

The Ohio State University

SCEPTER TANK MIXTURES FOR CONTROL OF VOLUNTEER CORN IN RR SOYBEANS

Trial ID: 16C05H064XOH519 Location: South Charlestown, OH Trial Year: 2016
 Protocol ID: 16C05H064 Investigator: Dr. Mark M. Loux
 Project ID: 16C05H064 Study Director: Tony Dobbels
 Sponsor Contact: Joseph Argentine

General Trial Information

Study Director: Tony Dobbels
Investigator: Dr. Mark M. Loux

Planned Completion Date: 8-31-2016

Trial Location

City: South Charleston **Country:** USA United States
State/Prov.: Ohio
Postal Code: 45368 **Climate Zone:** USWARM US Warm Continental

Conducted Under GLP: No
Conducted Under GEP: No

Objectives:

EVALUATE PERFORMANCE OF SCEPTER AS POST-E HERBICIDE IN RR SOYBEANS AGAINST VOLUNTEER CORN.

Contacts

Study Director: Tony Dobbels

Investigator: Dr. Mark M. Loux

Crop Description

Crop 1: GLXMA Glycine max
Variety: AG32X6
Description: Asgrow RRX

BBCH Scale: BSOY

Planting Date: 5-26-2016
Planting Method: PLANTD planted
Planting Equipment: FE Field Equipment
Emergence Date: 6-1-2016

Planting Rate, Unit: 150000 S/A
Depth, Unit: 1 IN
Row Spacing, Unit: 30 IN
Soil Temperature, Unit: 69 F
Soil Moisture: DRY dry
Seed Bed: MEDIUM medium

Pest Description

Pest 1 Type: W **Code:** ZEAMX Zea mays
Common Name: Corn
Description: Volunteer Corn
Artificial Population: X **Establishment Date:** 5-26-2016
Establishment Rate, Unit: 60 LB/A
Establishment Method/Description: Spreader

Pest 2 Type: W **Code:** SETFA Setaria faberi
Common Name: Giant foxtail

Pest 3 Type: W **Code:** AMBTR Ambrosia trifida
Common Name: Giant ragweed

Pest 4 Type: W **Code:** AMARE Amaranthus retroflexus
Common Name: Redroot pigweed

Pest 5 Type: W **Code:** CHEAL Chenopodium album
Common Name: Common lambsquarters

Pest 6 Type: W **Code:** IPOHE Ipomoea hederacea
Common Name: Ivyleaf morningglory

Site and Design

Treated Plot Width: 10 FT **Site Type:** FIELD field
Treated Plot Length: 30 FT **Experimental Unit:** 1 PLOT plot
Treated Plot Area: 300 FT2 **Treatments:** 8 **Tillage Type:** CONTIL conventional-till
Replications: 4 **Study Design:** RACOBL Randomized Complete Block (RCB)

No. Previous Crop Year

1. Corn 2015

Field Prep./Maintenance:

To remove existing vegetation, overspray plots with Gramoxone SL 2 qt/A + NIS 0.25% just prior to planting.

The Ohio State University

SCEPTER TANK MIXTURES FOR CONTROL OF VOLUNTEER CORN IN RR SOYBEANS

Trial ID: 16C05H064XOH519
 Protocol ID: 16C05H064
 Project ID: 16C05H064

Location: South Charlestown, OH Trial Year: 2016
 Investigator: Dr. Mark M. Loux
 Study Director: Tony Dobbels
 Sponsor Contact: Joseph Argentine

Soil Description

Description Name: G-6
 % OM: 2.2 Texture: SICL silty clay loam
 pH: 6.3 Soil Name: Crosby
 CEC: 13.6 Fert. Level: G good
 Soil Drainage: G good

Application Description

A
 Application Date: 6-20-2016
 Appl. Start Time: 10:45 AM
 Appl. Stop Time: 11:00 AM
 Application Method: SPRAY
 Application Timing: POSPOS
 Application Placement: BROADC
 Applied By: REEB/LOUX
 Air Temperature, Unit: 82 F
 % Relative Humidity: 67
 Wind Velocity, Unit: 12 MPH
 Wind Direction: WSW
 Dew Presence (Y/N): N no
 Soil Temperature, Unit: 73 F
 Soil Moisture: DRY
 % Cloud Cover: 45
 Next Moisture Occurred On: 6-23-2016
 Time to Next Moisture, Unit: 3 DAY

Crop Stage At Each Application

A
 Crop 1 Code, BBCH Scale: GLXMA BSOY
 Stage Scale Used: BBCH
 Stage Majority, Percent: 12 90
 Stage Minimum, Percent: 12 90
 Stage Maximum, Percent: 13 10
 Height, Unit: 8 IN

