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Weed Control Programs with Instigate

Trial ID: 14RPOC2 Location: Western Branch F-7 W Trial Year: 2014
 Protocol ID: 14RPOC2 Investigator: Dr. Mark M. Loux
 Project ID: USA-14-009 Study Director: Anthony Dobbels
 Sponsor Contact: Marsha Martin, DuPont

Crop Description

Crop 1: ZEAMX Zea mays
Variety: Seed Consultants SC 11HR12 **BBCH Scale:** BCOR
Description: RR/LL

Planting Date: Apr-26-2014
Planting Method: SEEDED seeded
Planting Equipment: FPP Finger Pickup Planter
Emergence Date: May-12-2014

Planting Rate, Unit: 32097 S/A
Depth, Unit: 1.75 IN
Row Spacing, Unit: 30 IN
Soil Temperature, Unit: 56 F
Soil Moisture: NORMAL normal, adequate
Seed Bed: MEDIUM medium

Pest Description

- Pest 1 Type:** W **Code:** AMBTR Ambrosia trifida
Common Name: Giant ragweed
- Pest 2 Type:** W **Code:** SETFA Setaria faberi
Common Name: Giant foxtail
- Pest 3 Type:** W **Code:** ABUTH Abutilon theophrasti
Common Name: velvetleaf
- Pest 4 Type:** W **Code:** AMBEL Ambrosia artemisiifolia
Common Name: Common ragweed
- Pest 5 Type:** W **Code:** POLPY Persicaria pensylvanica
Common Name: Pennsylvania smartweed
- Pest 6 Type:** W **Code:** AMARE Amaranthus retroflexus
Common Name: Redroot pigweed
- Pest 7 Type:** W **Code:** CHEAL Chenopodium album
Common Name: Common lambsquarters

Site and Design

Treated Plot Width: 6.67 FT
Treated Plot Length: 30 FT
Treated Plot Area: 200.1 FT² **Treatments:** 8
Replications: 3

Site Type: FIELD field
Experimental Unit: 1 PLOT plot
Tillage Type: CONTIL conventional-till
Study Design: RACOB� Randomized Complete Block (RCB)

No. Previous Crop Year
 1. Soybean 2013

Soil Description

Description Name: F-7 West
% OM: 3.8 **Texture:** SICL silty clay loam
pH: 7.2 **Soil Name:** Kokomo
CEC: 23.6 **Fert. Level:** G good
Soil Drainage: G good

Application Description

	A	B
Application Date:	Apr-26-2014	Jun-5-2014
Appl. Start Time:	7:00 PM	10:30 AM
Appl. Stop Time:	7:15 PM	11:00 AM
Application Method:	SPRAY	SPRAY
Application Timing:	PRE	POST
Application Placement:	BROSOL	BROFOL
Applied By:	Loux	Loux
Air Temperature, Unit:	74 F	66 F
% Relative Humidity:	47	73
Wind Velocity, Unit:	7 MPH	5.5 MPH
Wind Direction:	N	W
Dew Presence (Y/N):	N no	N no
Soil Temperature, Unit:	62 F	62 F
Soil Moisture:	MOIST	MOIST
% Cloud Cover:	5	10
Next Moisture Occurred On:	Apr-28-2014	Jun-8-2014
Time to Next Moisture, Unit:	1.5 DAY	3 DAY

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Crop Stage At Each Application

	A	B
Crop 1 Code, BBCH Scale:	ZEAMX BCOR	ZEAMX BCOR
Stage Scale Used:		DESC
Stage Majority, Percent:	15	100
Height, Unit:	18 IN	
Height Minimum, Maximum:	17	19

Pest Stage At Each Application

	A	B
Pest 1 Code, Type, Scale:	AMBTR W	AMBTR W
Stage Majority, Percent:	14	100
Height, Unit:	1.5 IN	
Height Minimum, Maximum:	1	2
Density, Unit:		11.33 M2
Pest 2 Code, Type, Scale:	SETFA W	SETFA W
Stage Majority, Percent:	14	100
Height, Unit:	1.5 IN	
Height Minimum, Maximum:	1	2
Density, Unit:		10 M2
Pest 3 Code, Type, Scale:	ABUTH W	ABUTH W
Density, Unit:		3 M2
Pest 4 Code, Type, Scale:	AMBEL W	AMBEL W
Density, Unit:		5.66 M2
Pest 5 Code, Type, Scale:	POLPY W	POLPY W
Density, Unit:		10.66 M2
Pest 6 Code, Type, Scale:	AMARE W	AMARE W
Density, Unit:		4.33 M2
Pest 7 Code, Type, Scale:	CHEAL W	CHEAL W
Density, Unit:		4.66 M2

