MSU Weed Science Research Program

Using GDD for Timing Standard-Split Applications II - May Planting

Trial ID: SB13-06EL Study Dir.: Sprague, Powell
Conducted: Campus Investigator: Christy Sprague

Date Planted: 5/5/2005
Variety: Crystal 963
Population: 4 3/8" seed spacing
Soil Type: Loam
Plot Size: 10 **X** 30 **FT**
Row Spacing: 30 IN
No. of Reps: 4
% OM: 3.2
pH: 6.7
Design: RANDOMIZED COMPLETE BLOCK

Tillage: Fall moldboard plow
Soil finish 4/11/06, 5/5/06
Fertilizer: Broadcast 200lb/A Urea (90# N)
110# 19-19-19 with planter 5/5/06

Crop and Weed Description

Weed	Code	Common Name	Scientific Name
1.	CHEAL	LAMBSQUARTERS, COMMON	CHENOPODIUM ALBUM L.
2.	ABUTH	VELVETLEAF	ABUTILON THEOPHRASTI MEDIK.
3.	ANGR	Annual grass	mainly foxtail, panicum
4.	BRAKA/SINAR	MUSTARD, WILD	BRASSICA KABER
5.	DATST	JIMSONWEED	DATURA STRAMONIUM L.
6.	SOLPT	NIGHTSHADE, EASTERN BLACK	SOLANUM PTYCANTHUM DUNAL
7.	AMARE	PIGWEED, REDROOT	AMARANTHUS RETROFLEXUS L.

Crop	Code	Common Name
1.	BETVU	SUGAR BEET

Application Description

	A	B	C	D	E
Application Timing:	0.5" wds	400A GDD	425A GDD	7 Day	350B GDD
Date Treated:	5/25/2006	5/27/2006	5/29/2006	6/2/2006	6/5/2006
Time Treated:	10:00 am	7:30 pm	6:45 pm	12:30 pm	6:30 pm
% Cloud Cover:	100	10	30	100	5
Air Temp., Unit:	70 F	76 F	85 F	74 F	83 F
% Relative Humidity:	83	75	54	39	25
Wind Speed/Unit/Dir:	4 mph SE	2 mph S	2 mph S	2 mph NE	2 mph S
Soil Temp., Unit:	59 F	76 F	87 F	69 F	84 F
Soil/Leaf Surface M:	3 5	4 5	5 5	5 5	5 5
Soil Moist (1=w 5=d):	4	4	4	4	5

	F	G	H	I
Application Timing:	350B GDD	400B GDD	500B GDD	450B GDD
Date Treated:	6/8/2006	6/9/2006	6/12/2006	6/13/2006
Time Treated:	4:00 pm	3:00 pm	9:20 am	10:00 am
% Cloud Cover:	15	40	5	10
Air Temp., Unit:	83 F	77 F	60 F	72 F
% Relative Humidity:	28	20	60	42
Wind Speed/Unit/Dir:	4 mph NW	6 mph NW	4 mph NE	1 mph NE
Soil Temp., Unit:	79 F	72 F	64 F	62 F
Soil/Leaf Surface M:	5 5	5 5	5 5	5 5
Soil Moist (1=w 5=d):	5	5	5	5

Crop Stage at Each Application

	A	B	C	D	E
Crop Name:	BETVU	BETVU	BETVU	BETVU	BETVU
Height (In.):	1/2"-1"	1/2-1 1/4	1/2-1 1/2	.5-2"	2-3"
Stage (L):	coty	coty-2	coty-2	2-4	4-6

	F	G	H	I
Crop Name:	BETVU	BETVU	BETVU	BETVU
Height (In.):	2.5-4"	3-5"	3-6"	3-6"
Stage (L):	4-6	4-6	4-8	4-8

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Weed Stage at Each Application

