

Purdue Weed Science

Balance Bean & Balance GT Demo

Trial ID: 17S-TPAC-SOY-23 Location: TPAC Trial Year: 2017
 Protocol ID: 17S-TPAC-SOY-23 Investigator: Dr. Bill Johnson
 Project ID: HP17USAXP4 Study Director: Dustin Johnson
 Sponsor Contact: A. Kurtz - Bayer

General Trial Information

Study Director: Dustin Johnson **Title:** Research Associate
Investigator: Dr. Bill Johnson **Title:** Professor

Discipline: H herbicide
Trial Status: E established
Initiation Date: May-18-2017

Trial Location

City: Lafayette **Country:** USA United States
State/Prov.: Indiana
Postal Code: 47909

Latitude of LL Corner °: 40.29176 N
Longitude of LL Corner °: 86.90513 W

Conducted Under GLP: No
Conducted Under GEP: No

Contacts

Study Director: Dustin Johnson **Title:** Research Associate
Organization: Purdue University
Address: 915 W. State Street
City+State/Prov: West Lafayette, IN
Postal Code: 47907 **E-mail:** john1357@purdue.edu
Country: USA United States

Investigator: Dr. Bill Johnson **Title:** Professor
Organization: Purdue University
Address: 915 W. State Street
City+State/Prov: West Lafayette, IN
Postal Code: 47907 **E-mail:** wgj@purdue.edu
Country: USA United States

Cooperator/Landowner

Cooperator: Jay Young **Role:** Superintendent
Organization: Purdue University
Address 1: 8343 US 231 S
City: Lafayette **Phone No.:** 765-538-3422
State/Prov: IN **Fax No.:** 765-538-3423
Postal Code: 47909
Country: USA United States **E-mail:** jayyoung@purdue.edu

Crop Description

Crop 1: GLXMA Glycine max Soybean
Variety: BALANCE GT
Description: HPPD/RR
Planting Rate, Unit: 140000 S/A **Planting Date:** May-18-2017
Depth, Unit: 1.25 IN **Planting Method:** PLANTD planted
Row Spacing, Unit: 15 IN **Planting Equipment:** PP Plot Planter
Soil Temperature, Unit: 75 F **Emergence Date:** May-27-2017
Soil Moisture: DRY dry

Pest Description

Pest 1 Type: W **Code:** AMBTR Ambrosia trifida
Common Name: Giant ragweed

Site and Design

Treated Plot Width: 10 FT **Site Type:** FIELD field
Treated Plot Length: 30 FT **Experimental Unit:** 1 PLOT plot
Treated Plot Area: 300 FT2 **Treatments:** 10 **Tillage Type:** CONTIL conventional-till
Replications: 4 **Study Design:** RACOB Randomized Complete Block (RCB)

Soil Description

Description Name: TPAC -Field 4A
% OM: 3.1 **Texture:** SIL silt loam
pH: 6 **Soil Name:** Toronto-Millbrook
CEC: 11.1

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Application Description

	A	B
Application Date:	May-18-2017	Jun-20-2017
Appl. Start Time:	6:28 PM	8:50 AM
Appl. Stop Time:	6:53 PM	9:05 AM
Application Method:	SPRAY	SPRAY
Application Timing:	PREPLA	POSPOS
Application Placement:	BROADC	BROADC
Applied By:	G. DUNCAN	D. JOHNSON
Air Temperature, Unit:	89 F	67 F
% Relative Humidity:	43	74
Wind Velocity, Unit:	12 MPH	5 MPH
Wind Direction:	SW	SSW
Dew Presence (Y/N):	N no	N no
Soil Temperature, Unit:	78 F	64 F
Soil Moisture:	DRY	SLIWET
% Cloud Cover:	35	10

Crop Stage At Each Application

	A	B
Crop 1 Code, BBCH Scale:	GLXMA BSOY	GLXMA BSOY
Stage Scale Used:		BBCH
Stage Majority, Percent:		14
Stage Minimum, Percent:		13
Stage Maximum, Percent:		14
Height, Unit:		5 IN
Height Minimum, Maximum:		3 7

