

Syngenta ICS Soybean Trial.

Trial ID: 11-1-MME140

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: 6-6-11

Objectives: Evaluate Syngenta Systems Programs in soybean for yield.

Crop 1: GLXMA Soybean Variety: NK 46-A1 Description: RR
 Planting Method: SEEDED Planting Date: 6-6-11
 Rate, Unit: 140000 S/A Depth, Unit: 1.0 IN
 Row Spacing, Unit: 30 IN

Pest 1 Type: W Code: PANDI Panicum dichotomiflorum Michx. panicum, fall
 Pest 2 Type: W Code: AMBTR Ambrosia trifida L. ragweed, giant
 Pest 3 Type: W Code: ABUTH Abutilon theophrasti Medicus velvetleaf
 Pest 4 Type: W Code: AMATA Amaranthus rudis Sauer waterhemp, common
 Pest 5 Type: W Code: IPOHE Ipomoea hederacea (L.) Jacq. morningglory, ivyleaf
 Pest 6 Type: W Code: SETFA Setaria faberi Herrm. foxtail, giant

Plot Width, Unit: 20 FT Site Type: FIELD
 Plot Length, Unit: 125 FT Tillage Type: NO-TILL
 Replications: 1 Study Design: Non-Randomized

Prior Crops, Year
 1. ZEAMD 2010

Field Prep./Maintenance: N 0 LB/A, P205 50 LB/A, K20 150 LB/A

% OM: 1.5 Texture: SILT LOAM
 pH: 6.4 Soil Name: WINFIELD
 CEC: 6 Fert. Level: P1: 72 LB/A, K: 313 LB/A

Application	Description				
	A	B	C	D	E
Application Date:	6-7-11	7-5-11	7-26-11	8-10-11	8-12-11
Time of Day:	13:00	17:00	10:00	10:00	10:00
Application Method:	Spray	Spray	Spray	Spray	Spray
Application Timing:	PRE	4-6"W	21DA-B	IF-NEED	R3
Application Placement:	BROFOL	BROFOL	BROFOL	BROFOL	BROFOL
Applied By:	JRK	LAH	BA	BA	BA
Air Temperature, Unit:	95 F	87 F	90 F	79 F	80 F
% Relative Humidity:	41	46	61	60	60
Wind Velocity, Unit:	5 MPH	2 MPH	0 MPH	3 MPH	5 MPH
Wind Direction:	SW	NE		NE	SE
Dew Presence (Y/N):	N	N	N	N	N
Soil Temperature, Unit:	76 F	79 F	83 F	79 F	76 F
Soil Moisture:	NORMAL	ABONOR	BELNOR	NORMAL	NORMAL
% Cloud Cover:	0	0	0	20	0
Crop stage at application:	7-6-11 NA	5-7-11 V3-V4	26-7-11 R2	10-8-11 R3	12-8-11 R3
Height Min, Max (inch):		6 8	10 12	24 26	24 26

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	Pest Stage At Each Application									
Application Date:	6-7-11	7-5-11	7-26-11	8-10-11	8-12-11					
Weed Code:	PANDI	PANDI	PANDI	PANDI	PANDI	PANDI				
Stage Majority (leaves):	NA	4	8	5	NA					
Stage Min, Max:		2 5	2 10	5 7						
Height Majority:		6 IN	8 IN	12 IN						
Height Min, Max:		1 10	3 12	12 14						
Density, Unit:		3 FT2	0.1 FT2	0.01 FT2						
Weed Code:	AMBTR	AMBTR	AMBTR	AMBTR	AMBTR	AMBTR				
Stage Majority (leaves):	NA	NA	10	NA	NA					
Stage Min, Max:			4 10							
Height Majority:			12 IN							
Height Min, Max:			6 12							
Density, Unit:			0.01 FT2							
Weed Code:	ABUTH	ABUTH	ABUTH	ABUTH	ABUTH	ABUTH				
Stage Majority (leaves):	NA	NA	6	NA	NA					
Stage Min, Max:			4 8							
Height Majority:			10 IN							
Height Min, Max:			6 14							
Density, Unit:			0.01 FT2							
Weed Code:	AMATA	AMATA	AMATA	AMATA	AMATA	AMATA				
Stage Majority (leaves):	NA	NA	8	9	NA					
Stage Min, Max:			4 10	8 9						
Height Majority:			8 IN	8 IN						
Height Min, Max:			6 10	6 10						
Density, Unit:			0.01 FT2	0.01 FT2						
Weed Code:	IPOHE	IPOHE	IPOHE	IPOHE	IPOHE	IPOHE				
Stage Majority (leaves):	NA	NA	10+	coty	NA					
Stage Min, Max:			10 10+	coty 1						
Height Majority:			6 IN	2 IN						
Height Min, Max:			5 8	1 2						
Density, Unit:			0.01 FT2	0.01 FT2						
Weed Code:	SETFA	SETFA	SETFA	SETFA	SETFA	SETFA				
Stage Majority (leaves):	NA	NA	NA	5	NA					
Stage Min, Max:				5 7						
Height Majority:				12 IN						
Height Min, Max:				12 14						
Density, Unit:				0.01 FT2						

