

Stratego Corn Application Timing.

Trial ID: 08-WF-SW-M40 Location: Belleville Res. Center

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 City State Zip Country: Belleville IL 62221 USA
 Trial Status: FINAL Initiation Date: 06-15-08

Objectives: Determine the optimal application timing for Stratego in corn for disease management and corn yield.

Crop 1: ZEAMD Dent corn Variety: DKC 60-18
 Planting Method: SEEDED Planting Date: 06-15-08
 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: 36 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: 2.8 Texture: SILT LOAM
 pH: 6.3 Soil Name: BETHALTO
 CEC: 11 Fert. Level: P1: 76 LB/A, K: 407 LB/A

Application Description

	A	B	C	D
Application Date:	07-23-08	08-04-08	08-18-08	09-01-08
Time of Day:	10:00	10:30	11:00	15:00
Application Method:	Spray	Spray	Spray	Spray
Application Timing:	V10	VT	R2	R3-4
Application Placement:	BROFOL	BROFOL	BROFOL	BROFOL
Applied By:	DKT	DKT	RFK	DKT
Air Temperature, Unit:	76 F	84 F	80 F	90 F
% Relative Humidity:	81	92	50	50
Wind Velocity, Unit:	1 MPH	3 MPH	0 MPH	0 MPH
Dew Presence (Y/N):	N	N	N	N
Soil Moisture:	NORMAL	ABONOR	NORMAL	NORMAL

	A	B	C	D
Crop stage at application:	V10	VT	R2	R4
Height Min, Max (inch):	58 63	108 110	110 110	110 110

Application Equipment

	A	B	C	D
Appl. Equipment:	CO2 sprayer	CO2 sprayer	CO2 sprayer	CO2 sprayer
Operating Pressure:	45 PSI	45 PSI	45 PSI	45 PSI
Nozzle Type:	Flat fan	Flat fan	Flat fan	Flat fan
Nozzle Size:	XR 8002	XR 8002	XR 8002	XR 8002
Boom Length, Unit:	5 FT	5 FT	5 FT	5 FT
Spray Volume, Unit:	20 GPA	20 GPA	20 GPA	20 GPA

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Pest Code		Crop Code		Rating Date		Rating Data Type		Rating Unit		Rating Timing		Trt-Eval Interval				
Trt No.	Treatment Name	Form Conc	Form Type	Rate	Other Rate	Other Rate	Other Unit	Growth Stage	Appl Code	ZEAMD 11-21-08 Moisture Percent	ZEAMD 11-21-08 Yield bu/A	ZEAMD Injury Percent 14 DAT	CERCZM Incidence Percent 0 DAT	CERCZM Severity Percent 0 DAT	CERCZM Incidence Percent 14 DAT	CERCZM Severity Percent 14 DAT
1	NONTREATED									17.0 a	187 b	0 a	0.0 b	0.0 b	0.0 b	0.0 b
2	STRATEGO	2.08	EC	0.163	lb ai/a	10	fl oz/a	V10	A	17.1 a	181 b	0 a	0.0 b	0.0 b	0.0 b	0.0 b
2	INDUCE	100	SL	0.125	% v/v	0.125	% v/v	V10	A							
3	STRATEGO	2.08	EC	0.163	lb ai/a	10	fl oz/a	VT	B	17.1 a	211 a	0 a	0.0 b	0.0 b	0.3 b	0.1 b
3	INDUCE	100	SL	0.125	% v/v	0.125	% v/v	VT	B							
4	STRATEGO	2.08	EC	0.163	lb ai/a	10	fl oz/a	R2	C	17.2 a	215 a	0 a	0.3 b	0.1 b	0.3 b	0.1 b
4	INDUCE	100	SL	0.125	% v/v	0.125	% v/v	R2	C							
5	STRATEGO	2.08	EC	0.163	lb ai/a	10	fl oz/a	R3-4	D	17.4 a	216 a	0 a	25.5 a	0.5 a	25.5 a	0.5 a
5	INDUCE	100	SL	0.125	% v/v	0.125	% v/v	R3-4	D							
LSD (P=.05)										0.38	19.7	0.0	19.55	0.17	19.60	0.21
Replicate F										3.783	2.912	0.000	0.975	1.000	0.950	2.667
Replicate Prob(F)										0.0404	0.0780	1.0000	0.4368	0.4262	0.4472	0.0951
Treatment F										1.334	7.072	0.000	3.217	15.000	3.185	9.000
Treatment Prob(F)										0.3132	0.0036	1.0000	0.0518	0.0001	0.0533	0.0013