Pest Stage At Each Application

	A	B
Pest 1 Code, Type, Scale:	AMBTR W	AMBTR W
Stage Majority, Percent:		18
Stage Minimum, Percent:		10
Stage Maximum, Percent:		19
Height, Unit:		6 IN
Height Minimum, Maximum:		0.5 14
Density, Unit:		6 FT2

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Application Equipment

	A	B
Appl. Equipment:	CO2 BACKPACK	CO2 BACKPACK
Equipment Type:	BACSPR	BACSPR
Operation Pressure, Unit:	29 PSI	18 PSI
Nozzle Type:	TTI	FLAFXR
Nozzle Size:	110015	XR11002
Nozzle Spacing, Unit:	15 IN	15 IN
Nozzles/Row:	8	8
Boom Length, Unit:	10 FT	10 FT
Boom Height, Unit:	17 IN	17 IN
Ground Speed, Unit:	3 MPH	3 MPH
Carrier:	WATER	WATER
Spray Volume, Unit:	15 GAL/AC	15 GAL/AC
Mix Size, Unit:	1.8 liters	1.8 liters
Propellant:	COMCO2	COMCO2

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Reps: 4 Plots: 10 by 30 feet
 Spray vol: 15 GAL/AC Mix Size: 1.8 liters (1.5642 liters calculated mix size)

Trt No.	Treatment Name	Form Conc	Form Unit	Form Type	Rate	Rate Unit	Growth Stage	Appl Code	Amt Product to Measure	Rep 1	Rep 2	Rep 3	Rep 4
1	UNTREATED CHECK									101	304	603	803
2	BALANCE BEAN	4 LB/GAL		SC	3 fl oz/a		PREPRE	A	2.812 ml/mx	102	305	601	703
	SPARTAN 4F	4 LB/GAL		SC	5 fl oz/a		PREPRE	A	4.687 ml/mx				
	ROUNDUP POWERMAX	4.5 LBAE/GAL		SL	32 fl oz/a		EAPOWE	B	30.0 ml/mx				
	N-PAK AMS	3.4 LBA/GAL		L	2.5 % v/v		EAPOWE	B	45.0 ml/mx				
3	BALANCE BEAN	4 LB/GAL		SC	3 fl oz/a		PREPRE	A	2.812 ml/mx	103	405	602	801
	DUAL II MAGNUM	7.64 LB/GAL		EC	16 fl oz/a		PREPRE	A	15.0 ml/mx				
	ROUNDUP POWERMAX	4.5 LBAE/GAL		SL	32 fl oz/a		EAPOWE	B	30.0 ml/mx				
	N-PAK AMS	3.4 LBA/GAL		L	2.5 % v/v		EAPOWE	B	45.0 ml/mx				
4	BALANCE BEAN	4 LB/GAL		SC	3 fl oz/a		PREPRE	A	2.812 ml/mx	104	401	503	702
	ZIDUA	85 %		WG	1.5 oz/a		PREPRE	A	1.348 g/mx				
	ROUNDUP POWERMAX	4.5 LBAE/GAL		SL	32 fl oz/a		EAPOWE	B	30.0 ml/mx				
	N-PAK AMS	3.4 LBA/GAL		L	2.5 % v/v		EAPOWE	B	45.0 ml/mx				
5	FIERCE	76 %		WG	3 oz/a		PREPRE	A	2.696 g/mx	105	402	501	705
	ROUNDUP POWERMAX	4.5 LBAE/GAL		SL	32 fl oz/a		EAPOWE	B	30.0 ml/mx				
	N-PAK AMS	3.4 LBA/GAL		L	8.5 lb ai/100 gal		EAPOWE	B	45.0 ml/mx				
6	BALANCE BEAN	4 LB/GAL		SC	3 fl oz/a		PREPRE	A	2.812 ml/mx	201	303	605	802
	AUTHORITY FIRST	70 %		DF	4 oz/a		PREPRE	A	3.595 g/mx				
	ROUNDUP POWERMAX	4.5 LBAE/GAL		SL	32 fl oz/a		EAPOWE	B	30.0 ml/mx				
	N-PAK AMS	3.4 LBA/GAL		L	2.5 % v/v		EAPOWE	B	45.0 ml/mx				
7	BALANCE BEAN	4 LB/GAL		SC	3 fl oz/a		PREPRE	A	2.812 ml/mx	202	404	604	701
	TRICOR DF	75 %		DF	5.33 oz/a		PREPRE	A	4.79 g/mx				
	ROUNDUP POWERMAX	4.5 LBAE/GAL		SL	32 fl oz/a		EAPOWE	B	30.0 ml/mx				
	N-PAK AMS	3.4 LBA/GAL		L	2.5 % v/v		EAPOWE	B	45.0 ml/mx				
8	BALANCE BEAN	4 LB/GAL		SC	3 fl oz/a		PREPRE	A	2.812 ml/mx	203	403	502	804
	WARRANT	3 LB/GAL		EC	3 pt/a		PREPRE	A	45.0 ml/mx				
	ROUNDUP POWERMAX	4.5 LBAE/GAL		SL	32 fl oz/a		EAPOWE	B	30.0 ml/mx				
	N-PAK AMS	3.4 LBA/GAL		L	2.5 % v/v		EAPOWE	B	45.0 ml/mx				
9	BALANCE BEAN	4 LB/GAL		SC	3 fl oz/a		PREPRE	A	2.812 ml/mx	204	301	505	805
	VALOR SX	51 %		WG	2 oz/a		PREPRE	A	1.797 g/mx				
	ROUNDUP POWERMAX	4.5 LBAE/GAL		SL	32 fl oz/a		EAPOWE	B	30.0 ml/mx				
	N-PAK AMS	3.4 LBA/GAL		L	2.5 % v/v		EAPOWE	B	45.0 ml/mx				
10	BALANCE BEAN	4 LB/GAL		SC	3 fl oz/a		PREPRE	A	2.812 ml/mx	205	302	504	704
	PREFIX	5.29 LB/GAL		EC	1.5 pt/a		PREPRE	A	22.5 ml/mx				
	ROUNDUP POWERMAX	4.5 LBAE/GAL		SL	32 fl oz/a		EAPOWE	B	30.0 ml/mx				
	N-PAK AMS	3.4 LBA/GAL		L	2.5 % v/v		EAPOWE	B	45.0 ml/mx				

