

Hybrid by Fungicide Study.

Trial ID: 14-23N Location: Belleville Res. Center Trial Year: 2014
Investigator: Ronald F. Krausz

Trial Status: F one-year/final Initiation Date: 5-20-14 Completion Date: 10-21-14		Trial Location
City: Belleville State/Prov.: Illinois IL Postal Code: 62221	Country: USA	

Objectives: Evaluate effect of hybrid and fungicide on corn yield.
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Study Director: Ronald F. Krausz Organization: Belleville Research Center - Southern Illinois Univ Carbondale Address: 2036 Charles Lane City+State/Prov: Belleville, IL Postal Code: 62221 Country: USA	Contacts Title: Researcher/Farm Manager Phone No.: 618-566-4761 E-mail: rkrausz@siu.edu
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Crop 1: ZEAMD Zea mays indentata Dent corn Variety: See treatment list BBCH Scale: BCOR Planting Rate, Unit: 28000 S/A Planting Method: SEEDED Depth, Unit: 1.5 IN Row Spacing, Unit: 30 IN	Crop Description
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Pest 1 Type: D Code: CERCZM Cercospora zeae-maydis Common Name: Grey leaf spot of maize	Pest Description
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Treated Plot Width: 5 FT Total Plot Width: 10 FT Treated Plot Length: 33 FT Total Plot Length: 33 FT Replications: 3 Untreated Arrangement: NONE control is other than an untreated	Site and Design Site Type: FIELD Experimental Unit: 1 PLOT Tillage Type: REDTIL reduced-till Study Design: RAOBL Randomized Complete Block (RCB)
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No.	Previous Crop	Year
1.	GLXMA	2013

<table border="1"> <thead> <tr> <th>No.</th> <th>Maintenance Product Name</th> </tr> </thead> <tbody> <tr> <td>1.</td> <td>N 150 LB/A, P2O5 50 LB/A, K2O 150 LB/A</td> </tr> </tbody> </table>	No.	Maintenance Product Name	1.	N 150 LB/A, P2O5 50 LB/A, K2O 150 LB/A	Maintenance
No.	Maintenance Product Name				
1.	N 150 LB/A, P2O5 50 LB/A, K2O 150 LB/A				

% OM: 3 Texture: SIL silt loam pH: 6.1 Soil Name: Winfield CEC: 8	Soil Description
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Element	Quantity	Unit
P1	63	lb/A
K	312	lb/A

