

BroadAxe XC / Boundary / Vida burndown treatments in Soybeans

Trial ID: 15 NTSOY  
Protocol ID: 15 NTSOY  
Project ID: ZSOY83AD-2015US/GOWAN

Location: G-7 EAST END  
Investigator: Dr. Mark M. Loux  
Study Director: Bryan Reeb  
Sponsor Contact: Dain Bruns, Syn/Paul David, Gowan

Trial Year: 2015

**General Trial Information**

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

**Latitude of LL Corner** °: 39.85807 N  
**Longitude of LL Corner** °: 83.67535 W

**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  
**Variety:** Asgrow 3533  
**Description:** RoundUp Ready

**Planting Date:** 4-29-2015  
**Planting Method:** PLANTD planted  
**Planting Equipment:** KINZE  
**Emergence Date:** 5-10-2015

**Planting Rate, Unit:** 175000 S/A  
**Depth, Unit:** 1 IN  
**Row Spacing, Unit:** 15 IN  
**Soil Temperature, Unit:** 63 F  
**Soil Moisture:** SLIWET slightly wet, moist  
**Seed Bed:** MEDTRA medium/trashy

**Pest Description**

- Pest 1 Type:** W **Code:** LAMPU *Lamium purpureum*  
**Common Name:** Purple deadnettel
- Pest 2 Type:** W **Code:** STEME *Stellaria media*  
**Common Name:** Common chickweed
- Pest 3 Type:** W **Code:** RANAB *Ranunculus abortivus*  
**Common Name:** Smallflower buttercup
- Pest 4 Type:** W **Code:** ERYRE *Erysimum repandum*  
**Common Name:** Bushy wallflower
- Pest 5 Type:** W **Code:** VERAG *Veronica agrestis*  
**Common Name:** Field speedwell
- Pest 6 Type:** W **Code:** AMBTR *Ambrosia trifida*  
**Common Name:** Giant ragweed
- Pest 7 Type:** W **Code:** RANAB *Ranunculus abortivus*  
**Common Name:** Smallflower buttercup
- Pest 8 Type:** W **Code:** TAROF *Taraxacum officinale*  
**Common Name:** Common dandelion
- Pest 9 Type:** W **Code:** SETFA *Setaria faberi*  
**Common Name:** Giant foxtail

**Site and Design**

**Treated Plot Width:** 6.67 FT  
**Treated Plot Length:** 30 FT  
**Treated Plot Area:** 200.1 FT2 **Treatments:** 14  
**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:** G-7 East  
**% OM:** 2.5      **Texture:** SICL silty clay loam  
**pH:** 6      **Soil Name:** Crosby  
**CEC:** 17.4      **Fert. Level:** G good  
**Soil Drainage:** F fair

**Application Description**

	A	B
<b>Application Date:</b>	4-24-2015	5-28-2015
<b>Appl. Start Time:</b>	10:00 AM	8:50 AM
<b>Appl. Stop Time:</b>	10:30 AM	9:30 AM
<b>Application Method:</b>	SPRAY	SPRAY
<b>Application Timing:</b>	7 EPP	2-3" WDS
<b>Application Placement:</b>	BROSOI	BROFOL
<b>Applied By:</b>	REEB	BARCLAY
<b>Air Temperature, Unit:</b>	69 F	69 F
<b>% Relative Humidity:</b>	51	75
<b>Wind Velocity, Unit:</b>	6 MPH	2.5 MPH
<b>Wind Direction:</b>	N	E
<b>Dew Presence (Y/N):</b>	Y yes	
<b>Soil Temperature, Unit:</b>	41 F	66 F
<b>Soil Moisture:</b>	GOOD	DRY/MOIST
<b>% Cloud Cover:</b>	0	60
<b>Next Moisture Occurred On:</b>	4-25-2015	5-30-2015
<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>		3 IN
<b>Height Minimum, Maximum:</b>		2 3

