

# The Ohio State University

## Tank Mix partners for horseweed control

Trial ID: 17 TANKMIXERICA  
 Protocol ID: 17 TANKMIXERICA  
 Project ID:

Location: F-10 MIDDLE Trial Year: 2017  
 Investigator: Dr. Mark M. Loux  
 Study Director: Bryan Reeb  
 Sponsor Contact: OSU

### General Trial Information

**Study Director:** Bryan Reeb  
**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 °:** 39.85871 N  
**Longitude of LL Corner °:** 83.67209 W  
**Altitude of LL Corner, Unit:** 1058.00 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:** seed consultants SC3357LL  
**Description:** Liberty Link

**Planting Rate, Unit:** 175000 P/A  
**Depth, Unit:** 1 IN  
**Row Spacing, Unit:** 15 IN  
**Soil Moisture:** GOOD good  
**Planting Date:** May-17-2017  
**Planting Method:** PLANTD planted  
**Planting Equipment:** FE Field Equipment  
**Emergence Date:** May-29-2017

### Pest Description

- Pest 1 Type:** W **Code:** ERICA Erigeron canadensis  
**Common Name:** Canada horseweed
- Pest 2 Type:** W **Code:** ERYRE Erysimum repandum  
**Common Name:** Bushy wallflower
- Pest 3 Type:** W **Code:** SENGL Senecio glabellus  
**Common Name:** Cressleaf groundsel
- Pest 4 Type:** W **Code:** VERAR Veronica arvensis  
**Common Name:** Corn speedwell
- Pest 5 Type:** W **Code:** LEPCA Lepidium campestre  
**Common Name:** Field pepperweed
- Pest 6 Type:** W **Code:** SETFA Setaria faberi  
**Common Name:** Giant foxtail
- Pest 7 Type:** W **Code:** AMBTR Ambrosia trifida  
**Common Name:** Giant ragweed
- Pest 8 Type:** W **Code:** AMARP Amaranthus repens  
**Common Name:** Amaranthus repens
- Pest 9 Type:** W **Code:** CHEAL Chenopodium album  
**Common Name:** common lambsquarters
- Pest10 Type:** W **Code:** SIDSP Sida spinosa  
**Common Name:** Prickly sida

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## Site and Design

**Treated Plot Width:** 10 FT  
**Treated Plot Length:** 30 FT  
**Treated Plot Area:** 300 FT<sup>2</sup> **Treatments:** 12  
**Replications:** 3

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

## Soil Description

**Description Name:** F-10 West  
**% OM:** 1.5 **Texture:** SIL silt loam  
**pH:** 5.8 **Soil Name:** Crosby Silt Loam  
**CEC:** 13 **Fert. Level:** G good  
**Soil Drainage:** G good

## Application Description

	A	B
<b>Application Date:</b>	May-3-2017	Jun-16-2017
<b>Appl. Start Time:</b>	10:15 AM	9:30 AM
<b>Appl. Stop Time:</b>	11:00 AM	9:45 AM
<b>Application Method:</b>	SPRAY	SPRAY
<b>Application Placement:</b>	BROSOI	BROFOL
<b>Applied By:</b>	LOUX	ACKLEY
<b>Air Temperature, Unit:</b>	46 F	77 F
<b>% Relative Humidity:</b>	62	76
<b>Wind Velocity, Unit:</b>	7 MPH	3 MPH
<b>Wind Direction:</b>	N	SW
<b>Dew Presence (Y/N):</b>	N no	Y yes
<b>Soil Temperature, Unit:</b>	50 F	70 F
<b>Soil Moisture:</b>	SLIWET	WET
<b>% Cloud Cover:</b>	90	30
<b>Next Moisture Occurred On:</b>	May-4-2017	Jun-18-2017
<b>Time to Next Moisture, Unit:</b>	1 DAY	2 DAY

## Crop Stage At Each Application

	A	B
<b>Crop 1 Code, BBCH Scale:</b>	GLXMA BSOY	GLXMA BSOY
<b>Stage Scale Used:</b>		BBCH
<b>Stage Majority, Percent:</b>		13 100
<b>Height, Unit:</b>		7 IN

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## Pest Stage At Each Application

	A		B	
<b>Pest 1 Code, Type, Scale:</b>	ERICA	W	ERICA	W
<b>Stage Majority, Percent:</b>	21	100	30	100
<b>Height, Unit:</b>	4	IN	12	IN
<b>Height Minimum, Maximum:</b>	4	6	9	16
<b>Density, Unit:</b>	36	m2		
<b>Pest 2 Code, Type, Scale:</b>	ERYRE	W	ERYRE	W
<b>Stage Majority, Percent:</b>	89	100		
<b>Height, Unit:</b>	16	IN		
<b>Density, Unit:</b>	19	m2		
<b>Pest 3 Code, Type, Scale:</b>	SENGL	W	SENGL	W
<b>Stage Majority, Percent:</b>	65	100		
<b>Height, Unit:</b>	24	IN		
<b>Density, Unit:</b>	29	m2		
<b>Pest 4 Code, Type, Scale:</b>	VERAR	W	VERAR	W
<b>Stage Majority, Percent:</b>	65	100		
<b>Height, Unit:</b>	3	IN		
<b>Density, Unit:</b>	20	m2		
<b>Pest 5 Code, Type, Scale:</b>	LEPCA	W	LEPCA	W
<b>Stage Majority, Percent:</b>	69	100		
<b>Height, Unit:</b>	19	IN		
<b>Density, Unit:</b>	5	m2		
<b>Pest 6 Code, Type, Scale:</b>	SETFA	W	SETFA	W
<b>Stage Majority, Percent:</b>			13	100
<b>Height, Unit:</b>			5	IN
<b>Height Minimum, Maximum:</b>			4	6
<b>Pest 7 Code, Type, Scale:</b>	AMBTR	W	AMBTR	W
<b>Stage Majority, Percent:</b>			21	100
<b>Height, Unit:</b>			12	IN
<b>Pest 8 Code, Type, Scale:</b>	AMARP	W	AMARP	W
<b>Stage Majority, Percent:</b>			18	100
<b>Height, Unit:</b>			6	IN
<b>Pest 9 Code, Type, Scale:</b>	CHEAL	W	CHEAL	W
<b>Stage Majority, Percent:</b>			18	100
<b>Height, Unit:</b>			4	IN
<b>Pest10 Code, Type, Scale:</b>	SIDSP	W	SIDSP	W
<b>Stage Majority, Percent:</b>			14	100
<b>Height, Unit:</b>			4	IN

## Application Equipment

	A		B	
<b>Appl. Equipment:</b>	6' BACKPACK		10' BACKPACK	
<b>Equipment Type:</b>	BACCAI		BACCAI	
<b>Operation Pressure, Unit:</b>	48	PSI	44	PSI
<b>Nozzle Type:</b>	AIXR		AIXR	
<b>Nozzle Size:</b>	11015		11015	
<b>Nozzle Spacing, Unit:</b>	18	IN	18	IN
<b>Nozzles/Row:</b>	4		6	
<b>Boom Length, Unit:</b>	6.67	FT	10	FT
<b>Boom Height, Unit:</b>	20	IN	20	IN
<b>Ground Speed, Unit:</b>	3	MPH	3	MPH
<b>Carrier:</b>	WATER		WATER	
<b>Spray Volume, Unit:</b>	15	gal/ac	15	gal/ac
<b>Mix Size, Unit:</b>	1	liters	2	liters
<b>Propellant:</b>	COMCO2		COMCO2	

