

Purdue Weed Science

Xtend Soybean Herbicide Programs		
Trial ID: 18S-TPAC-SOY-24	Location: TPAC	Trial Year: 2018
Protocol ID: 18S-TPAC-SOY-24	Investigator: Dr. Bill Johnson	
Project ID: H052DCAD-2018US	Study Director: Dustin Johnson	
	Sponsor Contact: C. Threewits - Syngenta	

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-7-2018	
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 °: 86.90978 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	
State/Prov: IN	Phone No.: 765-538-3422
Postal Code: 47909	Fax No.: 765-538-3423
Country: USA United States	
E-mail: jayyoung@purdue.edu	

Crop Description	
Crop 1: GLXMA	Glycine max Soybean
Variety: XTEND AG30X6	
Description: DICAMBA/RR	
Planting Date: May-7-2018	
Planting Method: PLANTD planted	
Planting Rate, Unit: 155000 S/A	Planting Equipment: PP plot planter
Depth, Unit: 1.5 IN	Emergence Date: May-16-2018
Row Spacing, Unit: 15 IN	
Rows per Plot: 7	
Soil Temperature, Unit: 72 F	
Soil Moisture: DRY dry	

Pest Description	
Pest 1 Type: W	Code: AMBTR Ambrosia trifida
Common Name: Giant ragweed	
Pest 2 Type: W	Code: SETFA Setaria faberi
Common Name: Giant foxtail	

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: 11
Replications: 4	Tillage Type: CONTIL conventional-till
	Study Design: RACOB� Randomized Complete Block (RCB)

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Soil Description

Description Name: TPAC- Field 4B
% OM: 2.9 **Texture:** SIL silt loam
pH: 6.2 **Soil Name:** Toronto-Millbrook
CEC: 13.3

Application Description

	A	B
Application Date:	May-8-2018	Jun-8-2018
Appl. Start Time:	12:40 PM	3:00 PM
Appl. Stop Time:	1:10 PM	3:20 PM
Application Method:	SPRAY	SPRAY
Application Timing:	PREPRE	PREPRE
Application Placement:	BROADC	BROADC
Applied By:	M. ZIMMER	D. JOHNSON
Air Temperature, Unit:	81 F	85 F
% Relative Humidity:	34	57
Wind Velocity, Unit:	5 MPH	6 MPH
Wind Direction:	E	NNE
Dew Presence (Y/N):	N no	N no
Soil Temperature, Unit:	67 F	80 F
Soil Moisture:	DRY	DRY
% Cloud Cover:	0	40

Crop Stage At Each Application

	A	B
Crop 1 Code, BBCH Scale:	GLXMA BSOY	GLXMA BSOY
Stage Scale Used:	BBCH	BBCH
Stage Majority, Percent:	00	13
Stage Minimum, Percent:	00	12
Stage Maximum, Percent:	00	14
Height, Unit:		6 IN
Height Minimum, Maximum:		4 8

Pest Stage At Each Application

	A	B
Pest 1 Code, Type, Scale:	AMBTR W	AMBTR W
Stage Majority, Percent:	00	19
Stage Minimum, Percent:	00	10
Stage Maximum, Percent:	00	19
Height, Unit:		3.5 IN
Height Minimum, Maximum:		0.5 14
Density, Unit:		18 FT2
Pest 2 Code, Type, Scale:	SETFA W	SETFA W
Stage Majority, Percent:	00	15
Stage Minimum, Percent:	00	11
Stage Maximum, Percent:	00	19
Height, Unit:		3 IN
Height Minimum, Maximum:		0.5 6
Density, Unit:		3 FT2

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Application Equipment

	A	B
Appl. Equipment:	CO2 BACKPACK	CO2 BACKPACK
Equipment Type:	BACSPR	BACSPR
Operation Pressure, Unit:	29 PSI	29 PSI
Nozzle Type:	TTI	TTI
Nozzle Size:	110015	110015
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 L	1.8 L
Propellant:	COMCO2	COMCO2

Trt No Treatment Application Comment

5 Plot number 602 treatment 5 and plot number 702 treatment 8 were switch.
5 6/8/18 Post treatment of Flexstar was not applied instead blanket of Tavium and Roundup Powermax was applied.
1 6/8/18 Untreated check plot 506 was sprayed with Tavium and Roundup Powermax.

