

# The Ohio State University

## Weed Control Programs for Balance Bean

Trial ID: 14BalBean      Location:      Trial Year: 2014  
 Protocol ID: 14BalBean      Investigator: Dr. Mark M. Loux  
 Project ID: HP14USAB4G      Study Director: Anthony Dobbels  
 Sponsor Contact: David Lamore, Bayer CropScience

**Crop 1:** ZEAMX      Zea mays  
**Variety:** Pioneer P1184AM  
**Description:** RR/LL

**Crop Description**  
 Corn  
**BBCH Scale:** BCOR

**Planting Rate, Unit:** 32097      S/A  
**Depth, Unit:** 1.75 IN  
**Row Spacing, Unit:** 30 IN  
**Soil Temperature, Unit:** 56 F  
**Soil Moisture:** NORMAL normal, adequate  
**Seed Bed:** MEDIUM medium

**Planting Date:** Apr-26-2014  
**Planting Method:** SEEDED seeded  
**Planting Equipment:** FPP      Finger Pickup Planter  
**Emergence Date:** May-12-2014

**Pest 1 Type:** W      **Code:** SETFA      Setaria faberi  
**Common Name:** Giant foxtail

### Pest Description

**Pest 2 Type:** W      **Code:** AMBTR      Ambrosia trifida  
**Common Name:** Giant ragweed

**Pest 3 Type:** W      **Code:** CHEAL      Chenopodium album  
**Common Name:** Common lambsquarters

**Pest 4 Type:** W      **Code:** ABUTH      Abutilon theophrasti  
**Common Name:** velvetleaf

**Pest 5 Type:** W      **Code:** AMARE      Amaranthus retroflexus  
**Common Name:** Redroot pigweed

**Pest 6 Type:** W      **Code:** POLPY      Persicaria pensylvanica  
**Common Name:** Pennsylvania smartweed

**Pest 7 Type:** W      **Code:** SIDSP      Sida spinosa  
**Common Name:** Prickly sida

**Pest 8 Type:** W      **Code:** AMBEL      Ambrosia artemisiifolia  
**Common Name:** Common ragweed

**Treated Plot Width:** 6.67 FT  
**Treated Plot Length:** 30 FT  
**Treated Plot Area:** 200.1 FT<sup>2</sup>      **Treatments:** 14  
**Replications:** 3

**Site and Design**  
**Site Type:** FIELD field  
**Experimental Unit:** 1 PLOT plot  
**Tillage Type:** CONTIL conventional-till  
**Study Design:** RACOB� Randomized Complete Block (RCB)

**No. Previous Crop Year**  
 1. Soybean      2013

**Description Name:** F-7 West  
**% OM:** 3.8      **Texture:** SICL silty clay loam  
**pH:** 7.2      **Soil Name:** Kokomo  
**CEC:** 23.6      **Fert. Level:** G good  
**Soil Drainage:** G good

### Soil Description

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## Application Description

	A	B
Application Date:	Apr-26-2014	Jun-5-2014
Appl. Start Time:	7:00 PM	10:30 AM
Appl. Stop Time:	7:30 PM	11:00 AM
Application Method:	SPRAY	SPRAY
Application Timing:	PRE	POST
Application Placement:	BROSIOI	BROFOL
Applied By:	Loux	Loux
Air Temperature, Unit:	74 F	66 f
% Relative Humidity:	47	73
Wind Velocity, Unit:	7 MPH	5.5 MPH
Wind Direction:	N	W
Dew Presence (Y/N):	N no	N no
Soil Temperature, Unit:	62 F	62 F
Soil Moisture:	NORMAL	MOIST
% Cloud Cover:	5	10
Next Moisture Occurred On:	Apr-28-2014	Jun-8-2014
Time to Next Moisture, Unit:	1.5 DAY	3 DAY

## Crop Stage At Each Application

	A	B
Crop 1 Code, BBCH Scale:	ZEAMX BCOR	ZEAMX BCOR
Stage Scale Used:		DESC
Stage Majority, Percent:		15 100
Height, Unit:		18 IN

## Pest Stage At Each Application

	A	B
Pest 1 Code, Type, Scale:	SETFA W	SETFA W
Stage Majority, Percent:		12 100
Height, Unit:		3 IN
Height Minimum, Maximum:		2 4
Density, Unit:		500 M2
Pest 2 Code, Type, Scale:	AMBTR W	AMBTR W
Stage Majority, Percent:		16 100
Height, Unit:		4 IN
Height Minimum, Maximum:		3 5
Density, Unit:		28.66 M2
Pest 3 Code, Type, Scale:	CHEAL W	CHEAL W
Stage Majority, Percent:		16 100
Diameter, Unit:		1.5 IN
Height, Unit:		1 2
Density, Unit:		3.66 M2
Pest 4 Code, Type, Scale:	ABUTH W	ABUTH W
Density, Unit:		5.66 M2
Pest 5 Code, Type, Scale:	AMARE W	AMARE W
Density, Unit:		7.66 M2
Pest 6 Code, Type, Scale:	POLPY W	POLPY W
Stage Majority, Percent:		16
Height, Unit:		1.5 IN
Height Minimum, Maximum:		1 2
Density, Unit:		8.66 M2
Pest 7 Code, Type, Scale:	SIDSP W	SIDSP W
Density, Unit:		6 M2
Pest 8 Code, Type, Scale:	AMBEL W	AMBEL W
Density, Unit:		1.66 M2

## Application Equipment

	A	B
Appl. Equipment:	6 FOOT BOOM	6 FOOT BOOM
Equipment Type:	SPRBAC	SPRBAC
Operation Pressure, Unit:	46 PSI	46 PSI
Nozzle Type:	AI XR	AI XR
Nozzle Size:	110015	110015
Nozzle Spacing, Unit:	18 IN	18 IN
Boom Length, Unit:	6.67 FT	6.67 FT
Boom Height, Unit:	20 IN	20 IN
Ground Speed, Unit:	3 MPH	3 MPH
Carrier:	WATER	WATER
Spray Volume, Unit:	15 GPA	15 GPA
Mix Size, Unit:	1 Liters	1 Liters
Propellant:	CO2	CO2

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## Weed Control Programs for Balance Bean

Trial ID: 14BalBean  
Protocol ID: 14BalBean  
Project ID: HP14USAB4G

Location: Investigator: Dr. Mark M. Loux  
Study Director: Anthony Dobbels  
Sponsor Contact: David Lamore, Bayer CropScience

Trial Year: 2014

Pest Type	W Weed	W Weed	W Weed	W Weed	W Weed
Pest Code	SETFA	AMBTR	AMBEL	CHEAL	AMARE
Pest Scientific Name	Setaria faberi	Ambrosia trifi>	Ambrosia artem>	Chenopodium al>	Amaranthus ret>
Pest Name	Giant foxtail	Giant ragweed	Common ragweed	Common lambsqu>	Redroot pigweed
Rating Date	May-26-2014	May-26-2014	May-26-2014	May-26-2014	May-26-2014
Rating Type	CONTRO	CONTRO	CONTRO	CONTRO	CONTRO
Rating Unit	%	%	%	%	%
Number of Subsamples	1	1	1	1	1
SE Group No.	1	2	3	4	5
Days After First/Last Applic.	30 30	30 30	30 30	30 30	30 30
Trt-Eval Interval	30 DA-A	30 DA-A	30 DA-A	30 DA-A	30 DA-A
Plant-Eval Interval	30 DP-1	30 DP-1	30 DP-1	30 DP-1	30 DP-1
Days After Emergence	14 DE-1	14 DE-1	14 DE-1	14 DE-1	14 DE-1
ARM Action Codes	AA	AA	AA	AA	AA
Number of Decimals	0	0	0	0	0