Pest Stage At Each Application

A
 Pest 1 Code, Type, Scale: ZEAMX W
 Stage Majority, Percent: 16 100
 Height, Unit: 16 IN
 Height Minimum, Maximum: 16 19
 Density, Unit: 85 m2
 Pest 2 Code, Type, Scale: SETFA W
 Stage Majority, Percent: 15 100
 Height, Unit: 7 IN
 Height Minimum, Maximum: 7 9
 Density, Unit: 196 m2
 Pest 3 Code, Type, Scale: AMBTR W
 Stage Majority, Percent: 19 100
 Height, Unit: 12 IN
 Height Minimum, Maximum: 8 12
 Density, Unit: 9 m2
 Pest 4 Code, Type, Scale: AMARE W
 Stage Majority, Percent: 18 100
 Height, Unit: 5 IN
 Height Minimum, Maximum: 4 6
 Density, Unit: 12 m2
 Pest 5 Code, Type, Scale: CHEAL W
 Stage Majority, Percent: 19 100
 Height, Unit: 4 IN
 Height Minimum, Maximum: 2 4
 Density, Unit: 8 m2
 Pest 6 Code, Type, Scale: IPOHE W
 Stage Majority, Percent: 15 100
 Height, Unit: 3 IN
 Height Minimum, Maximum: 3 4
 Density, Unit: 0.33 m2

The Ohio State University

SCEPTER TANK MIXTURES FOR CONTROL OF VOLUNTEER CORN IN RR SOYBEANS

Trial ID: 16C05H064XOH519 Location: South Charlestown, OH Trial Year: 2016
 Protocol ID: 16C05H064 Investigator: Dr. Mark M. Loux
 Project ID: 16C05H064 Study Director: Tony Dobbels
 Sponsor Contact: Joseph Argentine

Application Equipment

Appl. Equipment: 10' AI XR
Equipment Type: SPRBAC
Operation Pressure, Unit: 46 PSI
Nozzle Type: AI XR
Nozzle Size: 110015
Nozzle Spacing, Unit: 18 IN
Boom Length, Unit: 10 FT
Boom Height, Unit: 20 IN
Ground Speed, Unit: 3 MPH
Carrier: WATER
Spray Volume, Unit: 15 GPA
Mix Size, Unit: 2 Liters
Propellant: CO2

Pest Type		W Weed	W Weed	W Weed
Pest Code		ZEAMX	SETFA	ECHCG
Pest Scientific Name		Zea mays	Setaria faberi	Echinochloa cr>
Pest Name		Corn	Giant foxtail	Common barnyar>
Crop Code	GLXMA	GLXMA		
BBCH Scale	BSOY	BSOY		
Crop Scientific Name	Glycine max	Glycine max		
Crop Name	Soybean	Soybean		
Description	CROP SAFETY CROP SAFETY WEED CONTROL WEED CONTROL WEED CONTROL			

Part Rated	PLANT C	PLANT C	PLANT P	PLANT P	PLANT P
Rating Date	6-27-2016	7-5-2016	7-5-2016	7-5-2016	7-5-2016
Rating Type	PHYGEN	PHYGEN	CONTRO	CONTRO	CONTRO
Rating Unit	%	%	%	%	%
Sample Size, Unit	2 ROW	2 ROW	2 ROW	2 ROW	2 ROW
Collection Basis, Unit	1 PLOT	1 PLOT	1 PLOT	1 PLOT	1 PLOT
Number of Subsamples	1	1	1	1	1
SE Group No.	2	14	15	16	17
Rating Timing	7-DAT	15DA-A	15DA-A	15DA-A	15DA-A
Days After First/Last Applic.	7 7	15 15	15 15	15 15	15 15
Trt-Eval Interval	7 DA-A	15 DA-A	15 DA-A	15 DA-A	15 DA-A
Plant-Eval Interval	32 DP-1	40 DP-1	40 DP-1	40 DP-1	40 DP-1
Days After Emergence	26 DE-1	34 DE-1	34 DE-1	34 DE-1	34 DE-1
ARM Action Codes	S10				
Number of Decimals	1	1	1	1	1

Trt No.	Treatment Name	Other Rate	Other Rate	Appl Unit Code	1*	2*	3*	4*	5*
1	UNTREATED CONTROL			A	0.0 b	0.0 -	0.0 f	0.0 b	0.0 c
2	SCEPTER	0.061 lb ai/a		A	0.0 b	0.0 -	60.0 d	100.0 a	99.3 a
	ROUNDUP POWERMAX	0.98 lb ae/a		A					
	MSO	0.5 % v/v		A					
	N PAK AMS	1.5 qt/a		A					
3	SCEPTER	0.092 lb ai/a		A	0.7 b	0.0 -	56.7 d	100.0 a	98.3 a
	ROUNDUP POWERMAX	0.98 lb ae/a		A					
	MSO	0.5 % v/v		A					
	N PAK AMS	1.5 qt/a		A					
4	SCEPTER	0.123 lb ai/a		A	0.7 b	1.0 -	58.3 d	100.0 a	100.0 a
	ROUNDUP POWERMAX	0.98 lb ae/a		A					
	MSO	0.5 % v/v		A					
	N PAK AMS	1.5 qt/a		A					
5	SELECT MAX	0.121 lb ai/a		A	0.0 b	0.0 -	82.7 a	100.0 a	100.0 a
	ROUNDUP POWERMAX	0.98 lb ae/a		A					
	MSO	0.5 % v/v		A					
	N PAK AMS	1.5 qt/a		A					
6	SELECT MAX	0.121 lb ai/a		A	0.7 b	0.0 -	78.3 b	100.0 a	99.3 a
	ROUNDUP POWERMAX	0.98 lb ae/a		A					
	SCEPTER	0.061 lb ai/a		A					
	MSO	0.5 % v/v		A					
	N PAK AMS	1.5 qt/a		A					
7	FLEXSTAR GT	1.53 lb ai/a		A	6.3 a	2.7 -	15.0 e	100.0 a	90.0 b
	MSO	0.5 % v/v		A					
	N PAK AMS	1.5 qt/a		A					

