

Herbicide efficacy and crop tolerance in Field Peas. (1998) (Brian Jenks and Kent McKay, Minot)

'Majoret' peas were planted May 23 into 7.5-inch rows at 300,000 pls/A in a conventional tillage system. Herbicide treatments consisted of preplant incorporated, preemergence, and postemergence applications. Individual plots were 10 by 30 ft and were arranged in a RCBD with three replications. PPI and PRE treatments were applied (May 22 and May 25) with 80015 flat fan nozzles delivering 20 gpa at 30 PSI. All postemergence treatments were applied June 25 with 8001 flat fan nozzles delivering 10 gpa at 40 PSI. Peas were approximately 9-inches tall at the POST application. Foxtail pressure was initially light and erratic, but emergence continued through the season. Foxtail populations in some areas were about 7 per square foot and 1-2 inches tall at POST application. Yellow foxtail was the most common species, but green foxtail was also present. Peas were harvested with a small plot combine on August 21.

<u>Treatment^a</u>	<u>Rate</u>	<u>July 11</u>		<u>August 21</u>		<u>Yield</u> lb/A
		<u>Injury</u>	<u>Fxtl</u>	<u>Injury</u>	<u>Fxtl</u>	
		-----% injury or control -----				
Untreated		0	0	0	0	2222
Prowl / Motive + NIS + 28% N	2.4 pt / 3 fl oz + 0.25% + 1 qt	15	88	2	100	2652
Prowl / Motive + NIS + 28% N	2.4 pt / 4 fl oz + 0.25% + 1 qt	25	88	5	100	2305
Prowl / Motive + NIS	2.4 pt / 3 fl oz + 0.25%	28	90	10	100	2325
Prowl / Motive + NIS	2.4 pt / 4 fl oz + 0.25%	32	90	7	100	2226
Balance	1.25 oz	15	60	7	63	2161
Balance	2 oz	57	73	50	58	1782
Broadstrike + Treflan	2 pt	15	78	7	90	2292
Spartan	0.25 lb ai	1	58	0	77	2597
Axiom	15 oz	3	65	0	82	2546
Resource + NIS	0.027 lb ai + 0.25%	13	0	0	0	2476
V-53482	0.078 lb ai	0	57	0	67	2972
Frontier	20 fl oz	1	62	0	77	2832
Sonalan	2 pt	0	82	0	90	3209
Basagran + Poast + COC	1.5 pt + 1 pt + 1%	0	82	0	93	2648
Basagran + Poast + COC / Basagran + COC (Post II)	0.75 pt + 1 pt + 1% / 0.75 pt + 1%	0	83	0	97	2594
Sencor	0.25 lb ai	0	50	0	63	2856
Prowl	3 pt	0	82	0	93	2815
Python	1 oz	b	0	b	0	2313
CV		64	9	148	14	13
LSD (0.05)		12	10	12	16	557

^a Applied PPI: Prowl, Broadstrike + Treflan, and Sonalan

Applied PRE: Balance, Spartan, Axiom, V-53482, Frontier, Sencor, and Python

Applied POST: Motive, Resource, Basagran, and Poast

^b Python was a late addition to the end of the field and was partially flooded

Motive, Balance, and Broadstrike + Treflan caused slight to severe injury to peas. The peas were past the recommended stage for POST application with Motive, but the injury was less noticeable as the season progressed. No injury was observed with Spartan, Axiom, V-53482, and Frontier. Prowl, Prowl/Motive, Motive, Axiom, Broadstrike + Treflan, and Poast provided good to excellent foxtail control.