Sort Order: Replicate 1

Product quantities required for listed treatments and applications of trials included in this table:

Amount*	Unit	Treatment Name	Form Conc	Form Unit	Form Type	Lot Code
28.125	ml	BALANCE BEAN	4	LB/GAL	SC	EXP32032A
5.859	ml	SPARTAN 4F	4	LB/GAL	SC	AEFDQM_970313136
337.500	ml	ROUNDUP POWERMAX	4.5	LBAE/GAL	SL	BCADDM_03120101
506.195	ml	N-PAK AMS	3.4	LBA/GAL	L	AEFDQM_970313105
18.750	ml	DUAL II MAGNUM	7.64	LB/GAL	EC	EXP31940A
1.685	g	ZIDUA	85	%	WG	KIH-485 85WG
3.370	g	FIERCE	76	%	WG	BCMOSI_11092303
4.493	g	AUTHORITY FIRST	70	%	DF	BCORKA_AUTHORITY FIRST
5.988	g	TRICOR DF	75	%	DF	EXP31939A
56.250	ml	WARRANT	3	LB/GAL	EC	BCORKA_WARRANT
2.247	g	VALOR SX	51	%	WG	BCROJO_VALOR
28.125	ml	PREFIX	5.29	LB/GAL	EC	BCORKA_PREFIX HERBICIDE

* 'Per area' calculations based on spray volume= 15 GAL/AC, mix size= 1.8 liters (mix size basis).

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Project ID: HP17USAXP4 Study Director: Dustin Johnson
Sponsor Contact: A. Kurtz - Bayer

Product quantities required for listed treatments and applications of trials included in this table:

- * Product amount calculations increased 25 % for overage adjustment.
- * 'Per volume' calculations use spray volume= 15 GAL/AC, mix size= 1.8 liters.

Trial Comments

6/20/17- Threw out 402 & 501 plot ratings of 6/9 & 6/20 due to inconsistency.

6/20/17-Applied Application B later than weed size specified due to majority of plots being clean. Sprayed untreated checks 603 & 803 by mistake during Applicaiton B.