Application Equipment

	A	B
Appl. Equipment:	6 FOOT BOOM	6 FOOT BOOM
Equipment Type:	SPRBAC	SPRBAC
Operation Pressure, Unit:	46 PSI	46 PSI
Nozzle Type:	AI XR	AI XR
Nozzle Size:	110015	110015
Nozzle Spacing, Unit:	18 IN	18 IN
Boom Length, Unit:	6.67 FT	6.67 FT
Boom Height, Unit:	20 IN	20 IN
Ground Speed, Unit:	3 MPH	3 MPH
Carrier:	WATER	WATER
Spray Volume, Unit:	15 GPA	15 GPA
Mix Size, Unit:	1 Liters	1 Liters
Propellant:	CO2	CO2

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Weed Control Programs with Instigate

Trial ID: 14PRPOC2 Location: Western Branch F-7 W Trial Year: 2014
 Protocol ID: 14PRPOC2 Investigator: Dr. Mark M. Loux
 Project ID: USA-14-009 Study Director: Anthony Dobbels
 Sponsor Contact: Marsha Martin, DuPont

Pest Type		W Weed	W Weed	W Weed					
Pest Code		SETFA	AMBTR	AMBEL					
Pest Scientific Name		Setaria faberi	Ambrosia trifi>	Ambrosia artem>					
Pest Name		Giant foxtail	Giant ragweed	Common ragweed					
Crop Code	ZEAMX	ZEAMX							
BBCH Scale	BCOR	BCOR							
Crop Scientific Name	Zea mays	Zea mays							
Crop Name	Corn	Corn							
Rating Date	May-26-2014	Jun-4-2014	Jun-4-2014	Jun-4-2014					
Rating Type	PHYGEN	PHYGEN	CONTRO	CONTRO					
Rating Unit	%	%	%	%					
Number of Subsamples	1	1	1	1					
SE Group No.	1	2	11	4					
Rating Timing		AT POST	AT POST	AT POST					
Days After First/Last Applic.	30 30	39 39	39 39	39 39					
Trt-Eval Interval	30 DA-A	-1 DA-B	-1 DA-B	-1 DA-B					
Plant-Eval Interval	30 DP-1	39 DP-1	39 DP-1	39 DP-1					
Days After Emergence	14 DE-1	23 DE-1	23 DE-1	23 DE-1					
ARM Action Codes			ET8						
Number of Decimals	0	0	0	0					
Trt Treatment No. Name	Rate Unit	Other Rate	Other Rate	Appl Unit Code	1	2	3	4	5
1 Instigate 6 oz					0	0	100	73	100
1 Rimsulfuron	0.25 oz ai/a	1 oz/a		A					
1 Mesotrione	2.5 oz ai/a	5 oz/a		A					
1 Cinch ATZ	2.06 lb ai/a	3 pt/a		A					
1 Abundit Extra	0.75 lb ae/a	32 oz/a		B					
1 N PAK AMS	2.5 % v/v	1.5 qt/a		B					
2 Instigate 6 oz					0	0	100	73	100
2 Rimsulfuron	0.25 oz ai/a	1 oz/a		A					
2 Mesotrione	2.5 oz ai/a	5 oz/a		A					
2 Cinch ATZ	2.06 lb ai/a	3 pt/a		A					
2 Atrazine	1 lb ai/a	1 qt/a		B					
2 Abundit Extra	0.75 lb ae/a	32 oz/a		B					
2 N PAK AMS	2.5 % v/v	1.5 qt/a		B					
3 Instigate 6 oz					0	0	100	73	100
3 Rimsulfuron	0.25 oz ai/a	1 oz/a		A					
3 Mesotrione	2.5 oz ai/a	5 oz/a		A					
3 Cinch ATZ	2.06 lb ai/a	3 pt/a		A					
3 Realm Q 4 oz									
3 Rimsulfuron	0.3 oz ai/a	1.2 oz/a		B					
3 Mesotrione	1.25 oz ai/a	2.5 oz/a		B					
3 Isoxadifen-ethyl	0.15 oz ai/a	0.3 oz/a		B					
3 Abundit Extra	0.75 lb ae/a	32 oz/a		B					
3 N PAK AMS	2.5 % v/v	1.5 qt/a		B					
4 Instigate 6 oz					0	0	100	62	100
4 Rimsulfuron	0.25 oz ai/a	1 oz/a		A					
4 Mesotrione	2.5 oz ai/a	5 oz/a		A					
4 BreakFree ATZ	1.97 lb ai/a	3 pt/a		A					
4 Abundit Extra	0.75 lb ae/a	32 oz/a		B					
4 N PAK AMS	2.5 % v/v	1.5 qt/a		B					
5 Instigate 6 oz					0	0	100	63	100
5 Rimsulfuron	0.25 oz ai/a	1 oz/a		A					
5 Mesotrione	2.5 oz ai/a	5 oz/a		A					
5 BreakFree ATZ	1.97 lb ai/a	3 pt/a		A					
5 Atrazine	1 lb ai/a	1 qt/a		B					
5 Abundit Extra	0.75 lb ae/a	32 oz/a		B					
5 N PAK AMS	2.5 % v/v	1.5 qt/a		B					

t=Mean descriptions are reported in transformed data units, and are not de-transformed.
 Missing data estimates are included in columns:Average=17