	A	B	C	D	E
Weed 1 Name:	CHEAL	CHEAL	CHEAL	CHEAL	CHEAL
Height (In.):	1/4-1 1/2	1/4"-3/4"	1/4"-1/2"	-	-
Stage (L):	coty-6	coty-1	coty-2	-	-
Weed 2 Name:	ABUTH	ABUTH	ABUTH	ABUTH	ABUTH
Height (In.):	1/4"	1/2"	1/4"-1/2"	.125-.25"	.5"
Stage (L):	coty	coty-1	coty	cot	cot
Weed 3 Name:	ANGR	ANGR	ANGR	ANGR	ANGR
Height (In.):	1/8"	-	1/8-1/2"	-	.5"
Stage (L):	1	-	coty-2	-	2
Weed 4 Name:	BRAKA/SINAR	BRAKA/SINAR	BRAKA/SINAR	BRAKA/SINAR	BRAKA/SINAR
Height (In.):	1/2"	1/2"	1/2"	-	-
Stage (L):	2	2	2	-	-
Weed 5 Name:	DATST	DATST	DATST	DATST	DATST
Height (In.):	1/2"	1"-1 1/2"	1/2-1 1/2	.5"	-
Stage (L):	coty	coty-1	coty-1	cot	-
Weed 6 Name:	SOLPT	SOLPT	SOLPT	SOLPT	SOLPT
Height (In.):	-	1/8"	1/8"	-	-
Stage (L):	-	coty	coty	-	-
Weed 7 Name:	AMARE	AMARE	AMARE	AMARE	AMARE
Height (In.):	-	-	-	-	-
Stage (L):	-	-	-	-	-

	F	G	H	I
Weed 1 Name:	CHEAL	CHEAL	CHEAL	CHEAL
Height (In.):	2-3"	4-7"	.5-1"	.5-1"
Stage (L):	8-10	2-many	2-4	2-4
Weed 2 Name:	ABUTH	ABUTH	ABUTH	ABUTH
Height (In.):	-	1-3"	1-2"	1-2"
Stage (L):	-	cot-2	cot-2	cot-2
Weed 3 Name:	ANGR	ANGR	ANGR	ANGR
Height (In.):	.75"	.5-2"	.5-1"	.5-1"
Stage (L):	2	3-5	2-3	2-3
Weed 4 Name:	BRAKA/SINAR	BRAKA/SINAR	BRAKA/SINAR	BRAKA/SINAR
Height (In.):	-	-	-	-
Stage (L):	-	-	-	-
Weed 5 Name:	DATST	DATST	DATST	DATST
Height (In.):	-	-	-	-
Stage (L):	-	-	-	-
Weed 6 Name:	SOLPT	SOLPT	SOLPT	SOLPT
Height (In.):	-	.5-2"	.5-2"	.5-1"
Stage (L):	-	2-4	2-4	2-4
Weed 7 Name:	AMARE	AMARE	AMARE	AMARE
Height (In.):	-	1-3"	1-2"	.5-1"
Stage (L):	-	cot-6	cot-4	cot-4

Weed Density (plants/sq. ft.)

	1	2	3	4	5	6
Date:	7/21/2006	7/21/2006	7/21/2006	7/21/2006	7/21/2006	7/21/2006
Weed Name:	CHEAL	ABUTH	ANGR	AMBEL	AMARE	BRAKA
Density:	3	1	5	<1	<1	<1

	7
Date:	7/21/2006
Weed Name:	TAROF
Density:	<1

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Trial ID: SB13-06EL Study Dir.: Sprague, Powell
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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	20"	20"	100"	19	water	27
B	CUB	3.8	AirMix	11003	20"	20"	100"	19	water	27
C	CUB	3.8	AirMix	11003	20"	20"	100"	19	water	27
D	CUB	3.8	AirMix	11003	22"	20"	100"	19	water	27
E	CUB	3.8	AirMix	11003	22"	20"	100"	19	water	27
F	CUB	3.8	AirMix	11003	22"	20"	100"	19	water	27
G	CUB	3.8	AirMix	11003	22"	20"	100"	19	water	27
H	CUB	3.8	AirMix	11003	22"	20"	100"	19	water	27
I	CUB	3.8	AirMix	11003	22"	20"	100"	19	water	27

Comments: Previous Crop: Corn. Previous Herbicide: Roundup, Distinct.

