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Country: UNITED STATES OF AMERICA Discipline: FUNGICIDE	Region: NJ Sequence: 405	Trial Use: Normal Year: 2011
Trial Id.: USNJ0F4052011	Master Protocol Id.:	FDAT02A4-2011US Revision Date: MAR 20
Trial Origin: IN-HOUSE TRIAL (SYNGENTA)	Licensee: Steve Mroczkiewicz	GEP: N
Title: Quilt Xcel + Herbicide V5 Application Evaluation		

SITE AND DESIGN	
Plot Width: 10 Unit: FT	Plot Length: 30 Unit: FT
Plot Area: 300.0	Unit: FT2
No Reps: 4	No Treats: 12
Site Description Event Date: 4-12-2011	Study Design: RACOB
Trial Location: Lafayette	Farm/Station Name: Throckmorton PAC
County: Tippecanoe	Farm Manager: Jay Young
State/Province: IN	Street: 8343 US 231 S
Postal Code: 47909	City+State/Prov: Lafayette, IN
Cooperator Name: Dr. Bill Johnson	Postal Code: 47909
Test Facility: Purdue University	Country: UNITED STATES OF AMERICA
Phone Number: 765-538-3422	
	US 49.376656 -24.53833 -124.715843 -66.968887
Soil Texture: SILT LOAM	
Tillage Type: CONVENTIONAL-TILL	
Block Arrangement: BLOCK 2 ABOVE 1, 3 ABOVE 4, 2 BESIDE 3, 1 BESIDE 4, PLOTS SIDE BY SIDE	
Untreated Arrangement: RANDOMIZED ARRANGEMENT WITHIN TRIAL	

No.	Year	Previous Crop/Pest
1.	2010	GLYCINE MAX

GENERAL TRIAL INFORMATION		
Initiation Date: 3-25-2011	Planned Completion: 12-1-2010	Protocol Id. : FDAT02A4-2011US
Title: Quilt Xcel + Herbicide V5 Application Evaluation	Means Only: N	
Intl./Overall Protocol Owner : Eric Tedford	Investigator: Steve Mroczkiewicz	
Local Protocol Responsibility: Dave Thomas		

TRIAL STATUS	
1. Date: 3-25-2011	TRIAL STATUS: ESTABLISHED
Comment: Generated by ARM	

SEED DESCRIPTION			
1.	Date: 4-12-2011	Area: Trial	Crop: ZEA MAYS
	Genetic Type A: GLYPHOSATE-R	B: GLUFOSINATE-R	C: B.THUR-C
			Var: Pioneer 33W84

CROP OCCURRENCE	
	1.
Date:	4-12-2011
Area:	Trial
Crop:	CORN DENT
Crop Code:	ZEAMD
BBCH Scale:	BCOR
Variety:	Pioneer 33W84
1.5 IN	
Row Spacing, Unit:	30.0 IN
Planting Rate, Unit:	34000.0 S/A
Method:	DRILLED

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PEST OCCURRENCE

	1.	2.
Date:	6-17-2011	6-17-2011
Area:	Trial	Trial
Pest:	AMBROSIA TRIFIDA	SETARIA FABERI
Pest Code:	AMBTR	SETFA
Stage Scale:	BBCH	BGRM
OCCURRENCE TYPE:	OCCURRED	OCCURRED

CROP DEVELOPMENT

	1.
Date:	4-12-2011
Crop:	1 CORN DENT
Crop Code:	ZEAMD
BBCH Scale:	BCOR
Variety:	Pioneer 33W84

PEST DEVELOPMENT

	1.	2.
Date:	6-17-2011	6-17-2011
Pest:	1 AMBROSIA TRIFIDA	2 SETARIA FABERI
Pest Code:	AMBTR	SETFA
Stage Scale:	BBCH	BGRM
8.0	5.0	
Unit:	PER SQUARE YARD	PER SQUARE YARD
Height Min, Max, Unit:	1.0 8.0 IN	1.0 2.0 IN

WEATHER DESCRIPTION

1.

