

MSU Weed Science Research Program

Sequential weed control programs in corn

Trial ID: C03-13 Study Dir.: Sprague, Powell
 Conducted: Campus C-27 Investigator: Christy Sprague

Date Planted: May/06/2013 **Row Spacing:** 30 IN
Variety: P9807 **No. of Reps:** 4
Population: 32,000 seeds/A **% OM:** 2.8
Soil Type: Sandy clay loam **pH:** 6.5
Plot Size: 10 X 40 FT **Design:** RANDOMIZED COMPLETE BLOCK

Tillage: Fall chisel, spring soil finish x2
Fertilizer: 300 lb urea broadcast, 150 lb 19-19-19 starter

Crop and Weed Description

Weed	Code	Common Name	Scientific Name
1.	ANGR	mainly foxtail species	SETARIA SP.
2.	CHEAL	LAMBSQUARTERS, COMMON	CHENOPODIUM ALBUM L.
3.	AMAPO	AMARANTH, POWELL	AMARANTHUS POWELLII S.WATS.
4.	AMBEL	RAGWEED, COMMON	AMBROSIA ARTEMISIIFOLIA L.
Crop	Code	Common Name	
1.	ZEAMX	CORN, FIELD	

Application Description

	A	B
Application Timing:	PRE	POST
Date Treated:	May/07/2013	Jun/15/2013
Time Treated:	11:30 AM	11:15 AM
% Cloud Cover:	20	100
Air Temp., Unit:	68 F	74 F
% Relative Humidity:	39	60
Wind Speed/Unit/Dir:	3 mph E	3 mph SW
Soil Temp., Unit:	62 F	68 F
Soil/Leaf Surface M:	3 -	2 5
Soil Moist (1=w 5=d):	3	2

Crop Stage at Each Application

	A	B
Crop Name:	ZEAMX	ZEAMX
Height (In.):	-	14-19"
Stage (L):	-	V5

Weed Stage at Each Application

	A	B
Weed 1 Name:	ANGR	ANGR
Height (In.):	-	4"
Stage (L):	-	4
Weed 2 Name:	CHEAL	CHEAL
Height (In.):	-	2.5"
Stage (L):	-	10
Weed 3 Name:	AMAPO	AMAPO
Height (In.):	-	-
Stage (L):	-	-
Weed 4 Name:	AMBEL	AMBEL
Height (In.):	-	3"
Stage (L):	-	6

Weed Density (plants/sq. ft.)

	1	2	3	4
Date:	Jul/11/2013	Jul/11/2013	Jul/11/2013	Jul/11/2013
Weed Name:	ANGR	CHEAL	AMAPO	AMBEL
Density:	2	13	1	3

Application Equipment

Appl	Sprayer	Speed	Nozzle	Nozzle	Nozzle	Nozzle	Boom	GPA	Carrier	PSI
	Type	MPH	Type	Size	Height	Spacing	Width			
A	Cub	3.8	AIXR	11003	22"	20"	100"	19	water	35
B	Cub	3.8	AIXR	11003	29"	20"	100"	19	water	30

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Trial ID: C03-13 Study Dir.: Sprague, Powell
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Weed Code	ANGR	CHEAL	AMAPO
Crop Code	ZEAMX		
Rating Data Type	injury	control	control
Rating Unit	percent	percent	percent
Rating Date	Jun/15/2013	Jun/15/2013	Jun/15/2013
Trt-Eval Interval	39 DA-A	39 DA-A	39 DA-A
# Subsamples, Dec.	0	0	0

Trt No.	Treatment Name	Form Conc	Form Type	Rate Rate	Rate Unit	Grow Stg	Appl Code				
1	Harness Xtra	5.6	L	1.6	qt/a	PRE	A	0	99	99	99
	Impact	2.8	L	1	fl oz/a	POST	B				
	AAtrex	4	L	1	pt/a	POST	B				
	MSO		L	1	% v/v	POST	B				
	28% UAN		L	2.5	% v/v	POST	B				
2	Harness Xtra	5.6	L	1.6	qt/a	PRE	A	0	99	98	99
	Impact	2.8	L	0.75	fl oz/a	POST	B				
	Status	56	WG	2.5	oz/a	POST	B				
	AAtrex	4	L	1	pt/a	POST	B				
	MSO		L	1	% v/v	POST	B				
	28% UAN		L	2.5	% v/v	POST	B				
3	Degree Xtra	4	L	3	qt/a	PRE	A	0	98	99	99
	Laudis	3.5	L	2	fl oz/a	POST	B				
	Clarity	4	L	8	fl oz/a	POST	B				
	MSO		L	1	% v/v	POST	B				
	AMS		WG	8.5	lb/100 gal	POST	B				
4	Untreated							0	0	0	0
5	Harness Xtra	5.6	L	1.6	qt/a	PRE	A	0	99	99	99
	Roundup PowerMax	4.5	SL	22	fl oz/a	POST	B				
	AMS		WG	17	lb/100 gal	POST	B				
6	Harness Xtra	5.6	L	1.6	qt/a	PRE	A	0	99	99	99
	Impact	2.8	L	0.75	fl oz/a	POST	B				
	AAtrex	4	L	1	pt/a	POST	B				
	Roundup PowerMax	4.5	SL	22	fl oz/a	POST	B				
	MSO		L	1	% v/v	POST	B				
	AMS		WG	17	lb/100 gal	POST	B				
7	Harness Xtra	5.6	L	1.6	qt/a	PRE	A	0	99	99	99
	Laudis	3.5	L	3	fl oz/a	POST	B				
	AAtrex	4	L	1	pt/a	POST	B				
	Roundup PowerMax	4.5	SL	22	fl oz/a	POST	B				
	MSO		L	1	% v/v	POST	B				
	AMS		WG	17	lb/100 gal	POST	B				
8	Zidua	85	WG	2.5	oz/a	PRE	A	0	99	71	99
	Armezon	2.8	L	0.75	fl oz/a	POST	B				
	AAtrex	4	L	1	pt/a	POST	B				
	Roundup PowerMax	4.5	SL	22	fl oz/a	POST	B				
	MSO		L	1	% v/v	POST	B				
	AMS		WG	17	lb/100 gal	POST	B				
9	Verdict	5.57	L	15	fl oz/a	PRE	A	0	99	99	99
	Armezon	2.8	L	0.75	fl oz/a	POST	B				
	AAtrex	4	L	1	pt/a	POST	B				
	Roundup PowerMax	4.5	SL	22	fl oz/a	POST	B				
	MSO		L	1	% v/v	POST	B				
	AMS		WG	17	lb/100 gal	POST	B				
10	Zidua	85	WG	2.5	oz/a	PRE	A	0	99	73	99
	Status	56	WG	5	oz/a	POST	B				
	Roundup PowerMax	4.5	SL	22	fl oz/a	POST	B				
	Surfactant		L	0.25	% v/v	POST	B				
	AMS		WG	17	lb/100 gal	POST	B				

