Weed control in flax (2003)

Cathay flax was seeded May 14 at 60 lb/A. Individual plots were 10 x 30 ft and replicated three times. PRE and POST treatments were applied May 14, and June 13, respectively. The primary weeds evaluated were redroot pigweed (Rrpw), common lambsquarters (Colq), wild buckwheat (Wibw), and Pennsylvania smartweed (Pnsw). Flax was harvested September 5.

		Rrpw			Colq			Wibw			Pnsw			Flax				
Treatment	Rate	Jun 7	Jul 1	Jul 30	Jun 7	Jul 1	Jul 30	Jun 7	Jul 1	Jul 30	Jun 7	Jul 1	Jul 30	Jun 7	Jul 1	Jul 30	Yield	Test Wt
							-% co	ntrol ———						—% injury —			bu/A	#/bu
Untreated		0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	15	51.8
PRE																		
Spartan	2.67 oz	77	50	91	100	83	96	77	58	88	0	48	85	0	0	0	17	53.1
Spartan	5.33 oz	90	73	93	100	95	98	89	75	91	20	64	89	0	0	0	21	53.3
Spartan	10.67 oz	99	96	98	100	100	100	94	91	97	70	77	90	12	0	1	19	53.6
PRE/POST																		
Spartan/ Harmony ^a	4 oz/ 0.167 oz	86	100	100	100	100	100	86	98	97	0	99	99	0	27	10	18	53.8
Spartan/ Harmony ^a	4 oz/ 0.25 oz	85	100	100	100	100	100	85	99	98	0	99	100	0	35	11	17	53.7
Spartan/ Bronate ^b	2.67 oz/ 11.4 fl oz	75	92	98	98	100	100	75	99	95	0	91	92	0	11	1	23	53.6
POST																		
Bronate ^b	11.4 fl oz	0	91	95	0	100	100	0	97	99	0	95	98	0	11	2	19	53.7
LSD (0.05)		6	23	4	2	18	5	5	24	4	6	28	9	2	2	2	NS	0.9
CV		5	18	3	1	12	3	5	18	3	31	23	7	58	- 12	37	16	0.9

^aHarmony GT

^bBronate Advanced

Spartan applied PRE did not cause any visible flax injury except when applied at 10.67 oz, which is 2-4 times the normal use rate. Harmony GT caused significant crop injury, and tended to reduce yields compared to Bronate Advanced. No adjuvant was applied with Harmony GT.

All postemergence treatments provided excellent weed control. Weed control increased as Spartan rate increased. Weed control ratings with Spartan alone were lower at the July 1 evaluation compared to June 7, but then increased at the July 30 evaluation. Weed growth may have slowed or stopped in July due to dry conditions or due to additional activation of Spartan following a single rain event on July 18. June and July were very dry with the only significant rainfall on July 18 (0.55 in).