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 Investigator: Dr. Mark M. Loux  
 Study Director: Bryan Reeb  
 Sponsor Contact: OSU

Pest Type	W Weed	W Weed	W Weed	W Weed	W Weed
Pest Code	LAMPU	SENGL	ERYRE	STEME	VERAG
Pest Name	Purple deadnet>	Cressleaf grou>	Bushy wallflow>	Common chickwe>	Field speedwell
Rating Date	May-16-2017	May-16-2017	May-16-2017	May-16-2017	May-16-2017
Rating Type	CONTRO	CONTRO	CONTRO	CONTRO	CONTRO
Rating Unit	%	%	%	%	%
Number of Subsamples	1	1	1	1	1
Days After First/Last Applic.	13 13	13 13	13 13	13 13	13 13
Trt-Eval Interval	13 DA-A	13 DA-A	13 DA-A	13 DA-A	13 DA-A
Days After Emergence	-13 DE-1	-13 DE-1	-13 DE-1	-13 DE-1	-13 DE-1

Trt No.	Treatment Name	Other Rate	Other Rate	Appl Unit Code	1	2	3	4	5
1	Gramoxone SL	3 pt/a		A	100.0 a	100.0 a	100.0 a	100.0 a	100.0 a
1	Sharpen	1 oz/a		A					
1	MSO	1 % v/v		A					
1	N-pak ams	3 qt/a		A					
1	Liberty	29 oz/a		B					
1	Prefix	2.2 pt/a		B					
1	N-pak ams	1.5 qt/a		B					
2	Gramoxone SL	3 pt/a		A	100.0 a	100.0 a	100.0 a	100.0 a	100.0 a
2	Trivence - 10 oz			A					
2	Classic	1.56 oz/a		A					
2	Sencor DF	5.95 oz/a		A					
2	Valor SX	2.5 oz/a		A					
2	NIS	0.25 % v/v		A					
2	N-pak ams	3 qt/a		A					
2	Liberty	29 oz/a		B					
2	Prefix	2.2 pt/a		B					
2	N-pak ams	1.5 qt/a		B					
3	Gramoxone SL	3 pt/a		A	100.0 a	100.0 a	100.0 a	100.0 a	100.0 a
3	Boundary	3 pt/a		A					
3	NIS	0.25 % v/v		A					
3	N-pak ams	3 qt/a		A					
3	Liberty	29 oz/a		B					
3	Prefix	2.2 pt/a		B					
3	N-pak ams	1.5 qt/a		B					
4	Roundup Power Max	32 oz/a		A	100.0 a	100.0 a	100.0 a	100.0 a	93.3 a
4	2,4-D Ester	1 pt/a		A					
4	Sharpen	1 oz/a		A					
4	MSO	1 % v/v		A					
4	N-pak ams	3 qt/a		A					
4	Liberty	29 oz/a		B					
4	Select Max	6 oz/a		B					
4	Dual II Magnum	1.3 pt/a		B					
4	N-pak ams	1.5 qt/a		B					

Means followed by same letter or symbol do not significantly differ (P=.05, LSD)  
 Mean comparisons performed only when AOV Treatment P(F) is significant at mean comparison OSL.  
 Missing data estimates are included in columns: Yates=14,17  
 Could not calculate LSD (% mean diff) for columns 1,4,15,22 because error mean square = 0.

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Pest Type	W Weed	W Weed	W Weed	W Weed	W Weed
Pest Code	LAMPU	SENGL	ERYRE	STEME	VERAG
Pest Name	Purple deadnet>	Cressleaf grou>	Bushy wallflow>	Common chickwe>	Field speedwell
Rating Date	May-16-2017	May-16-2017	May-16-2017	May-16-2017	May-16-2017
Rating Type	CONTRO	CONTRO	CONTRO	CONTRO	CONTRO
Rating Unit	%	%	%	%	%
Number of Subsamples	1	1	1	1	1
Days After First/Last Applic.	13 13	13 13	13 13	13 13	13 13
Trt-Eval Interval	13 DA-A	13 DA-A	13 DA-A	13 DA-A	13 DA-A
Days After Emergence	-13 DE-1	-13 DE-1	-13 DE-1	-13 DE-1	-13 DE-1

Trt No.	Treatment Name	Other Rate	Other Rate	Appl Unit Code	1	2	3	4	5
5	Roundup Power Max	32 oz/a		A	100.0 a	100.0 a	100.0 a	100.0 a	100.0 a
	5 2,4-D Ester	1 pt/a		A					
	5 Trivence - 10 oz			A					
	5 Classic	1.56 oz/a		A					
	5 Sencor DF	5.95 oz/a		A					
	5 Valor SX	2.5 oz/a		A					
	5 N-pak ams	3 qt/a		A					
	5 Liberty	29 oz/a		B					
	5 Select Max	6 oz/a		B					
	5 Dual II Magnum	1.3 pt/a		B					
	5 N-pak ams	1.5 qt/a		B					
6	Roundup Power Max	32 oz/a		A	100.0 a	88.3 b	91.7 b	100.0 a	100.0 a
	6 2,4-D Ester	1 pt/a		A					
	6 Boundary	3 pt/a		A					
	6 N-pak ams	3 qt/a		A					
	6 Liberty	29 oz/a		B					
	6 Select Max	6 oz/a		B					
	6 Dual II Magnum	1.3 pt/a		B					
	6 N-pak ams	1.5 qt/a		B					
7	Liberty	32 oz/a		A	100.0 a	100.0 a	100.0 a	100.0 a	80.0 b
	7 Sharpen	1 oz/a		A					
	7 MSO	1 % v/v		A					
	7 N-pak ams	3 qt/a		A					
	7 Flexstar	1.3 pt/a		B					
	7 Select Max	6 oz/a		B					
	7 MSO	0.3 qt/a		B					
	7 N-pak ams	1.5 qt/a		B					
8	Liberty	32 oz/a		A	100.0 a	100.0 a	100.0 a	100.0 a	100.0 a
	8 Trivence - 10 oz			A					
	8 Classic	1.56 oz/a		A					
	8 Sencor DF	5.95 oz/a		A					
	8 Valor SX	2.5 oz/a		A					
	8 N-pak ams	3 qt/a		A					
	8 Flexstar	1.3 pt/a		B					
	8 Select Max	6 oz/a		B					
	8 MSO	0.3 qt/a		B					
	8 N-pak ams	1.5 qt/a		B					
9	Liberty	32 oz/a		A	100.0 a	100.0 a	100.0 a	100.0 a	100.0 a
	9 Boundary	3 pt/a		A					
	9 N-pak ams	3 qt/a		A					
	9 Flexstar	1.3 pt/a		B					
	9 Select Max	6 oz/a		B					
	9 MSO	0.3 qt/a		B					
	9 N-pak ams	1.5 qt/a		B					

