

The Ohio State University

Shredder Met Comp

Trial ID: 16SHREDMET
 Protocol ID: Shredder Met Comp 102615
 Project ID:

Location: Trial Year: 2015
 Investigator: Dr. Mark M. Loux
 Study Director:
 Sponsor Contact:

General Trial Information

Investigator: Dr. Mark M. Loux

Trial Location

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

Latitude of LL Corner °: 39.85873 N
 Longitude of LL Corner °: 83.67263 W
 Altitude of LL Corner, Unit: 1090.00 FT

Conducted Under GLP: No
 Conducted Under GEP: No

Investigator: Dr. Mark M. Loux

Crop Description

Crop 1: GLXMA Glycine max
 Variety: CZ3443LL
 Description: Credenze

Soybean

Planting Rate, Unit: 179000 S/A
 Depth, Unit: 1 IN
 Row Spacing, Unit: 15 IN
 Soil Temperature, Unit: 56 F
 Soil Moisture: NORMAL normal, adequate
 Seed Bed: MEDIUM medium

Planting Date: 4-25-2016
 Planting Method: SEEDS seeded
 Planting Equipment: PP Plot Planter
 Emergence Date: 5-16-2016

Pest Description

Pest 1 Type: W Code: ERICA Conyza canadensis
 Common Name: Canada horseweed
 Description: Bolted Plants / Glyphosate Resistant

Pest 2 Type: W Code: ERICA Conyza canadensis
 Common Name: Canada horseweed
 Description: Rosettes/ Glyphosate Resistant

Pest 3 Type: W Code: LAMPU Lamium purpureum
 Common Name: Purple deadnettel

Pest 4 Type: W Code: SENGL Senecio glabellus
 Common Name: Cressleaf groundsel

Pest 5 Type: W Code: RANAB Ranunculus abortivus
 Common Name: Smallflower buttercup

Site and Design

Treated Plot Width: 6.67 FT
 Treated Plot Length: 30 FT
 Treated Plot Area: 200.1 FT² Treatments: 6
 Replications: 3

Site Type: FIELD field
 Experimental Unit: 1 PLOT plot
 Tillage Type: NOTILL no-till
 Study Design: RACOB L Randomized Complete Block (RCB)

No. Previous Crop Year
 1. Wheat 2015

Soil Description

Description Name: F-10 West
 % OM: 1.6 Texture: SIC silty clay
 pH: 6.6 Soil Name: Crosby
 CEC: 9 Fert. Level: G good
 Soil Drainage: G good

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Application Description

A
 Application Date: 11-3-2015
 Appl. Start Time: 9:30 AM
 Appl. Stop Time: 10:00 AM
 Application Method: SPRAY
 Application Timing: FALL
 Application Placement: BROFOL
 Applied By: Dobbels
 Air Temperature, Unit: 63 F
 % Relative Humidity: 61
 Wind Velocity, Unit: 3 MPH
 Wind Direction: ENE
 Dew Presence (Y/N): N no
 Soil Temperature, Unit: 48 F
 Soil Moisture: MOIST
 % Cloud Cover: 0
 Next Moisture Occurred On: 11-6-2015
 Time to Next Moisture, Unit: 3 DAY

Crop Stage At Each Application

A
 Crop 1 Code, BBCH Scale: GLXMA BSOY

Pest Stage At Each Application

A
 Pest 1 Code, Type, Scale: ERICA W BBCH
 Stage Majority, Percent: 30 100
 Diameter, Unit: 4 IN
 Height, Unit: 4 IN
 Height Minimum, Maximum: 4 6
 Density, Unit: 10 M2
 Pest 2 Code, Type, Scale: ERICA W
 Stage Majority, Percent: 19 100
 Diameter, Unit: 3 IN
 Height, Unit: 1 IN
 Height Minimum, Maximum: 0.5 1
 Density, Unit: 6 M2
 Pest 3 Code, Type, Scale: LAMPU W
 Stage Majority, Percent: 19 100
 Diameter, Unit: 4 IN
 Height, Unit: 3 IN
 Height Minimum, Maximum: 3 4
 Density, Unit: 8 M2
 Pest 4 Code, Type, Scale: SENGL W
 Stage Majority, Percent: 19 100
 Diameter, Unit: 5 IN
 Height, Unit: 3 IN
 Height Minimum, Maximum: 3 4
 Density, Unit: 6.6 M2
 Pest 5 Code, Type, Scale: RANAB W
 Stage Majority, Percent: 13 100
 Diameter, Unit: 4 IN
 Height, Unit: 4 IN
 Height Minimum, Maximum: 3 4
 Density, Unit: 1.3 M2