The Ohio State University

SCEPTER TANK MIXTURES FOR CONTROL OF VOLUNTEER CORN IN RR SOYBEANS

Trial ID: 16C05H064XOH519 Location: South Charlestown, OH Trial Year: 2016
 Protocol ID: 16C05H064 Investigator: Dr. Mark M. Loux
 Project ID: 16C05H064 Study Director: Tony Dobbels
 Sponsor Contact: Joseph Argentine

Pest Type	GLXMA		GLXMA		W Weed	W Weed	W Weed	
Pest Code	BSOY		BSOY		ZEAMX	SETFA	ECHCG	
Pest Scientific Name	Glycine max		Glycine max		Zea mays	Setaria faberi	Echinochloa cr>	
Pest Name	Soybean		Soybean		Corn	Giant foxtail	Common barnyar>	
Crop Code	GLXMA		GLXMA					
BBCH Scale	BSOY		BSOY					
Crop Scientific Name	Glycine max		Glycine max					
Crop Name	Soybean		Soybean					
Description	CROP SAFETY		CROP SAFETY		WEED CONTROL	WEED CONTROL	WEED CONTROL	
Part Rated	PLANT C		PLANT C		PLANT P	PLANT P	PLANT P	
Rating Date	6-27-2016		7-5-2016		7-5-2016	7-5-2016	7-5-2016	
Rating Type	PHYGEN		PHYGEN		CONTRO	CONTRO	CONTRO	
Rating Unit	%		%		%	%	%	
Sample Size, Unit	2	ROW	2	ROW	2	ROW	2	
Collection Basis, Unit	1	PLOT	1	PLOT	1	PLOT	1	
Number of Subsamples	1		1		1	1	1	
SE Group No.	2		14		15	16	17	
Rating Timing	7-DAT		15DA-A		15DA-A	15DA-A	15DA-A	
Days After First/Last Applic.	7 7		15 15		15 15	15 15	15 15	
Trt-Eval Interval	7 DA-A		15 DA-A		15 DA-A	15 DA-A	15 DA-A	
Plant-Eval Interval	32 DP-1		40 DP-1		40 DP-1	40 DP-1	40 DP-1	
Days After Emergence	26 DE-1		34 DE-1		34 DE-1	34 DE-1	34 DE-1	
ARM Action Codes	S10							
Number of Decimals	1		1		1	1	1	
Trt Treatment	Other	Other	Appl					
No. Name	Rate	Rate	Unit Code	1*	2*	3*	4*	5*
8 FLEXSTAR GT	1.53 lb ai/a		A	7.3 a	2.0 -	73.3 c	100.0 a	100.0 a
SCEPTER	0.061 lb ai/a		A					
MSO	0.5 % v/v		A					
N PAK AMS	1.5 qt/a		A					
LSD P=.05				2.16	2.25	3.77	.	5.66
Standard Deviation				1.23	1.28	2.15	0.00	3.23
CV				62.91	181.28	4.05	0.0	3.76
Bartlett's X2				2.254	0.375	2.494	0.0	9.756
P(Bartlett's X2)				0.689	0.829	0.777	.	0.021*
Skewness				1.3885*	1.8393*	-0.9207	-2.4219*	-2.3505*
Kurtosis				0.6974	2.2269*	-0.5698	4.2103*	3.9775*
Replicate F				0.686	0.480	12.171	0.000	1.232
Replicate Prob(F)				0.5196	0.6285	0.0009	1.0000	0.3213
Treatment F				18.224	2.105	581.857	0.000	349.027
Treatment Prob(F)				0.0001	0.1118	0.0001	1.0000	0.0001

The Ohio State University

SCEPTER TANK MIXTURES FOR CONTROL OF VOLUNTEER CORN IN RR SOYBEANS

Trial ID: 16C05H064XOH519 Location: South Charlestown, OH Trial Year: 2016
 Protocol ID: 16C05H064 Investigator: Dr. Mark M. Loux
 Project ID: 16C05H064 Study Director: Tony Dobbels
 Sponsor Contact: Joseph Argentine

Pest Type	W Weed	W Weed	W Weed	W Weed
Pest Code	AMBTR	CHEAL	AMARE	SETFA
Pest Scientific Name	Ambrosia trifida	Chenopodium album	Amaranthus retrofractus	Setaria faberii
Pest Name	Giant ragweed	Common lambsquarters	Redroot pigweed	Giant foxtail
Crop Code				
BBCH Scale				
Crop Scientific Name				
Crop Name				
Description	WEED CONTROL	WEED CONTROL	WEED CONTROL	WEED CONTROL
Part Rated	CONTROL	PLANT P	PLANT P	PLANT P
Rating Date	7-5-2016	7-5-2016	7-5-2016	7-18-2016
Rating Type	CONTRO	CONTRO	CONTRO	CONTRO
Rating Unit	%	%	%	%
Sample Size, Unit	2 ROW	2 ROW	2 ROW	2 ROW
Collection Basis, Unit	1 PLOT	1 PLOT	1 PLOT	1 PLOT
Number of Subsamples	1	1	1	1
SE Group No.	18	19	20	21
Rating Timing	15DA-A	15DA-A	15DA-A	28 DA-A
Days After First/Last Applic.	15 15	15 15	15 15	28 28
Trt-Eval Interval	15 DA-A	15 DA-A	15 DA-A	28 DA-A
Plant-Eval Interval	40 DP-1	40 DP-1	40 DP-1	53 DP-1
Days After Emergence	34 DE-1	34 DE-1	34 DE-1	47 DE-1
ARM Action Codes				
Number of Decimals	1	1	1	1

