

MSU Weed Science Research Program
Weed Control Systems in Narrow-Row Roundup Ready Sugarbeets III

Trial ID: SB07-07 Robinson Study Dir.: Armstrong, Powell, Sprague
Conducted: Robinson's Investigator: Christy Sprague

Date Planted: 4/21/07 **Row Spacing:** IN
Variety: Beta RZ02RR07 **No. of Reps:** 4
Population: **% OM:** 10.7
Soil Type: Clay Loam **pH:** 7.5
Plot Size: 15 X 30 FT **Design:** RANDOMIZED COMPLETE BLOCK

Tillage: Fall Moldboard Plowed
Spring Tooth drag X2 4/21/07

Crop and Weed Description

Weed	Code	Common Name	Scientific Name
1.	ABUTH	VELVETLEAF	ABUTILON THEOPHRASTI MEDIK.
2.	CHEAL	LAMBSQUARTERS, COMMON	CHENOPODIUM ALBUM L.
3.	AMARE	PIGWEEED, REDROOT	AMARANTHUS RETROFLEXUS L.
4.	SOLPT	NIGHTSHADE, EASTERN BLACK	SOLANUM PTYCANTHUM DUNAL
5.	POLPY	SMARTWEED, PENNSYLVANIA	POLYGONUM PENNSYLVANICUM L.
Crop	Code	Common Name	
1.	BETVU	BEET, SUGAR	

Application Description

	A	B	C	D	E
Application Timing:	STD 1	2" Weeds	STD 2	4" Weeds	Timing E
Date Treated:	5/11/07	5/18/07	5/22/07	5/30/07	6/6/07
Time Treated:	10:30 am	5:00 pm	2:00 pm	2:00 pm	1:20 pm
% Cloud Cover:	75	10	0	60	10
Air Temp., Unit:	77 F	70 F	84 F	90 F	70 F
% Relative Humidity:	51	20	28	32	49
Wind Speed/Unit/Dir:	2 mph SE	5 mph W	6 mph SW	4 mph SW	5 mph SW
Soil Temp., Unit:	68 F	64 F	74 F	78 F	63 F
Soil/Leaf Surface M:	4 5	5 5	5 5	5 5	4 5
Soil Moist (1=w 5=d):	3	5	4	4	3

Crop Stage at Each Application

	A	B	C	D	E
Crop Name:	BETVU	BETVU	BETVU	BETVU	BETVU
Height (In.):	1/2-1"	3/4-2"	1-2"	3-6"	7-8.5"
Stage (L):	coty-2	coty-4	4	4-8	12

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Weed Stage at Each Application

	A	B	C	D	E
Weed 1 Name:	ABUTH	ABUTH	ABUTH	ABUTH	ABUTH
Height (In.):	1/4-3/4"	1/4-1.5"	1"	2-3.5"	1.5-3"
Stage (L):	coty-1	coty-2	2	2-4	4-5
Weed 2 Name:	CHEAL	CHEAL	CHEAL	CHEAL	CHEAL
Height (In.):	1/4-3/4"	1/2-1.25"	-	1-4"	1.5-5.5"
Stage (L):	coty-4	coty-6	-	6-many	6-many
Weed 3 Name:	AMARE	AMARE	AMARE	AMARE	AMARE
Height (In.):	1/4-1/2"	1/4-3/4"	-	1/2-3"	1.5-4"
Stage (L):	coty-2	coty-2	-	4-many	6-12
Weed 4 Name:	SOLPT	SOLPT	SOLPT	SOLPT	SOLPT
Height (In.):				1-2.5"	3"
Stage (L):				2-4	8
Weed 5 Name:	POLPY	POLPY	POLPY	POLPY	POLPY
Height (In.):				2-3"	7.5"
Stage (L):				many	many

Weed Density (plants/sq. ft.)

	1	2	3	4
Date:	7/12/07	7/12/07	7/12/07	7/12/07
Weed Name:	CHEAL	POLPY	AMARE	ABUTH
Density:	2	1	1	1

Application Equipment

Appl	Sprayer Type	Speed MPH	Nozzle Type	Nozzle Size	Nozzle Height	Nozzle Spacing	Boom Width	GPA	Carrier	PSI
A	Cub	3.8	AirMix	11003	21"	20	100	19	water	27
B	Cub	3.8	AirMix	11003	22"	20	100	19	water	27
C	Cub	3.8	AirMix	11003	22"	20	100	19	water	27
D	Cub	3.8	AirMix	11003	25"	20	100	19	water	27
E	Cub	3.8	AirMix	11003	24"	20	100	19	water	27

Comments: Application B- Treatments: 13,14,17,18,21,22
Application D- Treatments: 15,16,19,20,23,24

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Weed Code								CHEAL	AMARE	SOLPT	POLCO
Crop Code								BETVU			
Rating Data Type								injury	control	control	control
Rating Unit								precent	precent	precent	precent
Rating Date								6/6/07	6/6/07	6/6/07	6/6/07
Trt-Eval Interval								26 DA-A	26 DA-A	26 DA-A	26 DA-A