Date By Notes

Jun-8-2018 D. JOHNSON Evening storm on brought hail and damage to crop occurred. After application a rain shower occurred at 4:30pm.

Trial Comments

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Xtend Soybean Herbicide Programs	
Trial ID: 18S-TPAC-SOY-24	Location: TPAC
Protocol ID: 18S-TPAC-SOY-24	Trial Year: 2018
Project ID: H052DCAD-2018US	Investigator: Dr. Bill Johnson
	Study Director: Dustin Johnson
	Sponsor Contact: C. Threewits - Syngenta

Reps: 4 Plots: 10 by 30 feet
 Spray vol: 15 GAL/AC Mix Size: 1.8 L (total for 4 plots; minimum=1.564 L)

Trt No.	Treatment Name	Form Conc	Form Unit	Form Type	Rate	Rate Unit	Appl Code	Appl Description	Amt Product to Measure	Rep 1	Rep 2	Rep 3	Rep 4
1	UNTREATED CHECK									101	302	506	703
2	BOUNDARY	6.5 LB/GAL		EC	1.5 pt/a		A	AT PLANTING	22.5 mL/mx	102	206	505	706
	CANOPY @ 2.25 OZ/A	75 %		DG			A	AT PLANTING					
	METRIBUZIN	75 %		DG	1.93 oz/a		A	AT PLANTING	1.734 g/mx				
	CLASSIC	25 %		DG	0.96 oz/a		A	AT PLANTING	0.8627 g/mx				
	TAVIUM	3.39 LB/GAL		CS	56.5 fl oz/a		B	16-24" WEEDS	52.97 mL/mx				
	ROUNDUP POWERMAX	4.5 LBAE/GAL		SL	26 fl oz/a		B	16-24" WEEDS	24.37 mL/mx				
	AG16098	100 %		L	0.5 % v/v		B	16-24" WEEDS	8.999 mL/mx				
	CLASS ACT RIDION	100 %		L	1 % v/v		B	16-24" WEEDS	18.0 mL/mx				
3	BOUNDARY	6.5 LB/GAL		EC	1.8 pt/a		A	AT PLANTING	27.0 mL/mx	103	402	601	606
	XTENDIMAX	2.9 LBAE/GAL		SL	22 fl oz/a		A	AT PLANTING	20.62 mL/mx				
	TAVIUM	3.39 LB/GAL		CS	56.5 fl oz/a		B	16-24" WEEDS	52.97 mL/mx				
	ROUNDUP POWERMAX	4.5 LBAE/GAL		SL	26 fl oz/a		B	16-24" WEEDS	24.37 mL/mx				
	AG16098	100 %		L	0.5 % v/v		B	16-24" WEEDS	8.999 mL/mx				
	CLASS ACT RIDION	100 %		L	1 % v/v		B	16-24" WEEDS	18.0 mL/mx				
4	BOUNDARY	6.5 LB/GAL		EC	1.8 pt/a		A	AT PLANTING	27.0 mL/mx	104	306	501	704
	FIRSTRATE	84 %		WG	0.5 oz/a		A	AT PLANTING	0.4493 g/mx				
	TAVIUM	3.39 LB/GAL		CS	56.5 fl oz/a		B	16-24" WEEDS	52.97 mL/mx				
	ROUNDUP POWERMAX	4.5 LBAE/GAL		SL	26 fl oz/a		B	16-24" WEEDS	24.37 mL/mx				
	AG16098	100 %		L	0.5 % v/v		B	16-24" WEEDS	8.999 mL/mx				
	CLASS ACT RIDION	100 %		L	1 % v/v		B	16-24" WEEDS	18.0 mL/mx				
5	BOUNDARY	6.5 LB/GAL		EC	1.5 pt/a		A	AT PLANTING	22.5 mL/mx	105	305	602	802