Trt No.	Treatment Name	Rate	Rate Unit	Other Rate	Other Rate Unit	Appl Code	1	2	3	4	5
1	UTC						0	0	0	0	0
2	Sonic	0.35 lb ai/a		8 oz/a		A	97	83	100	100	100
	2 2,4-D Amine	0.5 lb ai/a		1 pt/a		B					
	2 Roundup PowerMax	1.13 lb ae/a		32 oz/a		B					
	2 N PAK AMS	2.5 % v/v		1.5 qt/a		B					
3	Surestart II	1.04 lb ai/a		2 pt/a		A	97	50	97	70	100
	3 2,4-D Amine	0.5 lb ai/a		1 pt/a		B					
	3 Roundup PowerMax	1.13 lb ae/a		32 oz/a		B					
	3 N PAK AMS	2.5 % v/v		1.5 qt/a		B					
4	Valor SX	0.064 lb ai/a		2 oz/a		A	61	23	97	100	99
	4 Clarity	0.5 lb ai/a		16 oz/a		B					
	4 Roundup PowerMax	1.13 lb ae/a		32 oz/a		B					
	4 N PAK AMS	2.5 % v/v		1.5 qt/a		B					
	4 Roundup PowerMax	1.13 lb ae/a		32 oz/a		C					
	4 Warrant	0.94 lb ai/a		1.25 qt/a		C					
	4 N PAK AMS	2.5 % v/v		1.5 qt/a		C					
5	Valor SX	0.064 lb ai/a		2 oz/a		A	31	37	82	100	100
	5 Clarity	0.5 lb ai/a		16 oz/a		B					
	5 Roundup PowerMax	1.13 lb ae/a		32 oz/a		B					
	5 N PAK AMS	2.5 % v/v		1.5 qt/a		B					
	5 Clarity	0.5 lb ai/a		16 oz/a		C					
	5 Roundup PowerMax	1.13 lb ae/a		32 oz/a		C					
	5 Warrant	0.94 lb ai/a		1.25 qt/a		C					
	5 N PAK AMS	2.5 % v/v		1.5 qt/a		C					
6	Valor SX	0.064 lb ai/a		2 oz/a		A	81	57	100	100	100
	6 Clarity	0.5 lb ai/a		16 oz/a		B					
	6 Roundup PowerMax	1.13 lb ae/a		32 oz/a		B					
	6 N PAK AMS	2.5 % v/v		1.5 qt/a		B					
	6 Clarity	0.5 lb ai/a		16 oz/a		C					
	6 Roundup PowerMax	1.13 lb ae/a		32 oz/a		C					
	6 Warrant	0.94 lb ai/a		1.25 qt/a		C					
	6 N PAK AMS	2.5 % v/v		1.5 qt/a		C					
7	Prefix	1.32 lb ai/a		2 pt/a		A	100	53	95	100	100
	7 Hallex GT	1.97 lb ai/a		3.6 pt/a		B					
	7 N PAK AMS	2.5 % v/v		1.5 qt/a		B					

t=Mean descriptions are reported in transformed data units, and are not de-transformed.

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Pest Type	W Weed	W Weed	W Weed	W Weed	W Weed
Pest Code	SETFA	AMBTR	AMBEL	CHEAL	AMARE
Pest Scientific Name	Setaria faberi	Ambrosia trifi>	Ambrosia artem>	Chenopodium al>	Amaranthus ret>
Pest Name	Giant foxtail	Giant ragweed	Common ragweed	Common lambsqu>	Redroot pigweed
Rating Date	May-26-2014	May-26-2014	May-26-2014	May-26-2014	May-26-2014
Rating Type	CONTRO	CONTRO	CONTRO	CONTRO	CONTRO
Rating Unit	%	%	%	%	%
Number of Subsamples	1	1	1	1	1
SE Group No.	1	2	3	4	5
Days After First/Last Applic.	30 30	30 30	30 30	30 30	30 30
Trt-Eval Interval	30 DA-A	30 DA-A	30 DA-A	30 DA-A	30 DA-A
Plant-Eval Interval	30 DP-1	30 DP-1	30 DP-1	30 DP-1	30 DP-1
Days After Emergence	14 DE-1	14 DE-1	14 DE-1	14 DE-1	14 DE-1
ARM Action Codes	AA	AA	AA	AA	AA
Number of Decimals	0	0	0	0	0

Trt No.	Treatment Name	Rate	Unit	Other Rate	Other Unit	Appl Code	1	2	3	4	5
8	Zemax	1.88 lb ai/a		2 qt/a		A	100	70	100	100	100
8	Reflex	0.25 lb ai/a		1 pt/a		A					
8	Liberty	0.66 lb ai/a		36 oz/a		B					
8	Dual II Magnum	0.955 lb ai/a		1 pt/a		B					
8	N PAK AMS	2.5 % v/v		1.5 qt/a		B					
9	Zidua	0.08 lb ai/a		1.5 oz/a		A	99	23	100	99	100
9	Sharpen	0.0223 lb ai/a		1 oz/a		A					
9	Clarity	0.5 lb ai/a		16 oz/a		B					
9	Roundup PowerMax	1.13 lb ae/a		32 oz/a		B					
9	N PAK AMS	2.5 % v/v		1.5 qt/a		B					
10	Optill	0.085 lb ai/a		2 oz/a		A	71	50	95	100	100
10	Clarity	0.5 lb ai/a		16 oz/a		B					
10	Roundup PowerMax	1.13 lb ae/a		32 oz/a		B					
10	N PAK AMS	2.5 % v/v		1.5 qt/a		B					
11	Balance Bean	0.094 lb ai/a		3 oz/a		A	100	62	100	100	100
11	Zidua	0.08 lb ai/a		1.5 oz/a		A					
11	Liberty	0.53 lb ai/a		29 oz/a		B					
11	Zidua	0.08 lb ai/a		1.5 oz/a		B					
11	N PAK AMS	2.5 % v/v		1.5 qt/a		B					
12	Balance Bean	0.094 lb ai/a		3 oz/a		A	93	87	100	100	100
12	Valor SX	0.048 lb ai/a		1.5 oz/a		A					
12	Liberty	0.53 lb ai/a		29 oz/a		B					
12	Zidua	0.08 lb ai/a		1.5 oz/a		B					
12	N PAK AMS	2.5 % v/v		1.5 qt/a		B					
13	Balance Bean	0.094 lb ai/a		3 oz/a		A	84	80	100	100	93
13	Sencor DF	0.375 lb ai/a		8 oz/a		A					
13	Liberty	0.53 lb ai/a		29 oz/a		B					
13	Zidua	0.08 lb ai/a		1.5 oz/a		B					
13	N PAK AMS	2.5 % v/v		1.5 qt/a		B					
14	Balance Bean	0.0625 lb ai/a		2 oz/a		A	79	82	100	100	97
14	Sencor DF	0.25 lb ai/a		5.33 oz/a		A					
14	Liberty	0.53 lb ai/a		29 oz/a		B					
14	Zidua	0.08 lb ai/a		1.5 oz/a		B					
14	N PAK AMS	2.5 % v/v		1.5 qt/a		B					
LSD (P=.05)							20.1t	29.8	20.3t	23.3	5.7
Standard Deviation							11.9t	17.7	12.1t	13.9	3.4
CV							18.14	32.8	15.43	15.33	3.69
Bartlett's X2							17.573	10.384	8.027	12.238	5.055
P(Bartlett's X2)							0.063	0.582	0.155	0.001*	0.08
Skewness							-1.4681*	-0.3171	-2.492*	-2.8715*	-3.3602*
Kurtosis							1.5747*	-0.9607	5.2671*	6.5827*	9.9527*
Replicate F							0.412	3.389	0.415	0.976	1.688
Replicate Prob(F)							0.6665	0.0492	0.6647	0.3902	0.2045
Treatment F							13.107	6.478	11.633	11.559	183.326
Treatment Prob(F)							0.0001	0.0001	0.0001	0.0001	0.0001

