

The Ohio State University

Reviton Soybean Burndown

Trial ID: 21RRXNT Location: Trial Year: 2021
 Protocol ID: 2021-H-US11-S, Fierce MD 64.02 Investigator (Creator): Dr. Mark M. Loux
 Project ID: Study Director:
 Sponsor Contact:

Trial Status: E established
ARM Trial Created On: Apr-2-2021
Initiation Date: Apr-16-2021

Trial Location

City: South Charleston **Country:** USA United States
State/Prov.: Ohio
Postal Code: 45368

Latitude of LL Corner °: 39.85883 N
Longitude of LL Corner °: -83.67296 W
Altitude of LL Corner: 1088.00 FT

Conducted Under GLP: No
Conducted Under GEP: No

Crop Description

Crop 1: C	GLXMA Glycine max	Soybean
Entry Date:	Jun-2-2021	Stage Scale: BBCH
Variety:	Asgrow AG38XF1	
Attributes:	DICAMBA, GLYPHOSATE, GLUFOSINATE TOL	
Planting Date:	May-14-2021	Planting Rate: 175000 S/A
Depth:	1.5 IN	
Rows per Plot:	8	Planting Method: PLANTD planted
Row Spacing:	15 IN	Planting Equipment: FE field equipment
		Seed Bed: MEDIUM medium
Soil Temperature:	60 F	Soil Moisture: NORMAL normal, adequate
Emergence Date:	Jun-1-2021	
Harvest Date:	Oct-13-2021	Harvest Equipment: Kincaid 8XP
Moisture Meter:	Harvest Master	Harvested Width: 6.25 FT
% Standard Moisture:	13.0	Harvested Length: 30 FT
Weighing Equipment:	Harvest Master HM800	

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Pest Description

Pest 1 Type: W	Code: STEME <i>Stellaria media</i>	Entry Date: Apr-19-2021
	Common Name: Common chickweed	Stage Scale: BBCH
Pest 2 Type: W	Code: LAMPU <i>Lamium purpureum</i>	Entry Date: Apr-19-2021
	Common Name: Purple deadnettle	Stage Scale: BBCH
Pest 3 Type: W	Code: VERAG <i>Veronica agrestis</i>	Entry Date: Apr-19-2021
	Common Name: Field speedwell	Stage Scale: BBCH
Pest 4 Type: W	Code: TAROF <i>Taraxacum officinale</i>	Entry Date: Apr-19-2021
	Common Name: Blowball	Stage Scale: BBCH
Pest 5 Type: W	Code: CARPE <i>Cardamine pensylvanica</i>	Entry Date: Apr-19-2021
	Common Name: Pennsylvania bittercress	Stage Scale: BBCH
Pest 6 Type: W	Code: RANAB <i>Ranunculus abortivus</i>	Entry Date: Apr-19-2021
	Common Name: Smallflower buttercup	Stage Scale: BBCH
Pest 7 Type: W	Code: ERYRE <i>Erysimum repandum</i>	Entry Date: Apr-19-2021
	Common Name: Bushy wallflower	Stage Scale: BBCH
Pest 8 Type: W	Code: AMBTR <i>Ambrosia trifida</i>	Entry Date: Apr-19-2021
	Common Name: Giant ragweed	Stage Scale: BBCH
Pest 9 Type: W	Code: ERICA <i>Erigeron canadensis</i>	Entry Date: Jun-9-2021
	Common Name: Canada horseweed	Stage Scale: BBCH
Pest10 Type: W	Code: SETFA <i>Setaria faberi</i>	Entry Date: Jun-9-2021
	Common Name: Giant foxtail	Stage Scale: BBCH
Pest11 Type: W	Code: CHEAL <i>Chenopodium album</i>	Entry Date: Jun-9-2021
	Common Name: common lambsquarters	Stage Scale: BBCH
Pest12 Type: W	Code: AMARE <i>Amaranthus retroflexus</i>	Entry Date: Jun-9-2021
	Common Name: Redroot pigweed	Stage Scale: BBCH
Pest13 Type: W	Code: AMBEL <i>Ambrosia artemisiifolia</i>	Entry Date: Jun-9-2021
	Common Name: Common ragweed	Stage Scale: BBCH
Pest14 Type: W	Code: POLPY <i>Persicaria pensylvanica</i>	Entry Date: Jun-9-2021
	Common Name: annual smartweed	Stage Scale: BBCH

Site and Design

Treated Plot Width: 6.67 FT
Treated Plot Length: 30 FT
Treated Plot Area: 200.1 FT² **Treatments:** 8
Replications: 3

Site Type: FIELD field
Experimental Unit: 1 PLOT plot
Tillage Type: NOTILL no-till
Study Design: RAOBL Randomized Complete Block (RCB)

Previous

No. Crop Year
 1. WHEAT 2020

Soil Description

Description Name: F-9 West
% Sand: 33 **% OM:** 1.6 **Texture:** SIL silt loam
% Silt: 53 **pH:** 6 **Soil Name:** Crosby
% Clay: 15 **CEC:** 8.6 **Fert. Level:** G good

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Application Description

	A	B
Application Date	Apr-16-2021	Jun-8-2021
Appl. Start Time	9:00 AM	11:00 AM
Appl. Stop Time	9:15 AM	11:30 AM
Application Method	SPRAY	SPRAY
Application Timing	14 EPP	POST
Application Placement	BROFOL	BROFOL
Applied By	Lamb	Dobbels
Appl. Entry Date	Apr-19-2021	Jun-9-2021
Air Temperature Start, Stop	43 43 F	77 77 F
% Relative Humidity Start, Stop	73 73	80 80
Wind Velocity+Dir. Start	10 MPH NW 6	MPH SW
Wind Velocity+Dir. Stop	10 MPH NW 6	MPH SW
Wind Velocity+Dir. Max	12 MPH NW 6	MPH SW
Wet Leaves (Y/N)	N no	N no
Soil Temperature	41 F	73 F
Soil Moisture	MOIST	MOIST
Soil Surface Condition	MEDTRA	MEDTRA
% Cloud Cover	5	80
Next Moisture Occurred On	Apr-19-2021	Jun-9-2021
Time to Next Moisture	3.0 DAY	1.0 DAY
Moisture 6 Hours after Appl.	0 IN	0 IN
Moisture 1 Week after Appl.	0.44 IN	0.26 IN

Crop Stage At Each Application

	A	B
Crop 1 Code, BBCH Scale	GLXMA BSOY	GLXMA BSOY
Days after Emergence	-46	7
Stage Majority, Percent		13 100
Height Average		3 IN
Height Minimum, Maximum		3 4

Pest Stage At Each Application

	A	B
Pest 1 Code, Type, Scale	STEME W	BBCH STEME W
Stage Majority, Percent	65 90	
Stage Minimum, Percent	63 10	
Stage Maximum, Percent	65 90	
Diameter Average	7 IN	
Diameter Minimum, Maximum	6 8	
Height Average	1 IN	
Height Minimum, Maximum	0.5 1	
Density Average	5 PLA/m2	
Density Minimum, Maximum	1 6	
Pest 2 Code, Type, Scale	LAMPU W	BBCH LAMPU W
Stage Majority, Percent	65 100	
Diameter Average	2 IN	
Diameter Minimum, Maximum	2 3	
Height Average	3 IN	
Height Minimum, Maximum	3 4	
Density Average	12 PLA/m2	
Density Minimum, Maximum	3 18	
Pest 3 Code, Type, Scale	VERAG W	BBCH VERAG W
Stage Majority, Percent	63 80	
Stage Minimum, Percent	60 10	
Stage Maximum, Percent	63 80	
Diameter Average	4 IN	
Diameter Minimum, Maximum	3 4	
Height Average	0.25 IN	
Height Minimum, Maximum	0.25 0.5	
Density Average	3 PLA/m2	
Density Minimum, Maximum	0 4	
Pest 4 Code, Type, Scale	TAROF W	BBCH TAROF W
Stage Majority, Percent	65 100	
Diameter Average	8 IN	
Diameter Minimum, Maximum	8 10	
Height Average	1 IN	
Height Minimum, Maximum	1 2	
Density Average	2 PLA/m2	
Density Minimum, Maximum	0 3	
Pest 5 Code, Type, Scale	CARPE W	BBCH CARPE W
Stage Majority, Percent	69 100	
Diameter Average	2 IN	
Diameter Minimum, Maximum	1.5 2	