MSU Weed Science Research Program

Weed Code								ANGR	CHEAL	AMAPO	
Crop Code								ZEAMX			
Rating Data Type								injury	control	control	
Rating Unit								percent	percent	percent	
Rating Date								Jun/15/2013	Jun/15/2013	Jun/15/2013	
Trt-Eval Interval								39 DA-A	39 DA-A	39 DA-A	
# Subsamples, Dec.								0	0	0	
Trt No.	Treatment Name	Form Conc	Form Type	Rate Rate	Unit	Grow Stg	Appl Code				
11	Verdict	5.57	L	15	fl oz/a	PRE	A	0	99	98	
	Status	56	WG	5	oz/a	POST	B			99	
	Roundup PowerMax	4.5	SL	22	fl oz/a	POST	B				
	Surfactant		L	0.25	% v/v	POST	B				
	AMS		WG	17	lb/100 gal	POST	B				
12	Resolve Q (1.25 oz/A)							0	99	71	
	Rimsulfuron (Premix)	25	WG	0.9	oz/a	PRE	A				
	Harmony SG (Premix)	50	WG	0.1	oz/a	PRE	A				
	Roundup PowerMax	4.5	SL	22	fl oz/a	POST	B				
	AMS		WG	17	lb/100 gal	POST	B				
13	Corvus	2.63	L	3.5	oz/a	PRE	A	0	99	99	
	AAtrex	4	L	1	qt/a	PRE	A				
	Status	56	WG	5	oz/a	POST	B				
	Roundup PowerMax	4.5	SL	22	fl oz/a	POST	B				
	AMS		WG	17	lb/100 gal	POST	B				
14	Balance Flexx	2	L	4	fl oz/a	PRE	A	0	99	99	
	AAtrex	4	L	1.5	qt/a	PRE	A				
	TripleFLEX	4.16	L	1.5	pt/a	POST	B				
	Liberty	2.34	L	22	fl oz/a	POST	B				
	AMS		WG	17	lb/100 gal	POST	B				
15	Balance Flexx	2	L	4	fl oz/a	PRE	A	0	99	99	
	AAtrex	4	L	1.5	qt/a	PRE	A				
	Clarity	4	L	8	fl oz/a	POST	B				
	Liberty	2.34	L	22	fl oz/a	POST	B				
	AMS		WG	17	lb/100 gal	POST	B				
16	Lumax EZ	3.67	L	2	qt/a	PRE	A	0	99	99	
	Touchdown Total	4.17	SL	24	fl oz/a	POST	B				
	AMS		WG	17	lb/100 gal	POST	B				
17	Lexar EZ	3.7	L	2.25	qt/a	PRE	A	0	99	99	
	Touchdown Total	4.17	SL	24	fl oz/a	POST	B				
	AMS		WG	17	lb/100 gal	POST	B				
18	Lumax EZ	3.67	L	1.5	qt/a	PRE	A	0	99	99	
	Halex GT	4.38	L	3.6	pt/a	POST	B				
	Surfactant		L	0.25	% v/v	POST	B				
	AMS		WG	17	lb/100 gal	POST	B				
19	Duall II Magnum	7.64	L	0.67	pt/a	PRE	A	0	98	0	
	GWN-10141		WG	0.75	oz/a	POST	B			99	
	Surfactant		L	0.25	% v/v	POST	B				
20	Duall II Magnum	7.64	L	0.67	pt/a	PRE	A	0	99	0	
	GWN-10141		WG	1	oz/a	POST	B			99	
	Surfactant		L	0.25	% v/v	POST	B				
LSD (P=.05)								0.0	0.9	3.9	0.0
CV								0.0	0.69	3.44	0.0