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Pest Type	W Weed	W Weed	W Weed	W Weed	W Weed					
Pest Code	POLPY	ABUTH	HIBTR	SETFA	ECHCG					
Pest Scientific Name	Persicaria pen>	Abutilon theop>	Hibiscus trion>	Setaria faberi	Echinochloa cr>					
Pest Name	Pennsylvania s>	velvetleaf	Venice mallow	Giant foxtail	Common barnyar>					
Rating Date	May-26-2014	May-26-2014	May-26-2014	Jun-17-2014	Jun-17-2014					
Rating Type	CONTRO	CONTRO	CONTRO	CONTRO	CONTRO					
Rating Unit	%	%	%	%	%					
Number of Subsamples	1	1	1	1	1					
SE Group No.	6	7	8	9	10					
Days After First/Last Applic.	30 30	30 30	30 30	52 12	52 12					
Trt-Eval Interval	30 DA-A	30 DA-A	30 DA-A							
Plant-Eval Interval	30 DP-1	30 DP-1	30 DP-1	52 DP-1	52 DP-1					
Days After Emergence	14 DE-1	14 DE-1	14 DE-1	36 DE-1	36 DE-1					
ARM Action Codes				AA						
Number of Decimals	0	0	0							
Trt Treatment	Rate	Rate Unit	Other Rate	Other Rate Unit	Appl Code	6	7	8	9	10
1 UTC						0	0	0	0.0	0.0
2 Sonic	0.35 lb ai/a		8 oz/a		A	100	100	100	99.9	100.0
2 2,4-D Amine	0.5 lb ai/a		1 pt/a		B					
2 Roundup PowerMax	1.13 lb ae/a		32 oz/a		B					
2 N PAK AMS	2.5 % v/v		1.5 qt/a		B					
3 Surestart II	1.04 lb ai/a		2 pt/a		A	100	100	100	94.0	80.0
3 2,4-D Amine	0.5 lb ai/a		1 pt/a		B					
3 Roundup PowerMax	1.13 lb ae/a		32 oz/a		B					
3 N PAK AMS	2.5 % v/v		1.5 qt/a		B					
4 Valor SX	0.064 lb ai/a		2 oz/a		A	100	97	92	99.6	100.0
4 Clarity	0.5 lb ai/a		16 oz/a		B					
4 Roundup PowerMax	1.13 lb ae/a		32 oz/a		B					
4 N PAK AMS	2.5 % v/v		1.5 qt/a		B					
4 Roundup PowerMax	1.13 lb ae/a		32 oz/a		C					
4 Warrant	0.94 lb ai/a		1.25 qt/a		C					
4 N PAK AMS	2.5 % v/v		1.5 qt/a		C					
5 Valor SX	0.064 lb ai/a		2 oz/a		A	100	100	97	99.6	100.0
5 Clarity	0.5 lb ai/a		16 oz/a		B					
5 Roundup PowerMax	1.13 lb ae/a		32 oz/a		B					
5 N PAK AMS	2.5 % v/v		1.5 qt/a		B					
5 Clarity	0.5 lb ai/a		16 oz/a		C					
5 Roundup PowerMax	1.13 lb ae/a		32 oz/a		C					
5 Warrant	0.94 lb ai/a		1.25 qt/a		C					
5 N PAK AMS	2.5 % v/v		1.5 qt/a		C					
6 Valor SX	0.064 lb ai/a		2 oz/a		A	100	100	96	99.6	100.0
6 Clarity	0.5 lb ai/a		16 oz/a		B					
6 Roundup PowerMax	1.13 lb ae/a		32 oz/a		B					
6 N PAK AMS	2.5 % v/v		1.5 qt/a		B					
6 Clarity	0.5 lb ai/a		16 oz/a		C					
6 Roundup PowerMax	1.13 lb ae/a		32 oz/a		C					
6 Warrant	0.94 lb ai/a		1.25 qt/a		C					
6 N PAK AMS	2.5 % v/v		1.5 qt/a		C					
7 Prefix	1.32 lb ai/a		2 pt/a		A	90	97	93	100.0	100.0
7 Halax GT	1.97 lb ai/a		3.6 pt/a		B					
7 N PAK AMS	2.5 % v/v		1.5 qt/a		B					

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Pest Type	W Weed	W Weed	W Weed	W Weed	W Weed
Pest Code	POLPY	ABUTH	HIBTR	SETFA	ECHCG
Pest Scientific Name	Persicaria pen>	Abutilon theop>	Hibiscus trion>	Setaria faberi	Echinochloa cr>
Pest Name	Pennsylvania s>	velvetleaf	Venice mallow	Giant foxtail	Common barnyar>
Rating Date	May-26-2014	May-26-2014	May-26-2014	Jun-17-2014	Jun-17-2014
Rating Type	CONTRO	CONTRO	CONTRO	CONTRO	CONTRO
Rating Unit	%	%	%	%	%
Number of Subsamples	1	1	1	1	1
SE Group No.	6	7	8	9	10
Days After First/Last Applic.	30 30	30 30	30 30	52 12	52 12
Trt-Eval Interval	30 DA-A	30 DA-A	30 DA-A		
Plant-Eval Interval	30 DP-1	30 DP-1	30 DP-1	52 DP-1	52 DP-1
Days After Emergence	14 DE-1	14 DE-1	14 DE-1	36 DE-1	36 DE-1
ARM Action Codes				AA	
Number of Decimals	0	0	0		

