

Effect of seeding depth on dry pea tolerance to sulfentrazone in a loam soil (2004)

'Majoret' dry pea was seeded April 26 at 120 lb/A into 7.5 inch rows at either 1- or 2-inch seeding depth. Individual plots were 10 x 30 ft and replicated three times. Herbicide treatments were applied preemergence (PRE) on May 4 or postemergence (POST) on June 18. The study was conducted on a loam soil with soil pH 4.6 and 4.0% organic matter.

Dry pea stand seeded at 2-inch depths was significantly higher than at 1-inch depth. However, there was essentially no crop injury from Spartan treatments at either depth. Basagran caused slight crop injury. In July, kochia control was excellent with any Spartan treatment. Kochia control with Basagran was 7-13% lower compared to Spartan. The dry pea crop was good and was quite competitive with weeds. Dry pea yield in Spartan treatments was higher than in the Basagran or untreated treatments. We expect that very little Spartan injury occurred since the soil pH was very low.

Treatment ^a	Rate	Timing	Dry pea		Kochia		Yield	Test Wt
			May 26	Jul 26	Jun 17	Jul 26	Aug 20	
1-inch depth			pl / m row	% injury	— % control —		lb/A	lb/bu
Untreated			8.0	0	0	0	2525	65.2
Spartan	2.67 oz	PRE	8.3	0	100	96	3149	65.6
Spartan	4 oz	PRE	7.6	0	100	100	3013	65.6
Spartan	5.33 oz	PRE	7.7	0	100	100	3222	65.6
Basagran	1 pt	POST	7.8	4	0	87	2769	65.6
Handweeded check ^b			8.6	2	0	92	2916	65.8
2-inch depth								
Untreated			9.8	0	0	0	2817	65.5
Spartan	2.67 oz	PRE	9.5	0	99	100	3084	65.7
Spartan	4 oz	PRE	9.5	1	100	100	3034	65.4
Spartan	5.33 oz	PRE	10.6	0	100	100	3113	65.8
Basagran	1 pt	POST	9.3	5	0	93	2526	65.8
Handweeded check ^b			8.7	7	0	96	2479	66.0
LSD (0.05)			1.5	3	1	4	425	NS
CV			10.2	109	0	3	9	0.5

^aSelect was applied with COC at 5 oz + 1% v/v, respectively, to all treatments.

^bHandweeded checks were treated with Basagran at 0.5 pt and Select at 5 oz to aid hand weeding.