

2011 POST Design of Anthem versus Standards in GLYPHOSATE program in SOYBEAN

Trial ID: 11 FMC SB 05A Anthem POST Protocol ID: 11 FMC SB 05A Anthem POST  
Location: Concord, NE  
Project ID: QNA792-2011-GLMXA-05A1 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: LG Seeds C2699 RR  
BBCH Scale: B5OY Planting Date: 06-16-2011  
Planting Method: SEEDED seeded Rate, Unit: 149000 s/a  
Depth, Unit: 1.25 in  
Row Spacing, Unit: 30 in

Pest Description

Pest 1 Type: W Code: SETVI Setaria viridis  
Common Name: Green foxtail  
  
Pest 2 Type: W Code: ABUTH Abutilon theophrasti  
Common Name: Velvetleaf  
  
Pest 3 Type: W Code: AMATU Amaranthus tuberculatus  
Common Name: Tall waterhemp

Site and Design

Plot Width, Unit: 6.667 FT Site Type: FIELD field  
Plot Length, Unit: 25 FT  
Plot Area, Unit: 166.6667 FT2 Tillage Type: NOTILL no-till  
Replications: 4 Study Design: RACOB L Randomized Complete Block (RCB)

Maintenance

No.	Date	Maintenance Treatment Name	Form Conc	Form Unit	Form Type	Rate	Rate Unit	Tank Mix
1.	06-05-2011	Roundup PowerMAX	5.5	lb/gal	SL	29	oz/A	yes
2.	06-05-2011	Cadet	0.91	lb/gal	EC	0.5	oz/A	yes
3.	06-05-2011	AMS	21.5	%	SG	2.5	oz/A	yes

Soil Description

% Sand: 10 % OM: 2.4 Texture: SICL silty clay loam  
% Silt: 58 pH: 5.6  
% Clay: 32 CEC: 18.6 Fert. Level: F fair  
Analyzed By:  
Midwest Labs

Application Description

	A
Application Date:	07-19-2011
Time of Day:	11:30 am
Application Method:	spray
Application Timing:	POST
Application Placement:	foliar
Applied By:	js
Air Temperature, Unit:	91 F
% Relative Humidity:	59
Wind Velocity, Unit:	7 mph
Wind Direction:	S
Dew Presence (Y/N):	N no
Soil Temperature, Unit:	85 F
Soil Moisture:	SLIDRY
% Cloud Cover:	0

Crop Stage At Each Application

	A
Crop 1 Code, BBCH Scale:	GLXMA BSOY
Stage Scale Used:	BBCH
Stage Majority, Percent:	5T
Height, Unit:	12 in

Pest Stage At Each Application

	A
Pest 1 Code, Type, Scale:	SETVI W
Height, Unit:	4 in
Height Minimum, Maximum:	1 6
Density, Unit:	1 m2
Pest 2 Code, Type, Scale:	ABUTH W
Height, Unit:	5 in
Height Minimum, Maximum:	2 8
Density, Unit:	.5 m2
Pest 3 Code, Type, Scale:	AMATU W
Height, Unit:	5 in
Height Minimum, Maximum:	3 7
Density, Unit:	1 m2

Application Equipment

	A
Appl. Equipment:	Backpack
Operating Pressure, Unit:	30 PSI
Nozzle Type:	AIXR
Nozzle Size:	110015
Nozzle Spacing, Unit:	20 in
Boom Length, Unit:	6.67 ft
Boom Height, Unit:	15 in
Ground Speed, Unit:	2.7 mph
Carrier:	WATER
Spray Volume, Unit:	15 gal/ac
Mix Size, Unit:	.9 liters
Propellant:	COMCO2

