

The Ohio State University

Tavuim plus vaporgrip technology - University testing in RR2 Xtend soybeans
 Trial ID: 18 PRPOST3 Location: Trial Year: 2018
 Protocol ID: 18 PRPOST3 Investigator: Dr. Mark M. Loux
 Project ID: HDC050A4-2018US Study Director: Bryan Reeb
 Sponsor Contact: Dain Bruns, Syngenta

No. Previous Crop Year

1. Corn 2017

Soil Description

Description Name: BIG E
 % Sand: 45 % OM: 3.1 Texture: L loam
 % Silt: 45 pH: 6.6 Soil Name: KOKOMO SILTY CLAY LOAM
 % Clay: 11 CEC: 15.2 Fert. Level: G good
 Soil Drainage: G good

Application Description

	A	B
Application Date:	May-11-2018	Jun-6-2018
Appl. Start Time:	7:45 AM	9:10 AM
Appl. Stop Time:	8:00 AM	9:30 AM
Interval to Prev. Appl., Unit:		26 DAYS
Application Method:	SPRAY	SPRAY
Application Timing:	PRE	4" GRW
Application Placement:	BROSOI	BROFOL
Applied By:	Boden	Ackley,Lamb
Air Temperature, Unit:	56 F	59 F
% Relative Humidity:	78	73
Wind Velocity, Unit:	7 MPH	6 MPH
Wind Direction:	E	NE
Dew Presence (Y/N):	N no	Y yes
Soil Temperature, Unit:	60 F	60 F
Soil Moisture:	NORMAL	NORMAL
% Cloud Cover:	20	0
Next Moisture Occurred On:	May-15-2018	Jun-8-2018
Time to Next Moisture, Unit:	4 DAY	2 DAY
Moisture 1 Week after Appl.:	0.43 IN	1.1 IN

Crop Stage At Each Application

	A	B
Crop 1 Code, BBCH Scale:	GLXMA BSOY	GLXMA BSOY
Stage Scale Used:		BBCH
Stage Majority, Percent:		13 100
Height, Unit:		7 IN
Height Minimum, Maximum:		4 7

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Pest Stage At Each Application

	A	B
Pest 1 Code, Type, Scale:	SETFA W	SETFA W
Stage Majority, Percent:	16	100
Height, Unit:	6	IN
Height Minimum, Maximum:	1	8
Density, Unit:	68	PLA/m2
Pest 2 Code, Type, Scale:	ECHCG W	ECHCG W
Stage Majority, Percent:	16	100
Height, Unit:	6	IN
Height Minimum, Maximum:	1	8
Density, Unit:	96	PLA/m2
Pest 3 Code, Type, Scale:	AMBTR W	AMBTR W
Stage Majority, Percent:	15	100
Height, Unit:	6	IN
Height Minimum, Maximum:	1	12
Density, Unit:	8	PLA/m2
Pest 4 Code, Type, Scale:	AMARE W	AMARE W
Density, Unit:	7	PLA/m2
Pest 5 Code, Type, Scale:	CHEAL W	CHEAL W
Stage Majority, Percent:	19	100
Height, Unit:	3	IN
Height Minimum, Maximum:	1	5
Density, Unit:	33	PLA/m2
Pest 6 Code, Type, Scale:	ABUTH W	ABUTH W
Stage Majority, Percent:	13	100
Height, Unit:	3	IN
Height Minimum, Maximum:	2	4
Density, Unit:	2	PLA/m2
Pest 7 Code, Type, Scale:	POLPY W	POLPY W
Stage Majority, Percent:	15	100
Height, Unit:	2	IN
Height Minimum, Maximum:	1	4
Density, Unit:	6	PLA/m2
Pest 8 Code, Type, Scale:	IPOHE W	IPOHE W
Stage Majority, Percent:	13	100
Height, Unit:	2	IN
Height Minimum, Maximum:	2	6
Pest 9 Code, Type, Scale:	SIDSP W	SIDSP W
Stage Majority, Percent:	13	100
Height, Unit:	2	IN
Height Minimum, Maximum:	1	3
Density, Unit:	13	PLA/m2
Pest10 Code, Type, Scale:	HIBTR W	HIBTR W
Stage Majority, Percent:	13	100
Height, Unit:	2	IN
Height Minimum, Maximum:	1	3
Density, Unit:	11	PLA/m2

Application Equipment

	A	B
Appl. Equipment:	6' BACKPACK	6' BACKPACK
Equipment Type:	BACCAI	BACCAI
Operation Pressure, Unit:	44 PSI	44 PSI
Nozzle Type:	TTI	TTI
Nozzle Size:	11015	11015
Nozzle Spacing, Unit:	18 IN	18 IN
Nozzles/Row:	4	4
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 gal/ac	15 gal/ac
Mix Size, Unit:	1 L	1 L
Propellant:	COMCO2	COMCO2