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

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								CERCZM	CERCZM	CERCZM	CERCZM	CERCZM	CERCZM		
								ZEAMD	ZEAMD	ZEAMD	ZEAMD	ZEAMD	ZEAMD		
												10-06-08	10-06-08		
								Incidence	Severity	Incidence	Severity	Incidence	Severity		
								Percent	Percent	Percent	Percent	Percent	Percent		
								28 DAT	28 DAT	35 DAT	35 DAT	35 DA-D	35 DA-D		
Trt	Treatment	Form	Form	Rate	Other	Other	Growth	Appl							
No.	Name	Conc	Type	Rate	Unit	Rate	Unit	Stage	Code						
1	NONTREATED									0.0 b	0.0 b	0.0 b	0.0 b	25.5 a	0.8 a
2	STRATEGO	2.08	EC	0.163	lb ai/a	10	fl oz/a	V10	A	0.0 b	0.0 b	0.0 b	0.0 b	25.5 a	0.8 a
2	INDUCE	100	SL	0.125	% v/v	0.125	% v/v	V10	A						
3	STRATEGO	2.08	EC	0.163	lb ai/a	10	fl oz/a	VT	B	0.0 b	0.0 b	0.0 b	0.0 b	1.0 a	0.5 b
3	INDUCE	100	SL	0.125	% v/v	0.125	% v/v	VT	B						
4	STRATEGO	2.08	EC	0.163	lb ai/a	10	fl oz/a	R2	C	0.3 b	0.1 b	1.0 b	0.5 a	1.0 a	0.5 b
4	INDUCE	100	SL	0.125	% v/v	0.125	% v/v	R2	C						
5	STRATEGO	2.08	EC	0.163	lb ai/a	10	fl oz/a	R3-4	D	25.5 a	0.5 a	25.5 a	0.5 a	25.5 a	0.5 b
5	INDUCE	100	SL	0.125	% v/v	0.125	% v/v	R3-4	D						
LSD (P=.05)										19.55	0.17	19.49	0.00	36.47	0.24
Replicate F										0.975	1.000	1.000	0.000	0.286	2.667
Replicate Prob(F)										0.4368	0.4262	0.4262	1.0000	0.8348	0.0951
Treatment F										3.217	15.000	3.191	0.000	1.286	3.000
Treatment Prob(F)										0.0518	0.0001	0.0530	1.0000	0.3294	0.0625

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

Trial Comments

1. Protocol: Bayer (B4H).
2. Ratings: CI at 14 DAT; DI/DS at 0, 14, 28 + 35 DAT; Rate all plots at 35 DA "D".
3. Timings should be a minimum of 14 days apart.
4. Yield.
5. Maintain proper fertility and weed and insect management.
Lexar (2.9 lbai/A) plus Aatrex (1.25 lbai/A) was applied PRE on 6-15-08.
6. CERCZM = Gray leaf spot (*Cercospora zeae-maydis*).
DAT = Days after various applications. DA-D = Days after the R3-4 application.
Ratings at 14 days after the V10, VT, R2, and R3-4 applications were on 8-6-08, 8-18-08, 9-1-08, and 9-15-08, respectively.
Ratings at 28 days after the V10, VT, R2, and R3-4 applications were on 8-20-08, 9-1-08, 9-15-08, and 9-29-09, respectively.
Ratings at 35 days after the V10, VT, R2, and R3-4 applications were on 8-27-08, 9-8-08, 9-22-08, and 10-6-08, respectively.
7. Harvested 11-21-08, (2) 30 inch rows by 33 ft.