Trt No.	Treatment Name	Form Conc	Form Type	Rate	Rate Unit	Grow Stg	Appl Code					
13	20" rows							0	92	97	99	74
	Roundup WeatherMax	4.5	SL	22	fl oz/a	2" weeds	B					
	Ammonium sulfate		WG	17	lb/100 gal	2" weeds	B					
	Roundup WeatherMax	4.5	SL	22	fl oz/a	+ 4" wds	F					
	Ammonium sulfate		WG	17	lb/100 gal	+ 4" wds	F					
14	20" rows							0	90	97	99	74
	Roundup WeatherMax	4.5	SL	22	fl oz/a	2" weeds	B					
	Ammonium sulfate		WG	17	lb/100 gal	2" weeds	B					
	Roundup WeatherMax	4.5	SL	22	fl oz/a	+ 4" wds	F					
	Ammonium sulfate		WG	17	lb/100 gal	+ 4" wds	F					
	Roundup WeatherMax	4.5	SL	22	fl oz/a	Scout	H					
	Ammonium sulfate		WG	17	lb/100 gal	Scout	H					
15	20" rows							0	83	98	97	99
	Roundup WeatherMax	4.5	SL	22	fl oz/a	4" weeds	D					
	Ammonium sulfate		WG	17	lb/100 gal	4" weeds	D					
	Roundup WeatherMax	4.5	SL	22	fl oz/a	+ 4" wds	G					
	Ammonium sulfate		WG	17	lb/100 gal	+ 4" wds	G					
16	20" rows							0	83	98	99	99
	Roundup WeatherMax	4.5	SL	22	fl oz/a	4" weeds	D					
	Ammonium sulfate		WG	17	lb/100 gal	4" weeds	D					
17	30" rows							0	95	93	97	74
	Roundup WeatherMax	4.5	SL	22	fl oz/a	2" weeds	B					
	Ammonium sulfate		WG	17	lb/100 gal	2" weeds	B					
	Roundup WeatherMax	4.5	SL	22	fl oz/a	+ 4" wds	F					
	Ammonium sulfate		WG	17	lb/100 gal	+ 4" wds	F					
18	30" rows							0	94	93	97	74
	Roundup WeatherMax	4.5	SL	22	fl oz/a	2" weeds	B					
	Ammonium sulfate		WG	17	lb/100 gal	2" weeds	B					
	Roundup WeatherMax	4.5	SL	22	fl oz/a	+ 4" wds	F					
	Ammonium sulfate		WG	17	lb/100 gal	+ 4" wds	F					
	Roundup WeatherMax	4.5	SL	22	fl oz/a	Scout	H					
	Ammonium sulfate		WG	17	lb/100 gal	Scout	H					
19	30" rows							0	84	99	99	90
	Roundup WeatherMax	4.5	SL	22	fl oz/a	4" weeds	D					
	Ammonium sulfate		WG	17	lb/100 gal	4" weeds	D					
	Roundup WeatherMax	4.5	SL	22	fl oz/a	+ 4" wds	G					
	Ammonium sulfate		WG	17	lb/100 gal	+ 4" wds	G					
20	30" rows							0	84	99	99	94
	Roundup WeatherMax	4.5	SL	22	fl oz/a	4" weeds	D					
	Ammonium sulfate		WG	17	lb/100 gal	4" weeds	D					
21	15" rows							0	97	96	99	74
	Roundup WeatherMax	4.5	SL	22	fl oz/a	2" weeds	B					
	Ammonium sulfate		WG	17	lb/100 gal	2" weeds	B					
	Roundup WeatherMax	4.5	SL	22	fl oz/a	+ 4" wds	F					
	Ammonium sulfate		WG	17	lb/100 gal	+ 4" wds	F					
22	15" rows							0	98	98	99	74
	Roundup WeatherMax	4.5	SL	22	fl oz/a	2" weeds	B					
	Ammonium sulfate		WG	17	lb/100 gal	2" weeds	B					
	Roundup WeatherMax	4.5	SL	22	fl oz/a	+ 4" wds	F					
	Ammonium sulfate		WG	17	lb/100 gal	+ 4" wds	F					
	Roundup WeatherMax	4.5	SL	22	fl oz/a	Scout	H					
	Ammonium sulfate		WG	17	lb/100 gal	Scout	H					

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Crop Code	BETVU			
Rating Data Type	injury	control	control	control
Rating Unit	precent	precent	precent	precent
Rating Date	6/6/07	6/6/07	6/6/07	6/6/07
Trt-Eval Interval	26 DA-A	26 DA-A	26 DA-A	26 DA-A

