

The Ohio State University

Scepter tank mixtures for preplant in soybeans

Trial ID: 16 AMVPRENT
 Protocol ID: 16 AMVPRE
 Project ID: 16C05H062

Location: Western Branch Trial Year: 2016
 Investigator: Dr. Mark M. Loux
 Study Director: Bryan Reeb
 Sponsor Contact: Joe Argentine, AMVAC

General Trial Information

Study Director: Bryan Reeb
 Investigator: Dr. Mark M. Loux

Latitude of LL Corner °: 39.85888 N
 Longitude of LL Corner °: 83.67345 W
 Altitude of LL Corner, Unit: 1088.00 FT

Conducted Under GLP: No
 Conducted Under GEP: No

Contacts

Study Director: Bryan Reeb

Investigator: Dr. Mark M. Loux

Crop Description

Crop 1: GLXMA Glycine max Soybean
 Variety: CZ 3383RY
 Description: Credenze Roundup Ready
 Seed Shape: FLAT
 Planting Rate, Unit: 175000 S/A
 Depth, Unit: 1.5 IN
 Row Spacing, Unit: 15 IN
 Soil Moisture: SLIDRY slightly dry
 Seed Bed: FINTRA fine/trashy
 BBCH Scale: BSOY
 Planting Date: 4-25-2016
 Planting Method: PLANTD planted
 Planting Equipment: PP Plot Planter
 Emergence Date: 5-11-2016

Site and Design

Treated Plot Width: 6.67 FT
 Treated Plot Length: 30 FT
 Treated Plot Area: 200.1 FT2
 Replications: 3
 Site Type: FIELD field
 Experimental Unit: 1 PLOT plot
 Tillage Type: NOTILL no-till
 Study Design: RACOB� Randomized Complete Block (RCB)
 Treatments: 15

Soil Description

Description Name: F-9 West
 % OM: 2
 pH: 6.2
 CEC: 9.7
 Texture: SICL silty clay loam
 Soil Name: Kokomo
 Fert. Level: G good
 Soil Drainage: G good

Application Description

Application Date: 4-26-2016
 Appl. Start Time: 9:00 AM
 Appl. Stop Time: 9:30 AM
 Application Method: SPRAY
 Application Timing: ATPL
 Application Placement: BROSOL
 Applied By: REEB/DOBBEL
 Air Temperature, Unit: 69.8 F
 % Relative Humidity: 60
 Wind Velocity, Unit: 9 MPH
 Wind Direction: W
 Dew Presence (Y/N): N no
 Soil Temperature, Unit: 58 F
 Soil Moisture: DRY
 % Cloud Cover: 15
 Next Moisture Occurred On: 4-28-2016
 Time to Next Moisture, Unit: 2 DAYS

Crop Stage At Each Application

Crop 1 Code, BBCH Scale: GLXMA BSOY

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Application Equipment

Appl. Equipment: 6' BACKPACK
Equipment Type: BACCAI
Operation Pressure, Unit: 44 PSI
Nozzle Type: AIXR
Nozzle Size: 11015
Nozzle Spacing, Unit: 18 IN
Nozzles/Row: 4
Boom Length, Unit: 6.67 FT
Boom Height, Unit: 20 IN
Ground Speed, Unit: 3 MPH
Carrier: WATER
Spray Volume, Unit: 15 gal/ac
Mix Size, Unit: 1 liters
Propellant: COMCO2

Date By Notes
 4-15-2016 REEB 32 OZ RUP + 32 OZ 2,4-D OVERLAY

Pest Type	W Weed	W Weed	W Weed	W Weed				W Weed
Pest Code	SETFA	CHEAL	ERICA	AMBTR				SETFA
Pest Scientific Name	Setaria faberi	Chenopodium al-	Conyza canadens	Ambrosia trifi>				Setaria faberi
Pest Name	Giant foxtail	Common lambsqu>	Canada horsewe>	Giant ragweed				Giant foxtail
Rating Date	5-26-2016	5-26-2016	5-26-2016	5-26-2016	5-26-2016	6-8-2016	6-8-2016	6-8-2016
Rating Type	CONTRO	CONTRO	CONTRO	CONTRO	STARED	STARED	STARED	CONTRO
Rating Unit	%	%	%	%	%	%	%	%
Number of Subsamples	1	1	1	1	1	1	1	1
SE Group No.	1	2	3	4	5	6	7	7
Days After First/Last Applic.	30 30	30 30	30 30	30 30	30 30	43 43	43 43	43 43
Trt-Eval Interval	30 DA-A	30 DA-A	30 DA-A	30 DA-A	30 DA-A	43 DA-A	43 DA-A	43 DA-A
Plant-Eval Interval	31 DP-1	31 DP-1	31 DP-1	31 DP-1	31 DP-1	44 DP-1	44 DP-1	44 DP-1
Days After Emergence	15 DE-1	15 DE-1	15 DE-1	15 DE-1	15 DE-1	28 DE1	28 DE1	28 DE-1