Application Equipment

Appl. Equipment:	CO2 sprayer	CO2 sprayer	CO2 sprayer	CO2 sprayer	CO2 sprayer
Operating Pressure:	30 PSI	30 PSI	30 PSI	30 PSI	30 PSI
Nozzle Type:	Flat fan	Flat fan	Flat fan	Flat fan	Flat fan
Nozzle Size:	XR 8003	XR 8003	XR 8003	XR 8003	XR 8003
Boom Length, Unit:	7.5 FT	7.5 FT	7.5 FT	7.5 FT	7.5 FT
Spray Volume, Unit:	20 GPA	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

GLXMA	GLXMA	GLXMA	GLXMA
10-22-11	10-22-11	9-2-11	9-16-11
Moisture	Yield	Injury	Injury
Percent	bu/A	Percent	Percent
		21 DA-E	35 DA-E

Trt No.	Treatment Name	Form Conc	Form Type	Rate	Rate Unit	Other Rate	Other Rate Unit	Growth Stage	Appl Code				
1	NK 46-A1 (TREATED W/CRUISER MAXX)									11.6	57	0	0
1	TOUCHDOWN TOTAL	4.17	SL	0.78	lb ae/a	24	fl oz/a	4-6"W	B				
1	N-PAK AMS	100	SL	2.5	% v/v	2.5	% v/v	4-6"W	B				
1	TOUCHDOWN TOTAL	4.17	SL	0.78	lb ae/a	24	fl oz/a	21DA-B	C				
1	N-PAK AMS	100	SL	2.5	% v/v	2.5	% v/v	21DA-B	C				
1	QUILT XCEL	2.2	SC	0.18	lb ai/a	10.5	fl oz/a	R3	E				
1	ENDIGO	2.06	ZC	0.0563	lb ai/a	3.5	fl oz/a	R3	E				
1	COC (PRIME OIL)	100	SL	1	% v/v	1	% v/v	R3	E				
2	NK 46-A1 (TREATED W/CRUISER MAXX)									11.9	59	0	0
2	FLEXSTAR GT 3.5	3.5	SL	1.53	lb ae/a	3.5	pt/a	4-6"W	B				
2	N-PAK AMS	100	SL	2.5	% v/v	2.5	% v/v	4-6"W	B				
2	TOUCHDOWN TOTAL	4.17	SL	0.78	lb ae/a	24	fl oz/a	IF-NEED	D				
2	N-PAK AMS	100	SL	2.5	% v/v	2.5	% v/v	IF-NEED	D				
2	QUILT XCEL	2.2	SC	0.18	lb ai/a	10.5	fl oz/a	R3	E				
2	ENDIGO	2.06	ZC	0.0563	lb ai/a	3.5	fl oz/a	R3	E				
2	COC (PRIME OIL)	100	SL	1	% v/v	1	% v/v	R3	E				
3	NK 46-A1 (TREATED W/CRUISER MAXX)									11.6	55	0	0
3	PREFIX	5.29	EC	1.32	lb ai/a	2	pt/a	PRE	A				
3	TOUCHDOWN TOTAL	4.17	SL	0.78	lb ae/a	24	fl oz/a	21DA-B	C				
3	N-PAK AMS	100	SL	2.5	% v/v	2.5	% v/v	21DA-B	C				
3	QUILT XCEL	2.2	SC	0.18	lb ai/a	10.5	fl oz/a	R3	E				
3	ENDIGO	2.06	ZC	0.0563	lb ai/a	3.5	fl oz/a	R3	E				
3	COC (PRIME OIL)	100	SL	1	% v/v	1	% v/v	R3	E				
4	NK 46-A1 (TREATED W/CRUISER MAXX)									11.6	52	0	0
4	TOUCHDOWN TOTAL	4.17	SL	0.78	lb ae/a	24	fl oz/a	4-6"W	B				
4	N-PAK AMS	100	SL	2.5	% v/v	2.5	% v/v	4-6"W	B				
4	TOUCHDOWN TOTAL	4.17	SL	0.78	lb ae/a	24	fl oz/a	21DA-B	C				
4	N-PAK AMS	100	SL	2.5	% v/v	2.5	% v/v	21DA-B	C				
5	NK 46-A1 (TREATED W/CRUISER MAXX)									11.7	54	0	0