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Height Average	4	IN		
Height Minimum, Maximum	4	5		
Density Average	15	PLA/m2		
Density Minimum, Maximum	5	20		
Pest 6 Code, Type, Scale	RANAB W BBCH RANAB W BBCH			
Stage Majority, Percent	60	50		
Stage Minimum, Percent	55	25		
Stage Maximum, Percent	63	25		
Diameter Average	2	IN		
Diameter Minimum, Maximum	1	2		
Height Average	3	IN		
Height Minimum, Maximum	3	4		
Density Average	3	PLA/m2		
Density Minimum, Maximum	1	4		
Pest 7 Code, Type, Scale	ERYRE W BBCH ERYRE W BBCH			
Stage Majority, Percent	60	50		
Stage Minimum, Percent	55	10		
Stage Maximum, Percent	60	50		
Diameter Average	3	IN		
Diameter Minimum, Maximum	2	3		
Height Average	8	IN		
Height Minimum, Maximum	8	10		
Density Average	1	PLA/m2		
Density Minimum, Maximum	0	4		
Pest 8 Code, Type, Scale	AMBTR W BBCH AMBTR W BBCH			
Stage Majority, Percent	10	100	19	100
Diameter Average	1	IN		
Diameter Minimum, Maximum	0.5	1		
Height Average	0.5	IN	8	IN
Height Minimum, Maximum	0.25	0.5	8	12
Density Average	5	PLA/m2	5	PLA/m2
Density Minimum, Maximum	2	8	1	8
Pest 9 Code, Type, Scale	ERICA W BBCH ERICA W BBCH			
Stage Majority, Percent			19	100
Diameter Average			3	IN
Diameter Minimum, Maximum			2	3
Height Average			6	IN
Height Minimum, Maximum			6	8
Density Average			2	PLA/m2
Density Minimum, Maximum			0	5
Pest10 Code, Type, Scale	SETFA W BBCH SETFA W BBCH			
Stage Majority, Percent			13	80
Stage Minimum, Percent			12	10
Stage Maximum, Percent			14	10
Height Average			6	IN
Height Minimum, Maximum			6	8
Density Average			125	PLA/m2
Density Minimum, Maximum			78	236
Pest11 Code, Type, Scale	CHEAL W BBCH CHEAL W BBCH			
Stage Majority, Percent			18	80
Stage Minimum, Percent			14	10
Stage Maximum, Percent			19	10
Height Average			3	IN
Height Minimum, Maximum			2	4
Density Average			12	PLA/m2
Density Minimum, Maximum			5	16
Pest12 Code, Type, Scale	AMARE W BBCH AMARE W BBCH			
Stage Majority, Percent			12	80
Stage Minimum, Percent			12	80
Stage Maximum, Percent			14	20
Height Average			1	IN
Height Minimum, Maximum			1	1.5
Density Average			3	PLA/m2
Density Minimum, Maximum			0	5
Pest13 Code, Type, Scale	AMBEL W BBCH AMBEL W BBCH			
Stage Majority, Percent			18	80
Stage Minimum, Percent			16	10
Stage Maximum, Percent			18	80
Height Average			6	IN
Height Minimum, Maximum			4	8
Density Average			3	PLA/m2
Density Minimum, Maximum			0	4
Pest14 Code, Type, Scale	POLPY W BBCH POLPY W BBCH			
Stage Majority, Percent			14	60
Stage Minimum, Percent			12	20

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Stage Maximum, Percent	16	10
Height Average	4	IN
Height Minimum, Maximum	1	5
Density Average	4	PLA/m2
Density Minimum, Maximum	1	7

Application Equipment

	A		B
Appl. Equipment	6' TT		10' TTI
Equipment Type	BACCAI		BACCAI
Operation Pressure	44 PSI		44 PSI
Nozzle Model	110015		110015
Nozzle Type	TT		TTI
Nozzle Spacing	18 IN		18 IN
Boom Length	6.67 FT		10 FT
Boom Height	20 IN		20 IN
Ground Speed	3 MPH		3 MPH
Carrier	WATER		WATER
Water Hardness (ppm CaCO3)	250		
Application Amount	15 GAL/AC		15 GAL/AC
Mix Size	1 L		2 L
Spray pH	7.8		
Propellant	COMCO2		COMCO2
Tank Mix (Y/N)			Y yes

Notes

Context	Date	By	Notes				
STATUS	Apr-2-2021	Dr. Mark M. Loux	Automatically added by ARM: Trial Status updated to 'S' during trial creation.				
STATUS	Apr-19-2021	Dr. Mark M. Loux	Automatically added by ARM: Trial Status updated to 'E' when Rating Date entered.				
STATUS	Apr-19-2021	Dr. Mark M. Loux	Automatically added by ARM: Trial Status updated to 'E' when Rating Date entered.				
Pest Type			W Weed	W Weed	W Weed	W Weed	W Weed
Pest Code			STEME	LAMPU	TAROF	CARPE	VERAG
Pest Name			Common chickweed	Purple deadnett>	Blowball	Pennsylvania bi>	Field speedwell
Crop Type, Code							
Crop Name							
Rating Date			Apr-19-2021	Apr-19-2021	Apr-19-2021	Apr-19-2021	Apr-19-2021
Part Rated			CANOPY C	CANOPY -	CANOPY -	CANOPY -	CANOPY -
Rating Type			CONTRO	CONTRO	CONTRO	CONTRO	CONTRO
Rating Unit/Min/Max			% 0 100	% 0 100 %	0 100	% 0 100 %	0 100
Number of Subsamples			1	1	1	1	1
Data Entry Date			Apr-19-2021	Apr-19-2021	Apr-19-2021	Apr-19-2021	Apr-19-2021
Days After First/Last Applic.			3 3	3 3	3 3	3 3	3 3
Trt-Eval Interval			3 DA-A	3 DA-A	3 DA-A	3 DA-A	3 DA-A
Days After Emergence			-43 DE-1	-43 DE-1	-43 DE-1	-43 DE-1	-43 DE-1
ARM Action Codes					ET5		
Number of Decimals			0	0	0	0	0

Trt No.	Treatment Name	Other Rate	Other Rate	Appl Unit Code	1*	2*	3*	4*	5*
1	UTC			A	0 -	0 -	0 d	0 -	0 -
2	Reviton	2 oz/a		A	0 -	0 -	40 a	0 -	0 -
	HC MSO	19.2 oz/a		A					
3	Reviton	2 oz/a		A	0 -	0 -	40 a	0 -	0 -
	Roundup Powermax	22 oz/a		A					
	HC MSO	19.2 oz/a		A					
	AMSOL	48 oz/a		A					
4	Sharpen	1.5 oz/a		A	0 -	0 -	35 ab	0 -	0 -
	Roundup Powermax	22 oz/a		A					
	HC MSO	19.2 oz/a		A					
	AMSOL	48 oz/a		A					
5	Reviton	2 oz/a		A	0 -	0 -	40	0 -	0 -
	Roundup Powermax	22 oz/a		A					
	Zone Elite	32 oz/a		A					
	HC MSO	19.2 oz/a		A					
	AMSOL	48 oz/a		A					