**Pest Stage At Each Application**

	<b>A</b>	<b>B</b>	
<b>Pest 1 Code, Type, Scale:</b>	LAMPU W	LAMPU W	
<b>Stage Majority, Percent:</b>	65	100	
<b>Diameter, Unit:</b>	6	IN	
<b>Height, Unit:</b>	5	IN	
<b>Height Minimum, Maximum:</b>	3	6	
<b>Density, Unit:</b>	3.66	M2	
<b>Pest 2 Code, Type, Scale:</b>	STEME W	STEME W	
<b>Stage Majority, Percent:</b>	65	100	
<b>Diameter, Unit:</b>	12	IN	
<b>Height, Unit:</b>	3	IN	
<b>Height Minimum, Maximum:</b>	1	4	
<b>Density, Unit:</b>	2	M2	
<b>Pest 3 Code, Type, Scale:</b>	RANAB W	RANAB W	
<b>Stage Majority, Percent:</b>	65	100	
<b>Diameter, Unit:</b>	3	IN	
<b>Height, Unit:</b>	6	IN	
<b>Height Minimum, Maximum:</b>	4	7	
<b>Pest 4 Code, Type, Scale:</b>	ERYRE W	ERYRE W	
<b>Stage Majority, Percent:</b>	19	100	
<b>Diameter, Unit:</b>	4	IN	
<b>Height, Unit:</b>	2	IN	
<b>Height Minimum, Maximum:</b>	1	3	
<b>Density, Unit:</b>	2	M2	
<b>Pest 5 Code, Type, Scale:</b>	VERAG W	VERAG W	
<b>Stage Majority, Percent:</b>	19	100	
<b>Diameter, Unit:</b>	4	IN	
<b>Height, Unit:</b>	0.5	IN	
<b>Height Minimum, Maximum:</b>	0.25	1	
<b>Density, Unit:</b>	2	M2	
<b>Pest 6 Code, Type, Scale:</b>	AMBTR W	AMBTR W	
<b>Stage Majority, Percent:</b>	12	100	12 100
<b>Stage Minimum, Percent:</b>			12 100
<b>Stage Maximum, Percent:</b>			14 100
<b>Diameter, Unit:</b>	3	IN	
<b>Height, Unit:</b>	0.5	IN	3 IN
<b>Height Minimum, Maximum:</b>	0.5	1	2 6
<b>Pest 7 Code, Type, Scale:</b>	RANAB W	RANAB W	
<b>Density, Unit:</b>	0.66	M2	
<b>Pest 8 Code, Type, Scale:</b>	TAROF W	TAROF W	
<b>Density, Unit:</b>	0.33	M2	
<b>Pest 9 Code, Type, Scale:</b>	SETFA W	SETFA W	
<b>Stage Majority, Percent:</b>		12	100
<b>Stage Minimum, Percent:</b>		12	100
<b>Stage Maximum, Percent:</b>		14	100
<b>Height, Unit:</b>		3	IN
<b>Height Minimum, Maximum:</b>		1	4

**Application Equipment**

	<b>A</b>	<b>B</b>
<b>Appl. Equipment:</b>	6' BACKPACK	6' BACKPACK
<b>Equipment Type:</b>	BACCAI	BACCAI
<b>Operation Pressure, Unit:</b>	44 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	4
<b>Boom Length, Unit:</b>	6.67 FT	6.67 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	1 liters
<b>Propellant:</b>	COMCO2	COMCO2

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Pest Type	W Weed	W Weed	W Weed
Pest Code	LAMPU	STEME	RANAB
Pest Scientific Name	Lamium purpure>	Stellaria media	Ranunculus abo>
Pest Name	Purple deadnet>	Common chickwe>	Smallflower bu>
Rating Date	5-8-2015	5-8-2015	5-8-2015
Rating Type	CONTRO	CONTRO	CONTRO
Rating Unit	%	%	%
Number of Subsamples	1	1	1
Days After First/Last Applic.	14 14	14 14	14 14
Trt-Eval Interval	14 DA-A	14 DA-A	14 DA-A
Plant-Eval Interval	9 DP-1	9 DP-1	9 DP-1
Days After Emergence	-2 DE-1	-2 DE-1	-2 DE-1