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Pest Type				W Weed	W Weed	W Weed			
Pest Code				SETFA	AMBTR	AMBEL			
Pest Scientific Name				Setaria faberi	Ambrosia trifi>	Ambrosia artem>			
Pest Name				Giant foxtail	Giant ragweed	Common ragweed			
Crop Code	ZEAMX	ZEAMX							
BBCH Scale	BCOR	BCOR							
Crop Scientific Name	Zea mays	Zea mays							
Crop Name	Corn	Corn							
Rating Date	May-26-2014	Jun-4-2014		Jun-4-2014	Jun-4-2014	Jun-4-2014			
Rating Type	PHYGEN	PHYGEN		CONTRO	CONTRO	CONTRO			
Rating Unit	%	%		%	%	%			
Number of Subsamples	1	1		1	1	1			
SE Group No.	1	2		11	4	5			
Rating Timing		AT POST		AT POST	AT POST	AT POST			
Days After First/Last Applic.	30 30	39 39		39 39	39 39	39 39			
Trt-Eval Interval	30 DA-A	-1 DA-B		-1 DA-B	-1 DA-B	-1 DA-B			
Plant-Eval Interval	30 DP-1	39 DP-1		39 DP-1	39 DP-1	39 DP-1			
Days After Emergence	14 DE-1	23 DE-1		23 DE-1	23 DE-1	23 DE-1			
ARM Action Codes					ET8				
Number of Decimals	0	0		0	0	0			
Trt Treatment	Rate	Other	Other	Appl					
No. Name	Rate Unit	Rate	Rate Unit	Code	1	2	3	4	5
6 Instigate 6 oz					0	0	100	73	100
6 Rimsulfuron	0.25 oz ai/a	1 oz/a		A					
6 Mesotrione	2.5 oz ai/a	5 oz/a		A					
6 BreakFree ATZ	1.97 lb ai/a	3 pt/a		A					
6 Realm Q 4 oz									
6 Rimsulfuron	0.3 oz ai/a	1.2 oz/a		B					
6 Mesotrione	1.25 oz ai/a	2.5 oz/a		B					
6 Isoxadifen-ethyl	0.15 oz ai/a	0.3 oz/a		B					
6 Abundit Extra	0.75 lb ae/a	32 oz/a		B					
6 N PAK AMS	2.5 % v/v	1.5 qt/a		B					
7 Lumax EZ	2.75 lb ai/a	3 qt/a		A	0	0	100	40	100
7 Abundit Extra	0.75 lb ae/a	32 oz/a		B					
7 N PAK AMS	2.5 % v/v	1.5 qt/a		B					
8 UTC					0	0	0	0	0
LSD (P=.05)					0.0	0.0	0.0	22.3	0.0
Standard Deviation					0.0	0.0	0.0	12.7	0.0
CV					0.0	0.0	0.0	22.24	0.0
Bartlett's X2					0.0	0.0	0.0	2.852	0.0
P(Bartlett's X2)					.	.	.	0.827	.
Skewness					.	.	-2.4219*	-0.958*	-2.4219*
Kurtosis					.	.	4.2103*	0.2175	4.2103*
Replicate F					0.000	0.000	0.000	5.473	0.000
Replicate Prob(F)					1.0000	1.0000	1.0000	0.0175	1.0000
Treatment F					0.000	0.000	0.000	12.318	0.000
Treatment Prob(F)					1.0000	1.0000	1.0000	0.0001	1.0000

