

Interaction of Winter Annual Weed Removal on Insects I

Trial ID: FSB02-09
Conducted: C-13 Botany

Study Dir.: Barnett, Sprague, Di Fonzo
Investigator: Christy Sprague

Date Planted: 5/20/09
Variety: Asgrow 2107
Population: 200,000
Soil Type: Loam
Plot Size: 10 X 30 FT
Row Spacing: 7.5 IN
No. of Reps: 4
% OM: 3.7
pH: 7.1
Design: RANDOMIZED COMPLETE BLOCK

Tillage: No-Till into standing corn stubble
Fertilizer: None

Crop and Weed Description

Weed	Code	Common Name	Scientific Name
1.	TAROF	DANDELION, COMMON	TARAXACUM OFFICINALE
2.	STEME	CHICKWEED, COMMON	STELLARIA MEDIA (L.)
3.	ERICA	HORSEWEED (Marestail)	CONYZA CANADENSIS L.
4.	LAMAM	HENBIT	LAMIUM AMPLEXICAULE L.
5.	MELAL	COCKLE, WHITE	MELANDRIUM ALBUM (MILL.) GARCKE
6.	ERIST	FLEABANE, ROUGH	ERIGERON STRIGOSUS MUHL.
7.	AMBEL	RAGWEED, COMMON	AMBROSIA ARTEMISIIFOLIA L.
8.	ANGR	mainly foxtail species	SETARIA SP.
9.	DAUCA	CARROT, WILD	DAUCUS CAROTA L.
10.	CHEAL	LAMBSQUARTERS, COMMON	CHENOPODIUM ALBUM L.
Crop	Code	Common Name	
1.	GLXMA	Soybean	

Application Description

	A	B	C	D	E	F	G
Application Timing:	Fall	49 EPP	34 EPP	27 EPP	16 EPP	1 EPP	POST
Date Treated:	11/6/08	4/2/09	4/17/09	4/24/09	5/4/09	5/19/09	6/26/09
Time Treated:	5:00 pm	6:00 pm	9:00 am	11:00 am	5:00 pm	7:00 pm	11:00 am
% Cloud Cover:	60	100	10	30	90	0	0
Air Temp., Unit:	65 F	64 F	45 F	68 F	69 F	75 F	80 F
% Relative Humidity:	50	36	47	46	36	43	61
Wind Speed/Unit/Dir:	3 mph E	7 mph E	2 mph SW	8 mph SW	3 mph SE	5 mph W	2 mph E
Soil Temp., Unit:	52 F	51 F	41 F	50 F	56 F	58 F	72 F
Soil/Leaf Surface M:	5 5	3 5	3 5	3 5	4 5	5 5	4 5
Soil Moist (1=w 5=d):	3	2	2	3	3	5	3

Crop Stage at Each Application

	A	B	C	D	E	F	G
Crop Name:	GLXMA	GLXMA	GLXMA	GLXMA	GLXMA	GLXMA	GLXMA
Height (In.):	-	-	-	-	-	-	7"
Stage (L):	-	-	-	-	-	-	V4

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Weed Stage at Each Application

	A	B	C	D	E	F	G
Weed 1 Name:	TAROF	TAROF	TAROF	TAROF	TAROF	TAROF	TAROF
Height (In.):	6" di am	6" di am	6" di am	7" di am	7" di am	6-14"	14"
Stage (L):	many	many	many	many	many	6-flower	many
Weed 2 Name:	STEME	STEME	STEME	STEME	STEME	STEME	STEME
Height (In.):	2"	6" di am	7" di am	8" di am	8" di am	8-16"	14"
Stage (L):	many	many	many	many	many	seed drop	many
Weed 3 Name:	ERI CA	ERI CA	ERI CA	ERI CA	ERI CA	ERI CA	ERI CA
Height (In.):	4"	2"	-	-	-	3-5"	-
Stage (L):	many	3-6	-	-	-	many	-
Weed 4 Name:	LAMAM	LAMAM	LAMAM	LAMAM	LAMAM	LAMAM	LAMAM
Height (In.):	3"	6" di am	8" di am	8" di am	10" di a	10"	12"
Stage (L):	6-8	many	many	many	many	seed drop	many
Weed 5 Name:	MELAL	MELAL	MELAL	MELAL	MELAL	MELAL	MELAL
Height (In.):	-	2"	4"	5"	4-10" di a	12-20"	18"
Stage (L):	-	many	many	many	many	flower	many
Weed 6 Name:	ERI ST	ERI ST	ERI ST	ERI ST	ERI ST	ERI ST	ERI ST
Height (In.):	-	-	-	4" di am	8" di a	10"	38"
Stage (L):	-	-	-	many	many	many	many
Weed 7 Name:	AMBEL	AMBEL	AMBEL	AMBEL	AMBEL	AMBEL	AMBEL
Height (In.):	-	-	-	-	-	-	8"
Stage (L):	-	-	-	-	-	-	many
Weed 8 Name:	ANGR	ANGR	ANGR	ANGR	ANGR	ANGR	ANGR
Height (In.):	-	-	-	-	-	-	4"
Stage (L):	-	-	-	-	-	-	4
Weed 9 Name:	DAUCA	DAUCA	DAUCA	DAUCA	DAUCA	DAUCA	DAUCA
Height (In.):	-	-	-	-	-	-	12"
Stage (L):	-	-	-	-	-	-	many
Weed10 Name:	CHEAL	CHEAL	CHEAL	CHEAL	CHEAL	CHEAL	CHEAL
Height (In.):	-	-	-	-	-	-	12"
Stage (L):	-	-	-	-	-	-	many