Trt No.	Treatment Name	Other Rate	Other Rate	Appl Unit	Appl Code	Appl Description	1	2	3
1	Broadaxe XC	25 oz/a		A	7 EPP		100.0 a	88.3 c	100.0 a
1	Weedone LV-4	1 pt/a		A	7 EPP				
1	Touchdown Total	24 oz/a		A	7 EPP				
1	N-pak ams	1.5 qt/a		A	7 EPP				
1	Touchdown Total	32 oz/a		B	EPO 2-3" wds				
1	N-pak ams	1.5 qt/a		B	EPO 2-3" wds				
2	Tricor	4 oz/a		A	7 EPP		100.0 a	100.0 a	100.0 a
2	Broadaxe XC	25 oz/a		A	7 EPP				
2	Weedone LV-4	1 pt/a		A	7 EPP				
2	Touchdown Total	24 oz/a		A	7 EPP				
2	N-pak ams	1.5 qt/a		A	7 EPP				
2	Flexstar GT 3.5	4.5 pt/a		B	EPO 2-3" wds				
2	N-pak ams	1.5 qt/a		B	EPO 2-3" wds				
2	Destiny HC	0.3 qt/a		B	EPO 2-3" wds				
3	Tricor	3 oz/a		A	7 EPP		100.0 a	100.0 a	100.0 a
3	Boundary	1.75 pt/a		A	7 EPP				
3	Weedone LV-4	1 pt/a		A	7 EPP				
3	Touchdown Total	24 oz/a		A	7 EPP				
3	N-pak ams	1.5 qt/a		A	7 EPP				
3	Flexstar GT 3.5	4.5 pt/a		B	EPO 2-3" wds				
3	N-pak ams	1.5 qt/a		B	EPO 2-3" wds				
3	Destiny HC	0.3 qt/a		B	EPO 2-3" wds				
4	Classic	1.25 oz/a		A	7 EPP		100.0 a	93.3 abc	93.3 b
4	Broadaxe XC	25 oz/a		A	7 EPP				
4	N-pak ams	1.5 qt/a		A	7 EPP				
4	Touchdown Total	32 oz/a		B	EPO 2-3" wds				
4	N-pak ams	1.5 qt/a		B	EPO 2-3" wds				
5	Broadaxe XC	25 oz/a		A	7 EPP		96.7 b	98.3 ab	100.0 a
5	Touchdown Total	24 oz/a		A	7 EPP				
5	N-pak ams	1.5 qt/a		A	7 EPP				
5	Prefix	2 pt/a		B	EPO 2-3" wds				
5	Touchdown Total	32 oz/a		B	EPO 2-3" wds				
5	N-pak ams	1.5 qt/a		B	EPO 2-3" wds				

Means followed by same letter 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=9

Pest Type	W Weed	W Weed	W Weed
Pest Code	LAMPU	STEME	RANAB
Pest Scientific Name	Lamium purpure>	Stellaria media	Ranunculus abo>
Pest Name	Purple deadnet>	Common chickwe>	Smallflower bu>
Rating Date	5-8-2015	5-8-2015	5-8-2015
Rating Type	CONTRO	CONTRO	CONTRO
Rating Unit	%	%	%
Number of Subsamples	1	1	1
Days After First/Last Applic.	14 14	14 14	14 14
Trt-Eval Interval	14 DA-A	14 DA-A	14 DA-A
Plant-Eval Interval	9 DP-1	9 DP-1	9 DP-1
Days After Emergence	-2 DE-1	-2 DE-1	-2 DE-1

Trt No.	Treatment Name	Other Rate	Other Rate	Appl Unit	Appl Code	Appl Description	1	2	3
6	Valor XLT @ 4.0 oz			A			100.0 a	96.7 ab	100.0 a
6	Valor SX	2.35 oz/a		A	7	EPP			
6	Classic	1.65 oz/a		A	7	EPP			
6	Vida	1 oz/a		A	7	EPP			
6	Roundup Power Max	24 oz/a		A	7	EPP			
6	2,4-D Ester	16 oz/a		A	7	EPP			
6	N-pak ams	3 qt/a		A	7	EPP			
6	NIS	4.8 oz/a		A	7	EPP			
7	Authority XL	6 oz/a		A	7	EPP	99.3 ab	88.3 c	100.0 a
7	Vida	1 oz/a		A	7	EPP			
7	Roundup Power Max	24 oz/a		A	7	EPP			
7	2,4-D Ester	16 oz/a		A	7	EPP			
7	N-pak ams	3 qt/a		A	7	EPP			
7	NIS	4.8 oz/a		A	7	EPP			
8	Vida	1 oz/a		A	7	EPP	100.0 a	96.0 abc	100.0 a
8	Metribuzin	4 oz/a		A	7	EPP			
8	2,4-D Ester	16 oz/a		A	7	EPP			
8	NIS	4.8 oz/a		A	7	EPP			
9	Liberty	32 oz/a		A	7	EPP	100.0 a	100.0 a	100.0 a
9	Vida	1 oz/a		A	7	EPP			
9	Metribuzin	4 oz/a		A	7	EPP			
9	2,4-D Ester	16 oz/a		A	7	EPP			
9	NIS	4.8 oz/a		A	7	EPP			
9	N-pak ams	3 qt/a		A	7	EPP			
10	Valor XLT @ 4.0 oz			A			99.3 ab	100.0 a	100.0 a
10	Valor SX	2.35 oz/a		A	7	EPP			
10	Classic	1.65 oz/a		A	7	EPP			
10	Vida	1 oz/a		A	7	EPP			
10	Roundup Power Max	24 oz/a		A	7	EPP			
10	NIS	4.8 oz/a		A	7	EPP			
10	N-pak ams	3 qt/a		A	7	EPP			
11	Authority XL	6 oz/a		A	7	EPP	98.0 ab	91.0 bc	99.3 a
11	Vida	1 oz/a		A	7	EPP			
11	Roundup Power Max	24 oz/a		A	7	EPP			
11	NIS	4.8 oz/a		A	7	EPP			
11	N-pak ams	3 qt/a		A	7	EPP			
12	Metribuzin	10 oz/a		A	7	EPP	100.0 a	100.0 a	100.0 a
12	Roundup Power Max	24 oz/a		A	7	EPP			
12	2,4-D Ester	16 oz/a		A	7	EPP			
12	N-pak ams	3 qt/a		A	7	EPP			
12	NIS	4.8 oz/a		A	7	EPP			
13	Metribuzin	10 oz/a		A	7	EPP	100.0 a	100.0 a	100.0 a
13	Sharpen	1 oz/a		A	7	EPP			
13	Roundup Power Max	24 oz/a		A	7	EPP			
13	2,4-D Ester	16 oz/a		A	7	EPP			
13	Exuro	0.6 qt/a		A	7	EPP			
13	N-pak ams	3 qt/a		A	7	EPP			

