C9. Sowing Date, MRZ Mid North (Mallala), South Australia

Aim

To maximise yield of new chickpea varieties through the identification of optimum sowing dates.

Treatments

Varieties: Kabuli: Genesis 079, Genesis 090 and Genesis 114,
Desi: PBA Slasher, CICA0603 and CICA0604
Sowing dates: 19 May (Early), 7 June (Mid), 22 June (Late)
Fertiliser: Map + Zn @ 75kg/ha

Results and Interpretation

The wet season finish in 2010 favoured chickpea production, and yields were significantly higher than in previous years, averaging 2.5t/ha in this trial.

Grain yield was highest at the early sowing date and lowest at the late sowing date in all varieties (Figure C9.1). PBA Slasher and CICA0603 performed similarly, and were both the highest or equal highest yielding varieties at each sowing date. Genesis 090 and Genesis 114 performed similarly, and were both the lowest or equal lowest yielding varieties at each sowing date.

Lodging was the highest at the early sowing date for all varieties except Genesis 090 and PBA Slasher (Table C9.1). Genesis 090 showed no difference in lodging between the three sowing dates, while PBA Slasher showed no difference in lodging between the early and mid sowing dates. CICA0603 was the most prone to lodging at the early sowing date, while CICA0603, CICA0604 and Genesis 079 showed more lodging than Genesis 090, Genesis 114 and PBA Slasher at the mid and late sowing dates.

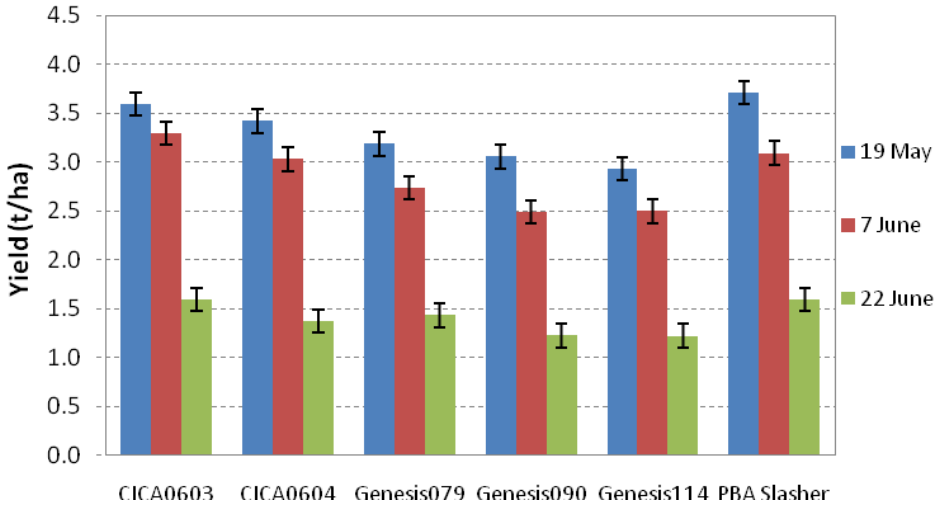

Figure C9.1. Effect of sowing date on grain yield (t/ha) of 6 chickpea varieties, Mallala 2010.

Table C9.1. Effect of sowing date on lodging (1-9 score) of 6 chickpeas varieties, Mallala 2010.

TOS	CICA0603	CICA0604	Genesis 079	Genesis 090	Genesis 114	PBA Slasher
May 19	2.3	3.7	4.3	8.0	7.7	6.7
June 7	5.7	6.0	5.7	8.3	8.7	7.3
June 22	6.0	6.0	5.7	8.7	8.7	8.0
LSD (P<0.05)	0.93 (0.90 same TOS)					

Key Findings and Comments

- All varieties yielded highest sown at the early sowing date.
- PBA Slasher and CICA0603 were the highest yielding at each sowing date.
- Lodging was generally worse at the early sowing date.
- CICA0603 and CICA0604 show high yield potential, but are also more prone to lodging, especially sown early.