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Pest Type	W Weed	W Weed	W Weed	W Weed	W Weed
Pest Code	LAMPU	SENGL	ERYRE	STEME	VERAG
Pest Name	Purple deadnet>	Cressleaf grou>	Bushy wallflow>	Common chickwe>	Field speedwell
Rating Date	May-16-2017	May-16-2017	May-16-2017	May-16-2017	May-16-2017
Rating Type	CONTRO	CONTRO	CONTRO	CONTRO	CONTRO
Rating Unit	%	%	%	%	%
Number of Subsamples	1	1	1	1	1
Days After First/Last Applic.	13 13	13 13	13 13	13 13	13 13
Trt-Eval Interval	13 DA-A	13 DA-A	13 DA-A	13 DA-A	13 DA-A
Days After Emergence	-13 DE-1	-13 DE-1	-13 DE-1	-13 DE-1	-13 DE-1

Trt Treatment	Other Rate	Other Rate	Appl Unit Code	1	2	3	4	5
10 Roundup Power Max	32 oz/a		A	100.0 a	63.3 c	91.7 b	100.0 a	100.0 a
10 2,4-D Ester	1 pt/a		A					
10 Matador	3 pt/a		A					
10 Dual II Magnum	1.57 pt/a		A					
10 Metribuzin	4.5 oz/a		A					
10 Pursuit	3 oz/a		A					
10 N-pak ams	3 qt/a		A					
10 Liberty	29 oz/a		B					
10 Select Max	6 oz/a		B					
10 N-pak ams	1.5 qt/a		B					
11 Roundup Power Max	32 oz/a		A	100.0 a	100.0 a	100.0 a	100.0 a	96.7 a
11 Liberty	32 oz/a		A					
11 Sharpen	1 oz/a		A					
11 MSO	1 % v/v		A					
11 N-pak ams	3 qt/a		A					
11 Flexstar	1.3 pt/a		B					
11 Select Max	6 oz/a		B					
11 Dual II Magnum	1.3 pt/a		B					
11 MSO	0.3 qt/a		B					
11 N-pak ams	1.5 qt/a		B					
12 Roundup Power Max	32 oz/a		A	100.0 a	96.7 a	100.0 a	100.0 a	100.0 a
12 Liberty	32 oz/a		A					
12 Sencor DF	8 oz/a		A					
12 N-pak ams	3 qt/a		A					
12 Flexstar	1.3 pt/a		B					
12 Select Max	6 oz/a		B					
12 Dual II Magnum	1.3 pt/a		B					
12 MSO	0.3 qt/a		B					
12 N-pak ams	1.5 qt/a		B					
LSD P=.05				.	7.79	4.01	.	10.02
Standard Deviation				0.00	4.60	2.37	0.00	5.92
CV				0.0	4.81	2.4	0.0	6.07
Bartlett's X2				0.0	0.906	1.62	0.0	2.582
P(Bartlett's X2)				.	0.636	0.203	.	0.275
Replicate F				0.000	2.003	0.865	0.000	0.178
Replicate Prob(F)				1.0000	0.1588	0.4348	1.0000	0.8378
Treatment F				0.000	16.367	5.618	0.000	2.962
Treatment Prob(F)				1.0000	0.0001	0.0003	1.0000	0.0145

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Pest Type	W Weed	W Weed	W Weed	W Weed	W Weed			
Pest Code	ERICA	SETFA	AMBTR	ERICA	VERAR			
Pest Name	Canada horsewe>	Giant foxtail	Giant ragweed	Canada horsewe>	Corn speedwell			
Rating Date	May-16-2017	Jun-2-2017	Jun-2-2017	Jun-2-2017	Jun-2-2017			
Rating Type	CONTRO	CONTRO	CONTRO	CONTRO	CONTRO			
Rating Unit	%	%	%	%	%			
Number of Subsamples	1	1	1	1	1			
Days After First/Last Applic.	13 13	30 30	30 30	30 30	30 30			
Trt-Eval Interval	13 DA-A	30 DA-A	30 DA-A	30 DA-A	30 DA-A			
Days After Emergence	-13 DE-1	4 DE-1	4 DE-1	4 DE-1	4 DE-1			
Trt Treatment	Other Rate	Other Rate	Appl Unit Code	6	7	8	9	10
1 Gramoxone SL	3 pt/a		A	88.3 ab	43.3 cde	36.7 cd	71.7 bc	100.0 a
1 Sharpen	1 oz/a		A					
1 MSO	1 % v/v		A					
1 N-pak ams	3 qt/a		A					
1 Liberty	29 oz/a		B					
1 Prefix	2.2 pt/a		B					
1 N-pak ams	1.5 qt/a		B					
2 Gramoxone SL	3 pt/a		A	83.3 b	100.0 a	66.7 ab	88.3 a	100.0 a
2 Trivence - 10 oz			A					
2 Classic	1.56 oz/a		A					
2 Sencor DF	5.95 oz/a		A					
2 Valor SX	2.5 oz/a		A					
2 NIS	0.25 % v/v		A					
2 N-pak ams	3 qt/a		A					
2 Liberty	29 oz/a		B					
2 Prefix	2.2 pt/a		B					
2 N-pak ams	1.5 qt/a		B					
3 Gramoxone SL	3 pt/a		A	91.7 ab	95.0 a	40.0 bcd	86.7 ab	100.0 a
3 Boundary	3 pt/a		A					
3 NIS	0.25 % v/v		A					
3 N-pak ams	3 qt/a		A					
3 Liberty	29 oz/a		B					
3 Prefix	2.2 pt/a		B					
3 N-pak ams	1.5 qt/a		B					
4 Roundup Power Max	32 oz/a		A	100.0 a	20.0 de	70.0 a	98.3 a	100.0 a
4 2,4-D Ester	1 pt/a		A					
4 Sharpen	1 oz/a		A					
4 MSO	1 % v/v		A					
4 N-pak ams	3 qt/a		A					
4 Liberty	29 oz/a		B					
4 Select Max	6 oz/a		B					
4 Dual II Magnum	1.3 pt/a		B					
4 N-pak ams	1.5 qt/a		B					

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Pest Type	W Weed ERICA	W Weed SETFA	W Weed AMBTR	W Weed ERICA	W Weed VERAR
Pest Code	ERICA	SETFA	AMBTR	ERICA	VERAR
Pest Name	Canada horsewe>	Giant foxtail	Giant ragweed	Canada horsewe>	Corn speedwell
Rating Date	May-16-2017	Jun-2-2017	Jun-2-2017	Jun-2-2017	Jun-2-2017
Rating Type	CONTRO	CONTRO	CONTRO	CONTRO	CONTRO
Rating Unit	%	%	%	%	%
Number of Subsamples	1	1	1	1	1
Days After First/Last Applic.	13 13	30 30	30 30	30 30	30 30
Trt-Eval Interval	13 DA-A	30 DA-A	30 DA-A	30 DA-A	30 DA-A
Days After Emergence	-13 DE-1	4 DE-1	4 DE-1	4 DE-1	4 DE-1

