

2011 Kixor / "Get the most out of every soybean acre"

Trial ID: 11 BAS SB D9F Get the Most Protocol ID: 11 BAS D9F Get the Most  
Location: Concord, NE  
Project ID: DEM-H-2011-US-D9F-G-01.0 Investigator: Stevan Knezevic

General Trial Information

Investigator: Stevan Knezevic

Trial Location

City: Concord  
State/Prov.: NE  
Postal Code: 68728  
Country: USA

Personnel

Investigator: Stevan Knezevic

Crop Description

Crop 1: GLXMA Glycine max Soybean  
Variety: LGSeeds C2699 RR  
BBCH Scale: BSOY Planting Date: 06-07-2011  
Planting Method: SEEDED seeded Rate, Unit: 156816 s/a  
Depth, Unit: 1.5 in  
Harvest Date: 10-05-2011 Harvest Equipment: Almaco SP40  
Harvested Width, Unit: 5 ft Harvested Length, Unit: 27.5 ft  
% Standard Moisture: 13.0

Pest Description

- Pest 1 Type: W Code: ERICA Conyza canadensis  
Common Name: Canada horseweed
- Pest 2 Type: W Code: TAROF Taraxacum officinale  
Common Name: Common dandelion
- Pest 3 Type: W Code: SETVI Setaria viridis  
Common Name: Green foxtail
- Pest 4 Type: W Code: CCHSS Cenchrus sp.  
Common Name: Sandbur
- Pest 5 Type: W Code: ABUTH Abutilon theophrasti  
Common Name: Velvetleaf
- Pest 6 Type: W Code: AMATU Amaranthus tuberculatus  
Common Name: Tall waterhemp

Site and Design

Plot Width, Unit: 10 FT Site Type: FIELD field  
Plot Length, Unit: 45 FT  
Plot Area, Unit: 450 FT2 Tillage Type: NOTILL no-till  
Replications: 6 Study Design: RACOB L Randomized Complete Block (RCB)

Soil Description

% Sand: 12 % OM: 2.5 Texture: SICL silty clay loam  
% Silt: 58 pH: 5.6  
% Clay: 30 CEC: 17.7 Fert. Level: F fair  
Analyzed By:  
Midwest Labs

Application Description				
	A	B	C	D
Application Date:	05-19-2011	06-01-2011	07-10-2011	08-25-2011
Time of Day:	9:30 am	11:00 am	1:00 pm	2:00 pm
Application Method:	spray	spray	spray	spray
Application Timing:	7-10 EPP	3-5EPP	POST	R4
Application Placement:	foliar	foliar	foliar	foliar
Applied By:	js	js	js	js
Air Temperature, Unit:	57 F	70 F	91 F	78 F
% Relative Humidity:	78	50	60	64
Wind Velocity, Unit:	7 mph	5 mph	6 mph	5 mph
Wind Direction:	NE	SE	SSE	S
Dew Presence (Y/N):	N no	N no	N no	N no
Soil Temperature, Unit:	57 F	64 F		72 F
Soil Moisture:	GOOD	WET	DRY	SLIWET
% Cloud Cover:	100	70	20	5

Crop Stage At Each Application				
	A	B	C	D
Crop 1 Code, BBCH Scale:	GLXMA BSOY	GLXMA BSOY	GLXMA BSOY	GLXMA BSOY
Stage Scale Used:			BBCH	BBCH
Stage Majority, Percent:			3T 100	R4 100
Height, Unit:			6 in	30 in
Height Minimum, Maximum:			6 8	

