

MSU Weed Science Research Program

POSTEMERGENCE WEED CONTROL IN CORN WITH GLYPHOSATE FORMULATIONS, 2009

Trial ID: C0509
 Conducted: CAMPUS

Study Dir.: Andy Chomas
 Investigator: Wesley Everman

Date Planted: 5/7/09 **Row Spacing:** 30 IN
Variety: PIONEER 37Y14 **No. of Reps:** 4
Population: 29,000 S/A **% OM:** 3.4
Soil Type: Loam **pH:** 6.4
Plot Size: 10 X 35 FT **Design:** RANDOMIZED COMPLETE BLOCK

Tillage: Fall Chisel. Spring Field Cultivated X2.
Fertilizer: 300 lbs/A 46-0-0 Broadcast. 125 lbs/A 19-19-19 In Row at Plant.

Crop and Weed Description

Weed	Code	Common Name	Scientific Name
1.	ANGR	Annual Grass species	
2.	CHEAL	LAMBSQUARTERS, COMMON	CHENOPODIUM ALBUM L.
3.	AMARE	PIGWEEED, REDROOT	AMARANTHUS RETROFLEXUS L.
4.	ABUTH	VELVETLEAF	ABUTILON THEOPHRASTI MEDIK.
Crop	Code	Common Name	
1.	ZEAMX	CORN, FIELD	

Application Description

	A	B
Application Timing:	PRE	V5
Date Treated:	5/7/09	6/10/09
Time Treated:	8:00 PM	4:15 PM
% Cloud Cover:	60	40
Air Temp., Unit:	70 F	78 F
% Relative Humidity:	54	46
Wind Speed/Unit/Dir:	3 mph W	1 mph E
Soil Temp., Unit:	60 F	77 F
Soil/Leaf Surface M:		5
Soil Moist (1=w 5=d):	3	3

Crop Stage at Each Application

	A	B
Crop Name:	ZEAMX	ZEAMX
Height (In.):		8-12(10)
Stage (L):		6:V4-5(4)

Weed Stage at Each Application

	A	B
Weed 1 Name:	ANGR	ANGR
Height (In.):		.5-9(8)
Stage (L):		1-6(3)
Weed 2 Name:	CHEAL	CHEAL
Height (In.):		.3-6(3)
Stage (L):		cot-3(2)
Weed 3 Name:	AMARE	AMARE
Height (In.):		.3-9(5)
Stage (L):		cot-7(6)
Weed 4 Name:	ABUTH	ABUTH
Height (In.):		.3-1.5(1)
Stage (L):		cot-3(3)

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Weed Density (plants/sq. ft.)

	1	2
Date:	5/7/09	6/10/09
Weed Name:	ANGR	ANGR
Density:	75	
Date:	5/7/09	6/10/09
Weed Name:	CHEAL	CHEAL
Density:	83	
Date:	5/7/09	6/10/09
Weed Name:	AMARE	AMARE
Density:	3	
Date:	5/7/09	6/10/09
Weed Name:	AMBEL	AMBEL
Density:	<1	
Date:	5/7/09	6/10/09
Weed Name:	ABUTH	ABUTH
Density:	0	

Application Equipment

Appl	Sprayer	Speed	Nozzle	Nozzle	Nozzle	Nozzle	Boom			
	Type	MPH	Type	Size	Height	Spacing	Width	GPA	Carrier	PSI
A	CUB	3.5	FF	8003	19"	20"	100"	20	H2O	30
B	CUB	3.5	FF	8003	22"	20"	100"	20	H2O	30

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Weed Code		ANGR	CHEAL	AMARE		ANGR	CHEAL	AMARE
Crop Code		ZEAMX				ZEAMX		
Rating Data Type		injury	control	control	control	injury	control	control
Rating Unit		percent	percent	percent	percent	percent	percent	percent
Rating Date		6/18/09	6/18/09	6/18/09	6/18/09	6/25/09	6/25/09	6/25/09
Trt-Eval Interval		8 DAV%	8 DAV%	8 DAV%	8 DAV%	15 DAV5	15 DAV5	15 DAV5
ARM Action Codes								

Trt No.	Treatment Name	Form Conc	Form Type	Rate	Rate Unit	Grow Stg	1	2	3	4	5	6	7	8
1	Makaze		L	32	fl oz/a	V5 ZEAMX	0	89	97	100	0	96	98	95
1	Choice Weather Master		L	0.5	% v/v	V5 ZEAMX								
2	LI 6303		L	22	fl oz/a	V5 ZEAMX	0	90	96	100	0	98	98	95
2	Choice Weather Master		L	0.5	% v/v	V5 ZEAMX								
3	Mad Dog Plus		L	32	fl oz/a	V5 ZEAMX	0	87	93	100	0	97	99	97
3	Choice Weather Master		L	0.5	% v/v	V5 ZEAMX								
4	LI 6285		L	32	fl oz/a	V5 ZEAMX	0	88	88	100	0	97	97	99
4	Choice Weather Master		L	0.5	% v/v	V5 ZEAMX								
5	Roundup PowerMAX	4.5	L	22	fl oz/a	V5 ZEAMX	0	88	93	100	0	96	97	99
5	Choice Weather Master		L	0.5	% v/v	V5 ZEAMX								
6	Non-Treated						0	0	0	0	0	0	0	0
LSD (P=.05)							0.0	5.3	7.4	0.0	0.0	2.1	2.6	5.5
Standard Deviation							0.0	3.5	4.9	0.0	0.0	1.4	1.7	3.7
CV							0.0	4.79	6.33	0.0	0.0	1.71	2.15	4.52

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Weed Code								ANGR	CHEAL	AMARE	ABUTH	
Crop Code								ZEAMX				
Rating Data Type								injury	control	control	control	ZEAMX
Rating Unit								percent	percent	percent	percent	yield
Rating Date								6/30/09	6/30/09	6/30/09	6/30/09	11/4/09
Trt-Eval Interval								20 DAV5	20 DAV5	20 DAV5	20 DAV5	HARVEST
ARM Action Codes												

Trt No.	Treatment Name	Form Conc	Form Type	Rate	Rate Unit	Grow Stg	9	10	11	12	13	14
1	Makaze		L	32	fl oz/a	V5 ZEAMX	0	96	93	92	100	215
1	Choice Weather Master		L	0.5	% v/v	V5 ZEAMX						
2	LI 6303		L	22	fl oz/a	V5 ZEAMX	0	95	91	93	95	217
2	Choice Weather Master		L	0.5	% v/v	V5 ZEAMX						
3	Mad Dog Plus		L	32	fl oz/a	V5 ZEAMX	0	93	94	95	99	223
3	Choice Weather Master		L	0.5	% v/v	V5 ZEAMX						
4	LI 6285		L	32	fl oz/a	V5 ZEAMX	0	94	94	94	99	218
4	Choice Weather Master		L	0.5	% v/v	V5 ZEAMX						
5	Roundup PowerMAX	4.5	L	22	fl oz/a	V5 ZEAMX	0	97	94	95	98	226
5	Choice Weather Master		L	0.5	% v/v	V5 ZEAMX						
6	Non-Treated						0	0	0	0	0	118
LSD (P=.05)							0.0	3.7	3.7	3.1	5.2	38.8
Standard Deviation							0.0	2.5	2.5	2.0	3.5	25.8
CV							0.0	3.13	3.19	2.6	4.23	12.71