Northeast Research & Extension Center

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Description		Soybean	Soybean	Green foxtail	Green foxtail	Velvetleaf								
Rating Date		07-26-2011	08-20-2011	07-26-2011	08-20-2011	07-26-2011								
Rating Type		Injury	Injury	Control	Control	Control								
Rating Unit		Percent	Percent	Percent	Percent	Percent								
Days After First/Last Applic.		7 7	32 32	7 7	32 32	7 7								
Trt-Eval Interval		7 DA-A	32 DA-A	7 DA-A	32 DA-A	7 DA-A								
Plant-Eval Interval		40 DP-1	65 DP-1	40 DP-1	65 DP-1	40 DP-1								
Trt No.	Treatment Name	Form Conc	Form Unit	Form Type	Rate Rate	Other Rate	Other Unit	Growth Stage	Appl Code					
1	Anthem	2.15 lb/gal	SE		4 oz/a	75 g a/ha		POST 2T3T A		1.5 c	0.0 a	99.0 a	99.0 a	99.0 a
	Roundup PowerMAX	5.5 lb/gal	SL		22 oz/a			POST 2T3T A						
	AMS	21.5 %	SG		17 lb/100 gal			POST 2T3T A						
2	Anthem	2.15 lb/gal	SE		5.5 oz/a	104 g a/ha		POST 2T3T A		4.5 b	0.0 a	99.0 a	99.0 a	99.0 a
	Roundup PowerMAX	5.5 lb/gal	SL		22 oz/a			POST 2T3T A						
	AMS	21.5 %	SG		17 lb/100 gal			POST 2T3T A						
3	Anthem	2.15 lb/gal	SE		7 oz/a	132 g a/ha		POST 2T3T A		7.5 a	0.0 a	99.0 a	99.0 a	99.0 a
	Roundup PowerMAX	5.5 lb/gal	SL		22 oz/a			POST 2T3T A						
	AMS	21.5 %	SG		17 lb/100 gal			POST 2T3T A						
4	Flexstar GT	3.29 lb/gal	SL		3 pt/a	1380 g a/ha		POST 2T3T A		6.3 ab	0.0 a	99.0 a	99.0 a	99.0 a
	AMS	21.5 %	SG		17 lb/100 gal			POST 2T3T A						
5	Warrant	3 lb/gal	EC		3 pt/a	1260 g a/ha		POST 2T3T A		0.0 c	0.0 a	95.8 b	99.0 a	89.8 b
	Roundup PowerMAX	5.5 lb/gal	SL		22 oz/a			POST 2T3T A						
	AMS	21.5 %	SG		17 lb/100 gal			POST 2T3T A						
6	F6180	85 %	WG		1.75 oz/a	104 g a/ha		POST 2T3T A		0.0 c	0.0 a	99.0 a	99.0 a	93.5 ab
	Roundup PowerMAX	5.5 lb/gal	SL		22 oz/a			POST 2T3T A						
	AMS	21.5 %	SG		17 lb/100 gal			POST 2T3T A						
7	Roundup PowerMAX	5.5 lb/gal	SL		22 oz/a			POST 2T3T A		0.0 c	0.0 a	94.8 b	99.0 a	91.3 b
	AMS	21.5 %	SG		17 lb/100 gal			POST 2T3T A						
8	Nontreated Check									0.0 c	0.0 a	0.0 c	0.0 b	0.0 c
LSD (P=.05)					2.19	0.00				2.82	0.00			5.80
Standard Deviation					1.49	0.00				1.92	0.00			3.94
CV					60.21	0.0				2.24	0.0			4.7
Grand Mean					2.47	0.0				85.69	86.63			83.81
Replicate F					0.504	0.000				1.668	0.000			2.791
Replicate Prob(F)					0.6834	1.0000				0.2044	1.0000			0.0656
Treatment F					17.857	0.000				1308.812	0.000			298.979
Treatment Prob(F)					0.0001	1.0000				0.0001	1.0000			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										Velvetleaf	Waterhemp	Waterhemp	Soybean	Soybean