Trt No.	Treatment Name	Form Conc	Form Type	Rate	Rate Unit	Grow Stg	Appl Code					
23	15" rows							0	88	99	92	99
	Roundup WeatherMax	4.5	SL	22	fl oz/a	4" weeds	D					
	Ammonium sulfate		WG	17	lb/100 gal	4" weeds	D					
	Roundup WeatherMax	4.5	SL	22	fl oz/a	+ 4" wds	G					
	Ammonium sulfate		WG	17	lb/100 gal	+ 4" wds	G					
24	15" weeds							0	86	99	92	99
	Roundup WeatherMax	4.5	SL	22	fl oz/a	4" weeds	D					
	Ammonium sulfate		WG	17	lb/100 gal	4" weeds	D					
25	15" rows							0	0	0	0	25
	Roundup WeatherMax	4.5	SL	22	fl oz/a	6" weeds	E					
	Ammonium sulfate		WG	17	lb/100 gal	6" weeds	E					
	Roundup WeatherMax	4.5	SL	22	fl oz/a	+ 4" wds	H					
	Ammonium sulfate		WG	17	lb/100 gal	+ 4" wds	H					
26	15" rows							0	0	0	0	25
	Untreated											
27	15" rows							0	99	99	99	94
	Weed-Free											
	Roundup WeatherMax	4.5	SL	22	fl oz/a	2" weeds	A					
	Ammonium sulfate		WG	17	lb/100 gal	2" weeds	A					
	Roundup WeatherMax	4.5	SL	22	fl oz/a	4" weeds	E					
	Ammonium sulfate		WG	17	lb/100 gal	4" weeds	E					
	Roundup WeatherMax	4.5	SL	22	fl oz/a	Scout	H					
	Ammonium sulfate		WG	17	lb/100 gal	Scout	H					
28	15" rows							11	94	99	99	99
	Betamix	1.3	EC	2	pt/a	STD 1	A					
	Upbeet	50	DF	0.5	oz/a	STD 1	A					
	Stinger	3	L	4	fl oz/a	STD 1	A					
	Betamix	1.3	EC	3	pt/a	STD 2	C					
	Upbeet	50	DF	0.5	oz/a	STD 2	C					
	Stinger	3	L	4	fl oz/a	STD 2	C					
	Activator 90 (NIS)		L	0.25	% v/v	STD 2	C					
29	30" rows							0	0	0	0	0
	Roundup WeatherMax	4.5	SL	22	fl oz/a	6" weeds	E					
	Ammonium sulfate		WG	17	lb/100 gal	6" weeds	E					
	Roundup WeatherMax	4.5	SL	22	fl oz/a	+ 4" wds	H					
	Ammonium sulfate		WG	17	lb/100 gal	+ 4" wds	H					
30	30" rows							0	0	0	0	0
	Untreated											
31	30" rows							0	99	99	99	99
	Weed-Free											
	Roundup WeatherMax	4.5	SL	22	fl oz/a	2" weeds	A					
	Ammonium sulfate		WG	17	lb/100 gal	2" weeds	A					
	Roundup WeatherMax	4.5	SL	22	fl oz/a	4" weeds	E					
	Ammonium sulfate		WG	17	lb/100 gal	4" weeds	E					
	Roundup WeatherMax	4.5	SL	22	fl oz/a	Scout	H					
	Ammonium sulfate		WG	17	lb/100 gal	Scout	H					

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Crop Code	BETVU			
Rating Data Type	injury	control	control	control
Rating Unit	precent	precent	precent	precent
Rating Date	6/6/07	6/6/07	6/6/07	6/6/07
Trt-Eval Interval	26 DA-A	26 DA-A	26 DA-A	26 DA-A

Trt No.	Treatment Name	Form Conc	Form Type	Rate	Rate Unit	Grow Stg	Appl Code	CHEAL	AMARE	SOLPT	POLCO	
32	30" rows							15	98	99	99	
	Betamix	1.3	EC	2	pt/a	STD 1	A					
	Upbeet	50	DF	0.5	oz/a	STD 1	A					
	Stinger	3	L	4	fl oz/a	STD 1	A					
	Betamix	1.3	EC	3	pt/a	STD 2	C					
	Upbeet	50	DF	0.5	oz/a	STD 2	C					
	Stinger	3	L	4	fl oz/a	STD 2	C					
	Activator 90 (NIS)		L	0.25	% v/v	STD 2	C					
33	20" rows							0	0	0	0	
	Roundup WeatherMax	4.5	SL	22	fl oz/a	6" weeds	E					
	Ammonium sulfate		WG	17	lb/100 gal	6" weeds	E					
	Roundup WeatherMax	4.5	SL	22	fl oz/a	+ 4" wds	H					
	Ammonium sulfate		WG	17	lb/100 gal	+ 4" wds	H					
34	20" rows							0	0	0	0	
	Untreated											
35	20" rows							0	99	99	99	
	Weed-Free											
	Roundup WeatherMax	4.5	SL	22	fl oz/a	2" weeds	A					
	Ammonium sulfate		WG	17	lb/100 gal	2" weeds	A					
	Roundup WeatherMax	4.5	SL	22	fl oz/a	4" weeds	E					
	Ammonium sulfate		WG	17	lb/100 gal	4" weeds	E					
	Roundup WeatherMax	4.5	SL	22	fl oz/a	Scout	H					
	Ammonium sulfate		WG	17	lb/100 gal	Scout	H					
36	20" rows							15	98	95	99	
	Betamix	1.3	EC	2	pt/a	STD 1	A					
	Upbeet	50	DF	0.5	oz/a	STD 1	A					
	Stinger	3	L	4	fl oz/a	STD 1	A					
	Betamix	1.3	EC	3	pt/a	STD 2	C					
	Upbeet	50	DF	0.5	oz/a	STD 2	C					
	Stinger	3	L	4	fl oz/a	STD 2	C					
	Activator 90 (NIS)		L	0.25	% v/v	STD 2	C					
LSD (P=.05)								0.7	5.1	3.3	6.1	39.9
Standard Deviation								0.5	3.6	2.4	4.3	28.2
CV								29.69	5.2	3.22	5.85	40.66