5	FLEXSTAR GT 3.5	3.5	SL	1.53	lb ae/a	3.5	pt/a	4-6"W	B				
5	N-PAK AMS	100	SL	2.5	% v/v	2.5	% v/v	4-6"W	B				
5	TOUCHDOWN TOTAL	4.17	SL	0.78	lb ae/a	24	fl oz/a	IF-NEED	D				
5	N-PAK AMS	100	SL	2.5	% v/v	2.5	% v/v	IF-NEED	D				
6	NK 46-A1 (TREATED W/CRUISER MAXX)									11.2	52	0	0
6	PREFIX	5.29	EC	1.32	lb ai/a	2	pt/a	PRE	A				
6	TOUCHDOWN TOTAL	4.17	SL	0.78	lb ae/a	24	fl oz/a	21DA-B	C				
6	N-PAK AMS	100	SL	2.5	% v/v	2.5	% v/v	21DA-B	C				
7	NK 46-A1 (TREATED W/CRUISER MAXX)									11.8	61	0	0
7	TOUCHDOWN TOTAL	4.17	SL	0.78	lb ae/a	24	fl oz/a	4-6"W	B				
7	N-PAK AMS	100	SL	2.5	% v/v	2.5	% v/v	4-6"W	B				
7	TOUCHDOWN TOTAL	4.17	SL	0.78	lb ae/a	24	fl oz/a	21DA-B	C				
7	N-PAK AMS	100	SL	2.5	% v/v	2.5	% v/v	21DA-B	C				
7	QUADRIIS	2.08	SC	0.0975	lb ai/a	6	fl oz/a	R3	E				
7	WARRIOR II	2.09	CS	0.026	lb ai/a	1.6	fl oz/a	R3	E				
7	COC (PRIME OIL)	100	SL	1	% v/v	1	% v/v	R3	E				
8	NK 46-A1 (TREATED W/CRUISER MAXX)									11.7	53	0	0
8	FLEXSTAR GT 3.5	3.5	SL	1.53	lb ae/a	3.5	pt/a	4-6"W	B				
8	N-PAK AMS	100	SL	2.5	% v/v	2.5	% v/v	4-6"W	B				
8	TOUCHDOWN TOTAL	4.17	SL	0.78	lb ae/a	24	fl oz/a	IF-NEED	D				
8	N-PAK AMS	100	SL	2.5	% v/v	2.5	% v/v	IF-NEED	D				
8	QUADRIIS	2.08	SC	0.0975	lb ai/a	6	fl oz/a	R3	E				
8	WARRIOR II	2.09	CS	0.026	lb ai/a	1.6	fl oz/a	R3	E				
8	COC (PRIME OIL)	100	SL	1	% v/v	1	% v/v	R3	E				
9	NK 46-A1 (TREATED W/CRUISER MAXX)									11.4	46	0	0
9	PREFIX	5.29	EC	1.32	lb ai/a	2	pt/a	PRE	A				
9	TOUCHDOWN TOTAL	4.17	SL	0.78	lb ae/a	24	fl oz/a	21DA-B	C				
9	N-PAK AMS	100	SL	2.5	% v/v	2.5	% v/v	21DA-B	C				
9	QUADRIIS	2.08	SC	0.0975	lb ai/a	6	fl oz/a	R3	E				
9	WARRIOR II	2.09	CS	0.026	lb ai/a	1.6	fl oz/a	R3	E				
9	COC (PRIME OIL)	100	SL	1	% v/v	1	% v/v	R3	E				

LSD (P=.05)

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Location: Belleville Res. Center

Pest Code									
Crop Code									
Rating Date									
Rating Data Type									
Rating Unit									
Rating Timing									
Trt-Eval Interval									21 DA-E 35 DA-E

Trt No.	Treatment Name	Form Conc	Form Type	Rate Rate	Rate Unit	Other Rate	Other Rate Unit	Growth Stage	Appl Code
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Means followed by same letter do not significantly differ (P=.05, LSD)

Syngenta ICS Soybean Trial.

