

Chickpea, Sowing Time, HRZ Western District (Inverleigh), Victoria

Aim

To evaluate autumn or spring sowing for chickpea varieties in the Victorian high rainfall zone (HRZ).

Treatments

- Sowing dates: May 15, August 27
- Varieties: Genesis 090, Genesis Kalkee, PBA Striker, PBA Monarch, Neelam

Table 1. Other Site Details

| | |
|---|-------|
| Stubble management | Burnt |
| Row spacing (cm) | 20 |
| Plant density (pl/m²) | 24 |
| Fertiliser¹ (kg/ha) | 60 |

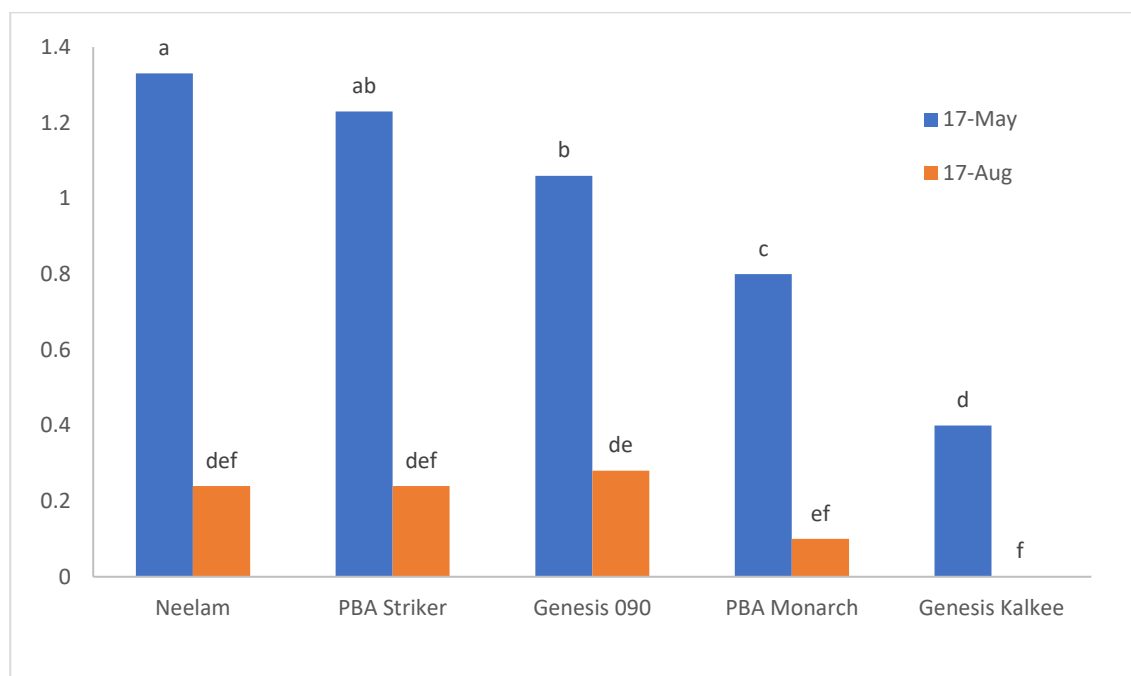
1. MAP

Results and Interpretation

- **Key Messages:** Autumn-sown chickpea had grain yields of up to 1.3t/ha c.f. with 0.2t/ha for spring sowing. Neelam was the highest yielding variety autumn sown.
- **Summary:** Chickpeas are not traditionally grown in the Victorian HRZ. Several varieties were tested at two sites in an autumn or spring sowing date to explore their potential for the region. Mid-season vigour was reasonable, and spring-sown crops had similar biomass at flowering compared to autumn-sown crops at flowering.
- There were several periods of cold weather where minimum temperatures were less than 4C several days in a row. There were four frost events in August and September where minimum temperature was less than -1.5C. The average day/night temperature was 10C in August and September, increasing to 15C in October.
- Despite the unfavourable conditions, May-sown Neelam and PBA Striker yielded over 1 t/ha. Spring-sown crops achieved only 0.25 t/ha, and the ranking of varieties was similar between May and August sowing dates.

Table 2. Chickpea biomass (t/ha) at flowering of varieties sown in autumn or spring at Inverleigh, VIC.

| Treatment | |
|---------------------------|------------|
| Sowing date | |
| May 15 | 2.2 - |
| August 27 | 2.0 - |
| LSD (P<0.05) | NS |
| Variety | |
| Genesis 090 | 1.8 b |
| Genesis Kalkee | 1.8 b |
| PBA Striker | 2.8 a |
| PBA Monarch | 1.8 b |
| Neelam | 2.0 b |
| LSD (P<0.05) | 0.8 |
| Sowing date x variety | |
| May 15, Genesis 090 | 1.8 - |
| August 27, Genesis 090 | 1.9 - |
| May 15, Genesis Kalkee | 1.5 - |
| August 27, Genesis Kalkee | 2.0 - |
| May 15, PBA Striker | 3.2 - |
| August 27, PBA Striker | 2.3 - |
| May 15, PBA Monarch | 2.2 - |
| August 27, PBA Monarch | 1.5 - |
| May 15, Neelam | 2.1 - |
| August 27, Neelam | 2.0 - |
| LSD (P<0.05) | 0.5 |

**Figure 1.** Grain yield (t/ha) of chickpea varieties sown in autumn or spring at Inverleigh, VIC. Letters represent significant differences for the variety x sowing date interaction (P=0.05).