Fall-applied Spartan in wheat (2003)

Mountrail durum was seeded April 23 into 7.5-inch rows at 120 lb/A. Individual plots were 10 x 30 ft and replicated three times. Fall, PRE, and POST treatments were applied November 19, April 24, and June 2, respectively. The primary weeds evaluated were kochia (Kocz), common lambsquarters (Colq), and redroot pigweed (Rrpw).

			Kocz			Colq			Rrpw			Test
		Jun	Jun	Jul	Jun	Jun	Jul	Jun	Jun	Jul	Yield	Wt
Treatment	Rate	7	17	7	7	17	7	7	17	7		g 7
					——% '	contr	ol ——				bu/A	lb/bu
Fall/POST												
Spartan/ Puma	3 oz/ 0.4 pt	98	96	100	98	99	100	79	85	91	51	60.9
Spartan/ Puma	4 oz/ 0.4 pt	97	98	100	100	100	100	81	90	97	46	59.8
Spartan/ Puma	5.33 oz/ 0.4 pt	100	100	100	100	100	100	82	92	97	55	60.9
Spartan/ Puma + Aim + MCPA ester	3 oz/ 0.4 pt + 0.5 fl oz + 0.75 pt	100	100	100	100	100	100	97	100	100	51	60.6
Spartan/ Puma + Aim + MCPA ester	4 oz/ 0.4 pt + 0.5 fl oz + 0.75 pt	100	100	100	100	100	100	97	100	100	50	60.7
Spartan/ Puma + Aim + MCPA ester	5.33 oz/ 0.4 pt + 0.5 fl oz + 0.75 pt	100	100	100	100	100	100	97	100	100	50	60.8
PRE/POST												
Spartan/ Puma + Aim + MCPA ester	4 oz/ 0.4 pt + 0.5 fl oz + 0.75 pt	100	100	100	100	100	100	96	100	100	46	60.7
POST												
Puma + Bronate ^a	0.4 pt + 0.8 pt		100	100		100	100		98	99	53	60.2
Puma + Harmony GT + MCPA ester + Starane	0.4 pt + 0.3 oz + 0.75 pt + 0.5 pt		96	100		98	100		97	100	52	60.0
Untreated		0	0	0	0	0	0	0	0	0	42	60.0
LSD (0.05)		2	3		2	2		2	4	3	NS	NS
CV aBronate Advanced		1	2	0	1	1	0	2	3	3	13	8.0

^aBronate Advanced

Fall and spring applications of Spartan were evaluated for durum wheat tolerance and weed control. Spartan was applied alone or followed by standard wheat herbicides. These standard wheat herbicides were also applied alone as a comparison to the Spartan treatments.

We could not determine with certainty that any Spartan treatment caused crop injury. There were some crop growth differences within the plot area, but we believe these growth differences were due to variation

in soil type and drought stress rather than herbicide injury since they did not follow plot borders.