Pest Stage At Each Application				
	A	B	C	D
Pest 1 Code, Type, Scale:	ERICA W	ERICA W	ERICA W	ERICA W
Height, Unit:	1 in	4.5 in		
Height Minimum, Maximum:		3 6		
Density, Unit:	2 m2	5 m2		
Pest 2 Code, Type, Scale:	TAROF W	TAROF W	TAROF W	TAROF W
Height, Unit:	3 in	6 in		
Density, Unit:	1 m2	1 m2		
Pest 3 Code, Type, Scale:	SETVI W	SETVI W	SETVI W	SETVI W
Pest 4 Code, Type, Scale:	CCHSS W	CCHSS W	CCHSS W	CCHSS W
Pest 5 Code, Type, Scale:	ABUTH W	ABUTH W	ABUTH W	ABUTH W
Pest 6 Code, Type, Scale:	AMATU W	AMATU W	AMATU W	AMATU W

Application Equipment				
	A	B	C	D
Appl. Equipment:	Backpack	Backpack	Backpack	Backpack
Operating Pressure, Unit:	20 PSI	20 PSI	20 PSI	20 PSI
Nozzle Type:	Turbo Tee	Turbo Tee	Turbo Tee	Turbo Tee
Nozzle Size:	11003	11003	11003	11003
Nozzle Spacing, Unit:	20 in	20 in	20 in	20 in
Boom Length, Unit:	10 ft	10 ft	10 ft	10 ft
Boom Height, Unit:	15 in	15 in	15 in	15 in
Ground Speed, Unit:	2.7 mph	2.7 mph	2.7 mph	2.7 mph
Carrier:	WATER	WATER	WATER	WATER
Spray Volume, Unit:	20 gal/ac	20 gal/ac	20 gal/ac	20 gal/ac
Mix Size, Unit:	1.8 liters	1.8 liters	1.8 liters	1.8 liters
Propellant:	COMCO2	COMCO2	COMCO2	COMCO2

Date	By	Notes
07-10-2011	js	Weed Sizes in treatments 1 and 2 were ~ 12 inches Weed Sizes in treatments 3,4 and 5 were 2-5 inches

No.	Date	By	Deviations
1.	10-05-2011	js	Due to low weed population and an application error, rep 6 was omitted.