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Pest Type	O Other	W Weed	W Weed	W Weed	W Weed	W Weed				
Pest Code	SETFA	ECHCG	AMBTR	CHEAL	ABUTH					
Pest Scientific Name	Setaria faberi	Echinochloa cr>	Ambrosia trifi>	Chenopodium al>	Abutilon theop>					
Pest Name	Giant foxtail	Common barnyar>	Giant ragweed	common lambsqu>	velvetleaf					
Rating Date	Jun-5-2018	Jun-5-2018	Jun-5-2018	Jun-5-2018	Jun-5-2018	Jun-5-2018				
Rating Type	PHYGEN	CONTRO	CONTRO	CONTRO	CONTRO	CONTRO				
Rating Unit	%	%	%	%	%	%				
Number of Subsamples	1	1	1	1	1	1				
Days After First/Last Applic.	25 25	25 25	25 25	25 25	25 25	25 25				
Plant-Eval Interval	25 DP-1	25 DP-1	25 DP-1	25 DP-1	25 DP-1	25 DP-1				
Days After Emergence	19 DE-1	19 DE-1	19 DE-1	19 DE-1	19 DE-1	19 DE-1				
Trt No.	Treatment Name	Other Rate	Other Rate	Appl Unit Code	1*	2*	3*	4*	5*	6*
1	UTC				0.0 b	0.0 d	0.0 e	0.0 b	0.0 c	0.0 b
2	Boundary	1.8 pt/a		A	1.2 ab	97.8 a	96.8 a	55.0 a	97.9 ab	100.0 a
	2 Intact	9.6 oz/a		B						
	2 Class Act Ridion	19.2 oz/a		B						
	2 Tavium	56.5 oz/a		B						
	2 Roundup Power Max	28.4 oz/a		B						
3	Broadaxe XC	25 oz/a		A	1.4 a	83.8 ab	82.2 b	57.5 a	99.0 ab	94.3 a
	3 Intact	9.6 oz/a		B						
	3 Class Act Ridion	19.2 oz/a		B						
	3 Tavium	56.5 oz/a		B						
	3 Roundup Power Max	28.4 oz/a		B						
4	Prefix	32 oz/a		A	1.2 ab	80.8 ab	80.0 b	67.5 a	90.4 ab	90.0 a
	4 Intact	9.6 oz/a		B						
	4 Class Act Ridion	19.2 oz/a		B						
	4 Tavium	56.5 oz/a		B						
	4 Roundup Power Max	28.4 oz/a		B						
5	Valor XLT @ 3 oz			A	1.2 ab	58.8	51.3 cd	75.0 a	99.9 a	100.0 a
	5 Valor SX	1.76 oz/a		A						
	5 Classic	1.24 oz/a		A						
	5 Intact	9.6 oz/a		B						
	5 Class Act Ridion	19.2 oz/a		B						
	5 Xtendimax	22 oz/a		B						
	5 Roundup Power Max	28.4 oz/a		B						
6	Zidua Pro	4.5 oz/a		A	0.9 ab	70.0 b	66.4 bc	60.0 a	85.4 b	91.8 a
	6 Intact	9.6 oz/a		B						
	6 Class Act Ridion	19.2 oz/a		B						
	6 Engenia	12.8 oz/a		B						
	6 Roundup Power Max	28.4 oz/a		B						
7	Trivence @ 10 oz			A	2.1 a	62.5 b	56.4 bcd	70.0 a	100.0 a	100.0 a
	7 Valor SX	2.5 oz/a		A						
	7 Classic	1.56 oz/a		A						
	7 Metribuzin	5.95 oz/a		A						
	7 Intact	9.6 oz/a		B						
	7 Class Act Ridion	19.2 oz/a		B						
	7 Fexapan	22 oz/a		B						
	7 Roundup Power Max	28.4 oz/a		B						