Trt Treatment No. Name	Rate Rate Unit	Other Rate Unit	Other Rate Unit	Appl Code	6	7	8	9	10
8 Zemax	1.88 lb ai/a	2 qt/a		A	100	100	100	100.0	100.0
8 Reflex	0.25 lb ai/a	1 pt/a		A					
8 Liberty	0.66 lb ai/a	36 oz/a		B					
8 Dual II Magnum	0.955 lb ai/a	1 pt/a		B					
8 N PAK AMS	2.5 % v/v	1.5 qt/a		B					
9 Zidua	0.08 lb ai/a	1.5 oz/a		A	100	100	89	85.2	73.3
9 Sharpen	0.0223 lb ai/a	1 oz/a		A					
9 Clarity	0.5 lb ai/a	16 oz/a		B					
9 Roundup PowerMax	1.13 lb ae/a	32 oz/a		B					
9 N PAK AMS	2.5 % v/v	1.5 qt/a		B					
10 Optill	0.085 lb ai/a	2 oz/a		A	100	100	100	98.7	100.0
10 Clarity	0.5 lb ai/a	16 oz/a		B					
10 Roundup PowerMax	1.13 lb ae/a	32 oz/a		B					
10 N PAK AMS	2.5 % v/v	1.5 qt/a		B					
11 Balance Bean	0.094 lb ai/a	3 oz/a		A	100	100	100	100.0	100.0
11 Zidua	0.08 lb ai/a	1.5 oz/a		A					
11 Liberty	0.53 lb ai/a	29 oz/a		B					
11 Zidua	0.08 lb ai/a	1.5 oz/a		B					
11 N PAK AMS	2.5 % v/v	1.5 qt/a		B					
12 Balance Bean	0.094 lb ai/a	3 oz/a		A	100	100	100	99.8	95.0
12 Valor SX	0.048 lb ai/a	1.5 oz/a		A					
12 Liberty	0.53 lb ai/a	29 oz/a		B					
12 Zidua	0.08 lb ai/a	1.5 oz/a		B					
12 N PAK AMS	2.5 % v/v	1.5 qt/a		B					
13 Balance Bean	0.094 lb ai/a	3 oz/a		A	100	100	93	100.0	100.0
13 Sencor DF	0.375 lb ai/a	8 oz/a		A					
13 Liberty	0.53 lb ai/a	29 oz/a		B					
13 Zidua	0.08 lb ai/a	1.5 oz/a		B					
13 N PAK AMS	2.5 % v/v	1.5 qt/a		B					
14 Balance Bean	0.0625 lb ai/a	2 oz/a		A	100	100	95	99.9	98.3
14 Sencor DF	0.25 lb ai/a	5.33 oz/a		A					
14 Liberty	0.53 lb ai/a	29 oz/a		B					
14 Zidua	0.08 lb ai/a	1.5 oz/a		B					
14 N PAK AMS	2.5 % v/v	1.5 qt/a		B					
LSD (P=.05)					7.8	3.7	10.9	5.46t	5.97
Standard Deviation					4.6	2.2	6.5	3.25t	3.55
CV					5.02	2.41	7.26	4.11	3.99
Bartlett's X2					0.0	0.0	3.901	4.991	3.528
P(Bartlett's X2)					.	.	0.69	0.759	0.171
Skewness					-3.3025*	-3.414*	-3.0871*	-2.9994*	-2.9113*
Kurtosis					9.6002*	10.2314*	8.6273*	8.2384*	7.6961*
Replicate F					1.000	0.481	3.056	1.100	0.188
Replicate Prob(F)					0.3816	0.6233	0.0643	0.3478	0.8294
Treatment F					99.462	429.778	48.133	158.805	172.739
Treatment Prob(F)					0.0001	0.0001	0.0001	0.0001	0.0001

# The Ohio State University

Pest Type	W Weed	W Weed	W Weed	W Weed
Pest Code	AMBTR	AMBEL	CHEAL	AMARE
Pest Scientific Name	Ambrosia trifid	Ambrosia artemisiifolia	Chenopodium album	Amaranthus retrofractus
Pest Name	Giant ragweed	Common ragweed	Common lambsquarters	Redroot pigweed
Rating Date	Jun-17-2014	Jun-17-2014	Jun-17-2014	Jun-17-2014
Rating Type	CONTRO	CONTRO	CONTRO	CONTRO
Rating Unit	%	%	%	%
Number of Subsamples	1	1	1	1
SE Group No.	11	12	13	14
Days After First/Last Applic.	52 12	52 12	52 12	52 12
Trt-Eval Interval				
Plant-Eval Interval	52 DP-1	52 DP-1	52 DP-1	52 DP-1
Days After Emergence	36 DE-1	36 DE-1	36 DE-1	36 DE-1
ARM Action Codes	AA			
Number of Decimals				

Trt No.	Treatment Name	Rate	Rate Unit	Other Rate	Other Rate Unit	Appl Code	11	12	13	14
1	UTC						0.0	0.0	0.0	0.0
2	Sonic	0.35 lb ai/a		8 oz/a		A	99.9	100.0	100.0	100.0
	2 2,4-D Amine	0.5 lb ai/a		1 pt/a		B				
	2 Roundup PowerMax	1.13 lb ae/a		32 oz/a		B				
	2 N PAK AMS	2.5 % v/v		1.5 qt/a		B				
3	Surestart II	1.04 lb ai/a		2 pt/a		A	81.7	100.0	88.3	93.3
	3 2,4-D Amine	0.5 lb ai/a		1 pt/a		B				
	3 Roundup PowerMax	1.13 lb ae/a		32 oz/a		B				
	3 N PAK AMS	2.5 % v/v		1.5 qt/a		B				
4	Valor SX	0.064 lb ai/a		2 oz/a		A	99.6	100.0	100.0	100.0
	4 Clarity	0.5 lb ai/a		16 oz/a		B				
	4 Roundup PowerMax	1.13 lb ae/a		32 oz/a		B				
	4 N PAK AMS	2.5 % v/v		1.5 qt/a		B				
	4 Roundup PowerMax	1.13 lb ae/a		32 oz/a		C				
	4 Warrant	0.94 lb ai/a		1.25 qt/a		C				
	4 N PAK AMS	2.5 % v/v		1.5 qt/a		C				
5	Valor SX	0.064 lb ai/a		2 oz/a		A	100.0	100.0	100.0	100.0
	5 Clarity	0.5 lb ai/a		16 oz/a		B				
	5 Roundup PowerMax	1.13 lb ae/a		32 oz/a		B				
	5 N PAK AMS	2.5 % v/v		1.5 qt/a		B				
	5 Clarity	0.5 lb ai/a		16 oz/a		C				
	5 Roundup PowerMax	1.13 lb ae/a		32 oz/a		C				
	5 Warrant	0.94 lb ai/a		1.25 qt/a		C				
	5 N PAK AMS	2.5 % v/v		1.5 qt/a		C				
6	Valor SX	0.064 lb ai/a		2 oz/a		A	99.4	100.0	100.0	100.0
	6 Clarity	0.5 lb ai/a		16 oz/a		B				
	6 Roundup PowerMax	1.13 lb ae/a		32 oz/a		B				
	6 N PAK AMS	2.5 % v/v		1.5 qt/a		B				
	6 Clarity	0.5 lb ai/a		16 oz/a		C				
	6 Roundup PowerMax	1.13 lb ae/a		32 oz/a		C				
	6 Warrant	0.94 lb ai/a		1.25 qt/a		C				
	6 N PAK AMS	2.5 % v/v		1.5 qt/a		C				
7	Prefix	1.32 lb ai/a		2 pt/a		A	99.9	100.0	97.7	100.0
	7 Hallex GT	1.97 lb ai/a		3.6 pt/a		B				
	7 N PAK AMS	2.5 % v/v		1.5 qt/a		B				

# The Ohio State University

Pest Type	W Weed	W Weed	W Weed	W Weed
Pest Code	AMBTR	AMBEL	CHEAL	AMARE
Pest Scientific Name	Ambrosia trifid>	Ambrosia artem>	Chenopodium al>	Amaranthus ret>
Pest Name	Giant ragweed	Common ragweed	Common lambsqu>	Redroot pigweed
Rating Date	Jun-17-2014	Jun-17-2014	Jun-17-2014	Jun-17-2014
Rating Type	CONTRO	CONTRO	CONTRO	CONTRO
Rating Unit	%	%	%	%
Number of Subsamples	1	1	1	1
SE Group No.	11	12	13	14
Days After First/Last Applic.	52 12	52 12	52 12	52 12
Trt-Eval Interval				
Plant-Eval Interval	52 DP-1	52 DP-1	52 DP-1	52 DP-1
Days After Emergence	36 DE-1	36 DE-1	36 DE-1	36 DE-1
ARM Action Codes	AA			
Number of Decimals				