	CANOPY @ 2.25 OZ/A	75 %		DG			A	AT PLANTING					
	METRIBUZIN	75 %		DG	1.93 oz/a		A	AT PLANTING	1.734 g/mx				
	CLASSIC	25 %		DG	0.96 oz/a		A	AT PLANTING	0.8627 g/mx				
	TAVIUM	3.39 LB/GAL		CS	56.5 fl oz/a		B	16-24" WEEDS	52.97 mL/mx				
	ROUNDUP POWERMAX	4.5 LBAE/GAL		SL	26 fl oz/a		B	16-24" WEEDS	24.37 mL/mx				
	AG16098	100 %		L	0.5 % v/v		B	16-24" WEEDS	8.999 mL/mx				
	CLASS ACT RIDION	100 %		L	1 % v/v		B	16-24" WEEDS	18.0 mL/mx				
6	PREFIX	5.29 LB/GAL		EC	2 pt/a		A	AT PLANTING	30.0 mL/mx	106	401	502	605
	CANOPY @ 2.25 OZ/A	75 %		DG			A	AT PLANTING					
	METRIBUZIN	75 %		DG	1.93 oz/a		A	AT PLANTING	1.734 g/mx				
	CLASSIC	25 %		DG	0.96 oz/a		A	AT PLANTING	0.8627 g/mx				
	TAVIUM	3.39 LB/GAL		CS	56.5 fl oz/a		B	16-24" WEEDS	52.97 mL/mx				
	ROUNDUP POWERMAX	4.5 LBAE/GAL		SL	26 fl oz/a		B	16-24" WEEDS	24.37 mL/mx				
	AG16098	100 %		L	0.5 % v/v		B	16-24" WEEDS	8.999 mL/mx				
	CLASS ACT RIDION	100 %		L	1 % v/v		B	16-24" WEEDS	18.0 mL/mx				
7	PREFIX	5.29 LB/GAL		EC	2 pt/a		A	AT PLANTING	30.0 mL/mx	201	404	603	701
	XTENDIMAX	2.9 LBAE/GAL		SL	22 fl oz/a		A	AT PLANTING	20.62 mL/mx				
	TAVIUM	3.39 LB/GAL		CS	56.5 fl oz/a		B	16-24" WEEDS	52.97 mL/mx				
	ROUNDUP POWERMAX	4.5 LBAE/GAL		SL	26 fl oz/a		B	16-24" WEEDS	24.37 mL/mx				
	AG16098	100 %		L	0.5 % v/v		B	16-24" WEEDS	8.999 mL/mx				
	CLASS ACT RIDION	100 %		L	1 % v/v		B	16-24" WEEDS	18.0 mL/mx				
8	TAVIUM	3.39 LB/GAL		CS	56.5 fl oz/a		A	AT PLANTING	52.97 mL/mx	202	303	406	702
	TRICOR 75 DF	75 %		DF	6 oz/a		A	AT PLANTING	5.392 g/mx				
	TAVIUM	3.39 LB/GAL		CS	56.5 fl oz/a		B	16-24" WEEDS	52.97 mL/mx				
	ROUNDUP POWERMAX	4.5 LBAE/GAL		SL	26 fl oz/a		B	16-24" WEEDS	24.37 mL/mx				
	AG16098	100 %		L	0.5 % v/v		B	16-24" WEEDS	8.999 mL/mx				
	CLASS ACT RIDION	100 %		L	1 % v/v		B	16-24" WEEDS	18.0 mL/mx				
9	SONIC	70 %		WG	5 oz/a		A	AT PLANTING	4.493 g/mx	203	304	504	705
	TAVIUM	3.39 LB/GAL		CS	56.5 fl oz/a		B	16-24" WEEDS	52.97 mL/mx				
	ROUNDUP POWERMAX	4.5 LBAE/GAL		SL	26 fl oz/a		B	16-24" WEEDS	24.37 mL/mx				
	AG16098	100 %		L	0.5 % v/v		B	16-24" WEEDS	8.999 mL/mx				
	CLASS ACT RIDION	100 %		L	1 % v/v		B	16-24" WEEDS	18.0 mL/mx				