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Weed Code	ABUTH	CHEAL	AMARE	ABUTH	
Crop Code					BETVU
Rating Data Type	control	control	control	control	count
Rating Unit	percent	percent	percent	percent	#/100'
Rating Date	6/6/07	7/2/07	7/2/07	7/2/07	9/20/07
Trt-Eval Interval	26 DA-A	52 DA-A	52 DA-A	52 DA-A	132 DA-A

Trt No.	Treatment Name	Form Conc	Form Type	Rate	Rate Unit	Grow Stg	Appl Code					
13	20" rows							99	99	96	99	117
	Roundup WeatherMax	4.5	SL	22	fl oz/a	2" weeds	B					
	Ammonium sulfate		WG	17	lb/100 gal	2" weeds	B					
	Roundup WeatherMax	4.5	SL	22	fl oz/a	+ 4" wds	F					
	Ammonium sulfate		WG	17	lb/100 gal	+ 4" wds	F					
14	20" rows							99	99	96	99	117
	Roundup WeatherMax	4.5	SL	22	fl oz/a	2" weeds	B					
	Ammonium sulfate		WG	17	lb/100 gal	2" weeds	B					
	Roundup WeatherMax	4.5	SL	22	fl oz/a	+ 4" wds	F					
	Ammonium sulfate		WG	17	lb/100 gal	+ 4" wds	F					
	Roundup WeatherMax	4.5	SL	22	fl oz/a	Scout	H					
	Ammonium sulfate		WG	17	lb/100 gal	Scout	H					
15	20" rows							84	98	96	99	119
	Roundup WeatherMax	4.5	SL	22	fl oz/a	4" weeds	D					
	Ammonium sulfate		WG	17	lb/100 gal	4" weeds	D					
	Roundup WeatherMax	4.5	SL	22	fl oz/a	+ 4" wds	G					
	Ammonium sulfate		WG	17	lb/100 gal	+ 4" wds	G					
16	20" rows							80	99	96	99	121
	Roundup WeatherMax	4.5	SL	22	fl oz/a	4" weeds	D					
	Ammonium sulfate		WG	17	lb/100 gal	4" weeds	D					
17	30" rows							99	99	96	99	169
	Roundup WeatherMax	4.5	SL	22	fl oz/a	2" weeds	B					
	Ammonium sulfate		WG	17	lb/100 gal	2" weeds	B					
	Roundup WeatherMax	4.5	SL	22	fl oz/a	+ 4" wds	F					
	Ammonium sulfate		WG	17	lb/100 gal	+ 4" wds	F					
18	30" rows							99	99	96	99	178
	Roundup WeatherMax	4.5	SL	22	fl oz/a	2" weeds	B					
	Ammonium sulfate		WG	17	lb/100 gal	2" weeds	B					
	Roundup WeatherMax	4.5	SL	22	fl oz/a	+ 4" wds	F					
	Ammonium sulfate		WG	17	lb/100 gal	+ 4" wds	F					
	Roundup WeatherMax	4.5	SL	22	fl oz/a	Scout	H					
	Ammonium sulfate		WG	17	lb/100 gal	Scout	H					
19	30" rows							92	99	96	99	171
	Roundup WeatherMax	4.5	SL	22	fl oz/a	4" weeds	D					
	Ammonium sulfate		WG	17	lb/100 gal	4" weeds	D					
	Roundup WeatherMax	4.5	SL	22	fl oz/a	+ 4" wds	G					
	Ammonium sulfate		WG	17	lb/100 gal	+ 4" wds	G					
20	30" rows							92	97	96	99	169
	Roundup WeatherMax	4.5	SL	22	fl oz/a	4" weeds	D					
	Ammonium sulfate		WG	17	lb/100 gal	4" weeds	D					
21	15" rows							99	98	96	99	94
	Roundup WeatherMax	4.5	SL	22	fl oz/a	2" weeds	B					
	Ammonium sulfate		WG	17	lb/100 gal	2" weeds	B					
	Roundup WeatherMax	4.5	SL	22	fl oz/a	+ 4" wds	F					
	Ammonium sulfate		WG	17	lb/100 gal	+ 4" wds	F					
22	15" rows							99	99	96	99	97
	Roundup WeatherMax	4.5	SL	22	fl oz/a	2" weeds	B					
	Ammonium sulfate		WG	17	lb/100 gal	2" weeds	B					
	Roundup WeatherMax	4.5	SL	22	fl oz/a	+ 4" wds	F					
	Ammonium sulfate		WG	17	lb/100 gal	+ 4" wds	F					
	Roundup WeatherMax	4.5	SL	22	fl oz/a	Scout	H					
	Ammonium sulfate		WG	17	lb/100 gal	Scout	H					

