

Study Name: Timing of weed control in Roundup Ready canola

Study Number: 9908

Objectives: Evaluate weed control with Roundup applied at different rates and stages

Results: Flea beetle pressure was extremely high in 1999. The canola seed was treated with Gaucho, but a foliar insecticide application was needed to help reduce the flea beetle pressure. The canola remained in the cotyledon to 2-leaf stage for an extended period due to the flea beetles and wet soil. The Roundup Ready canola emerged before other canola varieties in this same field but was hit hard by the flea beetles and never really looked good the rest of the year.

The objective of this study was to compare weed control from soil-applied products with Roundup at different rates and timings. The primary weeds were kochia, foxtails, lambsquarters, and pigweed. Other species present were shepherdspurse, field pennycress, and biennial wormwood. Treflan and Sonalan did not control the mustard species or biennial wormwood, but generally provided good control of kochia, foxtails, lambsquarters, and pigweed. Treflan or Sonalan followed by a postemergence application of Roundup was as effective or better than Treflan or Sonalan alone.

Roundup was effective at any rate on kochia, foxtails, lambsquarters, redroot pigweed, biennial wormwood, field pennycress, and shepherdspurse. Roundup applied only at cotyledon to 2-leaf canola controlled emerged weeds, but missed a new flush of weeds that emerged soon after application. Canola yields were higher with the later application timings compared to the cotyledon to 2-leaf application. The split applications of Liberty also provided effective weed control.

Table. Timing of weed control in Roundup Ready canola.

Treatment ^a	Rate	Timing ^b	June 25				July 26	Yield
			Kocz	Fxtl ^c	Colq	Rrpw	Kocz	
			-----Control (%)-----					lb/A
Treflan	1.5 pt	A	78	91	100	100	58	1050
Treflan / Assure II	1.5 pt / 8 fl oz	A / C	68	98	96	95	60	918
Sonalan	2 pt	A	79	97	100	98	68	828
Sonalan / Assure II	2 pt / 8 fl oz	A / C	81	99	97	98	73	775
Treflan / Roundup	1.5 pt / 1 pt	A / C	100	100	100	100	96	1010
Sonalan / Roundup	2 pt / 1 pt	A / C	100	100	100	100	94	1093
Roundup	1 pt	B	78	85	87	78	58	1110
Roundup	1 pt	C	98	98	100	99	90	1206
Roundup	1 pt	D	100	100	100	100	97	1386
Roundup / Roundup	1 pt / 1 pt	B / D	100	99	100	100	95	1219
Roundup / Roundup	0.5 pt / 0.5 pt	B / D	93	100	95	97	85	1330
Handweed Check + Treflan / Roundup	1.5 pt / 1 pt	A / C	100	100	100	100	96	1100
Weedy Check			0	0	0	0	0	611
LSD			6	6	6	6	6	295
CV			4	4	4	4	5	17

^a All Roundup treatments included AMS (1%)

^b A=PPI; B=cotyledon to 2-lf canola; C=3 to 4-lf canola; D=5 to 6-leaf canola

^c Fxtl=green and yellow foxtail