

## Corn Response to Different Postemergence Herbicides.

Project Code: 04-1-W40      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:      10-6-04

## Objective:

To evaluate the varying response of corn to different postemergence applied corn herbicides.

Weed Code	Common Name	Scientific Name
1. NA	crop tolerance only	

Crop 1:	ZEAMX corn, field	Variety:	DKC 60-17 RR
Planting Method:	Seeded	Planting Date:	4-28-04
Rate:	28000 S/A	Depth:	1.5 IN
Row Spacing:	30 IN		

Plot Width, Unit:	10 FT	Plot Length, Unit:	28 FT	Reps:	5
Tillage Type:	Reduced-Till	Study Design:	Randomized complete block		
Previous Crop, Year:	GLXMA, 2003				

Field Prep./Maintenance: N 0 LB/A, P2O5 50 LB/A, K2O 100 LB/A

Soil Name: Weir	% OM: 1.6	pH: 6.2	CEC: 8
Texture: Silt loam	Fert. Level: P1: 83 LB/A,	K: 396 LB/A	

## APPLICATION DESCRIPTION

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Application Date:	6-7-04
Time of Day:	9:00
Application Method:	Spray
Application Timing:	20"CN
Applic. Placement:	BROFOL
Air Temp., Unit:	70 F
% Relative Humidity:	98
Wind Velocity, Unit:	7 MPH
Soil Moisture:	NORMAL
% Cloud Cover:	85

## CROP STAGE AT EACH APPLICATION

CROP STAGE AT EACH APPLICATION	
Crop 1 Code, Stage:	ZEAMX V6
Height, Unit:	20 IN

## APPLICATION EQUIPMENT

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Appl. Equipment:	CO2 sprayer
Operating Pressure:	40 PSI
Nozzle Type:	Flat fan
Nozzle Size:	8002
Boom Length, Unit:	7.5 FT
Spray Volume, Unit:	15 GPA

## NOTES:

Harvested 9-21-04, (2) 30 inch rows x 22 ft.

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Weed Code															
Crop Code															
Rating Data Type															
Rating Unit															
Rating Date															
Trt-Eval Interval															

Trt No.	Treatment Name	Form Conc	Form Type	Rate	Rate Unit	Prod Rate	Prod Unit	Grow Stg	Appl Code	Chloro Percent	Necro Percent	Stunt Percent	Stunt Percent	Moisture Percent	Yield bu/A
1	ROUNDUP W-MAX	4.5	SL	0.77	LB AE/A	22	FL OZ/A	20"CN	A	0	0	0	0	17.5	211
1	AMS	100	DRY	2.0	% W/W	2	% W/W	20"CN	A						
2	STEADFAST	75	WG	0.035	LB A/A	0.75	OZ/A	20"CN	A	0	0	4	13	15.7	169
2	PRIME OIL COC	100	LIQ	1	% V/V	1	% V/V	20"CN	A						
2	28% UAN	100	LIQ	2.0	QT/A	2	QT/A	20"CN	A						
3	ACCENT	75	WG	0.0234	LB A/A	0.5	OZ/A	20"CN	A	1	0	0	6	16.7	191
3	PRIME OIL COC	100	LIQ	1	% V/V	1	% V/V	20"CN	A						
3	28% UAN	100	LIQ	2.0	QT/A	2	QT/A	20"CN	A						
4	CELEBRITY PLUS	70	WG	0.206	LB A/A	4.7	OZ/A	20"CN	A	0	0	0	7	16.9	169
4	ACTIVATOR 90	100	LIQ	0.25	% V/V	0.25	% V/V	20"CN	A						
4	28% UAN	100	LIQ	2.0	QT/A	2	QT/A	20"CN	A						
5	STEADFAST	75	WG	0.035	LB A/A	0.75	OZ/A	20"CN	A	0	0	7	16	15.8	181
5	CALLISTO	4	SC	0.094	LB A/A	3	FL OZ/A	20"CN	A						
5	PRIME OIL COC	100	LIQ	1	% V/V	1	% V/V	20"CN	A						
5	28% UAN	100	LIQ	2.5	% V/V	2.5	% V/V	20"CN	A						
6	HORNET	68.5	WG	0.171	LB A/A	4	OZ/A	20"CN	A	4	0	0	7	16.4	185
6	PRIME OIL COC	100	LIQ	1	% V/V	1	% V/V	20"CN	A						
6	28% UAN	100	LIQ	2.5	% V/V	2.5	% V/V	20"CN	A						
7	NONTREATED									0	0	0	0	17.2	217
LSD (P=.05)										0.9	0.0	3.5	4.0	0.87	13.6
Replicate F										1.754	0.000	1.011	3.689	5.072	0.670
Replicate Prob(F)										0.1712	1.0000	0.4213	0.0177	0.0042	0.6192
Treatment F										19.385	0.000	5.617	19.044	5.283	16.606
Treatment Prob(F)										0.0001	1.0000	0.0009	0.0001	0.0014	0.0001

Trial Comments

1. Protocol: Monsanto.
2. Ratings: Chlorosis/Necrosis 5 DAT; Growth reduction 10 DAT.  
 Note weed control if any differences.  
 Date of 100% tassel emergence with pollen shed.
3. Yield.
4. Blanket PRE application of Degree Xtra at 3 qt/A to all plots was applied on 5-4-04.
5. DA-A = Days after 20"CN application. Chloro = Chlorosis. Necro = Necrosis. Stunt = Growth reduction.
6. Harvested 9-21-04, (2) 30 inch rows x 22 ft.