

Weed control and crop tolerance to herbicides in no-till dry pea (Williston 2004).

'Scuba' dry pea was direct seeded May 4 into durum wheat stubble at 195 lb/A into 7-inch rows. Individual plots were 10 x 30 ft and replicated three times. Preemergence (PRE) and postemergence (POST) herbicides were applied May 7 and June 14, respectively. The study was conducted on a loam soil with pH 5.5 and OM 2.3%. The primary weeds present were green foxtail (Grft), Russian thistle (Ruth) and kochia (Kocz).

Dry pea density tended to decrease with higher Spartan rates. Visible crop injury increased with higher Spartan rates. However, dry pea yield was not reduced despite the slight impact on crop density and visible injury. Sencor applied PRE with Spartan also caused moderate crop injury, but with no impact on dry pea yield.

All treatments provided good to excellent control of green foxtail, Russian thistle, and kochia. Treatments with Spartan provided slightly better weed control compared to total postemergence treatments.

Treatment ^a	Rate	Timing	Dry pea			Grft		Ruth		Kochia	
			Jun 2	Jun 6	Jun 30	Jun 6	Jun 30	Jun 6	Jun 30	Jun 6	Jun 30
			#/m row	% injury		% control					
Raptor + Basagran + NIS + 28% N	4 oz + 1 pt + 0.25% v/v + 1 qt	POST	9.0	0	6	0	90	0	91	0	93
Spartan/Select + COC	2.67 oz/ 5 fl oz + 1% v/v	PRE/ POST	7.5	7	5	93	100	100	100	100	100
Spartan/Select + COC	4 oz/ 5 fl oz + 1% v/v	PRE/ POST	7.0	13	10	96	100	98	100	100	100
Spartan/Select + COC	5.33 oz/ 5 fl oz + 1% v/v	PRE/ POST	6.1	19	19	99	100	100	100	100	100
Basagran + Poast + COC	2 pt + 1 pt + 2 pt	POST	10.0	0	4	0	91	0	99	0	95
Spartan/ Basagran + Poast + COC	2.67 oz/ 1 pt + 1 pt + 2 pt	PRE/ POST	8.1	7	5	94	98	100	100	100	100
Spartan + Sencor/ Select + COC	4 oz + 0.25 lb/ 5 fl oz + 1% v/v	PRE/ POST	7.3	15	27	98	100	100	100	100	100
Untreated			8.3	0	0	0	0	0	0	0	0
LSD (0.05)			1.5	3	6	3	4	2	2	NS	6
CV			10.6	25	36	2	3	2	2	0	4

^aRoundup UltraMax II plus AMS was applied PRE to each treatment at 11 oz + 2.5 gal/100gal.