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Pest Type	W Weed	W Weed	W Weed	W Weed	W Weed
Pest Code	STEME	LAMPU	TAROF	CARPE	VERAG
Pest Name	Common chickweed	Purple deadnett>	Blowball	Pennsylvania bi>	Field speedwell
Crop Type, Code					
Crop Name					
Rating Date	Apr-19-2021	Apr-19-2021	Apr-19-2021	Apr-19-2021	Apr-19-2021
Part Rated	CANOPY C	CANOPY -	CANOPY -	CANOPY -	CANOPY -
Rating Type	CONTRO	CONTRO	CONTRO	CONTRO	CONTRO
Rating Unit/Min/Max	% 0 100	% 0 100 %	% 0 100	% 0 100 %	% 0 100
Number of Subsamples	1	1	1	1	1
Data Entry Date	Apr-19-2021	Apr-19-2021	Apr-19-2021	Apr-19-2021	Apr-19-2021
Days After First/Last Applic.	3 3	3 3	3 3	3 3	3 3
Trt-Eval Interval	3 DA-A	3 DA-A	3 DA-A	3 DA-A	3 DA-A
Days After Emergence	-43 DE-1	-43 DE-1	-43 DE-1	-43 DE-1	-43 DE-1
ARM Action Codes			ET5		
Number of Decimals	0	0	0	0	0

Trt No.	Treatment Name	Other Rate	Other Rate	Appl Unit Code	1*	2*	3*	4*	5*
6	Fierce EZ	6 oz/a		A	0 -	0 -	30 abc	0 -	0 -
	Roundup Powermax	22 oz/a		A					
	Xtendimax	22 oz/a		A					
	NIS	4.8 oz/a		A					
	On Target	9.6 oz/a		A					
	Volt Edge	20 oz/a		A					
	Roundup Powermax	22 oz/a		B					
	Xtendimax	22 oz/a		B					
	Perpetuo	6 oz/a		B					
	Select Max	9 oz/a		B					
	NIS	4.8 oz/a		B					
	On Target	9.6 oz/a		B					
	Volt Edge	20 oz/a		B					
7	Fierce MTZ	1 pt/a		A	0 -	0 -	22 c	0 -	0 -
	Roundup Powermax	22 oz/a		A					
	Xtendimax	22 oz/a		A					
	NIS	4.8 oz/a		A					
	On Target	9.6 oz/a		A					
	Volt Edge	20 oz/a		A					
	Roundup Powermax	22 oz/a		B					
	Xtendimax	22 oz/a		B					
	Perpetuo	6 oz/a		B					
	Select Max	9 oz/a		B					
	NIS	4.8 oz/a		B					
	On Target	9.6 oz/a		B					
	Volt Edge	20 oz/a		B					
8	Fierce XLT	4 oz/a		A	0 -	0 -	25 bc	0 -	0 -
	Roundup Powermax	22 oz/a		A					
	Xtendimax	22 oz/a		A					
	NIS	4.8 oz/a		A					
	On Target	9.6 oz/a		A					
	Volt Edge	20 oz/a		A					
	Roundup Powermax	22 oz/a		B					
	Xtendimax	22 oz/a		B					
	Perpetuo	6 oz/a		B					
	Select Max	9 oz/a		B					
	NIS	4.8 oz/a		B					
	On Target	9.6 oz/a		B					
	Volt Edge	20 oz/a		B					
LSD P=.05					.	.	9.5	.	.
Standard Deviation					0.0	0.0	5.3	0.0	0.0
CV					0.0	0.0	19.52	0.0	0.0
Levene's F^					.	.	0.79	.	.
Levene's Prob(F)					.	.	0.592	.	.
Skewness^					.	.	-0.2688	.	.
Kurtosis^					.	.	0.0086	.	.
Replicate F					0.000	0.000	1.292	0.000	0.000
Replicate Prob(F)					1.0000	1.0000	0.3104	1.0000	1.0000
Treatment F					0.000	0.000	20.500	0.000	0.000
Treatment Prob(F)					1.0000	1.0000	0.0001	1.0000	1.0000

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 Location: Bushy Giant ragweed
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 Investigator (Creator): Dr. Mark M. Loux
 Study Director:
 Sponsor Contact:

Pest Type	W Weed	W Weed	W Weed	W Weed	W Weed
Pest Code	RANAB	ERYRE	AMBTR	STEME	LAMPU
Pest Name	Smallflower but>	Bushy wallflower	Giant ragweed	Common chickweed	Purple deadnett>
Crop Type, Code					
Crop Name					
Rating Date	Apr-19-2021	Apr-19-2021	Apr-19-2021	Apr-23-2021	Apr-23-2021
Part Rated	CANOPY -	CANOPY -	CANOPY -	CANOPY -	CANOPY -
Rating Type	CONTRO	CONTRO	CONTRO	CONTRO	CONTRO
Rating Unit/Min/Max	% 0 100	% 0 100	% 0 100	% 0 100	% 0 100
Number of Subsamples	1	1	1	1	1
Data Entry Date	Apr-19-2021	Apr-19-2021	Apr-19-2021	Apr-23-2021	Apr-23-2021
Days After First/Last Applic.	3 3	3 3	3 3	7 7	7 7
Trt-Eval Interval	3 DA-A	3 DA-A	3 DA-A	7 DA-A	7 DA-A
Days After Emergence	-43 DE-1	-43 DE-1	-43 DE-1	-39 DE-1	-39 DE-1
ARM Action Codes					
Number of Decimals	0	0	0	0	0

Trt No.	Treatment Name	Other Rate	Other Rate	Appl Unit Code	6*	7*	8*	9*	10*
1	UTC				0 b		0 -	0 d	0 d
2	Reviton	2 oz/a		A	37 a	40 -	0 -	47 ab	67 a
	HC MSO	19.2 oz/a		A					
3	Reviton	2 oz/a		A	40 a	35 -	0 -	53 ab	60 ab
	Roundup Powermax	22 oz/a		A					
	HC MSO	19.2 oz/a		A					
	AMSOL	48 oz/a		A					
4	Sharpen	1.5 oz/a		A	37 a	35 -	0 -	50 ab	50 b
	Roundup Powermax	22 oz/a		A					
	HC MSO	19.2 oz/a		A					
	AMSOL	48 oz/a		A					
5	Reviton	2 oz/a		A	31 a	30 -	0 -	60 a	57 ab
	Roundup Powermax	22 oz/a		A					
	Zone Elite	32 oz/a		A					
	HC MSO	19.2 oz/a		A					
	AMSOL	48 oz/a		A					

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Pest Type	W Weed	W Weed	W Weed	W Weed	W Weed
Pest Code	RANAB	ERYRE	AMBTR	STEME	LAMPU
Pest Name	Smallflower but>	Bushy wallflower	Giant ragweed	Common chickweed	Purple deadnett>
Crop Type, Code					
Crop Name					
Rating Date	Apr-19-2021	Apr-19-2021	Apr-19-2021	Apr-23-2021	Apr-23-2021
Part Rated	CANOPY -	CANOPY -	CANOPY -	CANOPY -	CANOPY -
Rating Type	CONTRO	CONTRO	CONTRO	CONTRO	CONTRO
Rating Unit/Min/Max	% 0 100	% 0 100	% 0 100	% 0 100	% 0 100
Number of Subsamples	1	1	1	1	1
Data Entry Date	Apr-19-2021	Apr-19-2021	Apr-19-2021	Apr-23-2021	Apr-23-2021
Days After First/Last Applic.	3 3	3 3	3 3	7 7	7 7
Trt-Eval Interval	3 DA-A	3 DA-A	3 DA-A	7 DA-A	7 DA-A
Days After Emergence	-43 DE-1	-43 DE-1	-43 DE-1	-39 DE-1	-39 DE-1
ARM Action Codes					
Number of Decimals	0	0	0	0	0

