

Paraquat Corn Burndown Adjuvant Trial.

Trial ID: 12-KRC-ParaAdj  
 Location: Kuehn Res. Center

Investigator: Bryan Young

General Trial Information	
<b>Study Director:</b> Bryan Young	<b>Investigator:</b> Bryan Young <b>Title:</b> Professor
<b>Trial Status:</b> F - one-year/final	
<b>Initiation Date:</b> 5-2-12	
Trial Location	
<b>City:</b> Dowell	
<b>State/Prov.:</b> IL	
<b>Postal Code:</b> 62927	
<b>Country:</b> USA	

**Objectives:**  
 Evaluate the effect of WetCit on control of corn with paraquat in a simulated replant.

Personnel	
<b>Study Director:</b> Bryan Young	<b>Title:</b> Professor
<b>Investigator:</b> Bryan Young	
<b>Affiliation:</b> Southern Illinois University	
<b>Address:</b> 1205 Lincoln Drive - AG 176 - MC 4415	
<b>Location:</b> Carbondale IL	
<b>Postal Code:</b> 62901	<b>E-mail:</b> bgyoung@siu.edu
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Crop Description	
<b>Crop 1:</b> ZEAMD Zea mays indentata Dent corn	<b>Description:</b> RR2/LL
<b>Variety:</b> DKC 61-06	<b>Planting Date:</b> 5-2-12
<b>BBCH Scale:</b> BCOR	<b>Rate, Unit:</b> 28000 S/A
<b>Planting Method:</b> SEEDED Seeded	
<b>Depth, Unit:</b> 2 IN	
<b>Row Spacing, Unit:</b> 30 IN	

Pest Description	
<b>Code:</b> NA	

Site and Design	
<b>Plot Width, Unit:</b> 10 FT	<b>Site Type:</b> FIELD field
<b>Plot Length, Unit:</b> 30 FT	
<b>Plot Area, Unit:</b> 300 FT2	<b>Tillage Type:</b> NOTILL no-till
<b>Replications:</b> 3	<b>Study Design:</b> RACOB L Randomized Complete Block (RCB)

No.	Previous Crop	Year
1.	GLXMA	2011

Maintenance	
No.	Maintenance Treatment Name
1.	N ___ LB/A, P205 ___ LB/A, K20 ___ LB/A

Soil Description	
<b>Texture:</b> SIL SILT LOAM	
Additional Measured Elements	
Element	Unit
P1	LB/A
K	LB/A

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## Application Description

	A	B
Application Date:	5-23-12	6-2-12
Time of Day:	16:30	8:00
Application Method:	Spray	Spray
Application Timing:	V4	V6
Application Placement:	BROFOL	BROFOL
Applied By:	JRK	LAH
Air Temperature, Unit:	89 F	65 F
% Relative Humidity:	26	63
Wind Velocity, Unit:	4 MPH	4 MPH
Wind Direction:	S	SW
Dew Presence (Y/N):	N no	N no
Soil Temperature, Unit:	81 F	60 F
Soil Moisture:	BELNOR	NORMAL
% Cloud Cover:	0	100

## Crop Stage At Each Application

	A		B	
Crop 1 Code, BBCH Scale:	ZEAMD BCOR		ZEAMD BCOR	
Stage Scale Used:	DESC		DESC	
Stage Majority, Percent:	V4		V6	
Stage Minimum, Percent:	V3		V5	
Stage Maximum, Percent:	V4		V6	
Height, Unit:	8	IN	16	IN
Height Minimum, Maximum:	6	8	12	16

## Pest Stage At Each Application

	A		B	
Pest 1 Code, Type, Scale:	NA	DESC	NA	DESC
Stage Majority, Percent:	NA		NA	

## Application Equipment

	A		B	
Appl. Equipment:	CO2 sprayer		CO2 sprayer	
Equipment Type:	BACSPR		BACSPR	
Operation Pressure, Unit:	30	PSI	30	PSI
Nozzle Type:	XR		XR	
Nozzle Size:	8003		8003	
Boom Length, Unit:	6.67 FT		6.67 FT	
Spray Volume, Unit:	20	GPA	20	GPA

