

L4. Crop Topping, MRZ Wimmera (Vectis), Victoria

Aim

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

Treatments

Varieties: Aldinga, Boomer, Nipper, Nugget, PBA Bounty, PBA Flash, PBA Blitz, CIPAL0501, CIPAL0802, CIPAL0803.

Crop Topping: Nil
Early: Applied approximately 10-14 days pre rye grass milky dough stage (11th November)
Mid: Applied at rye grass milky dough (Not applied)
Late: Applied approximately 10-14 days post rye grass milky dough stage (Not Applied)

Other Details

Sowing date: 17 May
Row Spacing/Stubble: 30 cm row spacing, inter-row, standing stubble (ST, 0.30)
Fertiliser: MAP + Zn @ 60 kg/ha at sowing
Plant Density: 120 plants/m²

Results and Interpretation

- Grain Yield – Due to extreme rainfall events throughout harvest, grain yields were significantly reduced similar to other trials. In addition, only the early desiccation treatment was able to be applied. The trial was harvested December 22, and showed that crop-topping 2 weeks prior to the recommended time resulted in a 55% yield loss across all varieties. PBA Flash had the lowest yield loss (25%) and Nugget highest (70%) (Table L4.1).

Table L4.1. The effect of the interaction between crop topping treatment and lentil genotype on grain yield (t/ha) at Vectis in 2010. Varieties are ranked according to their visual maturity rating at Curyo, i.e. PBABlitz was earliest and Nipper latest.

Variety	Nil	+ 2 weeks (11 Nov)
PBA Blitz	1.74	1.02
CIPAL0802	1.66	0.97
PBA Flash	1.54	1.18
Nugget	1.93	0.64
PBA Bounty	1.27	0.90
Aldinga	1.56	0.86
Boomer	1.18	0.79
CIPAL0803	1.98	1.09
CIPAL0501	1.97	0.93
Nipper	2.00	0.92
Mean	1.68	0.93

Isd(P<0.05)Crop Top x Gen = NS, Isd(P<0.05)Crop Top = 0.19, Isd(P<0.05)Gen = 0.24

Key Findings and Comments

Due to extreme weather events during harvest it is difficult to determine any significant trends from this data. This trial will be repeated in 2011.