Trt No.	Treatment Name	Other Rate	Other Rate	Appl Unit Code	6*	7*	8*	9*	10*
6	Fierce EZ	6 oz/a		A	33 a	20 -	0 -	37 bc	30 c
	Roundup Powermax	22 oz/a		A					
	Xtendimax	22 oz/a		A					
	NIS	4.8 oz/a		A					
	On Target	9.6 oz/a		A					
	Volt Edge	20 oz/a		A					
	Roundup Powermax	22 oz/a		B					
	Xtendimax	22 oz/a		B					
	Perpetuo	6 oz/a		B					
	Select Max	9 oz/a		B					
	NIS	4.8 oz/a		B					
	On Target	9.6 oz/a		B					
	Volt Edge	20 oz/a		B					
7	Fierce MTZ	1 pt/a		A	37 a		0 -	30 c	30 c
	Roundup Powermax	22 oz/a		A					
	Xtendimax	22 oz/a		A					
	NIS	4.8 oz/a		A					
	On Target	9.6 oz/a		A					
	Volt Edge	20 oz/a		A					
	Roundup Powermax	22 oz/a		B					
	Xtendimax	22 oz/a		B					
	Perpetuo	6 oz/a		B					
	Select Max	9 oz/a		B					
	NIS	4.8 oz/a		B					
	On Target	9.6 oz/a		B					
	Volt Edge	20 oz/a		B					
8	Fierce XLT	4 oz/a		A	36 a		0 -	27 c	23 c
	Roundup Powermax	22 oz/a		A					
	Xtendimax	22 oz/a		A					
	NIS	4.8 oz/a		A					
	On Target	9.6 oz/a		A					
	Volt Edge	20 oz/a		A					
	Roundup Powermax	22 oz/a		B					
	Xtendimax	22 oz/a		B					
	Perpetuo	6 oz/a		B					
	Select Max	9 oz/a		B					
	NIS	4.8 oz/a		B					
	On Target	9.6 oz/a		B					
	Volt Edge	20 oz/a		B					
LSD P=.05					9.4	127.1	.	13.5	11.9
Standard Deviation					5.2	10.0	0.0	7.7	6.8
CV					16.83	30.43	0.0	20.35	17.1
Levene's F^					0.502	.	.	1.012	0.80
Levene's Prob(F)					0.817	.	.	0.459	0.599
Skewness^					-0.3382	0.0	.	-0.3987	-0.2146
Kurtosis^					-0.7337	-1.2	.	1.1201	0.8891
Replicate F					0.336	0.000	0.000	0.280	1.727
Replicate Prob(F)					0.7214	1.0000	1.0000	0.7599	0.2136
Treatment F					18.243	0.607	0.000	18.550	33.338
Treatment Prob(F)					0.0001	0.7313	1.0000	0.0001	0.0001

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Reviton Soybean Burndown

Trial ID: 21RRXNT
 Protocol ID: 2021-H-US11-S, Fierce MD 64.02
 Project ID:
 Location: Pennsylvania
 Investigator (Creator): Dr. Mark M. Loux
 Study Director:
 Sponsor Contact:
 Trial Year: 2021

Pest Type	W Weed	W Weed	W Weed	W Weed	W Weed	W Weed				
Pest Code	TAROF	CARPE	VERAG	RANAB	ERYRE	AMBTR				
Pest Name	Blowball	Pennsylvania bi>	Field speedwell	Smallflower but>	Bushy wallflower	Giant ragweed				
Crop Type, Code										
Crop Name										
Rating Date	Apr-23-2021	Apr-23-2021	Apr-23-2021	Apr-23-2021	Apr-23-2021	Apr-23-2021				
Part Rated	CANOPY -	CANOPY -	CANOPY -	CANOPY -	CANOPY -	CANOPY -				
Rating Type	CONTRO	CONTRO	CONTRO	CONTRO	CONTRO	CONTRO				
Rating Unit/Min/Max	% 0 100	% 0 100	% 0 100	% 0 100	% 0 100	% 0 100				
Number of Subsamples	1	1	1	1	1	1				
Data Entry Date	Apr-23-2021	Apr-23-2021	Apr-23-2021	Apr-23-2021	Apr-23-2021	Apr-23-2021				
Days After First/Last Applic.	7 7	7 7	7 7	7 7	7 7	7 7				
Trt-Eval Interval	7 DA-A	7 DA-A	7 DA-A	7 DA-A	7 DA-A	7 DA-A				
Days After Emergence	-39 DE-1	-39 DE-1	-39 DE-1	-39 DE-1	-39 DE-1	-39 DE-1				
ARM Action Codes				ET3	ET5	EC				
Number of Decimals	0	0	0	0	0	0				
Trt No.	Treatment Name	Other Rate	Other Rate	Appl Unit Code	11*	12*	13*	14*	15*	16*
1	UTC			A	0 c	0 c	0 b	0 c	0 c	0
2	Reviton	2 oz/a		A	63 a	33 a	27 a	47 a	40 b	33 -
	HC MSO	19.2 oz/a		A						
3	Reviton	2 oz/a		A	80 a	37 a	30 a	40	33 b	37 -
	Roundup Powermax	22 oz/a		A						
	HC MSO	19.2 oz/a		A						
	AMSOL	48 oz/a		A						
4	Sharpen	1.5 oz/a		A	68 a	37 a	27 a	37 ab	50 a	33 -
	Roundup Powermax	22 oz/a		A						
	HC MSO	19.2 oz/a		A						
	AMSOL	48 oz/a		A						
5	Reviton	2 oz/a		A	72 a	40 a	30 a	34 b	40	50 -
	Roundup Powermax	22 oz/a		A						
	Zone Elite	32 oz/a		A						
	HC MSO	19.2 oz/a		A						
	AMSOL	48 oz/a		A						

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Reviton Soybean Burndown

Trial ID: 21RRXNT Location: Trial Year: 2021
 Protocol ID: 2021-H-US11-S, Fierce MD 64.02 Investigator (Creator): Dr. Mark M. Loux
 Project ID: Study Director:
 Sponsor Contact:

Pest Type	W Weed	W Weed	W Weed	W Weed	W Weed	W Weed
Pest Code	TAROF	CARPE	VERAG	RANAB	ERYRE	AMBTR
Pest Name	Blowball	Pennsylvania bi>	Field speedwell	Smallflower but>	Bushy wallflower	Giant ragweed
Crop Type, Code						
Crop Name						
Rating Date	Apr-23-2021	Apr-23-2021	Apr-23-2021	Apr-23-2021	Apr-23-2021	Apr-23-2021
Part Rated	CANOPY -	CANOPY -	CANOPY -	CANOPY -	CANOPY -	CANOPY -
Rating Type	CONTRO	CONTRO	CONTRO	CONTRO	CONTRO	CONTRO
Rating Unit/Min/Max	% 0 100	% 0 100	% 0 100	% 0 100	% 0 100	% 0 100
Number of Subsamples	1	1	1	1	1	1
Data Entry Date	Apr-23-2021	Apr-23-2021	Apr-23-2021	Apr-23-2021	Apr-23-2021	Apr-23-2021
Days After First/Last Applic.	7 7	7 7	7 7	7 7	7 7	7 7
Trt-Eval Interval	7 DA-A	7 DA-A	7 DA-A	7 DA-A	7 DA-A	7 DA-A
Days After Emergence	-39 DE-1	-39 DE-1	-39 DE-1	-39 DE-1	-39 DE-1	-39 DE-1
ARM Action Codes				ET3	ET5	EC
Number of Decimals	0	0	0	0	0	0