Southern Illinois University

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Pest Code Crop Code Rating Date Rating Type Rating Unit Rating Timing Trt-Eval Interval							ZEAMD	ZEAMD	ZEAMD	ZEAMD	ZEAMD
Trt Treatment Form Form Rate Other Other Growth Appl No. Name Conc Type Rate Unit Rate Rate Unit Stage Code							Control Percent	Control Percent	Control Percent	Plants 000/A	Plants 000/A
							3 DAT	7 DAT	14 DAT	0 DAT	28 DAT
1 NONTREATED							0 d	0 d	0 e	30.0 a	30.0 a
2 PARAZONE 3 SL 1.01 lb ai/a 2.7 pt/a V4 A							97 ab	97 b	99 ab	30.2 a	0.3 c
METRIBUZIN 75 DF 75 WG 0.188 lb ai/a 4 oz/a V4 A											
CHEMSURF 80 100 SL 0.25 % v/v 0.25 % v/v V4 A											
3 PARAZONE 3 SL 1.01 lb ai/a 2.7 pt/a V4 A							94 c	96 c	98 abc	29.3 a	1.2 c
METRIBUZIN 75 DF 75 WG 0.188 lb ai/a 4 oz/a V4 A											
WETCIT 100 SL 0.5 % v/v 0.5 % v/v V4 A											
4 PARAZONE 3 SL 1.01 lb ai/a 2.7 pt/a V4 A							96 ab	97 b	98 abc	29.5 a	0.3 c
METRIBUZIN 75 DF 75 WG 0.188 lb ai/a 4 oz/a V4 A											
WETCIT 100 SL 1 % v/v 1 % v/v V4 A											
5 PARAZONE 3 SL 1.01 lb ai/a 2.7 pt/a V4 A							97 ab	97 b	99 a	29.5 a	0.0 c
METRIBUZIN 75 DF 75 WG 0.188 lb ai/a 4 oz/a V4 A											
USIEX2142012 100 SL 0.25 % v/v 0.25 % v/v V4 A											
6 PARAZONE 3 SL 1.01 lb ai/a 2.7 pt/a V6 B							96 b	97 b	96 d	30.7 a	4.0 b
METRIBUZIN 75 DF 75 WG 0.188 lb ai/a 4 oz/a V6 B											
CHEMSURF 80 100 SL 0.25 % v/v 0.25 % v/v V6 B											
7 PARAZONE 3 SL 1.01 lb ai/a 2.7 pt/a V6 B							96 ab	97 b	98 bc	29.2 a	0.3 c
METRIBUZIN 75 DF 75 WG 0.188 lb ai/a 4 oz/a V6 B											
WETCIT 100 SL 0.5 % v/v 0.5 % v/v V6 B											
8 PARAZONE 3 SL 1.01 lb ai/a 2.7 pt/a V6 B							97 a	98 a	99 ab	30.0 a	0.0 c
METRIBUZIN 75 DF 75 WG 0.188 lb ai/a 4 oz/a V6 B											
WETCIT 100 SL 1 % v/v 1 % v/v V6 B											
9 PARAZONE 3 SL 1.01 lb ai/a 2.7 pt/a V6 B							96 b	97 b	97 cd	29.2 a	1.5 c
METRIBUZIN 75 DF 75 WG 0.188 lb ai/a 4 oz/a V6 B											
USIEX2142012 100 SL 0.25 % v/v 0.25 % v/v V6 B											
LSD (P=.05)							1.6	0.9	1.3	3.01	1.98
Standard Deviation							0.9	0.5	0.8	1.74	1.15
CV							1.11	0.64	0.88	5.85	27.36
Replicate F							0.165	1.969	1.000	0.083	1.214
Replicate Prob(F)							0.8494	0.1720	0.3897	0.9210	0.3228
Treatment F							3430.093	10445.108	5410.282	0.262	217.993
Treatment Prob(F)							0.0001	0.0001	0.0001	0.9696	0.0001

Means followed by same letter do not significantly differ (P=.05, LSD)  
 Mean comparisons performed only when AOV Treatment P(F) is significant at mean comparison OSL.

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Trial Comments

1. Protocol: United Suppliers.
2. Ratings: Percent corn injury and control at 3, 7, and 14 DAT.  
Stand counts from 17 ft 5 inch from 2 center rows prior to application and 28 DAT.
3. Keep plots weed free and monitor any living corn plants for ear development.
4. Not harvested.