

## **Chickpea, Sowing Time, HRZ Western District (Lake Bolac), Victoria**

### **Aim**

To evaluate the appropriateness of chickpea varieties for the Victorian high rainfall zone (HRZ) on an autumn or spring sowing date.

### **Treatments**

- Sowing dates: May 17, August 17
- Varieties: Genesis 090, Genesis Kalkee, PBA Striker, PBA Monarch, CICA1156, CICA1352

**Table 1.** Other Site Details

<b>Stubble management</b>	Burnt
<b>Row spacing (cm)</b>	20
<b>Plant density (pl/m<sup>2</sup>)</b>	22
<b>Fertiliser<sup>1</sup> (kg/ha)</b>	60

1. MAP

### **Results and Interpretation**

- **Key Messages:** Chickpeas are not traditionally grown in the Victorian HRZ. Plots were not harvestable due to unfavourable weather during reproductive stages at this exposed site.
- Many pods were white and did not produce grain, as a result of cold conditions and frost.
- **Summary:** Chickpeas are not traditionally grown in the Victorian HRZ. Several varieties were tested at two sites on an autumn or spring sowing date to explore their potential for the region. Spring-sown crops had similar biomass at flowering compared to autumn-sown crops (see Table 2). There were differences in biomass at flowering between varieties, suggesting that in more favourable conditions where crops go to harvest there may be genotypes that are more suited to this environment.
- At Lake Bolac, there were fewer and less severe frost events than other trial sites but there were longer periods of cold nights mid-spring followed by hotter weather in late spring. In August and September, there were 29 days where the minimum temperature was below 2°C. Between September 15 and October 31 there were 20 days where the maximum temperature was greater than 25°C. The average day/night temperature was the same as Inverleigh: 10°C in August and September, and 15°C in October.
- There were too few grain-filled pods to merit harvesting the plots at Lake Bolac. Many pods were white and did not contain grain, thought to be due to frost and/or cold damage plus hot temperatures.

**Table 2.** Biomass (t/ha) at flowering of chickpea varieties sown in autumn or spring at Lake Bolac, Victoria.

<b>Treatment</b>		
Sowing date		
May 17	1.4	-
August 17	1.3	-
<b>LSD (P&lt;0.05)</b>	<b>0.6</b>	
Variety		
Genesis 090	1.4	ab
Genesis Kalkee	1.1	c
PBA Striker	1.3	abc
PBA Monarch	1.4	ab
CICA1156	1.5	a
CICA1352	1.2	bc
<b>LSD (P&lt;0.05)</b>	<b>0.2</b>	
Sowing date x variety		
May 17, Genesis 090	1.5	-
August 17, Genesis 090	1.3	-
May 17, Genesis Kalkee	1.2	-
August 17, Genesis Kalkee	1.0	-
May 17, PBA Striker	1.2	-
August 17, PBA Striker	1.4	-
May 17, PBA Monarch	1.5	-
August 17, PBA Monarch	1.3	-
May 17, CICA1156	1.7	-
August 17, CICA1156	1.3	-
May 17, CICA1352	1.2	-
August 17, CICA1352	1.2	-
<b>LSD (P&lt;0.05)</b>	<b>0.3</b>	