI/ha - 22 September

Total Water 2.2 MI/ha
GSR 220mm (Decile 5)

Fungicide Veritas 1.4l/ha 11 August
Chlorothalonil 1.5 l/ha 22 September

Harvest 7 December

E

Eight faba bean varieties and lines were sown, following pre-irrigation (0.7 MI/ha), on 9 May, with variable sowing rates aiming at 25 plants/m². Establishment was even and achieved the target population.

F

The trial received two fungicide applications: 11 August and 22 September.

W

The trial was irrigated three times in spring, beginning 31 August (0.8 MI/ha) again on 22 September (0.9 MI/ha) and on 23 October (0.8 MI/ha).

H

Harvested on 8 December, the trial averaged 7.3 t/ha. All varieties/lines were statistically of equal yield. Bean size did vary between varieties/lines.

Results

Table 1: Yield, bean size, plant height at harvest and lodging score.

Variety	Yield t/ha	Height cm	Lodging	Seed Wt (g/100s)
Breeding line 3	7.60	110	7	75.9
Bendoc	7.49	120	7	68.1
Breeding line 4	7.48	120	6	79.3
Samira	7.42	130	6	79.1
Breeding line 2	7.21	130	4	86.3
Fiesta	7.04	120	7	71.5
Amberley	6.99	115	5	74.4
Breeding line 1	6.95	110	3	78.3
p	0.126			
Isd	NS			
cv%	5.2			
Trial Ave	7.27			

Lodging Score: 0 = no lodging,
9 = flat on the ground.

7.27 t/ha
Average Yield

7.60 t/ha
Highest Yield

Note: This is only one trial in one location/environment. It is advised to consult other trial results over multiple sites and seasons before making annual variety decisions.

Variety	2015	2016	2017	2018	2019	2020	2021	2023	Ave
Breeding line 2				108%	111%	110%	107%	99%	107%
Breeding line 4							102%	103%	103%
PBA Samira	106%	108%	97%	100%	98%	94%	101%	102%	101%
Breeding line 3							96%	104%	100%
Breeding line 1					97%	107%		96%	100%
PBA Bendoc			93%	97%	97%	100%	100%	103%	98%
PBA Marne	85%	97%	101%	98%	104%	101%	99%		98%
PBA Amberley	77%	116%	104%	98%	93%	98%	94%	96%	97%
Nura	98%	83%		93%	99%	95%			94%
Zahra	97%	95%	89%	89%	84%	98%			92%
Site Average t/ha	5.6	7.4	6.2	6.2	5.1	5.8	7.3	7.3	6.3