

University of Nebraska

Control of RR Corn II in Soybeans

Trial ID: L0716
Location: Havelock

Study Dir.: Kevin Horky
Investigator: Dr. Mark Bernards

GENERAL TRIAL INFORMATION

Study Director: Kevin Horky **Title:** Research Technician
Affiliation: University of Nebraska Lincoln
Postal Code: 68583
Investigator: Dr. Mark Bernards **Title:** Ext. Weed Specialist
Affiliation: University of Nebraska Lincoln
Postal Code: 68583

TRIAL LOCATION

City: Lincoln
State/Prov.: NE
Postal Code: 68583

Conducted Under GLP (Y/N): N **Conducted Under GEP (Y/N):** N

CROP AND WEED DESCRIPTION

Weed	Code	Common Name	Scientific Name
1.	ABUTH	Velvetleaf	Abutilon theophrasti
2.	AMAPA	Amaranth, Palmer	Amaranthus palmeri
3.	HELAN	Common sunflower	Helianthus annuus
4.	ZEAMX	Corn	Zea mays

Crop 1: GLXMA SOYBEAN **Variety:** Asgrow 2703
Planting Date: 21/May/2007 **Planting Method:** planted
Rate: 180000 seeds/acre **Depth:** 1 in
Row Spacing: 30 in **Seed Bed:** COARSE
Soil Moisture: good **Emergence Date:** 28/May/2007

SITE AND DESIGN

Plot Width, Unit: 10 FT **Plot Length, Unit:** 30 FT **Reps:** 3
Site Type: field
Tillage Type: conventional **Study Design:** RANDOMIZED COMPLETE BLOCK

MAINTENANCE

Field Prep./Maintenance: Field was disked once, then field cultivated once.

SOIL DESCRIPTION

% Sand: 6 **% OM:** 3.1 **Texture:** Silty clay loam
% Silt: 65 **pH:** 6.6 **Soil Name:** Sharpesburg
% Clay: 29 **CEC:** 31 **Fert. Level:** good

APPLICATION DESCRIPTION

	A
Application Date:	27/Jun/2007
Time of Day:	10:00 am
Application Method:	Spray
Application Timing:	lpost
Applic. Placement:	BROFOL
Air Temp., Unit:	87 F
% Relative Humidity:	38
Wind Velocity, Unit:	3 mph
Dew Presence (Y/N):	n
Soil Temp., Unit:	82 F
Soil Moisture:	good
% Cloud Cover:	30

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CROP STAGE AT EACH APPLICATION

A	
Crop 1 Code, Stage:	GLXMA
Stage Scale:	V5
Height, Unit:	12 in

WEED STAGE AT EACH APPLICATION

A	
Weed 1 Code, Stage:	ABUTH
Stage Scale:	8 in
Density, Unit:	5 m2
Weed 2 Code, Stage:	AMAPA
Stage Scale:	8 in
Density, Unit:	10 m2
Weed 3 Code, Stage:	HELAN
Stage Scale:	10 in
Density, Unit:	5 m2
Weed 4 Code, Stage:	ZEAMX
Stage Scale:	17 in
Density, Unit:	10 m2

APPLICATION EQUIPMENT

A	
Appl. Equipment:	IH cub
Operating Pressure:	30
Nozzle Type:	Turbo Tee
Nozzle Size:	11015
Nozzle Spacing, Unit:	15 in
Nozzles/Row:	2
Boom Length, Unit:	10 ft
Boom Height, Unit:	30 in
Ground Speed, Unit:	3 mph
Carrier:	water
Spray Volume, Unit:	15 gpa
Propellant:	air

Trial Comments

Valent protocol MD 01.14
 Corn 18-20 inch
 Apply pre herbicide for early weed control, plant in soybeans.

