

Evaluation of Microsun ZnO in Corn.

Trial ID: 09-WF-SE-N70

Location: Belleville Res. Center

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 City State Zip Country: Belleville IL 62221 USA
 Trial Status: FINAL Initiation Date: 06-28-09

Objectives: Evaluate the seed treatment product MAIZE Coat Zn for enhanced corn growth and development in a Roundup Ready system.

Crop 1: ZEAMD Dent corn	Variety: P33K44	Description: RR/LL
Planting Method: SEEDED	Planting Date: 06-28-09	
Rate, Unit: 28000 S/A	Depth, Unit: 1.5 IN	
Row Spacing, Unit: 30 IN		

Plot Width, Unit: 10 FT	Site Type: FIELD
Plot Length, Unit: 30 FT	Tillage Type: REDUCED-TILL
Replications: 6	Study Design: Randomized Complete Block

Prior Crops, Year
 1. GLXMA 2008

Field Prep./Maintenance: N 150 LB/A, P205 0 LB/A, K2O 150 LB/A

% OM: 2.1	Texture: SILT LOAM
pH: 5.6	Soil Name: WINFIELD
CEC: 10	Fert. Level: P1: 54 LB/A, K: 316 LB/A

Application Description

A

Application Date:	07-24-09
Time of Day:	11:15
Application Method:	Spray
Application Timing:	V6
Application Placement:	BROFOL
Applied By:	DKP
Air Temperature, Unit:	82 F
% Relative Humidity:	92
Wind Velocity, Unit:	1 MPH
Wind Direction:	N
Dew Presence (Y/N):	N
Soil Moisture:	ABONOR
% Cloud Cover:	10

	07-24-09
Crop stage at application:	V6
Height Min, Max (inch):	17 22

Pest Stage At Each Application

Application Date:	07-24-09
Weed Code:	NA

Application Equipment

Appl. Equipment:	CO2 sprayer
Operating Pressure:	30 PSI
Nozzle Type:	Flat fan
Nozzle Size:	XR 8002
Boom Length, Unit:	10 FT
Spray Volume, Unit:	20 GPA

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Pest Code
Crop Code
Rating Date
Rating Data Type
Rating Unit
Rating Timing
Trt-Eval Interval

ZEAMD ZEAMD ZEAMD ZEAMD ZEAMD
12-16-09 12-16-09 07-27-09 07-31-09 10-26-09
Moisture Yield Plants SPAD Height
Percent bu/A 000/A Inch
3 DA-A 7 DA-A EOS

Trt No.	Treatment Name	Form Conc	Form Type	Rate	Rate Unit	Other Rate	Other Rate Unit	Growth Stage	Appl Code					
1	NO SEED TREATMENT									23.0 a	126 a	30.2 a	50.7 a	113.7 a
2	NO SEED TREATMENT									22.7 a	121 a	29.6 a	50.5 a	112.3 bc
2	ROUNDUP POWERMAX	4.5	SL	1.125	lb ae/a	32	fl oz/a	V6	A					
3	MICROSUN ZNO SEED TRT			4	oz wt/cwt					22.6 a	129 a	29.5 a	51.4 a	113.3 ab
4	MICROSUN ZNO SEED TRT			4	oz wt/cwt					22.7 a	122 a	29.5 a	51.1 a	111.7 c
4	ROUNDUP POWERMAX	4.5	SL	1.125	lb ae/a	32	fl oz/a	V6	A					
5	MICROSUN ZNO SEED TRT			6	oz wt/cwt					23.0 a	127 a	30.4 a	51.1 a	113.3 ab
6	MICROSUN ZNO SEED TRT			6	oz wt/cwt					22.7 a	119 a	30.1 a	51.3 a	111.7 c
6	ROUNDUP POWERMAX	4.5	SL	1.125	lb ae/a	32	fl oz/a	V6	A					
LSD (P=.05)										0.65	10.7	1.59	1.35	1.23
Replicate F										1.901	0.429	1.391	3.538	20.500
Replicate Prob(F)										0.1300	0.8239	0.2616	0.0148	0.0001
Treatment F										0.532	1.212	0.531	0.673	4.500
Treatment Prob(F)										0.7501	0.3325	0.7510	0.6478	0.0046

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

Trial Comments

1. Protocol: SIU/RFK.
2. Ratings: Corn stand count 30 DAP, SPAD reading after POST application, plant height at harvest, grain yield.
3. Blanket PRE application of Lumax (3 qt/A) plus Aatrex 90 (1.38 lb/A) was applied 6-28-09.
4. SPAD = Minolta chlorophyll meter (model SPAD 502) reading on on the newest fully developed leaf.
Plants 000/A = Thousands per acre.
5. EOS = End of season.
6. Harvested 12-16-09, (2) 30 inch rows by 27 ft.