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Trial ID: SB13-06EL Study Dir.: Sprague, Powell
Conducted: Campus Investigator: Christy Sprague

Trt No.	Treatment Name	Form Conc	Rate	Rate Unit	Grow Stg	Appl Code	BETVU injury percent 6/16/2006 22 DA-A	CHEAL control percent 6/16/2006 22 DA-A	AMAPO control percent 6/16/2006 22 DA-A	ABUTH control percent 6/16/2006 22 DA-A	SOLPT control percent 6/16/2006 22 DA-A	DIGSA control percent 6/16/2006 22 DA-A	BETVU injury percent 6/23/2006 29 DA-A	CHEAL percent 6/23/2006 29 DA-A
1	Betamix	1.3	2	pt/a	1/2" wds	A	19	99	99	97	99	96	5	98
1	Upbeet	50	0.5	oz/a	1/2" wds	A								
1	Stinger	3	0.25	pt/a	1/2" wds	A								
1	Betamix	1.3	3	pt/a	7 day	D								
1	Upbeet	50	0.5	oz/a	7 day	D								
1	Stinger	3	0.25	pt/a	7 day	D								
1	Activator 90 NIS		0.25	% v/v	7 day	D								
2	Betamix	1.3	2	pt/a	350A GDD	A	18	99	99	94	99	97	3	95
2	Upbeet	50	0.5	oz/a	350A GDD	A								
2	Stinger	3	0.25	pt/a	350A GDD	A								
2	Betamix	1.3	3	pt/a	350B GDD	E								
2	Upbeet	50	0.5	oz/a	350B GDD	E								
2	Stinger	3	0.25	pt/a	350B GDD	E								
2	Activator 90 NIS		0.25	% v/v	350B GDD	E								
3	Betamix	1.3	2	pt/a	400A GDD	B	35	74	74	95	99	92	4	99
3	Upbeet	50	0.5	oz/a	400A GDD	B								
3	Stinger	3	0.25	pt/a	400A GDD	B								
3	Betamix	1.3	3	pt/a	350B GDD	F								
3	Upbeet	50	0.5	oz/a	350B GDD	F								
3	Stinger	3	0.25	pt/a	350B GDD	F								
3	Activator 90 NIS		0.25	% v/v	350B GDD	F								
4	Untreated						0	0	0	0	0	0	0	0
5	Betamix	1.3	2	pt/a	400A GDD	B	31	99	99	95	99	90	10	99
5	Upbeet	50	0.5	oz/a	400A GDD	B								
5	Stinger	3	0.25	pt/a	400A GDD	B								
5	Betamix	1.3	3	pt/a	400B GDD	G								
5	Upbeet	50	0.5	oz/a	400B GDD	G								
5	Stinger	3	0.25	pt/a	400B GDD	G								
5	Activator 90 NIS		0.25	% v/v	400B GDD	G								
6	Betamix	1.3	2	pt/a	400A GDD	B	30	99	99	98	99	88	25	99
6	Upbeet	50	0.5	oz/a	400AGDD	B								
6	Stinger	3	0.25	pt/a	400A GDD	B								
6	Betamix	1.3	3	pt/a	500B GDD	H								
6	Upbeet	50	0.5	oz/a	500B GDD	H								
6	Stinger	3	0.25	pt/a	500B GDD	H								
6	Activator 90 NIS		0.25	% v/v	500B GDD	H								
7	Betamix	1.3	2	pt/a	425A GDD	C	25	84	93	80	99	76	11	97
7	Upbeet	50	0.5	oz/a	425A GDD	C								
7	Stinger	3	0.25	pt/a	425A GDD	C								
7	Betamix	1.3	3	pt/a	425B GDD	H								
7	Upbeet	50	0.5	oz/a	425B GDD	H								
7	Stinger	3	0.25	pt/a	425B GDD	H								
7	Activator 90 NIS		0.25	% v/v	425B GDD	H								
8	Betamix	1.3	2	pt/a	450A GDD	C	20	71	93	70	99	71	10	95
8	Upbeet	50	0.5	oz/a	450A GDD	C								
8	Stinger	3	0.25	pt/a	450A GDD	C								
8	Betamix	1.3	3	pt/a	450B GDD	I								
8	Upbeet	50	0.5	oz/a	450B GDD	I								
8	Stinger	3	0.25	pt/a	450B GDD	I								
8	Activator 90 NIS		0.25	% v/v	450B GDD	I								
LSD (P=.05)							5.0	27.9	27.4	8.4	0.0	10.5	10.9	5.3
Standard Deviation							3.4	19.0	18.6	5.7	0.0	7.1	7.4	3.6
CV							15.45	24.31	22.66	7.26	0.0	9.34	87.59	4.21