Pest Type		W Weed	W Weed	W Weed
Pest Code		LAMPU	STEME	RANAB
Pest Scientific Name		Lamium purpure>	Stellaria media	Ranunculus abo>
Pest Name		Purple deadnet>	Common chickwe>	Smallflower bu>
Rating Date		5-8-2015	5-8-2015	5-8-2015
Rating Type		CONTRO	CONTRO	CONTRO
Rating Unit		%	%	%
Number of Subsamples		1	1	1
Days After First/Last Applic.		14 14	14 14	14 14
Trt-Eval Interval		14 DA-A	14 DA-A	14 DA-A
Plant-Eval Interval		9 DP-1	9 DP-1	9 DP-1
Days After Emergence		-2 DE-1	-2 DE-1	-2 DE-1
Trt Treatment	Other Other	Appl Appl		
No. Name	Rate Rate	Unit Code Description	1	2
14 UTC			0.0 c	0.0 d
				0.0 c
LSD P=.05			2.73	8.02
Standard Deviation			1.63	4.78
CV			1.76	5.34
Grand Mean			92.38	89.43
Bartlett's X2			6.538	2.989
P(Bartlett's X2)			0.038*	0.81
Skewness			-3.4301*	-3.1693*
Kurtosis			10.3088*	9.0865*
Replicate F			0.575	0.698
Replicate Prob(F)			0.5699	0.5067
Treatment F			800.840	89.604
Treatment Prob(F)			0.0001	0.0001

