

Pre-harvest weed desiccation in lentil with Sharpen, Valor, and Paraquat

'Pennell' lentil was seeded May 18 at 95 lb/A into 7.5-inch rows into wheat stubble. Desiccation treatments were applied pre-harvest on August 25. Weeds present were common lambsquarters (Colq), kochia (Kocz), and redroot pigweed (Rrpw). Individual plots were 10 x 30 ft and replicated four times.

Sharpen + Glyphosate provided more weed desiccation (74-90%) than other treatments two weeks after treatment (WAT). Desiccation with Sharpen alone ranged from 38-71%. Valor provided 20-61% desiccation and Gramoxone Inteon provided 26-70% desiccation. These numbers are significantly lower compared to a similar study in dry pea applied August 4. Mean temperatures seven days before and after the lentil application were about five degrees warmer than the early August dry pea application. Approximately 0.72 inches of precipitation fell within three days after the dry pea application, but there was no rain after the lentil application. The warmer, drier conditions in late August may have contributed to the lower weed desiccation in the lentil study. There were no significant differences in lentil yield or test weight between treatments. Note: As of December 2009, Sharpen and Valor are not labeled for use as desiccants in lentil.

Table. Pre-harvest weed desiccation in lentil with Sharpen, Valor, and Paraquat (0908).

Treatment ^a	Rate	Colq ^b		Kocz ^b		Rrpw ^b		Lentil	
		1 WAT	2 WAT	1 WAT	2 WAT	1 WAT	2 WAT	Yield	TW
		-----% desiccation-----						lb/A	lb/bu
Untreated		0	0	0	0	0	0	1066	58.1
Sharpen + MSO + AMS	2 fl oz + 1% + 2%	25	38	29	58	40	71	1138	59.0
Sharpen + Glyphosate + MSO + AMS	1 fl oz + 1 qt + 1% + 2%	18	78	13	74	35	90	1019	59.4
Valor + MSO	2 oz + 1%	15	20	20	38	13	61	983	58.7
Gramoxone Inteon + NIS	1.5 pt + 0.25%	19	26	30	55	47	70	995	58.6
LSD (0.05)		7.7	7.4	13.1	13.5	25.1	27.1	NS	NS
CV		5	5	9	9	16	17	22	1

^aAll treatments were applied pre-harvest and evaluated 1 and 2 weeks after treatment (WAT)

^bColq=Common lambsquarters; Kocz=Kochia; Rrpw=Redroot pigweed