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Reps: 4 Plots: 10 by 30 feet
Spray vol: 15 GAL/AC Mix Size: 1.8 L (total for 4 plots; minimum=1.564 L)

Trt No.	Treatment Name	Form Conc	Form Unit	Form Type	Rate	Rate Unit	Appl Code	Appl Description	Amt Product to Measure	Rep 1	Rep 2	Rep 3	Rep 4
10	ZIDUA PRO	4.09	LB/GAL	SC	6 fl oz/a	A	A	AT PLANTING	5.625 mL/mx	204	403	405	604
	TAVIUM	3.39	LB/GAL	CS	56.5 fl oz/a	B	B	16-24" WEEDS	52.97 mL/mx				
	ROUNDUP POWERMAX	4.5	LBAE/GAL	SL	26 fl oz/a	B	B	16-24" WEEDS	24.37 mL/mx				
	AG16098	100 %		L	0.5 % v/v	B	B	16-24" WEEDS	8.999 mL/mx				
	CLASS ACT RIDION	100 %		L	1 % v/v	B	B	16-24" WEEDS	18.0 mL/mx				
11	FIERCE	76 %		WG	4 oz/a	A	A	AT PLANTING	3.595 g/mx	205	301	503	801
	TAVIUM	3.39	LB/GAL	CS	56.5 fl oz/a	B	B	16-24" WEEDS	52.97 mL/mx				
	ROUNDUP POWERMAX	4.5	LBAE/GAL	SL	26 fl oz/a	B	B	16-24" WEEDS	24.37 mL/mx				
	AG16098	100 %		L	0.5 % v/v	B	B	16-24" WEEDS	8.999 mL/mx				
	CLASS ACT RIDION	100 %		L	1 % v/v	B	B	16-24" WEEDS	18.0 mL/mx				

Sort Order: Treatment

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Xtend Soybean Herbicide Programs						
Trial ID: 18S-TPAC-SOY-24	Location: TPAC	Trial Year: 2018				
Protocol ID: 18S-TPAC-SOY-24	Investigator: Dr. Bill Johnson					
Project ID: H052DCAD-2018US	Study Director: Dustin Johnson					
Sponsor Contact: C. Threewits - Syngenta						