Trt No.	Treatment Name	Other Rate	Other Rate Unit	Appl Code	6*	7*	8*	9*
1	UNTREATED CONTROL				0.0 d	0.0 c	0.0 b	0.0 b
2	SCEPTER	0.061 lb ai/a	A		76.7 abc	90.0 ab	100.0 a	98.3 a
	ROUNDUP POWERMAX	0.98 lb ae/a	A					
	MSO	0.5 % v/v	A					
	N PAK AMS	1.5 qt/a	A					
3	SCEPTER	0.092 lb ai/a	A		66.7 bc	92.7 ab	100.0 a	98.3 a
	ROUNDUP POWERMAX	0.98 lb ae/a	A					
	MSO	0.5 % v/v	A					
	N PAK AMS	1.5 qt/a	A					
4	SCEPTER	0.123 lb ai/a	A		60.0 c	95.0 a	100.0 a	100.0 a
	ROUNDUP POWERMAX	0.98 lb ae/a	A					
	MSO	0.5 % v/v	A					
	N PAK AMS	1.5 qt/a	A					
5	SELECT MAX	0.121 lb ai/a	A		78.0 ab	83.7 b	100.0 a	97.7 a
	ROUNDUP POWERMAX	0.98 lb ae/a	A					
	MSO	0.5 % v/v	A					
	N PAK AMS	1.5 qt/a	A					
6	SELECT MAX	0.121 lb ai/a	A		71.7 abc	97.0 a	100.0 a	96.7 a
	ROUNDUP POWERMAX	0.98 lb ae/a	A					
	SCEPTER	0.061 lb ai/a	A					
	MSO	0.5 % v/v	A					
	N PAK AMS	1.5 qt/a	A					
7	FLEXSTAR GT	1.53 lb ai/a	A		88.3 a	93.3 ab	100.0 a	98.3 a
	MSO	0.5 % v/v	A					
	N PAK AMS	1.5 qt/a	A					

The Ohio State University

SCEPTER TANK MIXTURES FOR CONTROL OF VOLUNTEER CORN IN RR SOYBEANS

Trial ID: 16C05H064XOH519 Location: South Charlestown, OH Trial Year: 2016
 Protocol ID: 16C05H064 Investigator: Dr. Mark M. Loux
 Project ID: 16C05H064 Study Director: Tony Dobbels
 Sponsor Contact: Joseph Argentine

Pest Type	W Weed	W Weed	W Weed	W Weed			
Pest Code	AMBTR	CHEAL	AMARE	SETFA			
Pest Scientific Name	Ambrosia trifi>	Chenopodium al>	Amaranthus ret>	Setaria faberi			
Pest Name	Giant ragweed	Common lambsqu>	Redroot pigweed	Giant foxtail			
Crop Code							
BBCH Scale							
Crop Scientific Name							
Crop Name							
Description	WEED CONTROL	WEED CONTROL	WEED CONTROL	WEED CONTROL			
Part Rated	PLANT P	PLANT P	PLANT P	PLANT P			
Rating Date	7-5-2016	7-5-2016	7-5-2016	7-18-2016			
Rating Type	CONTRO	CONTRO	CONTRO	CONTRO			
Rating Unit	%	%	%	%			
Sample Size, Unit	2 ROW	2 ROW	2 ROW	2 ROW			
Collection Basis, Unit	1 PLOT	1 PLOT	1 PLOT	1 PLOT			
Number of Subsamples	1	1	1	1			
SE Group No.	18	19	20	21			
Rating Timing	15DA-A	15DA-A	15DA-A	28 DA-A			
Days After First/Last Applic.	15 15	15 15	15 15	28 28			
Trt-Eval Interval	15 DA-A	15 DA-A	15 DA-A	28 DA-A			
Plant-Eval Interval	40 DP-1	40 DP-1	40 DP-1	53 DP-1			
Days After Emergence	34 DE-1	34 DE-1	34 DE-1	47 DE-1			
ARM Action Codes							
Number of Decimals	1	1	1	1			
Trt Treatment No. Name	Other Rate	Other Rate	Appl Unit Code	6*	7*	8*	9*
8 FLEXSTAR GT	1.53 lb ai/a		A	82.7 ab	94.3 a	100.0 a	95.0 a
SCEPTER	0.061 lb ai/a		A				
MSO	0.5 % v/v		A				
N PAK AMS	1.5 qt/a		A				
LSD P=.05				17.73	10.42	.	5.24
Standard Deviation				10.12	5.95	0.00	2.99
CV				15.46	7.37	0.0	3.5
Bartlett's X2				5.445	8.199	0.0	1.282
P(Bartlett's X2)				0.364	0.224	.	0.937
Skewness				-1.5949*	-2.2397*	-2.4219*	-2.3892*
Kurtosis				1.8716*	3.6725*	4.2103*	4.1118*
Replicate F				1.211	0.773	0.000	0.228
Replicate Prob(F)				0.3273	0.4804	1.0000	0.7989
Treatment F				22.815	91.547	0.000	401.319
Treatment Prob(F)				0.0001	0.0001	1.0000	0.0001