				W Weed	W Weed	W Weed	W Weed			
				AMBTR	SETFA	AMBTR	ERICA			
				Ambrosia trifi>	Setaria faberi	Ambrosia trifi>	Conyza canaden>			
				Giant ragweed	Giant foxtail	Giant ragweed	Canada horsewe>			
Pest Type				5-8-2015	5-28-2015	5-28-2015	5-28-2015			
Pest Code				CONTRO	CONTRO	CONTRO	CONTRO			
Pest Scientific Name				%	%	%	%			
Pest Name				1	1	1	1			
Rating Date				14 14	34 34	34 34	34 34			
Rating Type				14 DA-A						
Rating Unit				9 DP-1	29 DP-1	29 DP-1	29 DP-1			
Number of Subsamples				-2 DE-1	18 DE-1	18 DE-1	18 DE-1			
Days After First/Last Applic.										
Trt-Eval Interval										
Plant-Eval Interval										
Days After Emergence										
Trt No.	Treatment Name	Other Rate	Other Rate	Appl Unit	Appl Code	Description	4	5	6	7
1	Broadaxe XC	25 oz/a		A	7 EPP		99.3 a	85.0 ab	60.0 c	100.0 a
1	Weedone LV-4	1 pt/a		A	7 EPP					
1	Touchdown Total	24 oz/a		A	7 EPP					
1	N-pak ams	1.5 qt/a		A	7 EPP					
1	Touchdown Total	32 oz/a		B	EPO 2-3" wds					
1	N-pak ams	1.5 qt/a		B	EPO 2-3" wds					
2	Tricor	4 oz/a		A	7 EPP		99.3 a	85.0 ab	76.7 abc	100.0 a
2	Broadaxe XC	25 oz/a		A	7 EPP					
2	Weedone LV-4	1 pt/a		A	7 EPP					
2	Touchdown Total	24 oz/a		A	7 EPP					
2	N-pak ams	1.5 qt/a		A	7 EPP					
2	Flexstar GT 3.5	4.5 pt/a		B	EPO 2-3" wds					
2	N-pak ams	1.5 qt/a		B	EPO 2-3" wds					
2	Destiny HC	0.3 qt/a		B	EPO 2-3" wds					
3	Tricor	3 oz/a		A	7 EPP		100.0 a	80.0 abc	75.0 abc	100.0 a
3	Boundary	1.75 pt/a		A	7 EPP					
3	Weedone LV-4	1 pt/a		A	7 EPP					
3	Touchdown Total	24 oz/a		A	7 EPP					
3	N-pak ams	1.5 qt/a		A	7 EPP					
3	Flexstar GT 3.5	4.5 pt/a		B	EPO 2-3" wds					
3	N-pak ams	1.5 qt/a		B	EPO 2-3" wds					
3	Destiny HC	0.3 qt/a		B	EPO 2-3" wds					
4	Classic	1.25 oz/a		A	7 EPP		100.0 a	93.3 a	81.7 ab	100.0 a
4	Broadaxe XC	25 oz/a		A	7 EPP					
4	N-pak ams	1.5 qt/a		A	7 EPP					
4	Touchdown Total	32 oz/a		B	EPO 2-3" wds					
4	N-pak ams	1.5 qt/a		B	EPO 2-3" wds					
5	Broadaxe XC	25 oz/a		A	7 EPP		92.7 b	79.3 abc	63.3 bc	90.0 b
5	Touchdown Total	24 oz/a		A	7 EPP					
5	N-pak ams	1.5 qt/a		A	7 EPP					
5	Prefix	2 pt/a		B	EPO 2-3" wds					
5	Touchdown Total	32 oz/a		B	EPO 2-3" wds					
5	N-pak ams	1.5 qt/a		B	EPO 2-3" wds					

Pest Type	W Weed	W Weed	W Weed	W Weed
Pest Code	AMBTR	SETFA	AMBTR	ERICA
Pest Scientific Name	Ambrosia trifi>	Setaria faberi	Ambrosia trifi>	Conyza canaden>
Pest Name	Giant ragweed	Giant foxtail	Giant ragweed	Canada horsewe>
Rating Date	5-8-2015	5-28-2015	5-28-2015	5-28-2015
Rating Type	CONTRO	CONTRO	CONTRO	CONTRO
Rating Unit	%	%	%	%
Number of Subsamples	1	1	1	1
Days After First/Last Applic.	14 14	34 34	34 34	34 34
Trt-Eval Interval	14 DA-A			
Plant-Eval Interval	9 DP-1	29 DP-1	29 DP-1	29 DP-1
Days After Emergence	-2 DE-1	18 DE-1	18 DE-1	18 DE-1