Means followed by same letter do not significantly differ (P=.05, LSD)

MSU Weed Science Research Program

Weed Code		AMBEL		ZEAMX		ANGR		CHEAL			
Crop Code											
Rating Data Type		control		injury		control		control			
Rating Unit		percent		percent		percent		percent			
Rating Date		Jun/15/2013		Jun/21/2013		Jun/21/2013		Jun/21/2013			
Trt-Eval Interval		39 DA-A		6 DA-B		6 DA-B		6 DA-B			
# Subsamples, Dec.		0		0		0		0			
Trt No.	Treatment Name	Form Conc	Form Type	Rate Rate	Rate Unit	Grow Stg	Appl Code				
1	Harness Xtra	5.6	L	1.6	qt/a	PRE	A	99	0	99	99
	Impact	2.8	L	1	fl oz/a	POST	B				
	AAtrex	4	L	1	pt/a	POST	B				
	MSO		L	1	% v/v	POST	B				
	28% UAN		L	2.5	% v/v	POST	B				
2	Harness Xtra	5.6	L	1.6	qt/a	PRE	A	98	1	99	99
	Impact	2.8	L	0.75	fl oz/a	POST	B				
	Status	56	WG	2.5	oz/a	POST	B				
	AAtrex	4	L	1	pt/a	POST	B				
	MSO		L	1	% v/v	POST	B				
	28% UAN		L	2.5	% v/v	POST	B				
3	Degree Xtra	4	L	3	qt/a	PRE	A	99	9	99	99
	Laudis	3.5	L	2	fl oz/a	POST	B				
	Clarity	4	L	8	fl oz/a	POST	B				
	MSO		L	1	% v/v	POST	B				
	AMS		WG	8.5	lb/100 gal	POST	B				
4	Untreated							0	0	0	0
5	Harness Xtra	5.6	L	1.6	qt/a	PRE	A	97	1	99	99
	Roundup PowerMax	4.5	SL	22	fl oz/a	POST	B				
	AMS		WG	17	lb/100 gal	POST	B				
6	Harness Xtra	5.6	L	1.6	qt/a	PRE	A	99	0	99	99
	Impact	2.8	L	0.75	fl oz/a	POST	B				
	AAtrex	4	L	1	pt/a	POST	B				
	Roundup PowerMax	4.5	SL	22	fl oz/a	POST	B				
	MSO		L	1	% v/v	POST	B				
	AMS		WG	17	lb/100 gal	POST	B				
7	Harness Xtra	5.6	L	1.6	qt/a	PRE	A	99	1	99	99
	Laudis	3.5	L	3	fl oz/a	POST	B				
	AAtrex	4	L	1	pt/a	POST	B				
	Roundup PowerMax	4.5	SL	22	fl oz/a	POST	B				
	MSO		L	1	% v/v	POST	B				
	AMS		WG	17	lb/100 gal	POST	B				
8	Zidua	85	WG	2.5	oz/a	PRE	A	85	1	99	99
	Armezon	2.8	L	0.75	fl oz/a	POST	B				
	AAtrex	4	L	1	pt/a	POST	B				
	Roundup PowerMax	4.5	SL	22	fl oz/a	POST	B				
	MSO		L	1	% v/v	POST	B				
	AMS		WG	17	lb/100 gal	POST	B				
9	Verdict	5.57	L	15	fl oz/a	PRE	A	99	0	99	99
	Armezon	2.8	L	0.75	fl oz/a	POST	B				
	AAtrex	4	L	1	pt/a	POST	B				
	Roundup PowerMax	4.5	SL	22	fl oz/a	POST	B				
	MSO		L	1	% v/v	POST	B				
	AMS		WG	17	lb/100 gal	POST	B				
10	Zidua	85	WG	2.5	oz/a	PRE	A	79	3	99	99
	Status	56	WG	5	oz/a	POST	B				
	Roundup PowerMax	4.5	SL	22	fl oz/a	POST	B				
	Surfactant		L	0.25	% v/v	POST	B				
	AMS		WG	17	lb/100 gal	POST	B				
11	Verdict	5.57	L	15	fl oz/a	PRE	A	99	5	99	99
	Status	56	WG	5	oz/a	POST	B				
	Roundup PowerMax	4.5	SL	22	fl oz/a	POST	B				
	Surfactant		L	0.25	% v/v	POST	B				
	AMS		WG	17	lb/100 gal	POST	B				

