Evaluation of weed control programs in conventional corn. Horky, Kevin T. and Alex R. Martin. A field study was conducted to evaluate the efficacy of weed control programs in conventional corn. A randomized complete block design with three replications per treatment was utilized. The study was conducted on a Sharpsburg silt loam with 2.7% organic matter and a pH of 6.8. Individual plots consisted of six 30-inch rows, each 30 feet long. 'Pioneer 35Y62' corn was planted April 27 at a population of 22000 seeds per acre. Treatments were applied with a tractor-mounted sprayer at a speed of 3.0 mph. EPOST treatments were applied 26 days after planting. Application, weed, and environmental data are presented below:

Date	April 27	May 23
Treatment	PRE	EPOST
Sprayer		
gpa	15	15
psi	30	30
Temperature (°C)		
air	14	30
soil (4 inch)	8	20
Soil Moisture	adequate	adequate
Wind (mph)	10	3
Sky (% cloudy)	100	10
Relative		
humidity (%)	28	15
Precip. After appl. (inches)		
week 1	0.09	0.15
week 2	0.23	2.59
Corn		
stage	--	V3
height (cm)	--	10
Velvetleaf		
height (cm)	--	5
infestation (m^2)	--	6
Common sunflower		
height (cm)	--	8
infestation (m^2)	--	4
Palmer amaranth		
height (cm)	--	3
infestation (m^2)	--	3
Green foxtail		
height (cm)	--	3
infestation (m^2)	--	1

Summary comments: Limited rainfall reduced performance of PRE treatments. EPOST treatments provided the greatest weed control and crop yield. Results of the study are summarized in the following table. (Department of Agronomy and Horticulture, University of Nebraska-Lincoln)

Table. Evaluation of weed control in conventional corn (Horky and Martin).

Treatment	Rate	Timing	---------ABUTH---------			---------HELAN---------			---------AMAPA---------			---------SETVI--------			ZEAMX	
															Injury	YIELD
			5/31	6/14	6/28	5/31	6/14	6/28	5/31	6/14	6/28	5/31	6/14	6/28	5/31	9/30
	(lb/a)		---% Weed Control---												%Chlorosis	(bu/ac)
S-metolachlor&	1.31	PRE	93	88	88	90	90	90	93	90	88	93	88	88	0	47
atrazine&	1.31															
mesotrione&	0.17															
benoxacor																
S-metolachlor&	1.52	PRE	90	87	87	95	93	93	95	93	93	95	92	92	0	69
atrazine&	1.52															
mesotrione&	0.2															
benoxacor																
S-metolachlor&	1.26	PRE	47	43	43	58	53	53	67	62	60	80	77	77	0	61
atrazine&	1.63															
benoxacor																
S-metolachlor&	1.68	PRE	90	88	87	95	92	92	95	93	92	93	88	88	0	78
atrazine&	0.63															
mesotrione&	0.17															
benoxacor																
S-metolachlor&	1.31	PRE	88	83	83	93	90	88	95	92	92	95	90	90	0	88
atrazine&	1.31															
mesotrione&	0.17															
benoxacor+																
simazine	1															
Dimethenamid-P&	0.72	PRE	58	53	53	62	55	55	68	65	63	78	70	68	0	71
atrazine	1.4															
Acetochlor&	2.47	PRE	68	65	65	62	60	60	68	63	60	77	68	67	0	68
atrazine&	1.44															
MON4660																
Flufenacet&	0.3	PRE	83	80	80	85	82	80	92	87	87	90	82	83	0	60
isoxaflutole	0.06															
Acetochlor&	1.95	PRE	67	63	60	68	60	60	78	73	73	82	75	73	0	62
atrazine&	1.46															
dichlormid																
S-metolachlor&	1.31	EPOST	99	95	96	99	98	98	99	99	99	86	80	78	27	88
atrazine&	1.31															
mesotrione&	0.17															
benoxacor+																
NIS[1]	0.25% v/v															
S-metolachlor&	1.26	EPOST	83	78	82	87	82	83	92	92	90	85	78	78	2	105
atrazine&	1.63															
benoxacor+																
NIS	0.25% v/v															
Acetochlor&	1.95	PRE	63	60	60	68	63	63	73	70	70	77	70	70	0	75
atrazine&	1.46															
dichlormid+																
flumetsulam&	0.035															
clopyralid	0.11															

(continued)

Table. Evaluation of weed control in conventional corn (Horky and Martin), continued.

Treatment	Rate	Timing	5/31	6/14	6/28	5/31	6/14	6/28	5/31	6/14	6/28	5/31	6/14	6/28	Injury 5/31	YIELD 9/30
		Application	---------ABUTH---------			---------HELAN---------			---------AMAPA---------			---------SETVI--------			ZEAMX	
	(lb/a)		--% Weed Control---												%Chlorosis	(bu/ac)
Flufenacet&	0.36	PRE	85	80	82	75	70	70	85	82	83	95	88	87	0	80
isoxaflutole+	0.075															
atrazine	1															
LSD (P=.05)			6	7	8	13	14	14	8	9	11	9	12	12	3	26