Application Equipment

A
 Appl. Equipment: 6 FOOT BOOM
 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: 1 Liters
 Propellant: CO2

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Pest Type										
Pest Code										
Pest Name										
	W Weed	W Weed	W Weed	W Weed	W Weed	W Weed				
	ERICA	LAMPU	RANAB	SENGL	ERICA	LAMPU				
	Canada horsewe>	Purple deadnet>	Smallflower bu>	Cressleaf grou>	Canada horsewe>	Purple deadnet>				
Rating Date	11-16-2015	11-16-2015	11-16-2015	11-16-2015	12-2-2015	12-2-2015				
Rating Type	CONTRO	CONTRO	CONTRO	CONTRO	CONTRO	CONTRO				
Rating Unit	%	%	%	%	%	%				
Number of Subsamples	1	1	1	1	1	1				
Days After First/Last Applic.										
Trt-Eval Interval	13 DA-A	13 DA-A	13 DA-A	13 DA-A	29 DA-A	29 DA-A				
Days After Emergence	-182 DE-1	-182 DE-1	-182 DE-1	-182 DE-1	-166 DE-1	-166 DE-1				
Number of Decimals	0	0	0	0	0	0				
Trt No.	Treatment Name	Other Rate	Other Rate	Appl Unit Code	1*	2*	3*	4*	5*	6*
1	UTC				0 c	0 b	0 b	0 d	0 c	0 c
2	Shredder LV-6	1.33 pt/a		A	63 b	40 a	40 a	20 c	82 b	63 b
	SUPERB HC	0.5 % v/v		A						
3	Shredder LV-6	1.33 pt/a		A	72 a	53 a	40 a	24 c	85 ab	80 a
	Dimetric	4 oz/a		A						
	SUPERB HC	0.5 % v/v		A						
4	Shredder LV-6	1.33 pt/a		A	75 a	53 a	40 a	34 bc	85 ab	83 a
	Dimetric	8 oz/a		A						
	SUPERB HC	0.5 % v/v		A						
5	Shredder LV-6	1.33 pt/a		A	75 a	50 a	50 a	43 ab	91 a	83 a
	AGH 15003	8 oz/a		A						
	SUPERB HC	0.5 % v/v		A						
6	Shredder LV-6	1.33 pt/a		A	75 a	53 a	50 a	48 a	92 a	92 a
	AGH 15003	16 oz/a		A						
	SUPERB HC	0.5 % v/v		A						
LSD P=.05					5.8	15.9	11.0	11.5	9.2	13.5
Standard Deviation					3.2	8.8	6.1	5.5	5.0	7.4
CV					5.27	21.01	16.51	29.07	6.96	11.05
Bartlett's X2					0.852	0.923	0.0	0.073	2.479	2.493
P(Bartlett's X2)					0.653	0.921	.	0.964	0.479	0.646
Skewness					-1.8211*	-1.2432*	-1.2111*	-0.3213	-1.8312*	-1.374*
Kurtosis					1.7145	0.4267	0.7899	-1.1118	1.7814	0.8524
Replicate F					1.667	1.522	3.182	0.264	1.289	6.574
Replicate Prob(F)					0.2373	0.2649	0.0852	0.7777	0.3177	0.0150
Treatment F					265.333	17.348	28.364	24.820	150.357	63.741
Treatment Prob(F)					0.0001	0.0001	0.0001	0.0015	0.0001	0.0001