Trt	Treatment	Rate	Other	Other	Appl	11	12	13	14	
No.	Name	Rate	Unit	Rate	Unit	Code				
8	Zemax	1.88 lb ai/a		2 qt/a		A	93.9	100.0	100.0	100.0
8	Reflex	0.25 lb ai/a		1 pt/a		A				
8	Liberty	0.66 lb ai/a		36 oz/a		B				
8	Dual II Magnum	0.955 lb ai/a		1 pt/a		B				
8	N PAK AMS	2.5 % v/v		1.5 qt/a		B				
9	Zidua	0.08 lb ai/a		1.5 oz/a		A	81.7	93.3	88.3	100.0
9	Sharpen	0.0223 lb ai/a		1 oz/a		A				
9	Clarity	0.5 lb ai/a		16 oz/a		B				
9	Roundup PowerMax	1.13 lb ae/a		32 oz/a		B				
9	N PAK AMS	2.5 % v/v		1.5 qt/a		B				
10	Optill	0.085 lb ai/a		2 oz/a		A	97.8	100.0	100.0	100.0
10	Clarity	0.5 lb ai/a		16 oz/a		B				
10	Roundup PowerMax	1.13 lb ae/a		32 oz/a		B				
10	N PAK AMS	2.5 % v/v		1.5 qt/a		B				
11	Balance Bean	0.094 lb ai/a		3 oz/a		A	87.4	100.0	100.0	100.0
11	Zidua	0.08 lb ai/a		1.5 oz/a		A				
11	Liberty	0.53 lb ai/a		29 oz/a		B				
11	Zidua	0.08 lb ai/a		1.5 oz/a		B				
11	N PAK AMS	2.5 % v/v		1.5 qt/a		B				
12	Balance Bean	0.094 lb ai/a		3 oz/a		A	96.7	100.0	100.0	100.0
12	Valor SX	0.048 lb ai/a		1.5 oz/a		A				
12	Liberty	0.53 lb ai/a		29 oz/a		B				
12	Zidua	0.08 lb ai/a		1.5 oz/a		B				
12	N PAK AMS	2.5 % v/v		1.5 qt/a		B				
13	Balance Bean	0.094 lb ai/a		3 oz/a		A	96.7	100.0	100.0	100.0
13	Sencor DF	0.375 lb ai/a		8 oz/a		A				
13	Liberty	0.53 lb ai/a		29 oz/a		B				
13	Zidua	0.08 lb ai/a		1.5 oz/a		B				
13	N PAK AMS	2.5 % v/v		1.5 qt/a		B				
14	Balance Bean	0.0625 lb ai/a		2 oz/a		A	97.6	100.0	100.0	100.0
14	Sencor DF	0.25 lb ai/a		5.33 oz/a		A				
14	Liberty	0.53 lb ai/a		29 oz/a		B				
14	Zidua	0.08 lb ai/a		1.5 oz/a		B				
14	N PAK AMS	2.5 % v/v		1.5 qt/a		B				
LSD (P=.05)							10.46t	5.18	6.88	5.18
Standard Deviation							6.23t	3.09	4.10	3.09
CV							8.44	3.34	4.5	3.34
Bartlett's X2							12.524	0.0	3.314	0.0
P(Bartlett's X2)							0.326	.	0.191	.
Skewness							-2.4503*	-3.3795*	-3.2344*	-3.3795*
Kurtosis							6.0373*	10.0411*	9.3447*	10.0411*
Replicate F							2.210	1.000	0.282	1.000
Replicate Prob(F)							0.1299	0.3816	0.7564	0.3816
Treatment F							40.226	223.692	125.762	223.692
Treatment Prob(F)							0.0001	0.0001	0.0001	0.0001



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Pest Type	W Weed	W Weed	W Weed	W Weed	W Weed
Pest Code	POLPY	ABUTH	HIBTR	SIDSP	SETFA
Pest Scientific Name	Persicaria pen>	Abutilon theop>	Hibiscus trion>	Sida spinosa	Setaria faberi
Pest Name	Pennsylvania s>	velvetleaf	Venice mallow	Prickly sida	Giant foxtail
Rating Date	Jun-17-2014	Jun-17-2014	Jun-17-2014	Jun-17-2014	Jul-7-2014
Rating Type	CONTRO	CONTRO	CONTRO	CONTRO	CONTRO
Rating Unit	%	%	%	%	%
Number of Subsamples	1	1	1	1	1
SE Group No.	15	16	17	18	19
Days After First/Last Applic.	52 12	52 12	52 12	52 12	72 32
Trt-Eval Interval					
Plant-Eval Interval	52 DP-1	52 DP-1	52 DP-1	52 DP-1	72 DP-1
Days After Emergence	36 DE-1	36 DE-1	36 DE-1	36 DE-1	56 DE-1
ARM Action Codes	AA		AA	AA	AA
Number of Decimals					

Trt No.	Treatment Name	Rate	Rate Unit	Other Rate	Other Rate Unit	Appl Code	15	16	17	18	19
1	UTC						0.0	0.0	0.0	0.0	0.0
2	Sonic	0.35 lb ai/a		8 oz/a		A	100.0	100.0	100.0	100.0	81.6
	2 2,4-D Amine	0.5 lb ai/a		1 pt/a		B					
	2 Roundup PowerMax	1.13 lb ae/a		32 oz/a		B					
	2 N PAK AMS	2.5 % v/v		1.5 qt/a		B					
3	Surestart II	1.04 lb ai/a		2 pt/a		A	94.4	93.3	98.9	94.8	20.0
	3 2,4-D Amine	0.5 lb ai/a		1 pt/a		B					
	3 Roundup PowerMax	1.13 lb ae/a		32 oz/a		B					
	3 N PAK AMS	2.5 % v/v		1.5 qt/a		B					
4	Valor SX	0.064 lb ai/a		2 oz/a		A	100.0	100.0	100.0	100.0	78.9
	4 Clarity	0.5 lb ai/a		16 oz/a		B					
	4 Roundup PowerMax	1.13 lb ae/a		32 oz/a		B					
	4 N PAK AMS	2.5 % v/v		1.5 qt/a		B					
	4 Roundup PowerMax	1.13 lb ae/a		32 oz/a		C					
	4 Warrant	0.94 lb ai/a		1.25 qt/a		C					
	4 N PAK AMS	2.5 % v/v		1.5 qt/a		C					
5	Valor SX	0.064 lb ai/a		2 oz/a		A	100.0	100.0	100.0	99.9	84.1
	5 Clarity	0.5 lb ai/a		16 oz/a		B					
	5 Roundup PowerMax	1.13 lb ae/a		32 oz/a		B					
	5 N PAK AMS	2.5 % v/v		1.5 qt/a		B					
	5 Clarity	0.5 lb ai/a		16 oz/a		C					
	5 Roundup PowerMax	1.13 lb ae/a		32 oz/a		C					
	5 Warrant	0.94 lb ai/a		1.25 qt/a		C					
	5 N PAK AMS	2.5 % v/v		1.5 qt/a		C					
6	Valor SX	0.064 lb ai/a		2 oz/a		A	100.0	100.0	100.0	99.9	89.1
	6 Clarity	0.5 lb ai/a		16 oz/a		B					
	6 Roundup PowerMax	1.13 lb ae/a		32 oz/a		B					
	6 N PAK AMS	2.5 % v/v		1.5 qt/a		B					
	6 Clarity	0.5 lb ai/a		16 oz/a		C					
	6 Roundup PowerMax	1.13 lb ae/a		32 oz/a		C					
	6 Warrant	0.94 lb ai/a		1.25 qt/a		C					
	6 N PAK AMS	2.5 % v/v		1.5 qt/a		C					
7	Prefix	1.32 lb ai/a		2 pt/a		A	99.9	100.0	97.6	98.8	100.0
	7 Hallex GT	1.97 lb ai/a		3.6 pt/a		B					
	7 N PAK AMS	2.5 % v/v		1.5 qt/a		B					

