

Weed control in Dry Bean (2000)

Dry beans (Maverick) were planted at Underwood on May 24 into 30-inch rows at 60 lb/A in a conventional tillage system. Individual plots were 10 x 22 ft and replicated four times. Prowl, Valor, and Spartan were applied preemergence (PRE) on May 25. Postemergence (POST) treatments were applied on June 22 to 1-2 trifoliolate dry beans. The primary weeds present were wild mustard (Wimu, 2-4 lf, 1-2 per sq ft) and green/yellow foxtail (Foxtail, 1-2", 30 per sq ft).

Treatment	Rate	Dry Bean Injury			Wimu		Foxtail		Yield	Tst wt.
		Jun 22	Jul 12	Jul 31	Jun 22	Jul 31	Jun 22	Jul 31		
		———— % ————			———— % Control ————				lb/A	lb/bu
Untreated			0	0		0		0	414	57.3
PRE/POST										
Prowl / Raptor + NIS	3.6 pt / 4 oz + 0.25%	5	0	0	49	100	64	92	1477	57.8
Valor / Poast + COC	1.25 oz ai / 1 pt + 1%	33	12	0	81	88	83	98	1458	58.2
Spartan / Poast + COC	0.25 lb ai / 1 pt + 1%	15	29	20	78	82	81	97	1155	59.1
POST										
Raptor + NIS	4 oz + 0.25%		0	0		95		86	1318	58.1
Raptor + NIS + Zinc	4 oz + 0.25% + 1 qt		0	0		98		91	1404	58.0
Raptor + Basagran + NIS + 28%N	4 oz + 4 oz + 0.25% + 1 qt		0	0		94		92	1325	58.5
Raptor + Quad 7	4 oz + 1%		0	0		97		93	1573	59.1
Raptor + Basagran + NIS + 28%N	4 oz + 8 oz + 0.25% + 1 qt		0	0		94		92	1522	58.4
Raptor + Reflex + MSO	4 oz + 8 oz + 1%		0	0		100		84	1285	60.0
Reflex + Poast + MSO	16 oz + 1 pt + 1%		0	0		100		97	1519	59.0
Basagran + Poast + COC	2 pt + 1 pt + 1%		0	0		62		95	1159	58.0
LSD		10	5	3	26	14	7	5	389	0.9
CV		33	116	148	21	11	5	4	21	1

We evaluated dry bean tolerance and weed control with four experimental herbicides. We observed no injury with Raptor or Reflex. Raptor provided good to excellent control of wild mustard and foxtail spp. Valor caused moderate initial injury, but the dry beans appeared to recover over time. Spartan caused significant injury throughout the season. The soil pH at Underwood is 7.5. Spartan caused almost no injury in studies at Minot where the pH is lower. Wild mustard control with Basagran was poorer than expected.