Trt No.	Treatment Name	Other Rate	Other Rate	Appl Unit Code	6	7	8	9	10
5	Roundup Power Max	32 oz/a		A	56.7 c	93.3 ab	71.7 a	60.0 c	100.0 a
	5 2,4-D Ester	1 pt/a		A					
	5 Trivence - 10 oz			A					
	5 Classic	1.56 oz/a		A					
	5 Sencor DF	5.95 oz/a		A					
	5 Valor SX	2.5 oz/a		A					
	5 N-pak ams	3 qt/a		A					
	5 Liberty	29 oz/a		B					
	5 Select Max	6 oz/a		B					
	5 Dual II Magnum	1.3 pt/a		B					
	5 N-pak ams	1.5 qt/a		B					
6	Roundup Power Max	32 oz/a		A	65.0 c	91.7 ab	63.3 abc	70.0 c	100.0 a
	6 2,4-D Ester	1 pt/a		A					
	6 Boundary	3 pt/a		A					
	6 N-pak ams	3 qt/a		A					
	6 Liberty	29 oz/a		B					
	6 Select Max	6 oz/a		B					
	6 Dual II Magnum	1.3 pt/a		B					
	6 N-pak ams	1.5 qt/a		B					
7	Liberty	32 oz/a		A	98.3 a	33.3 cde	63.3 abc	93.3 a	83.3 a
	7 Sharpen	1 oz/a		A					
	7 MSO	1 % v/v		A					
	7 N-pak ams	3 qt/a		A					
	7 Flexstar	1.3 pt/a		B					
	7 Select Max	6 oz/a		B					
	7 MSO	0.3 qt/a		B					
	7 N-pak ams	1.5 qt/a		B					
8	Liberty	32 oz/a		A	98.7 a	100.0 a	73.3 a	90.0 a	100.0 a
	8 Trivence - 10 oz			A					
	8 Classic	1.56 oz/a		A					
	8 Sencor DF	5.95 oz/a		A					
	8 Valor SX	2.5 oz/a		A					
	8 N-pak ams	3 qt/a		A					
	8 Flexstar	1.3 pt/a		B					
	8 Select Max	6 oz/a		B					
	8 MSO	0.3 qt/a		B					
	8 N-pak ams	1.5 qt/a		B					
9	Liberty	32 oz/a		A	98.3 a	86.7 ab	46.7 a-d	96.7 a	100.0 a
	9 Boundary	3 pt/a		A					
	9 N-pak ams	3 qt/a		A					
	9 Flexstar	1.3 pt/a		B					
	9 Select Max	6 oz/a		B					
	9 MSO	0.3 qt/a		B					
	9 N-pak ams	1.5 qt/a		B					

Means followed by same letter or symbol do not significantly differ (P=.05, LSD)  
 Mean comparisons performed only when AOV Treatment P(F) is significant at mean comparison OSL.  
 Missing data estimates are included in columns: Yates=14, 17  
 Could not calculate LSD (% mean diff) for columns 1,4,15,22 because error mean square = 0.



# The Ohio State University

Pest Type	W Weed	W Weed	W Weed	W Weed	W Weed
Pest Code	ERICA	SETFA	AMBTR	ERICA	VERAR
Pest Name	Canada horsewe>	Giant foxtail	Giant ragweed	Canada horsewe>	Corn speedwell
Rating Date	May-16-2017	Jun-2-2017	Jun-2-2017	Jun-2-2017	Jun-2-2017
Rating Type	CONTRO	CONTRO	CONTRO	CONTRO	CONTRO
Rating Unit	%	%	%	%	%
Number of Subsamples	1	1	1	1	1
Days After First/Last Applic.	13 13	30 30	30 30	30 30	30 30
Trt-Eval Interval	13 DA-A	30 DA-A	30 DA-A	30 DA-A	30 DA-A
Days After Emergence	-13 DE-1	4 DE-1	4 DE-1	4 DE-1	4 DE-1

Trt Treatment No. Name	Other Rate	Other Rate	Appl Unit Code	6	7	8	9	10
10 Roundup Power Max	32 oz/a		A	53.3 c	66.7 abc	73.3 a	43.3 d	100.0 a
10 2,4-D Ester	1 pt/a		A					
10 Matador	3 pt/a		A					
10 Dual II Magnum	1.57 pt/a		A					
10 Metribuzin	4.5 oz/a		A					
10 Pursuit	3 oz/a		A					
10 N-pak ams	3 qt/a		A					
10 Liberty	29 oz/a		B					
10 Select Max	6 oz/a		B					
10 N-pak ams	1.5 qt/a		B					
11 Roundup Power Max	32 oz/a		A	100.0 a	56.7 bcd	56.7 a-d	91.7 a	80.0 a
11 Liberty	32 oz/a		A					
11 Sharpen	1 oz/a		A					
11 MSO	1 % v/v		A					
11 N-pak ams	3 qt/a		A					
11 Flexstar	1.3 pt/a		B					
11 Select Max	6 oz/a		B					
11 Dual II Magnum	1.3 pt/a		B					
11 MSO	0.3 qt/a		B					
11 N-pak ams	1.5 qt/a		B					
12 Roundup Power Max	32 oz/a		A	96.7 a	6.7 e	30.0 d	93.3 a	100.0 a
12 Liberty	32 oz/a		A					
12 Sencor DF	8 oz/a		A					
12 N-pak ams	3 qt/a		A					
12 Flexstar	1.3 pt/a		B					
12 Select Max	6 oz/a		B					
12 Dual II Magnum	1.3 pt/a		B					
12 MSO	0.3 qt/a		B					
12 N-pak ams	1.5 qt/a		B					
LSD P=.05				12.39	38.27	27.31	16.44	16.78
Standard Deviation				7.32	22.60	16.13	9.71	9.91
CV				8.52	34.19	27.98	11.85	10.22
Bartlett's X2				12.928	13.601	4.627	14.618	0.112
P(Bartlett's X2)				0.166	0.137	0.948	0.147	0.738
Replicate F				1.006	0.629	12.735	0.670	0.537
Replicate Prob(F)				0.3820	0.5423	0.0002	0.5216	0.5918
Treatment F				17.229	6.561	2.752	9.224	1.571
Treatment Prob(F)				0.0001	0.0001	0.0208	0.0001	0.1768

Means followed by same letter or symbol do not significantly differ (P=.05, LSD)  
 Mean comparisons performed only when AOV Treatment P(F) is significant at mean comparison OSL.  
 Missing data estimates are included in columns: Yates=14, 17  
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# The Ohio State University