Data requested
 Crop Injury 14, 28, 56 DAT

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Weed Code				ZEAMX	ABUTH	AMAPA	HELAN	ZEAMX	
Crop Code				GLXMA	GLXMA	GLXMA	GLXMA	GLXMA	
Rating Data Type				CONTROL	CONTROL	CONTROL	CONTROL	CONTROL	
Rating Unit				%	%	%	%	%	
Rating Date				11/Jul/2007	11/Jul/2007	11/Jul/2007	11/Jul/2007	25/Jul/2007	
Trt-Eval Interval				14 DA-A	14 DA-A	14 DA-A	14 DA-A	28 DA-A	
Trt	Treatment	Rate	Grow						
No.	Name	Rate	Stg	Plot	1	2	3	4	5
1	Roundup Original Max	22 oz/a	lpost	101	0	95	99	99	0
	AMS	17 lb/100 gal	lpost	208	0	95	99	99	0
				307	0	95	99	99	0
	Mean =				0	95	99	99	0
2	Select Max	9 oz/a	lpost	102	70	99	99	99	95
	Roundup Original Max	22 oz/a	lpost	204	85	99	99	99	95
	AMS	17 lb/100 gal	lpost	305	85	95	99	99	95
	Mean =				80	98	99	99	95
3	Select Max	14 oz/a	lpost	103	60	99	99	99	95
	Roundup Original Max	22 oz/a	lpost	206	80	95	99	99	95
	AMS	17 lb/100 gal	lpost	301	80	99	99	99	95
	Mean =				73	98	99	99	95
4	Select Max	9 oz/a	lpost	104	80	95	99	99	90
	Roundup Original Max	22 oz/a	lpost	202	70	99	99	99	90
	AMS	17 lb/100 gal	lpost	306	85	95	99	99	90
	NIS	0.25 % v/v	lpost						
Mean =				78	96	99	99	90	
5	V-10207	6 oz/a	lpost	105	70	99	99	99	95
	Roundup Original Max	22 oz/a	lpost	207	85	99	99	99	95
	AMS	17 lb/100 gal	lpost	303	90	99	99	99	99
	Mean =				82	99	99	99	96
6	V-10207	10 oz/a	lpost	106	85	99	99	99	95
	Roundup Original Max	22 oz/a	lpost	203	80	95	99	99	90
	AMS	17 lb/100 gal	lpost	302	80	99	99	99	95
	Mean =				82	98	99	99	93
7	Select Max	6 oz/a	lpost	107	75	99	99	99	90
	Roundup Original Max	22 oz/a	lpost	205	80	95	99	99	90
	AMS	17 lb/100 gal	lpost	308	80	95	99	99	90
	Mean =				78	96	99	99	90
8	V-10207	4 oz/a	lpost	108	80	95	99	99	95
	Roundup Original Max	22 oz/a	lpost	201	65	99	99	99	90
	AMS	17 lb/100 gal	lpost	304	80	95	99	99	95
	Mean =				75	96	99	99	93

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Weed Code					ABUTH	AMAPA	HELAN
Crop Code					GLXMA	GLXMA	GLXMA
Rating Data Type					CONTROL	CONTROL	CONTROL
Rating Unit					%	%	%
Rating Date					25/Jul/2007	25/Jul/2007	25/Jul/2007
Trt-Eval Interval					28 DA-A	28 DA-A	28 DA-A
Trt No.	Treatment Name	Rate	Unit	Grow Stg Plot	6	7	8
1	Roundup Original Max	22	oz/a	lpost 101	99	99	99
	AMS	17	lb/100 gal	lpost 208	99	99	99
				307	95	99	99
				Mean =	98	99	99
2	Select Max	9	oz/a	lpost 102	99	99	99
	Roundup Original Max	22	oz/a	lpost 204	99	99	99
	AMS	17	lb/100 gal	lpost 305	99	99	99
				Mean =	99	99	99
3	Select Max	14	oz/a	lpost 103	95	99	99
	Roundup Original Max	22	oz/a	lpost 206	99	99	99
	AMS	17	lb/100 gal	lpost 301	99	99	99
				Mean =	98	99	99
4	Select Max	9	oz/a	lpost 104	99	99	99
	Roundup Original Max	22	oz/a	lpost 202	99	99	99
	AMS	17	lb/100 gal	lpost 306	99	99	99
	NIS	0.25	% v/v	lpost			
			Mean =	99	99	99	
5	V-10207	6	oz/a	lpost 105	95	95	99
	Roundup Original Max	22	oz/a	lpost 207	99	99	99
	AMS	17	lb/100 gal	lpost 303	95	99	99
				Mean =	96	98	99
6	V-10207	10	oz/a	lpost 106	99	99	99
	Roundup Original Max	22	oz/a	lpost 203	99	99	99
	AMS	17	lb/100 gal	lpost 302	99	99	99
				Mean =	99	99	99
7	Select Max	6	oz/a	lpost 107	95	95	99
	Roundup Original Max	22	oz/a	lpost 205	95	99	99
	AMS	17	lb/100 gal	lpost 308	95	99	99
				Mean =	95	98	99
8	V-10207	4	oz/a	lpost 108	95	99	99
	Roundup Original Max	22	oz/a	lpost 201	99	99	99
	AMS	17	lb/100 gal	lpost 304	99	99	99
				Mean =	98	99	99