Trt Treatment	Other	Other	Appl	1*	2*	3*	4*	5*	6*	7*
No. Name	Rate	Rate	Unit Code							
1 UTC				0.0 d	0.0 b	0.0 c	0.0 e	0.0 c	0.0 -	0.0 g
2 Valor SX	3 oz/a		A	80.0 c	100.0 a	96.7 b	66.7 bcd	1.0 bc	0.0 -	40.0 ef
3 Valor XLT @ 5 oz				93.3 ab	100.0 a	95.0 b	68.3 bcd	1.7 bc	1.0 -	63.3 a-d
Valor SX	2.93 oz/a		A							
Classic	2.06 oz/a		A							
4 Valor SX	3 oz/a		A	100.0 a	100.0 a	100.0 a	70.0 bcd	0.0 c	0.0 -	80.0 ab
Scepter	2.1 oz/a		A							
5 Valor SX	3 oz/a		A	100.0 a	100.0 a	100.0 a	60.0 d	0.0 c	0.0 -	78.3 ab
Dual II Magnum	20 oz/a		A							
6 Valor SX	3 oz/a		A	100.0 a	100.0 a	100.0 a	78.3 abc	1.0 bc	0.7 -	73.3 abc
Dual II Magnum	20 oz/a		A							
Scepter	2.1 oz/a		A							
7 Trivence @ 10 oz				100.0 a	100.0 a	100.0 a	75.0 a-d	0.0 c	0.0 -	76.7 abc
Classic	1.56 oz/a		A							
Valor SX	2.5 oz/a		A							
Metribuzin	5.95 oz/a		A							
8 Valor SX	2.5 oz/a		A	100.0 a	100.0 a	100.0 a	81.7 ab	0.0 c	0.3 -	83.3 a
Metribuzin	8 oz/a		A							
Scepter	2.1 oz/a		A							
9 Spartan	8 oz/a		A	93.3 ab	100.0 a	100.0 a	63.3 cd	6.7 a	1.0 -	46.7 def
10 Authority XL	6.45 oz/a		A	95.0 ab	100.0 a	100.0 a	73.3 a-d	7.3 a	3.7 -	60.0 b-e
11 Spartan	8 oz/a		A	98.3 ab	100.0 a	100.0 a	86.7 a	1.0 bc	1.0 -	61.7 bcd
Scepter	2.1 oz/a		A							
12 Authority Elite	24 oz/a		A	100.0 a	100.0 a	100.0 a	60.0 d	0.0 c	1.3 -	56.7 c-f
13 Authority Elite	24 oz/a		A	100.0 a	100.0 a	100.0 a	73.3 a-d	5.0 ab	0.7 -	71.7 abc
Scepter	2.1 oz/a		A							
14 Authority MTZ	16 oz/a		A	90.0 b	100.0 a	100.0 a	66.7 bcd	0.0 c	0.0 -	36.7 f

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Pest Type	W Weed	W Weed	W Weed	W Weed	W Weed		W Weed			
Pest Code	SETFA	CHEAL	ERICA	AMBTR	SETFA		SETFA			
Pest Scientific Name	Setaria faberi	Chenopodium al>	Conyza canaden>	Ambrosia trifi>	Setaria faberi		Setaria faberi			
Pest Name	Giant foxtail	Common lambsqu>	Canada horsewe>	Giant ragweed	Giant foxtail		Giant foxtail			
Rating Date	5-26-2016	5-26-2016	5-26-2016	5-26-2016	5-26-2016	6-8-2016	6-8-2016			
Rating Type	CONTRO	CONTRO	CONTRO	CONTRO	STARED	STARED	CONTRO			
Rating Unit	%	%	%	%	%	%	%			
Number of Subsamples	1	1	1	1	1	1	1			
SE Group No.	1	2	3	4	5	6	7			
Days After First/Last Applic.	30 30	30 30	30 30	30 30	30 30	43 43	43 43			
Trt-Eval Interval	30 DA-A	30 DA-A	30 DA-A	30 DA-A	30 DA-A	43 DA-A	43 DA-A			
Plant-Eval Interval	31 DP-1	31 DP-1	31 DP-1	31 DP-1	31 DP-1	44 DP-1	44 DP-1			
Days After Emergence	15 DE-1	15 DE-1	15 DE-1	15 DE-1	15 DE-1	28 DE1	28 DE-1			
Trt Treatment	Other Rate	Other Rate	Appl Unit Code	1*	2*	3*	4*	5*	6*	7*
15 Authority MTZ	16 oz/a	A		100.0 a	100.0 a	100.0 a	76.7 abc	1.7 bc	1.3 -	73.3 abc
Metribuzin	2.24 oz/a	A								
Scepter	2.1 oz/a	A								
LSD P=.05				8.54	.	3.30	16.49	4.83	2.22	20.39
Standard Deviation				5.11	0.00	1.97	9.86	2.89	1.33	12.19
CV				5.67	0.0	2.13	14.79	170.86	180.76	20.28
Bartlett's X2				3.385	0.0	0.041	7.944	9.056	5.837	12.181
P(Bartlett's X2)				0.641	.	0.84	0.847	0.249	0.666	0.513
Skewness				-3.1718*	-3.5954*	-3.5512*	-2.0047*	2.3566*	2.0916*	-1.0503*
Kurtosis				9.2945*	11.4333*	11.215*	4.6161*	5.0804*	3.6825*	0.713
Replicate F				2.301	0.000	1.000	2.793	4.054	3.073	1.753
Replicate Prob(F)				0.1188	1.0000	0.3806	0.0783	0.0284	0.0621	0.1918
Treatment F				74.932	0.000	509.898	12.289	2.290	1.577	9.798
Treatment Prob(F)				0.0001	1.0000	0.0001	0.0001	0.0301	0.1480	0.0001