7/28/17-Soybeans mowed off.

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Pest Type	W Weed	W Weed	W Weed	W Weed	W Weed		
Pest Code	AMBTR	AMBTR	AMBTR	AMBTR	AMBTR		
Pest Name	Giant ragweed	Giant ragweed	Giant ragweed	Giant ragweed	Giant ragweed		
Crop Code	GLXMA	GLXMA	GLXMA	GLXMA	GLXMA		
Crop Name	Soybean	Soybean	Soybean	Soybean	Soybean		
Part Rated	PLOT -	PLOT -	PLOT -	PLOT -	PLOT -		
Rating Date	Jun-9-2017	Jun-9-2017	Jun-20-2017	Jun-20-2017	Jul-3-2017		
Rating Type	CONTROL	PHYGEN	CONTROL	PHYGEN	CONTROL		
Rating Unit	%	%	%	%	%		
Number of Subsamples	1	1	1	1	1		
Assessed By	D. JOHNSON	D. JOHNSON	D. JOHNSON	D. JOHNSON	D. JOHNSON		
Rating Timing	A1	A1	A2	A2	A3		
Days After First/Last Applic.	22 22	22 22	33 33	33 33	46 13		
Trt-Eval Interval	22 DA-A	22 DA-A	22 DA-A	22 DA-A	22 DA-A		
Days After Emergence	13 DE-1	13 DE-1	24 DE-1	24 DE-1	37 DE-1		
ARM Action Codes	P	P	P	P	P		
Number of Decimals	0	0	0	0	0		
Trt Treatment	Rate	Appl					
No. Name	Rate Unit	Code	1	2	3	4	5
1 UNTREATED CHECK			0 b	0 a	0 b	0 a	0 b
2 BALANCE BEAN	3 fl oz/a	A	95 a	0 a	82 a	0 a	99 a
SPARTAN 4F	5 fl oz/a	A					
ROUNDUP POWERMAX	32 fl oz/a	B					
N-PAK AMS	2.5 % v/v	B					
3 BALANCE BEAN	3 fl oz/a	A	97 a	0 a	89 a	0 a	96 a
DUAL II MAGNUM	16 fl oz/a	A					
ROUNDUP POWERMAX	32 fl oz/a	B					
N-PAK AMS	2.5 % v/v	B					
4 BALANCE BEAN	3 fl oz/a	A	99 a	0 a	85 a	0 a	96 a
ZIDUA	1.5 oz/a	A					
ROUNDUP POWERMAX	32 fl oz/a	B					
N-PAK AMS	2.5 % v/v	B					
5 FIERCE	3 oz/a	A	95 a	0 a	79 a	0 a	89 a
ROUNDUP POWERMAX	32 fl oz/a	B					
N-PAK AMS	8.5 lb ai/100 gal	B					
6 BALANCE BEAN	3 fl oz/a	A	95 a	0 a	85 a	0 a	95 a
AUTHORITY FIRST	4 oz/a	A					
ROUNDUP POWERMAX	32 fl oz/a	B					
N-PAK AMS	2.5 % v/v	B					
7 BALANCE BEAN	3 fl oz/a	A	97 a	0 a	90 a	0 a	91 a
TRICOR DF	5.33 oz/a	A					
ROUNDUP POWERMAX	32 fl oz/a	B					
N-PAK AMS	2.5 % v/v	B					
8 BALANCE BEAN	3 fl oz/a	A	97 a	0 a	86 a	0 a	95 a
WARRANT	3 pt/a	A					
ROUNDUP POWERMAX	32 fl oz/a	B					
N-PAK AMS	2.5 % v/v	B					
9 BALANCE BEAN	3 fl oz/a	A	98 a	0 a	87 a	0 a	93 a
VALOR SX	2 oz/a	A					
ROUNDUP POWERMAX	32 fl oz/a	B					
N-PAK AMS	2.5 % v/v	B					

Means followed by same letter or symbol do not significantly differ (P=.05, Student-Newman-Keuls)
 Mean comparisons performed only when AOV Treatment P(F) is significant at mean comparison OSL.
 Missing data estimates are included in columns: Average=1,3
 Could not calculate LSD (% mean diff) for columns 2,4 because error mean square = 0.