Rating Date										08-20-2011	07-26-2011	08-20-2011	10-05-2011	10-05-2011
Rating Type										Control	Control	Control	Moisture	Yield@13.0%
Rating Unit										Percent	Percent	Percent	%	bu/A
Days After First/Last Applic.										32 32	7 7	32 32	78 78	78 78
Trt-Eval Interval										32 DA-A	7 DA-A	32 DA-A	78 DA-A	78 DA-A
Plant-Eval Interval										65 DP-1	40 DP-1	65 DP-1	111 DP-1	111 DP-1
Trt No.	Treatment Name	Form Conc	Form Unit	Form Type	Rate Rate Unit	Other Rate	Other Rate Unit	Growth Stage	Appl Code					
1	Anthem	2.15 lb/gal	SE		4 oz/a	75 g a/ha		POST 2T3T A	A	99.0 a	99.0 a	99.0 a	9.375 a	33.410 a
	Roundup PowerMAX	5.5 lb/gal	SL		22 oz/a			POST 2T3T A	A					
	AMS	21.5 %	SG		17 lb/100 gal			POST 2T3T A	A					
2	Anthem	2.15 lb/gal	SE		5.5 oz/a	104 g a/ha		POST 2T3T A	A	99.0 a	98.0 ab	99.0 a	8.895 ab	31.830 a
	Roundup PowerMAX	5.5 lb/gal	SL		22 oz/a			POST 2T3T A	A					
	AMS	21.5 %	SG		17 lb/100 gal			POST 2T3T A	A					
3	Anthem	2.15 lb/gal	SE		7 oz/a	132 g a/ha		POST 2T3T A	A	99.0 a	99.0 a	99.0 a	8.778 b	31.475 a
	Roundup PowerMAX	5.5 lb/gal	SL		22 oz/a			POST 2T3T A	A					
	AMS	21.5 %	SG		17 lb/100 gal			POST 2T3T A	A					
4	Flexstar GT	3.29 lb/gal	SL		3 pt/a	1380 g a/ha		POST 2T3T A	A	99.0 a	98.3 ab	99.0 a	8.705 b	31.775 a
	AMS	21.5 %	SG		17 lb/100 gal			POST 2T3T A	A					
5	Warrant	3 lb/gal	EC		3 pt/a	1260 g a/ha		POST 2T3T A	A	99.0 a	96.0 bc	99.0 a	8.840 ab	32.610 a
	Roundup PowerMAX	5.5 lb/gal	SL		22 oz/a			POST 2T3T A	A					
	AMS	21.5 %	SG		17 lb/100 gal			POST 2T3T A	A					
6	F6180	85 %	WG		1.75 oz/a	104 g a/ha		POST 2T3T A	A	99.0 a	96.0 bc	99.0 a	8.760 b	31.770 a
	Roundup PowerMAX	5.5 lb/gal	SL		22 oz/a			POST 2T3T A	A					
	AMS	21.5 %	SG		17 lb/100 gal			POST 2T3T A	A					
7	Roundup PowerMAX	5.5 lb/gal	SL		22 oz/a			POST 2T3T A	A	99.0 a	93.8 c	99.0 a	8.873 ab	32.818 a
	AMS	21.5 %	SG		17 lb/100 gal			POST 2T3T A	A					
8	Nontreated Check									0.0 b	0.0 d	0.0 b	7.783 c	27.120 b
LSD (P=.05)										0.00	2.36	0.00	0.5147	2.9292
Standard Deviation										0.00	1.61	0.00	0.3499	1.9916
CV										0.0	1.89	0.0	4.0	6.3
Grand Mean										86.63	85.0	86.63	8.75	31.6
Replicate F										0.000	0.419	0.000	22.397	13.138
Replicate Prob(F)										1.0000	0.7410	1.0000	0.0001	0.0001
Treatment F										0.000	1831.548	0.000	6.410	3.742
Treatment Prob(F)										1.0000	0.0001	1.0000	0.0004	0.0087

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