MSU Weed Science Research Program

Weed Code						AMBEL		ANGR	CHEAL	
Crop Code							ZEAMX			
Rating Data Type						control	injury	control	control	
Rating Unit						percent	percent	percent	percent	
Rating Date						Jun/15/2013	Jun/21/2013	Jun/21/2013	Jun/21/2013	
Trt-Eval Interval						39 DA-A	6 DA-B	6 DA-B	6 DA-B	
# Subsamples, Dec.						0	0	0	0	
Trt No.	Treatment Name	Form Conc	Form Type	Rate Rate Unit	Grow Stg	Appl Code				
12	Resolve Q (1.25 oz/A)	25	WG	0.9 oz/a	PRE	A	75	0	99	
	Rimsulfuron (Premix)	50	WG	0.1 oz/a	PRE	A				
	Harmony SG (Premix)	4.5	SL	22 fl oz/a	POST	B				
	Roundup PowerMax		WG	17 lb/100 gal	POST	B				
	AMS									
13	Corvus	2.63	L	3.5 oz/a	PRE	A	99	7	99	
	AAtrex	4	L	1 qt/a	PRE	A				
	Status	56	WG	5 oz/a	POST	B				
	Roundup PowerMax	4.5	SL	22 fl oz/a	POST	B				
	AMS		WG	17 lb/100 gal	POST	B				
14	Balance Flexx	2	L	4 fl oz/a	PRE	A	99	6	99	
	AAtrex	4	L	1.5 qt/a	PRE	A				
	TripleFLEX	4.16	L	1.5 pt/a	POST	B				
	Liberty	2.34	L	22 fl oz/a	POST	B				
	AMS		WG	17 lb/100 gal	POST	B				
15	Balance Flexx	2	L	4 fl oz/a	PRE	A	99	18	99	
	AAtrex	4	L	1.5 qt/a	PRE	A				
	Clarity	4	L	8 fl oz/a	POST	B				
	Liberty	2.34	L	22 fl oz/a	POST	B				
	AMS		WG	17 lb/100 gal	POST	B				
16	Lumax EZ	3.67	L	2 qt/a	PRE	A	99	0	99	
	Touchdown Total	4.17	SL	24 fl oz/a	POST	B				
	AMS		WG	17 lb/100 gal	POST	B				
17	Lexar EZ	3.7	L	2.25 qt/a	PRE	A	99	0	99	
	Touchdown Total	4.17	SL	24 fl oz/a	POST	B				
	AMS		WG	17 lb/100 gal	POST	B				
18	Lumax EZ	3.67	L	1.5 qt/a	PRE	A	99	0	99	
	Halex GT	4.38	L	3.6 pt/a	POST	B				
	Surfactant		L	0.25 % v/v	POST	B				
	AMS		WG	17 lb/100 gal	POST	B				
19	Duall II Magnum	7.64	L	0.67 pt/a	PRE	A	0	0	99	
	GWN-10141		WG	0.75 oz/a	POST	B			30	
	Surfactant		L	0.25 % v/v	POST	B				
20	Duall II Magnum	7.64	L	0.67 pt/a	PRE	A	0	0	99	
	GWN-10141		WG	1 oz/a	POST	B			33	
	Surfactant		L	0.25 % v/v	POST	B				
LSD (P=.05)							5.2	2.7	0.0	1.6
CV							4.55	72.08	0.0	1.31

Means followed by same letter do not significantly differ (P=.05, LSD)

MSU Weed Science Research Program

Weed Code		AMAPO	AMBEL		ANGR						
Crop Code				ZEAMX							
Rating Data Type		control	control	injury	control						
Rating Unit		percent	percent	percent	percent						
Rating Date		Jun/21/2013	Jun/21/2013	Jun/28/2013	Jun/28/2013						
Trt-Eval Interval		6 DA-B	6 DA-B	13 DA-B	13 DA-B						
# Subsamples, Dec.		0	0	0	0						
Trt No.	Treatment Name	Form Conc	Form Type	Rate Rate	Unit	Grow Stg	Appl Code				
1	Harness Xtra	5.6	L	1.6	qt/a	PRE	A	99	99	0	99
	Impact	2.8	L	1	fl oz/a	POST	B				
	AAtrex	4	L	1	pt/a	POST	B				
	MSO		L	1	% v/v	POST	B				
	28% UAN		L	2.5	% v/v	POST	B				
2	Harness Xtra	5.6	L	1.6	qt/a	PRE	A	99	99	0	99
	Impact	2.8	L	0.75	fl oz/a	POST	B				
	Status	56	WG	2.5	oz/a	POST	B				
	AAtrex	4	L	1	pt/a	POST	B				
	MSO		L	1	% v/v	POST	B				
	28% UAN		L	2.5	% v/v	POST	B				
3	Degree Xtra	4	L	3	qt/a	PRE	A	99	99	5	99
	Laudis	3.5	L	2	fl oz/a	POST	B				
	Clarity	4	L	8	fl oz/a	POST	B				
	MSO		L	1	% v/v	POST	B				
	AMS		WG	8.5	lb/100 gal	POST	B				
4	Untreated							0	0	0	0
5	Harness Xtra	5.6	L	1.6	qt/a	PRE	A	99	99	0	99
	Roundup PowerMax	4.5	SL	22	fl oz/a	POST	B				
	AMS		WG	17	lb/100 gal	POST	B				
6	Harness Xtra	5.6	L	1.6	qt/a	PRE	A	99	99	1	99
	Impact	2.8	L	0.75	fl oz/a	POST	B				
	AAtrex	4	L	1	pt/a	POST	B				
	Roundup PowerMax	4.5	SL	22	fl oz/a	POST	B				
	MSO		L	1	% v/v	POST	B				
	AMS		WG	17	lb/100 gal	POST	B				
7	Harness Xtra	5.6	L	1.6	qt/a	PRE	A	99	99	0	99
	Laudis	3.5	L	3	fl oz/a	POST	B				
	AAtrex	4	L	1	pt/a	POST	B				
	Roundup PowerMax	4.5	SL	22	fl oz/a	POST	B				
	MSO		L	1	% v/v	POST	B				
	AMS		WG	17	lb/100 gal	POST	B				
8	Zidua	85	WG	2.5	oz/a	PRE	A	99	99	2	99
	Armezon	2.8	L	0.75	fl oz/a	POST	B				
	AAtrex	4	L	1	pt/a	POST	B				
	Roundup PowerMax	4.5	SL	22	fl oz/a	POST	B				
	MSO		L	1	% v/v	POST	B				
	AMS		WG	17	lb/100 gal	POST	B				
9	Verdict	5.57	L	15	fl oz/a	PRE	A	99	99	3	99
	Armezon	2.8	L	0.75	fl oz/a	POST	B				
	AAtrex	4	L	1	pt/a	POST	B				
	Roundup PowerMax	4.5	SL	22	fl oz/a	POST	B				
	MSO		L	1	% v/v	POST	B				
	AMS		WG	17	lb/100 gal	POST	B				
10	Zidua	85	WG	2.5	oz/a	PRE	A	99	99	3	99
	Status	56	WG	5	oz/a	POST	B				
	Roundup PowerMax	4.5	SL	22	fl oz/a	POST	B				
	Surfactant		L	0.25	% v/v	POST	B				
	AMS		WG	17	lb/100 gal	POST	B				
11	Verdict	5.57	L	15	fl oz/a	PRE	A	99	99	4	99
	Status	56	WG	5	oz/a	POST	B				
	Roundup PowerMax	4.5	SL	22	fl oz/a	POST	B				
	Surfactant		L	0.25	% v/v	POST	B				
	AMS		WG	17	lb/100 gal	POST	B				