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Pest Type	W Weed	W Weed	W Weed	W Weed	W Weed
Pest Code	CHEAL	AMARE	POLPY	ABUTH	SIDSP
Pest Scientific Name	Chenopodium ai>	Amaranthus ret>	Persicaria pen>	Abutilon theop>	Sida spinosa
Pest Name	Common lambsqu>	Redroot pigweed	Pennsylvania s>	velvetleaf	Prickly sida
Crop Code					
BBCH Scale					
Crop Scientific Name					
Crop Name					
Rating Date	Jun-4-2014	Jun-4-2014	Jun-4-2014	Jun-4-2014	Jun-4-2014
Rating Type	CONTRO	CONTRO	CONTRO	CONTRO	CONTRO
Rating Unit	%	%	%	%	%
Number of Subsamples	1	1	1	1	1
SE Group No.	6	7	8	9	10
Rating Timing	AT POST	AT POST	AT POST	AT POST	AT POST
Days After First/Last Applic.	39 39	39 39	39 39	39 39	39 39
Trt-Eval Interval	-1 DA-B	-1 DA-B	-1 DA-B	-1 DA-B	-1 DA-B
Plant-Eval Interval	39 DP-1	39 DP-1	39 DP-1	39 DP-1	39 DP-1
Days After Emergence	23 DE-1	23 DE-1	23 DE-1	23 DE-1	23 DE-1
ARM Action Codes					
Number of Decimals	0	0	0	0	0
Trt Treatment	Rate	Other	Other	Appl	
No. Name	Rate Unit	Rate	Rate Unit	Code	
1 Instigate 6 oz					100
1 Rimsulfuron	0.25 oz ai/a	1 oz/a		A	100
1 Mesotrione	2.5 oz ai/a	5 oz/a		A	100
1 Cinch ATZ	2.06 lb ai/a	3 pt/a		A	100
1 Abundit Extra	0.75 lb ae/a	32 oz/a		B	100
1 N PAK AMS	2.5 % v/v	1.5 qt/a		B	97
2 Instigate 6 oz					100
2 Rimsulfuron	0.25 oz ai/a	1 oz/a		A	100
2 Mesotrione	2.5 oz ai/a	5 oz/a		A	100
2 Cinch ATZ	2.06 lb ai/a	3 pt/a		A	100
2 Atrazine	1 lb ai/a	1 qt/a		B	100
2 Abundit Extra	0.75 lb ae/a	32 oz/a		B	100
2 N PAK AMS	2.5 % v/v	1.5 qt/a		B	100
3 Instigate 6 oz					100
3 Rimsulfuron	0.25 oz ai/a	1 oz/a		A	100
3 Mesotrione	2.5 oz ai/a	5 oz/a		A	100
3 Cinch ATZ	2.06 lb ai/a	3 pt/a		A	100
3 Realm Q 4 oz					100
3 Rimsulfuron	0.3 oz ai/a	1.2 oz/a		B	100
3 Mesotrione	1.25 oz ai/a	2.5 oz/a		B	100
3 Isoxadifen-ethyl	0.15 oz ai/a	0.3 oz/a		B	100
3 Abundit Extra	0.75 lb ae/a	32 oz/a		B	100
3 N PAK AMS	2.5 % v/v	1.5 qt/a		B	97
4 Instigate 6 oz					100
4 Rimsulfuron	0.25 oz ai/a	1 oz/a		A	100
4 Mesotrione	2.5 oz ai/a	5 oz/a		A	100
4 BreakFree ATZ	1.97 lb ai/a	3 pt/a		A	100
4 Abundit Extra	0.75 lb ae/a	32 oz/a		B	100
4 N PAK AMS	2.5 % v/v	1.5 qt/a		B	97
5 Instigate 6 oz					100
5 Rimsulfuron	0.25 oz ai/a	1 oz/a		A	100
5 Mesotrione	2.5 oz ai/a	5 oz/a		A	100
5 BreakFree ATZ	1.97 lb ai/a	3 pt/a		A	100
5 Atrazine	1 lb ai/a	1 qt/a		B	100
5 Abundit Extra	0.75 lb ae/a	32 oz/a		B	100
5 N PAK AMS	2.5 % v/v	1.5 qt/a		B	95