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Location: Belleville Res. Center

Pest Code	Crop Code	Rating Date	Rating Data Type	Rating Unit	Rating Timing	Trt-Eval Interval	DISEASE						
							GLXMA	GLXMA	GLXMA	GLXMA			
							9-2-11	9-2-11	9-16-11	9-16-11			
							Incidence	Severity	Incidence	Severity			
							Percent	Percent	Percent	Percent			
							21 DA-E	21 DA-E	35 DA-E	35 DA E			
Trt No.	Treatment Name	Form Conc	Form Type	Rate	Rate Unit	Other Rate	Other Rate Unit	Growth Stage	Appl Code				
1	NK 46-A1 (TREATED W/CRUISER MAXX)									0	0	0	0
1	TOUCHDOWN TOTAL	4.17	SL	0.78	lb ae/a	24	fl oz/a	4-6"W	B				
1	N-PAK AMS	100	SL	2.5	% v/v	2.5	% v/v	4-6"W	B				
1	TOUCHDOWN TOTAL	4.17	SL	0.78	lb ae/a	24	fl oz/a	21DA-B	C				
1	N-PAK AMS	100	SL	2.5	% v/v	2.5	% v/v	21DA-B	C				
1	QUILT XCEL	2.2	SC	0.18	lb ai/a	10.5	fl oz/a	R3	E				
1	ENDIGO	2.06	ZC	0.0563	lb ai/a	3.5	fl oz/a	R3	E				
1	COC (PRIME OIL)	100	SL	1	% v/v	1	% v/v	R3	E				
2	NK 46-A1 (TREATED W/CRUISER MAXX)									0	0	0	0
2	FLEXSTAR GT 3.5	3.5	SL	1.53	lb ae/a	3.5	pt/a	4-6"W	B				
2	N-PAK AMS	100	SL	2.5	% v/v	2.5	% v/v	4-6"W	B				
2	TOUCHDOWN TOTAL	4.17	SL	0.78	lb ae/a	24	fl oz/a	IF-NEED	D				
2	N-PAK AMS	100	SL	2.5	% v/v	2.5	% v/v	IF-NEED	D				
2	QUILT XCEL	2.2	SC	0.18	lb ai/a	10.5	fl oz/a	R3	E				
2	ENDIGO	2.06	ZC	0.0563	lb ai/a	3.5	fl oz/a	R3	E				
2	COC (PRIME OIL)	100	SL	1	% v/v	1	% v/v	R3	E				
3	NK 46-A1 (TREATED W/CRUISER MAXX)									0	0	0	0
3	PREFIX	5.29	EC	1.32	lb ai/a	2	pt/a	PRE	A				
3	TOUCHDOWN TOTAL	4.17	SL	0.78	lb ae/a	24	fl oz/a	21DA-B	C				
3	N-PAK AMS	100	SL	2.5	% v/v	2.5	% v/v	21DA-B	C				
3	QUILT XCEL	2.2	SC	0.18	lb ai/a	10.5	fl oz/a	R3	E				
3	ENDIGO	2.06	ZC	0.0563	lb ai/a	3.5	fl oz/a	R3	E				
3	COC (PRIME OIL)	100	SL	1	% v/v	1	% v/v	R3	E				
4	NK 46-A1 (TREATED W/CRUISER MAXX)									0	0	0	0
4	TOUCHDOWN TOTAL	4.17	SL	0.78	lb ae/a	24	fl oz/a	4-6"W	B				
4	N-PAK AMS	100	SL	2.5	% v/v	2.5	% v/v	4-6"W	B				
4	TOUCHDOWN TOTAL	4.17	SL	0.78	lb ae/a	24	fl oz/a	21DA-B	C				
4	N-PAK AMS	100	SL	2.5	% v/v	2.5	% v/v	21DA-B	C				
5	NK 46-A1 (TREATED W/CRUISER MAXX)									0	0	0	0
5	FLEXSTAR GT 3.5	3.5	SL	1.53	lb ae/a	3.5	pt/a	4-6"W	B				
5	N-PAK AMS	100	SL	2.5	% v/v	2.5	% v/v	4-6"W	B				
5	TOUCHDOWN TOTAL	4.17	SL	0.78	lb ae/a	24	fl oz/a	IF-NEED	D				
5	N-PAK AMS	100	SL	2.5	% v/v	2.5	% v/v	IF-NEED	D				
6	NK 46-A1 (TREATED W/CRUISER MAXX)									0	0	0	0
6	PREFIX	5.29	EC	1.32	lb ai/a	2	pt/a	PRE	A				
6	TOUCHDOWN TOTAL	4.17	SL	0.78	lb ae/a	24	fl oz/a	21DA-B	C				
6	N-PAK AMS	100	SL	2.5	% v/v	2.5	% v/v	21DA-B	C				
7	NK 46-A1 (TREATED W/CRUISER MAXX)									0	0	0	0
7	TOUCHDOWN TOTAL	4.17	SL	0.78	lb ae/a	24	fl oz/a	4-6"W	B				
7	N-PAK AMS	100	SL	2.5	% v/v	2.5	% v/v	4-6"W	B				
7	TOUCHDOWN TOTAL	4.17	SL	0.78	lb ae/a	24	fl oz/a	21DA-B	C				
7	N-PAK AMS	100	SL	2.5	% v/v	2.5	% v/v	21DA-B	C				
7	QUADRIIS	2.08	SC	0.0975	lb ai/a	6	fl oz/a	R3	E				
7	WARRIOR II	2.09	CS	0.026	lb ai/a	1.6	fl oz/a	R3	E				
7	COC (PRIME OIL)	100	SL	1	% v/v	1	% v/v	R3	E				
8	NK 46-A1 (TREATED W/CRUISER MAXX)									0	0	0	0
8	FLEXSTAR GT 3.5	3.5	SL	1.53	lb ae/a	3.5	pt/a	4-6"W	B				
8	N-PAK AMS	100	SL	2.5	% v/v	2.5	% v/v	4-6"W	B				
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8	N-PAK AMS	100	SL	2.5	% v/v	2.5	% v/v	IF-NEED	D				
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8	WARRIOR II	2.09	CS	0.026	lb ai/a	1.6	fl oz/a	R3	E				
8	COC (PRIME OIL)	100	SL	1	% v/v	1	% v/v	R3	E				
9	NK 46-A1 (TREATED W/CRUISER MAXX)									0	0	0	0
9	PREFIX	5.29	EC	1.32	lb ai/a	2	pt/a	PRE	A				
9	TOUCHDOWN TOTAL	4.17	SL	0.78	lb ae/a	24	fl oz/a	21DA-B	C				
9	N-PAK AMS	100	SL	2.5	% v/v	2.5	% v/v	21DA-B	C				
9	QUADRIIS	2.08	SC	0.0975	lb ai/a	6	fl oz/a	R3	E				
9	WARRIOR II	2.09	CS	0.026	lb ai/a	1.6	fl oz/a	R3	E				
9	COC (PRIME OIL)	100	SL	1	% v/v	1	% v/v	R3	E				