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Pest Scientific Name	Setaria faberi	Echinochloa cr>	Ambrosia trifi>	Chenopodium al>	Abutilon theop>				
Pest Name	Giant foxtail	Common barnyar>	Giant ragweed	common lambsqu>	velvetleaf				
Rating Date	Jun-5-2018	Jun-5-2018	Jun-5-2018	Jun-5-2018	Jun-5-2018	Jun-5-2018			
Rating Type	PHYGEN	CONTRO	CONTRO	CONTRO	CONTRO	CONTRO			
Rating Unit	%	%	%	%	%	%			
Number of Subsamples	1	1	1	1	1	1			
Days After First/Last Applic.	25 25	25 25	25 25	25 25	25 25	25 25			
Plant-Eval Interval	25 DP-1	25 DP-1	25 DP-1	25 DP-1	25 DP-1	25 DP-1			
Days After Emergence	19 DE-1	19 DE-1	19 DE-1	19 DE-1	19 DE-1	19 DE-1			
Trt Treatment	Other	Other	Appl						
No. Name	Rate	Rate	Unit Code	1*	2*	3*	4*	5*	6*
8 Authority First	6.4 oz/a		A	0.0 b	40.0 c	34.8 d	57.5 a	98.7 ab	100.0 a
8 Intact	9.6 oz/a		B						
8 Class Act Ridion	19.2 oz/a		B						
8 Xtendimax	22 oz/a		B						
8 Roundup Power Max	28.4 oz/a		B						
LSD P=.05				1.28 - 1.32	15.81	12.00 - 21.85	15.44	4.92 - 11.78	9.74
Standard Deviation				0.16t	10.64	8.61t	10.50	8.71t	6.63
CV				57.96t	17.13	17.52t	18.98	12.29t	7.84
Levene's F				1.612	1.322	1.229	1.175	0.875	2.319
Levene's Prob(F)				0.18	0.291	0.326	0.353	0.54	0.059
Skewness				0.2226	-0.8522	-0.7854	-1.2722*	-1.7357*	-2.1668*
Kurtosis				-1.102	-0.2611	0.1829	1.0768	1.9093*	3.2027*
Replicate F				5.636	0.304	0.431	4.563	4.601	2.975
Replicate Prob(F)				0.0054	0.8221	0.7333	0.0130	0.0126	0.0549
Treatment F				5.132	38.243	30.948	19.915	46.410	107.784
Treatment Prob(F)				0.0016	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	W Weed				
Pest Code	AMARE	SIDSP	HIBTR	SETFA	ECHCG	AMBTR				
Pest Scientific Name	Amaranthus ret>	Sida spinosa	Hibiscus trion>	Setaria faberi	Echinochloa cr>	Ambrosia trifi>				
Pest Name	Redroot pigweed	Prickly sida	Venice mallow	Giant foxtail	Common barnyar>	Giant ragweed				
Rating Date	Jun-5-2018	Jun-5-2018	Jun-5-2018	Jun-20-2018	Jun-20-2018	Jun-20-2018				
Rating Type	CONTRO	CONTRO	CONTRO	CONTRO	CONTRO	CONTRO				
Rating Unit	%	%	%	%	%	%				
Number of Subsamples	1	1	1	1	1	1				
Days After First/Last Applic.	25 25	25 25	25 25	40 14	40 14	40 14				
Plant-Eval Interval	25 DP-1	25 DP-1	25 DP-1	40 DP-1	40 DP-1	40 DP-1				
Days After Emergence	19 DE-1	19 DE-1	19 DE-1	34 DE-1	34 DE-1	34 DE-1				
Trt No.	Treatment Name	Other Rate	Other Rate	Appl Unit Code	7*	8*	9*	10*	11*	12*
1	UTC				0.0 b	0.0 b	0.0 b	0.0 c	0.0 d	0.0 b
2	Boundary	1.8 pt/a		A	100.0 a	99.2 a	95.0 a	100.0 a	99.6 a	99.5 a
	2 Intact	9.6 oz/a		B						
	2 Class Act Ridion	19.2 oz/a		B						
	2 Tavium	56.5 oz/a		B						
	2 Roundup Power Max	28.4 oz/a		B						
3	Broadaxe XC	25 oz/a		A	100.0 a	99.6 a	94.8 a	99.8 a	99.4 ab	99.8 a
	3 Intact	9.6 oz/a		B						
	3 Class Act Ridion	19.2 oz/a		B						
	3 Tavium	56.5 oz/a		B						
	3 Roundup Power Max	28.4 oz/a		B						
4	Prefix	32 oz/a		A	100.0 a	94.3 a	95.0 a	99.5 a	99.9 a	100.0 a
	4 Intact	9.6 oz/a		B						
	4 Class Act Ridion	19.2 oz/a		B						
	4 Tavium	56.5 oz/a		B						
	4 Roundup Power Max	28.4 oz/a		B						
5	Valor XLT @ 3 oz			A	100.0 a	100.0 a	100.0 a	97.8 b	97.3 bc	100.0 a
	5 Valor SX	1.76 oz/a		A						
	5 Classic	1.24 oz/a		A						
	5 Intact	9.6 oz/a		B						
	5 Class Act Ridion	19.2 oz/a		B						
	5 Xtendimax	22 oz/a		B						
	5 Roundup Power Max	28.4 oz/a		B						
6	Zidua Pro	4.5 oz/a		A	96.5 a	96.5 a	91.8 a	98.3 b	93.7 c	99.3 a
	6 Intact	9.6 oz/a		B						
	6 Class Act Ridion	19.2 oz/a		B						
	6 Engenia	12.8 oz/a		B						
	6 Roundup Power Max	28.4 oz/a		B						
7	Trivence @ 10 oz			A	100.0 a	100.0 a	100.0 a	97.3 b	97.1 bc	100.0 a
	7 Valor SX	2.5 oz/a		A						
	7 Classic	1.56 oz/a		A						
	7 Metribuzin	5.95 oz/a		A						
	7 Intact	9.6 oz/a		B						
	7 Class Act Ridion	19.2 oz/a		B						
	7 Fexapan	22 oz/a		B						
	7 Roundup Power Max	28.4 oz/a		B						