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Pest Type	W Weed	W Weed	W Weed	W Weed	W Weed
Pest Code	CHEAL	AMARE	POLPY	ABUTH	SIDSP
Pest Scientific Name	Chenopodium al>	Amaranthus ret>	Persicaria pen>	Abutilon theop>	Sida spinosa
Pest Name	Common lambsqu>	Redroot pigweed	Pennsylvania s>	velvetleaf	Prickly sida
Crop Code					
BBCH Scale					
Crop Scientific Name					
Crop Name					
Rating Date	Jun-4-2014	Jun-4-2014	Jun-4-2014	Jun-4-2014	Jun-4-2014
Rating Type	CONTRO	CONTRO	CONTRO	CONTRO	CONTRO
Rating Unit	%	%	%	%	%
Number of Subsamples	1	1	1	1	1
SE Group No.	6	7	8	9	10
Rating Timing	AT POST	AT POST	AT POST	AT POST	AT POST
Days After First/Last Applic.	39 39	39 39	39 39	39 39	39 39
Trt-Eval Interval	-1 DA-B	-1 DA-B	-1 DA-B	-1 DA-B	-1 DA-B
Plant-Eval Interval	39 DP-1	39 DP-1	39 DP-1	39 DP-1	39 DP-1
Days After Emergence	23 DE-1	23 DE-1	23 DE-1	23 DE-1	23 DE-1
ARM Action Codes					
Number of Decimals	0	0	0	0	0
Trt Treatment	Rate	Other	Other	Appl	
No. Name	Rate Unit	Rate	Rate Unit	Code	
6 Instigate 6 oz					6 100 7 100 8 100 9 100 10 93
6 Rimsulfuron	0.25 oz ai/a	1 oz/a		A	
6 Mesotrione	2.5 oz ai/a	5 oz/a		A	
6 BreakFree ATZ	1.97 lb ai/a	3 pt/a		A	
6 Realm Q 4 oz					
6 Rimsulfuron	0.3 oz ai/a	1.2 oz/a		B	
6 Mesotrione	1.25 oz ai/a	2.5 oz/a		B	
6 Isoxadifen-ethyl	0.15 oz ai/a	0.3 oz/a		B	
6 Abundit Extra	0.75 lb ae/a	32 oz/a		B	
6 N PAK AMS	2.5 % v/v	1.5 qt/a		B	
7 Lumax EZ	2.75 lb ai/a	3 qt/a		A	100 100 100 100 93
7 Abundit Extra	0.75 lb ae/a	32 oz/a		B	
7 N PAK AMS	2.5 % v/v	1.5 qt/a		B	
8 UTC					0 0 0 0 0
LSD (P=.05)	0.0	0.0			10.1
Standard Deviation	0.0	0.0			5.8
CV	0.0	0.0			6.89
Bartlett's X2	0.0	0.0			2.086
P(Bartlett's X2)	.	.			0.837
Skewness	-2.4219*	-2.4219*			-2.2471*
Kurtosis	4.2103*	4.2103*			3.6521*
Replicate F	0.000	0.000			6.191
Replicate Prob(F)	1.0000	1.0000			0.0118
Treatment F	0.000	0.000			103.533
Treatment Prob(F)	1.0000	1.0000			0.0001

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Pest Type	W Weed	W Weed	W Weed	W Weed	W Weed				
Pest Code	SETFA	AMBTR	AMBEL	CHEAL	ABUTH				
Pest Scientific Name	Setaria faberi	Ambrosia trifi>	Ambrosia artem>	Chenopodium al>	Abutilon theop>				
Pest Name	Giant foxtail	Giant ragweed	Common ragweed	Common lambsqu>	velvetleaf				
Crop Code									
BBCH Scale									
Crop Scientific Name									
Crop Name									
Rating Date	Jul-3-2014	Jul-3-2014	Jul-3-2014	Jul-3-2014	Jul-3-2014				
Rating Type	CONTRO	CONTRO	CONTRO	CONTRO	CONTRO				
Rating Unit	%	%	%	%	%				
Number of Subsamples	1	1	1	1	1				
SE Group No.	12	13	14	15	16				
Rating Timing									
Days After First/Last Applic.	68 28	68 28	68 28	68 28	68 28				
Trt-Eval Interval	28 DA-B	28 DA-B	28 DA-B	28 DA-B	28 DA-B				
Plant-Eval Interval	68 DP-1	68 DP-1	68 DP-1	68 DP-1	68 DP-1				
Days After Emergence	52 DE-1	52 DE-1	52 DE-1	52 DE-1	52 DE-1				
ARM Action Codes									
Number of Decimals	0	0	0	0	0				
Trt Treatment	Rate	Other	Other	Appl					
No. Name	Rate Unit	Rate	Rate Unit	Code					
					11				
					12				
					13				
					14				
					15				
1 Instigate 6 oz					83	80	100	100	100
1 Rimsulfuron	0.25 oz ai/a	1 oz/a		A					
1 Mesotrione	2.5 oz ai/a	5 oz/a		A					
1 Cinch ATZ	2.06 lb ai/a	3 pt/a		A					
1 Abundit Extra	0.75 lb ae/a	32 oz/a		B					
1 N PAK AMS	2.5 % v/v	1.5 qt/a		B					
2 Instigate 6 oz					90	82	100	100	100
2 Rimsulfuron	0.25 oz ai/a	1 oz/a		A					
2 Mesotrione	2.5 oz ai/a	5 oz/a		A					
2 Cinch ATZ	2.06 lb ai/a	3 pt/a		A					
2 Atrazine	1 lb ai/a	1 qt/a		B					
2 Abundit Extra	0.75 lb ae/a	32 oz/a		B					
2 N PAK AMS	2.5 % v/v	1.5 qt/a		B					
3 Instigate 6 oz					92	80	100	100	100
3 Rimsulfuron	0.25 oz ai/a	1 oz/a		A					
3 Mesotrione	2.5 oz ai/a	5 oz/a		A					
3 Cinch ATZ	2.06 lb ai/a	3 pt/a		A					
3 Realm Q 4 oz									
3 Rimsulfuron	0.3 oz ai/a	1.2 oz/a		B					
3 Mesotrione	1.25 oz ai/a	2.5 oz/a		B					
3 Isoxadifen-ethyl	0.15 oz ai/a	0.3 oz/a		B					
3 Abundit Extra	0.75 lb ae/a	32 oz/a		B					
3 N PAK AMS	2.5 % v/v	1.5 qt/a		B					
4 Instigate 6 oz					85	87	100	100	100
4 Rimsulfuron	0.25 oz ai/a	1 oz/a		A					
4 Mesotrione	2.5 oz ai/a	5 oz/a		A					
4 BreakFree ATZ	1.97 lb ai/a	3 pt/a		A					
4 Abundit Extra	0.75 lb ae/a	32 oz/a		B					
4 N PAK AMS	2.5 % v/v	1.5 qt/a		B					
5 Instigate 6 oz					95	80	100	100	100
5 Rimsulfuron	0.25 oz ai/a	1 oz/a		A					
5 Mesotrione	2.5 oz ai/a	5 oz/a		A					
5 BreakFree ATZ	1.97 lb ai/a	3 pt/a		A					
5 Atrazine	1 lb ai/a	1 qt/a		B					
5 Abundit Extra	0.75 lb ae/a	32 oz/a		B					
5 N PAK AMS	2.5 % v/v	1.5 qt/a		B					

