

Weed control in dry pea at Williston (2002)

Scuba dry pea was seeded May 17 into 9.5-inch rows at 140 lb/A. Individual plots were 10 x 30 ft and replicated three times. Treatments were applied preemergence (PRE) on May 24 and postemergence (POST) on June 20. The primary weeds were redroot pigweed (Rrpw), green foxtail (Grft), Russian thistle (Ruth), and common lambsquarters (Colq).

Table 1. Weed control in dry pea at Williston.

Treatment	Rate	Timing	Dry pea		Rrpw		Grft		Ruth		Colq		Yield	Test wt
			Jun 20	Jul 10	Jun 20	Jul 10	Jun 20	Jul 10	Jun 20	Jul 10	Jun 20	Jul 10	Aug 8	Aug 8
			% injury		—————% control —————								lb/A	lb/bu
Raptor + Basagran + COC	4 oz + 1 pt + 1% v/v	POST	0	7	0	88	0	77	0	93	0	98	1279	61.2
Spartan/Select	2.67 oz/5 fl oz	PRE/POST	14	7	98	94	89	99	100	100	100	100	1394	61.0
Spartan/Select	4 oz/5 fl oz	PRE/POST	18	17	98	97	96	100	100	98	100	100	1379	61.2
Spartan/Select	5.33 oz/5 fl oz	PRE/POST	29	8	100	100	97	100	100	100	100	100	1174	61.3
Basagran + Poast	2 pt + 1 pt	POST	0	7	0	78	0	95	0	98	0	98	1151	61.2
Spartan/Basagran + Poast	2.67 oz/1 pt + 1 pt	PRE/POST	9	6	96	96	95	99	100	100	100	100	1190	61.1
Spartan + Sencor/Select	4 oz + 0.5 lb/5 fl oz	PRE/POST	52	53	98	100	99	100	100	100	100	100	831	61.4
Basagran + Poast + Raptor	1 pt + 0.5 pt + 2 fl oz	POST	0	7	0	79	0	75	0	93	0	95	1342	61.1
Untreated			0	0	0	0	0	0	0	0	0	0	1127	60.7
LSD (0.05)			16	15	4	10	3	2	--	8	--	6	317	NS
CV			69	68	4	7	3	2	0	5	0	4	15	0.79

^aAll Select treatments were applied with 1% v/v COC, and Poast treatments were applied with 2 pt/A COC.

We evaluated weed control and dry pea tolerance to several herbicides. Spartan was granted a specific exemption (Section 18) for use in dry pea in 2001 and 2002. Dry pea injury from Spartan was erratic and varied even within our 10 x 30 ft plots. The injury appeared to be positively correlated with soil pH. As soil pH increased, crop injury also increased (see Table 2 below). Dry pea injury was much higher where Sencor was tank mixed with Spartan.

All treatments containing Spartan followed by Select provided excellent control of redroot pigweed, lambsquarters, Russian thistle, and green foxtail. Raptor/Basagran/Poast tank mixes provided excellent control of Russian thistle and lambsquarters, but provided only fair to good control of redroot pigweed and green foxtail. Dry conditions led to low and variable dry pea yields.

Table 2. Herbicide injury in dry pea at Williston.

Herbicide	Rate	Injury	pH	OM	Plot #
	oz/A	— % —		— % —	
Spartan	2.67	5	6.4	1.9	205
Spartan	2.67	10	6.6	1.7	301
Spartan	2.67	22	6.8	1.8	306