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Pest Type	W Weed	W Weed	W Weed	W Weed	W Weed
Pest Code	POLPY	ABUTH	HIBTR	SIDSP	SETFA
Pest Scientific Name	Persicaria pen>	Abutilon theop>	Hibiscus trion>	Sida spinosa	Setaria faberi
Pest Name	Pennsylvania s>	velvetleaf	Venice mallow	Prickly sida	Giant foxtail
Rating Date	Jun-17-2014	Jun-17-2014	Jun-17-2014	Jun-17-2014	Jul-7-2014
Rating Type	CONTRO	CONTRO	CONTRO	CONTRO	CONTRO
Rating Unit	%	%	%	%	%
Number of Subsamples	1	1	1	1	1
SE Group No.	15	16	17	18	19
Days After First/Last Applic.	52 12	52 12	52 12	52 12	72 32
Trt-Eval Interval					
Plant-Eval Interval	52 DP-1	52 DP-1	52 DP-1	52 DP-1	72 DP-1
Days After Emergence	36 DE-1	36 DE-1	36 DE-1	36 DE-1	56 DE-1
ARM Action Codes	AA		AA	AA	AA
Number of Decimals					

Trt Treatment No. Name	Rate	Other Rate	Other Rate	Appl Unit Code	15	16	17	18	19
8 Zemax	1.88 lb ai/a	2 qt/a		A	100.0	100.0	100.0	99.9	100.0
8 Reflex	0.25 lb ai/a	1 pt/a		A					
8 Liberty	0.66 lb ai/a	36 oz/a		B					
8 Dual II Magnum	0.955 lb ai/a	1 pt/a		B					
8 N PAK AMS	2.5 % v/v	1.5 qt/a		B					
9 Zidua	0.08 lb ai/a	1.5 oz/a		A	98.3	100.0	65.3	96.7	29.2
9 Sharpen	0.0223 lb ai/a	1 oz/a		A					
9 Clarity	0.5 lb ai/a	16 oz/a		B					
9 Roundup PowerMax	1.13 lb ae/a	32 oz/a		B					
9 N PAK AMS	2.5 % v/v	1.5 qt/a		B					
10 Optill	0.085 lb ai/a	2 oz/a		A	100.0	100.0	99.9	100.0	85.6
10 Clarity	0.5 lb ai/a	16 oz/a		B					
10 Roundup PowerMax	1.13 lb ae/a	32 oz/a		B					
10 N PAK AMS	2.5 % v/v	1.5 qt/a		B					
11 Balance Bean	0.094 lb ai/a	3 oz/a		A	100.0	100.0	100.0	100.0	99.8
11 Zidua	0.08 lb ai/a	1.5 oz/a		A					
11 Liberty	0.53 lb ai/a	29 oz/a		B					
11 Zidua	0.08 lb ai/a	1.5 oz/a		B					
11 N PAK AMS	2.5 % v/v	1.5 qt/a		B					
12 Balance Bean	0.094 lb ai/a	3 oz/a		A	100.0	100.0	100.0	99.9	95.5
12 Valor SX	0.048 lb ai/a	1.5 oz/a		A					
12 Liberty	0.53 lb ai/a	29 oz/a		B					
12 Zidua	0.08 lb ai/a	1.5 oz/a		B					
12 N PAK AMS	2.5 % v/v	1.5 qt/a		B					
13 Balance Bean	0.094 lb ai/a	3 oz/a		A	100.0	100.0	100.0	100.0	98.4
13 Sencor DF	0.375 lb ai/a	8 oz/a		A					
13 Liberty	0.53 lb ai/a	29 oz/a		B					
13 Zidua	0.08 lb ai/a	1.5 oz/a		B					
13 N PAK AMS	2.5 % v/v	1.5 qt/a		B					
14 Balance Bean	0.0625 lb ai/a	2 oz/a		A	100.0	100.0	100.0	99.9	99.4
14 Sencor DF	0.25 lb ai/a	5.33 oz/a		A					
14 Liberty	0.53 lb ai/a	29 oz/a		B					
14 Zidua	0.08 lb ai/a	1.5 oz/a		B					
14 N PAK AMS	2.5 % v/v	1.5 qt/a		B					
LSD (P=.05)					8.17t	5.18	9.08t	8.86t	10.06t
Standard Deviation					4.87t	3.09	5.41t	5.28t	5.99t
CV					5.94	3.34	6.78	6.53	9.28
Bartlett's X2					3.042	0.0	3.664	9.384	7.383
P(Bartlett's X2)					0.218	.	0.30	0.226	0.597
Skewness					-3.1641*	-3.3795*	-2.6416*	-3.1244*	-1.2055*
Kurtosis					8.9467*	10.0411*	6.1583*	8.8063*	0.5187
Replicate F					0.950	1.000	1.429	0.035	0.085
Replicate Prob(F)					0.3999	0.3816	0.2578	0.9654	0.9185
Treatment F					72.434	223.692	63.619	60.057	60.555
Treatment Prob(F)					0.0001	0.0001	0.0001	0.0001	0.0001

# The Ohio State University

Pest Type	W Weed	W Weed	W Weed	W Weed
Pest Code	AMBTR	AMBEL	CHEAL	AMARE
Pest Scientific Name	Ambrosia trifi>	Ambrosia artem>	Chenopodium al>	Amaranthus ret>
Pest Name	Giant ragweed	Common ragweed	Common lambsqu>	Redroot pigweed
Rating Date	Jul-7-2014	Jul-7-2014	Jul-7-2014	Jul-7-2014
Rating Type	CONTRO	CONTRO	CONTRO	CONTRO
Rating Unit	%	%	%	%
Number of Subsamples	1	1	1	1
SE Group No.	20	21	22	23
Days After First/Last Applic.	72 32	72 32	72 32	72 32
Trt-Eval Interval				
Plant-Eval Interval	72 DP-1	72 DP-1	72 DP-1	72 DP-1
Days After Emergence	56 DE-1	56 DE-1	56 DE-1	56 DE-1
ARM Action Codes	ET1			
Number of Decimals				

Trt No.	Treatment Name	Rate	Rate Unit	Other Rate	Other Rate Unit	Appl Code	20	21	22	23
1	UTC						0.0	0.0	0.0	0.0
2	Sonic	0.35 lb ai/a		8 oz/a		A	73.3	100.0	100.0	100.0
	2 2,4-D Amine	0.5 lb ai/a		1 pt/a		B				
	2 Roundup PowerMax	1.13 lb ae/a		32 oz/a		B				
	2 N PAK AMS	2.5 % v/v		1.5 qt/a		B				
3	Surestart II	1.04 lb ai/a		2 pt/a		A	80.0	100.0	100.0	100.0
	3 2,4-D Amine	0.5 lb ai/a		1 pt/a		B				
	3 Roundup PowerMax	1.13 lb ae/a		32 oz/a		B				
	3 N PAK AMS	2.5 % v/v		1.5 qt/a		B				
4	Valor SX	0.064 lb ai/a		2 oz/a		A	90.0	100.0	100.0	100.0
	4 Clarity	0.5 lb ai/a		16 oz/a		B				
	4 Roundup PowerMax	1.13 lb ae/a		32 oz/a		B				
	4 N PAK AMS	2.5 % v/v		1.5 qt/a		B				
	4 Roundup PowerMax	1.13 lb ae/a		32 oz/a		C				
	4 Warrant	0.94 lb ai/a		1.25 qt/a		C				
	4 N PAK AMS	2.5 % v/v		1.5 qt/a		C				
5	Valor SX	0.064 lb ai/a		2 oz/a		A	98.3	100.0	100.0	100.0
	5 Clarity	0.5 lb ai/a		16 oz/a		B				
	5 Roundup PowerMax	1.13 lb ae/a		32 oz/a		B				
	5 N PAK AMS	2.5 % v/v		1.5 qt/a		B				
	5 Clarity	0.5 lb ai/a		16 oz/a		C				
	5 Roundup PowerMax	1.13 lb ae/a		32 oz/a		C				
	5 Warrant	0.94 lb ai/a		1.25 qt/a		C				
	5 N PAK AMS	2.5 % v/v		1.5 qt/a		C				
6	Valor SX	0.064 lb ai/a		2 oz/a		A	93.3	100.0	100.0	100.0
	6 Clarity	0.5 lb ai/a		16 oz/a		B				
	6 Roundup PowerMax	1.13 lb ae/a		32 oz/a		B				
	6 N PAK AMS	2.5 % v/v		1.5 qt/a		B				
	6 Clarity	0.5 lb ai/a		16 oz/a		C				
	6 Roundup PowerMax	1.13 lb ae/a		32 oz/a		C				
	6 Warrant	0.94 lb ai/a		1.25 qt/a		C				
	6 N PAK AMS	2.5 % v/v		1.5 qt/a		C				
7	Prefix	1.32 lb ai/a		2 pt/a		A	90.0	100.0	100.0	100.0
	7 Hallex GT	1.97 lb ai/a		3.6 pt/a		B				
	7 N PAK AMS	2.5 % v/v		1.5 qt/a		B				

