

B7. Sowing Date, HRZ South East (Conmurra), South Australia

Aim

To determine optimum sowing dates for maximising yield of new faba bean varieties in high rainfall areas.

Treatments

Varieties: Nura, Farah, Aquadulce, Aquadulce_Gilb (grower selection), 974*(611*974)/15-1 (abbreviated in text to 974*), PBA Kareema
Sowing dates: 19 May (Early), 15 June (Late)
Fertiliser: Map + Zn @ 100kg/ha at sowing

Results and Interpretation

Early sowing was important for maximising faba bean yield at Conmurra in 2010, showing up to 14 percent yield loss by delayed sowing in the most sensitive varieties (Aquadulce, Aquadulce_Gilb, see Table B7.1). Nura and PBA Kareema showed no yield loss from delayed sowing. Aquadulce yielded 27% higher than PBA Kareema, while all other varieties performed similarly.

Lodging of faba beans was exacerbated by early sowing (Table B7.1). Nura and Farah were the worst affected, whilst Aquadulce_Gilb and 974* were least affected.

Disease infection at Conmurra in 2010 was not as severe as in previous years, with Ascochyta ranking only low-moderate severity. Ascochyta infection of early sown beans was more than three times higher than late sown beans, while there was no difference between varieties.

Table B7.1. Effect of sowing date on grain yield (t/ha) and lodging (1-9 score) of six faba bean varieties, Conmurra 2010.

TOS	Yield (t/ha)		Lodging (1-9 score)	
	Early	Late	Early	Late
974*(611*974)/15-1	6.43	5.90	8.5	9.0
Aquadulce	7.18	6.19	7.7	8.8
Aquadulce_Gilb	6.62	5.83	8.5	8.7
Farah	6.95	6.51	5.3	8.3
Nura	6.64	6.84	4.8	8.3
PBA Kareema	5.65	5.66	7.8	8.7
LSD (P<0.05)	1.40 (0.55 same TOS)		0.83 (0.90 same TOS)	

Table B7.2. Effect of sowing date on ascochyta severity (% infected) of faba beans, Conmurra 2010.

TOS	Early	Late	LSD (P<0.05)
Asco Severity (% infected)	5.7	1.6	0.98

Key Findings and Comments

- Winter and spring seasonal conditions favoured faba bean production in 2010.
- Yield was generally maximised at the early sowing date.
- Lodging was worse for earlier sown beans, particularly Farah and Nura.
- While early sown beans had higher ascochyta blight infection than late sown beans, there was no difference in severity between bean varieties.
- Chocolate spot severity was low at this site in 2010, and there was no difference between varieties or sowing dates.