

Mesotrione, dicamba, and San 1269H tank-mixes for weed control in corn. DeKalb, Illinois, 2002. Maxwell, Douglas J., Christy L. Sprague, and Ryan F. Hasty. The objective of this research was to evaluate mesotrione, diacamba, and San 1269H tank-mixes 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. DeKalb 58-78 corn was planted 2 inches deep on May 4 in 30 inch rows. Treatments were arranged in randomized complete blocks with three replications of plots 10 by 30 feet. Herbicides were applied with a CO<sub>2</sub> backpack sprayer delivering 20 gpa and equipped with 8003 flat fan nozzles. A blanket postemergence application of 0.031 lb/A nicosulfuron, 1.0% Herbimax, and 2.5% 28%N was applied June 26th for grass weed control. Application information is listed below:

Date	June 7	June 17
Application	epost	lpost
Temperature (F)		
Air	78	67
Soil	67	64
Soil Moisture	Moist	Moist
Wind (mph)	6W	2W
Sky Cover (%)	0	50
Precip. after application		
Week 1 (inch)	0.07	0.00
Week 2 (inch)	0.01	0.17
Relative humidity (%)	62	67
Corn		
Leaf no.	3	7
Height (inch)	5	17
Giant Ragweed		
Leaf no.	8	>8
Height (inch)	6	14
Common Ragweed		
Leaf no.	6	8
Height (inch)	4	9
Common Lambsquarters		
Leaf no.	6	9
Height (inch)	2	6
Pennsylvania Smartweed		
Leaf no.	4	8
Height (inch)	3	9

There was no crop injury observed with any of the treatments. Mesotrione alone early postemergence had good control early but gave way to regrowth and new germination later. Mesotrione and lower rates of dicamba and San 1269H early postemergence had very good control 10 days after treatment (10 DAT), but did not hold through the 30 DAT for giant ragweed. Dicamba and San-1269H rates of 0.08 lb/A and higher with mesotrione proved highly effective 10 and 30 DAT for the early postemergence and late postemergence timings. Late postemergence rates of dicamba and San 1269H of 0.13 lb/A with mesotrione at 10 DAT were rated good but improved to excellent by 30 DAT. (Dept. of Crop Sciences, University of Illinois, Urbana).

Table. Mesotrione, dicamba, and San 1269H tank-mixes for weed control in corn. DeKalb, Illinois, 2002. ( Maxwell, Sprague, and Hasty).

Treatment	Appl Rate	Time	Zeamd 10DAT % inj	Ambtr 10DAT % control	Ambel 10DAT % control	Cheal 10DAT % control	Polpy 10DAT % control	Zeamd 30DAT % inj	Ambtr 30DAT % control	Ambel 30DAT % control	Cheal 30DAT % control	Polpy 30DAT % control
Mesotrione	0.094	epost	0	97	90	99	99	0	83	75	99	99
+Herbimax+28%N	1.0%+2.5%											
Meso+dicamba&San 1269H	0.094+0.029+0.011	epost	0	98	99	99	99	0	93	98	99	99
+Herbimax+28%N	1.0%+2.5%											
Meso+dicamba&San 1269H	0.094+0.057+0.023	epost	0	99	99	99	99	0	92	99	99	99
+Herbimax+28%N	1.0%+2.5%											
Meso+dicamba&San 1269H	0.094+0.093+0.037	epost	0	99	99	99	99	0	91	99	99	99
+Herbimax+28%N	1.0%+2.5%											
Meso+dicamba&San 1269H	0.094+0.125+0.05	epost	0	99	99	99	99	0	95	99	99	99
+Herbimax+28%N	1.0%+2.5%											
Meso+dicamba&San 1269H	0.047+0.029+0.011	epost	0	99	99	99	99	0	96	99	99	99
+Herbimax+28%N	1.0%+2.5%											
Check	-	-	0	0	0	0	0	0	0	0	0	0
Mesotrione	0.094	lpost	0	60	50	57	53	0	74	68	90	99
+Herbimax+28%N	1.0%+2.5%											
Meso+dicamba&San 1269H	0.094+0.029+0.011	lpost	0	78	75	86	87	0	92	92	99	99
+Herbimax+28%N	1.0%+2.5%											
Meso+dicamba&San 1269H	0.094+0.057+0.023	lpost	0	89	90	94	96	0	96	96	99	99
+Herbimax+28%N	1.0%+2.5%											
Meso+dicamba&San 1269H	0.094+0.093+0.037	lpost	0	89	92	91	96	0	95	94	99	99
+Herbimax+28%N	1.0%+2.5%											
Meso+dicamba&San 1269H	0.094+0.125+0.05	lpost	0	94	96	96	97	0	99	99	99	99
+Herbimax+28%N	1.0%+2.5%											
LSD (0.05)			0	5	5	5	4	0	4	4	0	0