Pest Type	W Weed	W Weed	W Weed	W Weed	O Other			
Pest Code	SETFA	AMBTR	ERICA	AMARE				
Pest Name	Giant foxtail	Giant ragweed	Canada horsewee>	Redroot pigweed				
Rating Date	Jun-15-2017	Jun-15-2017	Jun-15-2017	Jun-15-2017	Jun-15-2017			
Rating Type	CONTRO	CONTRO	CONTRO	CONTRO	PHYGEN			
Rating Unit	%	%	%	%	%			
Number of Subsamples	1	1	1	1	1			
Days After First/Last Applic.	43 43	43 43	43 43	43 43	43 43			
Trt-Eval Interval	43 DA-A	43 DA-A	43 DA-A	43 DA-A	43 DA-A			
Days After Emergence	17 DE-1	17 DE-1	17 DE-1	17 DE-1	17 DE-1			
Trt Treatment	Other Rate	Other Rate	Appl Unit Code	11	12	13	14	15
1 Gramoxone SL	3 pt/a		A	20.0 cd	10.0 cd	55.0 cd	20.0 bcd	0.0 a
1 Sharpen	1 oz/a		A					
1 MSO	1 % v/v		A					
1 N-pak ams	3 qt/a		A					
1 Liberty	29 oz/a		B					
1 Prefix	2.2 pt/a		B					
1 N-pak ams	1.5 qt/a		B					
2 Gramoxone SL	3 pt/a		A	86.7 a	50.0 a	86.7 ab	100.0 a	0.0 a
2 Trivence - 10 oz			A					
2 Classic	1.56 oz/a		A					
2 Sencor DF	5.95 oz/a		A					
2 Valor SX	2.5 oz/a		A					
2 NIS	0.25 % v/v		A					
2 N-pak ams	3 qt/a		A					
2 Liberty	29 oz/a		B					
2 Prefix	2.2 pt/a		B					
2 N-pak ams	1.5 qt/a		B					
3 Gramoxone SL	3 pt/a		A	83.3 a	6.7 d	90.0 ab	0.0 d	0.0 a
3 Boundary	3 pt/a		A					
3 NIS	0.25 % v/v		A					
3 N-pak ams	3 qt/a		A					
3 Liberty	29 oz/a		B					
3 Prefix	2.2 pt/a		B					
3 N-pak ams	1.5 qt/a		B					
4 Roundup Power Max	32 oz/a		A	6.7 d	36.7 abc	100.0 a	13.3 bcd	0.0 a
4 2,4-D Ester	1 pt/a		A					
4 Sharpen	1 oz/a		A					
4 MSO	1 % v/v		A					
4 N-pak ams	3 qt/a		A					
4 Liberty	29 oz/a		B					
4 Select Max	6 oz/a		B					
4 Dual II Magnum	1.3 pt/a		B					
4 N-pak ams	1.5 qt/a		B					

Means followed by same letter or symbol do not significantly differ (P=.05, LSD)  
 Mean comparisons performed only when AOV Treatment P(F) is significant at mean comparison OSL.  
 Missing data estimates are included in columns: Yates=14, 17  
 Could not calculate LSD (% mean diff) for columns 1,4,15,22 because error mean square = 0.

# The Ohio State University

Pest Type	W Weed	W Weed	W Weed	W Weed	O Other
Pest Code	SETFA	AMBTR	ERICA	AMARE	
Pest Name	Giant foxtail	Giant ragweed	Canada horsewe>	Redroot pigweed	
Rating Date	Jun-15-2017	Jun-15-2017	Jun-15-2017	Jun-15-2017	Jun-15-2017
Rating Type	CONTRO	CONTRO	CONTRO	CONTRO	PHYGEN
Rating Unit	%	%	%	%	%
Number of Subsamples	1	1	1	1	1
Days After First/Last Applic.	43 43	43 43	43 43	43 43	43 43
Trt-Eval Interval	43 DA-A	43 DA-A	43 DA-A	43 DA-A	43 DA-A
Days After Emergence	17 DE-1	17 DE-1	17 DE-1	17 DE-1	17 DE-1

Trt No.	Treatment Name	Other Rate	Other Rate	Appl Unit Code	11	12	13	14	15
5	Roundup Power Max	32 oz/a		A	71.7 ab	46.7 ab	43.3 d	100.0 a	0.0 a
	5 2,4-D Ester	1 pt/a		A					
	5 Trivence - 10 oz			A					
	5 Classic	1.56 oz/a		A					
	5 Sencor DF	5.95 oz/a		A					
	5 Valor SX	2.5 oz/a		A					
	5 N-pak ams	3 qt/a		A					
	5 Liberty	29 oz/a		B					
	5 Select Max	6 oz/a		B					
	5 Dual II Magnum	1.3 pt/a		B					
	5 N-pak ams	1.5 qt/a		B					
6	Roundup Power Max	32 oz/a		A	73.3 a	16.7 cd	71.7 bc	33.3 bc	0.0 a
	6 2,4-D Ester	1 pt/a		A					
	6 Boundary	3 pt/a		A					
	6 N-pak ams	3 qt/a		A					
	6 Liberty	29 oz/a		B					
	6 Select Max	6 oz/a		B					
	6 Dual II Magnum	1.3 pt/a		B					
	6 N-pak ams	1.5 qt/a		B					
7	Liberty	32 oz/a		A	20.0 cd	26.7 a-d	95.0 ab	3.3 d	0.0 a
	7 Sharpen	1 oz/a		A					
	7 MSO	1 % v/v		A					
	7 N-pak ams	3 qt/a		A					
	7 Flexstar	1.3 pt/a		B					
	7 Select Max	6 oz/a		B					
	7 MSO	0.3 qt/a		B					
	7 N-pak ams	1.5 qt/a		B					
8	Liberty	32 oz/a		A	81.7 a	50.0 a	76.7 abc	100.0 a	0.0 a
	8 Trivence - 10 oz			A					
	8 Classic	1.56 oz/a		A					
	8 Sencor DF	5.95 oz/a		A					
	8 Valor SX	2.5 oz/a		A					
	8 N-pak ams	3 qt/a		A					
	8 Flexstar	1.3 pt/a		B					
	8 Select Max	6 oz/a		B					
	8 MSO	0.3 qt/a		B					
	8 N-pak ams	1.5 qt/a		B					
9	Liberty	32 oz/a		A	61.7 ab	13.3 cd	95.0 ab	0.0 d	0.0 a
	9 Boundary	3 pt/a		A					
	9 N-pak ams	3 qt/a		A					
	9 Flexstar	1.3 pt/a		B					
	9 Select Max	6 oz/a		B					
	9 MSO	0.3 qt/a		B					
	9 N-pak ams	1.5 qt/a		B					

Means followed by same letter or symbol do not significantly differ (P=.05, LSD)  
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# The Ohio State University

Pest Type	W Weed	W Weed	W Weed	W Weed	O Other
Pest Code	SETFA	AMBTR	ERICA	AMARE	
Pest Name	Giant foxtail	Giant ragweed	Canada horsewe>	Redroot pigweed	
Rating Date	Jun-15-2017	Jun-15-2017	Jun-15-2017	Jun-15-2017	Jun-15-2017
Rating Type	CONTRO	CONTRO	CONTRO	CONTRO	PHYGEN
Rating Unit	%	%	%	%	%
Number of Subsamples	1	1	1	1	1
Days After First/Last Applic.	43 43	43 43	43 43	43 43	43 43
Trt-Eval Interval	43 DA-A	43 DA-A	43 DA-A	43 DA-A	43 DA-A
Days After Emergence	17 DE-1	17 DE-1	17 DE-1	17 DE-1	17 DE-1