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 Sponsor Contact: A. Kurtz - Bayer

Pest Type	W Weed	W Weed	W Weed	W Weed	W Weed
Pest Code	AMBTR	AMBTR	AMBTR	AMBTR	AMBTR
Pest Name	Giant ragweed	Giant ragweed	Giant ragweed	Giant ragweed	Giant ragweed
Crop Code	GLXMA	GLXMA	GLXMA	GLXMA	GLXMA
Crop Name	Soybean	Soybean	Soybean	Soybean	Soybean
Part Rated	PLOT -	PLOT -	PLOT -	PLOT -	PLOT -
Rating Date	Jun-9-2017	Jun-9-2017	Jun-20-2017	Jun-20-2017	Jul-3-2017
Rating Type	CONTROL	PHYGEN	CONTROL	PHYGEN	CONTROL
Rating Unit	%	%	%	%	%
Number of Subsamples	1	1	1	1	1
Assessed By	D. JOHNSON	D. JOHNSON	D. JOHNSON	D. JOHNSON	D. JOHNSON
Rating Timing	A1	A1	A2	A2	A3
Days After First/Last Applic.	22 22	22 22	33 33	33 33	46 13
Trt-Eval Interval	22 DA-A	22 DA-A	22 DA-A	22 DA-A	22 DA-A
Days After Emergence	13 DE-1	13 DE-1	24 DE-1	24 DE-1	37 DE-1
ARM Action Codes	P	P	P	P	P
Number of Decimals	0	0	0	0	0
Trt Treatment	Rate	Appl			
No. Name	Rate Unit	Code	1	2	3
10 BALANCE BEAN	3 fl oz/a	A	98 a	0 a	89 a
PREFIX	1.5 pt/a	A			0 a
ROUNDUP POWERMAX	32 fl oz/a	B			
N-PAK AMS	2.5 % v/v	B			93 a
LSD P=.05	6.7	.	16.7	.	11.1
Standard Deviation	4.6	0.0	11.5	0.0	7.6
CV	5.31	0.0	14.88	0.0	9.01
Bartlett's X2	5.915	0.0	3.581	0.0	4.987
P(Bartlett's X2)	0.657	.	0.893	.	0.759
Skewness	-2.5895*	.	-2.1198*	.	-2.4901*
Kurtosis	5.1603*	.	3.5298*	.	4.9786*
Replicate F	0.514	0.000	0.395	0.000	0.577
Replicate Prob(F)	0.6762	1.0000	0.7576	1.0000	0.6353
Treatment F	175.410	0.000	22.642	0.000	61.378
Treatment Prob(F)	0.0001	1.0000	0.0001	1.0000	0.0001

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Sponsor Contact: A. Kurtz - Bayer	

Pest Type				W Weed
Pest Code				AMBTR
Pest Name				Giant ragweed
Crop Code				GLXMA
Crop Name				Soybean
Part Rated				PLOT -
Rating Date				Jul-19-2017
Rating Type				CONTROL
Rating Unit				%
Number of Subsamples				1
Assessed By				D. JOHNSON
Rating Timing				A4
Days After First/Last Applic.				62 29
Trt-Eval Interval				22 DA-A
Days After Emergence				53 DE-1
ARM Action Codes				P
Number of Decimals				0
Trt Treatment	Rate	Appl		
No. Name	Rate Unit	Code		6
1 UNTREATED CHECK				0 b
2 BALANCE BEAN	3 fl oz/a	A		96 a
SPARTAN 4F	5 fl oz/a	A		
ROUNDUP POWERMAX	32 fl oz/a	B		
N-PAK AMS	2.5 % v/v	B		
3 BALANCE BEAN	3 fl oz/a	A		96 a
DUAL II MAGNUM	16 fl oz/a	A		
ROUNDUP POWERMAX	32 fl oz/a	B		
N-PAK AMS	2.5 % v/v	B		
4 BALANCE BEAN	3 fl oz/a	A		96 a
ZIDUA	1.5 oz/a	A		
ROUNDUP POWERMAX	32 fl oz/a	B		
N-PAK AMS	2.5 % v/v	B		
5 FIERCE	3 oz/a	A		86 a
ROUNDUP POWERMAX	32 fl oz/a	B		
N-PAK AMS	8.5 lb ai/100 gal	B		
6 BALANCE BEAN	3 fl oz/a	A		100 a
AUTHORITY FIRST	4 oz/a	A		
ROUNDUP POWERMAX	32 fl oz/a	B		
N-PAK AMS	2.5 % v/v	B		
7 BALANCE BEAN	3 fl oz/a	A		95 a
TRICOR DF	5.33 oz/a	A		
ROUNDUP POWERMAX	32 fl oz/a	B		
N-PAK AMS	2.5 % v/v	B		
8 BALANCE BEAN	3 fl oz/a	A		98 a
WARRANT	3 pt/a	A		
ROUNDUP POWERMAX	32 fl oz/a	B		
N-PAK AMS	2.5 % v/v	B		
9 BALANCE BEAN	3 fl oz/a	A		94 a
VALOR SX	2 oz/a	A		
ROUNDUP POWERMAX	32 fl oz/a	B		
N-PAK AMS	2.5 % v/v	B		