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Pest Type	W Weed	W Weed	W Weed	W Weed	W Weed					
Pest Code	SETFA	AMBTR	AMBEL	CHEAL	ABUTH					
Pest Scientific Name	Setaria faberi	Ambrosia trifi>	Ambrosia artem>	Chenopodium al>	Abutilon theop>					
Pest Name	Giant foxtail	Giant ragweed	Common ragweed	Common lambsqu>	velvetleaf					
Crop Code										
BBCH Scale										
Crop Scientific Name										
Crop Name										
Rating Date	Jul-3-2014	Jul-3-2014	Jul-3-2014	Jul-3-2014	Jul-3-2014					
Rating Type	CONTRO	CONTRO	CONTRO	CONTRO	CONTRO					
Rating Unit	%	%	%	%	%					
Number of Subsamples	1	1	1	1	1					
SE Group No.	12	13	14	15	16					
Rating Timing										
Days After First/Last Applic.	68 28	68 28	68 28	68 28	68 28					
Trt-Eval Interval	28 DA-B	28 DA-B	28 DA-B	28 DA-B	28 DA-B					
Plant-Eval Interval	68 DP-1	68 DP-1	68 DP-1	68 DP-1	68 DP-1					
Days After Emergence	52 DE-1	52 DE-1	52 DE-1	52 DE-1	52 DE-1					
ARM Action Codes										
Number of Decimals	0	0	0	0	0					
Trt Treatment	Rate	Other	Other	Appl						
No. Name	Rate Unit	Rate	Rate	Unit Code	11	12	13	14	15	
6 Instigate 6 oz					100	80	100	100	100	
6 Rimsulfuron	0.25 oz ai/a	1 oz/a		A						
6 Mesotrione	2.5 oz ai/a	5 oz/a		A						
6 BreakFree ATZ	1.97 lb ai/a	3 pt/a		A						
6 Realm Q 4 oz										
6 Rimsulfuron	0.3 oz ai/a	1.2 oz/a		B						
6 Mesotrione	1.25 oz ai/a	2.5 oz/a		B						
6 Isoxadifen-ethyl	0.15 oz ai/a	0.3 oz/a		B						
6 Abundit Extra	0.75 lb ae/a	32 oz/a		B						
6 N PAK AMS	2.5 % v/v	1.5 qt/a		B						
7 Lumax EZ	2.75 lb ai/a	3 qt/a		A	88	80	100	100	100	
7 Abundit Extra	0.75 lb ae/a	32 oz/a		B						
7 N PAK AMS	2.5 % v/v	1.5 qt/a		B						
8 UTC					0	0	0	0	0	
LSD (P=.05)					11.8	7.5	0.4	0.6	0.7	
Standard Deviation					6.7	4.3	0.2	0.4	0.4	
CV					8.52	6.02	0.23	0.4	0.44	
Bartlett's X2					2.952	2.924	0.0	0.0	0.0	
P(Bartlett's X2)					0.707	0.087	.	.	.	
Skewness					-2.1515*	-2.2996*	-2.4217*	-2.4214*	-2.4213*	
Kurtosis					3.4439*	3.9337*	4.2097*	4.2089*	4.2085*	
Replicate F					0.597	0.740	1.000	1.000	1.960	
Replicate Prob(F)					0.5640	0.4950	0.3927	0.3927	0.1776	
Treatment F					69.300	135.927	89915.295	29915.003	25104.643	
Treatment Prob(F)					0.0001	0.0001	0.0001	0.0001	0.0001	