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Pest Type	W Weed	W Weed	W Weed	W Weed	W Weed	W Weed				
Pest Code	RANAB	SENGL	ERICA	LAMPU	SENGL	RANAB				
Pest Name	Smallflower bu>	Cressleaf Canada horsewe>	Purple deadnet>	Cressleaf grou>	Smallflower bu>					
Rating Date	12-2-2015	12-2-2015	4-27-2016	4-27-2016	4-27-2016	4-27-2016				
Rating Type	CONTRO	CONTRO	CONTRO	CONTRO	CONTRO	CONTRO				
Rating Unit	%	%	%	%	%	%				
Number of Subsamples	1	1	1	1	1	1				
Days After First/Last Applic.			176 176	176 176	176 176	176 176				
Trt-Eval Interval	29 DA-A	29 DA-A	176 DA-A	176 DA-A	176 DA-A	176 DA-A				
Days After Emergence	-166 DE-1	-166 DE-1	-19 DE-1	-19 DE-1	-19 DE-1	-19 DE-1				
Number of Decimals	0	0	0	0	0	0				
Trt No.	Treatment Name	Other Rate	Other Rate	Appl Unit Code	7*	8*	9*	10*	11*	12*
1	UTC			A	0 d	0 d	0 b	0 c	0 b	0 d
2	Shredder LV-6	1.33 pt/a		A	83 bc	33 c	100 a	78 b	93 a	68 c
	SUPERB HC	0.5 % v/v		A						
3	Shredder LV-6	1.33 pt/a		A	74 c	34 bc	100 a	100 a	100 a	93 ab
	Dimetric	4 oz/a		A						
	SUPERB HC	0.5 % v/v		A						
4	Shredder LV-6	1.33 pt/a		A	93 a	62 abc	98 a	100 a	100 a	95 a
	Dimetric	8 oz/a		A						
	SUPERB HC	0.5 % v/v		A						
5	Shredder LV-6	1.33 pt/a		A	90 ab	63 ab	100 a	92 a	93 a	78 bc
	AGH 15003	8 oz/a		A						
	SUPERB HC	0.5 % v/v		A						
6	Shredder LV-6	1.33 pt/a		A	97 a	68 a	100 a	100 a	100 a	100 a
	AGH 15003	16 oz/a		A						
	SUPERB HC	0.5 % v/v		A						
LSD P=.05					8.4	26.0	2.1	11.1	12.7	16.6
Standard Deviation					4.2	12.4	1.2	6.1	7.0	9.1
CV					7.9	42.12	1.42	7.82	8.62	12.63
Bartlett's X2					1.123	1.116	0.0	0.73	0.0	1.928
P(Bartlett's X2)					0.771	0.773	.	0.393	.	0.587
Skewness					-1.4268*	-0.3395	-1.9518*	-1.6914*	-1.8442*	-1.3906*
Kurtosis					0.2674	-1.3211	2.0307	1.364	1.7482	0.6313
Replicate F					0.635	1.009	1.000	2.111	0.455	2.636
Replicate Prob(F)					0.5623	0.4285	0.4019	0.1719	0.6472	0.1204
Treatment F					208.141	11.397	3577.000	123.556	97.545	50.099
Treatment Prob(F)					0.0001	0.0092	0.0001	0.0001	0.0001	0.0001

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Pest Type		W Weed	W Weed	W Weed			
Pest Code		VERAG	STEME	ERICA			
Pest Name		Field speedwell	Common chickwe>	Canada horsewe>			
Rating Date		5-9-2016	5-9-2016	5-23-2016			
Rating Type		CONTRO	CONTRO	CONTRO			
Rating Unit		%	%	%			
Number of Subsamples		1	1	1			
Days After First/Last Applic.		188 188	188 188	202 202			
Trt-Eval Interval		188 DA-A	188 DA-A	202 DA-A			
Days After Emergence		-7 DE-1	-7 DE-1	7 DE-1			
Number of Decimals		0	0	0			
Trt No.	Treatment Name	Other Rate	Other Rate	Appl Unit Code	19*	20*	21*
1	UTC				0 b	0 b	0 c
2	Shredder LV-6	1.33 pt/a		A	20 b	93 a	83 b
	SUPERB HC	0.5 % v/v		A			
3	Shredder LV-6	1.33 pt/a		A	95 a	100 a	100 a
	Dimetric	4 oz/a		A			
	SUPERB HC	0.5 % v/v		A			
4	Shredder LV-6	1.33 pt/a		A	95 a	100 a	93 ab
	Dimetric	8 oz/a		A			
	SUPERB HC	0.5 % v/v		A			
5	Shredder LV-6	1.33 pt/a		A	87 a	100 a	100 a
	AGH 15003	8 oz/a		A			
	SUPERB HC	0.5 % v/v		A			
6	Shredder LV-6	1.33 pt/a		A	100 a	100 a	98 a
	AGH 15003	16 oz/a		A			
	SUPERB HC	0.5 % v/v		A			
	LSD P=.05				27.9	8.6	13.8
	Standard Deviation				15.3	4.7	7.6
	CV				23.22	5.73	9.58
	Bartlett's X2				4.734	0.0	3.76
	P(Bartlett's X2)				0.192	.	0.153
	Skewness				-0.8376	-1.8973*	-1.7384*
	Kurtosis				-1.2148	1.8825	1.4706
	Replicate F				2.995	1.000	1.522
	Replicate Prob(F)				0.0956	0.4019	0.2649
	Treatment F				24.802	220.000	80.565
	Treatment Prob(F)				0.0001	0.0001	0.0001

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Pest Type

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

Pest Code

ERICA, Conyza canadensis, = ERICA, Conyza canadensis,

LAMPU, Lamium purpureum, = US

RANAB, Ranunculus abortivus, = US

SENGL, Senecio glabellus, = US

VERAG, Veronica agrestis, = US

STEME, Stellaria media, = US

Rating Type

CONTRO = control / burndown or knockdown

Rating Unit

% = percent