The Ohio State University

SCEPTER TANK MIXTURES FOR CONTROL OF VOLUNTEER CORN IN RR SOYBEANS

Trial ID: 16C05H064XOH519 Location: South Charlestown, OH Trial Year: 2016
 Protocol ID: 16C05H064 Investigator: Dr. Mark M. Loux
 Project ID: 16C05H064 Study Director: Tony Dobbels
 Sponsor Contact: Joseph Argentine

Pest Type	W Weed	W Weed	W Weed	W Weed
Pest Code	ZEAMX	AMBTR	CHEAL	AMARE
Pest Scientific Name	Zea mays	Ambrosia trifi>	Chenopodium al>	Amaranthus ret>
Pest Name	Corn	Giant ragweed	Common lambsqu>	Redroot pigweed
Crop Code				
BBCH Scale				
Crop Scientific Name				
Crop Name				
Description	WEED CONTROL	WEED CONTROL	WEED CONTROL	WEED CONTROL
Part Rated	CONTROL	PLANT P	PLANT P	PLANT P
Rating Date	7-18-2016	7-18-2016	7-18-2016	7-18-2016
Rating Type	CONTRO	CONTRO	CONTRO	CONTRO
Rating Unit	%	%	%	%
Sample Size, Unit	2 ROW	2 ROW	2 ROW	2 ROW
Collection Basis, Unit	1 PLOT	1 PLOT	1 PLOT	1 PLOT
Number of Subsamples	1	1	1	1
SE Group No.	22	23	24	25
Rating Timing	28 DA-A	28 DA-A	28 DA-A	28 DA-A
Days After First/Last Applic.	28 28	28 28	28 28	28 28
Trt-Eval Interval	28 DA-A	28 DA-A	28 DA-A	28 DA-A
Plant-Eval Interval	53 DP-1	53 DP-1	53 DP-1	53 DP-1
Days After Emergence	47 DE-1	47 DE-1	47 DE-1	47 DE-1
ARM Action Codes				
Number of Decimals	1	1	1	1

Trt Treatment No. Name	Other Rate	Other Rate Unit	Appl Code	10*	11*	12*	13*
1 UNTREATED CONTROL				0.0 d	0.0 c	0.0 b	0.0 b
2 SCEPTER	0.061 lb ai/a		A	71.7 bc	81.7 b	95.0 a	93.3 a
ROUNDUP POWERMAX	0.98 lb ae/a		A				
MSO	0.5 % v/v		A				
N PAK AMS	1.5 qt/a		A				
3 SCEPTER	0.092 lb ai/a		A	70.0 bc	80.0 b	100.0 a	100.0 a
ROUNDUP POWERMAX	0.98 lb ae/a		A				
MSO	0.5 % v/v		A				
N PAK AMS	1.5 qt/a		A				
4 SCEPTER	0.123 lb ai/a		A	73.3 bc	81.7 b	100.0 a	95.0 a
ROUNDUP POWERMAX	0.98 lb ae/a		A				
MSO	0.5 % v/v		A				
N PAK AMS	1.5 qt/a		A				
5 SELECT MAX	0.121 lb ai/a		A	98.3 a	87.7 ab	93.3 a	93.3 a
ROUNDUP POWERMAX	0.98 lb ae/a		A				
MSO	0.5 % v/v		A				
N PAK AMS	1.5 qt/a		A				
6 SELECT MAX	0.121 lb ai/a		A	76.7 b	81.7 b	95.0 a	95.0 a
ROUNDUP POWERMAX	0.98 lb ae/a		A				
SCEPTER	0.061 lb ai/a		A				
MSO	0.5 % v/v		A				
N PAK AMS	1.5 qt/a		A				
7 FLEXSTAR GT	1.53 lb ai/a		A	10.0 d	95.0 a	95.0 a	95.0 a
MSO	0.5 % v/v		A				
N PAK AMS	1.5 qt/a		A				

The Ohio State University

SCEPTER TANK MIXTURES FOR CONTROL OF VOLUNTEER CORN IN RR SOYBEANS

Trial ID: 16C05H064XOH519 Location: South Charlestown, OH Trial Year: 2016
 Protocol ID: 16C05H064 Investigator: Dr. Mark M. Loux
 Project ID: 16C05H064 Study Director: Tony Dobbels
 Sponsor Contact: Joseph Argentine