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Sponsor Contact: A. Kurtz - Bayer			
Pest Type	W Weed		
Pest Code	AMBTR		
Pest Name	Giant ragweed		
Crop Code	GLXMA		
Crop Name	Soybean		
Part Rated	PLOT -		
Rating Date	Jul-19-2017		
Rating Type	CONTROL		
Rating Unit	%		
Number of Subsamples	1		
Assessed By	D. JOHNSON		
Rating Timing	A4		
Days After First/Last Applic.	62 29		
Trt-Eval Interval	22 DA-A		
Days After Emergence	53 DE-1		
ARM Action Codes	P		
Number of Decimals	0		
Trt No.	Treatment Name	Rate Rate Unit	Appl Code
			6
10	BALANCE BEAN	3 fl oz/a	A
	PREFIX	1.5 pt/a	A
	ROUNDUP POWERMAX	32 fl oz/a	B
	N-PAK AMS	2.5 % v/v	B
			98 a
LSD P=.05	8.6		
Standard Deviation	5.9		
CV	6.9		
Bartlett's X2	13.476		
P(Bartlett's X2)	0.096		
Skewness	-2.5625*		
Kurtosis	5.2281*		
Replicate F	0.497		
Replicate Prob(F)	0.6877		
Treatment F	105.256		
Treatment Prob(F)	0.0001		

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Pest Type

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

Pest Code

AMBTR, Ambrosia trifida, Giant ragweed = US

Crop Code

GLXMA, BSOY, Glycine max, Soybean = US

Part Rated

PLOT = plot

Rating Type

PHYGEN = phytotoxicity - general / injury

Rating Unit

% = percent

Rating Timing

A1 = 1st Assessment According to Trial Schedule

A2 = 2nd Assessment According to trial Schedule

A3 = 3rd Assessment According to Trial Schedule

A4 = 4th Assessment According to Trial Schedule

ARM Action Codes

P = Rating scale of 0 to 100 (e.g. % control or injury)

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Sponsor Contact: A. Kurtz - Bayer	

