

Study Name: Lentil tolerance to preemergence herbicides

Study Number: 0551

Objectives:

Results:

'Pennell' lentils were seeded May 2 at 60 lb/A into 7.5-inch rows. Herbicide treatments were applied preemergence (PRE) on May 6. Individual plots were 10 x 30 ft and replicated three times.

The objective of this study was to evaluate lentil tolerance to preemergence herbicides. Sencor is the only herbicide tested in this study that is approved as of November 2005. None of the herbicides caused a reduction in lentil density approximately 6 weeks after treatment (WAT) compared to the untreated check. However, all herbicides caused slight to moderate visible injury at the June evaluation. Spartan and 2,4-DB applied PRE caused what would probably be considered unacceptable crop injury compared to other treatments at the July evaluation.

Table. Lentil tolerance to preemergence herbicides.

Treatment ^a	Rate	Timing	Lentil		Density	Yield	Test Wt
			Jun 17	Jul 7	Jun 23	Sep 9	Sep 9
			— % injury —		plants/m ^b	lb/A	lb/bu
Untreated			0	0	17.1	669	56.3
Express	0.083 oz	PRE	17	7	17.5	754	53.8
Express	0.125 oz	PRE	14	6	18.1	854	55.8
Harmony GT	0.083 oz	PRE	11	7	15.9	983	56.5
Harmony GT	0.125 oz	PRE	20	9	15.5	733	55.4
Sencor	0.25 lb	PRE	19	10	15.3	923	56.8
Prowl H2O	3 pt	PRE	8	4	15.0	573	55.1
Spartan	0.5 oz	PRE	19	16	15.7	647	56.6
2,4-DB	0.7 pt	PRE	25	13	16.0	611	55.5
Roundup UltraMax II	11 fl oz	PRE	0	0	15.0	636	55.5
LSD (0.05)			9	7	NS	259	NS
CV			38	56	10.3	20	3.0

^aRoundup UltraMax II + AMS (11 fl oz + 2.5 gal/100 gal) was applied alone or tankmixed with each treatment.

^bCrop density is reported in plants per meter of row.