Wild buckwheat control in lentil

The objective of this study was to determine the effect of wild buckwheat size on level of control achieved. 'Maxim' lentil was planted May 20 followed by the application of preemergence herbicides on May 21. Raptor was applied postemergence when wild buckwheat was in the cotyledon- to 2-leaf stage on June 5 and when wild buckwheat was 3- to 5-leaf on June 11, which provided 94% control at the July 23 evaluation.

All treatments caused slight to moderate crop injury, but by July injury subsided to ≤10%. The most effect treatment for wild buckwheat control was with Prowl+Sharpen (PRE) followed by Beyond (POST). Wild buckwheat control with Beyond applied alone POST was affected significantly by wild buckwheat size at application time. Beyond applied at the cotyledon- to 2-leaf stage provided 89% control compared to Beyond applied six days later at the 3- to 5-leaf stage, which provided only 63% control at the July 23 evaluation.

Table. Wild buckwheat control in Clearfield lentil. (1519)

Treatment[a]	Rate	Timing	Lentil Injury			Weed Control[d]								
			Jun-11	Jun-23	Jul-23	Wibw			Rrpw			Colq		
						Jun-11	Jun-23	Jul-23	Jun-11	Jun-23	Jul-23	Jun-11	Jun-23	Jul-23
			------%------			------% ------								
Untreated			0	0	0	0	0	0	0	0	0	0	0	0
Prowl + Sharpen[b]	2 pt + 0.75 oz	PRE	11	16	7	75	58	48	89	69	48	98	98	91
Prowl + Pursuit	2 pt + 2 oz	PRE	10	17	10	73	72	73	98	86	85	98	98	97
Prowl + Metribuzin	3 pt + 0.33 lb	PRE	17	22	7	68	56	48	97	78	56	98	98	98
Beyond[c]	4 oz	Cot-2lf	6	16	4	90	95	89	99	99	98	99	99	95
Beyond[c]	4 oz	3 lf +	0	14	6	0	75	63	0	96	99	0	95	98
Prowl+Sharpen[b] / Beyond[c]	2 pt+0.75 oz / 4 oz	PRE / Cot-2lf	16	20	9	96	97	94	99	99	99	99	99	99
LSD (0.05)			2.7	5.2	NS	3.5	6.9	4.8	3.3	6.5	12	0.5	0.0	5.6

[a] Prowl = Prowl H2O

[b] Applied with AMS + MSO (2.5 gal/100 gal + 1.5 pt)

[c] Applied with 28% N + MSO (2.5 gal/100 gal + 1.5 pt)

[d] Wibw=Wild buckwheat; Rrpw=Redroot pigweed; Colq=Common lambsquarters