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Pest Code	AMARE	SIDSP	HIBTR	SETFA	ECHCG	AMBTR				
Pest Scientific Name	Amaranthus ret>	Sida spinosa	Hibiscus trion>	Setaria faberi	Echinochloa cr>	Ambrosia trifi>				
Pest Name	Redroot pigweed	Prickly sida	Venice mallow	Giant foxtail	Common barnyar>	Giant ragweed				
Rating Date	Jun-5-2018	Jun-5-2018	Jun-5-2018	Jun-20-2018	Jun-20-2018	Jun-20-2018				
Rating Type	CONTRO	CONTRO	CONTRO	CONTRO	CONTRO	CONTRO				
Rating Unit	%	%	%	%	%	%				
Number of Subsamples	1	1	1	1	1	1				
Days After First/Last Applic.	25 25	25 25	25 25	40 14	40 14	40 14				
Plant-Eval Interval	25 DP-1	25 DP-1	25 DP-1	40 DP-1	40 DP-1	40 DP-1				
Days After Emergence	19 DE-1	19 DE-1	19 DE-1	34 DE-1	34 DE-1	34 DE-1				
Trt Treatment	Other Rate	Other Rate	Appl Unit	Code	7*	8*	9*	10*	11*	12*
8 Authority First	6.4 oz/a		A		99.8 a	99.7 a	98.8 a	98.0 b	97.3 bc	99.5 a
8 Intact	9.6 oz/a		B							
8 Class Act Ridion	19.2 oz/a		B							
8 Xtendimax	22 oz/a		B							
8 Roundup Power Max	28.4 oz/a		B							
LSD P=.05					2.04 - 3.30	3.27 - 5.33	8.63	0.87	0.89 - 3.08	0.83
Standard Deviation					5.58t	7.09t	5.87	0.59	2.84t	0.57
CV					7.24t	9.56t	6.95	0.69	3.94t	0.65
Levene's F					2.88	3.426	0.674	3.286	2.564	1.905
Levene's Prob(F)					0.025*	0.011*	0.692	0.014*	0.04*	0.113
Skewness					-2.2212*	-2.0549*	-2.1664*	-2.3758*	-2.2481*	-2.3796*
Kurtosis					3.3319*	2.8415*	3.203*	3.895*	3.5362*	3.9056*
Replicate F					1.684	3.175	7.967	0.593	0.698	0.778
Replicate Prob(F)					0.2009	0.0453	0.0010	0.6263	0.5635	0.5195
Treatment F					126.488	73.414	136.101	13865.035	430.180	15467.779
Treatment Prob(F)					0.0001	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	W Weed				
Pest Code	CHEAL	ABUTH	AMARE	SIDSP	HIBTR	POLPY				
Pest Scientific Name	Chenopodium al-	Abutilon theop>	Amaranthus ret>	Sida spinosa	Hibiscus trion>	Persicaria pen>				
Pest Name	common lambsqu>	velvetleaf	Redroot pigweed	Prickly sida	Venice mallow	annual smartwe>				
Rating Date	Jun-20-2018	Jun-20-2018	Jun-20-2018	Jun-20-2018	Jun-20-2018	Jun-20-2018				
Rating Type	CONTRO	CONTRO	CONTRO	CONTRO	CONTRO	CONTRO				
Rating Unit	%	%	%	%	%	%				
Number of Subsamples	1	1	1	1	1	1				
Days After First/Last Applic.	40 14	40 14	40 14	40 14	40 14	40 14				
Plant-Eval Interval	40 DP-1	40 DP-1	40 DP-1	40 DP-1	40 DP-1	40 DP-1				
Days After Emergence	34 DE-1	34 DE-1	34 DE-1	34 DE-1	34 DE-1	34 DE-1				
Trt No.	Treatment Name	Other Rate	Other Rate	Appl Unit Code	13*	14*	15*	16*	17*	18*
1	UTC				0.0 -	0.0 -	0.0 -	0.0 b	0.0 c	0.0 -
2	Boundary	1.8 pt/a		A	100.0 -	100.0 -	100.0 -	100.0 a	100.0 a	100.0 -
	2 Intact	9.6 oz/a		B						
	2 Class Act Ridion	19.2 oz/a		B						
	2 Tavium	56.5 oz/a		B						
	2 Roundup Power Max	28.4 oz/a		B						
