

Mesotrione plus Atrazine Premix.

Trial ID: 09-6A-M50

Location: Belleville Res. Center

Investigator: Bryan Young, Professor, Southern Illinois University, bgyoung@siu.edu
 City State Zip Country: Belleville IL 62221 USA
 Trial Status: FINAL Initiation Date: 05-24-09

Objectives: Evaluate the crop tolerance and weed control from the premix of mesotrione and atrazine.

Crop 1: ZEAMD Dent corn Variety: DKC 61-73 Description: RR2/YGCB
 Planting Method: SEEDED Planting Date: 05-24-09
 Rate, Unit: 28000 S/A Depth, Unit: 1.5 IN
 Row Spacing, Unit: 30 IN

Pest 1 Type: W Code: XANST Xanthium strumarium L. cocklebur, common

Plot Width, Unit: 10 FT Site Type: FIELD
 Plot Length, Unit: 25 FT Tillage Type: REDUCED-TILL
 Replications: 3 Study Design: Randomized Complete Block

Prior Crops, Year
 1. GLXMA 2008

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

% OM: 1.6 Texture: SILT LOAM
 pH: 6.3 Soil Name: CASEYVILLE
 CEC: 7 Fert. Level: P1 105 LB/A, K 448 LB/A

Application Description

	A	B
Application Date:	05-24-09	06-06-09
Time of Day:	17:00	8:30
Application Method:	Spray	Spray
Application Timing:	PRE	2-4"W
Application Placement:	BROSOI	BROFOL
Applied By:	NVH	NVH
Air Temperature, Unit:	76 F	70 F
% Relative Humidity:	92	88
Wind Velocity, Unit:	2 MPH	2 MPH
Wind Direction:	E	S
Dew Presence (Y/N):	N	N
Soil Moisture:	NORMAL	ABONOR
% Cloud Cover:	100	50

	A	B
Crop stage at application:	NA	V2
Height Min, Max (inch):	3	4

Pest Stage At Each Application

	A	B
Application Date:	05-24-09	06-06-09
Weed Code:	XANST	XANST
Stage Majority (leaves):	NA	2
Stage Min, Max:		COTY 4
Height Majority:		3 IN
Height Min, Max:		1 4
Density, Unit:		30 FT2

Application Equipment

	A	B
Appl. Equipment:	CO2 sprayer	CO2 sprayer
Operating Pressure:	30 PSI	30 PSI
Nozzle Type:	Flat fan	Flat fan
Nozzle Size:	XR 8002	XR 8002
Boom Length, Unit:	7.5 FT	7.5 FT
Spray Volume, Unit:	15 GPA	15 GPA

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										ZEAMD	ZEAMD	ZEAMD	ZEAMD	XANST	XANST	XANST
										06-13-09	06-20-09	07-04-09	08-01-09	06-20-09	07-04-09	08-01-09
										Injury	Injury	Injury	Injury	Control	Control	Control
										Percent	Percent	Percent	Percent	Percent	Percent	Percent
										7 DA-B	14 DA-B	28 DA-B	56 DA-B	14 DA-B	28 DA-B	56 DA-B
Trt No.	Treatment Name	Form Conc	Form Type	Rate	Rate Unit	Other Rate	Other Rate Unit	Growth Stage	Appl Code							
1	NONTREATED									0 a	0 a	0 a	0 a	0 b	0 d	0 d
2	BICEP II MAGNUM	5.5	SC	1.65	lb ai/a	1.2	qt/a	PRE	A	0 a	0 a	0 a	0 a	99 a	69 a	57 a
2	N-PAK AMS	100	SL	2.5	% v/v	2.5	% v/v	2-4"W	B							
2	A16907	3.7	SC	0.58	lb ai/a	20	fl oz/a	2-4"W	B							
2	TOUCHDOWN TOTAL	4.17	SL	0.78	lb ae/a	24	fl oz/a	2-4"W	B							
3	N-PAK AMS	100	SL	2.5	% v/v	2.5	% v/v	2-4"W	B	0 a	0 a	0 a	0 a	99 a	63 a	48 ab
3	A16907	3.7	SC	0.58	lb ai/a	20	fl oz/a	2-4"W	B							
3	TOUCHDOWN TOTAL	4.17	SL	0.78	lb ae/a	24	fl oz/a	2-4"W	B							
4	N-PAK AMS	100	SL	2.5	% v/v	2.5	% v/v	2-4"W	B	0 a	0 a	0 a	0 a	99 a	45 b	35 b
4	LAUDIS	3.5	SC	0.0547	lb ai/a	2	fl oz/a	2-4"W	B							
4	TOUCHDOWN TOTAL	4.17	SL	0.78	lb ae/a	24	fl oz/a	2-4"W	B							
5	N-PAK AMS	100	SL	2.5	% v/v	2.5	% v/v	2-4"W	B	0 a	0 a	0 a	0 a	99 a	43 b	12 cd
5	IMPACT	2.8	SC	0.0109	lb ai/a	0.5	fl oz/a	2-4"W	B							
5	TOUCHDOWN TOTAL	4.17	SL	0.78	lb ae/a	24	fl oz/a	2-4"W	B							
6	N-PAK AMS	100	SL	2.5	% v/v	2.5	% v/v	2-4"W	B	0 a	0 a	0 a	0 a	99 a	35 c	17 c
6	STATUS	56	WG	0.0875	lb ae/a	2.5	oz/a	2-4"W	B							
6	TOUCHDOWN TOTAL	4.17	SL	0.78	lb ae/a	24	fl oz/a	2-4"W	B							
7	N-PAK AMS	100	SL	2.5	% v/v	2.5	% v/v	2-4"W	B	0 a	0 a	0 a	0 a	99 a	67 a	35 b
7	CAPRENO	3.45	SC	0.081	lb ai/a	3	fl oz/a	2-4"W	B							
7	TOUCHDOWN TOTAL	4.17	SL	0.78	lb ae/a	24	fl oz/a	2-4"W	B							
8	N-PAK AMS	100	SL	2.5	% v/v	2.5	% v/v	2-4"W	B	0 a	0 a	0 a	0 a	99 a	63 a	45 ab
8	A16907	3.7	SC	0.694	lb ai/a	24	fl oz/a	2-4"W	B							
8	TOUCHDOWN TOTAL	4.17	SL	0.78	lb ae/a	24	fl oz/a	2-4"W	B							
LSD (P=.05)										0.0	0.0	0.0	0.0	0.0	7.2	14.3
Replicate F										0.000	0.000	0.000	0.000	0.000	1.171	0.299
Replicate Prob(F)										1.0000	1.0000	1.0000	1.0000	1.0000	0.3386	0.7463
Treatment F										0.000	0.000	0.000	0.000	0.000	96.662	17.652
Treatment Prob(F)										1.0000	1.0000	1.0000	1.0000	1.0000	0.0001	0.0001

Means followed by same letter do not significantly differ (P=.05, LSD)

Trial Comments

1. Protocol: Syngenta (MS016A4).
2. Ratings: CI at 7, 14 + 28 da B; WC at 14, 28 + 56 da B.
3. Yield.
4. Target common cocklebur.
5. Not harvested due to common cocklebur pressure.