

## MANA Acetochlor Evaluation.

Project Code: 05-52-MW80      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 various formulations of acetochlor.

Weed Code	Common Name	Scientific Name
1.	SETFA foxtail, giant	Setaria faberi Herrm.

<b>Crop 1:</b>	ZEAMX corn, field	<b>Variety:</b>	33P65 RR
<b>Planting Method:</b>	Seeded	<b>Planting Date:</b>	5-6-05
<b>Rate:</b>	28000 S/A	<b>Depth:</b>	1.5 IN
<b>Row Spacing:</b>	30 IN		

<b>Plot Width, Unit:</b>	10 FT	<b>Plot Length, Unit:</b>	25 FT	<b>Reps:</b>	4
<b>Tillage Type:</b>	Reduced-Till	<b>Study Design:</b>	Randomized complete block		
<b>Previous Crop, Year:</b>	GLXMA, 2004				

**Field Prep./Maintenance:** N 150 LB/A, P205 0 LB/A, K20 100 LB/A

<b>Soil Name:</b>	Weir	<b>% OM:</b>	2.2	<b>pH:</b>	6.9	<b>CEC:</b>	9
<b>Texture:</b>	Silt loam	<b>Fert. Level:</b>	P1: 107 LB/A, K: 420 LB/A				

**APPLICATION DESCRIPTION**

		A
<b>Application Date:</b>	05-06-05	
<b>Time of Day:</b>	19:00	
<b>Application Method:</b>	Spray	
<b>Application Timing:</b>	PRE	
<b>Applic. Placement:</b>	BROSIOI	
<b>Air Temp., Unit:</b>	76 F	
<b>% Relative Humidity:</b>	30	
<b>Wind Velocity, Unit:</b>	2 MPH	
<b>Soil Moisture:</b>	NORMAL	

**CROP STAGE AT EACH APPLICATION**

		A
<b>Crop 1 Code, Stage:</b>	ZEAMX NA	
<b>Height, Unit:</b>	NA NA	

**APPLICATION EQUIPMENT**

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

**NOTES:**

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Weed Code	Crop Code	Rating Data Type	Rating Unit	Rating Date	Trt-Eval Interval	ZEAMX			SETFA					
						Injury Percent	Injury Percent	Injury Percent	Control Percent	Control Percent	Control Percent			
Trt No.	Treatment Name	Form Conc	Form Type	Rate Unit	Prod Rate	Prod Unit	Grow Stg	Appl Code	05-27-05 14 DAE	06-10-05 28 DAE	06-24-05 42 DAE	05-20-05 14 DA-A	06-03-05 28 DA-A	06-17-05 42 DA-A
1	MANA-ACE	6.4	EC	0.8 lb ai/a	1	pt/a	PRE	A	0	0	0	97	91	49
2	MANA-ACE	6.4	EC	1.2 lb ai/a	1.5	pt/a	PRE	A	0	0	0	97	94	81
3	MANA-ACE	6.4	EC	2.4 lb ai/a	3	pt/a	PRE	A	0	0	0	97	98	89
4	SURPASS	6.4	EC	0.8 lb ai/a	1	pt/a	PRE	A	0	0	0	95	92	61
5	SURPASS	6.4	EC	1.2 lb ai/a	1.5	pt/a	PRE	A	0	0	0	97	93	70
6	SURPASS	6.4	EC	2.4 lb ai/a	3	pt/a	PRE	A	0	0	0	97	98	92
7	HARNESS	7	EC	0.8 lb ai/a	0.91	pt/a	PRE	A	0	0	0	97	93	66
8	HARNESS	7	EC	1.2 lb ai/a	1.37	pt/a	PRE	A	0	0	0	98	97	84
9	HARNESS	7	EC	2.4 lb ai/a	2.74	pt/a	PRE	A	0	0	0	97	97	79
10	DEGREE	3.8	ME	0.8 lb ai/a	1.68	pt/a	PRE	A	0	0	0	88	82	8
11	DEGREE	3.8	ME	1.2 lb ai/a	2.53	pt/a	PRE	A	0	0	0	93	91	48
12	DEGREE	3.8	ME	2.4 lb ai/a	5.05	pt/a	PRE	A	0	0	0	85	94	73
13	NONTREATED								0	0	0	0	0	0
14	KIH-485	60	WG	0.148 lb ai/a	3.95	oz/a	PRE	A	0	0	0	96	88	57
15	KIH-485	60	WG	0.296 lb ai/a	7.9	oz/a	PRE	A	0	0	0	92	95	81
16	DUAL II MAGNUM	7.64	EC	1.27 lb ai/a	1.33	pt/a	PRE	A	0	0	0	94	91	58
LSD (P=.05)									0.0	0.0	0.0	4.0	4.3	25.1
Replicate F									0.000	0.000	0.000	2.156	1.185	0.790
Replicate Prob(F)									1.0000	1.0000	1.0000	0.1065	0.3262	0.5061
Treatment F									0.000	0.000	0.000	286.527	239.128	9.080
Treatment Prob(F)									1.0000	1.0000	1.0000	0.0001	0.0001	0.0001

## Trial Comments

1. Protocol: MANA, K-I Chemical USA Inc.
2. Ratings: CI 14, 28, and 42 DAE; WC 14, 28 and 42 DAT.
3. Basagran 1.0 lbai/A + COC 1% v/v was applied to all plots on 5-24-05 to reduce broadleaf interference.
4. DAE = Days after emergence. DA-A = Days after PRE application.
5. At 14 DA-A grass pressure was very low in all plots due to lack of rainfall.