3	Broadaxe XC	25 oz/a		A	100.0 -	100.0 -	100.0 -	99.8 a	100.0 a	100.0 -
	3 Intact	9.6 oz/a		B						
	3 Class Act Ridion	19.2 oz/a		B						
	3 Tavium	56.5 oz/a		B						
	3 Roundup Power Max	28.4 oz/a		B						
4	Prefix	32 oz/a		A	100.0 -	100.0 -	100.0 -	99.5 a	100.0 a	100.0 -
	4 Intact	9.6 oz/a		B						
	4 Class Act Ridion	19.2 oz/a		B						
	4 Tavium	56.5 oz/a		B						
	4 Roundup Power Max	28.4 oz/a		B						
5	Valor XLT @ 3 oz			A	100.0 -	100.0 -	100.0 -	99.8 a	100.0 a	100.0 -
	5 Valor SX	1.76 oz/a		A						
	5 Classic	1.24 oz/a		A						
	5 Intact	9.6 oz/a		B						
	5 Class Act Ridion	19.2 oz/a		B						
	5 Xtendimax	22 oz/a		B						
	5 Roundup Power Max	28.4 oz/a		B						
6	Zidua Pro	4.5 oz/a		A	100.0 -	100.0 -	100.0 -	100.0 a	99.5 b	100.0 -
	6 Intact	9.6 oz/a		B						
	6 Class Act Ridion	19.2 oz/a		B						
	6 Engenia	12.8 oz/a		B						
	6 Roundup Power Max	28.4 oz/a		B						
7	Trivence @ 10 oz			A	100.0 -	100.0 -	100.0 -	100.0 a	100.0 a	100.0 -
	7 Valor SX	2.5 oz/a		A						
	7 Classic	1.56 oz/a		A						
	7 Metribuzin	5.95 oz/a		A						
	7 Intact	9.6 oz/a		B						
	7 Class Act Ridion	19.2 oz/a		B						
	7 Fexapan	22 oz/a		B						
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Pest Scientific Name	Chenopodium al>	Abutilon theop>	Amaranthus ret>	Sida spinosa	Hibiscus trion>	Persicaria pen>			
Pest Name	common lambsqu>	velvetleaf	Redroot pigweed	Prickly sida	Venice mallow	annual smartwe>			
Rating Date	Jun-20-2018	Jun-20-2018	Jun-20-2018	Jun-20-2018	Jun-20-2018	Jun-20-2018			
Rating Type	CONTRO	CONTRO	CONTRO	CONTRO	CONTRO	CONTRO			
Rating Unit	%	%	%	%	%	%			
Number of Subsamples	1	1	1	1	1	1			
Days After First/Last Applic.	40 14	40 14	40 14	40 14	40 14	40 14			
Plant-Eval Interval	40 DP-1	40 DP-1	40 DP-1	40 DP-1	40 DP-1	40 DP-1			
Days After Emergence	34 DE-1	34 DE-1	34 DE-1	34 DE-1	34 DE-1	34 DE-1			
Trt Treatment	Other Rate	Other Rate	Appl Unit Code	13*	14*	15*	16*	17*	18*
8 Authority First	6.4 oz/a		A	100.0 -	100.0 -	100.0 -	100.0 a	100.0 a	100.0 -
8 Intact	9.6 oz/a		B						
8 Class Act Ridion	19.2 oz/a		B						
8 Xtendimax	22 oz/a		B						
8 Roundup Power Max	28.4 oz/a		B						
LSD P=.05				.	.	.	0.56	0.30	.
Standard Deviation	0.00			0.00	0.00	0.00	0.38	0.20	0.00
CV	0.0			0.0	0.0	0.0	0.43	0.23	0.0
Levene's F	0.00			0.00	0.00	0.00	0.762	0.00	0.00
Levene's Prob(F)				.	.	.	0.624	.	.
Skewness	-2.3809*			-2.3809*	-2.3809*	-2.3809*	-2.3801*	-2.3806*	-2.3809*
Kurtosis	3.9094*			3.9094*	3.9094*	3.9094*	3.9073*	3.9086*	3.9094*
Replicate F	0.000			0.000	0.000	0.000	3.500	1.000	0.000
Replicate Prob(F)	1.0000			1.0000	1.0000	1.0000	0.0335	0.4123	1.0000
Treatment F	0.000			0.000	0.000	0.000	34901.003	119831.583	0.000
Treatment Prob(F)	1.0000			1.0000	1.0000	1.0000	0.0001	0.0001	1.0000