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Trt No.	Treatment Name	Form Conc	Rate	Rate Unit	Grow Stg	Appl Code	AMAPO	ABUTH	SOLPT	ANGR	BETVU	CHEAL	ABUTH	AMARE
Weed Code							AMAPO	ABUTH	SOLPT	ANGR	BETVU	CHEAL	ABUTH	AMARE
Crop Code														
Rating Data Type											injury	control	control	control
Rating Unit							percent	percent	percent	percent	percent	percent	percent	percent
Rating Date							6/23/2006	6/23/2006	6/23/2006	6/23/2006	10/5/2006	10/5/2006	10/5/2006	10/5/2006
Trt-Eval Interval							29 DA-A	29 DA-A	29 DA-A	29 DA-A	133 DA-A	133 DA-A	133 DA-A	133 DA-A
1	Betamix	1.3	2	pt/a	1/2" wds	A	99	93	99	91	0	89	89	99
1	Upbeet	50	0.5	oz/a	1/2" wds	A								
1	Stinger	3	0.25	pt/a	1/2" wds	A								
1	Betamix	1.3	3	pt/a	7 day	D								
1	Upbeet	50	0.5	oz/a	7 day	D								
1	Stinger	3	0.25	pt/a	7 day	D								
1	Activator 90 NIS		0.25	% v/v	7 day	D								
2	Betamix	1.3	2	pt/a	350A GDD	A	99	91	99	96	1	96	89	100
2	Upbeet	50	0.5	oz/a	350A GDD	A								
2	Stinger	3	0.25	pt/a	350A GDD	A								
2	Betamix	1.3	3	pt/a	350B GDD	E								
2	Upbeet	50	0.5	oz/a	350B GDD	E								
2	Stinger	3	0.25	pt/a	350B GDD	E								
2	Activator 90 NIS		0.25	% v/v	350B GDD	E								
3	Betamix	1.3	2	pt/a	400A GDD	B	99	95	99	91	1	93	93	99
3	Upbeet	50	0.5	oz/a	400A GDD	B								
3	Stinger	3	0.25	pt/a	400A GDD	B								
3	Betamix	1.3	3	pt/a	350B GDD	F								
3	Upbeet	50	0.5	oz/a	350B GDD	F								
3	Stinger	3	0.25	pt/a	350B GDD	F								
3	Activator 90 NIS		0.25	% v/v	350B GDD	F								
4	Untreated						0	0	0	0	0	0	0	0
5	Betamix	1.3	2	pt/a	400A GDD	B	99	99	99	94	0	96	93	98
5	Upbeet	50	0.5	oz/a	400A GDD	B								
5	Stinger	3	0.25	pt/a	400A GDD	B								
5	Betamix	1.3	3	pt/a	400B GDD	G								
5	Upbeet	50	0.5	oz/a	400B GDD	G								
5	Stinger	3	0.25	pt/a	400B GDD	G								
5	Activator 90 NIS		0.25	% v/v	400B GDD	G								
6	Betamix	1.3	2	pt/a	400A GDD	B	99	93	99	92	1	100	95	99
6	Upbeet	50	0.5	oz/a	400AGDD	B								
6	Stinger	3	0.25	pt/a	400A GDD	B								
6	Betamix	1.3	3	pt/a	500B GDD	H								
6	Upbeet	50	0.5	oz/a	500B GDD	H								
6	Stinger	3	0.25	pt/a	500B GDD	H								
6	Activator 90 NIS		0.25	% v/v	500B GDD	H								
7	Betamix	1.3	2	pt/a	425A GDD	C	92	90	99	87	1	96	85	96
7	Upbeet	50	0.5	oz/a	425A GDD	C								
7	Stinger	3	0.25	pt/a	425A GDD	C								
7	Betamix	1.3	3	pt/a	425B GDD	H								
7	Upbeet	50	0.5	oz/a	425B GDD	H								
7	Stinger	3	0.25	pt/a	425B GDD	H								
7	Activator 90 NIS		0.25	% v/v	425B GDD	H								
8	Betamix	1.3	2	pt/a	450A GDD	C	99	89	99	90	0	88	80	97
8	Upbeet	50	0.5	oz/a	450A GDD	C								
8	Stinger	3	0.25	pt/a	450A GDD	C								
8	Betamix	1.3	3	pt/a	450B GDD	I								
8	Upbeet	50	0.5	oz/a	450B GDD	I								
8	Stinger	3	0.25	pt/a	450B GDD	I								
8	Activator 90 NIS		0.25	% v/v	450B GDD	I								
LSD (P=.05)							4.2	10.4	0.0	11.6	2.0	10.2	14.8	5.3
Standard Deviation							2.9	7.1	0.0	7.9	1.3	6.9	10.1	3.6
CV							3.33	8.7	0.0	9.85	213.81	8.41	12.95	4.18

