

# Trial 8

## Lentil Sowing Depth Trial

### Sponsored by DuPont

**Aim:** to determine safe and effective techniques for using Trifluralin and Lexone in Digger lentils

**Method:** Lentils were sown at two depths (4 and 8 cm), Trifluralin was applied just prior to sowing (at 0.8 and 1.6L/ha) and was incorporated by sowing, Lexone (280 and 380 g/ha) was applied immediately post sowing (moist soil).

**Results:**

sowing depth (cm)	rate of Lexone (g/ha)	rate of Trifluralin (L/ha)	yield (t/ha)
4	280	0.8	2.30
8	280	0.8	2.00
4	280	1.6	2.47
8	280	1.6	2.08
4	380	0.8	1.93
8	380	0.8	1.90
4	380	1.6	1.64
8	380	1.6	1.94
Significant difference			NS

**Interpretation:** although the yield differences between treatments were not significant ( $P=0.08$ ) the trend was for the high Lexone treatments (380g/ha) to have the lowest yield. There was no effect of deep sowing, nor of different Trifluralin rates. It could be that lentils are more tolerant to Trifluralin compared to chickpeas - trial work will continue with lentils to work out tolerances to different herbicides.

**Commercial practice:** sowing depth for lentils to be sprayed with Lexone is critical, a minimum depth of 5cm is required. To achieve optimum weed control at least 12mm of rainfall is required within two weeks of the herbicide being sprayed. The recommended rate for sandy soils is 180g/ha lexone and for heavy clay loam 280g/ha lexone. Lexone can be mixed with Simazine for better weed control on the sandy soils.