Trt Treatment	Other Rate	Other Rate	Appl Unit Code	11	12	13	14	15
10 Roundup Power Max	32 oz/a		A	43.3 bc	20.0 bcd	33.3 d	100.0 a	0.0 a
10 2,4-D Ester	1 pt/a		A					
10 Matador	3 pt/a		A					
10 Dual II Magnum	1.57 pt/a		A					
10 Metribuzin	4.5 oz/a		A					
10 Pursuit	3 oz/a		A					
10 N-pak ams	3 qt/a		A					
10 Liberty	29 oz/a		B					
10 Select Max	6 oz/a		B					
10 N-pak ams	1.5 qt/a		B					
11 Roundup Power Max	32 oz/a		A	13.3 d	16.7 cd	96.7 a	10.0 cd	0.0 a
11 Liberty	32 oz/a		A					
11 Sharpen	1 oz/a		A					
11 MSO	1 % v/v		A					
11 N-pak ams	3 qt/a		A					
11 Flexstar	1.3 pt/a		B					
11 Select Max	6 oz/a		B					
11 Dual II Magnum	1.3 pt/a		B					
11 MSO	0.3 qt/a		B					
11 N-pak ams	1.5 qt/a		B					
12 Roundup Power Max	32 oz/a		A	0.0 d	26.7 a-d	93.3 ab	40.0 b	0.0 a
12 Liberty	32 oz/a		A					
12 Sencor DF	8 oz/a		A					
12 N-pak ams	3 qt/a		A					
12 Flexstar	1.3 pt/a		B					
12 Select Max	6 oz/a		B					
12 Dual II Magnum	1.3 pt/a		B					
12 MSO	0.3 qt/a		B					
12 N-pak ams	1.5 qt/a		B					
LSD P=.05				29.51	27.06	24.82	29.50	.
Standard Deviation				17.43	15.98	14.66	17.32	0.00
CV				37.23	59.92	18.78	39.97	0.0
Bartlett's X2				9.736	3.793	16.965	1.599	0.0
P(Bartlett's X2)				0.464	0.976	0.075	0.809	.
Replicate F				0.441	15.896	0.556	2.333	0.000
Replicate Prob(F)				0.6488	0.0001	0.5815	0.1228	1.0000
Treatment F				10.822	2.872	7.148	18.970	0.000
Treatment Prob(F)				0.0001	0.0169	0.0001	0.0001	1.0000

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# The Ohio State University

Pest Type	W Weed	W Weed	W Weed	W Weed	W Weed			
Pest Code	SETFA	AMBTR	ERICA	SIDSP	AMARE			
Pest Name	Giant foxtail	Giant ragweed	Canada horsewe>	Prickly sida	Redroot pigweed			
Rating Date	Jul-20-2017	Jul-20-2017	Jul-20-2017	Jul-20-2017	Jul-20-2017			
Rating Type	CONTRO	CONTRO	CONTRO	CONTRO	CONTRO			
Rating Unit	%	%	%	%	%			
Number of Subsamples	1	1	1	1	1			
Days After First/Last Applic.	78 34	78 34	78 34	78 34	78 34			
Trt-Eval Interval								
Days After Emergence	52 DE-1	52 DE-1	52 DE-1	52 DE-1	52 DE-1			
Trt Treatment	Other	Other	Appl					
No. Name	Rate	Rate	Unit Code	16	17	18	19	20
1 Gramoxone SL	3 pt/a		A	91.0 ab	83.3 a	100.0 a	100.0 a	98.3 a
1 Sharpen	1 oz/a		A					
1 MSO	1 % v/v		A					
1 N-pak ams	3 qt/a		A					
1 Liberty	29 oz/a		B					
1 Prefix	2.2 pt/a		B					
1 N-pak ams	1.5 qt/a		B					
2 Gramoxone SL	3 pt/a		A	100.0 a	98.3 a	100.0 a	100.0 a	100.0 a
2 Trivence - 10 oz			A					
2 Classic	1.56 oz/a		A					
2 Sencor DF	5.95 oz/a		A					
2 Valor SX	2.5 oz/a		A					
2 NIS	0.25 % v/v		A					
2 N-pak ams	3 qt/a		A					
2 Liberty	29 oz/a		B					
2 Prefix	2.2 pt/a		B					
2 N-pak ams	1.5 qt/a		B					
3 Gramoxone SL	3 pt/a		A	96.0 ab	86.7 a	100.0 a	100.0 a	96.7 a
3 Boundary	3 pt/a		A					
3 NIS	0.25 % v/v		A					
3 N-pak ams	3 qt/a		A					
3 Liberty	29 oz/a		B					
3 Prefix	2.2 pt/a		B					
3 N-pak ams	1.5 qt/a		B					
4 Roundup Power Max	32 oz/a		A	97.7 ab	80.0 a	100.0 a	96.7 a	100.0 a
4 2,4-D Ester	1 pt/a		A					
4 Sharpen	1 oz/a		A					
4 MSO	1 % v/v		A					
4 N-pak ams	3 qt/a		A					
4 Liberty	29 oz/a		B					
4 Select Max	6 oz/a		B					
4 Dual II Magnum	1.3 pt/a		B					
4 N-pak ams	1.5 qt/a		B					

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 Missing data estimates are included in columns: Yates=14, 17  
 Could not calculate LSD (% mean diff) for columns 1,4,15,22 because error mean square = 0.

# The Ohio State University

Pest Type	W Weed	W Weed	W Weed	W Weed	W Weed
Pest Code	SETFA	AMBTR	ERICA	SIDSP	AMARE
Pest Name	Giant foxtail	Giant ragweed	Canada horsewe>	Prickly sida	Redroot pigweed
Rating Date	Jul-20-2017	Jul-20-2017	Jul-20-2017	Jul-20-2017	Jul-20-2017
Rating Type	CONTRO	CONTRO	CONTRO	CONTRO	CONTRO
Rating Unit	%	%	%	%	%
Number of Subsamples	1	1	1	1	1
Days After First/Last Applic.	78 34	78 34	78 34	78 34	78 34
Trt-Eval Interval					
Days After Emergence	52 DE-1	52 DE-1	52 DE-1	52 DE-1	52 DE-1