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Rating Data Type	control	control	control	control	count
Rating Unit	percent	percent	percent	percent	#/100'
Rating Date	6/6/07	7/2/07	7/2/07	7/2/07	9/20/07
Trt-Eval Interval	26 DA-A	52 DA-A	52 DA-A	52 DA-A	132 DA-A

Trt No.	Treatment Name	Form Conc	Form Type	Rate	Rate Unit	Grow Stg	Appl Code	ABUTH	CHEAL	AMARE	ABUTH	BETVU
23	15" rows							80	99	96	99	103
	Roundup WeatherMax	4.5	SL	22	fl oz/a	4" weeds	D					
	Ammonium sulfate		WG	17	lb/100 gal	4" weeds	D					
	Roundup WeatherMax	4.5	SL	22	fl oz/a	+ 4" wds	G					
	Ammonium sulfate		WG	17	lb/100 gal	+ 4" wds	G					
24	15" weeds							79	99	97	99	101
	Roundup WeatherMax	4.5	SL	22	fl oz/a	4" weeds	D					
	Ammonium sulfate		WG	17	lb/100 gal	4" weeds	D					
25	15" rows							0	99	99	98	96
	Roundup WeatherMax	4.5	SL	22	fl oz/a	6" weeds	E					
	Ammonium sulfate		WG	17	lb/100 gal	6" weeds	E					
	Roundup WeatherMax	4.5	SL	22	fl oz/a	+ 4" wds	H					
	Ammonium sulfate		WG	17	lb/100 gal	+ 4" wds	H					
26	15" rows							0	0	-2	0	96
	Untreated											
27	15" rows							99	99	99	99	99
	Weed-Free											
	Roundup WeatherMax	4.5	SL	22	fl oz/a	2" weeds	A					
	Ammonium sulfate		WG	17	lb/100 gal	2" weeds	A					
	Roundup WeatherMax	4.5	SL	22	fl oz/a	4" weeds	E					
	Ammonium sulfate		WG	17	lb/100 gal	4" weeds	E					
	Roundup WeatherMax	4.5	SL	22	fl oz/a	Scout	H					
	Ammonium sulfate		WG	17	lb/100 gal	Scout	H					
28	15" rows							91	85	97	96	103
	Betamix	1.3	EC	2	pt/a	STD 1	A					
	Upbeet	50	DF	0.5	oz/a	STD 1	A					
	Stinger	3	L	4	fl oz/a	STD 1	A					
	Betamix	1.3	EC	3	pt/a	STD 2	C					
	Upbeet	50	DF	0.5	oz/a	STD 2	C					
	Stinger	3	L	4	fl oz/a	STD 2	C					
	Activator 90 (NIS)		L	0.25	% v/v	STD 2	C					
29	30" rows							0	99	97	96	162
	Roundup WeatherMax	4.5	SL	22	fl oz/a	6" weeds	E					
	Ammonium sulfate		WG	17	lb/100 gal	6" weeds	E					
	Roundup WeatherMax	4.5	SL	22	fl oz/a	+ 4" wds	H					
	Ammonium sulfate		WG	17	lb/100 gal	+ 4" wds	H					
30	30" rows							0	0	0	0	162
	Untreated											
31	30" rows							99	99	96	99	170
	Weed-Free											
	Roundup WeatherMax	4.5	SL	22	fl oz/a	2" weeds	A					
	Ammonium sulfate		WG	17	lb/100 gal	2" weeds	A					
	Roundup WeatherMax	4.5	SL	22	fl oz/a	4" weeds	E					
	Ammonium sulfate		WG	17	lb/100 gal	4" weeds	E					
	Roundup WeatherMax	4.5	SL	22	fl oz/a	Scout	H					
	Ammonium sulfate		WG	17	lb/100 gal	Scout	H					

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Weed Code	ABUTH	CHEAL	AMARE	ABUTH	BETVU
Crop Code					
Rating Data Type	control	control	control	control	count
Rating Unit	percent	percent	percent	percent	#/100'
Rating Date	6/6/07	7/2/07	7/2/07	7/2/07	9/20/07
Trt-Eval Interval	26 DA-A	52 DA-A	52 DA-A	52 DA-A	132 DA-A