MSU Weed Science Research Program

Weed Code						AMAPO	AMBEL	ZEAMX	ANGR
Crop Code									
Rating Data Type						control	control	injury	control
Rating Unit						percent	percent	percent	percent
Rating Date						Jun/21/2013	Jun/21/2013	Jun/28/2013	Jun/28/2013
Trt-Eval Interval						6 DA-B	6 DA-B	13 DA-B	13 DA-B
# Subsamples, Dec.						0	0	0	0
Trt No.	Treatment Name	Form Conc	Form Type	Rate Rate	Unit	Grow Stg	Appl Code		
12	Resolve Q (1.25 oz/A)	25	WG	0.9	oz/a	PRE	A	99	99
	Rimsulfuron (Premix)	50	WG	0.1	oz/a	PRE	A		
	Harmony SG (Premix)	4.5	SL	22	fl oz/a	POST	B		
	Roundup PowerMax		WG	17	lb/100 gal	POST	B		
13	AMS	2.63	L	3.5	oz/a	PRE	A	99	99
	Corvus	4	L	1	qt/a	PRE	A		
	AAtrex	56	WG	5	oz/a	POST	B		
	Status	4.5	SL	22	fl oz/a	POST	B		
	Roundup PowerMax		WG	17	lb/100 gal	POST	B		
14	AMS	2	L	4	fl oz/a	PRE	A	99	99
	Balance Flexx	4	L	1.5	qt/a	PRE	A		
	AAtrex	4.16	L	1.5	pt/a	POST	B		
	TripleFLEX	2.34	L	22	fl oz/a	POST	B		
	Liberty		WG	17	lb/100 gal	POST	B		
15	AMS	2	L	4	fl oz/a	PRE	A	99	99
	Balance Flexx	4	L	1.5	qt/a	PRE	A		
	AAtrex	4	L	8	fl oz/a	POST	B		
	Clarity	2.34	L	22	fl oz/a	POST	B		
	Liberty		WG	17	lb/100 gal	POST	B		
16	AMS	3.67	L	2	qt/a	PRE	A	99	99
	Lumax EZ	4.17	SL	24	fl oz/a	POST	B		
	Touchdown Total		WG	17	lb/100 gal	POST	B		
17	AMS	3.7	L	2.25	qt/a	PRE	A	99	99
	Lexar EZ	4.17	SL	24	fl oz/a	POST	B		
	Touchdown Total		WG	17	lb/100 gal	POST	B		
18	AMS	3.67	L	1.5	qt/a	PRE	A	99	99
	Lumax EZ	4.38	L	3.6	pt/a	POST	B		
	Halex GT		L	0.25	% v/v	POST	B		
	Surfactant		WG	17	lb/100 gal	POST	B		
19	AMS	7.64	L	0.67	pt/a	PRE	A	99	48
	Duall II Magnum		WG	0.75	oz/a	POST	B		
	GWN-10141		L	0.25	% v/v	POST	B		
20	AMS	7.64	L	0.67	pt/a	PRE	A	97	48
	Duall II Magnum		WG	1	oz/a	POST	B		
	GWN-10141		L	0.25	% v/v	POST	B		
	Surfactant								
	LSD (P=.05)							1.4	2.2
	CV							1.07	1.73
								2.2	119.78
								0.6	0.48

Means followed by same letter do not significantly differ (P=.05, LSD)