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Trt No.	Treatment Name	Other Rate	Other Rate Unit	Appl Code	8*	9*	10*
1	UTC				0.0 c	0.0 c	0.0 d
2	Valor SX	3 oz/a		A	93.3 b	90.0 ab	46.7 bc
3	Valor XLT @ 5 oz				100.0 a	90.0 ab	46.7 bc
	Valor SX	2.93 oz/a		A			
	Classic	2.06 oz/a		A			
4	Valor SX	3 oz/a		A	100.0 a	96.7 a	56.7 abc
	Scepter	2.1 oz/a		A			
5	Valor SX	3 oz/a		A	90.0 b	96.0 a	43.3 c
	Dual II Magnum	20 oz/a		A			
6	Valor SX	3 oz/a		A	100.0 a	98.3 a	65.0 a
	Dual II Magnum	20 oz/a		A			
	Scepter	2.1 oz/a		A			
7	Trivence @ 10 oz				100.0 a	95.0 a	50.0 abc
	Classic	1.56 oz/a		A			
	Valor SX	2.5 oz/a		A			
	Metribuzin	5.95 oz/a		A			
8	Valor SX	2.5 oz/a		A	100.0 a	100.0 a	60.0 ab
	Metribuzin	8 oz/a		A			
	Scepter	2.1 oz/a		A			
9	Spartan	8 oz/a		A	100.0 a	100.0 a	43.3 c
10	Authority XL	6.45 oz/a		A	100.0 a	100.0 a	46.7 bc
11	Spartan	8 oz/a		A	100.0 a	96.7 a	60.0 ab
	Scepter	2.1 oz/a		A			
12	Authority Elite	24 oz/a		A	100.0 a	80.0 b	43.3 c
13	Authority Elite	24 oz/a		A	100.0 a	96.7 a	46.7 bc
	Scepter	2.1 oz/a		A			
14	Authority MTZ	16 oz/a		A	100.0 a	100.0 a	53.3 abc

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Trt No.	Treatment Name	Other Rate	Other Rate Unit	Appl Code	8*	9*	10*
15	Authority MTZ	16 oz/a	A		100.0 a	100.0 a	53.3 abc
	Metribuzin	2.24 oz/a	A				
	Scepter	2.1 oz/a	A				
	LSD P=.05				5.43	11.25	16.65
	Standard Deviation				3.25	6.73	9.95
	CV				3.52	7.53	20.88
	Bartlett's X2				1.242	10.142	6.478
	P(Bartlett's X2)				0.265	0.181	0.89
	Skewness				-3.4579*	-3.0888*	-1.4234*
	Kurtosis				10.7259*	8.7584*	2.778*
	Replicate F				1.000	3.265	0.219
	Replicate Prob(F)				0.3806	0.0531	0.8049
	Treatment F				187.519	42.408	6.680
	Treatment Prob(F)				0.0001	0.0001	0.0001

Pest Type	W Weed	W Weed	W Weed
Pest Code	CHEAL	ERICA	AMBTR
Pest Scientific Name	Chenopodium al>	Conyza canad>	Ambrosia trifi>
Pest Name	Common lambsqu>	Canada horsewe>	Giant ragweed
Rating Date	6-8-2016	6-8-2016	6-8-2016
Rating Type	CONTRO	CONTRO	CONTRO
Rating Unit	%	%	%
Number of Subsamples	1	1	1
SE Group No.	8	9	10
Days After First/Last Applic.	43 43	43 43	43 43
Trt-Eval Interval	43 DA-A	43 DA-A	43 DA-A
Plant-Eval Interval	44 DP-1	44 DP-1	44 DP-1
Days After Emergence	28 DE-1	28 DE-1	28 DE-1

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Pest Type

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

Pest Code

SETFA, Setaria faberi, = US

CHEAL, Chenopodium album, = US

ERICA, Conyza canadensis, = ERICA, Conyza canadensis,

AMBTR, Ambrosia trifida, = US

Rating Type

CONTRO = control / burndown or knockdown

STARED = stand reduction

Rating Unit

% = percent

Plant-Eval Interval

31 DP-1 = 1 GLXMA 4-25-2016

44 DP-1 = 1 GLXMA 4-25-2016