Trt No.	Treatment Name	Form Conc	Form Type	Rate	Rate Unit	Grow Stg	Appl Code	ABUTH	CHEAL	AMARE	ABUTH	BETVU
32	30" rows							98	84	94	89	172
	Betamix	1.3	EC	2	pt/a	STD 1	A					
	Upbeet	50	DF	0.5	oz/a	STD 1	A					
	Stinger	3	L	4	fl oz/a	STD 1	A					
	Betamix	1.3	EC	3	pt/a	STD 2	C					
	Upbeet	50	DF	0.5	oz/a	STD 2	C					
	Stinger	3	L	4	fl oz/a	STD 2	C					
	Activator 90 (NIS)		L	0.25	% v/v	STD 2	C					
33	20" rows							0	99	97	99	115
	Roundup WeatherMax	4.5	SL	22	fl oz/a	6" weeds	E					
	Ammonium sulfate		WG	17	lb/100 gal	6" weeds	E					
	Roundup WeatherMax	4.5	SL	22	fl oz/a	+ 4" wds	H					
	Ammonium sulfate		WG	17	lb/100 gal	+ 4" wds	H					
34	20" rows							0	0	-2	0	118
	Untreated											
35	20" rows							99	99	97	99	116
	Weed-Free											
	Roundup WeatherMax	4.5	SL	22	fl oz/a	2" weeds	A					
	Ammonium sulfate		WG	17	lb/100 gal	2" weeds	A					
	Roundup WeatherMax	4.5	SL	22	fl oz/a	4" weeds	E					
	Ammonium sulfate		WG	17	lb/100 gal	4" weeds	E					
	Roundup WeatherMax	4.5	SL	22	fl oz/a	Scout	H					
	Ammonium sulfate		WG	17	lb/100 gal	Scout	H					
36	20" rows							94	75	84	87	121
	Betamix	1.3	EC	2	pt/a	STD 1	A					
	Upbeet	50	DF	0.5	oz/a	STD 1	A					
	Stinger	3	L	4	fl oz/a	STD 1	A					
	Betamix	1.3	EC	3	pt/a	STD 2	C					
	Upbeet	50	DF	0.5	oz/a	STD 2	C					
	Stinger	3	L	4	fl oz/a	STD 2	C					
	Activator 90 (NIS)		L	0.25	% v/v	STD 2	C					
LSD (P=.05)								10.4	7.7	3.8	4.2	15.2
Standard Deviation								7.4	5.4	2.6	2.6	10.7
CV								10.53	6.44	3.17	3.0	8.37

MSU Weed Science Research Program

Weed Control Systems in Narrow-Row Roundup Ready Sugarbeets III

Trial ID: SB07-07 Robinson
 Conducted: Robinson's

Study Dir.: Armstrong, Powell, Sprague
 Investigator: Christy Sprague

Weed Code
 Crop Code
 Rating Data Type
 Rating Unit
 Rating Date
 Trt-Eval Interval

BETVU % sugar 9/20/07 132 DA-A
 BETVU yield ton/acre 9/20/07 132 DA-A
 BETVU RWST #/ton 9/20/07 132 DA-A
 BETVU RWSA ton/acre 9/20/07 132 DA-A

