

Rupanyup lentil rolling demonstration

Method

Lentils were rolled at five different timings in a nearest neighbour design with rolling post sowing – pre-emergence as the control.

Treatments were applied in a paddock of Cassab lentils sown at 50kg/ha with 50kg/ha Legume Pluz (2.1% Zn).

Chemical

1.3L/ha Credit/Bonus[®] and 1.2L/ha Surpass[®] (March 16)
42ml/ha Hammer[®] and 1.2L/ha Roundup Power Max[®] (June 19)
130g/ha Lexone[®] and 850ml/ha Simazine[®] (June 25)
275ml/ha Select[®] and 1kg/ha Pencozeb[®] (September 4)
0.5L/ha Carbazim[®] (October 6)
1.5L/ha Elect[®] and 0.25L/ha SumiAlphaflex[®] (October 30)

Results

Table 1: Lentil yield, Rupanyup.

Treatment	Yield (t/ha)
Rolled PSPE (control)	2.2
Rolled @ 4 node	2.2
Rolled @ 7 node	2.2
Rolled @ 9 node	2.1
Not rolled	2.0
LSD (5%)	NS
CV %	1.6

Interpretation:

- Research to date in Australia suggests optimum rolling time between 3-5 node and crop damage has been recorded from rolling after the 7 node stage. However this trial showed no yield penalty from any time of rolling.
- Lentil rolling is a management practice utilised to create better harvesting conditions and to lower sample contamination. The results from this trial suggests there is flexibility in rolling time and that rolling can be delayed up to the 9 node stage if other management issues are more pressing immediately after sowing. However, this is dependent on the soil and crop health conditions at the time of rolling.
- To avoid crop damage rolling should not occur within 2 weeks of a herbicide application.
- Soils at risk of hard setting or wind erosion should not be rolled PSPE.

Location

Russell Dunlop
Stawell-Warracknabeal Rd,
Rupanyup.

Growing Season Rainfall

Ave: 285 mm
2003: 261 mm

Soil

Type: Grey clay
pH (H₂O): 8.2

Sowing Date

June 24, 2003

Paddock History

2002: Wheat
2001: Canola
2000: Faba beans