

AE F130360 01 combinations for weed control in corn. DeKalb, Illinois, 2002. Bunting, Jeffrey A., Ryan F. Hasty, and Christy L. Sprague. The objective of this research was to evaluate AE F130360 01 and AE F130360 02 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 35P17 corn was planted 2 inches deep on May 5 in 30 inch rows. Treatments were arranged in randomized complete blocks with three replications of plots 10 by 28 feet. Herbicides were applied with a CO₂ backpack sprayer delivering 20 gpa and equipped with 8003 flat fan nozzles. Application information is listed below:

Date	May 5	June 12	June 17
Application	pre	epost	post
Temperature (F)			
Air	82	76	70
Soil	60	75	65
Soil Moisture	Moist	Moist	Dry
Wind (mph)	10S	7NE	2W
Sky Cover (%)	0	100	50
Precip. after application			
Week 1 (inch)	1.37	0.03	0.00
Week 2 (inch)	2.22	0.00	0.17
Relative humidity (%)	36	71	66
Corn			
Leaf no.	-	4	5
Height (inch)	-	3	4
Giant Foxtail			
Leaf no.	-	1	3
Height (inch)	-	2	5
Velvetleaf			
Leaf no.	-	4	5
Height (inch)	-	3	4
Common Lambsquarters			
Leaf no.	-	6	6
Height (inch)	-	2	3.5

Corn injury ranged from 0 - 20%, 10 days after treatment (DAT) of the early postemergence applications. AE F130360 01 and AE F130360 02 when applied with carfentrazone resulted in 18 and 20% injury, respectively. Corn recovered by 28 DAT. Sequential herbicide treatments provided greater than 90% for all weeds in the study. Giant foxtail control from nicosulfuron, AE F130360 01, and AE F130360 02 were similar and greater than 85%. Velvetleaf and common lambsquarters control was significantly higher for AE F130360 02 when compared with nicosulfuron. The competitive standard for comparing the weed control spectrum of AE F130360 02 is nicosulfuron plus rimsulfuron. Giant foxtail control was similar, but velvetleaf control and common lambsquarter control was greater for AE F130360 02. The addition of atrazine plus crop oil concentrate (COC) with AE F130360 01 or AE F130360 02 lowered giant foxtail control significantly. Methylated seed oil (MSO) in place of COC helped overcome this effect for both scenarios. The addition of a tank-mix herbicide with AE F130360 02 did not increase the level of weed control significantly from treatments with no tank-mix partner. In general, broadleaf activity did increase when atrazine or mesotrione was added with either AE F130360 01 and AE F130360 02. (Dept. of Crop Sciences, University of Illinois, Urbana).

Table. AE F130360 01 combinations for weed control in corn. DeKalb, Illinois, 2002. (Bunting, Hasty, and Sprague).

Treatment	Appl Rate (lb/A)	Time	Zeamd 10DAT % inj	Setfa 10DAT -----% control	Abuth 10DAT	Cheal 10DAT	Zeamd 7-11 % inj	Setfa 7-11 -----% control	Abuth 7-11	Cheal 7-11
Nicosulfuron	0.031	epost	0	99	99	99	0	87	35	50
+Herbimax+28%N	1.0%+2.5%									
AE F130360 01	0.033	epost	7	99	99	99	2	87	89	94
+MSO+28%N	1.0%+2.5%									
AE F130360 02	0.067	epost	8	99	99	99	0	85	90	97
+MSO+28%N	1.0%+2.5%									
Nicosulfuron&rimsulfuron	0.023+0.12	epost	0	99	99	99	0	85	70	72
+Herbimax+28%N	1.0%+2.5%									
Rims&nico&atrazine	0.012+0.012+0.766	epost	0	99	99	99	0	85	91	94
+Herbimax+28%N	1.0%+2.5%									
Check	-	-	0	0	0	0	0	0	0	0
AE F130360 01+atrazine	0.033+1.0	epost	0	99	99	99	3	87	96	98
+MSO+28%N	1.0%+2.5%									
AE F130360 01+atrazine	0.033+1.0	epost	0	99	99	99	0	75	96	98
+COC+28%N	1.0%+2.5%									
AE F130360 01+dicamba	0.033+0.188	epost	15	99	99	99	4	87	88	97
+MSO+28%N	1.0%+2.5%									
AE F130360 01	0.033	epost	13	99	99	99	0	89	95	98
+dicamba&San 1269H	0.125+0.05									
+MSO+28%N	1.0%+2.5%									
AE F130360 01	0.033	epost	18	99	99	99	0	89	91	95
+carfentrazone	0.008									
+MSO+28%N	1.0%+2.5%									
AE F130360 01+prim	0.033+0.018	epost	8	99	99	99	0	89	90	86
+MSO+28%N	1.0%+2.5%									
Dimethenamid-p&atrazine	0.44+0.5	pre	0	73	99	99	0	93	91	98
+rims&nico&atrazine	0.012+0.012+0.766	post								
+Herbimax+28%N	1.0%+2.5%									
Atrazine	2.0	pre	0	73	99	99	0	95	94	96
+AE F130360 01	0.033	post								
+MSO+28%N	1.0%+2.5%									
Isoxaflutole	0.07	pre	0	73	99	99	0	96	99	99
+AE F130360 01	0.033	post								
+MSO+28%N	1.0%+2.5%									
S-metolachlor	1.59	pre	0	73	99	99	0	97	99	89
+AE F130360 01	0.033	post								
+MSO+28%N	1.0%+2.5%									
AE F130360 02+dicamba	0.067+0.188	epost	12	99	99	99	0	86	91	95
+MSO+28%N	1.0%+2.5%									
AE F130360 02	0.067	epost	17	99	99	99	0	88	95	99
+dicamba&San 1269H	0.125+0.05									
+MSO+28%N	1.0%+2.5%									
AE F130360 02+carf	0.067+0.008	epost	20	99	99	99	0	93	91	96
+MSO+28%N	1.0%+2.5%									
AE F130360 02+atrazine	0.067+1.0	epost	3	99	99	99	0	86	96	99
+MSO+28%N	1.0%+2.5%									
AE F130360 02+atrazine	0.067+1.0	epost	2	99	99	99	0	75	95	99
+COC+28%N	1.0%+2.5%									
AE F130360 01+mesotrione	0.033+0.094	epost	12	99	99	99	0	86	96	99
+MSO+28%N	1.0%+2.5%									
AE F130360 02+mesotrione	0.067+0.094	epost	12	99	99	99	0	87	99	99
+MSO+28%N	1.0%+2.5%									
Atrazine	2.0	pre	0	73	99	99	0	97	99	99
+AE F130360 02	0.067	post								
+MSO+28%N	1.0%+2.5%									
Isoxaflutole	0.07	pre	0	73	99	99	0	98	99	99
+AE F130360 02	0.067	post								
+MSO+28%N	1.0%+2.5%									
S-metolachlor	1.59	pre	0	73	99	99	0	99	96	96
+AE F130360 02	0.067	post								
+MSO+28%N	1.0%+2.5%									
Hand Weeded	-	-	0	99	99	99	0	99	99	99
LSD (0.05)			3	3	4	3	3	7	13	12