Faba Bean, Disease Management, MRZ Wimmera (Horsham), Victoria

Aim

To evaluate potential of foliar fungicide spray strategies, new breeding lines and varieties for management of fungal diseases in faba bean.

Treatments

Disease Management

Treatment	Chemical and Application Rate	Timing
Nil	No fungicide applied	
Budget	Tebuconazole 430 @ 350ml/ha (+Agridex 1000ml/ha)	At 4 weeks after emergence and canopy closure
Complete	Tebuconazole 430 at @ 350ml/ha (+Agridex 1000ml/ha) + Chlorothalonil 720 @1.5L/ha and then Chlorothalonil 720 @1.5L/ha + carbendazim 500 @ 500ml/ha	Tebuconazole 430 at @ 350ml/ha (+Agridex 1000ml/ha) + Chlorothalonil 720 @1.5L/ha at 4 weeks after emergence and then Chlorothalonil 720 @1.5L/ha + carbendazim 500 @ 500ml/ha, fortnightly (x7)

P-Pickle T® fungicide seed treatment was applied to all treatments except the 'Nil', at 200ml/100kg seed (360 g/L Thiram and 200 g/L Thiabendazole).

*****Some of the treatments in this research contain unregistered fungicides, application rates and timings and were undertaken for experimental purposes only. The results within this document do not constitute a recommendation for that particular use by the author or author`s organisation.***

Other Site Details

Sowing Date	22 May
Stubble (height cm)	Standing (30)
Row Spacing (cm)	36
Plant Density (plant/m^2)	20
Fertilizer (kg/ha)[1]	80

1. MAP (9.2, 20.2, 0, 2.7) + Zn (2.5)

Results and Interpretation

- **Key Message:** Disease was not an issue in 2018 due to very dry seasonal conditions. There was no difference in grain yield between the disease management strategies, and the varieties and breeding lines.

- **Establishment and Plant Growth:** Due to a dry start to the season, establishment and early growth was very slow in 2018. Dry seasonal conditions impacted plant growth and frost events during the reproductive stage caused flower and pod abortion. Disease was not an issue in 2018 due to very dry seasonal conditions.

- **Grain Yield:** Grain yields were very low in 2018, less than 0.85 t/ha, due to very dry and frosty conditions (Table 1). The differences in grain yield between the disease management strategies, and varieties and breeding lines were not significant (Table 1).

Table 1. Grain yield (t/ha) of faba bean breeding lines and varieties sown in a disease management trial at Horsham in 2018.

	Grain Yield (t/ha)			
Variety	**Nil**	**Budget**	**Complete**	*Average*
AF09169	0.57	0.75	0.74	*0.69*
AF11023	0.50	0.62	0.83	*0.65*
AF12025	0.75	0.67	0.80	*0.74*
Farah	0.71	0.71	0.76	*0.73*
PBA Samira	0.73	0.69	0.69	*0.71*
Average	*0.65*	*0.69*	*0.76*	*0.70*

Lsd (P<0.05) ChemicalTrtxvariety = ns; ChemivcalTrt = ns; Variety = ns; CV (%) = 20.6