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Trt No.	Treatment Name	Form Conc	Rate	Rate Unit	Grow Stg	Appl Code	DATST control percent 10/5/2006 133 DA-A	SOLPT control percent 10/5/2006 133 DA-A	ANGR control percent 10/5/2006 133 DA-A	BETVU stand count 100' row 10/10/2006 138 DA-A	BETVU % sugar 10/10/2006 138 DA-A	BETVU yield ton/acre 10/10/2006 138 DA-A	BETVU RWST # / ton 10/10/2006 138 DA-A
1	Betamix	1.3	2	pt/a	1/2" wds	A	100	100	73	129	16.5	26.8	250.5
1	Upbeet	50	0.5	oz/a	1/2" wds	A							
1	Stinger	3	0.25	pt/a	1/2" wds	A							
1	Betamix	1.3	3	pt/a	7 day	D							
1	Upbeet	50	0.5	oz/a	7 day	D							
1	Stinger	3	0.25	pt/a	7 day	D							
1	Activator 90 NIS		0.25	% v/v	7 day	D							
2	Betamix	1.3	2	pt/a	350A GDD	A	100	100	89	128	16.8	24.5	253.4
2	Upbeet	50	0.5	oz/a	350A GDD	A							
2	Stinger	3	0.25	pt/a	350A GDD	A							
2	Betamix	1.3	3	pt/a	350B GDD	E							
2	Upbeet	50	0.5	oz/a	350B GDD	E							
2	Stinger	3	0.25	pt/a	350B GDD	E							
2	Activator 90 NIS		0.25	% v/v	350B GDD	E							
3	Betamix	1.3	2	pt/a	400A GDD	B	100	100	75	131	17.0	22.5	257.8
3	Upbeet	50	0.5	oz/a	400A GDD	B							
3	Stinger	3	0.25	pt/a	400A GDD	B							
3	Betamix	1.3	3	pt/a	350B GDD	F							
3	Upbeet	50	0.5	oz/a	350B GDD	F							
3	Stinger	3	0.25	pt/a	350B GDD	F							
3	Activator 90 NIS		0.25	% v/v	350B GDD	F							
4	Untreated						0	0	0	133	17.2	14.5	268.3
5	Betamix	1.3	2	pt/a	400A GDD	B	100	100	71	130	17.1	23.1	259.7
5	Upbeet	50	0.5	oz/a	400A GDD	B							
5	Stinger	3	0.25	pt/a	400A GDD	B							
5	Betamix	1.3	3	pt/a	400B GDD	G							
5	Upbeet	50	0.5	oz/a	400B GDD	G							
5	Stinger	3	0.25	pt/a	400B GDD	G							
5	Activator 90 NIS		0.25	% v/v	400B GDD	G							
6	Betamix	1.3	2	pt/a	400A GDD	B	100	100	78	136	16.8	22.3	256.5
6	Upbeet	50	0.5	oz/a	400AGDD	B							
6	Stinger	3	0.25	pt/a	400A GDD	B							
6	Betamix	1.3	3	pt/a	500B GDD	H							
6	Upbeet	50	0.5	oz/a	500B GDD	H							
6	Stinger	3	0.25	pt/a	500B GDD	H							
6	Activator 90 NIS		0.25	% v/v	500B GDD	H							
7	Betamix	1.3	2	pt/a	425A GDD	C	100	100	69	139	16.8	26.1	255.4
7	Upbeet	50	0.5	oz/a	425A GDD	C							
7	Stinger	3	0.25	pt/a	425A GDD	C							
7	Betamix	1.3	3	pt/a	425B GDD	H							
7	Upbeet	50	0.5	oz/a	425B GDD	H							
7	Stinger	3	0.25	pt/a	425B GDD	H							
7	Activator 90 NIS		0.25	% v/v	425B GDD	H							
8	Betamix	1.3	2	pt/a	450A GDD	C	100	100	68	131	16.7	25.4	251.3
8	Upbeet	50	0.5	oz/a	450A GDD	C							
8	Stinger	3	0.25	pt/a	450A GDD	C							
8	Betamix	1.3	3	pt/a	450B GDD	I							
8	Upbeet	50	0.5	oz/a	450B GDD	I							
8	Stinger	3	0.25	pt/a	450B GDD	I							
8	Activator 90 NIS		0.25	% v/v	450B GDD	I							
LSD (P=.05)							0.0	0.0	32.8	25.0	1.04	6.22	19.03
Standard Deviation							0.0	0.0	22.3	17.0	0.70	4.23	12.94
CV							0.0	0.0	34.19	12.88	4.18	18.27	5.04