# The Ohio State University

Pest Type	W Weed	W Weed	W Weed	W Weed
Pest Code	AMBTR	AMBEL	CHEAL	AMARE
Pest Scientific Name	Ambrosia trifid>	Ambrosia artem>	Chenopodium al>	Amaranthus ret>
Pest Name	Giant ragweed	Common ragweed	Common lambsqu>	Redroot pigweed
Rating Date	Jul-7-2014	Jul-7-2014	Jul-7-2014	Jul-7-2014
Rating Type	CONTRO	CONTRO	CONTRO	CONTRO
Rating Unit	%	%	%	%
Number of Subsamples	1	1	1	1
SE Group No.	20	21	22	23
Days After First/Last Applic.	72 32	72 32	72 32	72 32
Trt-Eval Interval				
Plant-Eval Interval	72 DP-1	72 DP-1	72 DP-1	72 DP-1
Days After Emergence	56 DE-1	56 DE-1	56 DE-1	56 DE-1
ARM Action Codes	ET1			
Number of Decimals				

Trt No.	Treatment Name	Rate	Unit	Other Rate	Other Unit	Appl Code	20	21	22	23
8	Zemax	1.88 lb ai/a		2 qt/a		A	73.3	100.0	100.0	100.0
8	Reflex	0.25 lb ai/a		1 pt/a		A				
8	Liberty	0.66 lb ai/a		36 oz/a		B				
8	Dual II Magnum	0.955 lb ai/a		1 pt/a		B				
8	N PAK AMS	2.5 % v/v		1.5 qt/a		B				
9	Zidua	0.08 lb ai/a		1.5 oz/a		A	97.3	100.0	98.3	100.0
9	Sharpen	0.0223 lb ai/a		1 oz/a		A				
9	Clarity	0.5 lb ai/a		16 oz/a		B				
9	Roundup PowerMax	1.13 lb ae/a		32 oz/a		B				
9	N PAK AMS	2.5 % v/v		1.5 qt/a		B				
10	Optill	0.085 lb ai/a		2 oz/a		A	86.7	100.0	100.0	100.0
10	Clarity	0.5 lb ai/a		16 oz/a		B				
10	Roundup PowerMax	1.13 lb ae/a		32 oz/a		B				
10	N PAK AMS	2.5 % v/v		1.5 qt/a		B				
11	Balance Bean	0.094 lb ai/a		3 oz/a		A	65.0	100.0	100.0	100.0
11	Zidua	0.08 lb ai/a		1.5 oz/a		A				
11	Liberty	0.53 lb ai/a		29 oz/a		B				
11	Zidua	0.08 lb ai/a		1.5 oz/a		B				
11	N PAK AMS	2.5 % v/v		1.5 qt/a		B				
12	Balance Bean	0.094 lb ai/a		3 oz/a		A	76.0	100.0	100.0	100.0
12	Valor SX	0.048 lb ai/a		1.5 oz/a		A				
12	Liberty	0.53 lb ai/a		29 oz/a		B				
12	Zidua	0.08 lb ai/a		1.5 oz/a		B				
12	N PAK AMS	2.5 % v/v		1.5 qt/a		B				
13	Balance Bean	0.094 lb ai/a		3 oz/a		A	85.7	100.0	100.0	100.0
13	Sencor DF	0.375 lb ai/a		8 oz/a		A				
13	Liberty	0.53 lb ai/a		29 oz/a		B				
13	Zidua	0.08 lb ai/a		1.5 oz/a		B				
13	N PAK AMS	2.5 % v/v		1.5 qt/a		B				
14	Balance Bean	0.0625 lb ai/a		2 oz/a		A	93.3	100.0	100.0	100.0
14	Sencor DF	0.25 lb ai/a		5.33 oz/a		A				
14	Liberty	0.53 lb ai/a		29 oz/a		B				
14	Zidua	0.08 lb ai/a		1.5 oz/a		B				
14	N PAK AMS	2.5 % v/v		1.5 qt/a		B				
LSD (P=.05)							17.13	0.00	1.30	0.00
Standard Deviation							10.21	0.00	0.77	0.00
CV							12.96	0.0	0.83	0.0
Bartlett's X2							14.203	0.0	0.0	0.0
P(Bartlett's X2)							0.288	.	.	.
Skewness							-2.0961*	-3.4528*	-3.4476*	-3.4528*
Kurtosis							4.4108*	10.4158*	10.3922*	10.4158*
Replicate F							2.225	0.000	1.000	0.000
Replicate Prob(F)							0.1282	1.0000	0.3816	1.0000
Treatment F							17.674	0.000	3591.770	0.000
Treatment Prob(F)							0.0001	1.0000	0.0001	1.0000

# The Ohio State University

Pest Type	W Weed	W Weed	W Weed
Pest Code	POLPY	ABUTH	HIBTR
Pest Scientific Name	Persicaria pen>	Abutilon theop>	Hibiscus trion>
Pest Name	Pennsylvania s>	velvetleaf	Venice mallow
Rating Date	Jul-7-2014	Jul-7-2014	Jul-7-2014
Rating Type	CONTRO	CONTRO	CONTRO
Rating Unit	%	%	%
Number of Subsamples	1	1	1
SE Group No.	24	25	26
Days After First/Last Applic.	72 32	72 32	72 32
Trt-Eval Interval			
Plant-Eval Interval	72 DP-1	72 DP-1	72 DP-1
Days After Emergence	56 DE-1	56 DE-1	56 DE-1
ARM Action Codes			
Number of Decimals			