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Project ID: DEM-H-2011-US-D9F-G-01.0 Investigator: Stevan Knezevic											
Description	Marstail		Marstail		Dandelion		Dandelion		Green foxtail		
Rating Date	06-01-2011		07-10-2011		06-01-2011		07-10-2011		07-10-2011		
Rating Type	Control		Control		Control		Control		Control		
Rating Unit	Percent		Percent		Percent		Percent		Percent		
Days After First/Last Applic.	13 13		52 39		13 13		52 39		52 39		
Trt-Eval Interval											
Plant-Eval Interval	-6 DP-1		33 DP-1		-6 DP-1		33 DP-1		33 DP-1		
Trt No.	Treatment Name	Form Conc	Form Unit	Form Type	Rate Rate	Unit	Other Rate	Other Rate	Growth Unit	Stage	Appl Code
1	Roundup WeatherMAX NIS AMS	5.5 lb/gal 100 % 21.5 %	SL L GR	22 oz/a 0.25 % v/v 17 lb/100 gal	1060 g a/ha					3-5"weeds C	C
										0.0 b	0.0 b
2	Roundup WeatherMAX 2,4-D LV ester 4 NIS AMS Roundup WeatherMAX NIS AMS	5.5 lb/gal 4 lb/gal 100 % 21.5 % 5.5 lb/gal 100 % 21.5 %	SL EC L GR SL L GR	22 oz/a 0.506 lb ai/a 0.25 % v/v 17 lb/100 gal 22 oz/a 0.25 % v/v 17 lb/100 gal	1060 g a/ha 16.2 oz/a 1060 g a/ha					7-10 EPP A 7-10 EPP A 7-10 EPP A 7-10 EPP A 3-5"weeds C 3-5"weeds C 3-5"weeds C	A A A A C C C
										99.0 91.6 a 99.0 95.6 a	0.0 b
3	Roundup WeatherMAX OPTILL MSO AMS Roundup WeatherMAX NIS AMS	5.5 lb/gal 68 % 100 % 21.5 % 5.5 lb/gal 100 % 21.5 %	SL WG L GR SL L GR	22 oz/a 2 oz/a 1 % v/v 17 lb/100 gal 22 oz/a 0.25 % v/v 17 lb/100 gal	1060 g a/ha 95 g a/ha 1060 g a/ha					3-5 EPP B 3-5 EPP B 3-5 EPP B 3-5 EPP B 3-5"weeds C 3-5"weeds C 3-5"weeds C	B B B B C C C
										96.2 a	94.4 a 95.4 a
4	Roundup WeatherMAX OPTILL MSO AMS Roundup WeatherMAX NIS AMS PRIAXOR NIS	5.5 lb/gal 68 % 100 % 21.5 % 5.5 lb/gal 100 % 21.5 % 500 ga/l 100 %	SL WG L GR SL L SC L	22 oz/a 2 oz/a 1 % v/v 17 lb/100 gal 22 oz/a 0.25 % v/v 17 lb/100 gal 4 oz/a 0.25 % v/v	1060 g a/ha 95 g a/ha 1060 g a/ha 146 g a/ha					3-5 EPP B 3-5 EPP B 3-5 EPP B 3-5 EPP B 3-5"weeds C 3-5"weeds C 3-5"weeds C R3 R3	B B B B C C C D D
										96.2 a	95.4 a 98.0 a
5	Roundup WeatherMAX OPTILL MSO AMS Roundup WeatherMAX NIS AMS PRIAXOR FASTAC NIS	5.5 lb/gal 68 % 100 % 21.5 % 5.5 lb/gal 100 % 21.5 % 500 ga/l 100 ga/l 100 %	SL WG L GR SL L SC EC L	22 oz/a 2 oz/a 1 % v/v 17 lb/100 gal 22 oz/a 0.25 % v/v 17 lb/100 gal 4 oz/a 4 oz/a 0.25 % v/v	1060 g a/ha 95 g a/ha 1060 g a/ha 146 g a/ha 29.2 g a/ha					3-5 EPP B 3-5 EPP B 3-5 EPP B 3-5 EPP B 3-5"weeds C 3-5"weeds C 3-5"weeds C R3 R3 R3	B B B B C C C D D D
										97.2 a	96.2 a 95.3 a
LSD (P=.05)											6.18
Standard Deviation											4.61
CV											6.04
Grand Mean											99.0 76.24 99.0 76.32 57.73
Replicate F											2.798
Replicate Prob(F)											0.0617
Treatment F											428.707
Treatment Prob(F)											0.0001

