

## **L8 Crop Topping, LRZ Southern Mallee (Curyo), Victoria**

### **Aim**

To investigate the suitability of a range of lentil varieties differing in flowering and maturity characteristics for crop-topping/desiccation.

### **Treatments**

- Varieties: Aldinga, Boomer, Nipper, Nugget, PBA Bounty, PBA Flash, PBA Blitz, PBA Jumbo, CIPAL0802, CIPAL0803.
- Crop Topping: Nil.  
Early: Applied approximately 10-14 days pre rye grass milky dough stage (24<sup>th</sup> October).  
Mid: Applied at rye grass milky dough stage (4<sup>th</sup> November).  
Late: Applied approximately 10-14 days post rye grass milky dough stage (14<sup>th</sup> November).

### **Other Details**

- Sowing date: 4 May.
- Row Spacing/Stubble: 30 cm row spacing, inter-row, standing stubble.
- Fertiliser: MAP + Zn @ 40 kg/ha at sowing.
- Plant Density: 120 plants/m<sup>2</sup>.

### **Results and Interpretation**

- Key Message: No significant response to crop topping treatments was observed.
- Mouse Damage – Significant mouse damage was observed across the trial and each plot was scored for damage on a percentage scale. Mouse damage was used as a covariate in the grain yield analysis.
  - Grain Yield – No significant response to crop topping treatments was observed in 2011. Mean grain yields of varieties were all similar except Nipper, which was significantly lower (Table L8.1). Although not significant there appeared to be a trend toward lower grain yields in the earlier crop topping applications (Table L8.2).

**Table L8.1.** Mean grain yield (t/ha) of lentil varieties grown in the crop topping trial at Curyo in 2011.

Variety	Grain Yield (t/ha)
CIPAL0803	2.09
PBA Flash	2.03
PBA Blitz	1.97
PBA Bounty	1.95
CIPAL0802	1.95
Boomer	1.92
Aldinga	1.90
Nugget	1.88
PBA Jumbo	1.83
Nipper	1.61

lsd(P<0.05)Var = 0.26.

**Table L8.2.** Mean grain yield (t/ha) of lentils in each of the crop top treatments at Curyo in 2011.

Crop Top Application Time	Grain Yield (t/ha)
- 2 weeks (24 Oct)	1.79
Recommended (4 Nov)	1.87
+ 2 weeks (14 Nov)	1.92
Nil	2.07

lsd(P<0.05)CT = NS.

**Key Findings and Comments**

Although not clearly demonstrated in this trial previous results at various sites across southern Australia have demonstrated that earlier maturing lines generally displayed less yield loss in crop-topping treatments than later maturing types.