

2011 Sonic Herbicide programs

Trial ID: 11 DOW SB Sonic Firstrate Protocol ID: 11 DOW SB Sonic Firstrate
Location: Concord, NE
Project ID: 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: B50Y Planting Date: 06-16-2011
Planting Method: SEEDED seeded Rate, Unit: 149000 s/a
Depth, Unit: 1.25 in
Row Spacing, Unit: 30 in

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	lb/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

Application Description

	A	B	C
Application Date:	06-16-2011	07-19-2011	07-30-2011
Time of Day:	6:30 pm	11:45 am	1:00 pm
Application Method:	spray	spray	spray
Application Timing:	PRE	POST	LPOST
Application Placement:	surface	foliar	foliar
Applied By:	js	js	js
Air Temperature, Unit:	86 F	91 F	85 F
% Relative Humidity:	40	59	70
Wind Velocity, Unit:	5 mph	7 mph	5 mph
Wind Direction:	S	S	S
Dew Presence (Y/N):	N no	N no	N no
Soil Temperature, Unit:	74 F	85 F	82 F
Soil Moisture:	adequate	SLIDRY	DRY
% Cloud Cover:	0	0	30

Crop Stage At Each Application

	A	B	C
Crop 1 Code, BBCH Scale:	GLXMA BSOY	GLXMA BSOY	GLXMA BSOY
Stage Scale Used:		BBCH	BBCH
Stage Majority, Percent:		5T	8T
Stage Maximum, Percent:			R1
Height, Unit:		12 in	18 in
Height Minimum, Maximum:			16 20

Application Equipment

	A	B	C
Appl. Equipment:	4 nozzle PRE	Backpack	Backpack
Operating Pressure, Unit:	20 PSI	30 PSI	30 PSI
Nozzle Type:	Turbo Tee	AIXR	AIXR
Nozzle Size:	11002	110015	110015
Nozzle Spacing, Unit:	20 in	20 in	20 in
Boom Length, Unit:	6.67 ft	6.67 ft	6.67 ft
Boom Height, Unit:	15 in	15 in	15 in
Ground Speed, Unit:	2.7 mph	2.7 mph	2.7 mph
Carrier:	WATER	WATER	WATER
Spray Volume, Unit:	15 gal/ac	15 gal/ac	15 gal/ac
Mix Size, Unit:	.9 liters	.9 liters	.9 liters
Propellant:	COMCO2	COMCO2	COMCO2

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Description		Green foxtail		Green foxtail		Green foxtail		Velvetleaf		Velvetleaf		Velvetleaf		Waterhemp	
Rating Date		07-19-2011		07-27-2011		08-24-2011		07-19-2011		07-27-2011		08-24-2011		07-19-2011	
Rating Type		Control		Control		Control		Control		Control		Control		Control	
Rating Unit		Percent		Percent		Percent		Percent		Percent		Percent		Percent	
Days After First/Last Applic.		33 33		41 8		69 25		33 33		41 8		69 25		33 33	
Trt-Eval Interval		33 DA-A		8 DA-B		33 DA-A		8 DA-A		8 DA-B		33 DA-A		33 DA-A	
Plant-Eval Interval		33 DP-1		41 DP-1		69 DP-1		33 DP-1		41 DP-1		69 DP-1		33 DP-1	
Trt No.	Treatment Name	Form Conc	Form Unit	Form Type	Rate	Growth Unit	Stage	Appl Code							
1	Sonic Durango AMS	70 % 4 lbae/gal 21 %	WG SL SG	3 oz/a 24 oz/a 2 % v/v	PRE LPOST 4"weed LPOST 4"weed	A C C			60.0 a	83.8 a	99.0 a	70.0	84.5 a	99.0 a	90.0
2	Sonic Durango AMS	70 % 4 lbae/gal 21 %	WG SL SG	4.5 oz/a 24 oz/a 2 % v/v	PRE LPOST 4"weed LPOST 4"weed	A C C			86.3 a	92.5 a	99.0 a	86.3	99.0 a	99.0 a	93.0
3	Durango Firstrate AMS	4 lbae/gal 84 % 21 %	SL WG SG	24 oz/a 0.3 oz/a 2 % v/v	POST 4"weed POST 4"weed POST 4"weed	B B B				99.0 a	99.0 a		99.0 a	99.0 a	
LSD (P=.05)		30.03		12.98		0.00				36.02		0.00			
Standard Deviation		13.35		7.50		0.00				11.84		0.00			
CV		18.25		8.17		0.0				12.57		0.0			
Grand Mean		73.13		91.75		99.0		49.88		94.17		99.0		61.5	
Replicate F		0.064		0.630		0.000				0.333		0.000			
Replicate Prob(F)		0.9752		0.6221		1.0000				0.8076		1.0000			
Treatment F		7.737		4.164		0.000				2.000		0.000			
Treatment Prob(F)		0.0689		0.0734		1.0000				0.3333		1.0000			

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	Waterhemp	Waterhemp	Prostate spurge	Soybean	Soybean						
Rating Date	07-27-2011	08-24-2011	07-19-2011	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.	41 8	69 25	33 33	111 67	111 67						
Trt-Eval Interval	8 DA-B		33 DA-A								
Plant-Eval Interval	41 DP-1	69 DP-1	33 DP-1	111 DP-1	111 DP-1						
Trt No.	Treatment Name	Form Conc	Form Unit	Rate	Growth Stage	Appl Code					
1	Sonic	70 %	WG	3 oz/a	PRE	A					
	Durango	4 lbae/gal	SL	24 oz/a	LPOST 4"weed	C			91.0 a	8.880 a	
	AMS	21 %	SG	2 % v/v	LPOST 4"weed	C				33.173 a	
2	Sonic	70 %	WG	4.5 oz/a	PRE	A	99.0	99.0	96.8 a	9.148 a	
	Durango	4 lbae/gal	SL	24 oz/a	LPOST 4"weed	C				30.560 a	
	AMS	21 %	SG	2 % v/v	LPOST 4"weed	C					
3	Durango	4 lbae/gal	SL	24 oz/a	POST 4"weed	B	99.0	99.0		9.050 a	
	Firstrate	84 %	WG	0.3 oz/a	POST 4"weed	B				32.047 a	
	AMS	21 %	SG	2 % v/v	POST 4"weed	B					
LSD (P=.05)									14.37	1.2042	7.0706
Standard Deviation									6.39	0.6960	2.7215
CV									6.8	7.71	8.52
Grand Mean							74.25	74.25	93.88	9.03	31.93
Replicate F									1.147	1.060	1.032
Replicate Prob(F)									0.4564	0.4329	0.4560
Treatment F									1.621	0.151	0.696
Treatment Prob(F)									0.2926	0.8628	0.5645

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