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Pest Type	W Weed	W Weed	W Weed	W Weed				
Pest Code	AMARE	SIDSP	POLPY	IPOHE				
Pest Scientific Name	Amaranthus ret>	Sida spinosa	Persicaria pen>	Ipomoea hederata>				
Pest Name	Redroot pigweed	Prickly sida	Pennsylvania s>	Ivyleaf mornin>				
Crop Code								
BBCH Scale								
Crop Scientific Name								
Crop Name								
Rating Date	Jul-3-2014	Jul-3-2014	Jul-3-2014	Jul-3-2014				
Rating Type	CONTRO	CONTRO	CONTRO	CONTRO				
Rating Unit	%	%	%	%				
Number of Subsamples	1	1	1	1				
SE Group No.	17	18	19	20				
Rating Timing								
Days After First/Last Applic.	68 28	68 28	68 28	68 28				
Trt-Eval Interval	28 DA-B	28 DA-B	28 DA-B	28 DA-B				
Plant-Eval Interval	68 DP-1	68 DP-1	68 DP-1	68 DP-1				
Days After Emergence	52 DE-1	52 DE-1	52 DE-1	52 DE-1				
ARM Action Codes		ER1	AA					
Number of Decimals		0	0	0				
Trt Treatment	Rate	Other	Other	Appl	16	17	18	19
No. Name	Rate Unit	Rate	Rate Unit	Code				
1 Instigate 6 oz					100.0	80	100	100
1 Rimsulfuron	0.25 oz ai/a	1 oz/a		A				
1 Mesotrione	2.5 oz ai/a	5 oz/a		A				
1 Cinch ATZ	2.06 lb ai/a	3 pt/a		A				
1 Abundit Extra	0.75 lb ae/a	32 oz/a		B				
1 N PAK AMS	2.5 % v/v	1.5 qt/a		B				
2 Instigate 6 oz					100.0	88	100	93
2 Rimsulfuron	0.25 oz ai/a	1 oz/a		A				
2 Mesotrione	2.5 oz ai/a	5 oz/a		A				
2 Cinch ATZ	2.06 lb ai/a	3 pt/a		A				
2 Atrazine	1 lb ai/a	1 qt/a		B				
2 Abundit Extra	0.75 lb ae/a	32 oz/a		B				
2 N PAK AMS	2.5 % v/v	1.5 qt/a		B				
3 Instigate 6 oz					100.0	86	100	93
3 Rimsulfuron	0.25 oz ai/a	1 oz/a		A				
3 Mesotrione	2.5 oz ai/a	5 oz/a		A				
3 Cinch ATZ	2.06 lb ai/a	3 pt/a		A				
3 Realm Q 4 oz								
3 Rimsulfuron	0.3 oz ai/a	1.2 oz/a		B				
3 Mesotrione	1.25 oz ai/a	2.5 oz/a		B				
3 Isoxadifen-ethyl	0.15 oz ai/a	0.3 oz/a		B				
3 Abundit Extra	0.75 lb ae/a	32 oz/a		B				
3 N PAK AMS	2.5 % v/v	1.5 qt/a		B				
4 Instigate 6 oz					100.0	87	98	100
4 Rimsulfuron	0.25 oz ai/a	1 oz/a		A				
4 Mesotrione	2.5 oz ai/a	5 oz/a		A				
4 BreakFree ATZ	1.97 lb ai/a	3 pt/a		A				
4 Abundit Extra	0.75 lb ae/a	32 oz/a		B				
4 N PAK AMS	2.5 % v/v	1.5 qt/a		B				
5 Instigate 6 oz					100.0	95	100	93
5 Rimsulfuron	0.25 oz ai/a	1 oz/a		A				
5 Mesotrione	2.5 oz ai/a	5 oz/a		A				
5 BreakFree ATZ	1.97 lb ai/a	3 pt/a		A				
5 Atrazine	1 lb ai/a	1 qt/a		B				
5 Abundit Extra	0.75 lb ae/a	32 oz/a		B				
5 N PAK AMS	2.5 % v/v	1.5 qt/a		B				

