

Evaluation of dry pea tolerance to fall- vs. spring-applied Spartan in a sandy loam soil (2004)

'Majoret' dry pea was seeded April 26 at 120 lb/A into 7.5-inch rows. Individual plots were 10 x 30 ft and replicated 3 times. Fall herbicide treatments were applied October 6, 2003, while spring treatments were applied April 26, 2004. The primary weeds evaluated were green and yellow foxtail (Foxtail), kochia, wild buckwheat (Wibw), Russian thistle (Ruth), redroot pigweed (Rrpw), and common lambsquarters (Colq). The study was conducted on a sandy loam soil with soil pH 6.4 and 1.6% organic matter.

There was no visible crop injury with any fall or spring treatment. There was no significant difference in plant stand for any treatment. There were no significant differences in yield between the herbicide treatments. We included two untreated treatments in the study. Dry pea yield in one of the untreated treatments was the only yield significantly lower than other treatments. We noted during the growing season that crop stand in the third replication appeared somewhat lower than the other reps, but with little visible differences between treatments in that rep. It turned out that there was a significant yield difference between reps. However, within each replication the higher Spartan rates yielded as much or more than lower rates.

At the July rating, Spartan provided excellent control of all broadleaf weeds.

Treatment	Dry pea				Foxtail		Kochia		Wibw		Ruth		Rrpw		Colq	
	May 26	Jul 13	Yield	T.W.	Jun 15	Jul 13	Jun 15	Jul 13	Jun 15	Jul 13	Jun 15	Jul 13	Jun 15	Jul 13	Jun 15	Jul 13
	injury	Aug 12														
Untreated	pl/m row	%	lb/A	lb/bu	% control											
	8.9	0	1551	63.3	0	0	0	0	0	0	0	0	0	0	0	0
Fall Spartan																
2 oz	8.0	0	2187	63.9	10	89	97	97	88	96	93	100	20	94	98	100
3 oz	8.3	0	2214	63.8	8	89	97	99	89	94	94	100	25	96	98	100
4 oz	9.8	1	2095	64.3	17	91	99	100	92	99	95	98	47	97	100	100
5.33 oz	9.1	0	2511	63.9	13	89	100	100	93	98	98	100	48	96	100	100
Spring Spartan																
2 oz	8.2	0	2265	63.7	11	88	90	99	80	95	62	96	25	97	100	99
3 oz	9.3	0	2347	64.0	10	90	99	99	83	95	92	100	26	96	100	100
4 oz	9.0	0	2505	64.2	15	89	98	100	91	95	99	100	25	94	100	100
5.33 oz	8.3	0	2604	64.4	23	89	98	99	92	99	96	100	57	98	100	100
Untreated	8.6	0	2195	64.3	0	0	0	0	0	0	0	0	0	0	0	0
LSD (0.05)	NS	NS	391	NS	NS	6	6	2	10	6	18	4	28	5	2	1
CV	8.3	548	10	0.9	103	5	4	2	8	5	15	3	60	4	2	0