MSU Weed Science Research Program

Weed Code	CHEAL	AMAPO	AMBEL	ZEAMX	ANGR							
Crop Code												
Rating Data Type	control	control	control	injury	control							
Rating Unit	percent	percent	percent	percent	percent							
Rating Date	Jun/28/2013	Jun/28/2013	Jun/28/2013	Jul/12/2013	Jul/12/2013							
Trt-Eval Interval	13 DA-B	13 DA-B	13 DA-B	27 DA-B	27 DA-B							
# Subsamples, Dec.	0	0	0	0	0							
Trt No.	Treatment Name	Form Conc	Form Type	Rate Rate	Unit	Grow Stg	Appl Code					
1	Harness Xtra	5.6	L	1.6	qt/a	PRE	A	99	99	99	0	99
	Impact	2.8	L	1	fl oz/a	POST	B					
	AAtrex	4	L	1	pt/a	POST	B					
	MSO		L	1	% v/v	POST	B					
	28% UAN		L	2.5	% v/v	POST	B					
2	Harness Xtra	5.6	L	1.6	qt/a	PRE	A	99	99	99	0	99
	Impact	2.8	L	0.75	fl oz/a	POST	B					
	Status	56	WG	2.5	oz/a	POST	B					
	AAtrex	4	L	1	pt/a	POST	B					
	MSO		L	1	% v/v	POST	B					
	28% UAN		L	2.5	% v/v	POST	B					
3	Degree Xtra	4	L	3	qt/a	PRE	A	99	99	99	1	99
	Laudis	3.5	L	2	fl oz/a	POST	B					
	Clarity	4	L	8	fl oz/a	POST	B					
	MSO		L	1	% v/v	POST	B					
	AMS		WG	8.5	lb/100 gal	POST	B					
4	Untreated							0	0	0	0	0
5	Harness Xtra	5.6	L	1.6	qt/a	PRE	A	99	99	99	0	99
	Roundup PowerMax	4.5	SL	22	fl oz/a	POST	B					
	AMS		WG	17	lb/100 gal	POST	B					
6	Harness Xtra	5.6	L	1.6	qt/a	PRE	A	99	99	99	0	99
	Impact	2.8	L	0.75	fl oz/a	POST	B					
	AAtrex	4	L	1	pt/a	POST	B					
	Roundup PowerMax	4.5	SL	22	fl oz/a	POST	B					
	MSO		L	1	% v/v	POST	B					
	AMS		WG	17	lb/100 gal	POST	B					
7	Harness Xtra	5.6	L	1.6	qt/a	PRE	A	99	99	99	0	99
	Laudis	3.5	L	3	fl oz/a	POST	B					
	AAtrex	4	L	1	pt/a	POST	B					
	Roundup PowerMax	4.5	SL	22	fl oz/a	POST	B					
	MSO		L	1	% v/v	POST	B					
	AMS		WG	17	lb/100 gal	POST	B					
8	Zidua	85	WG	2.5	oz/a	PRE	A	99	99	99	0	99
	Armezon	2.8	L	0.75	fl oz/a	POST	B					
	AAtrex	4	L	1	pt/a	POST	B					
	Roundup PowerMax	4.5	SL	22	fl oz/a	POST	B					
	MSO		L	1	% v/v	POST	B					
	AMS		WG	17	lb/100 gal	POST	B					
9	Verdict	5.57	L	15	fl oz/a	PRE	A	99	99	99	0	99
	Armezon	2.8	L	0.75	fl oz/a	POST	B					
	AAtrex	4	L	1	pt/a	POST	B					
	Roundup PowerMax	4.5	SL	22	fl oz/a	POST	B					
	MSO		L	1	% v/v	POST	B					
	AMS		WG	17	lb/100 gal	POST	B					
10	Zidua	85	WG	2.5	oz/a	PRE	A	99	99	99	0	99
	Status	56	WG	5	oz/a	POST	B					
	Roundup PowerMax	4.5	SL	22	fl oz/a	POST	B					
	Surfactant		L	0.25	% v/v	POST	B					
	AMS		WG	17	lb/100 gal	POST	B					
11	Verdict	5.57	L	15	fl oz/a	PRE	A	99	99	99	1	99
	Status	56	WG	5	oz/a	POST	B					
	Roundup PowerMax	4.5	SL	22	fl oz/a	POST	B					
	Surfactant		L	0.25	% v/v	POST	B					
	AMS		WG	17	lb/100 gal	POST	B					