			W Weed AMBTR Giant ragweed	GLXMA Soybean	W Weed AMBTR Giant ragweed	GLXMA Soybean	W Weed AMBTR Giant ragweed	GLXMA Soybean
Pest Type	Pest Code	Pest Name	GLXMA	Soybean	GLXMA	Soybean	GLXMA	Soybean
Crop Code	Crop Name	Part Rated	PLOT -	PLOT -	PLOT -	PLOT -	PLOT -	PLOT -
Rating Date	Rating Type	Rating Unit	Jun-9-2017	Jun-9-2017	Jun-20-2017	Jun-20-2017	Jun-20-2017	Jul-3-2017
Number of Subsamples	Assessed By	Rating Timing	CONTROL	PHYGEN	CONTROL	PHYGEN	CONTROL	CONTROL
ARM Action Codes	Number of Decimals	Trt Treatment	%	%	%	%	%	%
Number of Decimals	Rate	Appl	1	1	1	1	1	1
No. Name	Rate Unit	Code Plot	0	0	0	0	0	0
1 UNTREATED CHECK		101	0	0	0	0	0	0
		304	0	0	0	0	0	0
		603	0	0	0	0	0	0
		803	0	0	0	0	0	0
		Mean =	0	0	0	0	0	0
2 BALANCE BEAN	3 fl oz/a	A 102	95	0	87	0	95	95
SPARTAN 4F	5 fl oz/a	A 305	100	0	95	0	100	100
ROUNDUP POWERMAX	32 fl oz/a	B 601	85	0	55	0	100	100
N-PAK AMS	2.5 % v/v	B 703	100	0	90	0	100	100
		Mean =	95	0	82	0	99	99
3 BALANCE BEAN	3 fl oz/a	A 103	100	0	95	0	100	100
DUAL II MAGNUM	16 fl oz/a	A 405	100	0	95	0	85	85
ROUNDUP POWERMAX	32 fl oz/a	B 602	95	0	90	0	100	100
N-PAK AMS	2.5 % v/v	B 801	92	0	75	0	100	100
		Mean =	97	0	89	0	96	96
4 BALANCE BEAN	3 fl oz/a	A 104	97	0	93	0	100	100
ZIDUA	1.5 oz/a	A 401	100	0	88	0	100	100
ROUNDUP POWERMAX	32 fl oz/a	B 503	100	0	85	0	100	100
N-PAK AMS	2.5 % v/v	B 702	100	0	75	0	85	85
		Mean =	99	0	85	0	96	96
5 FIERCE	3 oz/a	A 105	90	0	70	0	80	80
ROUNDUP POWERMAX	32 fl oz/a	B 402	95*	0	79*	0	95	95
N-PAK AMS	8.5 lb ai/100 gal	B 501	95*	0	79*	0	85	85
		705	100	0	88	0	97	97
		Mean =	95	0	79	0	89	89
6 BALANCE BEAN	3 fl oz/a	A 201	92	0	85	0	100	100
AUTHORITY FIRST	4 oz/a	A 303	99	0	90	0	100	100
ROUNDUP POWERMAX	32 fl oz/a	B 605	100	0	90	0	80	80
N-PAK AMS	2.5 % v/v	B 802	90	0	75	0	100	100
		Mean =	95	0	85	0	95	95
7 BALANCE BEAN	3 fl oz/a	A 202	95	0	82	0	100	100
TRICOR DF	5.33 oz/a	A 404	100	0	97	0	80	80
ROUNDUP POWERMAX	32 fl oz/a	B 604	100	0	100	0	100	100
N-PAK AMS	2.5 % v/v	B 701	92	0	80	0	85	85
		Mean =	97	0	90	0	91	91
8 BALANCE BEAN	3 fl oz/a	A 203	99	0	95	0	100	100
WARRANT	3 pt/a	A 403	100	0	85	0	95	95
ROUNDUP POWERMAX	32 fl oz/a	B 502	92	0	70	0	85	85
N-PAK AMS	2.5 % v/v	B 804	95	0	95	0	100	100
		Mean =	97	0	86	0	95	95
9 BALANCE BEAN	3 fl oz/a	A 204	100	0	97	0	90	90
VALOR SX	2 oz/a	A 301	100	0	70	0	85	85
ROUNDUP POWERMAX	32 fl oz/a	B 505	100	0	95	0	100	100
N-PAK AMS	2.5 % v/v	B 805	90	0	85	0	95	95
		Mean =	98	0	87	0	93	93
10 BALANCE BEAN	3 fl oz/a	A 205	100	0	100	0	95	95
PREFIX	1.5 pt/a	A 302	90	0	70	0	80	80
ROUNDUP POWERMAX	32 fl oz/a	B 504	100	0	95	0	100	100
N-PAK AMS	2.5 % v/v	B 704	100	0	90	0	95	95
		Mean =	98	0	89	0	93	93

Purdue Weed Science

Balance Bean & Balance GT Demo

Trial ID: 17S-TPAC-SOY-23 Location: TPAC Trial Year: 2017
 Protocol ID: 17S-TPAC-SOY-23 Investigator: Dr. Bill Johnson
 Project ID: HP17USAXP4 Study Director: Dustin Johnson
 Sponsor Contact: A. Kurtz - Bayer