No.	Date	Soil Temp.	Unit	Soil Moisture Condition
1.	6-17-2011	77.0	F	DRY

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APPLICATION

	A
Application Date/Time:	6-17-2011 10:01 AM
Applied By:	MW
Equipment Name:	FORD
Application Equipment:	TRMOSP
Nozzle Type:	FLAFAN
Nozzle Description:	XR 110 02
Nozzle Spacing, Unit:	20.0 IN
Nozzles/Row:	6.0
FT	
Boom Length, Unit:	10.0 FT
Boom Height, Unit:	20.0 IN
Ground Speed, Unit:	2.1 MPH
Spray Volume, Unit:	20.0
Mix Size, Unit:	2.5 GAL
Dew Presence (Y/N):	Y
Application Timing:	POSPOS
Applic. Placement:	BRODIR

Soil Component: % Organic Matter: 2.9
Soil Element:

INOCULATION/INFESTATION

1.

Code	Comment
1.	

Area Name	Treatment Numbers in Area
1.	

INSTRUCTIONS

CROPS: CORN

TARGETS:

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 OBJECTIVE(S):
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Evaluate Quilt Xcel tank mixed with Halex GT, Touchdown Total and Touchdown Total + Status and foliar fertilizers applied at V5 for plant performance, crop safety and yield.

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 CRITICAL PROTOCOL TASKS:
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Maintain good agronomics. Maintain weed free. Please use Bicep II Magnum for general weed control.

Use 15 GPA as the application volume to ensure the foliar fertilizer rates are correct.

PID: 2011-TSR-015

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 EXPERIMENTAL DESIGN AND PLOT DIMENSIONS:
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Experimental design: Randomized complete block
 Number of replications: 4
 Length: 30 feet

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TREATMENT DETAILS:

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A = V5-V6

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ASSESSMENT DETAILS:

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1. Corn Safety:
 - Rate % general phytotoxicity: 5-7, 14 and 28 DAT
2. Foliar Disease Severity:
 - % disease severity: Take two late season disease ratings 2-3 weeks apart. Rate early season disease if present
 - Late season foliar disease ratings: rate the disease severity on the upper portions of the plant, three leaves below the ear and up
 - Rate early season disease severity if present
3. Yield (bu/A)- harvest the center two rows
 - Bu/A converted to 15.5% moisture

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REPORT DATA BY: 10/15/2011

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OTHER NOTES:

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1. Provide GPS coordinates in degrees for test site.
2. Provide soil info for site including:
 - a. % organic matter
 - b. soil texture
 - c. % sand/silt/clay
 - d. pH
3. Weather data: rainfall

PLEASE DELETE SECTIONS BELOW FOR EXTERNAL USE.

There are two variants of this protocol. Variant A focus' on CPS's WeatherGard Complete and Choice WeatherMaster. Variant B uses Helena's products Choice + Induce. Choose the protocol variant for your COI based on the prevalence of one of these products or distributor in your territory.

PID: 2011-TSR-015

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Assessment Tasks															
No.	Timing ID	SE Name	SE Description	Part Assess	Assess Data Type	Assess Unit	Samples per 1 Collect.basis	Sample Unit	Coll. Basis	Basis Unit	Reporting Basis	Reporting Basis Unit	Asmt Type	Asmt Sub Type	Calc Type
1.	1	ZUSX001	%Phyto-General	PLANT	PHYGEN	%	1.0	PLOT	1.0	PLOT	1.0	PLOT	NOR	RAW	NC
2.	2	ZUSW001	%Control	PLANT	CONTRO	%	1.0	PLOT	1.0	PLOT	1.0	PLOT	NOR	RAW	NC
3.			Damaged Ears	EAR	DAMMTS	%	20.0	EAR	1.0	PLOT	1.0	PLOT	NOR	RAW	IN
4.	4	ZUSF002	Pest Severity (%)	PLANT	PESSEV	%AREA	1.0	PLOT	1.0	PLOT	1.0	PLANT	NOR	RAW	EF
5.	5	ZUSF002	Pest Severity (%)	PLA3UP	PESSEV	%AREA	1.0	PLOT	1.0	PLOT	1.0	PLANT	NOR	RAW	EF
6.	6	O002	% vigor of plants	PLANT	VIGOR	%CHANG	1.0	PLOT	1.0	PLOT	1.0	PLOT	NOR	RAW	NC
7.				PLANT	SENESE	%AREA		PLANT	1.0	PLOT	1.0	PLANT	NOR	RAW	EF
8.	8	ZUSX053	Moisture Content		CONMOI	%	1.0	PLOT	1.0	PLOT	1.0	PLOT	NOR	RAW	NC
9.	9	ZUSX052_C3	Yield/A		YIELD	BU		FT2	1.0	PLOT	1.0	ACRE	CAL	YLR	IN
10.					YIELD	LB		FT2	1.0	PLOT	1.0	ACRE	NOR	YLR	IN
No.	Timing ID														
1.	1														
2.	2														
4.	4														
5.	5														
6.	6														
8.	8														
9.	9														

