

Weed Control Systems in Narrow-Row Roundup Ready Sugarbeet II

Trial ID: SB09-08BB Study Dir.: Armstrong, Sprague, Powell
 Conducted: Saginaw Co. - Spiro Investigator: Christy Sprague

Date Planted: 4/19/08 Row Spacing: 15 IN
 Variety: Hillshog 9028 No. of Reps: 4
 Population: See comments % OM: 2.7
 Soil Type: Loam pH: 7.9
 Plot Size: 15 X 30 FT Design: RANDOMIZED COMPLETE BLOCK

Crop and Weed Description

Weed	Code	Common Name	Scientific Name
1.	CHEAL	LAMBSQUARTERS, COMMON	CHENOPODIUM ALBUM L.
2.	ABUTH	VELVETLEAF	ABUTILON THEOPHRASTI MEDIK.
3.	AMASS	REDROOT PIGWEED, POWELL AMARANTH	AMARANTHUS SP.
4.	SOLPT	NIGHTSHADE, EASTERN BLACK	SOLANUM PTYCANTHUM DUNAL
5.	POLPY	SMARTWEED, PENNSYLVANIA	POLYGONUM PENNSYLVANICUM L.
6.	ANGR	mainly foxtail species	SETARIA SP.
Crop	Code	Common Name	
1.	BETVU	BEET, SUGAR	

Application Description

	A	B	C	D	E	F	G	H
Application Timing:	Std1 A	WF RR	Std2B 2"	C 4"wds	D 6"+WF			
Date Treated:	5/6/08	5/19/08	5/28/08	6/2/08	6/11/08			
Time Treated:	12:30 PM	1:30 PM	1:15 PM	1:15 PM	11:00 AM			
% Cloud Cover:	50	50	15	20	5			
Air Temp., Unit:	75 F	66 F	67 F	87 F	75 F			
% Relative Humidity:	30	27	24	26	60			
Wind Speed/Unit/Dir:	3 mph E	4 mph W	2 mph W	7 mph SW	1 mph S			
Soil Temp., Unit:	58 F	59 F	67 F	72 F	69 F			
Soil/Leaf Surface M:	5 5	5 5	5 5	5 5	3 5			
Soil Moist (1=w 5=d):	5	5	5	5	3			

Crop Stage at Each Application

	A	B	C	D	E	F	G	H
Crop Name:	BETVU	BETVU	BETVU	BETVU	BETVU	BETVU	BETVU	BETVU
Height (In.):	.5	2-2.5	2-4	4-6	8-11			
Stage (L):	coty-2	coty-4	2-6	6-10	8-10			

Weed Stage at Each Application

	A	B	C	D	E	F	G	H
Weed 1 Name:	CHEAL	CHEAL	CHEAL	CHEAL	CHEAL	CHEAL	CHEAL	CHEAL
Height (In.):	.25-.75	.5-1.25	.5-2	1-6	3-10			
Stage (L):	coty-2	2-8	4-8	2	many			
Weed 2 Name:	ABUTH	ABUTH	ABUTH	ABUTH	ABUTH	ABUTH	ABUTH	ABUTH
Height (In.):	.25-.75	.5-2	--	4-6	--			
Stage (L):	coty-1	1-3	--	2-3	--			
Weed 3 Name:	AMASS	AMASS	AMASS	AMASS	AMASS	AMASS	AMASS	AMASS
Height (In.):	--	.125-.75	.5-2	2-4	4-10			
Stage (L):	--	2-4	4-6	6-10	many			
Weed 4 Name:	SOLPT	SOLPT	SOLPT	SOLPT	SOLPT	SOLPT	SOLPT	SOLPT
Height (In.):	--	.125-.25	1	2-5	4-8			
Stage (L):	--	2-4	6	--	8-12			
Weed 5 Name:	POLPY	POLPY	POLPY	POLPY	POLPY	POLPY	POLPY	POLPY
Height (In.):	--	--	1.5	2-3	4-8			
Stage (L):	--	--	6	--	many			
Weed 6 Name:	ANGR	ANGR	ANGR	ANGR	ANGR	ANGR	ANGR	ANGR
Height (In.):	--	--	--	--	4-8			
Stage (L):	--	--	--	--	4-6			

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	18	20	180	19	water	28
B	Cub	3.8	AirMix	11003	20	20	180	19	water	28
C	Cub	3.8	AirMix	11003	22	20	180	19	water	28
D	Cub	3.8	AirMix	11003	22	20	180	19	water	28
E	Cub	3.8	AirMix	11003	27	20	180	19	water	28
F										
G										
H										

Comments: Previous Crop- Soybean

Weed Control Systems in Narrow-Row Roundup Ready Sugarbeet II

Trial ID: SB09-08BB Study Dir.: Armstrong, Sprague, Powell
Conducted: Saginaw Co. - Spiro Investigator: Christy Sprague

