

MANA Acetochlor Plus Atrazine Premix.

Project Code: 05-51W-MN90 Location: Belleville Research Center
 Investigator: Bryan Young

Investigator: Bryan Young, Associate Professor, Southern Illinois University

City State Zip Country: Belleville IL 62221 USA
Trial Status: Final **Updated:** 11-14-05

Objective:

Determine the efficacy of MANA acetochlor plus atrazine premixes versus Degree Xtra.

Weed Code	Common Name	Scientific Name
1.	SETFA foxtail, giant	Setaria faberi Herrm.
2.	AMBTR ragweed, giant	Ambrosia trifida L.
3.	ABUTH velvetleaf	Abutilon theophrasti Medicus

Crop 1: ZEAMX corn, field **Variety:** 33P69 LL
Planting Method: Seeded **Planting Date:** 5-6-05
Rate: 28000 S/A **Depth:** 1.5 IN
Row Spacing: 30 IN

Plot Width, Unit: 10 FT **Plot Length, Unit:** 27 FT **Reps:** 4
Tillage Type: Reduced-Till **Study Design:** Randomized complete block
Previous Crop, Year: GLXMA, 2004

Field Prep./Maintenance: N 150 LB/A, P205 50 LB/A, K20 100 LB/A

Soil Name: Weir **% OM:** 2.2 **pH:** 6.5 **CEC:** 11
Texture: Silt loam **Fert. Level:** P1: 94 LB/A, K: 396 LB/A

APPLICATION DESCRIPTION

A
Application Date: 05-06-05
Time of Day: 17:00
Application Method: Spray
Application Timing: PRE
Applic. Placement: BROSUI
Air Temp., Unit: 76 F
% Relative Humidity: 30
Wind Velocity, Unit: 5 MPH
Soil Moisture: NORMAL

CROP STAGE AT EACH APPLICATION

A
Crop 1 Code, Stage: ZEAMX NA
Height, Unit: NA NA

APPLICATION EQUIPMENT

A
Appl. Equipment: CO2 sprayer
Operating Pressure: 40 PSI
Nozzle Type: Flat fan
Nozzle Size: 8003
Boom Length, Unit: 7.5 FT
Spray Volume, Unit: 20 GPA

NOTES:

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Weed Code		Crop Code		Rating Data Type		Rating Unit		Rating Date		Trt-Eval Interval		ZEAMX	ZEAMX	ZEAMX	SETFA	SETFA	SETFA	SETFA	
												Injury	Injury	Injury	Control	Control	Control	Control	
												Percent	Percent	Percent	Percent	Percent	Percent	Percent	Percent
												05-27-05	06-10-05	06-24-05	05-20-05	06-03-05	06-17-05	07-01-05	
												14 DAE	28 DAE	56 DAE	14 DA-A	28 DA-A	42 DA-A	56 DA-A	
Trt No.	Treatment Name	Form Conc	Form Type	Rate	Rate Unit	Prod Rate	Prod Unit	Grow Stg	Appl Code										
1	ACETO+ATRAZ	5.28	L	1.14	lb ai/a	0.86	qt/a	PRE	A	0	0	0	88	87	80	70			
2	ACETO+ATRAZ	5.28	L	2.26	lb ai/a	1.71	qt/a	PRE	A	0	0	0	91	94	74	83			
3	ACETO+ATRAZ	5.28	L	3.4	lb ai/a	2.57	qt/a	PRE	A	0	0	0	95	97	74	67			
4	ACETO+ATRAZ	5.28	L	4.53	lb ai/a	3.43	qt/a	PRE	A	0	0	0	95	97	90	77			
5	DEGREE XTRA	4	L	1.11	lb ai/a	1.11	qt/a	PRE	A	0	0	0	83	80	73	54			
6	DEGREE XTRA	4	L	2.22	lb ai/a	2.22	qt/a	PRE	A	0	0	0	88	88	59	48			
7	DEGREE XTRA	4	L	3.33	lb ai/a	3.33	qt/a	PRE	A	0	0	0	95	94	66	54			
8	DEGREE XTRA	4	L	4.44	lb ai/a	4.44	qt/a	PRE	A	0	0	0	95	95	73	66			
9	MANA-ACE	6.4	EC	0.75	lb ai/a	0.47	qt/a	PRE	A	0	0	0	84	90	66	55			
9	AATREX	90	WG	0.375	lb ai/a	0.417	lb/a	PRE	A										
10	MANA-ACE	6.4	EC	3.0	lb ai/a	1.87	qt/a	PRE	A	0	0	0	95	97	87	87			
10	AATREX	90	WG	1.5	lb ai/a	1.67	lb/a	PRE	A										
11	DEGREE	3.8	ME	0.75	lb ai/a	0.79	qt/a	PRE	A	0	0	0	45	73	33	17			
11	AATREX	90	WG	0.375	lb ai/a	0.417	lb/a	PRE	A										
12	DEGREE	3.8	ME	3.0	lb ai/a	3.16	qt/a	PRE	A	0	0	0	94	94	64	44			
12	AATREX	90	WG	1.5	lb ai/a	1.67	lb/a	PRE	A										
13	NONTREATED									0	0	0	0	0	0	0			
LSD (P=.05)										0.0	0.0	0.0	4.6	6.1	17.6	7.5			
Replicate F										0.000	0.000	0.000	0.295	0.972	4.866	0.896			
Replicate Prob(F)										1.0000	1.0000	1.0000	0.8290	0.4167	0.0061	0.4528			
Treatment F										0.000	0.000	0.000	296.535	149.488	15.231	89.820			
Treatment Prob(F)										1.0000	1.0000	1.0000	0.0001	0.0001	0.0001	0.0001			