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Trial Id.: USNJ0F4052011	Master Protocol Id.: FDAT02A4-2011US	Revision Date: MAR 20
Trial Origin: IN-HOUSE TRIAL (SYNGENTA)	Licensee: Steve Mroczkiewicz	GEP: N
Title: Quilt Xcel + Herbicide V5 Application Evaluation		

Assessment Date	6-24-2011 12:00 AM	7-2-2011 12:00 AM	7-13-2011 12:00 AM	8-4-2011 12:00 AM	10-17-2011 10:16 AM			
Assessed By	RH/JS	CB	RH/JS	MW				
Crop Code	1 ZEAMD	1 ZEAMD	1 ZEAMD	1 ZEAMD	1 ZEAMD			
Crop Variety	Pioneer 33W84	Pioneer 33W84	Pioneer 33W84	Pioneer 33W84	Pioneer 33W84			
SE Group No.	1	1	2	2	2			
Assessment Data Type	PHYGEN	PHYGEN	PHYGEN	DISPEN	YIELD			
Assessment Unit	%	%	%	%	BU			
Collection Basis, Unit					- ACRE			
Reporting Basis, Unit					AREA			
Assessment Type, Sub-Type	NOR RAW	NOR RAW	NOR RAW	NOR RAW	NOR RAW			
Number of Subsamples	1	1	1	3	1			
Transformation Code	0	0	0	0	0			
Days Application to Assessment	7 DA-A	15 DA-A	26 DA-A	48 DA-A	122 DA-A			
Days After Last Application	7	15	26	48	122			
Trt Treatment/Product Name	Product/AI Rate	Product/AI Rate Unit	Applic. Code	1	2	3	4	5
1 UNTREATED CHECK				1.3 b	0.0 c	0.0 c	2.375000238 a	136.73 a
2 WEATHERGARD COMPLETE	3.3 %v/v	A		3.0 ab	1.3 c	1.0 bc	2.250000225 a	143.18 a
HALEX GT 4.38 CS	2200.0 gai/ha	A						
AATREX 4L	560.0 gai/ha	A						
3 CHOICE WEATHER MASTER	3.3 %v/v	A		1.3 b	1.0 c	1.3 bc	1.500000150 a	141.30 a
REALM Q 75 WG	210.0 gai/ha	A						
TOUCHDOWN TOTAL 4.17 SL	880.0 gai/ha	A						
AATREX 4L	560.0 gai/ha	A						
4 CHOICE WEATHER MASTER	3.3 %v/v	A		4.0 ab	1.8 c	0.8 bc	2.083333462 a	170.33 a
STATUS 56 WG	98.0 gai/ha	A						
TOUCHDOWN TOTAL 4.17 SL	880.0 gai/ha	A						
AATREX 4L	560.0 gai/ha	A						
5 WEATHERGARD COMPLETE	3.3 %v/v	A		9.0 a	13.8 a	3.8 a	1.208333494 a	139.48 a
QUILT XCEL 2.2 SE	205.0 gai/ha	A						
HALEX GT 4.38 CS	2200.0 gai/ha	A						
AATREX 4L	560.0 gai/ha	A						
6 CHOICE WEATHER MASTER	3.3 %v/v	A		0.8 b	1.8 c	1.3 bc	1.666666794 a	167.33 a
QUILT XCEL 2.2 SE	205.0 gai/ha	A						
REALM Q 75 WG	210.0 gai/ha	A						
TOUCHDOWN TOTAL 4.17 SL	880.0 gai/ha	A						
AATREX 4L	560.0 gai/ha	A						
7 CHOICE WEATHER MASTER	3.3 %v/v	A		0.8 b	0.0 c	1.3 bc	1.916666819 a	156.65 a
QUILT XCEL 2.2 SE	205.0 gai/ha	A						
STATUS 56 WG	98.0 gai/ha	A						
TOUCHDOWN TOTAL 4.17 SL	880.0 gai/ha	A						
AATREX 4L	560.0 gai/ha	A						
8 MAXIMUM N-PACT	100.0 %v/v	A		8.3 ab	6.3 b	3.3 a	2.000000200 a	171.90 a
WEATHERGARD COMPLETE	3.3 %v/v	A						
QUILT XCEL 2.2 SE	205.0 gai/ha	A						
HALEX GT 4.38 CS	2200.0 gai/ha	A						
AATREX 4L	560.0 gai/ha	A						