Fungicides were broadcast applied the following dates-

May 12- 40 oz/acre Quadris
July 7- 5.7 oz Proline + 0.25% Induce
July 24- 9.2 oz/acre Headline
August 12- 2.0 lb/acre Pencozeb + 0.5 lb/acre Topsin
September 3- 9.2 oz/acre Headline

MSU Weed Science Research Program

Weed Control Systems in Narrow-Row Roundup Ready Sugarbeet II

Trial ID: SB09-08BB Study Dir.: Armstrong, Sprague, Powell
 Conducted: Saginaw Co. - Spiro Investigator: Christy Sprague

Weed Code								BETVU	BETVU	BETVU	BETVU
Crop Code								% Sugar	Root yield	RWST	RWSA
Rating Data Type									ton/acre	#/ton	#/acre
Rating Unit											
Rating Date								9/23/08	9/23/08	9/23/08	9/23/08
Trt-Eval Interval								140 DA-A	140 DA-A	140 DA-A	140 DA-A
Trt No.	Treatment Name	Form Conc	Form Type	Rate	Rate Unit	Grow Stg	Appl Code				
1	15" rows							15.6	52.9	223.0	11799
1	Roundup WeatherMax	4.5	SL	22	fl oz/a	2" weeds	B				
1	Ammonium sulfate		WG	17	lb/100 gal	2" weeds	B				
1	Roundup WeatherMax	4.5	SL	22	fl oz/a	+ 4" wds	E				
1	Ammonium sulfate		WG	17	lb/100 gal	+ 4" wds	E				
2	15" rows							15.5	50.3	222.5	11197
2	Roundup WeatherMax	4.5	SL	22	fl oz/a	2" weeds	B				
2	Ammonium sulfate		WG	17	lb/100 gal	2" weeds	B				
2	Roundup WeatherMax	4.5	SL	22	fl oz/a	+ 4" wds	E				
2	Ammonium sulfate		WG	17	lb/100 gal	+ 4" wds	E				
2	Roundup WeatherMax	4.5	SL	22	fl oz/a	Scout					
2	Ammonium sulfate		WG	17	lb/100 gal	Scout					
3	15" rows							14.9	50.9	210.2	10565
3	Roundup WeatherMax	4.5	SL	22	fl oz/a	4" weeds	C				
3	Ammonium sulfate		WG	17	lb/100 gal	4" weeds	C				
3	Roundup WeatherMax	4.5	SL	22	fl oz/a	+ 4" wds					
3	Ammonium sulfate		WG	17	lb/100 gal	+ 4" wds					
4	15" rows							15.8	54.2	227.3	12307
4	Roundup WeatherMax	4.5	SL	22	fl oz/a	4" weeds	C				
4	Ammonium sulfate		WG	17	lb/100 gal	4" weeds	C				
5	20" rows							15.2	52.6	217.8	11500
5	Roundup WeatherMax	4.5	SL	22	fl oz/a	2" weeds	B				
5	Ammonium sulfate		WG	17	lb/100 gal	2" weeds	B				
5	Roundup WeatherMax	4.5	SL	22	fl oz/a	+ 4" wds	E				
5	Ammonium sulfate		WG	17	lb/100 gal	+ 4" wds	E				
6	20" rows							15.8	49.8	228.0	11341
6	Roundup WeatherMax	4.5	SL	22	fl oz/a	2" weeds	B				
6	Ammonium sulfate		WG	17	lb/100 gal	2" weeds	B				
6	Roundup WeatherMax	4.5	SL	22	fl oz/a	+ 4" wds	E				
6	Ammonium sulfate		WG	17	lb/100 gal	+ 4" wds	E				
6	Roundup WeatherMax	4.5	SL	22	fl oz/a	Scout					
6	Ammonium sulfate		WG	17	lb/100 gal	Scout					
7	20" rows							15.5	51.0	221.4	11284
7	Roundup WeatherMax	4.5	SL	22	fl oz/a	4" weeds	C				
7	Ammonium sulfate		WG	17	lb/100 gal	4" weeds	C				
7	Roundup WeatherMax	4.5	SL	22	fl oz/a	+ 4" wds					
7	Ammonium sulfate		WG	17	lb/100 gal	+ 4" wds					
8	20" rows							15.7	51.9	227.3	11790
8	Roundup WeatherMax	4.5	SL	22	fl oz/a	4" weeds	C				
8	Ammonium sulfate		WG	17	lb/100 gal	4" weeds	C				

MSU Weed Science Research Program

Weed Control Systems in Narrow-Row Roundup Ready Sugarbeet II

Trial ID: SB09-08BB Study Dir.: Armstrong, Sprague, Powell
 Conducted: Saginaw Co. - Spiro Investigator: Christy Sprague