Pest Type Pest Code Pest Name	W Weed AMBTR Giant ragweed		W Weed AMBTR Giant ragweed		W Weed AMBTR Giant ragweed					
	GLXMA Soybean PLOT -	GLXMA Soybean PLOT -	GLXMA Soybean PLOT -	GLXMA Soybean PLOT -	GLXMA Soybean PLOT -	GLXMA Soybean PLOT -				
Crop Code	GLXMA	GLXMA	GLXMA	GLXMA	GLXMA	GLXMA				
Crop Name	Soybean	Soybean	Soybean	Soybean	Soybean	Soybean				
Part Rated	PLOT -	PLOT -	PLOT -	PLOT -	PLOT -	PLOT -				
Rating Date	May-22-2018	May-22-2018	Jun-5-2018	Jun-5-2018	Jun-22-2018	Jun-22-2018				
Rating Type	PHYGEN	CONTROL	PHYGEN	CONTROL	PHYGEN	CONTROL				
Rating Unit	%	%	%	%	%	%				
Number of Subsamples	1	1	1	1	1	1				
Assessed By	D. JOHNSON	D. JOHNSON	M. ZIMMER	M. ZIMMER	M. ZIMMER	M. ZIMMER				
Rating Timing	A1	A1	A2	A2	A3	A3				
Days After First/Last Applic.	14 14	14 14	28 28	28 28	45 14	45 14				
Trt-Eval Interval	14 DA-A	14 DA-A	14 DA-A	14 DA-A	14 DA-A	14 DA-A				
Days After Emergence	6 DE-1	6 DE-1	20 DE-1	20 DE-1	37 DE-1	37 DE-1				
ARM Action Codes	P	P	P	P	P	P				
Number of Decimals	0	0	0	0	0	0				
Trt No.	Treatment Name	Rate	Appl Unit	Code	1	2	3	4	5	6
1	UNTREATED CHECK				0	0	0	0	0	0
2	BOUNDARY CANOPY @ 2.25 OZ/A METRIBUZIN CLASSIC TAVIUM ROUNDUP POWERMAX AG16098 CLASS ACT RIDION	1.5 pt/a 1.93 oz/a 0.96 oz/a 56.5 fl oz/a 26 fl oz/a 0.5 % v/v 1 % v/v	A A A A B B B B		1 bc	23 b	0 b	11 c	0 b	88 c
3	BOUNDARY XTENDIMAX TAVIUM ROUNDUP POWERMAX AG16098 CLASS ACT RIDION	1.8 pt/a 22 fl oz/a 56.5 fl oz/a 26 fl oz/a 0.5 % v/v 1 % v/v	A A B B B B		0 c	61 a	0 b	70 a	0 b	95 a
4	BOUNDARY FIRSTRATE TAVIUM ROUNDUP POWERMAX AG16098 CLASS ACT RIDION	1.8 pt/a 0.5 oz/a 56.5 fl oz/a 26 fl oz/a 0.5 % v/v 1 % v/v	A A B B B B		0 c	29 b	0 b	33 b	0 b	91 bc
5	BOUNDARY CANOPY @ 2.25 OZ/A METRIBUZIN CLASSIC TAVIUM ROUNDUP POWERMAX AG16098 CLASS ACT RIDION	1.5 pt/a 1.93 oz/a 0.96 oz/a 56.5 fl oz/a 26 fl oz/a 0.5 % v/v 1 % v/v	A A A A B B B B		0 c	33 b	0 b	28 bc	0 b	90 bc
6	PREFIX CANOPY @ 2.25 OZ/A METRIBUZIN CLASSIC TAVIUM ROUNDUP POWERMAX AG16098 CLASS ACT RIDION	2 pt/a 1.93 oz/a 0.96 oz/a 56.5 fl oz/a 26 fl oz/a 0.5 % v/v 1 % v/v	A A A A B B B B		0 c	29 b	0 b	26 bc	0 b	90 bc

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.

Untreated treatment(s) 1 excluded from analysis.

Missing data estimates are included in columns: Yates=2,4

Could not calculate LSD (% mean diff) for columns 7 because error mean square = 0.