LSD (P=.05)

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Trial ID: 11-1-MME140

Location: Belleville Res. Center

Pest Code	DISEASE			
Crop Code	GLXMA	GLXMA	GLXMA	GLXMA
Rating Date	9-2-11	9-2-11	9-16-11	9-16-11
Rating Data Type	Incidence	Severity	Incidence	Severity
Rating Unit	Percent	Percent	Percent	Percent
Rating Timing	21 DA-E		35 DA-E	
Trt-Eval Interval	21 DA-E		35 DA E	

Trt No.	Treatment Name	Form Conc	Form Type	Rate	Rate Unit	Other Rate	Other Rate Unit	Growth Stage	Appl Code
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Means followed by same letter do not significantly differ (P=.05, LSD)

Trial Comments

1. Protocol: Syngenta (ZSC050A4).
2. Ratings: Observe and note any disease or insect pressure at R3 to maturity.
3. Yield and seed moisture; trim front and back 5 ft of center 2 rows in each plot prior to harvest.
4. Use high fertility to maximize yield potential, seeding rate is 140,000 s/A.
5. Photos of significant treatment differences would be appreciated.
6. Blanket burndown application of Touchdown Total (24 fl oz/A) plus 2,4-D LV4 (1 pt/A) to be applied 7-21 DBP.
Apply Gramoxone Inteon (2.5 pt/A) plus NIS (0.25 %v/v) at planting if necessary.
7. For XXX plots, spray center 15 ft of plots with Touchdown Total similar to treatment 4.
8. Mixing and spraying; each plot requires (2) 2 liter bottles, make 2 passes per plot with a 7.5 ft boom.
9. There was no observable insect feeding and no significant insect population.
Disease pressure was low, all incidence and severity ratings were zero.
Plots were monitored for any diseases, especially SDS and frogeye leafspot.
10. Harvested 10-22-11, (2) 30 inch rows by 112 ft.