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

Description										Gren foxtail	Sandbur	Sandbur	Velvetleaf	Velvetleaf		
Rating Date										08-03-2011	07-10-2011	08-03-2011	07-10-2011	08-03-2011		
Rating Type										Control	Control	Control	Control	Control		
Rating Unit										Percent	Percent	Percent	Percent	Percent		
Days After First/Last Applic.										76 24	52 39	76 24	52 39	76 24		
Trt-Eval Interval																
Plant-Eval Interval										57 DP-1	33 DP-1	57 DP-1	33 DP-1	57 DP-1		
Trt No.	Treatment Name	Form Conc	Form Unit	Form Type	Rate Rate	Rate Unit	Other Rate	Other Rate	Growth Unit	Stage	Appl Code					
1	Roundup WeatherMAX	5.5 lb/gal	SL		22 oz/a		1060 g a/ha			3-5"weeds	C	99.0 a	0.0 b	99.0 a	0.0 c	99.0 a
	NIS	100 %	L		0.25 % v/v					3-5"weeds	C					
	AMS	21.5 %	GR		17 lb/100 gal					3-5"weeds	C					
2	Roundup WeatherMAX	5.5 lb/gal	SL		22 oz/a		1060 g a/ha			7-10 EPP	A	99.0 a	0.0 b	99.0 a	0.0 c	99.0 a
	2,4-D LV ester 4	4 lb/gal	EC		0.506 lb ai/a		16.2 oz/a			7-10 EPP	A					
	NIS	100 %	L		0.25 % v/v					7-10 EPP	A					
	AMS	21.5 %	GR		17 lb/100 gal					7-10 EPP	A					
	Roundup WeatherMAX	5.5 lb/gal	SL		22 oz/a		1060 g a/ha			3-5"weeds	C					
	NIS	100 %	L		0.25 % v/v					3-5"weeds	C					
	AMS	21.5 %	GR		17 lb/100 gal					3-5"weeds	C					
3	Roundup WeatherMAX	5.5 lb/gal	SL		22 oz/a		1060 g a/ha			3-5 EPP	B	99.0 a	80.0 a	99.0 a	99.0 a	99.0 a
	OPTILL	68 %	WG		2 oz/a		95 g a/ha			3-5 EPP	B					
	MSO	100 %	L		1 % v/v					3-5 EPP	B					
	AMS	21.5 %	GR		17 lb/100 gal					3-5 EPP	B					
	Roundup WeatherMAX	5.5 lb/gal	SL		22 oz/a		1060 g a/ha			3-5"weeds	C					
	NIS	100 %	L		0.25 % v/v					3-5"weeds	C					
	AMS	21.5 %	GR		17 lb/100 gal					3-5"weeds	C					
4	Roundup WeatherMAX	5.5 lb/gal	SL		22 oz/a		1060 g a/ha			3-5 EPP	B	99.0 a	80.0 a	99.0 a	95.8 b	99.0 a
	OPTILL	68 %	WG		2 oz/a		95 g a/ha			3-5 EPP	B					
	MSO	100 %	L		1 % v/v					3-5 EPP	B					
	AMS	21.5 %	GR		17 lb/100 gal					3-5 EPP	B					
	Roundup WeatherMAX	5.5 lb/gal	SL		22 oz/a		1060 g a/ha			3-5"weeds	C					
	NIS	100 %	L		0.25 % v/v					3-5"weeds	C					
	AMS	21.5 %	GR		17 lb/100 gal					3-5"weeds	C					
	PRIAXOR	500 ga/l	SC		4 oz/a		146 g a/ha			R3	D					
	NIS	100 %	L		0.25 % v/v					R3	D					
5	Roundup WeatherMAX	5.5 lb/gal	SL		22 oz/a		1060 g a/ha			3-5 EPP	B	99.0 a	80.0 a	99.0 a	99.0 a	99.0 a
	OPTILL	68 %	WG		2 oz/a		95 g a/ha			3-5 EPP	B					
	MSO	100 %	L		1 % v/v					3-5 EPP	B					
	AMS	21.5 %	GR		17 lb/100 gal					3-5 EPP	B					
	Roundup WeatherMAX	5.5 lb/gal	SL		22 oz/a		1060 g a/ha			3-5"weeds	C					
	NIS	100 %	L		0.25 % v/v					3-5"weeds	C					
	AMS	21.5 %	GR		17 lb/100 gal					3-5"weeds	C					
	PRIAXOR	500 ga/l	SC		4 oz/a		146 g a/ha			R3	D					
	FASTAC	100 ga/l	EC		4 oz/a		29.2 g a/ha			R3	D					
	NIS	100 %	L		0.25 % v/v					R3	D					
LSD (P=.05)											0.00	3.77	0.00	2.95	0.00	
Standard Deviation											0.00	2.74	0.00	2.09	0.00	
CV											0.0	5.71	0.0	3.56	0.0	
Grand Mean											99.0	48.0	99.0	58.75	99.0	
Replicate F											0.000	0.333	0.000	0.625	0.000	
Replicate Prob(F)											1.0000	0.8503	1.0000	0.6554	1.0000	
Treatment F											0.000	1280.000	0.000	3285.459	0.000	
Treatment Prob(F)											1.0000	0.0001	1.0000	0.0001	1.0000	