Trt No.	Treatment Name	Rate	Rate Unit	Other Rate	Other Rate Unit	Appl Code	24	25	26
1	UTC						0.0	0.0	0.0
2	Sonic	0.35 lb ai/a		8 oz/a		A	100.0	100.0	100.0
	2 2,4-D Amine	0.5 lb ai/a		1 pt/a		B			
	2 Roundup PowerMax	1.13 lb ae/a		32 oz/a		B			
	2 N PAK AMS	2.5 % v/v		1.5 qt/a		B			
3	Surestart II	1.04 lb ai/a		2 pt/a		A	90.0	100.0	94.0
	3 2,4-D Amine	0.5 lb ai/a		1 pt/a		B			
	3 Roundup PowerMax	1.13 lb ae/a		32 oz/a		B			
	3 N PAK AMS	2.5 % v/v		1.5 qt/a		B			
4	Valor SX	0.064 lb ai/a		2 oz/a		A	100.0	100.0	100.0
	4 Clarity	0.5 lb ai/a		16 oz/a		B			
	4 Roundup PowerMax	1.13 lb ae/a		32 oz/a		B			
	4 N PAK AMS	2.5 % v/v		1.5 qt/a		B			
	4 Roundup PowerMax	1.13 lb ae/a		32 oz/a		C			
	4 Warrant	0.94 lb ai/a		1.25 qt/a		C			
	4 N PAK AMS	2.5 % v/v		1.5 qt/a		C			
5	Valor SX	0.064 lb ai/a		2 oz/a		A	100.0	100.0	98.3
	5 Clarity	0.5 lb ai/a		16 oz/a		B			
	5 Roundup PowerMax	1.13 lb ae/a		32 oz/a		B			
	5 N PAK AMS	2.5 % v/v		1.5 qt/a		B			
	5 Clarity	0.5 lb ai/a		16 oz/a		C			
	5 Roundup PowerMax	1.13 lb ae/a		32 oz/a		C			
	5 Warrant	0.94 lb ai/a		1.25 qt/a		C			
	5 N PAK AMS	2.5 % v/v		1.5 qt/a		C			
6	Valor SX	0.064 lb ai/a		2 oz/a		A	100.0	100.0	100.0
	6 Clarity	0.5 lb ai/a		16 oz/a		B			
	6 Roundup PowerMax	1.13 lb ae/a		32 oz/a		B			
	6 N PAK AMS	2.5 % v/v		1.5 qt/a		B			
	6 Clarity	0.5 lb ai/a		16 oz/a		C			
	6 Roundup PowerMax	1.13 lb ae/a		32 oz/a		C			
	6 Warrant	0.94 lb ai/a		1.25 qt/a		C			
	6 N PAK AMS	2.5 % v/v		1.5 qt/a		C			
7	Prefix	1.32 lb ai/a		2 pt/a		A	100.0	100.0	90.0
	7 Hallex GT	1.97 lb ai/a		3.6 pt/a		B			
	7 N PAK AMS	2.5 % v/v		1.5 qt/a		B			

# The Ohio State University

Pest Type	W Weed	W Weed	W Weed
Pest Code	POLPY	ABUTH	HIBTR
Pest Scientific Name	Persicaria pen>	Abutilon theop>	Hibiscus trion>
Pest Name	Pennsylvania s>	velvetleaf	Venice mallow
Rating Date	Jul-7-2014	Jul-7-2014	Jul-7-2014
Rating Type	CONTRO	CONTRO	CONTRO
Rating Unit	%	%	%
Number of Subsamples	1	1	1
SE Group No.	24	25	26
Days After First/Last Applic.	72 32	72 32	72 32
Trt-Eval Interval			
Plant-Eval Interval	72 DP-1	72 DP-1	72 DP-1
Days After Emergence	56 DE-1	56 DE-1	56 DE-1
ARM Action Codes			
Number of Decimals			

Trt Treatment No. Name	Rate	Unit	Other Rate	Other Rate	Unit	Appl Code	24	25	26
8 Zemax	1.88 lb ai/a		2 qt/a			A	100.0	100.0	98.3
8 Reflex	0.25 lb ai/a		1 pt/a			A			
8 Liberty	0.66 lb ai/a		36 oz/a			B			
8 Dual II Magnum	0.955 lb ai/a		1 pt/a			B			
8 N PAK AMS	2.5 % v/v		1.5 qt/a			B			
9 Zidua	0.08 lb ai/a		1.5 oz/a			A	96.7	100.0	96.7
9 Sharpen	0.0223 lb ai/a		1 oz/a			A			
9 Clarity	0.5 lb ai/a		16 oz/a			B			
9 Roundup PowerMax	1.13 lb ae/a		32 oz/a			B			
9 N PAK AMS	2.5 % v/v		1.5 qt/a			B			
10 Optill	0.085 lb ai/a		2 oz/a			A	100.0	100.0	100.0
10 Clarity	0.5 lb ai/a		16 oz/a			B			
10 Roundup PowerMax	1.13 lb ae/a		32 oz/a			B			
10 N PAK AMS	2.5 % v/v		1.5 qt/a			B			
11 Balance Bean	0.094 lb ai/a		3 oz/a			A	100.0	100.0	100.0
11 Zidua	0.08 lb ai/a		1.5 oz/a			A			
11 Liberty	0.53 lb ai/a		29 oz/a			B			
11 Zidua	0.08 lb ai/a		1.5 oz/a			B			
11 N PAK AMS	2.5 % v/v		1.5 qt/a			B			
12 Balance Bean	0.094 lb ai/a		3 oz/a			A	100.0	100.0	100.0
12 Valor SX	0.048 lb ai/a		1.5 oz/a			A			
12 Liberty	0.53 lb ai/a		29 oz/a			B			
12 Zidua	0.08 lb ai/a		1.5 oz/a			B			
12 N PAK AMS	2.5 % v/v		1.5 qt/a			B			
13 Balance Bean	0.094 lb ai/a		3 oz/a			A	100.0	100.0	100.0
13 Sencor DF	0.375 lb ai/a		8 oz/a			A			
13 Liberty	0.53 lb ai/a		29 oz/a			B			
13 Zidua	0.08 lb ai/a		1.5 oz/a			B			
13 N PAK AMS	2.5 % v/v		1.5 qt/a			B			
14 Balance Bean	0.0625 lb ai/a		2 oz/a			A	100.0	100.0	100.0
14 Sencor DF	0.25 lb ai/a		5.33 oz/a			A			
14 Liberty	0.53 lb ai/a		29 oz/a			B			
14 Zidua	0.08 lb ai/a		1.5 oz/a			B			
14 N PAK AMS	2.5 % v/v		1.5 qt/a			B			
LSD (P=.05)							8.29	0.00	3.53
Standard Deviation							4.94	0.00	2.10
CV							5.37	0.0	2.31
Bartlett's X2							2.007	0.0	1.37
P(Bartlett's X2)							0.157	.	0.713
Skewness							-3.285*	-3.4528*	-3.3546*
Kurtosis							9.5222*	10.4158*	9.9607*
Replicate F							0.684	0.000	1.232
Replicate Prob(F)							0.5133	1.0000	0.3083
Treatment F							87.098	0.000	473.236
Treatment Prob(F)							0.0001	1.0000	0.0001

# The Ohio State University

## Weed Control Programs for Balance Bean

Trial ID: 14BalBean                      Location:                      Trial Year: 2014  
Protocol ID: 14BalBean                  Investigator: Dr. Mark M. Loux  
Project ID: HP14USAB4G                Study Director: Anthony Dobbels  
Sponsor Contact: David Lamore, Bayer CropScience

### Pest Type

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

### Pest Code

SETFA, Setaria faberi, = US  
AMBTR, Ambrosia trifida, = US  
AMBEL, Ambrosia artemisiifolia, = US  
CHEAL, Chenopodium album, = US  
AMARE, Amaranthus retroflexus, = US  
POLPY, Persicaria pensylvanica, = US  
ABUTH, Abutilon theophrasti, = US  
HIBTR, Hibiscus trionum, = US  
ECHCG, Echinochloa crus-galli, = US  
SIDSP, Sida spinosa, = US

### Rating Type

CONTRO = control / burndown or knockdown

### Rating Unit

% = percent

### Plant-Eval Interval

30 DP-1 = 1 ZEAMX Apr-26-2014  
52 DP-1 = 1 ZEAMX Apr-26-2014  
72 DP-1 = 1 ZEAMX Apr-26-2014

### ARM Action Codes

AA = Automatic arcsine square root % transformation