Trt Treatment	Other Rate	Other Rate	Appl Unit Code	16	17	18	19	20
5 Roundup Power Max	32 oz/a		A	99.3 a	81.7 a	100.0 a	100.0 a	100.0 a
5 2,4-D Ester	1 pt/a		A					
5 Trivence - 10 oz			A					
5 Classic	1.56 oz/a		A					
5 Sencor DF	5.95 oz/a		A					
5 Valor SX	2.5 oz/a		A					
5 N-pak ams	3 qt/a		A					
5 Liberty	29 oz/a		B					
5 Select Max	6 oz/a		B					
5 Dual II Magnum	1.3 pt/a		B					
5 N-pak ams	1.5 qt/a		B					
6 Roundup Power Max	32 oz/a		A	95.0 ab	68.3 a	100.0 a	100.0 a	96.7 a
6 2,4-D Ester	1 pt/a		A					
6 Boundary	3 pt/a		A					
6 N-pak ams	3 qt/a		A					
6 Liberty	29 oz/a		B					
6 Select Max	6 oz/a		B					
6 Dual II Magnum	1.3 pt/a		B					
6 N-pak ams	1.5 qt/a		B					
7 Liberty	32 oz/a		A	86.7 b	86.2 a	90.0 b	98.3 a	100.0 a
7 Sharpen	1 oz/a		A					
7 MSO	1 % v/v		A					
7 N-pak ams	3 qt/a		A					
7 Flexstar	1.3 pt/a		B					
7 Select Max	6 oz/a		B					
7 MSO	0.3 qt/a		B					
7 N-pak ams	1.5 qt/a		B					
8 Liberty	32 oz/a		A	100.0 a	86.7 a	85.0 b	100.0 a	100.0 a
8 Trivence - 10 oz			A					
8 Classic	1.56 oz/a		A					
8 Sencor DF	5.95 oz/a		A					
8 Valor SX	2.5 oz/a		A					
8 N-pak ams	3 qt/a		A					
8 Flexstar	1.3 pt/a		B					
8 Select Max	6 oz/a		B					
8 MSO	0.3 qt/a		B					
8 N-pak ams	1.5 qt/a		B					
9 Liberty	32 oz/a		A	97.7 ab	75.0 a	96.7 a	98.3 a	93.3 a
9 Boundary	3 pt/a		A					
9 N-pak ams	3 qt/a		A					
9 Flexstar	1.3 pt/a		B					
9 Select Max	6 oz/a		B					
9 MSO	0.3 qt/a		B					
9 N-pak ams	1.5 qt/a		B					

Means followed by same letter or symbol do not significantly differ (P=.05, LSD)  
 Mean comparisons performed only when AOV Treatment P(F) is significant at mean comparison OSL.  
 Missing data estimates are included in columns: Yates=14, 17  
 Could not calculate LSD (% mean diff) for columns 1,4,15,22 because error mean square = 0.

# The Ohio State University

Pest Type	W Weed	W Weed	W Weed	W Weed	W Weed			
Pest Code	SETFA	AMBTR	ERICA	SIDSP	AMARE			
Pest Name	Giant foxtail	Giant ragweed	Canada horsewe>	Prickly sida	Redroot pigweed			
Rating Date	Jul-20-2017	Jul-20-2017	Jul-20-2017	Jul-20-2017	Jul-20-2017			
Rating Type	CONTRO	CONTRO	CONTRO	CONTRO	CONTRO			
Rating Unit	%	%	%	%	%			
Number of Subsamples	1	1	1	1	1			
Days After First/Last Applic.	78 34	78 34	78 34	78 34	78 34			
Trt-Eval Interval								
Days After Emergence	52 DE-1	52 DE-1	52 DE-1	52 DE-1	52 DE-1			
Trt Treatment	Other Rate	Other Rate	Appl Unit Code	16	17	18	19	20
10 Roundup Power Max	32 oz/a		A	94.3 ab	88.3 a	98.3 a	100.0 a	100.0 a
10 2,4-D Ester	1 pt/a		A					
10 Matador	3 pt/a		A					
10 Dual II Magnum	1.57 pt/a		A					
10 Metribuzin	4.5 oz/a		A					
10 Pursuit	3 oz/a		A					
10 N-pak ams	3 qt/a		A					
10 Liberty	29 oz/a		B					
10 Select Max	6 oz/a		B					
10 N-pak ams	1.5 qt/a		B					
11 Roundup Power Max	32 oz/a		A	90.0 ab	80.0 a	88.3 b	100.0 a	96.7 a
11 Liberty	32 oz/a		A					
11 Sharpen	1 oz/a		A					
11 MSO	1 % v/v		A					
11 N-pak ams	3 qt/a		A					
11 Flexstar	1.3 pt/a		B					
11 Select Max	6 oz/a		B					
11 Dual II Magnum	1.3 pt/a		B					
11 MSO	0.3 qt/a		B					
11 N-pak ams	1.5 qt/a		B					
12 Roundup Power Max	32 oz/a		A	66.7 c	80.0 a	90.0 b	100.0 a	95.0 a
12 Liberty	32 oz/a		A					
12 Sencor DF	8 oz/a		A					
12 N-pak ams	3 qt/a		A					
12 Flexstar	1.3 pt/a		B					
12 Select Max	6 oz/a		B					
12 Dual II Magnum	1.3 pt/a		B					
12 MSO	0.3 qt/a		B					
12 N-pak ams	1.5 qt/a		B					
LSD P=.05				12.38	22.74	5.69	3.43	7.50
Standard Deviation				7.31	13.39	3.36	2.03	4.43
CV				7.88	16.16	3.51	2.04	4.52
Bartlett's X2				16.029	12.976	5.29	1.337	5.198
P(Bartlett's X2)				0.066	0.295	0.259	0.513	0.392
Replicate F				1.958	16.911	2.274	1.185	1.309
Replicate Prob(F)				0.1650	0.0001	0.1266	0.3246	0.2904
Treatment F				4.808	0.926	8.508	0.862	0.836
Treatment Prob(F)				0.0009	0.5353	0.0001	0.5870	0.6085

Means followed by same letter or symbol do not significantly differ (P=.05, LSD)  
 Mean comparisons performed only when AOV Treatment P(F) is significant at mean comparison OSL.  
 Missing data estimates are included in columns: Yates=14, 17  
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# The Ohio State University

Pest Type				W Weed		
Pest Code				ECHCG		
Pest Name				Common barnyar>		
Rating Date				Jul-20-2017		
Rating Type				CONTRO		
Rating Unit				%		
Number of Subsamples				1	1	
Days After First/Last Applic.				78	34	
Trt-Eval Interval						
Days After Emergence				52 DE-1		
Trt No.	Treatment Name	Other Rate	Other Rate Unit	Appl Code	21	22
1	Gramoxone SL	3 pt/a		A	70.0	de
1	Sharpen	1 oz/a		A		
1	MSO	1 % v/v		A		
1	N-pak ams	3 qt/a		A		
1	Liberty	29 oz/a		B		
1	Prefix	2.2 pt/a		B		
1	N-pak ams	1.5 qt/a		B		
2	Gramoxone SL	3 pt/a		A	98.7	a
2	Trivence - 10 oz			A		
2	Classic	1.56 oz/a		A		
2	Sencor DF	5.95 oz/a		A		
2	Valor SX	2.5 oz/a		A		
2	NIS	0.25 % v/v		A		
2	N-pak ams	3 qt/a		A		
2	Liberty	29 oz/a		B		
2	Prefix	2.2 pt/a		B		
2	N-pak ams	1.5 qt/a		B		
3	Gramoxone SL	3 pt/a		A	79.3	bcd
3	Boundary	3 pt/a		A		
3	NIS	0.25 % v/v		A		
3	N-pak ams	3 qt/a		A		
3	Liberty	29 oz/a		B		
3	Prefix	2.2 pt/a		B		
3	N-pak ams	1.5 qt/a		B		
4	Roundup Power Max	32 oz/a		A	78.3	cde
4	2,4-D Ester	1 pt/a		A		
4	Sharpen	1 oz/a		A		
4	MSO	1 % v/v		A		
4	N-pak ams	3 qt/a		A		
4	Liberty	29 oz/a		B		
4	Select Max	6 oz/a		B		
4	Dual II Magnum	1.3 pt/a		B		
4	N-pak ams	1.5 qt/a		B		

Means followed by same letter or symbol do not significantly differ (P=.05, LSD)  
 Mean comparisons performed only when AOV Treatment P(F) is significant at mean comparison OSL.  
 Missing data estimates are included in columns: Yates=14,17  
 Could not calculate LSD (% mean diff) for columns 1,4,15,22 because error mean square = 0.