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	27"	20"	100"	19	water	28
B	Cub	3.8	AirMix	11003	27"	20"	100"	19	water	28
C	Cub	3.8	AirMix	11003	27"	20"	100"	19	water	28
D	Cub	3.8	AirMix	11003	27"	20"	100"	19	water	28
E	Cub	3.8	AirMix	11003	27"	20"	100"	19	water	28
F	Backpack	3.6	AirMix	11003	24"	20"	100"	19	water	32
G	tractorsp	5.0	AirMix	11003	30"	20"	360"	15.5	water	30

Comments: Treatment #8 - water was in tank so application was diluted

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Weed Code									
Crop Code							GLXMA	GLXMA	
Rating Data Type							moisture	yield	
Rating Unit							percent	bu/acre	
Rating Date							10/12/09	10/12/09	
Trt-Eval Interval							340 DA-A	at 13% M	

Trt No.	Treatment Name	Form Conc	Form Type	Rate	Rate Unit	Grow Stg	Appl Code		
1	Canopy EX		X					18.0	73.6
1	Classic	25	DF	2	oz/a	Fall	A		
1	Express	50	SG	0.3	oz/a	Fall	A		
1	Roundup WeatherMax	4.5	SL	22	fl oz/a	Fall	A		
1	2,4-D Ester	3.8	L	1	pt/a	Fall	A		
1	AMS		DF	17	lb/100 gal	Fall	A		
2	Roundup WeatherMax	4.5	SL	22	fl oz/a	Fall	A	17.1	70.0
2	2,4-D Ester	3.8	L	1	pt/a	Fall	A		
2	AMS		DF	17	lb/100 gal	Fall	A		
3	Untreated							18.5	57.5
4	Canopy EX		X					18.1	68.9
4	Classic	25	DF	2	oz/a		B		
4	Express	50	SG	0.3	oz/a		B		
4	Roundup WeatherMax	4.5	SL	22	fl oz/a		B		
4	2,4-D Ester	3.8	L	1	pt/a		B		
4	AMS		DF	17	lb/100 gal		B		
5	Roundup WeatherMax	4.5	SL	22	fl oz/a		B	16.7	66.3
5	2,4-D Ester	3.8	L	1	pt/a		B		
5	AMS		DF	17	lb/100 gal		B		
6	Canopy EX		X					17.5	73.8
6	Classic	25	DF	2	oz/a		C		
6	Express	50	SG	0.3	oz/a		C		
6	Roundup WeatherMax	4.5	SL	22	fl oz/a		C		
6	2,4-D Ester	3.8	L	1	pt/a		C		
6	AMS		DF	17	lb/100 gal		C		
7	Roundup WeatherMax	4.5	SL	22	fl oz/a		C	16.5	73.3
7	2,4-D Ester	3.8	L	1	pt/a		C		
7	AMS		DF	17	lb/100 gal		C		
8	Canopy EX		X					16.8	72.6
8	Classic	25	DF	2	oz/a		D		
8	Express	50	SG	0.3	oz/a		D		
8	Roundup WeatherMax	4.5	SL	22	fl oz/a		D		
8	2,4-D Ester	3.8	L	1	pt/a		D		
8	AMS		DF	17	lb/100 gal		D		
9	Roundup WeatherMax	4.5	SL	22	fl oz/a		D	16.8	73.8
9	2,4-D Ester	3.8	L	1	pt/a		D		
9	AMS		DF	17	lb/100 gal		D		
10	Canopy EX		X					21.7	65.7
10	Classic	25	DF	2	oz/a		E		
10	Express	50	SG	0.3	oz/a		E		
10	Roundup WeatherMax	4.5	SL	22	fl oz/a		E		
10	2,4-D Ester	3.8	L	1	pt/a		E		
10	AMS		DF	17	lb/100 gal		E		
11	Roundup WeatherMax	4.5	SL	22	fl oz/a		E	17.7	71.0
11	2,4-D Ester	3.8	L	1	pt/a		E		
11	AMS		DF	17	lb/100 gal		E		
12	Canopy EX		X					21.4	66.6
12	Classic	25	DF	2	oz/a		F-PRE		
12	Roundup WeatherMax	4.5	SL	22	fl oz/a		F-PRE		
12	AMS		DF	17	lb/100 gal		F-PRE		
13	Roundup WeatherMax	4.5	SL	22	fl oz/a		F-PRE	17.2	67.9
13	AMS		DF	17	lb/100 gal		F-PRE		
14	Untreated							17.0	59.7

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Rating Unit					percent	bu/acre	
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Trt-Eval Interval					340 DA-A	at 13% M	

Trt No.	Treatment Name	Form Conc	Form Type	Rate Rate	Unit	Grow Stg	Appl Code
LSD (P=.05)						2.82	7.50
Standard Deviation						1.97	5.25
CV						11.02	7.65