Means followed by same letter do not significantly differ (P=.05, Duncan's New MRT)  
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Description										Watermemp	Watermemp	Soybean	Soybean																
Rating Date										07-10-2011	08-03-2011	10-05-2011	10-05-2011																
Rating Type										Control	Control	Moisture	Yield@13.0%																
Rating Unit										Percent	Percent	%	bu/A																
Days After First/Last Applic.										52	39	76	24	139	41	139	41												
Trt-Eval Interval																													
Plant-Eval Interval										33 DP-1	57 DP-1	120 DP-1	120 DP-1																
Trt No.	Treatment Name	Form Conc	Form Unit	Form Type	Rate Rate	Unit	Other Rate	Other Rate	Growth Unit	Stage	Appl Code																		
1	Roundup WeatherMAX NIS AMS	5.5 lb/gal	100 %	21.5 %	SL	L	GR	22 oz/a	0.25 % v/v	17 lb/100 gal	1060 g a/ha	3-5"weeds C	3-5"weeds C	3-5"weeds C	0.0 b	99.0 a	8.386 c	26.070 b											
2	Roundup WeatherMAX 2,4-D LV ester 4 NIS AMS Roundup WeatherMAX NIS AMS	5.5 lb/gal	4 lb/gal	100 %	21.5 %	SL	EC	5.5 lb/gal	100 %	21.5 %	SL	L	GR	22 oz/a	0.25 % v/v	17 lb/100 gal	1060 g a/ha	16.2 oz/a	7-10 EPP A	7-10 EPP A	7-10 EPP A	7-10 EPP A	3-5"weeds C	3-5"weeds C	3-5"weeds C	0.0 b	99.0 a	8.650 bc	37.014 a
3	Roundup WeatherMAX OPTILL MSO AMS Roundup WeatherMAX NIS AMS	5.5 lb/gal	68 %	100 %	21.5 %	SL	WG	5.5 lb/gal	100 %	21.5 %	SL	L	GR	22 oz/a	1 % v/v	17 lb/100 gal	1060 g a/ha	95 g a/ha	3-5 EPP B	3-5 EPP B	3-5 EPP B	3-5 EPP B	3-5"weeds C	3-5"weeds C	3-5"weeds C	96.8 a	99.0 a	8.616 bc	36.928 a
4	Roundup WeatherMAX OPTILL MSO AMS Roundup WeatherMAX NIS AMS PRIAXOR NIS	5.5 lb/gal	68 %	100 %	21.5 %	SL	WG	5.5 lb/gal	100 %	21.5 %	SL	L	GR	22 oz/a	1 % v/v	17 lb/100 gal	1060 g a/ha	95 g a/ha	3-5 EPP B	3-5 EPP B	3-5 EPP B	3-5 EPP B	3-5"weeds C	3-5"weeds C	3-5"weeds C	97.0 a	99.0 a	8.844 ab	39.574 a
5	Roundup WeatherMAX OPTILL MSO AMS Roundup WeatherMAX NIS AMS PRIAXOR FASTAC NIS	5.5 lb/gal	68 %	100 %	21.5 %	SL	WG	5.5 lb/gal	100 %	21.5 %	SL	L	GR	22 oz/a	1 % v/v	17 lb/100 gal	1060 g a/ha	95 g a/ha	3-5 EPP B	3-5 EPP B	3-5 EPP B	3-5 EPP B	3-5"weeds C	3-5"weeds C	3-5"weeds C	97.0 a	99.0 a	9.022 a	40.354 a
LSD (P=.05)										3.07	0.00	0.2574	3.8441																
Standard Deviation										2.20	0.00	0.1920	2.8670																
CV										3.79	0.0	2.21	7.97																
Grand Mean										58.15	99.0	8.7	35.99																
Replicate F										2.026	0.000	4.041	0.802																
Replicate Prob(F)										0.1600	1.0000	0.0188	0.5413																
Treatment F										2902.293	0.000	7.886	20.107																
Treatment Prob(F)										0.0001	1.0000	0.0010	0.0001																

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