

## General Foliar Fungicide Evaluation in Corn.

Trial ID: 08-18-W140

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: 06-12-08

Objectives: Evaluate various foliar fungicides applied to corn at the VT growth stage for disease management and corn grain yield.

Crop 1: ZEAMD Dent corn Variety: DKC 60-18  
 Planting Method: SEEDED Planting Date: 06-12-08  
 Rate, Unit: 28000 S/A Depth, Unit: 1.5 IN  
 Row Spacing, Unit: 30 IN

Pest 1 Type: D Code: CERCZM Cercospora zeae-maydis Gray leaf spot of maize

Plot Width, Unit: 10 FT Site Type: FIELD  
 Plot Length, Unit: 33 FT Tillage Type: REDUCED-TILL  
 Replications: 4 Study Design: Randomized Complete Block

Prior Crops, Year  
 1. GLXMA 2007

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

% OM: 2.6 Texture: SILT LOAM  
 pH: 5.9 Soil Name: BETHALTO  
 CEC: 14 Fert. Level: P1 74 LB/A, K 445 LB/A

## Application Description

A  
 Application Date: 08-04-08  
 Time of Day: 11:00  
 Application Method: Spray  
 Application Timing: VT  
 Application Placement: BROFOL  
 Applied By: DKT NRJ  
 Air Temperature, Unit: 88 F  
 % Relative Humidity: 92  
 Wind Velocity, Unit: 4 MPH  
 Dew Presence (Y/N): Y  
 Soil Temperature, Unit: 84 F  
 Soil Moisture: ABONOR

08-04-08  
 Crop stage at application: VT  
 Height Min, Max (inch): 144 148

## Application Equipment

Appl. Equipment: CO2 sprayer  
 Operating Pressure: 30 PSI  
 Nozzle Type: Flat fan  
 Nozzle Size: XR 8002  
 Boom Length, Unit: 5 FT  
 Spray Volume, Unit: 20 GPA

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Pest Code									CERCZM	CERCZM
Crop Code									ZEAMD	ZEAMD
Rating Date									11-19-08	11-19-08
Rating Data Type									08-25-08	08-25-08
Rating Unit									Moisture	Yield
Rating Timing									Percent	bu/A
Trt-Eval Interval									Percent	Percent
									21 DA-A	21 DA-A
									21 DA-A	21 DA-A

Trt No.	Treatment Name	Form Conc	Form Type	Form Rate	Rate Unit	Other Rate	Other Unit	Growth Stage	Appl Code					
1	NONTREATED									16.7 d	209 f	0 a	0.8 a	0.4 a
2	QUADRI	2.08	SC	0.0975	lb ai/a	6 fl oz/a	VT	A		17.5 ab	233 a-e	0 a	0.0 b	0.0 b
2	ACTIVATOR 90	100	SL	0.25	% v/v	0.25 % v/v	VT	A						
3	QUADRI	2.08	SC	0.146	lb ai/a	9 fl oz/a	VT	A		17.4 ab	218 c-f	0 a	0.0 b	0.0 b
3	ACTIVATOR 90	100	SL	0.25	% v/v	0.25 % v/v	VT	A						
4	HEADLINE	2.09	EC	0.098	lb ai/a	6 fl oz/a	VT	A		17.5 a	241 ab	0 a	0.0 b	0.0 b
4	ACTIVATOR 90	100	SL	0.25	% v/v	0.25 % v/v	VT	A						
5	HEADLINE	2.09	EC	0.147	lb ai/a	9 fl oz/a	VT	A		17.5 a	239 abc	0 a	0.0 b	0.0 b
5	ACTIVATOR 90	100	SL	0.25	% v/v	0.25 % v/v	VT	A						
6	STRATEGO	2.08	EC	0.163	lb ai/a	10 fl oz/a	VT	A		17.4 ab	235 a-d	0 a	0.0 b	0.0 b
6	ACTIVATOR 90	100	SL	0.25	% v/v	0.25 % v/v	VT	A						
7	STRATEGO	2.08	EC	0.195	lb ai/a	12 fl oz/a	VT	A		17.2 abc	224 a-f	0 a	0.0 b	0.0 b
7	ACTIVATOR 90	100	SL	0.25	% v/v	0.25 % v/v	VT	A						
8	QUILT	1.66	SC	0.182	lb ai/a	14 fl oz/a	VT	A		17.4 ab	230 a-f	0 a	0.0 b	0.0 b
8	ACTIVATOR 90	100	SL	0.25	% v/v	0.25 % v/v	VT	A						
9	LEM17	1.67	EC	0.125	lb ai/a	9.6 fl oz/a	VT	A		16.8 cd	220 b-f	0 a	0.0 b	0.0 b
9	ACTIVATOR 90	100	SL	0.25	% v/v	0.25 % v/v	VT	A						
10	PUNCH	3.3	EC	0.103	lb ai/a	4 fl oz/a	VT	A		17.3 ab	211 ef	0 a	0.0 b	0.0 b
10	ACTIVATOR 90	100	SL	0.25	% v/v	0.25 % v/v	VT	A						
11	YT669	2.08	SC	0.13	lb ai/a	8 fl oz/a	VT	A		17.0 bcd	214 def	0 a	0.0 b	0.0 b
11	ACTIVATOR 90	100	SL	0.25	% v/v	0.25 % v/v	VT	A						
12	EVITO	4	SC	0.0625	lb ai/a	2 fl oz/a	VT	A		17.3 ab	233 a-e	0 a	0.0 b	0.0 b
12	PRIME OIL COC	100	SL	1	% v/v	1 % v/v	VT	A						
13	EVITO	4	SC	0.094	lb ai/a	3 fl oz/a	VT	A		17.5 ab	243 a	0 a	0.0 b	0.0 b
13	PRIME OIL COC	100	SL	1	% v/v	1 % v/v	VT	A						
LSD (P=.05)										0.49	22.2	0.0	0.20	0.10
Replicate F										17.890	5.148	0.000	1.000	1.000
Replicate Prob(F)										0.0001	0.0046	1.0000	0.4040	0.4040
Treatment F										2.667	2.207	0.000	9.000	9.000
Treatment Prob(F)										0.0114	0.0332	1.0000	0.0001	0.0001

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

## Trial Comments

1. Protocol: UIUC-Bradley (trts 1-8); DuPont (08-666); Arysta.
2. Ratings: CI/DI/DS at 21 DAT.
3. Yield.
4. Manage trial as weed-free (ex. Lumax-PRE) and use progressive insect management to reduce the impact of insects.
5. DA-A = Days after the VT application.
6. CERCZM = Gray leaf spot (*Cercospora zeae-maydis*).
7. Harvested 11-19-08, (2) 30 inch rows by 30 ft.