Trt	Treatment	Other	Other	Appl	Appl	4	5	6	7	
No.	Name	Rate	Rate	Unit	Code	Description				
6	Valor XLT @ 4.0 oz			A			100.0 a	81.7 abc	75.0 abc	100.0 a
6	Valor SX	2.35 oz/a		A	7	EPP				
6	Classic	1.65 oz/a		A	7	EPP				
6	Vida	1 oz/a		A	7	EPP				
6	Roundup Power Max	24 oz/a		A	7	EPP				
6	2,4-D Ester	16 oz/a		A	7	EPP				
6	N-pak ams	3 qt/a		A	7	EPP				
6	NIS	4.8 oz/a		A	7	EPP				
7	Authority XL	6 oz/a		A	7	EPP	100.0 a	71.7 a-d	76.7 abc	100.0 a
7	Vida	1 oz/a		A	7	EPP				
7	Roundup Power Max	24 oz/a		A	7	EPP				
7	2,4-D Ester	16 oz/a		A	7	EPP				
7	N-pak ams	3 qt/a		A	7	EPP				
7	NIS	4.8 oz/a		A	7	EPP				
8	Vida	1 oz/a		A	7	EPP	100.0 a	13.3 e	75.0 abc	100.0 a
8	Metribuzin	4 oz/a		A	7	EPP				
8	2,4-D Ester	16 oz/a		A	7	EPP				
8	NIS	4.8 oz/a		A	7	EPP				
9	Liberty	32 oz/a		A	7	EPP	100.0 a	50.0 d	83.3 ab	100.0 a
9	Vida	1 oz/a		A	7	EPP				
9	Metribuzin	4 oz/a		A	7	EPP				
9	2,4-D Ester	16 oz/a		A	7	EPP				
9	NIS	4.8 oz/a		A	7	EPP				
9	N-pak ams	3 qt/a		A	7	EPP				
10	Valor XLT @ 4.0 oz			A			96.7 ab	61.7 bcd	76.7 abc	98.3 a
10	Valor SX	2.35 oz/a		A	7	EPP				
10	Classic	1.65 oz/a		A	7	EPP				
10	Vida	1 oz/a		A	7	EPP				
10	Roundup Power Max	24 oz/a		A	7	EPP				
10	NIS	4.8 oz/a		A	7	EPP				
10	N-pak ams	3 qt/a		A	7	EPP				
11	Authority XL	6 oz/a		A	7	EPP	100.0 a	75.0 a-d	88.3 a	100.0 a
11	Vida	1 oz/a		A	7	EPP				
11	Roundup Power Max	24 oz/a		A	7	EPP				
11	NIS	4.8 oz/a		A	7	EPP				
11	N-pak ams	3 qt/a		A	7	EPP				
12	Metribuzin	10 oz/a		A	7	EPP	100.0 a	58.3 bcd	93.3 a	100.0 a
12	Roundup Power Max	24 oz/a		A	7	EPP				
12	2,4-D Ester	16 oz/a		A	7	EPP				
12	N-pak ams	3 qt/a		A	7	EPP				
12	NIS	4.8 oz/a		A	7	EPP				
13	Metribuzin	10 oz/a		A	7	EPP	100.0 a	55.0 cd	73.3 abc	100.0 a
13	Sharpen	1 oz/a		A	7	EPP				
13	Roundup Power Max	24 oz/a		A	7	EPP				
13	2,4-D Ester	16 oz/a		A	7	EPP				
13	Exuro	0.6 qt/a		A	7	EPP				
13	N-pak ams	3 qt/a		A	7	EPP				



## The Ohio State University

Pest Type	W Weed	W Weed	W Weed	W Weed
Pest Code	AMBTR	SETFA	AMBTR	ERICA
Pest Scientific Name	Ambrosia trifi>	Setaria faberi	Ambrosia trifi>	Conyza canadens>
Pest Name	Giant ragweed	Giant foxtail	Giant ragweed	Canada horsewe>
Rating Date	5-8-2015	5-28-2015	5-28-2015	5-28-2015
Rating Type	CONTRO	CONTRO	CONTRO	CONTRO
Rating Unit	%	%	%	%
Number of Subsamples	1	1	1	1
Days After First/Last Applic.	14 14	34 34	34 34	34 34
Trt-Eval Interval	14 DA-A			
Plant-Eval Interval	9 DP-1	29 DP-1	29 DP-1	29 DP-1
Days After Emergence	-2 DE-1	18 DE-1	18 DE-1	18 DE-1
Trt Treatment	Other Other	Appl Appl		
No. Name	Rate Rate	Unit Code	Description	
14 UTC		4	5	6
		0.0 c	0.0 e	0.0 d
				7
				0.0 c
LSD P=.05		5.73	29.15	20.25
Standard Deviation		3.41	17.37	12.06
CV		3.71	27.34	16.92
Grand Mean		92.00	63.52	71.31
Bartlett's X2		11.119	8.756	12.545
P(Bartlett's X2)		0.011*	0.724	0.324
Skewness		-3.3604*	-1.0188*	-1.8577*
Kurtosis		9.9542*	0.1315	3.7122*
Replicate F		0.515	0.215	1.771
Replicate Prob(F)		0.6032	0.8083	0.1901
Treatment F		181.780	7.420	10.201
Treatment Prob(F)		0.0001	0.0001	0.0001

Pest Type	W Weed	W Weed	W Weed
Pest Code	SETFA	AMBTR	ERICA
Pest Scientific Name	Setaria faberi	Ambrosia trifi>	Conyza canaden>
Pest Name	Giant foxtail	Giant ragweed	Canada horsewe>
Rating Date	6-23-2015	6-23-2015	6-23-2015
Rating Type	CONTRO	CONTRO	CONTRO
Rating Unit	%	%	%
Number of Subsamples	1	1	1
Days After First/Last Applic.	60 26	60 26	60 26
Trt-Eval Interval			
Plant-Eval Interval	55 DP-1	55 DP-1	55 DP-1
Days After Emergence	44 DE-1	44 DE-1	44 DE-1