Pest Type				W Weed
Pest Code				AMBTR
Pest Name				Giant ragweed
Crop Code				GLXMA
Crop Name				Soybean
Part Rated				PLOT -
Rating Date				Jul-19-2017
Rating Type				CONTROL
Rating Unit				%
Number of Subsamples				1
Assessed By				D. JOHNSON
Rating Timing				A4
Days After First/Last Applic.				62 29
Trt-Eval Interval				22 DA-A
Days After Emergence				53 DE-1
ARM Action Codes				P
Number of Decimals				0
Trt Treatment	Rate	Appl		
No. Name	Rate Unit	Code Plot		6
1 UNTREATED CHECK		101		0
		304		0
		603		0
		803		0
		Mean =		0
2 BALANCE BEAN	3 fl oz/a	A 102		97
SPARTAN 4F	5 fl oz/a	A 305		100
ROUNDUP POWERMAX	32 fl oz/a	B 601		85
N-PAK AMS	2.5 % v/v	B 703		100
		Mean =		96
3 BALANCE BEAN	3 fl oz/a	A 103		100
DUAL II MAGNUM	16 fl oz/a	A 405		100
ROUNDUP POWERMAX	32 fl oz/a	B 602		100
N-PAK AMS	2.5 % v/v	B 801		85
		Mean =		96
4 BALANCE BEAN	3 fl oz/a	A 104		100
ZIDUA	1.5 oz/a	A 401		95
ROUNDUP POWERMAX	32 fl oz/a	B 503		100
N-PAK AMS	2.5 % v/v	B 702		90
		Mean =		96
5 FIERCE	3 oz/a	A 105		85
ROUNDUP POWERMAX	32 fl oz/a	B 402		80
N-PAK AMS	8.5 lb ai/100 gal	B 501		85
		705		95
		Mean =		86
6 BALANCE BEAN	3 fl oz/a	A 201		99
AUTHORITY FIRST	4 oz/a	A 303		100
ROUNDUP POWERMAX	32 fl oz/a	B 605		100
N-PAK AMS	2.5 % v/v	B 802		100
		Mean =		100
7 BALANCE BEAN	3 fl oz/a	A 202		95
TRICOR DF	5.33 oz/a	A 404		100
ROUNDUP POWERMAX	32 fl oz/a	B 604		100
N-PAK AMS	2.5 % v/v	B 701		85
		Mean =		95
8 BALANCE BEAN	3 fl oz/a	A 203		100
WARRANT	3 pt/a	A 403		100
ROUNDUP POWERMAX	32 fl oz/a	B 502		92
N-PAK AMS	2.5 % v/v	B 804		100
		Mean =		98
9 BALANCE BEAN	3 fl oz/a	A 204		100
VALOR SX	2 oz/a	A 301		82
ROUNDUP POWERMAX	32 fl oz/a	B 505		100
N-PAK AMS	2.5 % v/v	B 805		95
		Mean =		94
10 BALANCE BEAN	3 fl oz/a	A 205		100
PREFIX	1.5 pt/a	A 302		90
ROUNDUP POWERMAX	32 fl oz/a	B 504		100
N-PAK AMS	2.5 % v/v	B 704		100
		Mean =		98

Purdue Weed Science

Balance Bean & Balance GT Demo

Trial ID: 17S-TPAC-SOY-23 Location: TPAC Trial Year: 2017
Protocol ID: 17S-TPAC-SOY-23 Investigator: Dr. Bill Johnson
Project ID: HP17USAXP4 Study Director: Dustin Johnson
Sponsor Contact: A. Kurtz - Bayer

Pest Type

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

Pest Code

AMBTR, Ambrosia trifida, Giant ragweed = US

Crop Code

GLXMA, BSOY, Glycine max, Soybean = US

Part Rated

PLOT = plot

Rating Type

PHYGEN = phytotoxicity - general / injury

Rating Unit

% = percent

Rating Timing

A1 = 1st Assessment According to Trial Schedule

A2 = 2nd Assessment According to trial Schedule

A3 = 3rd Assessment According to Trial Schedule

A4 = 4th Assessment According to Trial Schedule

ARM Action Codes

P = Rating scale of 0 to 100 (e.g. % control or injury)