MSU Weed Science Research Program

Weed Code	CHEAL	AMAPO	AMBEL	ZEAMX	ANGR						
Crop Code											
Rating Data Type	control	control	control	injury	control						
Rating Unit	percent	percent	percent	percent	percent						
Rating Date	Jun/28/2013	Jun/28/2013	Jun/28/2013	Jul/12/2013	Jul/12/2013						
Trt-Eval Interval	13 DA-B	13 DA-B	13 DA-B	27 DA-B	27 DA-B						
# Subsamples, Dec.	0	0	0	0	0						
Trt Treatment	Form Conc	Form Type	Rate Rate	Unit	Grow Stg	Appl Code					
12 Resolve Q (1.25 oz/A)							99	99	99	0	99
Rimsulfuron (Premix)	25	WG	0.9	oz/a	PRE	A					
Harmony SG (Premix)	50	WG	0.1	oz/a	PRE	A					
Roundup PowerMax	4.5	SL	22	fl oz/a	POST	B					
AMS		WG	17	lb/100 gal	POST	B					
13 Corvus	2.63	L	3.5	oz/a	PRE	A	99	99	99	0	99
AAtrex	4	L	1	qt/a	PRE	A					
Status	56	WG	5	oz/a	POST	B					
Roundup PowerMax	4.5	SL	22	fl oz/a	POST	B					
AMS		WG	17	lb/100 gal	POST	B					
14 Balance Flexx	2	L	4	fl oz/a	PRE	A	99	99	99	0	99
AAtrex	4	L	1.5	qt/a	PRE	A					
TripleFLEX	4.16	L	1.5	pt/a	POST	B					
Liberty	2.34	L	22	fl oz/a	POST	B					
AMS		WG	17	lb/100 gal	POST	B					
15 Balance Flexx	2	L	4	fl oz/a	PRE	A	99	99	99	5	99
AAtrex	4	L	1.5	qt/a	PRE	A					
Clarity	4	L	8	fl oz/a	POST	B					
Liberty	2.34	L	22	fl oz/a	POST	B					
AMS		WG	17	lb/100 gal	POST	B					
16 Lumax EZ	3.67	L	2	qt/a	PRE	A	99	99	99	0	99
Touchdown Total	4.17	SL	24	fl oz/a	POST	B					
AMS		WG	17	lb/100 gal	POST	B					
17 Lexar EZ	3.7	L	2.25	qt/a	PRE	A	99	99	99	0	99
Touchdown Total	4.17	SL	24	fl oz/a	POST	B					
AMS		WG	17	lb/100 gal	POST	B					
18 Lumax EZ	3.67	L	1.5	qt/a	PRE	A	99	99	99	0	99
Halex GT	4.38	L	3.6	pt/a	POST	B					
Surfactant		L	0.25	% v/v	POST	B					
AMS		WG	17	lb/100 gal	POST	B					
19 Duall II Magnum	7.64	L	0.67	pt/a	PRE	A	45	70	66	0	99
GWN-10141		WG	0.75	oz/a	POST	B					
Surfactant		L	0.25	% v/v	POST	B					
20 Duall II Magnum	7.64	L	0.67	pt/a	PRE	A	54	78	69	0	99
GWN-10141		WG	1	oz/a	POST	B					
Surfactant		L	0.25	% v/v	POST	B					
LSD (P=.05)							2.9	6.5	2.4	1.2	0.2
CV							2.34	5.01	1.9	238.15	0.12

Means followed by same letter do not significantly differ (P=.05, LSD)

MSU Weed Science Research Program

Weed Code	CHEAL	AMAPO	AMBEL									
Crop Code												
Rating Data Type	control	control	control									
Rating Unit	percent	percent	percent									
Rating Date	Jul/12/2013	Jul/12/2013	Jul/12/2013									
Trt-Eval Interval	27 DA-B	27 DA-B	27 DA-B									
# Subsamples, Dec.	0	0	0									
Trt No.	Treatment Name	Form Conc	Form Type	Rate Rate	Unit	Grow Stg	Appl Code					
1	Harness Xtra	5.6	L	1.6	qt/a	PRE	A	99	99	99	17.7	229.1
	Impact	2.8	L	1	fl oz/a	POST	B					
	AAtrex	4	L	1	pt/a	POST	B					
	MSO		L	1	% v/v	POST	B					
	28% UAN		L	2.5	% v/v	POST	B					
2	Harness Xtra	5.6	L	1.6	qt/a	PRE	A	99	99	99	17.7	222.8
	Impact	2.8	L	0.75	fl oz/a	POST	B					
	Status	56	WG	2.5	oz/a	POST	B					
	AAtrex	4	L	1	pt/a	POST	B					
	MSO		L	1	% v/v	POST	B					
	28% UAN		L	2.5	% v/v	POST	B					
3	Degree Xtra	4	L	3	qt/a	PRE	A	99	99	99	17.6	213.4
	Laudis	3.5	L	2	fl oz/a	POST	B					
	Clarity	4	L	8	fl oz/a	POST	B					
	MSO		L	1	% v/v	POST	B					
	AMS		WG	8.5	lb/100 gal	POST	B					
4	Untreated							0	0	0	17.9	192.3
5	Harness Xtra	5.6	L	1.6	qt/a	PRE	A	99	99	99	17.8	218.0
	Roundup PowerMax	4.5	SL	22	fl oz/a	POST	B					
	AMS		WG	17	lb/100 gal	POST	B					
6	Harness Xtra	5.6	L	1.6	qt/a	PRE	A	99	99	99	17.7	225.0
	Impact	2.8	L	0.75	fl oz/a	POST	B					
	AAtrex	4	L	1	pt/a	POST	B					
	Roundup PowerMax	4.5	SL	22	fl oz/a	POST	B					
	MSO		L	1	% v/v	POST	B					
	AMS		WG	17	lb/100 gal	POST	B					
7	Harness Xtra	5.6	L	1.6	qt/a	PRE	A	99	99	99	17.7	236.3
	Laudis	3.5	L	3	fl oz/a	POST	B					
	AAtrex	4	L	1	pt/a	POST	B					
	Roundup PowerMax	4.5	SL	22	fl oz/a	POST	B					
	MSO		L	1	% v/v	POST	B					
	AMS		WG	17	lb/100 gal	POST	B					
8	Zidua	85	WG	2.5	oz/a	PRE	A	99	99	99	17.8	218.6
	Armezon	2.8	L	0.75	fl oz/a	POST	B					
	AAtrex	4	L	1	pt/a	POST	B					
	Roundup PowerMax	4.5	SL	22	fl oz/a	POST	B					
	MSO		L	1	% v/v	POST	B					
	AMS		WG	17	lb/100 gal	POST	B					
9	Verdict	5.57	L	15	fl oz/a	PRE	A	99	99	99	17.7	233.5
	Armezon	2.8	L	0.75	fl oz/a	POST	B					
	AAtrex	4	L	1	pt/a	POST	B					
	Roundup PowerMax	4.5	SL	22	fl oz/a	POST	B					
	MSO		L	1	% v/v	POST	B					
	AMS		WG	17	lb/100 gal	POST	B					
10	Zidua	85	WG	2.5	oz/a	PRE	A	99	99	99	17.8	223.0
	Status	56	WG	5	oz/a	POST	B					
	Roundup PowerMax	4.5	SL	22	fl oz/a	POST	B					
	Surfactant		L	0.25	% v/v	POST	B					
	AMS		WG	17	lb/100 gal	POST	B					
11	Verdict	5.57	L	15	fl oz/a	PRE	A	99	99	99	17.6	227.2
	Status	56	WG	5	oz/a	POST	B					
	Roundup PowerMax	4.5	SL	22	fl oz/a	POST	B					
	Surfactant		L	0.25	% v/v	POST	B					
	AMS		WG	17	lb/100 gal	POST	B					

