

Faba Bean, Nutrition, HRZ Southern Wimmera (Gymbowen), Victoria

Authors

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Aim

To investigate the response of faba bean to application of lime, macro and micro-nutrients

Treatments

Variety: PBA Samira

Treatments: See Table 2 below

: The All Nut treatment had 6 kg/ha N, 16 kg/ha P, 30 kg/ha K, 6 kg/ha S, 2.5 kg/ha Zn, 1 kg/ha Cu, 3 kg/ha Mn and 0.06 kg/ha Mo

: Fluid lime (Calcium:38% W/V, Carbonate:57.7% W/V, Carbon:11.6% W/V, pH:9-10, Neutralizing value:99) @ 90 l/ha

Other Site Details

Gymbowen	
Sowing date	30 April
Stubble height (cm)	Standing (30)
Row Spacing (cm)	25.4
Plant density (plants/m ²)	20

Results and Interpretation

- Key Messages: There was no grain yield response to application of lime, macro and micro-nutrients, indicating that none of the applied nutrients were yield limiting at the site. Grain yield ranged between 4.52 and 4.89 t/ha.
- Establishment and Plant growth: Establishment was uniform due to adequate stored soil moisture at sowing and good rainfall condition after sowing. Plant growth throughout the season was excellent due to favourable growing season conditions. There was no significant visual difference in growth between the treatments.
- Grain Yield: There was no significant grain yield response to application of lime, macro and micro-nutrients, which ranged between 4.52 and 4.89 t/ha (Table 1). The results showed that none of the applied nutrients were limiting yield of faba bean at the site. The lack of response to application of liquid lime at 90 l/ha could be due to the moderate level of acidity at the site. The soil pH (CaCl₂) was 5.2 in the top 10 cm.

Table 1. Grain yield (t/ha) response of faba bean to application of lime, macro and micro-nutrients at Gymbowen in 2019.

Treatment	Grain Yield (t/ha)
No fertilizer	4.52
Lime	4.65
Nut_All	4.76
(N, P, K, S) + Lime	4.73
Nut_All - N	4.79
Nut_All - P	4.66
Nut_All -K	4.83
Nut_All - S	4.71
Nut_All - Zn	4.84
Nut_All - Cu	4.89
Nut_All - Mn	4.84
Nut_All - Mo	4.71
Lsd	ns