Trt No.	Treatment Name	Other Rate	Other Rate	Appl Unit Code	11*	12*	13*	14*	15*	16*
6	Fierce EZ	6 oz/a		A	33 b	13 b	13 ab	33 b	30 b	47 -
	Roundup Powermax	22 oz/a		A						
	Xtendimax	22 oz/a		A						
	NIS	4.8 oz/a		A						
	On Target	9.6 oz/a		A						
	Volt Edge	20 oz/a		A						
	Roundup Powermax	22 oz/a		B						
	Xtendimax	22 oz/a		B						
	Perpetuo	6 oz/a		B						
	Select Max	9 oz/a		B						
	NIS	4.8 oz/a		B						
	On Target	9.6 oz/a		B						
	Volt Edge	20 oz/a		B						
7	Fierce MTZ	1 pt/a		A	43 b	20 b	23 a	32 b	33 b	50 -
	Roundup Powermax	22 oz/a		A						
	Xtendimax	22 oz/a		A						
	NIS	4.8 oz/a		A						
	On Target	9.6 oz/a		A						
	Volt Edge	20 oz/a		A						
	Roundup Powermax	22 oz/a		B						
	Xtendimax	22 oz/a		B						
	Perpetuo	6 oz/a		B						
	Select Max	9 oz/a		B						
	NIS	4.8 oz/a		B						
	On Target	9.6 oz/a		B						
	Volt Edge	20 oz/a		B						
8	Fierce XLT	4 oz/a		A	40 b	10 bc	13 ab	37 ab	30 b	50 -
	Roundup Powermax	22 oz/a		A						
	Xtendimax	22 oz/a		A						
	NIS	4.8 oz/a		A						
	On Target	9.6 oz/a		A						
	Volt Edge	20 oz/a		A						
	Roundup Powermax	22 oz/a		B						
	Xtendimax	22 oz/a		B						
	Perpetuo	6 oz/a		B						
	Select Max	9 oz/a		B						
	NIS	4.8 oz/a		B						
	On Target	9.6 oz/a		B						
	Volt Edge	20 oz/a		B						
LSD P=.05					14.0	10.9	12.2	6.9	9.2	12.1
Standard Deviation					8.0	6.2	6.9	3.7	5.2	6.8
CV					15.94	26.19	34.01	12.27	16.78	15.83
Levene's F^					0.558	0.357	0.412	0.355	1.148	0.775
Levene's Prob(F)					0.779	0.914	0.881	0.891	0.386	0.603
Skewness^					-0.8745	0.4669	-0.7085	0.0	0.5309	-0.1088
Kurtosis^					0.2239	-0.3681	-0.2673	-1.3464	1.7565	1.1747
Replicate F					0.344	6.785	0.605	5.231	0.176	1.241
Replicate Prob(F)					0.7146	0.0087	0.5598	0.0353	0.8404	0.3236
Treatment F					32.412	17.338	7.000	46.154	26.235	4.207
Treatment Prob(F)					0.0001	0.0001	0.0011	0.0001	0.0001	0.0165

The Ohio State University

Reviton Soybean Burndown

Trial ID: 21RRXNT
 Protocol ID: 2021-H-US11-S, Fierce MD 64.02
 Project ID:
 Location: Trial Year: 2021
 Investigator (Creator): Dr. Mark M. Loux
 Study Director:
 Sponsor Contact:

Pest Type	W Weed	W Weed	W Weed	W Weed	W Weed				
Pest Code	STEME	LAMPU	TAROF	CARPE	VERAG				
Pest Name	Common chickweed	Purple deadnett>	Blowball	Pennsylvania b>	Field speedwell				
Crop Type, Code									
Crop Name									
Rating Date	May-7-2021	May-7-2021	May-7-2021	May-7-2021	May-7-2021				
Part Rated	CANOPY -	CANOPY -	CANOPY -	CANOPY -	CANOPY -				
Rating Type	CONTRO	CONTRO	CONTRO	CONTRO	CONTRO				
Rating Unit/Min/Max	% 0 100	% 0 100 %	0 100	% 0 100 %	0 100				
Number of Subsamples	1	1	1	1	1				
Data Entry Date	May-7-2021	May-7-2021	May-7-2021	May-7-2021	May-7-2021				
Days After First/Last Applic.	21 21	21 21	21 21	21 21	21 21				
Trt-Eval Interval	21 DA-A	21 DA-A	21 DA-A	21 DA-A	21 DA-A				
Days After Emergence	-25 DE-1	-25 DE-1	-25 DE-1	-25 DE-1	-25 DE-1				
ARM Action Codes	AS		EC						
Number of Decimals	0	0	0	0	0				
Trt No.	Treatment Name	Other Rate	Other Rate	Appl Unit Code	17* dAS	18*	19*	20*	21*
1	UTC				0 c	0 c	0	0 -	0 d
2	Reviton	2 oz/a		A	53 b	100 a	63 c	100 -	30 c
	HC MSO	19.2 oz/a		A					
3	Reviton	2 oz/a		A	100 a	100 a	98 a	100 -	100 a
	Roundup Powermax	22 oz/a		A					
	HC MSO	19.2 oz/a		A					
	AMSOL	48 oz/a		A					
4	Sharpen	1.5 oz/a		A	100 a	98 a	85 ab	100 -	98 a
	Roundup Powermax	22 oz/a		A					
	HC MSO	19.2 oz/a		A					
	AMSOL	48 oz/a		A					
5	Reviton	2 oz/a		A	100 a	100 a	93 ab	100 -	100 a
	Roundup Powermax	22 oz/a		A					
	Zone Elite	32 oz/a		A					
	HC MSO	19.2 oz/a		A					
	AMSOL	48 oz/a		A					

The Ohio State University

Reviton Soybean Burndown

Trial ID: 21RRXNT Location: Trial Year: 2021
 Protocol ID: 2021-H-US11-S, Fierce MD 64.02 Investigator (Creator): Dr. Mark M. Loux
 Project ID: Study Director:
 Sponsor Contact:

Pest Type	W Weed	W Weed	W Weed	W Weed	W Weed
Pest Code	STEME	LAMPU	TAROF	CARPE	VERAG
Pest Name	Common chickweed	Purple deadnett>	Blowball	Pennsylvania bi>	Field speedwell

Crop Type, Code					
Crop Name					
Rating Date	May-7-2021	May-7-2021	May-7-2021	May-7-2021	May-7-2021
Part Rated	CANOPY -	CANOPY -	CANOPY -	CANOPY -	CANOPY -
Rating Type	CONTRO	CONTRO	CONTRO	CONTRO	CONTRO
Rating Unit/Min/Max	% 0 100	% 0 100 %	% 0 100	% 0 100 %	% 0 100

Number of Subsamples	1	1	1	1	1
Data Entry Date	May-7-2021	May-7-2021	May-7-2021	May-7-2021	May-7-2021
Days After First/Last Applic.	21 21	21 21	21 21	21 21	21 21
Trt-Eval Interval	21 DA-A	21 DA-A	21 DA-A	21 DA-A	21 DA-A
Days After Emergence	-25 DE-1	-25 DE-1	-25 DE-1	-25 DE-1	-25 DE-1
ARM Action Codes	AS		EC		
Number of Decimals	0	0	0	0	0

Trt No.	Treatment Name	Other Rate	Other Rate	Appl Unit Code	17* dAS	18*	19*	20*	21*
6	Fierce EZ	6 oz/a		A	100 a	100 a	85 ab	100 -	98 a
	Roundup Powermax	22 oz/a		A					
	Xtendimax	22 oz/a		A					
	NIS	4.8 oz/a		A					
	On Target	9.6 oz/a		A					
	Volt Edge	20 oz/a		A					
	Roundup Powermax	22 oz/a		B					
	Xtendimax	22 oz/a		B					
	Perpetuo	6 oz/a		B					
	Select Max	9 oz/a		B					
	NIS	4.8 oz/a		B					
	On Target	9.6 oz/a		B					
	Volt Edge	20 oz/a		B					
7	Fierce MTZ	1 pt/a		A	100 a	100 a	87 ab	100 -	92 ab
	Roundup Powermax	22 oz/a		A					
	Xtendimax	22 oz/a		A					
	NIS	4.8 oz/a		A					
	On Target	9.6 oz/a		A					
	Volt Edge	20 oz/a		A					
	Roundup Powermax	22 oz/a		B					
	Xtendimax	22 oz/a		B					
	Perpetuo	6 oz/a		B					
	Select Max	9 oz/a		B					
	NIS	4.8 oz/a		B					
	On Target	9.6 oz/a		B					
	Volt Edge	20 oz/a		B					
8	Fierce XLT	4 oz/a		A	100 a	85 b	78 b	100 -	83 b
	Roundup Powermax	22 oz/a		A					
	Xtendimax	22 oz/a		A					
	NIS	4.8 oz/a		A					
	On Target	9.6 oz/a		A					
	Volt Edge	20 oz/a		A					
	Roundup Powermax	22 oz/a		B					
	Xtendimax	22 oz/a		B					
	Perpetuo	6 oz/a		B					
	Select Max	9 oz/a		B					
	NIS	4.8 oz/a		B					
	On Target	9.6 oz/a		B					
	Volt Edge	20 oz/a		B					