Trt No.	Treatment Name	Other Rate	Other Rate	Appl Unit	Appl Code	Appl Description	8	9	10
1	Broadaxe XC	25 oz/a		A	7 EPP		81.7 c	88.3 b	100.0 a
1	Weedone LV-4	1 pt/a		A	7 EPP				
1	Touchdown Total	24 oz/a		A	7 EPP				
1	N-pak ams	1.5 qt/a		A	7 EPP				
1	Touchdown Total	32 oz/a		B	EPO 2-3" wds				
1	N-pak ams	1.5 qt/a		B	EPO 2-3" wds				
2	Tricor	4 oz/a		A	7 EPP		92.7 ab	96.7 ab	100.0 a
2	Broadaxe XC	25 oz/a		A	7 EPP				
2	Weedone LV-4	1 pt/a		A	7 EPP				
2	Touchdown Total	24 oz/a		A	7 EPP				
2	N-pak ams	1.5 qt/a		A	7 EPP				
2	Flexstar GT 3.5	4.5 pt/a		B	EPO 2-3" wds				
2	N-pak ams	1.5 qt/a		B	EPO 2-3" wds				
2	Destiny HC	0.3 qt/a		B	EPO 2-3" wds				
3	Tricor	3 oz/a		A	7 EPP		86.7 bc	88.3 b	100.0 a
3	Boundary	1.75 pt/a		A	7 EPP				
3	Weedone LV-4	1 pt/a		A	7 EPP				
3	Touchdown Total	24 oz/a		A	7 EPP				
3	N-pak ams	1.5 qt/a		A	7 EPP				
3	Flexstar GT 3.5	4.5 pt/a		B	EPO 2-3" wds				
3	N-pak ams	1.5 qt/a		B	EPO 2-3" wds				
3	Destiny HC	0.3 qt/a		B	EPO 2-3" wds				
4	Classic	1.25 oz/a		A	7 EPP		96.0 ab	100.0 a	100.0 a
4	Broadaxe XC	25 oz/a		A	7 EPP				
4	N-pak ams	1.5 qt/a		A	7 EPP				
4	Touchdown Total	32 oz/a		B	EPO 2-3" wds				
4	N-pak ams	1.5 qt/a		B	EPO 2-3" wds				
5	Broadaxe XC	25 oz/a		A	7 EPP		97.7 a	100.0 a	75.0 b
5	Touchdown Total	24 oz/a		A	7 EPP				
5	N-pak ams	1.5 qt/a		A	7 EPP				
5	Prefix	2 pt/a		B	EPO 2-3" wds				
5	Touchdown Total	32 oz/a		B	EPO 2-3" wds				
5	N-pak ams	1.5 qt/a		B	EPO 2-3" wds				

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Pest Type	W Weed	W Weed	W Weed
Pest Code	SETFA	AMBTR	ERICA
Pest Scientific Name	Setaria faberi	Ambrosia trifi>	Conyza canadens>
Pest Name	Giant foxtail	Giant ragweed	Canada horsewe>
Rating Date	6-23-2015	6-23-2015	6-23-2015
Rating Type	CONTRO	CONTRO	CONTRO
Rating Unit	%	%	%
Number of Subsamples	1	1	1
Days After First/Last Applic.	60 26	60 26	60 26
Trt-Eval Interval			
Plant-Eval Interval	55 DP-1	55 DP-1	55 DP-1
Days After Emergence	44 DE-1	44 DE-1	44 DE-1