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Conducted: Campus Investigator: Christy Sprague

Weed Code	
Crop Code	BETVU
Rating Data Type	RWSA
Rating Unit	# / acre
Rating Date	10/10/2006
Trt-Eval Interval	138 DA-A

Trt No.	Treatment Name	Form Conc	Rate	Rate Unit	Grow Stg	Appl Code	
1	Betamix	1.3	2	pt/a	1/2" wds	A	6740
1	Upbeet	50	0.5	oz/a	1/2" wds	A	
1	Stinger	3	0.25	pt/a	1/2" wds	A	
1	Betamix	1.3	3	pt/a	7 day	D	
1	Upbeet	50	0.5	oz/a	7 day	D	
1	Stinger	3	0.25	pt/a	7 day	D	
1	Activator 90 NIS		0.25	% v/v	7 day	D	
2	Betamix	1.3	2	pt/a	350A GDD	A	6175
2	Upbeet	50	0.5	oz/a	350A GDD	A	
2	Stinger	3	0.25	pt/a	350A GDD	A	
2	Betamix	1.3	3	pt/a	350B GDD	E	
2	Upbeet	50	0.5	oz/a	350B GDD	E	
2	Stinger	3	0.25	pt/a	350B GDD	E	
2	Activator 90 NIS		0.25	% v/v	350B GDD	E	
3	Betamix	1.3	2	pt/a	400A GDD	B	5779
3	Upbeet	50	0.5	oz/a	400A GDD	B	
3	Stinger	3	0.25	pt/a	400A GDD	B	
3	Betamix	1.3	3	pt/a	350B GDD	F	
3	Upbeet	50	0.5	oz/a	350B GDD	F	
3	Stinger	3	0.25	pt/a	350B GDD	F	
3	Activator 90 NIS		0.25	% v/v	350B GDD	F	
4	Untreated						3815
5	Betamix	1.3	2	pt/a	400A GDD	B	5978
5	Upbeet	50	0.5	oz/a	400A GDD	B	
5	Stinger	3	0.25	pt/a	400A GDD	B	
5	Betamix	1.3	3	pt/a	400B GDD	G	
5	Upbeet	50	0.5	oz/a	400B GDD	G	
5	Stinger	3	0.25	pt/a	400B GDD	G	
5	Activator 90 NIS		0.25	% v/v	400B GDD	G	
6	Betamix	1.3	2	pt/a	400A GDD	B	5736
6	Upbeet	50	0.5	oz/a	400AGDD	B	
6	Stinger	3	0.25	pt/a	400A GDD	B	
6	Betamix	1.3	3	pt/a	500B GDD	H	
6	Upbeet	50	0.5	oz/a	500B GDD	H	
6	Stinger	3	0.25	pt/a	500B GDD	H	
6	Activator 90 NIS		0.25	% v/v	500B GDD	H	
7	Betamix	1.3	2	pt/a	425A GDD	C	6678
7	Upbeet	50	0.5	oz/a	425A GDD	C	
7	Stinger	3	0.25	pt/a	425A GDD	C	
7	Betamix	1.3	3	pt/a	425B GDD	H	
7	Upbeet	50	0.5	oz/a	425B GDD	H	
7	Stinger	3	0.25	pt/a	425B GDD	H	
7	Activator 90 NIS		0.25	% v/v	425B GDD	H	
8	Betamix	1.3	2	pt/a	450A GDD	C	6400
8	Upbeet	50	0.5	oz/a	450A GDD	C	
8	Stinger	3	0.25	pt/a	450A GDD	C	
8	Betamix	1.3	3	pt/a	450B GDD	I	
8	Upbeet	50	0.5	oz/a	450B GDD	I	
8	Stinger	3	0.25	pt/a	450B GDD	I	
8	Activator 90 NIS		0.25	% v/v	450B GDD	I	

LSD (P=.05)	1678.4
Standard Deviation	1141.2
CV	19.3