Lentil tolerance to preemergence herbicides

The objective of the study was to evaluate lentil tolerance to labeled or experimental herbicides applied preemergence. Our goal was to find products with different modes of action that can safely be used in lentil and control Group 1 resistant green foxtail. Zidua and BroadAxe have activity on green foxtail, but are not currently labeled for use in lentil.

'Maxim' lentil was planted May 20 followed by the application of the PRE herbicides on May 21.

Most treatments caused slight to moderate crop injury, but by July 23 lentil injury was ≤10%. BroadAxe caused severe injury but lentil also recovered to about 18% on July 23. Some plot yields may have been significantly affected by pigweed pressure.

Table. Lentil tolerance to preemergence herbicides. (1516)									
			Lentil						
			Height		Injury			Yield	Test wt
Treatment	Rate	Timing	Jun-24	Jul-6	Jun-11	Jun-24	Jul-23	Aug-26	Aug-26
			cm		%%			lb/a	lb/bu
Untreated			12.9	27.5	0	0	0	1144	59.9
Zidua	3 oz	PRE	11.7	28.9	16	21	9	1598	61.5
BroadAxe	20 fl oz	PRE	10.6	25.4	62	62	18	1384	61.0
Dual II Magnum	1.67 pt	PRE	12.4	25.4	15	17	10	1559	61.7
Outlook	14 fl oz	PRE	12.4	27.0	10	16	5	1471	61.2
Prowl	3 pt	PRE	13.3	25.8	14	15	1	1357	60.7
Metribuzin	0.33 lb	PRE	12.9	26.9	7	14	0	1372	61.3
LSD (0.05)			NS	NS	3.6	4.0	12.4	NS	1.1
CV			8.4	13.2	11.5	10.9	110.9	14.7	0.8