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The Ohio State University

Tavium plus vaporgrip technology - University testing in RR2 Xtend soybeans
 Trial ID: 18 PRPOST3 Location: Trial Year: 2018
 Protocol ID: 18 PRPOST3 Investigator: Dr. Mark M. Loux
 Project ID: HDC050A4-2018US Study Director: Bryan Reeb
 Sponsor Contact: Dain Bruns, Syngenta

Pest Type	O Other	W Weed	W Weed	W Weed	W Weed					
Pest Code	SETFA	ECHCG	AMBTR	CHEAL	ABUTH					
Pest Scientific Name	Setaria faberi	Echinochloa cr>	Ambrosia trifi>	Chenopodium al>	Abutilon theop>					
Pest Name	Giant foxtail	Common barnyar>	Giant ragweed	common	velvetleaf					
Rating Date	Jun-20-2018	Jul-3-2018	Jul-3-2018	Jul-3-2018	Jul-3-2018					
Rating Type	PHYGEN	CONTRO	CONTRO	CONTRO	CONTRO					
Rating Unit	%	%	%	%	%					
Number of Subsamples	1	1	1	1	1					
Days After First/Last Applic.	40 14	53 27	53 27	53 27	53 27					
Plant-Eval Interval	40 DP-1	53 DP-1	53 DP-1	53 DP-1	53 DP-1					
Days After Emergence	34 DE-1	47 DE-1	47 DE-1	47 DE-1	47 DE-1					
Trt No.	Treatment Name	Other Rate	Other Rate	Appl Unit Code	19*	20*	21*	22*	23*	24*
1	UTC				0.0 d	0.0 c	0.0 b	0.0 b	0.0 -	0.0 -
2	Boundary	1.8 pt/a		A	2.8 abc	100.0 a	99.8 a	99.8 a	100.0 -	100.0 -
	2 Intact	9.6 oz/a		B						
	2 Class Act Ridion	19.2 oz/a		B						
	2 Tavium	56.5 oz/a		B						
	2 Roundup Power Max	28.4 oz/a		B						
3	Broadaxe XC	25 oz/a		A	3.8 a	99.8 a	99.8 a	99.8 a	100.0 -	100.0 -
	3 Intact	9.6 oz/a		B						
	3 Class Act Ridion	19.2 oz/a		B						
	3 Tavium	56.5 oz/a		B						
	3 Roundup Power Max	28.4 oz/a		B						
4	Prefix	32 oz/a		A	3.0 ab	98.8 ab	99.0 a	100.0 a	100.0 -	100.0 -
	4 Intact	9.6 oz/a		B						
	4 Class Act Ridion	19.2 oz/a		B						
	4 Tavium	56.5 oz/a		B						
	4 Roundup Power Max	28.4 oz/a		B						
5	Valor XLT @ 3 oz			A	0.8 d	98.3 ab	98.0 a	100.0 a	100.0 -	100.0 -
	5 Valor SX	1.76 oz/a		A						
	5 Classic	1.24 oz/a		A						
	5 Intact	9.6 oz/a		B						
	5 Class Act Ridion	19.2 oz/a		B						
	5 Xtendimax	22 oz/a		B						
	5 Roundup Power Max	28.4 oz/a		B						
6	Zidua Pro	4.5 oz/a		A	1.0 cd	99.3 ab	98.3 a	99.5 a	100.0 -	100.0 -
	6 Intact	9.6 oz/a		B						
	6 Class Act Ridion	19.2 oz/a		B						
	6 Engenia	12.8 oz/a		B						
	6 Roundup Power Max	28.4 oz/a		B						
7	Trivence @ 10 oz			A	1.8 bcd	97.8 b	98.3 a	100.0 a	100.0 -	100.0 -
	7 Valor SX	2.5 oz/a		A						
	7 Classic	1.56 oz/a		A						
	7 Metribuzin	5.95 oz/a		A						
	7 Intact	9.6 oz/a		B						
	7 Class Act Ridion	19.2 oz/a		B						
	7 Fexapan	22 oz/a		B						
	7 Roundup Power Max	28.4 oz/a		B						

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The Ohio State University

Tavuim plus vaporgrip technology - University testing in RR2 Xtend soybeans
 Trial ID: 18 PRPOST3 Location: Trial Year: 2018
 Protocol ID: 18 PRPOST3 Investigator: Dr. Mark M. Loux
 Project ID: HDC050A4-2018US Study Director: Bryan Reeb
 Sponsor Contact: Dain Bruns, Syngenta

