

B4. Faba Bean Cercospora Leaf Spot Management, Yorke Peninsula (Maitland), South Australia

Aim

To determine whether fungicide-amended-fertiliser (eg Impact-in-furrow) can be used for effective control of Cercospora Leaf Spot (CLS) in faba bean.

Treatments

Varieties: Nura (S), Farah (S), AFO7125 (R)
Sowing dates: 29 May
Treatments: Nil – no fungicide applied
Foliar fungicide – 145 ml/ha tebuconazole applied at 6 WAS (9 July)
Fertiliser fungicide – Impact-in-furrow (a.i. flutriofole) applied at 100kg/ha at seeding.
Fertiliser: DAP + Zn @ 100kg/ha at sowing (Nil and Foliar only)
Disease management: Ascochyta Blight and Chocolate Spot infections were controlled using standard district practice.

Results and Interpretation

- Disease infection – Despite having found CLS infection in previous trials in surrounding paddocks, no CLS was evident in this trial in 2012. This may be due to positioning the trial in a paddock sown to lentil and the drier than average seasonal conditions.
- Grain Yield – yields averaged 4.3t/ha across the trial. The CLS resistant advanced breeding line AFO7125 was the highest yielding line in the trial, outyielding Farah and Nura by 5%. Farah and Nura performed similarly for grain yield in this trial.

Table 1: Grain yield (t/ha) of faba bean varieties at Maitland, 2012.

Variety	Farah	Nura	AF07125	LSD (P<0.05)
Grain Yield (t/ha)	4.2	4.2	4.4	0.18

Key Findings and Comments

- An advanced breeding line (AF07125) has been developed with improved resistance to CLS.
- There was no CLS in the trial, and the fungicide amended fertiliser (Impact-in-furrow) provided no additional benefits in terms of grain yield.
- Disease levels were low, and grain yield was high, averaging 4.3t/ha across the trial.
- The potential release AF07125 was the highest yielding variety, outyielding Farah and Nura by 5%.
- Further testing will be required to determine whether fungicide-amended-fertilisers (eg Impact-in-furrow) can be used for effective control of CLS in faba bean.