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Pest Type			W Weed			W Weed			W Weed		
Pest Code			AMBTR			AMBTR			AMBTR		
Pest Name			Giant ragweed			Giant ragweed			Giant ragweed		
Crop Code			GLXMA	GLXMA	GLXMA	GLXMA	GLXMA	GLXMA	GLXMA	GLXMA	GLXMA
Crop Name			Soybean			Soybean			Soybean		
Part Rated			PLOT -			PLOT -			PLOT -		
Rating Date			May-22-2018	May-22-2018	Jun-5-2018	Jun-5-2018	Jun-22-2018	Jun-22-2018	Jun-22-2018	Jun-22-2018	Jun-22-2018
Rating Type			PHYGEN			PHYGEN			PHYGEN		
Rating Unit			%			%			%		
Number of Subsamples			1			1			1		
Assessed By			D. JOHNSON	D. JOHNSON	M. ZIMMER	M. ZIMMER	M. ZIMMER	M. ZIMMER	M. ZIMMER	M. ZIMMER	M. ZIMMER
Rating Timing			A1			A2			A3		
Days After First/Last Applic.			14 14			28 28			45 14		
Trt-Eval Interval			14 DA-A			14 DA-A			14 DA-A		
Days After Emergence			6 DE-1			20 DE-1			37 DE-1		
ARM Action Codes			P			P			P		
Number of Decimals			0			0			0		
Trt No.	Treatment Name	Rate	Appl Code	1	2	3	4	5	6		
7	PREFIX	2 pt/a	A	1 bc	60 a	0 b	73 a	0 b	95 a		
	XTENDIMAX	22 fl oz/a	A								
	TAVIUM	56.5 fl oz/a	B								
	ROUNDUP POWERMAX	26 fl oz/a	B								
	AG16098	0.5 % v/v	B								
	CLASS ACT RIDION	1 % v/v	B								
8	TAVIUM	56.5 fl oz/a	A	1 bc	58 a	0 b	69 a	0 b	93 ab		
	TRICOR 75 DF	6 oz/a	A								
	TAVIUM	56.5 fl oz/a	B								
	ROUNDUP POWERMAX	26 fl oz/a	B								
	AG16098	0.5 % v/v	B								
	CLASS ACT RIDION	1 % v/v	B								
9	SONIC	5 oz/a	A	2 b	28 b	0 b	20 bc	0 b	90 bc		
	TAVIUM	56.5 fl oz/a	B								
	ROUNDUP POWERMAX	26 fl oz/a	B								
	AG16098	0.5 % v/v	B								
	CLASS ACT RIDION	1 % v/v	B								
10	ZIDUA PRO	6 fl oz/a	A	1 bc	33 b	0 b	34 b	0 b	91 bc		
	TAVIUM	56.5 fl oz/a	B								
	ROUNDUP POWERMAX	26 fl oz/a	B								
	AG16098	0.5 % v/v	B								
	CLASS ACT RIDION	1 % v/v	B								
11	FIERCE	4 oz/a	A	7 a	33 b	2 a	24 bc	2 a	88 c		
	TAVIUM	56.5 fl oz/a	B								
	ROUNDUP POWERMAX	26 fl oz/a	B								
	AG16098	0.5 % v/v	B								
	CLASS ACT RIDION	1 % v/v	B								
LSD P=.05				1.9	15.6	0.4	18.0	0.7	3.3		
Standard Deviation				1.3	10.7	0.3	12.4	0.5	2.3		
CV				97.45	27.85	134.56	32.13	210.82	2.49		
Levene's F				1.651	1.834		1.162		0.929		
Levene's Prob(F)				0.146	0.104		0.355		0.515		
Skewness				1.9771*	0.4151	3.3111*	0.4408	3.3543*	0.1898		
Kurtosis				3.4619*	-0.8499	10.091*	-1.3392	9.7359*	-0.9207		
Replicate F				2.465	1.260	1.000	1.671	1.000	2.001		
Replicate Prob(F)				0.0839	0.3085	0.4079	0.1977	0.4079	0.1376		
Treatment F				10.745	7.928	22.091	13.534	9.000	4.649		
Treatment Prob(F)				0.0001	0.0001	0.0001	0.0001	0.0001	0.0009		

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.

Untreated treatment(s) 1 excluded from analysis.

Missing data estimates are included in columns: Yates=2,4

Could not calculate LSD (% mean diff) for columns 7 because error mean square = 0.

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Trt No.	Treatment Name	Rate	Appl Unit	Code	7	8	9
1	UNTREATED CHECK				0	0	0
2	BOUNDARY CANOPY @ 2.25 OZ/A METRIBUZIN CLASSIC TAVIUM ROUNDUP POWERMAX AG16098 CLASS ACT RIDION	1.5 pt/a 1.93 oz/a 0.96 oz/a 56.5 fl oz/a 26 fl oz/a 0.5 % v/v 1 % v/v	A A A B B B B		0 -	91 c	96 -
3	BOUNDARY XTENDIMAX TAVIUM ROUNDUP POWERMAX AG16098 CLASS ACT RIDION	1.8 pt/a 22 fl oz/a 56.5 fl oz/a 26 fl oz/a 0.5 % v/v 1 % v/v	A A B B B B		0 -	94 b	98 -
4	BOUNDARY FIRSTRATE TAVIUM ROUNDUP POWERMAX AG16098 CLASS ACT RIDION	1.8 pt/a 0.5 oz/a 56.5 fl oz/a 26 fl oz/a 0.5 % v/v 1 % v/v	A A B B B B		0 -	93 bc	96 -
5	BOUNDARY CANOPY @ 2.25 OZ/A METRIBUZIN CLASSIC TAVIUM ROUNDUP POWERMAX AG16098 CLASS ACT RIDION	1.5 pt/a 1.93 oz/a 0.96 oz/a 56.5 fl oz/a 26 fl oz/a 0.5 % v/v 1 % v/v	A A A B B B B		0 -	92 bc	96 -
6	PREFIX CANOPY @ 2.25 OZ/A METRIBUZIN CLASSIC TAVIUM ROUNDUP POWERMAX AG16098 CLASS ACT RIDION	2 pt/a 1.93 oz/a 0.96 oz/a 56.5 fl oz/a 26 fl oz/a 0.5 % v/v 1 % v/v	A A A B B B B		0 -	94 b	99 -