Weed Code								BETVU	BETVU	BETVU	BETVU
Crop Code								% Sugar	Root yield	RWST	RWSA
Rating Data Type									ton/acre	#/ton	#/acre
Rating Unit											
Rating Date								9/23/08	9/23/08	9/23/08	9/23/08
Trt-Eval Interval								140 DA-A	140 DA-A	140 DA-A	140 DA-A
Trt No.	Treatment Name	Form Conc	Form Type	Rate	Rate Unit	Grow Stg	Appl Code				
9	30" rows							15.5	51.5	219.4	11349
9	Roundup WeatherMax	4.5	SL	22	fl oz/a	2" weeds	B				
9	Ammonium sulfate		WG	17	lb/100 gal	2" weeds	B				
9	Roundup WeatherMax	4.5	SL	22	fl oz/a	+ 4" wds	E				
9	Ammonium sulfate		WG	17	lb/100 gal	+ 4" wds	E				
10	30" rows							15.7	48.2	224.9	10835
10	Roundup WeatherMax	4.5	SL	22	fl oz/a	2" weeds	B				
10	Ammonium sulfate		WG	17	lb/100 gal	2" weeds	B				
10	Roundup WeatherMax	4.5	SL	22	fl oz/a	+ 4" wds	E				
10	Ammonium sulfate		WG	17	lb/100 gal	+ 4" wds	E				
10	Roundup WeatherMax	4.5	SL	22	fl oz/a	Scout					
10	Ammonium sulfate		WG	17	lb/100 gal	Scout					
11	30" rows							15.6	50.3	219.4	10697
11	Roundup WeatherMax	4.5	SL	22	fl oz/a	4" weeds	C				
11	Ammonium sulfate		WG	17	lb/100 gal	4" weeds	C				
11	Roundup WeatherMax	4.5	SL	22	fl oz/a	+ 4" wds					
11	Ammonium sulfate		WG	17	lb/100 gal	+ 4" wds					
12	30" rows							15.5	49.4	223.1	11053
12	Roundup WeatherMax	4.5	SL	22	fl oz/a	4" weeds	C				
12	Ammonium sulfate		WG	17	lb/100 gal	4" weeds	C				
13	30" rows							15.1	47.7	215.1	10300
13	Roundup WeatherMax	4.5	SL	22	fl oz/a	6" weeds	D				
13	Ammonium sulfate		WG	17	lb/100 gal	6" weeds	D				
13	Roundup WeatherMax	4.5	SL	22	fl oz/a	+ 4" wds					
13	Ammonium sulfate		WG	17	lb/100 gal	+ 4" wds					
14	30" rows							15.0	36.5	213.3	7189
14	Untreated										
15	30" rows							15.0	46.4	211.2	9768
15	Weed-Free										
15	Roundup WeatherMax	4.5	SL	22	fl oz/a	STD1	A				
15	Ammonium sulfate		WG	17	lb/100 gal	STD1	A				
15	Roundup WeatherMax	4.5	SL	22	fl oz/a	4" weeds	D				
15	Ammonium sulfate		WG	17	lb/100 gal	4" weeds	D				
15	Roundup WeatherMax	4.5	SL	22	fl oz/a	Scout					
15	Ammonium sulfate		WG	17	lb/100 gal	Scout					

MSU Weed Science Research Program

Weed Control Systems in Narrow-Row Roundup Ready Sugarbeet II

Trial ID: SB09-08BB Study Dir.: Armstrong, Sprague, Powell
 Conducted: Saginaw Co. - Spiro Investigator: Christy Sprague

Weed Code								BETVU	BETVU	BETVU	BETVU
Crop Code								% Sugar	Root yield	RWST	RWSA
Rating Data Type								ton/acre	#/ton	#/acre	
Rating Unit								9/23/08	9/23/08	9/23/08	9/23/08
Rating Date								140 DA-A	140 DA-A	140 DA-A	140 DA-A
Trt-Eval Interval											
Trt No.	Treatment Name	Form Conc	Form Type	Rate	Unit	Grow Stg	Appl Code				
23	15" rows							15.6	47.6	222.4	10574
23	Weed-Free										
23	Roundup WeatherMax	4.5	SL	22	fl oz/a	STD1	A				
23	Ammonium sulfate		WG	17	lb/100 gal	STD1	A				
23	Roundup WeatherMax	4.5	SL	22	fl oz/a	4" weeds	D				
23	Ammonium sulfate		WG	17	lb/100 gal	4" weeds	D				
23	Roundup WeatherMax	4.5	SL	22	fl oz/a	Scout					
23	Ammonium sulfate		WG	17	lb/100 gal	Scout					
24	15" rows							15.4	53.3	218.6	11731
24	Betamix	1.3	EC	2	pt/a	STD1	A				
24	Upbeet	50	DF	0.5	oz/a	STD1	A				
24	Stinger	3	L	4	fl oz/a	STD1	A				
24	Activator 90		L	0.25	% v/v	STD1	A				
24	Betamix	1.3	EC	3	pt/a	STD2	B				
24	Upbeet	50	DF	0.5	oz/a	STD2	B				
24	Stinger	3	L	4	fl oz/a	STD2	B				
24	Activator 90		L	0.25	% v/v	STD2	B				
LSD (P=.10)								0.67	7.13	11.97	1806.9
Standard Deviation								0.57	6.04	10.13	1529.2
CV								3.67	12.5	4.59	14.37