Quadris and Quilt Xcel Plant Performance under Low or No Disease Pressure.

Trial ID: 10-18-MW50 Location: Belleville Res. Center

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City State Zip Country: Belleville IL 62221 USA
Trial Status: FINAL **Initiation Date:** 06-01-10

Objectives: Evaluate the efect of Quadris applied at V5-V6, Quilt Xcel applied at R1, and the combined applications under low or no disease pressur for plant performance and yield.

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

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, P2O5 0 LB/A, K2O 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	B
Application Date:	06-21-10	07-26-10
Time of Day:	15:00	11:00
Application Method:	Spray	Spray
Application Timing:	V5-V6	R1
Application Placement:	BROFOL	BROFOL
Applied By:	JRK	RFK
Air Temperature, Unit:	90 F	85 F
% Relative Humidity:	92	63
Wind Velocity, Unit:	2 MPH	0 MPH
Wind Direction:	E	
Dew Presence (Y/N):	N	N
Soil Moisture:	ABONOR	ABONOR
% Cloud Cover:	10	0
	06-21-10	07-26-10
Crop stage at application:	V5-V6	VT
Height Min, Max (inch):	12 16	102 104

Pest Stage At Each Application

Application Date:	06-21-10	07-26-10
Stage Majority (leaves):	NA	NA

Application Equipment

Appl. Equipment:	CO2 sprayer	CO2 sprayer
Operating Pressure:	30 PSI	30 PSI
Nozzle Type:	Flat fan	Flat fan
Nozzle Size:	XR 8002	XR 8002
Boom Length, Unit:	7.5 FT	7.5 FT
Spray Volume, Unit:	20 GPA	20 GPA

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Trt No.	Treatment Name	Form Conc	Form Type	Rate	Rate Unit	Other Rate	Other Rate Unit	Growth Stage	Appl Code	ZEAMD 10-14-10 Moisture Percent	ZEAMD 10-14-10 Test wt. lb/bu	ZEAMD 10-14-10 Yield bu/A	ZEAMD 06-28-10 Injury Percent 7 DA-A	ZEAMD 08-02-10 Injury Percent 7 DA-B	ZEAMD 09-10-10 Greenness Percent R5
1	NONTREATED									12.7 c	62.0 a	163 b	0 b	0 a	5 b
2	QUADRIS	2.08	SC	0.0975	lb ai/a	6	fl oz/a	V5-V6	A	12.8 bc	61.8 a	168 b	2 a	0 a	5 b
3	QUILT XCEL	2.2	SE	0.18	lb ai/a	10.5	fl oz/a	R1	B	13.3 ab	61.4 b	180 a		0 a	50 a
4	QUADRIS	2.08	SC	0.0975	lb ai/a	6	fl oz/a	V5-V6	A	13.7 a	61.1 b	185 a	3 a	0 a	50 a
4	QUILT XCEL	2.2	SE	0.18	lb ai/a	10.5	fl oz/a	R1	B						
LSD (P=.05)										0.50	0.46	11.2	1.1	0.0	0.0
Replicate F										0.183	0.153	0.290	2.400	0.000	0.000
Replicate Prob(F)										0.9054	0.9251	0.8314	0.1664	1.0000	1.0000
Treatment F										7.969	8.377	8.497	18.600	0.000	0.000
Treatment Prob(F)										0.0067	0.0057	0.0054	0.0027	1.0000	1.0000

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

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Trt No.	Treatment Name	Form Conc	Form Type	Rate	Rate Unit	Other Rate	Other Rate Unit	Growth Stage	Appl Code	ZEAMD 09-28-10 Plants 000/A EOS	ZEAMD 09-30-10 Lodging Percent EOS	ZEAMD 09-30-10 Stalk Rot 0-5 EOS	ZEAMD 09-30-10 AbnormalEar Percent EOS	ZEAMD 09-30-10 Ear Length Inch EOS	ZEAMD 09-30-10 Kernals per Row EOS
1	NONTREATED									29.8 a	38 a	4.0 a	0 a	7.0 a	24 a
2	QUADRIS	2.08	SC	0.0975	lb ai/a	6	fl oz/a	V5-V6	A	29.3 a	30 a	3.2 b	0 a	6.9 a	24 a
3	QUILT XCEL	2.2	SE	0.18	lb ai/a	10.5	fl oz/a	R1	B	29.1 a	10 b	0.3 c	0 a	7.1 a	26 a
4	QUADRIS	2.08	SC	0.0975	lb ai/a	6	fl oz/a	V5-V6	A	29.6 a	3 b	0.4 c	0 a	6.8 a	25 a
4	QUILT XCEL	2.2	SE	0.18	lb ai/a	10.5	fl oz/a	R1	B						
LSD (P=.05)										2.68	11.9	0.62	0.0	0.41	2.9
Replicate F										0.141	2.700	1.663	0.000	1.335	2.290
Replicate Prob(F)										0.9326	0.1084	0.2434	1.0000	0.3230	0.1471
Treatment F										0.127	19.500	95.302	0.000	1.173	1.213
Treatment Prob(F)										0.9420	0.0003	0.0001	1.0000	0.3729	0.3599

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

Trial Comments

1. Protocol: Syngenta (AZ006A).
2. Ratings: CI at 7-14 days after each application.
3. Count filled ears: 20 per plot at R6 or later (record as % abnormally filled ears or blunt ears).
   If observed please describe symptoms.
4. Record % senesence when plants are R5 (dent) before plant dry down.
5. Use "push test" to evaluate stalk rot and record as % lodging.
   Test a total 10 plants beginning with the sixth plant.
6. Record corn population at harvest (2 rows by 17 ft 5 inch).
7. Yield: measure ear length (inch) and kernals per row of six ears (6 ears, 3 from each row middle).
8. Maintain weed and disease free, Lexar PRE and Bravo (if necessary).
   Blanket PRE application of Lumax (6 pt/A) and Aatrex 4L (2.5 pt/A) applied on 6/1/10.
9. R5 = Corn reproductive stage 5 (dent).
10. Stalk Rot, 0-5 = University of Illinois stalk rot ratings scale (Hines-Shaw-White).
    0 = no visible discoloration of the internal below ear stalk nodes or pith.
    1 = internal discoloration at the stalk nodes below the ear.
    2 = internal discoloration at the stalk nodes and in the pith below the ear.
    3 = pith separation occurring below the ear.
    4 = complete discoloration and decay of the pith between at least two nodes below the ear, but stalk still standing.
    5 = stalk lodged below the ear due to stalk rot.
11. AbnormalEar, Percent = Percentage of abnormal ears per 20 corn plants evaluated.
    Ear Length and Kernals per Row are averages of 6 ears per plot.
12. Harvested 10-14-10, (2) 30 inch rows by 27 ft.