LSD P=.05	3.6 - 4.8	8.5	12.1	.	10.9
Standard Deviation	0.1t	4.9	6.8	0.0	6.2
CV	1.61t	5.71	8.07	0.0	8.25
Levene's F^	0.643	1.342	0.472	.	1.034
Levene's Prob(F)	0.715	0.294	0.818	.	0.446
Skewness^	1.7125*	-1.341*	0.1982	.	0.8403
Kurtosis^	8.0329*	7.3846*	-0.5548	.	3.2947*

Replicate F	1.000	0.639	1.931	0.000	1.000
Replicate Prob(F)	0.3927	0.5426	0.1874	1.0000	0.3927
Treatment F	1732.931	153.633	8.223	0.000	114.931
Treatment Prob(F)	0.0001	0.0001	0.0011	1.0000	0.0001

The Ohio State University

Reviton Soybean Burndown

Trial ID: 21RRXNT
 Protocol ID: 2021-H-US11-S, Fierce MD 64.02
 Project ID:
 Location: ERICA
 Investigator (Creator): Dr. Mark M. Loux
 Study Director:
 Sponsor Contact:
 Trial Year: 2021

Pest Type	W Weed	W Weed	W Weed	W Weed	W Weed
Pest Code	RANAB	ERICA	AMBTR	SETFA	AMBTR
Pest Name	Smallflower Canada horseweed	Giant ragweed	Giant ragweed	Giant foxtail	Giant ragweed
Crop Type, Code	but>				
Crop Name					
Rating Date	May-7-2021	May-7-2021	May-7-2021	Jun-7-2021	Jun-7-2021
Part Rated	CANOPY -	CANOPY -	CANOPY -	CANOPY -	CANOPY -
Rating Type	CONTRO	CONTRO	CONTRO	CONTRO	CONTRO
Rating Unit/Min/Max	% 0 100	% 0 100	% 0 100	% 0 100	% 0 100
Number of Subsamples	1	1	1	1	1
Data Entry Date	May-7-2021	May-7-2021	May-7-2021	Jun-10-2021	Jun-10-2021
Days After First/Last Applic.	21 21	21 21	21 21	52 52	52 52
Trt-Eval Interval	21 DA-A	21 DA-A	21 DA-A	52 DA-A	52 DA-A
Days After Emergence	-25 DE-1	-25 DE-1	-25 DE-1	6 DE-1	6 DE-1
ARM Action Codes	AS	AA	AS	ET2	
Number of Decimals	0	0	0	0	0

Trt No.	Treatment Name	Other Rate	Other Rate Unit	Appl Code	22* dAS	23* dAA	24* dAS	25*	26*
1	UTC				0 b		0 b	0 c	0 b
2	Reviton	2 oz/a		A	95 a		100 a	0	0 b
	HC MSO	19.2 oz/a		A					
3	Reviton	2 oz/a		A	100 a		100 a	23 b	50 a
	Roundup Powermax	22 oz/a		A					
	HC MSO	19.2 oz/a		A					
	AMSOL	48 oz/a		A					
4	Sharpen	1.5 oz/a		A	100 a	100 -	100 a	0 c	60 a
	Roundup Powermax	22 oz/a		A					
	HC MSO	19.2 oz/a		A					
	AMSOL	48 oz/a		A					
5	Reviton	2 oz/a		A	100 a	60 -	100 a	75 a	50 a
	Roundup Powermax	22 oz/a		A					
	Zone Elite	32 oz/a		A					
	HC MSO	19.2 oz/a		A					
	AMSOL	48 oz/a		A					

The Ohio State University

Reviton Soybean Burndown

Trial ID: 21RRXNT Location: Trial Year: 2021
 Protocol ID: 2021-H-US11-S, Fierce MD 64.02 Investigator (Creator): Dr. Mark M. Loux
 Project ID: Study Director:
 Sponsor Contact:

Pest Type	W Weed	W Weed	W Weed	W Weed	W Weed
Pest Code	RANAB	ERICA	AMBTR	SETFA	AMBTR
Pest Name	Smallflower Canada	horseweed	Giant ragweed	Giant foxtail	Giant ragweed

Crop Type, Code					
Crop Name					
Rating Date	May-7-2021	May-7-2021	May-7-2021	Jun-7-2021	Jun-7-2021
Part Rated	CANOPY -	CANOPY -	CANOPY -	CANOPY -	CANOPY -
Rating Type	CONTRO	CONTRO	CONTRO	CONTRO	CONTRO
Rating Unit/Min/Max	% 0 100	% 0 100	% 0 100	% 0 100	% 0 100
Number of Subsamples	1	1	1	1	1
Data Entry Date	May-7-2021	May-7-2021	May-7-2021	Jun-10-2021	Jun-10-2021
Days After First/Last Applic.	21 21	21 21	21 21	52 52	52 52
Trt-Eval Interval	21 DA-A	21 DA-A	21 DA-A	52 DA-A	52 DA-A
Days After Emergence	-25 DE-1	-25 DE-1	-25 DE-1	6 DE-1	6 DE-1
ARM Action Codes	AS	AA	AS	ET2	
Number of Decimals	0	0	0	0	0

Trt No.	Treatment Name	Other Rate	Other Rate Unit	Appl Code	22* dAS	23* dAA	24* dAS	25*	26*	
6	Fierce EZ	6 oz/a		A	100 a		80 -	100 a	53 a	57 a
	Roundup Powermax	22 oz/a		A						
	Xtendimax	22 oz/a		A						
	NIS	4.8 oz/a		A						
	On Target	9.6 oz/a		A						
	Volt Edge	20 oz/a		A						
	Roundup Powermax	22 oz/a		B						
	Xtendimax	22 oz/a		B						
	Perpetuo	6 oz/a		B						
	Select Max	9 oz/a		B						
	NIS	4.8 oz/a		B						
	On Target	9.6 oz/a		B						
	Volt Edge	20 oz/a		B						
7	Fierce MTZ	1 pt/a		A	100 a		80 -	100 a	68 a	60 a
	Roundup Powermax	22 oz/a		A						
	Xtendimax	22 oz/a		A						
	NIS	4.8 oz/a		A						
	On Target	9.6 oz/a		A						
	Volt Edge	20 oz/a		A						
	Roundup Powermax	22 oz/a		B						
	Xtendimax	22 oz/a		B						
	Perpetuo	6 oz/a		B						
	Select Max	9 oz/a		B						
	NIS	4.8 oz/a		B						
	On Target	9.6 oz/a		B						
	Volt Edge	20 oz/a		B						
8	Fierce XLT	4 oz/a		A	100 a		80 -	95 a	73 a	57 a
	Roundup Powermax	22 oz/a		A						
	Xtendimax	22 oz/a		A						
	NIS	4.8 oz/a		A						
	On Target	9.6 oz/a		A						
	Volt Edge	20 oz/a		A						
	Roundup Powermax	22 oz/a		B						
	Xtendimax	22 oz/a		B						
	Perpetuo	6 oz/a		B						
	Select Max	9 oz/a		B						
	NIS	4.8 oz/a		B						
	On Target	9.6 oz/a		B						
	Volt Edge	20 oz/a		B						
LSD P=.05					5.5 - 5.5	.	5.5 - 5.5	17.9	18.0	
Standard Deviation					0.2t	0.0t	0.2t	10.1	10.3	
CV					1.8t	0.0t	1.8t	24.08	24.63	
Levene's F^					0.643	.	0.643	1.132	0.59	
Levene's Prob(F)					0.715	.	0.715	0.394	0.755	
Skewness^					-1.7125*	.	-1.7125*	-0.6272	-0.3964	
Kurtosis^					8.0329*	.	8.0329*	1.6913	2.0365*	
Replicate F					1.000	0.000	1.000	0.713	0.277	
Replicate Prob(F)					0.3927	1.0000	0.3927	0.5096	0.7622	
Treatment F					1280.555	0.000	1280.555	33.251	19.254	
Treatment Prob(F)					0.0001	1.0000	0.0001	0.0001	0.0001	