Trt No.	Treatment Name	Other Rate	Other Rate	Appl Unit	Appl Code	Description	8	9	10
6	Valor XLT @ 4.0 oz				A				
6	Valor SX	2.35 oz/a			A	7 EPP			
6	Classic	1.65 oz/a			A	7 EPP			
6	Vida	1 oz/a			A	7 EPP			
6	Roundup Power Max	24 oz/a			A	7 EPP			
6	2,4-D Ester	16 oz/a			A	7 EPP			
6	N-pak ams	3 qt/a			A	7 EPP			
6	NIS	4.8 oz/a			A	7 EPP			
7	Authority XL	6 oz/a			A	7 EPP			
7	Vida	1 oz/a			A	7 EPP			
7	Roundup Power Max	24 oz/a			A	7 EPP			
7	2,4-D Ester	16 oz/a			A	7 EPP			
7	N-pak ams	3 qt/a			A	7 EPP			
7	NIS	4.8 oz/a			A	7 EPP			
8	Vida	1 oz/a			A	7 EPP			
8	Metribuzin	4 oz/a			A	7 EPP			
8	2,4-D Ester	16 oz/a			A	7 EPP			
8	NIS	4.8 oz/a			A	7 EPP			
9	Liberty	32 oz/a			A	7 EPP			
9	Vida	1 oz/a			A	7 EPP			
9	Metribuzin	4 oz/a			A	7 EPP			
9	2,4-D Ester	16 oz/a			A	7 EPP			
9	NIS	4.8 oz/a			A	7 EPP			
9	N-pak ams	3 qt/a			A	7 EPP			
10	Valor XLT @ 4.0 oz				A				
10	Valor SX	2.35 oz/a			A	7 EPP			
10	Classic	1.65 oz/a			A	7 EPP			
10	Vida	1 oz/a			A	7 EPP			
10	Roundup Power Max	24 oz/a			A	7 EPP			
10	NIS	4.8 oz/a			A	7 EPP			
10	N-pak ams	3 qt/a			A	7 EPP			
11	Authority XL	6 oz/a			A	7 EPP			
11	Vida	1 oz/a			A	7 EPP			
11	Roundup Power Max	24 oz/a			A	7 EPP			
11	NIS	4.8 oz/a			A	7 EPP			
11	N-pak ams	3 qt/a			A	7 EPP			
12	Metribuzin	10 oz/a			A	7 EPP			
12	Roundup Power Max	24 oz/a			A	7 EPP			
12	2,4-D Ester	16 oz/a			A	7 EPP			
12	N-pak ams	3 qt/a			A	7 EPP			
12	NIS	4.8 oz/a			A	7 EPP			
13	Metribuzin	10 oz/a			A	7 EPP			
13	Sharpen	1 oz/a			A	7 EPP			
13	Roundup Power Max	24 oz/a			A	7 EPP			
13	2,4-D Ester	16 oz/a			A	7 EPP			
13	Exuro	0.6 qt/a			A	7 EPP			
13	N-pak ams	3 qt/a			A	7 EPP			

The Ohio State University

Pest Type	W Weed	W Weed	W Weed
Pest Code	SETFA	AMBTR	ERICA
Pest Scientific Name	Setaria faberi	Ambrosia trifida	Conyza canadensis
Pest Name	Giant foxtail	Giant ragweed	Canada horseweed
Rating Date	6-23-2015	6-23-2015	6-23-2015
Rating Type	CONTRO	CONTRO	CONTRO
Rating Unit	%	%	%
Number of Subsamples	1	1	1
Days After First/Last Applic.	60 26	60 26	60 26
Trt-Eval Interval			
Plant-Eval Interval	55 DP-1	55 DP-1	55 DP-1
Days After Emergence	44 DE-1	44 DE-1	44 DE-1
Trt Treatment	Other Other	Appl Appl	
No. Name	Rate Rate	Unit Code	Description
14 UTC			
	8	9	10
LSD P=.05	10.12	9.70	4.21
Standard Deviation	5.38	5.02	2.24
CV	5.91	5.31	2.35
Grand Mean	90.93	94.67	95.00
Bartlett's X2	4.849	1.602	0.0
P(Bartlett's X2)	0.303	0.449	.
Skewness	-0.8678	-0.7939	-1.8041*
Kurtosis	-0.3336	-0.4341	1.6882
Replicate F	1.095	0.462	1.000
Replicate Prob(F)	0.3799	0.6478	0.4096
Treatment F	4.619	4.193	75.000
Treatment Prob(F)	0.0316	0.0481	0.0001

BroadAxe XC / Boundary / Vida burndown treatments in Soybeans

Trial ID: 15 NTSOY	Location: G-7 EAST END	Trial Year: 2015
Protocol ID: 15 NTSOY	Investigator: Dr. Mark M. Loux	
Project ID: ZSOY83AD-2015US/GOWAN	Study Director: Bryan Reeb	
	Sponsor Contact: Dain Bruns, Syn/Paul David, Gowan	

Pest Type

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

Pest Code

LAMPU, Lamium purpureum, = US  
 STEME, Stellaria media, = US  
 RANAB, Ranunculus abortivus, = US  
 AMBTR, Ambrosia trifida, = US  
 SETFA, Setaria faberi, = US  
 ERICA, Conyza canadensis, = US

Rating Type

CONTRO = control / burndown or knockdown

Rating Unit

% = percent

Plant-Eval Interval

9 DP-1 = 1 GLXMA 4-29-2015  
 29 DP-1 = 1 GLXMA 4-29-2015  
 55 DP-1 = 1 GLXMA 4-29-2015