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Pest Type	W Weed	W Weed	W Weed	W Weed				
Pest Code	AMARE	SIDSP	POLPY	IPOHE				
Pest Scientific Name	Amaranthus ret>	Sida spinosa	Persicaria pen>	Ipomoea heder>				
Pest Name	Redroot pigweed	Prickly sida	Pennsylvania s>	Ivyleaf mornin>				
Crop Code								
BBCH Scale								
Crop Scientific Name								
Crop Name								
Rating Date	Jul-3-2014	Jul-3-2014	Jul-3-2014	Jul-3-2014				
Rating Type	CONTRO	CONTRO	CONTRO	CONTRO				
Rating Unit	%	%	%	%				
Number of Subsamples	1	1	1	1				
SE Group No.	17	18	19	20				
Rating Timing								
Days After First/Last Applic.	68 28	68 28	68 28	68 28				
Trt-Eval Interval	28 DA-B	28 DA-B	28 DA-B	28 DA-B				
Plant-Eval Interval	68 DP-1	68 DP-1	68 DP-1	68 DP-1				
Days After Emergence	52 DE-1	52 DE-1	52 DE-1	52 DE-1				
ARM Action Codes		ER1	AA					
Number of Decimals		0	0	0				
Trt Treatment	Rate	Other	Other	Appl	16	17	18	19
No. Name	Rate Unit	Rate	Rate Unit	Code				
6 Instigate 6 oz					100.0	93	100	93
6 Rimsulfuron	0.25 oz ai/a	1 oz/a		A				
6 Mesotrione	2.5 oz ai/a	5 oz/a		A				
6 BreakFree ATZ	1.97 lb ai/a	3 pt/a		A				
6 Realm Q 4 oz								
6 Rimsulfuron	0.3 oz ai/a	1.2 oz/a		B				
6 Mesotrione	1.25 oz ai/a	2.5 oz/a		B				
6 Isoxadifen-ethyl	0.15 oz ai/a	0.3 oz/a		B				
6 Abundit Extra	0.75 lb ae/a	32 oz/a		B				
6 N PAK AMS	2.5 % v/v	1.5 qt/a		B				
7 Lumax EZ	2.75 lb ai/a	3 qt/a		A	100.0	80	100	100
7 Abundit Extra	0.75 lb ae/a	32 oz/a		B				
7 N PAK AMS	2.5 % v/v	1.5 qt/a		B				
8 UTC					0.0	0	0	0
LSD (P=.05)					0.00	16.6	10.1t	10.8
Standard Deviation					0.00	9.3	5.8t	6.2
CV					0.0	12.27	7.51	7.33
Bartlett's X2					0.0	0.21	5.876	0.0
P(Bartlett's X2)					.	0.995	0.053	.
Skewness					-2.4219*	-3.2191*	-2.2883*	-2.2011*
Kurtosis					4.2103*	13.3019*	3.7246*	3.4845*
Replicate F					0.000	0.403	0.661	7.000
Replicate Prob(F)					1.0000	0.6772	0.5318	0.0078
Treatment F					0.000	33.546	87.673	91.938
Treatment Prob(F)					1.0000	0.0001	0.0001	0.0001

The Ohio State University

Weed Control Programs with Instigate

Trial ID: 14PRPOC2 Location: Western Branch F-7 W Trial Year: 2014
Protocol ID: 14PRPOC2 Investigator: Dr. Mark M. Loux
Project ID: USA-14-009 Study Director: Anthony Dobbels
Sponsor Contact: Marsha Martin, DuPont

Pest Type

W, Weed, G-BYRW7, G-WedStg = Weed or volunteer crop

Pest Code

SETFA, *Setaria faberi*, = US
AMBTR, *Ambrosia trifida*, = US
AMBEL, *Ambrosia artemisiifolia*, = US
CHEAL, *Chenopodium album*, = US
AMARE, *Amaranthus retroflexus*, = US
POLPY, *Persicaria pensylvanica*, = US
ABUTH, *Abutilon theophrasti*, = US
SIDSP, *Sida spinosa*, = US
IPOHE, *Ipomoea hederacea*, = US

Crop Code

ZEAMX, BCOR, *Zea mays*, = US

Rating Type

PHYGEN = phytotoxicity - general / injury
CONTRO = control / burndown or knockdown

Rating Unit

% = percent

Plant-Eval Interval

30 DP-1 = 1 ZEAMX Apr-26-2014
39 DP-1 = 1 ZEAMX Apr-26-2014
68 DP-1 = 1 ZEAMX Apr-26-2014

ARM Action Codes

AA = Automatic arcsine square root % transformation