Pest Type	W Weed	W Weed	W Weed	W Weed			
Pest Code	ZEAMX	AMBTR	CHEAL	AMARE			
Pest Scientific Name	Zea mays	Ambrosia trifi>	Chenopodium al>	Amaranthus ret>			
Pest Name	Corn	Giant ragweed	Common lambsqu>	Redroot pigweed			
Crop Code							
BBCH Scale							
Crop Scientific Name							
Crop Name							
Description	WEED CONTROL	WEED CONTROL	WEED CONTROL	WEED CONTROL			
Part Rated	PLANT P	PLANT P	PLANT P	PLANT P			
Rating Date	7-18-2016	7-18-2016	7-18-2016	7-18-2016			
Rating Type	CONTRO	CONTRO	CONTRO	CONTRO			
Rating Unit	%	%	%	%			
Sample Size, Unit	2 ROW	2 ROW	2 ROW	2 ROW			
Collection Basis, Unit	1 PLOT	1 PLOT	1 PLOT	1 PLOT			
Number of Subsamples	1	1	1	1			
SE Group No.	22	23	24	25			
Rating Timing	28 DA-A	28 DA-A	28 DA-A	28 DA-A			
Days After First/Last Applic.	28 28	28 28	28 28	28 28			
Trt-Eval Interval	28 DA-A	28 DA-A	28 DA-A	28 DA-A			
Plant-Eval Interval	53 DP-1	53 DP-1	53 DP-1	53 DP-1			
Days After Emergence	47 DE-1	47 DE-1	47 DE-1	47 DE-1			
ARM Action Codes							
Number of Decimals	1	1	1	1			
Trt Treatment No. Name	Other Rate	Other Rate Unit	Appl Code	10*	11*	12*	13*
8 FLEXSTAR GT	1.53 lb ai/a		A	63.3 c	79.3 b	93.3 a	93.3 a
SCEPTER	0.061 lb ai/a		A				
MSO	0.5 % v/v		A				
N PAK AMS	1.5 qt/a		A				
LSD P=.05				11.04	8.71	13.19	12.87
Standard Deviation				6.30	4.97	7.53	7.35
CV				10.88	6.78	8.97	8.84
Bartlett's X2				2.746	4.317	0.37	0.437
P(Bartlett's X2)				0.84	0.634	0.985	0.994
Skewness				-0.8606	-2.0969*	-2.2227*	-2.18*
Kurtosis				-0.5962	3.3127*	3.5712*	3.4462*
Replicate F				3.487	8.480	1.672	4.570
Replicate Prob(F)				0.0590	0.0039	0.2233	0.0297
Treatment F				88.854	109.941	61.268	62.917
Treatment Prob(F)				0.0001	0.0001	0.0001	0.0001

The Ohio State University

SCEPTER TANK MIXTURES FOR CONTROL OF VOLUNTEER CORN IN RR SOYBEANS

Trial ID: 16C05H064XOH519 Location: South Charlestown, OH Trial Year: 2016
 Protocol ID: 16C05H064 Investigator: Dr. Mark M. Loux
 Project ID: 16C05H064 Study Director: Tony Dobbels
 Sponsor Contact: Joseph Argentine

Pest Type	W Weed	W Weed	W Weed	W Weed				
Pest Code	ZEAMX	SETFA	ECHCG	AMBTR				
Pest Scientific Name	Zea mays	Setaria faberi	Echinochloa cr>	Ambrosia trifi>				
Pest Name	Corn	Giant foxtail	Common barnyar>	Giant ragweed				
Crop Code								
BBCH Scale								
Crop Scientific Name								
Crop Name								
Description	WEED CONTROL	WEED CONTROL	WEED CONTROL	WEED CONTROL				
Part Rated	PLANT P	PLANT P	PLANT P	PLANT P				
Rating Date	8-1-2016	8-1-2016	8-1-2016	8-1-2016				
Rating Type	CONTRO	CONTRO	CONTRO	CONTRO				
Rating Unit	%	%	%	%				
Sample Size, Unit	2 ROW	2 ROW	2 ROW	2 ROW				
Collection Basis, Unit	1 PLOT	1 PLOT	1 PLOT	1 PLOT				
Number of Subsamples	1	1	1	1				
SE Group No.	26	27	28	29				
Rating Timing	42DA-A	42DA-A	42DA-A	42DA-A				
Days After First/Last Applic.	42 42	42 42	42 42	42 42				
Trt-Eval Interval	42 DA-A	42 DA-A	42 DA-A	42 DA-A				
Plant-Eval Interval	67 DP-1	67 DP-1	67 DP-1	67 DP-1				
Days After Emergence	61 DE-1	61 DE-1	61 DE-1	61 DE-1				
ARM Action Codes								
Number of Decimals	1	1	1	1				
Trt No.	Treatment Name	Other Rate	Other Rate Unit	Appl Code	14*	15*	16*	17*
1	UNTREATED CONTROL				0.0 c	0.0 c	0.0 e	0.0 c
2	SCEPTER	0.061 lb ai/a	A		67.7 b	96.3 ab	93.3 bcd	91.7 ab
	ROUNDUP POWERMAX	0.98 lb ae/a	A					
	MSO	0.5 % v/v	A					
	N PAK AMS	1.5 qt/a	A					
3	SCEPTER	0.092 lb ai/a	A		75.3 b	97.7 ab	93.3 bcd	82.7 b
	ROUNDUP POWERMAX	0.98 lb ae/a	A					
	MSO	0.5 % v/v	A					
	N PAK AMS	1.5 qt/a	A					
4	SCEPTER	0.123 lb ai/a	A		78.7 b	99.3 ab	98.3 ab	82.0 b
	ROUNDUP POWERMAX	0.98 lb ae/a	A					
	MSO	0.5 % v/v	A					
	N PAK AMS	1.5 qt/a	A					
5	SELECT MAX	0.121 lb ai/a	A		100.0 a	94.7 ab	91.7 cd	89.3 ab
	ROUNDUP POWERMAX	0.98 lb ae/a	A					
	MSO	0.5 % v/v	A					
	N PAK AMS	1.5 qt/a	A					
6	SELECT MAX	0.121 lb ai/a	A		77.3 b	97.7 ab	96.7 abc	83.0 b
	ROUNDUP POWERMAX	0.98 lb ae/a	A					
	SCEPTER	0.061 lb ai/a	A					
	MSO	0.5 % v/v	A					
	N PAK AMS	1.5 qt/a	A					
7	FLEXSTAR GT	1.53 lb ai/a	A		6.7 c	100.0 a	100.0 a	95.0 a
	MSO	0.5 % v/v	A					
	N PAK AMS	1.5 qt/a	A					