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.
 Untreated treatment(s) 1 excluded from analysis.
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 Could not calculate LSD (% mean diff) for columns 7 because error mean square = 0.

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Trt No.	Treatment Name	Rate	Appl Unit	Code	7	8	9
7	PREFIX	2 pt/a	A		0 -	97 a	100 -
	XTENDIMAX	22 fl oz/a	A				
	TAVIUM	56.5 fl oz/a	B				
	ROUNDUP POWERMAX	26 fl oz/a	B				
	AG16098	0.5 % v/v	B				
	CLASS ACT RIDION	1 % v/v	B				
8	TAVIUM	56.5 fl oz/a	A		0 -	94 b	99 -
	TRICOR 75 DF	6 oz/a	A				
	TAVIUM	56.5 fl oz/a	B				
	ROUNDUP POWERMAX	26 fl oz/a	B				
	AG16098	0.5 % v/v	B				
	CLASS ACT RIDION	1 % v/v	B				
9	SONIC	5 oz/a	A		0 -	92 bc	98 -
	TAVIUM	56.5 fl oz/a	B				
	ROUNDUP POWERMAX	26 fl oz/a	B				
	AG16098	0.5 % v/v	B				
	CLASS ACT RIDION	1 % v/v	B				
10	ZIDUA PRO	6 fl oz/a	A		0 -	92 bc	96 -
	TAVIUM	56.5 fl oz/a	B				
	ROUNDUP POWERMAX	26 fl oz/a	B				
	AG16098	0.5 % v/v	B				
	CLASS ACT RIDION	1 % v/v	B				
11	FIERCE	4 oz/a	A		0 -	94 b	93 -
	TAVIUM	56.5 fl oz/a	B				
	ROUNDUP POWERMAX	26 fl oz/a	B				
	AG16098	0.5 % v/v	B				
	CLASS ACT RIDION	1 % v/v	B				
LSD P=.05					.	2.6	4.5
Standard Deviation					0.0	1.8	3.1
CV					0.0	1.95	3.18
Levene's F					0.00	1.147	2.612
Levene's Prob(F)					0.00*	0.363	0.023*
Skewness					.	-0.2017	-1.0723*
Kurtosis					.	-0.8033	-0.1667
Replicate F					0.000	7.338	4.400
Replicate Prob(F)					1.0000	0.0009	0.0121
Treatment F					0.000	4.281	1.699
Treatment Prob(F)					1.0000	0.0016	0.1379

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.

Untreated treatment(s) 1 excluded from analysis.

Missing data estimates are included in columns: Yates=2,4

Could not calculate LSD (% mean diff) for columns 7 because error mean square = 0.

Purdue Weed Science

Xtend Soybean Herbicide Programs

Trial ID: 18S-TPAC-SOY-24 Location: TPAC Trial Year: 2018
Protocol ID: 18S-TPAC-SOY-24 Investigator: Dr. Bill Johnson
Project ID: H052DCAD-2018US Study Director: Dustin Johnson
Sponsor Contact: C. Threewits - Syngenta

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

A5 = 5th Assessment According to Trial Schedule

ARM Action Codes

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