

**Study Name:** Weed control in field peas

**Study Number:** 9917

**Objectives:** Evaluate weed control and crop tolerance to Raptor, Spartan, and other herbicides.

**Results:** Raptor caused slight stunting in the peas, which generally recovered over time. Injury was higher when Raptor was tankmixed with Quad 7 or COC compared to NIS. Yields were 200-300 lbs lower with Quad 7 or COC.

Valor caused slight injury to the peas, generally observed as stand reduction. Yield was similar to or higher compared to most Raptor treatments. We saw excellent pea tolerance to Spartan in 1997 and 1998.

In 1999, Spartan caused slight to moderate crop injury that increased with rate. There was more injury with the PPI than the PRE applications. The injury is likely due to high moisture conditions at planting and time of application. There was a light rain during the PRE applications. We will repeat this study in 2000.

Any product containing flumetsulam (Broadstrike + Treflan, Python) appear to cause too much injury to peas. We will continue evaluating Raptor, Spartan, and Valor for crop tolerance.

Raptor, Valor, Spartan, Sonalan, and Prowl generally provided excellent control of redroot pigweed. Basagran, Sencor, and Axiom were weaker on pigweed which likely caused the lower pea yields.

Table. Weed control in field peas.

Treatment	Rate	Timing	6-8	6-22	8-17	6-8	6-22	8-17	Yield lb/A
			Peas	Peas	Peas	Rrpw	Rrpw	Rrpw	
			----- % Injury -----			----- % Control -----			
Raptor + NIS	3 fl oz + 0.25%	4-inch		5	0		91	91	2238
Raptor + NIS	4 fl oz + 0.25%	4-inch		5	1		94	93	2332
Raptor + Quad 7	4 fl oz + 1%	4-inch		11	7		97	94	2096
Raptor + COC	4 fl oz + 1%	4-inch		9	5		95	91	2084
Raptor + NIS+28%N	4 fl oz + 0.25%+1qt	4-inch		5	1		94	93	2329
Raptor + Basagran	4 fl oz + 8 fl oz	4-inch		4	1		97	95	2323
Raptor + Basagran	4 fl oz + 16 fl oz	4-inch		4	1		97	96	2308
Pursuit + NIS	0.72 oz + 0.25%	4-inch		1	0		94	93	2539
Valor	1.5 oz ai	PRE	11		3	97		91	2430
Spartan	0.125 lb ai	PPI	8		4	99		84	2264
Spartan	0.25 lb ai	PPI	33		15	100		95	2401
Spartan	0.5 lb ai	PPI	50		30	100		98	1824
Spartan	0.125 lb ai	PRE	6		4	98		86	2116
Spartan	0.25 lb ai	PRE	33		11	100		96	2266
Spartan	0.5 lb ai	PRE	47		17	100		98	2226
Axiom	15 oz	PRE	0		2	82		70	1856
Sonalan	2 pt	PPI	0		2	97		93	2282
Broadstrike+ Treflan	2 pt	PPI	65		82	100			

Python	1 oz	PRE	33		32	98		96	1548
Basagran	1.5 pt	4-inch			0			70	2025
Sencor	0.25 lb ai	PRE	2		0	94		82	2031
Prowl	3 pt	PPI	6		1	95		92	2370
Untreated			0		0	0		0	1044
LSD			21	2	8	9	4	10	17
CV			57	22	49	6	3	7	30