Overall Moisture Conditions: NORMAL Closest Weather Station: ICN - Belleville IL	Moisture and Weather Conditions Distance, Unit: 0.5 MI
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No.	Date	Amount	Unit	Type	Description	Interval	Unit	Min Temp	Max Temp	Temp Unit
1.	4-15-14					7	DAY	31	79	F
2.	4-21-14	0.17	IN	RAIN	rain	2	DAY			
3.	4-22-14					7	DAY	44	78	F
4.	4-24-14	2.24	IN	RAIN	rain	5	DAY			
5.	4-29-14	0.09	IN	RAIN	rain	2	DAY			
6.	4-29-14					7	DAY	41	87	F
7.	5-6-14					7	DAY	56	86	F
8.	5-8-14	0.13	IN	RAIN	rain	2	DAY			
9.	5-12-14	0.88	IN	RAIN	rain	4	DAY			
10.	5-13-14					7	DAY	37	76	F
11.	5-20-14					7	DAY	55	87	F
12.	5-21-14	0.06	IN	RAIN	rain	1	DAY			
13.	5-25-14	0.49	IN	RAIN	rain	2	DAY			
14.	5-27-14	0.08	IN	RAIN	rain	2	DAY			
15.	5-27-14					7	DAY	60	86	F
16.	5-31-14	0.14	IN	RAIN	rain	1	DAY			
17.	6-1-14	0.13	IN	RAIN	rain	1	DAY			
18.	6-3-14					7	DAY	59	90	F
19.	6-4-14	0.67	IN	RAIN	rain	1	DAY			
20.	6-7-14	0.6	IN	RAIN	rain	1	DAY			
21.	6-9-14	1.38	IN	RAIN	rain	2	DAY			
22.	6-10-14					7	DAY	51	90	F
23.	6-12-14	0.07	IN	RAIN	rain	1	DAY			
24.	6-15-14	0.02	IN	RAIN	rain	1	DAY			
25.	6-17-14					7	DAY	67	92	F
26.	6-20-14	2.09	IN	RAIN	rain	5	DAY			
27.	6-24-14					7	DAY	65	91	F
28.	6-27-14	0.11	IN	RAIN	rain	2	DAY			
29.	7-1-14	0.01	IN	RAIN	rain	1	DAY			
30.	7-1-14					7	DAY	55	90	F
31.	7-7-14	0.79	IN	RAIN	rain	2	DAY			
32.	7-8-14					7	DAY	59	89	F
33.	7-12-14	0.49	IN	RAIN	rain	3	DAY			
34.	7-15-14					7	DAY	54	85	F
35.	7-22-14					7	DAY	57	98	F
36.	7-25-14	0.02	IN	RAIN	rain	1	DAY			
37.	7-29-14					7	DAY	52	89	F
38.	8-1-14	0.04	IN	RAIN	rain	1	DAY			
39.	8-5-14	4.04	IN	RAIN	rain	4	DAY			
40.	8-5-14					7	DAY	66	88	F
41.	8-12-14					7	DAY	57	84	F
42.	8-15-14	1.21	IN	RAIN	rain	3	DAY			
43.	8-19-14					7	DAY	67	95	F
44.	8-20-14	0.11	IN	RAIN	rain	1	DAY			
45.	8-26-14					7	DAY	68	95	F
46.	8-27-14	1.56	IN	RAIN	rain	2	DAY			
47.	9-1-14	2.21	IN	RAIN	rain	2	DAY			
48.	9-2-14					7	DAY	54	93	F
49.	9-5-14	0.24	IN	RAIN	rain	1	DAY			
50.	9-9-14					7	DAY	45	85	F
51.	9-10-14	1.06	IN	RAIN	rain	1	DAY			
52.	9-16-14					7	DAY	46	86	F
53.	9-23-14					7	DAY	46	86	F
54.	9-30-14					7	DAY	37	87	F
55.	10-1-14	0.99	IN	RAIN	rain	3	DAY			
56.	10-6-14	0.31	IN	RAIN	rain	2	DAY			

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Application Description

	A	B
Application Date:	6-9-14	7-15-14
Appl. Start Time:	9:00	8:00
Appl. Stop Time:	10:00	9:00
Application Method:	SPRAY	SPRAY
Application Timing:	V5	VT
Application Placement:	BROFOL	BROFOL
Applied By:	RFK	RFK
Air Temperature, Unit:	73 F	66 F
% Relative Humidity:	76	65
Wind Velocity, Unit:	4 MPH	4 MPH
Wind Direction:	E	W
Dew Presence (Y/N):	N	N
Soil Temperature, Unit:	71 F	75 F
Soil Moisture:	ABONOR	NORMAL
% Cloud Cover:	0	0
Next Moisture Occurred On:	6-9-14	7-25-14
Time to Next Moisture, Unit:	10 HR	10 DAY

Crop Stage At Each Application

	A	B
Crop 1 Code, BBCH Scale:	ZEAMD	ZEAMD
Stage Scale Used:	DESC	DESC
Stage Majority, Percent:	V5	VT
Stage Minimum, Percent:	V5	VT
Stage Maximum, Percent:	V5	VT
Height, Unit:	12 IN	168 IN
Height Minimum, Maximum:	10 12	144 168

