

Control of volunteer Roundup Ready canola in wheat (2002)

Wheat was seeded April 29 over an area that had been in Roundup Ready canola in 2001. Individual plots were 10 x 30 ft and replicated three times. Treatments were applied to canola cotyledons on May 17, 3- to 4-leaf on June 4, or 5-leaf canola on June 14.

Treatment ^a	Rate	Canola stage	Volunteer canola control		
			Jun 8	Jun 24	Jul 24
			%		
Harmony GT	0.075 oz	Cotyledon	65	96	100
Harmony GT	0.15 oz	Cotyledon	68	97	100
Harmony GT	0.3 oz	Cotyledon	79	97	100
2,4-D ester	0.5 pt	Cotyledon	94	98	100
Aim	0.33 oz	Cotyledon	42	96	100
Aim + MCPA ester	0.33 oz + 0.5 pt	3 to 4-leaf		94	100
Bronate Advanced	0.8 pt	3 to 4-leaf		100	100
Harmony GT + Starane	0.3 oz + 0.33 pt	3 to 4-leaf		97	100
Harmony GT + MCPA ester	0.3 oz + 0.5 pt	3 to 4-leaf		99	100
Starane + MCPA ester	0.5 pt + 0.75 pt	3 to 4-leaf		95	100
Express + MCPA ester	0.33 oz + 0.5 pt	3 to 4-leaf		98	100
Aim + MCPA ester	0.33 oz + 0.5 pt	5-leaf		95	100
Bronate Advanced	0.8 pt	5-leaf		100	100
Harmony GT + Starane	0.3 oz + 0.33 pt	5-leaf		87	100
Harmony GT + MCPA ester	0.3 oz + 0.5 pt	5-leaf		92	100
Harmony GT + MCPA ester	0.4 oz + 0.5 pt	5-leaf		93	100
Starane + MCPA ester	0.5 pt + 0.75 pt	5-leaf		83	100
Express + MCPA ester	0.33 oz + 0.5 pt	5-leaf		89	100
Untreated				0	0
LSD (0.05)			13	3	--
CV			10	2	0

^aAll Harmony GT, Aim, and Express treatments were applied with NIS at 0.125 or 0.25% v/v.

On June 8, three weeks-after-treatment (WAT), 2,4-D ester provided more volunteer canola control than Harmony GT or Aim applied at the cotyledon stage. Volunteer canola control with Harmony GT increased with application rate. However, all herbicide treatments applied at the cotyledon stage provided more than 96% control of volunteer canola at the June 24 and July 24 evaluations.

Herbicide treatments applied at the 3- to 4-leaf canola stage provided 94-100% control of volunteer canola at the June evaluation. The same treatments applied at 5-leaf canola provided 83-100% volunteer canola control. Aim plus MCPA ester and Bronate Advanced provided equal control at either the 3- to 4-leaf or 5-leaf stages. However, for other herbicides, volunteer canola control was 6-12% lower when applied to larger canola (5-leaf) compared to the 3- to 4-leaf stage application. All treatments provided 100% control at the July evaluation. Dry conditions and crop competition contributed to the volunteer canola control.