

Corn Foliar Fungicide and Adjuvant Study - Winfield Solutions.

Trial ID: 10-18-MME120

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:** 06-01-10

Objectives: Evaluate foliar fungicides and adjuvants applied at the VT growth stage of corn.

Crop 1: ZEAMD Dent corn **Variety:** DKC 61-21 GENSS **Description:** RR2/LL
Planting Method: SEEDED **Planting Date:** 06-01-10
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 corn

Plot Width, Unit: 10 FT **Site Type:** FIELD
Plot Length, Unit: 30 FT **Tillage Type:** REDUCED-TILL
Replications: 4 **Study Design:** Randomized Complete Block

Prior Crops, Year
 1. GLXMA 2009

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

% OM: 1.9 **Texture:** SILT LOAM
pH: 7 **Soil Name:** BETHALTO
CEC: 12 **Fert. Level:** P1 89 LB/A, K 359 LB/A

Application Description A

Application Date: 07-21-10
Time of Day: 14:00
Application Method: Spray
Application Timing: VT
Application Placement: BROFOL
Applied By: JRK
Air Temperature, Unit: 92 F
% Relative Humidity: 63
Wind Velocity, Unit: 1 MPH
Wind Direction: SW
Dew Presence (Y/N): N
Soil Moisture: ABONOR
% Cloud Cover: 30

Crop stage at application: 07-21-10 VT
Height Min, Max (inch): 98 100

Pest Stage At Each Application

Application Date: 07-21-10
Weed Code: CERCZM
Stage Majority (leaves): NA

Application Equipment

Appl. Equipment: CO2 sprayer
Operating Pressure: 40 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	Crop Code	Rating Date	Rating Data Type	Rating Unit	Rating Timing	Trt-Eval Interval	ZEAMD 10-15-10 Moisture Percent	ZEAMD 10-15-10 Test wt. lb/bu	ZEAMD 10-15-10 Yield bu/A	CERCZM ZEAMD 08-11-10 Incidence Percent	CERCZM ZEAMD 08-11-10 Severity Percent	CERCZM ZEAMD 09-01-10 Incidence Percent R5	CERCZM ZEAMD 09-01-10 Severity Percent R5
Trt	Treatment	Form	Form	Rate	Other	Other	Growth	Appl					
No.	Name	Conc	Type	Unit	Rate	Rate	Stage	Code					
1	NONTREATED								13.0 e	62.0 a	190 bc	90 a	2 a
2	AGF 09003	100	SL	5 fl oz/a	5 fl oz/a	VT	A		13.4 a	61.7 c	205 a	41 b	1 c
2	PREFERENCE	100	SL	0.25 % v/v	0.25 % v/v	VT	A					90 a	13 cde
3	AGF 09003	100	SL	5 fl oz/a	5 fl oz/a	VT	A		13.3 abc	61.7 bc	196 ab	38 b	1 c
3	AG 06011	100	SL	6 fl oz/a	6 fl oz/a	VT	A					90 a	11 def
4	AGF 09003	100	SL	5 fl oz/a	5 fl oz/a	VT	A		13.4 a	61.6 c	193 b	25 b	1 c
4	AG 07010	100	SL	1 pt/a	1 pt/a	VT	A					90 a	9 fg
5	AGF 09003	100	SL	5 fl oz/a	5 fl oz/a	VT	A		13.2 a-d	61.8 bc	198 ab	25 b	1 c
5	AG 08001	100	SL	1 pt/a	1 pt/a	VT	A					90 a	6 g
6	ONSET	3.6	SL	0.113 lb ai/a	4 fl oz/a	VT	A		13.1 cde	61.9 ab	196 ab	90 a	1 c
6	PREFERENCE	100	SL	0.25 % v/v	0.25 % v/v	VT	A					90 a	15 abc
7	ONSET	3.6	SL	0.113 lb ai/a	4 fl oz/a	VT	A		12.9 e	62.0 a	191 b	90 a	1 b
7	AG 06011	100	SL	6 fl oz/a	6 fl oz/a	VT	A					90 a	16 ab
8	ONSET	3.6	SL	0.113 lb ai/a	4 fl oz/a	VT	A		13.1 b-e	61.9 ab	191 b	90 a	1 c
8	AG 07010	100	SL	1 pt/a	1 pt/a	VT	A					90 a	16 ab
9	ONSET	3.6	SL	0.113 lb ai/a	4 fl oz/a	VT	A		13.0 de	62.0 a	181 c	74 a	1 c
9	AG 08001	100	SL	1 pt/a	1 pt/a	VT	A					90 a	14 bcd
10	HEADLINE	2.09	EC	0.098 lb ai/a	6 fl oz/a	VT	A		13.4 a	61.6 c	199 ab	25 b	1 c
10	PREFERENCE	100	SL	0.25 % v/v	0.25 % v/v	VT	A					90 a	11 def
11	HEADLINE	2.09	EC	0.098 lb ai/a	6 fl oz/a	VT	A		13.3 ab	61.6 c	198 ab	25 b	1 c
11	AG 08001	100	SL	1 pt/a	1 pt/a	VT	A					90 a	10 ef
LSD (P=.05)									0.24	0.20	9.6	20.7	0.2
Replicate F									0.809	0.951	7.884	1.344	1.000
Replicate Prob(F)									0.4990	0.4284	0.0005	0.2787	0.4064
Treatment F									4.506	5.411	3.650	18.265	16.200
Treatment Prob(F)									0.0006	0.0001	0.0028	0.0001	0.0001

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

Trial Comments

1. Protocol: Winfield Solutions.
2. Ratings: DI/DS at 21 DAT and prior to harvest (but prior to leaf senescence).
3. Yield.
4. CERCZM = Gray leaf spot (*Cercospora zeae-maydis*).
VT = Corn vegetative stage T (tassel). R5 = Corn reproductive stage 5 (dent).
5. Harvested 10-15-10, (2) 30 inch rows by 27 ft.