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									AMBTR	AMBTR	AMBTR	AMBTR	ABUTH	ABUTH	ABUTH	ABUTH	
									Control	Control	Control	Control	Control	Control	Control	Control	
									Percent	Percent	Percent	Percent	Percent	Percent	Percent	Percent	
									05-20-05	06-03-05	06-17-05	07-01-05	05-20-05	06-03-05	06-17-05	07-01-05	
									14 DA-A	28 DA-A	42 DA-A	56 DA-A	14 DA-A	28 DA-A	42 DA-A	56 DA-A	
Trt No.	Treatment Name	Form Conc	Form Type	Rate	Rate Unit	Prod Rate	Prod Unit	Grow Stg	Appl Code								
1	ACETO+ATRAZ	5.28	L	1.14	lb ai/a	0.86	qt/a	PRE	A	40	31	0	0	30	30	0	0
2	ACETO+ATRAZ	5.28	L	2.26	lb ai/a	1.71	qt/a	PRE	A	53	64	5	2	41	46	0	0
3	ACETO+ATRAZ	5.28	L	3.4	lb ai/a	2.57	qt/a	PRE	A	68	85	29	7	63	78	28	8
4	ACETO+ATRAZ	5.28	L	4.53	lb ai/a	3.43	qt/a	PRE	A	75	92	58	22	79	90	53	25
5	DEGREE XTRA	4	L	1.11	lb ai/a	1.11	qt/a	PRE	A	39	30	0	0	30	25	5	5
6	DEGREE XTRA	4	L	2.22	lb ai/a	2.22	qt/a	PRE	A	55	53	3	0	35	44	5	3
7	DEGREE XTRA	4	L	3.33	lb ai/a	3.33	qt/a	PRE	A	69	83	39	3	70	76	29	13
8	DEGREE XTRA	4	L	4.44	lb ai/a	4.44	qt/a	PRE	A	80	89	48	10	76	88	48	13
9	MANA-ACE	6.4	EC	0.75	lb ai/a	0.47	qt/a	PRE	A	39	33	0	0	30	29	0	0
9	AATREX	90	WG	0.375	lb ai/a	0.417	lb/a	PRE	A								
10	MANA-ACE	6.4	EC	3.0	lb ai/a	1.87	qt/a	PRE	A	92	91	66	28	92	92	48	29
10	AATREX	90	WG	1.5	lb ai/a	1.67	lb/a	PRE	A								
11	DEGREE	3.8	ME	0.75	lb ai/a	0.79	qt/a	PRE	A	51	34	1	0	28	26	4	0
11	AATREX	90	WG	0.375	lb ai/a	0.417	lb/a	PRE	A								
12	DEGREE	3.8	ME	3.0	lb ai/a	3.16	qt/a	PRE	A	83	88	44	3	86	90	50	13
12	AATREX	90	WG	1.5	lb ai/a	1.67	lb/a	PRE	A								
13	NONTREATED									0	0	0	0	0	0	0	0
LSD (P=.05)										9.6	9.3	18.9	17.4	8.3	11.7	19.4	19.3
Replicate F										6.763	1.990	2.603	2.219	1.062	2.284	7.608	4.177
Replicate Prob(F)										0.0010	0.1328	0.0669	0.1027	0.3772	0.0955	0.0005	0.0123
Treatment F										53.407	91.247	14.665	2.248	95.897	60.145	10.833	2.105
Treatment Prob(F)										0.0001	0.0001	0.0001	0.0302	0.0001	0.0001	0.0001	0.0422

Trial Comments

1. Protocol: MANA.
2. Ratings: CI 14, 28, and 42 DAE; WC 14, 28, 42, and 56 DAT.
3. DAE = Days after emergence. DA-A = Days after PRE application.