The Ohio State University

SCEPTER TANK MIXTURES FOR CONTROL OF VOLUNTEER CORN IN RR SOYBEANS

Trial ID: 16C05H064XOH519 Location: South Charlestown, OH Trial Year: 2016
 Protocol ID: 16C05H064 Investigator: Dr. Mark M. Loux
 Project ID: 16C05H064 Study Director: Tony Dobbels
 Sponsor Contact: Joseph Argentine

Pest Type	W Weed	W Weed	W Weed	W Weed			
Pest Code	ZEAMX	SETFA	ECHCG	AMBTR			
Pest Scientific Name	Zea mays	Setaria faberi	Echinochloa cr>	Ambrosia trifi>			
Pest Name	Corn	Giant foxtail	Common barnyar>	Giant ragweed			
Crop Code							
BBCH Scale							
Crop Scientific Name							
Crop Name							
Description	WEED CONTROL	WEED CONTROL	WEED CONTROL	WEED CONTROL			
Part Rated	PLANT P	PLANT P	PLANT P	PLANT P			
Rating Date	8-1-2016	8-1-2016	8-1-2016	8-1-2016			
Rating Type	CONTRO	CONTRO	CONTRO	CONTRO			
Rating Unit	%	%	%	%			
Sample Size, Unit	2 ROW	2 ROW	2 ROW	2 ROW			
Collection Basis, Unit	1 PLOT	1 PLOT	1 PLOT	1 PLOT			
Number of Subsamples	1	1	1	1			
SE Group No.	26	27	28	29			
Rating Timing	42DA-A	42DA-A	42DA-A	42DA-A			
Days After First/Last Applic.	42 42	42 42	42 42	42 42			
Trt-Eval Interval	42 DA-A	42 DA-A	42 DA-A	42 DA-A			
Plant-Eval Interval	67 DP-1	67 DP-1	67 DP-1	67 DP-1			
Days After Emergence	61 DE-1	61 DE-1	61 DE-1	61 DE-1			
ARM Action Codes							
Number of Decimals	1	1	1	1			
Trt Treatment No. Name	Other Rate	Other Rate Unit	Appl Code	14*	15*	16*	17*
8 FLEXSTAR GT	1.53 lb ai/a		A	70.3 b	93.3 b	90.0 d	82.7 b
SCEPTER	0.061 lb ai/a		A				
MSO	0.5 % v/v		A				
N PAK AMS	1.5 qt/a		A				
LSD P=.05				12.30	6.33	6.19	10.79
Standard Deviation				7.02	3.62	3.54	6.16
CV				11.8	4.26	4.26	8.13
Bartlett's X2				10.37	8.439	2.162	10.002
P(Bartlett's X2)				0.065	0.134	0.826	0.125
Skewness				-0.9102	-2.3664*	-2.3288*	-2.1009*
Kurtosis				-0.7066	4.0373*	3.9307*	3.3294*
Replicate F				0.281	0.497	2.333	4.649
Replicate Prob(F)				0.7589	0.6185	0.1335	0.0283
Treatment F				79.032	271.067	272.143	76.004
Treatment Prob(F)				0.0001	0.0001	0.0001	0.0001

The Ohio State University

SCEPTER TANK MIXTURES FOR CONTROL OF VOLUNTEER CORN IN RR SOYBEANS

Trial ID: 16C05H064XOH519 Location: South Charlestown, OH Trial Year: 2016
 Protocol ID: 16C05H064 Investigator: Dr. Mark M. Loux
 Project ID: 16C05H064 Study Director: Tony Dobbels
 Sponsor Contact: Joseph Argentine

Pest Type	W Weed	W Weed
Pest Code	CHEAL	AMARE
Pest Scientific Name	Chenopodium al>	Amaranthus ret>
Pest Name	common lambsqu>	Redroot pigweed
Crop Code		
BBCH Scale		
Crop Scientific Name		
Crop Name		
Description	WEED CONTROL	WEED CONTROL
Part Rated	PLANT P	PLANT P
Rating Date	8-1-2016	8-1-2016
Rating Type	CONTRO	CONTRO
Rating Unit	%	%
Sample Size, Unit	2 ROW	2 ROW
Collection Basis, Unit	1 PLOT	1 PLOT
Number of Subsamples	1	1
SE Group No.	30	31
Rating Timing	42DA-A	42DA-A
Days After First/Last Applic.	42 42	42 42
Trt-Eval Interval	42 DA-A	42 DA-A
Plant-Eval Interval	67 DP-1	67 DP-1
Days After Emergence	61 DE-1	61 DE-1
ARM Action Codes		
Number of Decimals	1	1