Pest Stage At Each Application

	A	B
Pest 1 Code, Type, Scale:	CERCZM D	CERCZM D
Stage Majority, Percent:	NA	NA

Application Equipment

	A	B
Appl. Equipment:	CO2 sprayer	CO2 sprayer
Equipment Type:	BACSPR	BACSPR
Operation Pressure, Unit:	30 PSI	30 PSI
Nozzle Type:	XR	XR
Nozzle Size:	8002	8002
Boom Length, Unit:	5 FT	5 FT
Spray Volume, Unit:	15 GPA	15 GPA

Southern Illinois University

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Pest Code	ZEAMD	ZEAMD	ZEAMD	CERCZM	CERCZM	CERCZM	CERCZM
Crop Code	10-21-14	10-21-14	10-21-14	ZEAMD	ZEAMD	ZEAMD	ZEAMD
Rating Date	Moisture	Test wt.	Yield	8-5-14	8-5-14	8-19-14	8-19-14
Rating Type	Percent	lb/bu	bu/A	Incidence	Severity	Incidence	Severity
Rating Unit				Percent	Percent	Percent	Percent
Rating Timing							
Trt-Eval Interval	98 DA-B	98 DA-B	98 DA-B	21 DA-B	21 DA-B	35 DA-B	35 DA-B
Trt Treatment No. Name	Form Conc	Form Type	Rate Unit	Other Rate	Other Rate	Growth Unit	Appl Stage Code
1 DK 62-08 NO FUNGICIDE							
2 DK 62-77 NO FUNGICIDE							
3 DK 63-33 NO FUNGICIDE							
4 DK 64-89 NO FUNGICIDE							
5 DK 67-58 NO FUNGICIDE							
6 DK 62-08 HEADLINE	2.09	EC	0.098 lb ai/a	6 fl oz/a	V5	A	
7 DK 62-77 HEADLINE	2.09	EC	0.098 lb ai/a	6 fl oz/a	V5	A	
8 DK 63-33 HEADLINE	2.09	EC	0.098 lb ai/a	6 fl oz/a	V5	A	
9 DK 64-89 HEADLINE	2.09	EC	0.098 lb ai/a	6 fl oz/a	V5	A	
10 DK 67-58 HEADLINE	2.09	EC	0.098 lb ai/a	6 fl oz/a	V5	A	
11 DK 62-08 HEADLINE AMP	1.68	SL	0.131 lb ai/a	10 fl oz/a	VT	B	
12 DK 62-77 HEADLINE AMP	1.68	SL	0.131 lb ai/a	10 fl oz/a	VT	B	
13 DK 63-33 HEADLINE AMP	1.68	SL	0.131 lb ai/a	10 fl oz/a	VT	B	
14 DK 64-89 HEADLINE AMP	1.68	SL	0.131 lb ai/a	10 fl oz/a	VT	B	
15 DK 67-58 HEADLINE AMP	1.68	SL	0.131 lb ai/a	10 fl oz/a	VT	B	
LSD (P=.05)	0.99	0.43	17.7	0.00	0.00	0.34	0.74
Standard Deviation	0.59	0.26	10.6	0.00	0.00	0.20	0.44
CV	3.27	0.45	4.19	0.0	0.0	24.06	23.03
Replicate F	2.796	1.208	1.443	0.000	0.000	2.154	3.213
Replicate Prob(F)	0.0782	0.3139	0.2533	1.0000	1.0000	0.1349	0.0554
Treatment F	16.929	15.337	2.009	0.000	0.000	7.923	11.426
Treatment Prob(F)	0.0001	0.0001	0.0565	1.0000	1.0000	0.0001	0.0001

Means followed by same letter do not significantly differ (P=.05, LSD)
Mean comparisons performed only when AOV Treatment P(F) is significant at mean comparison OSL.

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Trial Comments

1. Protocol: SIU (RFK).
2. Ratings:
3. Yield.
4. Blanket PRE application of Lumax and Aatrex.
5. CERCZM = *Cercospora zeae-maydis* (Grey leaf spot of maize).
6. Harvested 10-21-14, (2) 30 inch rows by 30 ft.