

Herbicide efficacy and crop tolerance in Chickpeas. (1998) (Brian Jenks and Kent McKay, Minot) 'Sanford' chickpeas were planted May 23 into 7.5-inch rows at 140,000 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. Chickpeas were approximately 7-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 5 per square foot and 1-2 inches tall at POST application. Yellow foxtail was the most common species, but green foxtail was also present. Chickpeas were harvested with a small plot combine on September 29.

<u>Treatment^a</u>	<u>Rate</u>	<u>July 14</u>		<u>Sept 14</u>		<u>Yield</u>
		<u>Injury</u>	<u>Fxtl</u>	<u>Injury</u>	<u>Fxtl</u>	
-----% injury or control -----						
Untreated		0	0	0	0	1562
Prowl / Motive + NIS	3 pt / 2 fl oz + 0.25%	63	93	33	100	2061
Prowl / Motive + NIS	3 pt / 3 fl oz + 0.25%	77	92	50	100	1393
Motive + NIS	2 fl oz + 0.25%	70	84	50	83	1646
Motive + NIS	3 fl oz + 0.25%	75	93	57	95	1325
Balance	1.25 oz	1	48	0	40	1738
Balance	2 oz	2	52	0	55	1724
Spartan	0.25 lb ai	3	50	0	40	1974
Axiom	15 oz	1	65	0	83	2272
Resource + NIS	0.027 lb ai + 0.25%	15	0	8	0	1403
V-53482	0.078 lb ai	0	72	0	88	2417
Frontier	20 fl oz	0	65	0	73	2151
Sonalan	2 pt	0	80	0	83	2247
Sencor	0.25 lb ai	3	55	0	32	1299
Broadstrike + Treflan	2 pt	19	67	17	80	1906
Treflan	1.5 pt	0	82	0	73	2531
Prowl	3 pt	0	60	0	65	1862
Tough + NIS	2 pt + 0.25%	0	0	0	0	2084
Treflan / Tough + NIS	1.5 pt / 2 pt + 0.25%	0	85	0	90	2247
CV		27	12	45	19	23
LSD (0.05)		8	12	8	20	700

^a Applied PPI: Prowl, Sonalan, Broadstrike + Treflan, and Treflan
Applied PRE: Balance, Spartan, Axiom, V-53482, Frontier, Sencor
Applied POST: Motive, Resource, and Tough

Motive, Resource, and Broadstrike + Treflan caused moderate to severe injury to chickpeas. No injury was observed with the other treatments. Prowl/Motive, Motive, Axiom, V-53482, Sonalan, Broadstrike + Treflan, and Treflan/Tough provided good to excellent foxtail control. Foxtail control with Motive alone at 2 fl oz/A was 12% less than 3 fl oz/A.