Trt No.	Treatment Name	Other Rate	Other Rate Unit	Appl Code	18*	19*
1	UNTREATED CONTROL				0.0 c	0.0 b
2	SCEPTER	0.061 lb ai/a	A		97.7 ab	100.0 a
	ROUNDUP POWERMAX	0.98 lb ae/a	A			
	MSO	0.5 % v/v	A			
	N PAK AMS	1.5 qt/a	A			
3	SCEPTER	0.092 lb ai/a	A		100.0 a	100.0 a
	ROUNDUP POWERMAX	0.98 lb ae/a	A			
	MSO	0.5 % v/v	A			
	N PAK AMS	1.5 qt/a	A			
4	SCEPTER	0.123 lb ai/a	A		98.3 ab	100.0 a
	ROUNDUP POWERMAX	0.98 lb ae/a	A			
	MSO	0.5 % v/v	A			
	N PAK AMS	1.5 qt/a	A			
5	SELECT MAX	0.121 lb ai/a	A		90.0 b	93.3 a
	ROUNDUP POWERMAX	0.98 lb ae/a	A			
	MSO	0.5 % v/v	A			
	N PAK AMS	1.5 qt/a	A			
6	SELECT MAX	0.121 lb ai/a	A		89.3 b	100.0 a
	ROUNDUP POWERMAX	0.98 lb ae/a	A			
	SCEPTER	0.061 lb ai/a	A			
	MSO	0.5 % v/v	A			
	N PAK AMS	1.5 qt/a	A			
7	FLEXSTAR GT	1.53 lb ai/a	A		100.0 a	100.0 a
	MSO	0.5 % v/v	A			
	N PAK AMS	1.5 qt/a	A			

The Ohio State University

SCEPTER TANK MIXTURES FOR CONTROL OF VOLUNTEER CORN IN RR SOYBEANS

Trial ID: 16C05H064XOH519 Location: South Charlestown, OH Trial Year: 2016
 Protocol ID: 16C05H064 Investigator: Dr. Mark M. Loux
 Project ID: 16C05H064 Study Director: Tony Dobbels
 Sponsor Contact: Joseph Argentine

Pest Type	W Weed	W Weed
Pest Code	CHEAL	AMARE
Pest Scientific Name	Chenopodium al>	Amaranthus ret>
Pest Name	common lambsqu>	Redroot pigweed
Crop Code		
BBCH Scale		
Crop Scientific Name		
Crop Name		
Description	WEED CONTROL	WEED CONTROL
Part Rated	PLANT P	PLANT P
Rating Date	8-1-2016	8-1-2016
Rating Type	CONTRO	CONTRO
Rating Unit	%	%
Sample Size, Unit	2 ROW	2 ROW
Collection Basis, Unit	1 PLOT	1 PLOT
Number of Subsamples	1	1
SE Group No.	30	31
Rating Timing	42DA-A	42DA-A
Days After First/Last Applic.	42 42	42 42
Trt-Eval Interval	42 DA-A	42 DA-A
Plant-Eval Interval	67 DP-1	67 DP-1
Days After Emergence	61 DE-1	61 DE-1
ARM Action Codes		
Number of Decimals	1	1
Trt Treatment	Other Other	Appl
No. Name	Rate Rate Unit Code	18* 19*
8 FLEXSTAR GT	1.53 lb ai/a A	93.3 ab 100.0 a
SCEPTER	0.061 lb ai/a A	
MSO	0.5 % v/v A	
N PAK AMS	1.5 qt/a A	
LSD P=.05		9.46 7.15
Standard Deviation		5.40 4.08
CV		6.46 4.71
Bartlett's X2		4.416 0.0
P(Bartlett's X2)		0.353 .
Skewness		-2.2656* -2.3601*
Kurtosis		3.723* 3.9951*
Replicate F		1.029 1.000
Replicate Prob(F)		0.3828 0.3927
Treatment F		119.100 221.714
Treatment Prob(F)		0.0001 0.0001

The Ohio State University

SCEPTER TANK MIXTURES FOR CONTROL OF VOLUNTEER CORN IN RR SOYBEANS

Trial ID: 16C05H064XOH519 Location: South Charlestown, OH Trial Year: 2016
Protocol ID: 16C05H064 Investigator: Dr. Mark M. Loux
Project ID: 16C05H064 Study Director: Tony Dobbels
Sponsor Contact: Joseph Argentine

Pest Type

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

Pest Code

ZEAMX, Zea mays, = US
SETFA, Setaria faberi, = US
ECHCG, Echinochloa crus-galli, = US
AMBTR, Ambrosia trifida, = US
CHEAL, Chenopodium album, = US
AMARE, Amaranthus retroflexus, = US

Crop Code

GLXMA, BSOY, Glycine max, = US

Part Rated

PLANT = plant
C = Crop is Part Rated
P = Pest is Part Rated

Rating Type

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

Rating Unit

% = percent

ROW = row

PLOT = total plot

Plant-Eval Interval

32 DP-1 = 1 GLXMA 5-26-2016
40 DP-1 = 1 GLXMA 5-26-2016
53 DP-1 = 1 GLXMA 5-26-2016
67 DP-1 = 1 GLXMA 5-26-2016

ARM Action Codes

S10 = Perform 10% Student-Newman-Keuls mean separation on Standardized Summary