

Weed control in corn (2003)

Corn was seeded May 12 at 18,000 seeds/A into 30-inch rows. Individual plots were 10 x 30 ft and replicated three times. Herbicide treatments were applied June 2 to V2 to V4 corn. The primary weeds evaluated were green foxtail (Grft), kochia (Kocz), redroot pigweed (Rrpw), common lambsquarters (Colq), wild buckwheat (Wibw), and cutleaf nightshade (Clns).

Treatment ^a	Rate	Grft			Kocz			Rrpw			Colq			Wibw			Clns	
		Jun 18	Jul 1	Jul 15	Jun 18	Jul 1	Jul 15	Jun 18	Jul 1	Jul 15	Jun 18	Jul 1	Jul 15	Jun 18	Jul 1	Jul 15	Jun 18	Jul 1
		% control																
Steadfast	0.75 oz	99	97	88	85	70	47	98	96	86	89	97	89	92	83	77	93	94
Steadfast + Atrazine	0.75 oz + 0.5 pt	99	92	78	100	100	98	98	93	84	99	100	99	99	97	91	100	100
Steadfast + Starane	0.75 oz + 0.33 pt	99	95	90	96	94	81	97	95	88	90	95	87	94	96	89	95	94
Steadfast + Starane	0.75 oz + 0.67 pt	99	95	90	95	96	87	98	94	88	92	98	95	95	94	87	93	94
Steadfast + Atrazine+ Starane	0.75 oz + 0.5 pt + 0.33 pt	99	96	90	98	98	92	99	97	90	99	98	95	100	99	97	100	99
Steadfast + Atrazine + Starane	0.75 oz + 0.5 pt + 0.67 pt	99	97	85	100	98	94	99	95	90	100	99	95	99	98	94	100	100
Option + Starane	1.5 oz + 0.67 pt	98	96	87	95	95	83	96	90	83	91	98	94	94	92	85	97	100
Option + Clarity	1.5 oz + 2 fl oz	97	95	85	95	93	83	99	95	84	91	99	98	80	73	60	96	98
Steadfast + Clarity	0.75 oz + 2 fl oz	99	97	89	94	88	68	98	95	88	91	100	95	94	88	83	90	92
Steadfast + Clarity + Atrazine	0.75 oz + 2 fl oz + 0.5 pt	99	95	88	100	99	96	99	95	87	100	99	100	99	97	92	98	99
Option + Clarity + Atrazine	1.5 oz + 2 fl oz + 0.5 pt	95	93	84	99	98	98	98	94	86	100	100	96	100	96	93	100	100
Untreated		0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
LSD (0.05)		3	4	5	3	8	17	3	5	8	2	3	7	3	11	17	10	10
CV		2	3	4	2	6	13	2	4	6	1	2	5	2	8	13	7	7

^aSteadfast treatments were applied with MSO and 28% N at 1% v/v & 2 qt, respectively; Option treatments were applied with MSO and 28% N at 1.5 pt & 2 qt, respectively.

None of the treatments caused visible corn injury. We applied the treatments early to control the heavy population of 2- to 3-leaf foxtail. In the June 18 evaluation (16 DAT), all treatments provided excellent control of all weeds, with the exception of Steadfast alone on kochia and lambsquarters, as well as Option + Clarity on wild buckwheat. Treatments containing atrazine had better season-long control of several weeds. Lack of soil residual activity in several treatments resulted in unacceptable weed control later in the season, particularly with kochia. Steadfast alone provided poor kochia control, likely due to the presence of ALS-resistant plants.