Trt No.	Treatment Name	Form Conc	Form Type	Rate	Rate Unit	Grow Stg	Appl Code	BETVU % sugar	BETVU yield ton/acre	BETVU RWST #/ton	BETVU RWSA ton/acre
13	20" rows							16.7	30.2	238.1	3.6
	Roundup WeatherMax	4.5	SL	22	fl oz/a	2" weeds	B				
	Ammonium sulfate		WG	17	lb/100 gal	2" weeds	B				
	Roundup WeatherMax	4.5	SL	22	fl oz/a	+ 4" wds	F				
	Ammonium sulfate		WG	17	lb/100 gal	+ 4" wds	F				
14	20" rows							15.6	36.0	218.9	4.0
	Roundup WeatherMax	4.5	SL	22	fl oz/a	2" weeds	B				
	Ammonium sulfate		WG	17	lb/100 gal	2" weeds	B				
	Roundup WeatherMax	4.5	SL	22	fl oz/a	+ 4" wds	F				
	Ammonium sulfate		WG	17	lb/100 gal	+ 4" wds	F				
	Roundup WeatherMax	4.5	SL	22	fl oz/a	Scout	H				
	Ammonium sulfate		WG	17	lb/100 gal	Scout	H				
15	20" rows							16.4	36.5	234.2	4.3
	Roundup WeatherMax	4.5	SL	22	fl oz/a	4" weeds	D				
	Ammonium sulfate		WG	17	lb/100 gal	4" weeds	D				
	Roundup WeatherMax	4.5	SL	22	fl oz/a	+ 4" wds	G				
	Ammonium sulfate		WG	17	lb/100 gal	+ 4" wds	G				
16	20" rows							16.4	33.0	232.2	3.8
	Roundup WeatherMax	4.5	SL	22	fl oz/a	4" weeds	D				
	Ammonium sulfate		WG	17	lb/100 gal	4" weeds	D				
17	30" rows							16.3	28.3	231.6	3.3
	Roundup WeatherMax	4.5	SL	22	fl oz/a	2" weeds	B				
	Ammonium sulfate		WG	17	lb/100 gal	2" weeds	B				
	Roundup WeatherMax	4.5	SL	22	fl oz/a	+ 4" wds	F				
	Ammonium sulfate		WG	17	lb/100 gal	+ 4" wds	F				
18	30" rows							16.2	31.4	231.8	3.7
	Roundup WeatherMax	4.5	SL	22	fl oz/a	2" weeds	B				
	Ammonium sulfate		WG	17	lb/100 gal	2" weeds	B				
	Roundup WeatherMax	4.5	SL	22	fl oz/a	+ 4" wds	F				
	Ammonium sulfate		WG	17	lb/100 gal	+ 4" wds	F				
	Roundup WeatherMax	4.5	SL	22	fl oz/a	Scout	H				
	Ammonium sulfate		WG	17	lb/100 gal	Scout	H				
19	30" rows							15.8	32.1	227.9	3.7
	Roundup WeatherMax	4.5	SL	22	fl oz/a	4" weeds	D				
	Ammonium sulfate		WG	17	lb/100 gal	4" weeds	D				
	Roundup WeatherMax	4.5	SL	22	fl oz/a	+ 4" wds	G				
	Ammonium sulfate		WG	17	lb/100 gal	+ 4" wds	G				
20	30" rows							16.0	30.8	225.3	3.5
	Roundup WeatherMax	4.5	SL	22	fl oz/a	4" weeds	D				
	Ammonium sulfate		WG	17	lb/100 gal	4" weeds	D				
21	15" rows							16.9	31.3	246.4	3.9
	Roundup WeatherMax	4.5	SL	22	fl oz/a	2" weeds	B				
	Ammonium sulfate		WG	17	lb/100 gal	2" weeds	B				
	Roundup WeatherMax	4.5	SL	22	fl oz/a	+ 4" wds	F				
	Ammonium sulfate		WG	17	lb/100 gal	+ 4" wds	F				
22	15" rows							16.8	31.7	240.3	3.8
	Roundup WeatherMax	4.5	SL	22	fl oz/a	2" weeds	B				
	Ammonium sulfate		WG	17	lb/100 gal	2" weeds	B				
	Roundup WeatherMax	4.5	SL	22	fl oz/a	+ 4" wds	F				
	Ammonium sulfate		WG	17	lb/100 gal	+ 4" wds	F				
	Roundup WeatherMax	4.5	SL	22	fl oz/a	Scout	H				
	Ammonium sulfate		WG	17	lb/100 gal	Scout	H				