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

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Assessment Date	6-24-2011 12:00 AM	7-2-2011 12:00 AM	7-13-2011 12:00 AM	8-4-2011 12:00 AM	10-17-2011 10:16 AM			
Assessed By	RH/JS	CB	RH/JS	MW				
Crop Code	1 ZEAMD	1 ZEAMD	1 ZEAMD	1 ZEAMD	1 ZEAMD			
Crop Variety	Pioneer 33W84	Pioneer 33W84	Pioneer 33W84	Pioneer 33W84	Pioneer 33W84			
SE Group No.	1	1	2	2	2			
Assessment Data Type	PHYGEN	PHYGEN	PHYGEN	DISPEN	YIELD			
Assessment Unit	%	%	%	%	BU			
Collection Basis, Unit					- ACRE			
Reporting Basis, Unit					- AREA			
Assessment Type, Sub-Type	NOR RAW	NOR RAW	NOR RAW	NOR RAW	NOR RAW			
Number of Subsamples	1	1	1	3	1			
Transformation Code	0	0	0	0	0			
Days Application to Assessment	7 DA-A	15 DA-A	26 DA-A	48 DA-A	122 DA-A			
Days After Last Application	7	15	26	48	122			
Trt Treatment/Product Name	Product/AI Rate	Product/AI Rate Unit	Applic. Code	1	2	3	4	5
9 MAXIMUM N-PACT	100.0 %v/v	A		2.3 ab	1.3 c	1.8 b	2.541667000 a	160.03 a
CHOICE WEATHER MASTER	3.3 %v/v	A						
QUILT XCEL 2.2 SE	205.0 gai/ha	A						
REALM Q 75 WG	210.0 gai/ha	A						
TOUCHDOWN TOTAL 4.17 SL	880.0 gai/ha	A						
AATREX 4L	560.0 gai/ha	A						
10 MAXIMUM N-PACT	100.0 %v/v	A		1.0 b	3.0 c	1.0 bc	1.583333531 a	166.35 a
CHOICE WEATHER MASTER	3.3 %v/v	A						
QUILT XCEL 2.2 SE	205.0 gai/ha	A						
STATUS 56 WG	98.0 gai/ha	A						
TOUCHDOWN TOTAL 4.17 SL	880.0 gai/ha	A						
AATREX 4L	560.0 gai/ha	A						
11 WEATHERGARD COMPLETE	3.3 %v/v	A		3.3 ab	0.5 c	1.3 bc	1.916666819 a	167.50 a
QUILT XCEL 2.2 SE	205.0 gai/ha	A						
12 MAXIMUM N-PACT	100.0 %v/v	A		2.5 ab	0.0 c	0.5 bc	2.250000225 a	144.08 a
WEATHERGARD COMPLETE	3.3 %v/v	A						
QUILT XCEL 2.2 SE	205.0 gai/ha	A						
LSD (P=.05)	4.76			4.76	3.18	0.83	1.5513413312	27.469
Standard Deviation	3.29			3.29	2.20	0.57	1.0744014861	19.024
CV	106.13			106.13	86.66	40.44	55.35	12.24
Bartlett's X2	18.179			18.179	9.734	3.468	16.847	12.988
P(Bartlett's X2)	0.078			0.078	0.284	0.943	0.112	0.294
Replicate F	0.616			0.616	0.784	0.169	0.537	2.211
Replicate Prob(F)	0.6095			0.6095	0.5112	0.9164	0.6605	0.1053
Treatment F	2.866			2.866	12.751	14.031	0.535	2.015
Treatment Prob(F)	0.0095			0.0095	0.0001	0.0001	0.8648	0.0593

T40, T36, 1, ZEAMD, Pioneer 33W84, , = 1

5315, PHYGEN = PHYTOTOXICITY - GENERAL
 , PHYGEN = PHYTOTOXICITY - GENERAL
 135851, DISPEN = DISEASE PENETRATION
 5353, YIELD = YIELD

1221, % = PERCENT
 , % = PERCENT
 1185, BU = BUSHEL

158, ACRE = ACRE

3124, AREA = AREA

Assessment Type, Sub-Type
 NOR = NORMAL
 RAW = RAW DATA

Transformation Code
 0 = No Transformation

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