Pest Type	O Other	W Weed	W Weed	W Weed	W Weed				
Pest Code	SETFA	ECHCG	AMBTR	CHEAL	ABUTH				
Pest Scientific Name	Setaria faberi	Echinochloa cr>	Ambrosia trifi>	Chenopodium al>	Abutilon theop>				
Pest Name	Giant foxtail	Common barnyar>	Giant ragweed	common	velvetleaf				
Rating Date	Jun-20-2018	Jul-3-2018	Jul-3-2018	Jul-3-2018	Jul-3-2018				
Rating Type	PHYGEN	CONTRO	CONTRO	CONTRO	CONTRO				
Rating Unit	%	%	%	%	%				
Number of Subsamples	1	1	1	1	1				
Days After First/Last Applic.	40 14	53 27	53 27	53 27	53 27				
Plant-Eval Interval	40 DP-1	53 DP-1	53 DP-1	53 DP-1	53 DP-1				
Days After Emergence	34 DE-1	47 DE-1	47 DE-1	47 DE-1	47 DE-1				
Trt Treatment	Other Rate	Other Rate	Appl Unit Code	19*	20*	21*	22*	23*	24*
8 Authority First	6.4 oz/a		A	0.0 d	99.0 ab	98.3 a	100.0 a	100.0 -	100.0 -
8 Intact	9.6 oz/a		B						
8 Class Act Ridion	19.2 oz/a		B						
8 Xtendimax	22 oz/a		B						
8 Roundup Power Max	28.4 oz/a		B						
LSD P=.05		1.48		1.16		1.43		0.62	
Standard Deviation		1.01		0.79		0.97		0.42	0.00
CV		61.9		0.91		1.13		0.48	0.0
Levene's F		5.089		1.153		0.429		0.762	0.00
Levene's Prob(F)		0.001*		0.365		0.875		0.624	.
Skewness		0.6339		-2.3756*		-2.3749*		-2.3801*	-2.3809*
Kurtosis		-0.7893		3.894*		3.8923*		3.9073*	3.9094*
Replicate F		3.871		5.637		3.462		1.400	0.000
Replicate Prob(F)		0.0239		0.0054		0.0347		0.2706	1.0000
Treatment F		7.976		7820.003		5145.716		27920.803	0.000
Treatment Prob(F)		0.0001		0.0001		0.0001		0.0001	1.0000

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The Ohio State University

Tavium plus vaporgrip technology - University testing in RR2 Xtend soybeans
 Trial ID: 18 PRPOST3 Location: Trial Year: 2018
 Protocol ID: 18 PRPOST3 Investigator: Dr. Mark M. Loux
 Project ID: HDC050A4-2018US Study Director: Bryan Reeb
 Sponsor Contact: Dain Bruns, Syngenta

Pest Type	W Weed	W Weed	W Weed	W Weed	O Other
Pest Code	AMARE	SIDSP	HIBTR	POLPY	
Pest Scientific Name	Amaranthus ret>	Sida spinosa	Hibiscus trion>	Persicaria pen>	
Pest Name	Redroot pigweed	Prickly sida	Venice mallow	annual smartwe>	
Rating Date	Jul-3-2018	Jul-3-2018	Jul-3-2018	Jul-3-2018	Jul-3-2018
Rating Type	CONTRO	CONTRO	CONTRO	CONTRO	PHYGEN
Rating Unit	%	%	%	%	%
Number of Subsamples	1	1	1	1	1
Days After First/Last Applic.	53 27	53 27	53 27	53 27	53 27
Plant-Eval Interval	53 DP-1	53 DP-1	53 DP-1	53 DP-1	53 DP-1
Days After Emergence	47 DE-1	47 DE-1	47 DE-1	47 DE-1	47 DE-1