MSU Weed Science Research Program

Weed Control Systems in Narrow-Row Roundup Ready Sugarbeets III

Trial ID: SB07-07 Robinson
 Conducted: Robinson's

Study Dir.: Armstrong, Powell, Sprague
 Investigator: Christy Sprague

Weed Code

Crop Code

Rating Data Type

Rating Unit

Rating Date

Trt-Eval Interval

BETVU
% sugarBETVU
yield
ton/acreBETVU
RWST
#/tonBETVU
RWSA
ton/acre

9/20/07

9/20/07

9/20/07

9/20/07

132 DA-A

132 DA-A

132 DA-A

132 DA-A

Trt No.	Treatment Name	Form Conc	Form Type	Rate	Rate Unit	Grow Stg	Appl Code	BETVU % sugar	BETVU yield ton/acre	BETVU RWST #/ton	BETVU RWSA ton/acre
23	15" rows							16.5	36.6	233.7	4.3
	Roundup WeatherMax	4.5	SL	22	fl oz/a	4" weeds	D				
	Ammonium sulfate		WG	17	lb/100 gal	4" weeds	D				
	Roundup WeatherMax	4.5	SL	22	fl oz/a	+ 4" wds	G				
	Ammonium sulfate		WG	17	lb/100 gal	+ 4" wds	G				
24	15" weeds							16.4	34.8	234.2	4.1
	Roundup WeatherMax	4.5	SL	22	fl oz/a	4" weeds	D				
	Ammonium sulfate		WG	17	lb/100 gal	4" weeds	D				
25	15" rows							16.7	32.4	242.0	3.9
	Roundup WeatherMax	4.5	SL	22	fl oz/a	6" weeds	E				
	Ammonium sulfate		WG	17	lb/100 gal	6" weeds	E				
	Roundup WeatherMax	4.5	SL	22	fl oz/a	+ 4" wds	H				
	Ammonium sulfate		WG	17	lb/100 gal	+ 4" wds	H				
26	15" rows							17.2	29.8	249.7	3.7
	Untreated										
27	15" rows							17.0	38.3	243.8	4.7
	Weed-Free										
	Roundup WeatherMax	4.5	SL	22	fl oz/a	2" weeds	A				
	Ammonium sulfate		WG	17	lb/100 gal	2" weeds	A				
	Roundup WeatherMax	4.5	SL	22	fl oz/a	4" weeds	E				
	Ammonium sulfate		WG	17	lb/100 gal	4" weeds	E				
	Roundup WeatherMax	4.5	SL	22	fl oz/a	Scout	H				
	Ammonium sulfate		WG	17	lb/100 gal	Scout	H				
28	15" rows							15.3	33.8	220.5	3.7
	Betamix	1.3	EC	2	pt/a	STD 1	A				
	Upbeet	50	DF	0.5	oz/a	STD 1	A				
	Stinger	3	L	4	fl oz/a	STD 1	A				
	Betamix	1.3	EC	3	pt/a	STD 2	C				
	Upbeet	50	DF	0.5	oz/a	STD 2	C				
	Stinger	3	L	4	fl oz/a	STD 2	C				
	Activator 90 (NIS)		L	0.25	% v/v	STD 2	C				
29	30" rows							16.1	28.4	232.0	3.3
	Roundup WeatherMax	4.5	SL	22	fl oz/a	6" weeds	E				
	Ammonium sulfate		WG	17	lb/100 gal	6" weeds	E				
	Roundup WeatherMax	4.5	SL	22	fl oz/a	+ 4" wds	H				
	Ammonium sulfate		WG	17	lb/100 gal	+ 4" wds	H				
30	30" rows							16.2	24.9	228.8	2.9
	Untreated										
31	30" rows							15.8	31.7	221.2	3.5
	Weed-Free										
	Roundup WeatherMax	4.5	SL	22	fl oz/a	2" weeds	A				
	Ammonium sulfate		WG	17	lb/100 gal	2" weeds	A				
	Roundup WeatherMax	4.5	SL	22	fl oz/a	4" weeds	E				
	Ammonium sulfate		WG	17	lb/100 gal	4" weeds	E				
	Roundup WeatherMax	4.5	SL	22	fl oz/a	Scout	H				
	Ammonium sulfate		WG	17	lb/100 gal	Scout	H				

MSU Weed Science Research Program

Weed Control Systems in Narrow-Row Roundup Ready Sugarbeets III

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Weed Code

Crop Code

Rating Data Type

Rating Unit

Rating Date

Trt-Eval Interval

BETVU % sugar	BETVU yield ton/acre	BETVU RWST #/ton	BETVU RWSA ton/acre
9/20/07	9/20/07	9/20/07	9/20/07
132 DA-A	132 DA-A	132 DA-A	132 DA-A

Trt No.	Treatment Name	Form Conc	Form Type	Rate	Rate Unit	Grow Stg	Appl Code	BETVU % sugar	BETVU yield ton/acre	BETVU RWST #/ton	BETVU RWSA ton/acre
32	30" rows							15.1	30.4	214.6	3.3
	Betamix	1.3	EC	2	pt/a	STD 1	A				
	Upbeet	50	DF	0.5	oz/a	STD 1	A				
	Stinger	3	L	4	fl oz/a	STD 1	A				
	Betamix	1.3	EC	3	pt/a	STD 2	C				
	Upbeet	50	DF	0.5	oz/a	STD 2	C				
	Stinger	3	L	4	fl oz/a	STD 2	C				
	Activator 90 (NIS)		L	0.25	% v/v	STD 2	C				
33	20" rows							16.1	31.9	225.3	3.6
	Roundup WeatherMax	4.5	SL	22	fl oz/a	6" weeds	E				
	Ammonium sulfate		WG	17	lb/100 gal	6" weeds	E				
	Roundup WeatherMax	4.5	SL	22	fl oz/a	+ 4" wds	H				
	Ammonium sulfate		WG	17	lb/100 gal	+ 4" wds	H				
34	20" rows							15.9	26.6	224.4	3.0
	Untreated										
35	20" rows							15.8	35.8	219.7	3.9
	Weed-Free										
	Roundup WeatherMax	4.5	SL	22	fl oz/a	2" weeds	A				
	Ammonium sulfate		WG	17	lb/100 gal	2" weeds	A				
	Roundup WeatherMax	4.5	SL	22	fl oz/a	4" weeds	E				
	Ammonium sulfate		WG	17	lb/100 gal	4" weeds	E				
	Roundup WeatherMax	4.5	SL	22	fl oz/a	Scout	H				
	Ammonium sulfate		WG	17	lb/100 gal	Scout	H				
36	20" rows							15.8	33.1	223.6	3.7
	Betamix	1.3	EC	2	pt/a	STD 1	A				
	Upbeet	50	DF	0.5	oz/a	STD 1	A				
	Stinger	3	L	4	fl oz/a	STD 1	A				
	Betamix	1.3	EC	3	pt/a	STD 2	C				
	Upbeet	50	DF	0.5	oz/a	STD 2	C				
	Stinger	3	L	4	fl oz/a	STD 2	C				
	Activator 90 (NIS)		L	0.25	% v/v	STD 2	C				
	LSD (P=.05)							1.14	8.50	22.00	1.03
	Standard Deviation							0.81	6.01	15.55	0.73
	CV							4.99	18.74	6.74	19.66