Weed control in Flax (2000)

Flax (Cathay) was seeded May 18 into 6-inch rows at 50 lb/A in a conventional tillage system. Individual plots were 10 x 30 ft and replicated three times. Treatments were applied preemergence (PRE) on May 18 or postemergence on June 22 (POST). The primary weeds were redroot pigweed (Rrpw) and wild buckwheat (Wibw). Flax was harvested on September 8.

		Flax injury		Rrpw	Wibw	
Treatment	Rate	Jun 20	Jul 01	Jul 01	Jul 01	Yield
		———%———		—% Control—		bu/A
PRE						
Spartan	0.125 lb ai	0	3	53	52	23
Spartan	0.25 lb ai	1	5	72	77	25
Spartan	0.5 lb ai	5	9	95	95	25
Valor	1.5 oz ai	45	62	88	69	19
Valor	3 oz ai	80	85	100	93	13
DPX-R6447	0.8 oz ai	6	10	57	32	18
DPX-R6447	1.6 oz ai	13	22	90	58	22
POST						
Harmony GT	0.33 oz		41	90	90	18
Harmony GT + Starane	0.33 oz + 0.5 oz ai		75	90	91	8
Bronate	1 pt		15	87	89	22
Curtail M	1.75 pt		18	50	70	23
Raptor	4 fl oz		24	87	60	19
Handweeded check			5			19
Untreated		0	0	0	0	0
LSD		7	10	15	10	5
CV		20	23	12	9	15

[a] *Harmony GT and Raptor treatments were applied with NIS at 0.25%. The entire experiment was treated with Poast plus COC at 1 pt plus 1%.*

We evaluated several non-registered herbicides for weed control and injury to flax compared to the standard treatments. Spartan, Valor, DPX-R6447, Harmony GT, Starane, Raptor, and Curtail M are not registered (Section 3) for use in flax. All treatments caused some visible flax injury (discoloration, stunting, or stand reduction). Spartan caused only slight injury and had the highest yields. The low rate of Spartan (0.125 lb ai) is notably weaker on wild buckwheat compared to higher rates. The sunflower label would recommend 0.188 to 0.25 lb ai for our soil type. DPX-R6447 caused slight to moderate injury and Valor caused severe injury. The Harmony GT rate used here is too high and will cause unacceptable injury. Starane caused too much injury at even low rates. The untreated plots were not harvestable to due excessive weeds.