Trt No.	Treatment Name	Other Rate	Other Rate	Appl Unit Code	25*	26*	27*	28*	29*
1	UTC				0.0 -	0.0 b	0.0 b	0.0 -	0.0 -
2	Boundary	1.8 pt/a		A	100.0 -	100.0 a	100.0 a	100.0 -	0.0 -
	2 Intact	9.6 oz/a		B					
	2 Class Act Ridion	19.2 oz/a		B					
	2 Tavium	56.5 oz/a		B					
	2 Roundup Power Max	28.4 oz/a		B					
3	Broadaxe XC	25 oz/a		A	100.0 -	99.8 a	100.0 a	100.0 -	0.0 -
	3 Intact	9.6 oz/a		B					
	3 Class Act Ridion	19.2 oz/a		B					
	3 Tavium	56.5 oz/a		B					
	3 Roundup Power Max	28.4 oz/a		B					
4	Prefix	32 oz/a		A	100.0 -	99.8 a	100.0 a	100.0 -	0.0 -
	4 Intact	9.6 oz/a		B					
	4 Class Act Ridion	19.2 oz/a		B					
	4 Tavium	56.5 oz/a		B					
	4 Roundup Power Max	28.4 oz/a		B					
5	Valor XLT @ 3 oz			A	100.0 -	99.5 a	100.0 a	100.0 -	0.0 -
	5 Valor SX	1.76 oz/a		A					
	5 Classic	1.24 oz/a		A					
	5 Intact	9.6 oz/a		B					
	5 Class Act Ridion	19.2 oz/a		B					
	5 Xtendimax	22 oz/a		B					
	5 Roundup Power Max	28.4 oz/a		B					
6	Zidua Pro	4.5 oz/a		A	100.0 -	100.0 a	77.3 a	100.0 -	0.0 -
	6 Intact	9.6 oz/a		B					
	6 Class Act Ridion	19.2 oz/a		B					
	6 Engenia	12.8 oz/a		B					
	6 Roundup Power Max	28.4 oz/a		B					
7	Trivence @ 10 oz			A	100.0 -	100.0 a	100.0 a	100.0 -	0.0 -
	7 Valor SX	2.5 oz/a		A					
	7 Classic	1.56 oz/a		A					
	7 Metribuzin	5.95 oz/a		A					
	7 Intact	9.6 oz/a		B					
	7 Class Act Ridion	19.2 oz/a		B					
	7 Fexapan	22 oz/a		B					
	7 Roundup Power Max	28.4 oz/a		B					

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Pest Type	W Weed	W Weed	W Weed	W Weed	O Other			
Pest Code	AMARE	SIDSP	HIBTR	POLPY				
Pest Scientific Name	Amaranthus ret>	Sida spinosa	Hibiscus trion>	Persicaria pen>				
Pest Name	Redroot pigweed	Prickly sida	Venice mallow	annual smartwe>				
Rating Date	Jul-3-2018	Jul-3-2018	Jul-3-2018	Jul-3-2018	Jul-3-2018			
Rating Type	CONTRO	CONTRO	CONTRO	CONTRO	PHYGEN			
Rating Unit	%	%	%	%	%			
Number of Subsamples	1	1	1	1	1			
Days After First/Last Applic.	53 27	53 27	53 27	53 27	53 27			
Plant-Eval Interval	53 DP-1	53 DP-1	53 DP-1	53 DP-1	53 DP-1			
Days After Emergence	47 DE-1	47 DE-1	47 DE-1	47 DE-1	47 DE-1			
Trt Treatment	Other	Other	Appl					
No. Name	Rate	Rate	Unit Code	25*	26*	27*	28*	29*
8 Authority First	6.4 oz/a		A	100.0 -	100.0 a	100.0 a	100.0 -	0.0 -
8 Intact	9.6 oz/a		B					
8 Class Act Ridion	19.2 oz/a		B					
8 Xtendimax	22 oz/a		B					
8 Roundup Power Max	28.4 oz/a		B					
LSD P=.05				.	0.56	23.31	.	.
Standard Deviation				0.00	0.38	15.85	0.00	0.00
CV				0.0	0.43	18.72	0.0	0.0
Levene's F				0.00	0.762	1.045	0.00	0.00
Levene's Prob(F)				.	0.624	0.427	.	.
Skewness				-2.3809*	-2.3801*	-1.996*	-2.3809*	.
Kurtosis				3.9094*	3.9073*	2.1277*	3.9094*	.
Replicate F				0.000	3.500	1.000	0.000	0.000
Replicate Prob(F)				1.0000	0.0335	0.4123	1.0000	1.0000
Treatment F				0.000	34901.003	19.635	0.000	0.000
Treatment Prob(F)				1.0000	0.0001	0.0001	1.0000	1.0000

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Pest Type

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

Pest Code

SETFA, Setaria faberi, Giant foxtail = US
 ECHCG, Echinochloa crus-galli, Common barnyard grass = US
 AMBTR, Ambrosia trifida, Giant ragweed = US
 CHEAL, Chenopodium album, common lambsquarters = US
 ABUTH, Abutilon theophrasti, velvetleaf = US
 AMARE, Amaranthus retroflexus, Redroot pigweed = US
 SIDSP, Sida spinosa, Prickly sida = US
 HIBTR, Hibiscus trionum, Venice mallow = US
 POLPY, Persicaria pensylvanica, annual smartweed = US

Rating Type

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

Rating Unit

% = percent

Plant-Eval Interval

25 DP-1 = 1 GLXMA May-11-2018
 40 DP-1 = 1 GLXMA May-11-2018
 53 DP-1 = 1 GLXMA May-11-2018