

Impact of herbicides and seeding rate on lentil yield and quality

The objective of the study was to determine if a higher lentil seeding rate would help offset any herbicide injury. Lentil was planted at 12 or 18 plants/ft². Various herbicides were applied preemergence (June 1) after planting on May 26. All treatments caused slight to moderate lentil injury at the July evaluation; however, in most treatments, the lentils generally grew out of the injury. In early August, there were no differences in height between treatments. There were no yield differences between treatments; however, wet soil conditions in some areas of the plot contributed to yield variability and a high CV. Lentil yields were higher where seeded at 18 plants/ft² compared to 12 plants/ft². There tended to be slightly less visible injury (3-8%) with the higher seeding rate.

Table. Impact of herbicides and seeding rate on lentil yield and quality (1119)							
Treatment ^{ab}	Rate	Timing	Lentil				
			Injury		Height	Yield	TW
			9-Jul	17-Aug	4-Aug	15-Sep	
12 Plants per ft ²			-----%-----		cm	lb/A	lb/bu
Sharpen + Prowl H2O	1 fl oz + 3 pt	PRE	23	5	33.7	1068	62.8
Prowl	3 pt	PRE	17	5	33.3	1182	62.8
Sharpen + KIH-485	1 fl oz + 0.15 lb	PRE	16	8	34.2	1254	62.5
KIH-485	0.15 lb	PRE	15	6	35.1	1233	62.3
Sharpen + Spartan	1 fl oz + 3 fl oz	PRE	24	15	31.7	799	62.8
Spartan	3 fl oz	PRE	11	7	32.4	1124	62.8
Handweeded			10	3	33.8	1160	62.4
18 Plants per ft ²							
Sharpen + Prowl H2O	1 fl oz + 3 pt	PRE	17	2	33.5	1214	62.2
Prowl	3 pt	PRE	14	2	35.8	1373	62.2
Sharpen + KIH-485	1 fl oz + 0.15 lb	PRE	16	3	33.7	1282	61.6
KIH-485	0.15 lb	PRE	10	3	34.3	1358	61.6
Sharpen + Spartan	1 fl oz + 3 fl oz	PRE	20	7	34.3	1336	62.1
Spartan	3 fl oz	PRE	19	5	35.3	1677	62.6
Handweeded			0	0	35.3	1592	62.1
LSD (0.05)			5	5	NS	NS	NS
CV			24	64	5.2	23	1.4
^a Sharpen applied with MSO (1%) + AMS (2.5%); Beyond applied with NIS (0.25%) + 28% N (2.5%)							
^b Beyond (4 fl oz) applied POST to all treatments							