

Total postemergence herbicide programs for weed control in corn. Dekalb, Illinois, 2003. Hasty, Ryan F., Aaron G. Hager, and Christy L. Sprague. The objective of this research was to evaluate total postemergence herbicide programs for weed control in corn. The study was established at the Northern Illinois Research and Education Center, Dekalb. The soil was a Drummer silty-clay loam with a pH of 6.0 and 6.0% organic matter. Pioneer 33G29 corn was planted 2 inches deep on April 28 in 30 inch rows. Treatments were arranged in randomized complete blocks with three replications of plots 7.5 by 28 feet. Herbicides were applied with a CO<sub>2</sub> backpack sprayer delivering 20 gpa and equipped with 8003 flat fan nozzles. Application information is listed below:

Date	June 16
Application	epost
Temperature (F)	
Air	81
Soil	78
Soil Moisture	Moist
Wind (mph)	6-SW
Sky Cover (%)	50
Precip. after application	
Week 1 (inch)	0.30
Week 2 (inch)	0.30
Relative humidity (%)	36
Corn	
Leaf no.	5
Height (inch)	12
Giant Foxtail	
Leaf no.	4
Height (inch)	7
Velvetleaf	
Leaf no.	5
Height (inch)	4
Common Lambsquarters	
Leaf no.	>8
Height (inch)	4
Pennsylvania Smartweed	
Leaf no.	>8
Height (inch)	6

No crop response was observed from any herbicide treatment 16 days after treatment (DAT). All treatments provided >75% control of giant foxtail, velvetleaf, common lambsquarters, and Pennsylvanian smartweed 16 DAT. Overall, nicosulfuron provided significantly better giant foxtail control 30 DAT at 0.023 lbs/A compared with 0.016 lbs/A. Giant foxtail control with foramsulfuron 30 DAT was significantly less with the addition of mesotrione plus atrazine (70%-76% control) compared with the other tank-mixes tested (>90% control). (Dept. of Crop Sciences, University of Illinois, Urbana).

Table. Total postemergence herbicide programs for weed control in corn. Dekalb, Illinois, 2003. (Hasty, Hager, and Sprague).

Treatment	Appl Rate	Time	Zeamd 6-27	Setfa 6-27	Abuth 6-27	Cheal 6-27	Polpy 6-27	Zeamd 7-16	Setfa 7-16	Abuth 7-16	Cheal 7-16	Polpy 7-16
	(lb/A)		% inj	% control				% inj	% control			
Nicosulfuron+mesotrione+atrazine +Herbimax <sup>1</sup> +28% N	0.016+0.094+1.0 1.0%+2.5%	epost	0	79	99	99	99	0	70	99	99	99
Nicosulfuron+mesotrione+atrazine +Herbimax+28% N	0.023+0.094+1.0 1.0%+2.5%	epost	0	80	99	99	99	0	73	99	99	99
Nicosulfuron+flumetsulam&clopyralid +Herbimax+28% N	0.023+0.035+0.094 1.0%+2.5%	epost	0	82	96	75	99	0	81	99	77	99
Nicosulfuron+dicamba&diflufenzopyr +Herbimax+28% N	0.023+0.125+0.05 1.0%+2.5%	epost	0	78	99	99	99	0	75	99	99	99
Nicosulfuron&rimsulfuron +mesotrione+atrazine +Herbimax+28% N	0.0107+0.0053 0.094+1.0 1.0%+2.5%	epost	0	80	99	99	96	0	69	99	99	98
Nicosulfuron&rimsulfuron +mesotrione+atrazine +Herbimax+28% N	0.015+0.008 0.094+1.0 1.0%+2.5%	epost	0	78	99	99	96	0	71	99	99	96
Check	-	-	0	0	0	0	0	0	0	0	0	0
Nicosulfuron&rimsulfuron +mesotrione+atrazine +Herbimax+28% N	0.023+0.012 0.094+1.0 1.0%+2.5%	epost	0	85	99	99	99	0	83	99	99	99
Nicosulfuron&rimsulfuron +mesotrione +Herbimax+28% N	0.023+0.012 0.047 1.0%+2.5%	epost	0	88	99	95	99	0	88	98	97	98
Nicosulfuron&rimsulfuron +mesotrione+atrazine +Herbimax+28% N	0.023+0.012 0.047+0.75 1.0%+2.5%	epost	0	85	99	99	99	0	83	99	99	99
Nicosulfuron&rimsulfuron +dica&diflufenzopyr+atrazine +Herbimax+28% N	0.023+0.012 0.063+0.025+0.25 1.0%+2.5%	epost	0	88	92	92	99	0	93	98	93	99
Nicosulfuron&rimsulfuron+atrazine +Herbimax+28% N	0.023+0.012+0.75 1.0%+2.5%	epost	0	83	88	90	99	0	80	73	86	99
Nicosulfuron&rimsulfuron+atrazine +Herbimax+28% N	0.023+0.012+1.0 1.0%+2.5%	epost	0	85	88	88	99	0	85	72	75	99
Nicosulfuron&rimsulfuron +flumetsulam&clopyralid+atrazine +Herbimax+28% N	0.023+0.012 0.035+0.094+0.5 1.0%+2.5%	epost	0	87	92	90	96	0	83	99	85	99
Foramsulfuron+mesotrione+atrazine +Herbimax+28% N	0.033+0.094+1.0 1.0%+2.5%	epost	0	83	99	99	99	0	70	99	99	99
Foramsulfuron+mesotrione+atrazine +MSO <sup>2</sup> +28% N	0.033+0.094+1.0 1.0%+2.5%	epost	0	87	99	99	99	0	76	99	99	99
Fora+flumetsulam&clopyralid +MSO+28% N	0.033+0.035+0.094 1.0%+2.5%	epost	0	88	96	90	99	0	93	99	98	99
Fora+dicamba&diflufenzopyr +MSO+28% N	0.033+0.063+0.025 1.0%+2.5%	epost	0	89	99	99	99	0	95	99	98	99
Foramsulfuron +MSO+28% N	0.033 1.0%+2.5%	epost	0	93	98	85	99	0	93	96	75	77
Foramsulfuron&iodosulfuron +MSO+28% N	0.0544+0.0036 1.0%+2.5%	epost	0	92	99	83	99	0	95	98	93	99
Foramsulfuron&iodosulfuron +dicamba&diflufenzopyr +MSO+28% N	0.0544+0.0036 0.063+0.025 1.0%+2.5%	epost	0	93	99	99	99	0	96	98	99	99
LSD (0.05)			0	5	3	4	3	0	7	3	8	3

<sup>1</sup> Herbimax is a paraffinic oil and surfactant blend from Loveland Indus.; <sup>2</sup> MSO is a methylated seed oil and non-ionic surfactant blend from Loveland Indus.