The Ohio State University

Reviton Soybean Burndown

Trial ID: 21RRXNT
 Protocol ID: 2021-H-US11-S, Fierce MD 64.02
 Project ID:
 Location: AMARE
 Investigator (Creator): Dr. Mark M. Loux
 Study Director:
 Sponsor Contact:
 Trial Year: 2021

Pest Type	W Weed	W Weed	W Weed	W Weed					
Pest Code	CHEAL	AMARE	ERICA	TAROF					
Pest Name	common Redroot pigweed		Canada horseweed	Blowball					
Crop Type, Code			C GLXMA						
Crop Name			Soybean						
Rating Date	Jun-7-2021	Jun-7-2021	Jun-21-2021	Jun-21-2021					
Part Rated	CANOPY -	CANOPY -	CANOPY -	CANOPY -					
Rating Type	CONTRO	CONTRO	PHYNEC	CONTRO					
Rating Unit/Min/Max	% 0 100	% 0 100	% 0 100	% 0 100					
Number of Subsamples	1	1	1	1					
Data Entry Date	Jun-10-2021	Jun-10-2021	Jun-22-2021	Jun-22-2021					
Days After First/Last Applic.	52 52	52 52	66 13	66 13					
Trt-Eval Interval	52 DA-A	52 DA-A	13 DA-B	13 DA-B					
Days After Emergence	6 DE-1	6 DE-1	20 DE-1	20 DE-1					
ARM Action Codes	AL	AL	AA						
Number of Decimals	0	0	0	0					
Trt No.	Treatment Name	Other Rate	Other Rate	Appl Unit Code	27* dAL	28* dAL	29* dAA	30*	31*
1	UTC				0 b	0 c	5 -	75 -	58 -
2	Reviton	2 oz/a		A	0 b	0 c	5 -	77 -	45 -
	HC MSO	19.2 oz/a		A					
3	Reviton	2 oz/a		A	0 b	0 c	4 -	60 -	63 -
	Roundup Powermax	22 oz/a		A					
	HC MSO	19.2 oz/a		A					
	AMSOL	48 oz/a		A					
4	Sharpen	1.5 oz/a		A	2 b	2 bc	5 -	78 -	53 -
	Roundup Powermax	22 oz/a		A					
	HC MSO	19.2 oz/a		A					
	AMSOL	48 oz/a		A					
5	Reviton	2 oz/a		A	87 a	15 abc	5 -	68 -	67 -
	Roundup Powermax	22 oz/a		A					
	Zone Elite	32 oz/a		A					
	HC MSO	19.2 oz/a		A					
	AMSOL	48 oz/a		A					

The Ohio State University

Reviton Soybean Burndown

Trial ID: 21RRXNT Location: Trial Year: 2021
 Protocol ID: 2021-H-US11-S, Fierce MD 64.02 Investigator (Creator): Dr. Mark M. Loux
 Project ID: Study Director:
 Sponsor Contact:

Pest Type	W Weed	W Weed	W Weed	W Weed
Pest Code	CHEAL	AMARE	ERICA	TAROF
Pest Name	common Redroot pigweed		Canada	Blowball
Crop Type, Code	lambsqau>		horseweed	
Crop Name			C GLXMA	
Rating Date	Jun-7-2021	Jun-7-2021	Jun-21-2021	Jun-21-2021
Part Rated	CANOPY -	CANOPY -	CANOPY -	CANOPY -
Rating Type	CONTRO	CONTRO	PHYNEC	CONTRO
Rating Unit/Min/Max	% 0 100	% 0 100	% 0 100	% 0 100
Number of Subsamples	1	1	1	1
Data Entry Date	Jun-10-2021	Jun-10-2021	Jun-22-2021	Jun-22-2021
Days After First/Last Applic.	52 52	52 52	66 13	66 13
Trt-Eval Interval	52 DA-A	52 DA-A	13 DA-B	13 DA-B
Days After Emergence	6 DE-1	6 DE-1	20 DE-1	20 DE-1
ARM Action Codes	AL	AL	AA	
Number of Decimals	0	0	0	0

Trt No.	Treatment Name	Other Rate	Other Rate Unit Code	27* dAL	28* dAL	29* dAA	30*	31*
6	Fierce EZ	6 oz/a	A	0 b	0 c	5 -	85 -	72 -
	Roundup Powermax	22 oz/a	A					
	Xtendimax	22 oz/a	A					
	NIS	4.8 oz/a	A					
	On Target	9.6 oz/a	A					
	Volt Edge	20 oz/a	A					
	Roundup Powermax	22 oz/a	B					
	Xtendimax	22 oz/a	B					
	Perpetuo	6 oz/a	B					
	Select Max	9 oz/a	B					
	NIS	4.8 oz/a	B					
	On Target	9.6 oz/a	B					
	Volt Edge	20 oz/a	B					
7	Fierce MTZ	1 pt/a	A	53 a	36 ab	5 -	85 -	53 -
	Roundup Powermax	22 oz/a	A					
	Xtendimax	22 oz/a	A					
	NIS	4.8 oz/a	A					
	On Target	9.6 oz/a	A					
	Volt Edge	20 oz/a	A					
	Roundup Powermax	22 oz/a	B					
	Xtendimax	22 oz/a	B					
	Perpetuo	6 oz/a	B					
	Select Max	9 oz/a	B					
	NIS	4.8 oz/a	B					
	On Target	9.6 oz/a	B					
	Volt Edge	20 oz/a	B					
8	Fierce XLT	4 oz/a	A	84 a	84 a	5 -	75 -	70 -
	Roundup Powermax	22 oz/a	A					
	Xtendimax	22 oz/a	A					
	NIS	4.8 oz/a	A					
	On Target	9.6 oz/a	A					
	Volt Edge	20 oz/a	A					
	Roundup Powermax	22 oz/a	B					
	Xtendimax	22 oz/a	B					
	Perpetuo	6 oz/a	B					
	Select Max	9 oz/a	B					
	NIS	4.8 oz/a	B					
	On Target	9.6 oz/a	B					
	Volt Edge	20 oz/a	B					
LSD P=.05				3.9 - 64.9	22.4 - 74.9	0.8 - 0.8	17.5	25.9
Standard Deviation				0.3t	0.5t	0.6t	10.0	14.8
CV				42.67t	80.03t	4.7t	13.25	24.61
Levene's F^				0.449	1.06	0.643	0.982	0.367
Levene's Prob(F)				0.854	0.431	0.715	0.478	0.908
Skewness^				0.9955	-0.2349	-1.7125*	-0.128	-0.2339
Kurtosis^				2.9468*	3.912*	8.0329*	0.3916	-0.8326
Replicate F				2.550	0.033	1.000	2.013	7.693
Replicate Prob(F)				0.1231	0.9673	0.3927	0.1704	0.0056
Treatment F				20.205	7.131	1.000	2.069	1.187
Treatment Prob(F)				0.0001	0.0010	0.4706	0.1170	0.3701