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Crop Code				GLXMA	GLXMA	GLXMA	GLXMA	GLXMA	GLXMA	
Rating Data Type				CONTROL	CONTROL	CONTROL	CONTROL	CONTROL	CONTROL	
Rating Unit				%	%	%	%	%	%	
Rating Date				11/Jul/2007	11/Jul/2007	11/Jul/2007	11/Jul/2007	25/Jul/2007	25/Jul/2007	
Trt-Eval Interval				14 DA-A	14 DA-A	14 DA-A	14 DA-A	28 DA-A	28 DA-A	
Trt	Treatment	Rate	Unit	Grow						
No.	Name			Stg	1	2	3	4	5	6
1	Roundup Original Max	22	oz/a	lpost	0 b	95 a	99 a	99 a	0 c	98 a
	AMS	17	lb/100 gal	lpost						
2	Select Max	9	oz/a	lpost	80 a	98 a	99 a	99 a	95 a	99 a
	Roundup Original Max	22	oz/a	lpost						
	AMS	17	lb/100 gal	lpost						
3	Select Max	14	oz/a	lpost	73 a	98 a	99 a	99 a	95 a	98 a
	Roundup Original Max	22	oz/a	lpost						
	AMS	17	lb/100 gal	lpost						
4	Select Max	9	oz/a	lpost	78 a	96 a	99 a	99 a	90 b	99 a
	Roundup Original Max	22	oz/a	lpost						
	AMS	17	lb/100 gal	lpost						
	NIS	0.25	% v/v	lpost						
5	V-10207	6	oz/a	lpost	82 a	99 a	99 a	99 a	96 a	96 a
	Roundup Original Max	22	oz/a	lpost						
	AMS	17	lb/100 gal	lpost						
6	V-10207	10	oz/a	lpost	82 a	98 a	99 a	99 a	93 ab	99 a
	Roundup Original Max	22	oz/a	lpost						
	AMS	17	lb/100 gal	lpost						
7	Select Max	6	oz/a	lpost	78 a	96 a	99 a	99 a	90 b	95 a
	Roundup Original Max	22	oz/a	lpost						
	AMS	17	lb/100 gal	lpost						
8	V-10207	4	oz/a	lpost	75 a	96 a	99 a	99 a	93 ab	98 a
	Roundup Original Max	22	oz/a	lpost						
	AMS	17	lb/100 gal	lpost						
	LSD (P=.05)				12.4	3.6	0.0	0.0	2.6	2.7
	Standard Deviation				7.1	2.1	0.0	0.0	1.5	1.5
	CV				10.36	2.13	0.0	0.0	1.82	1.58
	Grand Mean				68.54	97.0	99.0	99.0	81.63	97.67
	Bartlett's X2				5.037	0.0	0.0	0.0	0.119	0.0
	P(Bartlett's X2)				0.539	1.00	.	.	0.942	1.00
	Replicate F				2.251	0.467	0.000	0.000	2.935	1.960
	Replicate Prob(F)				0.1421	0.6365	1.0000	1.0000	0.0862	0.1776
	Treatment F				46.133	1.067	0.000	0.000	1480.879	2.560
	Treatment Prob(F)				0.0001	0.4324	1.0000	1.0000	0.0001	0.0637

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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Weed Code				AMAPA	HELAN
Crop Code				GLXMA	GLXMA
Rating Data Type				CONTROL	CONTROL
Rating Unit				%	%
Rating Date				25/Jul/2007	25/Jul/2007
Trt-Eval Interval				28 DA-A	28 DA-A
Trt No.	Treatment Name	Rate	Unit	Grow Stg	
				7	8
1	Roundup Original Max AMS	22 oz/a 17 lb/100 gal	lpost lpost	99 a	99 a
2	Select Max Roundup Original Max AMS	9 oz/a 22 oz/a 17 lb/100 gal	lpost lpost lpost	99 a	99 a
3	Select Max Roundup Original Max AMS	14 oz/a 22 oz/a 17 lb/100 gal	lpost lpost lpost	99 a	99 a
4	Select Max Roundup Original Max AMS NIS	9 oz/a 22 oz/a 17 lb/100 gal 0.25 % v/v	lpost lpost lpost lpost	99 a	99 a
5	V-10207 Roundup Original Max AMS	6 oz/a 22 oz/a 17 lb/100 gal	lpost lpost lpost	98 a	99 a
6	V-10207 Roundup Original Max AMS	10 oz/a 22 oz/a 17 lb/100 gal	lpost lpost lpost	99 a	99 a
7	Select Max Roundup Original Max AMS	6 oz/a 22 oz/a 17 lb/100 gal	lpost lpost lpost	98 a	99 a
8	V-10207 Roundup Original Max AMS	4 oz/a 22 oz/a 17 lb/100 gal	lpost lpost lpost	99 a	99 a
LSD (P=.05)				1.9	0.0
Standard Deviation				1.1	0.0
CV				1.08	0.0
Grand Mean				98.67	99.0
Bartlett's X2				0.0	0.0
P(Bartlett's X2)				1.00	.
Replicate F				2.333	0.000
Replicate Prob(F)				0.1335	1.0000
Treatment F				1.000	0.000
Treatment Prob(F)				0.4706	1.0000

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.