

Weed control in Field Pea (2000)

'Majoret' peas were seeded April 28 at 180 lb/A into 6 inch rows in a conventional tillage system. Individual plots were 10 by 30 ft arranged in a RCBD with three replicates. Preplant incorporated (PPI) treatments were applied April 26, preemergence (PRE) treatments were applied May 3, and postemergence (POST) treatments were applied on June 2. All treatments were applied with a CO₂ pressurized bicycle sprayer. PPI and PRE treatments were applied with XR80015 flat fan nozzles delivering 20 gpa at 30 psi. POST treatments were applied using XR8001 flat fan nozzles delivering 10 gpa at 40 psi. Field peas were harvested on August 1.

Treatment	Rate	Pea			Control			Yield lb/A	Tst lb/bu
		Density	Injury		Wibw	Rrpw	Kocz		
		May 26	May 25	Jul 15	Jul 15	Jul 15	Jul 15		
		pl/m	—%—		—%—				
Untreated		8.9	0	0	0	0	0	3200	64.5
<u>PPI</u>									
Sonalan	2 pt	11.7	1	3	90	98	98	3580	64.9
Prowl	3.6 pt		1	0	88	98	98	3530	64.9
<u>PPI/POST</u>									
Spartan / Assure II	0.125 lb ai / 7 fl oz	13.4	3	0	70	100	100	3402	64.7
Spartan / Assure II	0.25 lb ai / 7 fl oz	12.2	5	2	90	100	100	3545	64.9
Spartan / Assure II	0.5 lb ai / 7 fl oz	10.1	9	7	95	100	100	3515	64.6
Prowl / Raptor + NIS	3 pt / 4 oz + 0.25 %		0	3	93	100	98	3489	64.6
Handweeded check ^a		11.1	0	3	99	100	100	3356	64.6
<u>PRE/POST</u>									
Valor / Assure II	1 oz ai / 7 fl oz	11.8	10	4	55	100	100	2877	64.0
Valor / Assure II	1.5 oz ai / 7 fl oz	9.3	12	8	77	100	100	3169	64.5
Valor / Assure II	3 oz ai / 7 fl oz	7.7	63	20	87	100	100	3062	65.3
Spartan / Assure II	0.125 lb ai / 7 fl oz	10.5	2	1	73	100	100	3479	64.6
Spartan / Assure II	0.25 lb ai / 7 fl oz	12.1	8	4	93	100	100	3528	64.4
Spartan / Assure II	0.5 lb ai / 7 fl oz	11.4	20	7	95	100	100	3509	64.9
<u>POST</u>									
Raptor + NIS	3 oz + 0.25 %			4	65	100	82	3286	64.6
Raptor + NIS	4 oz + 0.25 %			3	80	100	88	3424	64.8
Raptor + Quad 7	4 oz + 1 %			18	73	100	89	2214	62.3
Raptor + Basagran + NIS + 28% N	4 oz + 0.5 pt + 0.25 % + 1 qt			3	89	100	93	3375	64.7
Raptor + Basagran + NIS + 28% N	4 oz + 1 pt + 0.25 % + 1 qt			2	90	100	93	3464	64.6
Basagran + Poast	2 pt + 1 pt			4	82	87	93	3332	64.3
Starane + Assure II + NIS	0.5 oz ai + 7 fl oz + 0.25 %			29	55	43	100	2633	64.2
Starane + Basagran +	0.5 oz ai + 1 pt +			32	84	82	100	2652	64.4

Poast	1 pt								
LSD		3	5	6	14	4	4	459	NS
CV		16	29	50	11	3	3	9	1.2

^a *Treflan was applied at 1.5 pt/A (PPI), followed by Assure II at 7 fl oz (POST).*

We evaluated pea tolerance to Spartan, Valor, and Raptor compared to other herbicides. Spartan caused only slight injury at any rate or application timing and did not reduce crop yield. Valor caused moderate to severe injury at the high rate and reduced yield approximately 200-500 lbs. Raptor plus Quad 7 caused moderate visible crop injury and a significant yield reduction.