# The Ohio State University

Pest Type W Weed  
 Pest Code ECHCG  
 Pest Name Common barnyar>  
 Rating Date Jul-20-2017  
 Rating Type CONTRO  
 Rating Unit %  
 Number of Subsamples 1 1  
 Days After First/Last Applic. 78 34  
 Trt-Eval Interval  
 Days After Emergence 52 DE-1

Trt No.	Treatment Name	Other Rate	Other Rate Unit	Appl Code	21	22
5	Roundup Power Max	32 oz/a		A	99.3 a	
	5 2,4-D Ester	1 pt/a		A		
	5 Trivence - 10 oz			A		
	5 Classic	1.56 oz/a		A		
	5 Sencor DF	5.95 oz/a		A		
	5 Valor SX	2.5 oz/a		A		
	5 N-pak ams	3 qt/a		A		
	5 Liberty	29 oz/a		B		
	5 Select Max	6 oz/a		B		
	5 Dual II Magnum	1.3 pt/a		B		
	5 N-pak ams	1.5 qt/a		B		
6	Roundup Power Max	32 oz/a		A	94.3 ab	
	6 2,4-D Ester	1 pt/a		A		
	6 Boundary	3 pt/a		A		
	6 N-pak ams	3 qt/a		A		
	6 Liberty	29 oz/a		B		
	6 Select Max	6 oz/a		B		
	6 Dual II Magnum	1.3 pt/a		B		
	6 N-pak ams	1.5 qt/a		B		
7	Liberty	32 oz/a		A	81.7 bcd	
	7 Sharpen	1 oz/a		A		
	7 MSO	1 % v/v		A		
	7 N-pak ams	3 qt/a		A		
	7 Flexstar	1.3 pt/a		B		
	7 Select Max	6 oz/a		B		
	7 MSO	0.3 qt/a		B		
	7 N-pak ams	1.5 qt/a		B		
8	Liberty	32 oz/a		A	99.3 a	
	8 Trivence - 10 oz			A		
	8 Classic	1.56 oz/a		A		
	8 Sencor DF	5.95 oz/a		A		
	8 Valor SX	2.5 oz/a		A		
	8 N-pak ams	3 qt/a		A		
	8 Flexstar	1.3 pt/a		B		
	8 Select Max	6 oz/a		B		
	8 MSO	0.3 qt/a		B		
	8 N-pak ams	1.5 qt/a		B		
9	Liberty	32 oz/a		A	99.3 a	
	9 Boundary	3 pt/a		A		
	9 N-pak ams	3 qt/a		A		
	9 Flexstar	1.3 pt/a		B		
	9 Select Max	6 oz/a		B		
	9 MSO	0.3 qt/a		B		
	9 N-pak ams	1.5 qt/a		B		

Means followed by same letter or symbol do not significantly differ (P=.05, LSD)  
 Mean comparisons performed only when AOV Treatment P(F) is significant at mean comparison OSL.  
 Missing data estimates are included in columns: Yates=14, 17  
 Could not calculate LSD (% mean diff) for columns 1,4,15,22 because error mean square = 0.

# The Ohio State University

Pest Type W Weed  
 Pest Code ECHCG  
 Pest Name Common barnyar>  
 Rating Date Jul-20-2017  
 Rating Type CONTRO  
 Rating Unit %  
 Number of Subsamples 1 1  
 Days After First/Last Applic. 78 34  
 Trt-Eval Interval  
 Days After Emergence 52 DE-1

Trt No.	Treatment Name	Other Rate	Other Rate Unit	Appl Code	21	22
10	Roundup Power Max	32 oz/a		A	91.0	abc
10	2,4-D Ester	1 pt/a		A		
10	Matador	3 pt/a		A		
10	Dual II Magnum	1.57 pt/a		A		
10	Metribuzin	4.5 oz/a		A		
10	Pursuit	3 oz/a		A		
10	N-pak ams	3 qt/a		A		
10	Liberty	29 oz/a		B		
10	Select Max	6 oz/a		B		
10	N-pak ams	1.5 qt/a		B		
11	Roundup Power Max	32 oz/a		A	85.0	a-d
11	Liberty	32 oz/a		A		
11	Sharpen	1 oz/a		A		
11	MSO	1 % v/v		A		
11	N-pak ams	3 qt/a		A		
11	Flexstar	1.3 pt/a		B		
11	Select Max	6 oz/a		B		
11	Dual II Magnum	1.3 pt/a		B		
11	MSO	0.3 qt/a		B		
11	N-pak ams	1.5 qt/a		B		
12	Roundup Power Max	32 oz/a		A	63.3	e
12	Liberty	32 oz/a		A		
12	Sencor DF	8 oz/a		A		
12	N-pak ams	3 qt/a		A		
12	Flexstar	1.3 pt/a		B		
12	Select Max	6 oz/a		B		
12	Dual II Magnum	1.3 pt/a		B		
12	MSO	0.3 qt/a		B		
12	N-pak ams	1.5 qt/a		B		
LSD	P=.05				15.46	.
	Standard Deviation				9.13	.
	CV				10.54	.
	Bartlett's X2				26.401	.
	P(Bartlett's X2)				0.003*	.
	Replicate F				2.200	
	Replicate Prob(F)				0.1345	
	Treatment F				5.481	
	Treatment Prob(F)				0.0004	

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# The Ohio State University

## Tank Mix partners for horseweed control

Trial ID: 17 TANKMIXERICA  
Protocol ID: 17 TANKMIXERICA  
Project ID:

Location: F-10 MIDDLE Trial Year: 2017  
Investigator: Dr. Mark M. Loux  
Study Director: Bryan Reeb  
Sponsor Contact: OSU

### Pest Type

W, Weed, G-BYRW7, G-WedStg = Weed or volunteer crop  
O, Other, G-BYRO7, G-OthStg = Other animal or nematode

### Pest Code

LAMPU, Lamium purpureum, Purple deadnettle = US  
SENGL, Senecio glabellus, Cressleaf groundsel = US  
ERYRE, Erysimum repandum, Bushy wallflower = US  
STEME, Stellaria media, Common chickweed = US  
VERAG, Veronica agrestis, Field speedwell = US  
ERICA, Erigeron canadensis, Canada horseweed = US  
SETFA, Setaria faberi, Giant foxtail = US  
AMBTR, Ambrosia trifida, Giant ragweed = US  
VERAR, Veronica arvensis, Corn speedwell = US  
AMARE, Amaranthus retroflexus, Redroot pigweed = US  
SIDSP, Sida spinosa, Prickly sida = US  
ECHCG, Echinochloa crus-galli, Common barnyard grass = US

### Rating Type

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

### Rating Unit

% = percent