MSU Weed Science Research Program

Weed Code	CHEAL	AMAPO	AMBEL								
Crop Code				ZEAMX	ZEAMX						
Rating Data Type	control	control	control	moisure	yield						
Rating Unit	percent	percent	percent	percent	bu/acre						
Rating Date	Jul/12/2013	Jul/12/2013	Jul/12/2013	Nov/23/2013	Nov/23/2013						
Trt-Eval Interval	27 DA-B	27 DA-B	27 DA-B	200 DA-A	at 15% M						
# Subsamples, Dec.	0	0	0	1	1						
Trt Treatment	Form Conc	Form Type	Rate Rate	Unit	Grow Stg	Appl Code					
12 Resolve Q (1.25 oz/A)							99	99	99	17.6	230.6
Rimsulfuron (Premix)	25	WG	0.9	oz/a	PRE	A					
Harmony SG (Premix)	50	WG	0.1	oz/a	PRE	A					
Roundup PowerMax	4.5	SL	22	fl oz/a	POST	B					
AMS		WG	17	lb/100 gal	POST	B					
13 Corvus	2.63	L	3.5	oz/a	PRE	A	99	99	99	17.8	222.9
AAtrex	4	L	1	qt/a	PRE	A					
Status	56	WG	5	oz/a	POST	B					
Roundup PowerMax	4.5	SL	22	fl oz/a	POST	B					
AMS		WG	17	lb/100 gal	POST	B					
14 Balance Flexx	2	L	4	fl oz/a	PRE	A	99	99	99	17.6	221.8
AAtrex	4	L	1.5	qt/a	PRE	A					
TripleFLEX	4.16	L	1.5	pt/a	POST	B					
Liberty	2.34	L	22	fl oz/a	POST	B					
AMS		WG	17	lb/100 gal	POST	B					
15 Balance Flexx	2	L	4	fl oz/a	PRE	A	99	99	99	17.6	214.4
AAtrex	4	L	1.5	qt/a	PRE	A					
Clarity	4	L	8	fl oz/a	POST	B					
Liberty	2.34	L	22	fl oz/a	POST	B					
AMS		WG	17	lb/100 gal	POST	B					
16 Lumax EZ	3.67	L	2	qt/a	PRE	A	99	99	99	17.6	233.0
Touchdown Total	4.17	SL	24	fl oz/a	POST	B					
AMS		WG	17	lb/100 gal	POST	B					
17 Lexar EZ	3.7	L	2.25	qt/a	PRE	A	99	98	99	17.5	221.0
Touchdown Total	4.17	SL	24	fl oz/a	POST	B					
AMS		WG	17	lb/100 gal	POST	B					
18 Lumax EZ	3.67	L	1.5	qt/a	PRE	A	99	99	99	17.6	225.2
Halex GT	4.38	L	3.6	pt/a	POST	B					
Surfactant		L	0.25	% v/v	POST	B					
AMS		WG	17	lb/100 gal	POST	B					
19 Duall II Magnum	7.64	L	0.67	pt/a	PRE	A	50	99	94	17.8	223.0
GWN-10141		WG	0.75	oz/a	POST	B					
Surfactant		L	0.25	% v/v	POST	B					
20 Duall II Magnum	7.64	L	0.67	pt/a	PRE	A	60	99	95	17.6	216.2
GWN-10141		WG	1	oz/a	POST	B					
Surfactant		L	0.25	% v/v	POST	B					
LSD (P=.05)							1.3	0.6	2.2	0.34	17.75
CV							1.02	0.48	1.66	1.38	5.64

Means followed by same letter do not significantly differ (P=.05, LSD)