F5 Disease Management, HRZ South West (Inverleigh), Victoria

Aim

To investigate the adaptability of a range of field pea varieties to varying disease management strategies.

Treatments

Varieties: White Peas: PBA Pearl, Sturt.

Dun peas: PBA Wharton, PBA Coogee, Kaspa, PBA Gunyah, PBA Oura, PBA

Percy, Morgan, OZP1208, OZP1101.

Blue peas: OZB1308. Marrowfat: OZP0911. Maple: OZP0916.

Disease Control Fortnightly: chlorothalonil 500 @ 2 L/ha plus mancozeb @ 2kg applied

fortnightly starting 6 weeks after emergence. A total of 6 applications were

made throughout the season.

Early: mancozeb @ 2kg applied 9 Node + early flower.

Other Details

Stubble: Slashed Row Spacing: 20 cm.

Fertiliser: MAP @ 100 kg/ha at sowing.

Plant Density: 20 plants/m².

Results and Interpretation

• Key Messages: New varieties are available for southern Victoria, offering a range of grain types and forage options, associated with excellent yield potential. Disease had little impact on yields in 2014. PBA Pearl was the highest yielding variety producing, 2.3t/ha and estimated profit of \$500/ha.

• In 2014 there was very little disease observed in field peas, due to the drier season. There were no obvious differences in the amount of disease observed in the fungicide treatments or among varieties.

Grain yields of commercial cultivars ranged between 1.80 t/ha for Morgan to 2.30 t/ha for PBA Pearl (Fig 1). While there was no significant difference between the disease management treatments, there was a trend, in that, the 'Fortnightly' and the 'Early' treatments had average yields of 2t/ha across all varieties, while the 'Nil' treatment was 1.87t/ha.

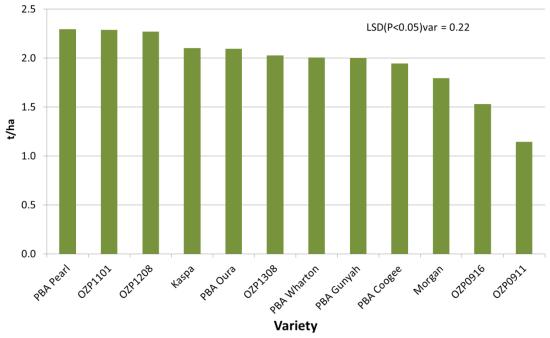


Figure 1. Grain yield (t/ha) of field pea varieties grown at Inverleigh in 2014.

Key Findings and Comments

• PBA Pearl, consistent with all other trial sites performed extremely well at Westmere in 2014, displaying yield significantly higher than most other commercial varieties. The new breeding line OZP1101, similar to 2013, produced similar yield to PBA Pearl. While there was no response to disease management in 2014, there continued a similar trend to 2013 where significantly higher yields and profitability were achieved with disease management. Based on yields achieved (2.3t/ha) peas could have achieved a net profit of approximately \$500/ha based on management costs of \$250/ha and grain price at \$330/t.