The Ohio State University

Reviton Soybean Burndown

Trial ID: 21RRXNT Location: Trial Year: 2021
 Protocol ID: 2021-H-US11-S, Fierce MD 64.02 Investigator (Creator): Dr. Mark M. Loux
 Project ID: Study Director:
 Sponsor Contact:

Pest Type	W Weed	W Weed	W Weed	W Weed	W Weed				
Pest Code	SETFA	AMBTR	SETFA	ECHCG	AMBTR				
Pest Name	Giant foxtail	Giant ragweed	Giant foxtail	Common barnyard>	Giant ragweed				
Crop Type, Code									
Crop Name									
Rating Date	Jun-21-2021	Jun-21-2021	Jul-6-2021	Jul-6-2021	Jul-6-2021				
Part Rated	CANOPY -	CANOPY -	CANOPY -	CANOPY -	CANOPY -				
Rating Type	CONTRO	CONTRO	CONTRO	CONTRO	CONTRO				
Rating Unit/Min/Max	% 0 100	% 0 100	% 0 100	% 0 100	% 0 100				
Number of Subsamples	1	1	1	1	1				
Data Entry Date	Jun-22-2021	Jun-22-2021	Jul-6-2021	Jul-6-2021	Jul-6-2021				
Days After First/Last Applic.	66 13	66 13	81 28	81 28	81 28				
Trt-Eval Interval	13 DA-B	13 DA-B	28 DA-B	28 DA-B	28 DA-B				
Days After Emergence	20 DE-1	20 DE-1	35 DE-1	35 DE-1	35 DE-1				
ARM Action Codes					AL				
Number of Decimals	0	0	0	0	0				
Trt No.	Treatment Name	Other Rate	Other Rate	Appl Unit Code	32*	33*	34*	35*	36* dAL
1	UTC			A	100 -	80 -	90 -	82 -	88 -
2	Reviton	2 oz/a		A	100 -	93 -	83 -	82 -	82 -
	HC MSO	19.2 oz/a		A					
3	Reviton	2 oz/a		A	87 -	87 -	78 -	60 -	85 -
	Roundup Powermax	22 oz/a		A					
	HC MSO	19.2 oz/a		A					
	AMSOL	48 oz/a		A					
4	Sharpen	1.5 oz/a		A	100 -	87 -	80 -	75 -	85 -
	Roundup Powermax	22 oz/a		A					
	HC MSO	19.2 oz/a		A					
	AMSOL	48 oz/a		A					
5	Reviton	2 oz/a		A	100 -	80 -	90 -	80 -	83 -
	Roundup Powermax	22 oz/a		A					
	Zone Elite	32 oz/a		A					
	HC MSO	19.2 oz/a		A					
	AMSOL	48 oz/a		A					

The Ohio State University

Reviton Soybean Burndown

Trial ID: 21RRXNT Location: Trial Year: 2021
 Protocol ID: 2021-H-US11-S, Fierce MD 64.02 Investigator (Creator): Dr. Mark M. Loux
 Project ID: Study Director:
 Sponsor Contact:

Pest Type	W Weed	W Weed	W Weed	W Weed	W Weed
Pest Code	SETFA	AMBTR	SETFA	ECHCG	AMBTR
Pest Name	Giant foxtail	Giant ragweed	Giant foxtail	Common barnyard>	Giant ragweed
Crop Type, Code					
Crop Name					
Rating Date	Jun-21-2021	Jun-21-2021	Jul-6-2021	Jul-6-2021	Jul-6-2021
Part Rated	CANOPY -	CANOPY -	CANOPY -	CANOPY -	CANOPY -
Rating Type	CONTRO	CONTRO	CONTRO	CONTRO	CONTRO
Rating Unit/Min/Max	% 0 100	% 0 100	% 0 100	% 0 100	% 0 100
Number of Subsamples	1	1	1	1	1
Data Entry Date	Jun-22-2021	Jun-22-2021	Jul-6-2021	Jul-6-2021	Jul-6-2021
Days After First/Last Applic.	66 13	66 13	81 28	81 28	81 28
Trt-Eval Interval	13 DA-B	13 DA-B	28 DA-B	28 DA-B	28 DA-B
Days After Emergence	20 DE-1	20 DE-1	35 DE-1	35 DE-1	35 DE-1
ARM Action Codes					AL
Number of Decimals	0	0	0	0	0

Trt No.	Treatment Name	Other Rate	Other Rate	Appl Unit Code	32*	33*	34*	35*	36* dAL
6	Fierce EZ	6 oz/a		A	93 -	83 -	92 -	80 -	77 -
	Roundup Powermax	22 oz/a		A					
	Xtendimax	22 oz/a		A					
	NIS	4.8 oz/a		A					
	On Target	9.6 oz/a		A					
	Volt Edge	20 oz/a		A					
	Roundup Powermax	22 oz/a		B					
	Xtendimax	22 oz/a		B					
	Perpetuo	6 oz/a		B					
	Select Max	9 oz/a		B					
	NIS	4.8 oz/a		B					
	On Target	9.6 oz/a		B					
	Volt Edge	20 oz/a		B					
7	Fierce MTZ	1 pt/a		A	100 -	83 -	87 -	82 -	81 -
	Roundup Powermax	22 oz/a		A					
	Xtendimax	22 oz/a		A					
	NIS	4.8 oz/a		A					
	On Target	9.6 oz/a		A					
	Volt Edge	20 oz/a		A					
	Roundup Powermax	22 oz/a		B					
	Xtendimax	22 oz/a		B					
	Perpetuo	6 oz/a		B					
	Select Max	9 oz/a		B					
	NIS	4.8 oz/a		B					
	On Target	9.6 oz/a		B					
	Volt Edge	20 oz/a		B					
8	Fierce XLT	4 oz/a		A	100 -	88 -	88 -	78 -	78 -
	Roundup Powermax	22 oz/a		A					
	Xtendimax	22 oz/a		A					
	NIS	4.8 oz/a		A					
	On Target	9.6 oz/a		A					
	Volt Edge	20 oz/a		A					
	Roundup Powermax	22 oz/a		B					
	Xtendimax	22 oz/a		B					
	Perpetuo	6 oz/a		B					
	Select Max	9 oz/a		B					
	NIS	4.8 oz/a		B					
	On Target	9.6 oz/a		B					
	Volt Edge	20 oz/a		B					

LSD P=.05	16.4	15.5	11.5	16.4	10.1 - 10.2
Standard Deviation	9.4	8.8	6.6	9.4	0.0t
CV	9.63	10.36	7.65	12.14	1.58t
Levene's F^	0.842	0.448	0.249	1.025	0.268
Levene's Prob(F)	0.569	0.857	0.965	0.451	0.958
Skewness^	-1.4495*	-0.3989	0.0739	-0.614	0.2351
Kurtosis^	4.9284*	-0.1474	-0.5954	0.5469	-0.7183
Replicate F	0.568	4.863	0.313	0.757	1.724
Replicate Prob(F)	0.5794	0.0249	0.7364	0.4874	0.2142
Treatment F	0.838	0.777	1.701	1.836	1.269
Treatment Prob(F)	0.5743	0.6168	0.1882	0.1578	0.3324

The Ohio State University

Reviton Soybean Burndown

Trial ID: 21RRXNT
 Protocol ID: 2021-H-US11-S, Fierce MD 64.02
 Project ID:

Location: Trial Year: 2021
 Investigator (Creator): Dr. Mark M. Loux
 Study Director:
 Sponsor Contact:

Pest Type	W Weed	W Weed
Pest Code	AMARE	SIDSP
Pest Name	Redroot pigweed	Prickly sida
Crop Type, Code		
Crop Name		
Rating Date	Jul-6-2021	Jul-6-2021
Part Rated	CANOPY -	CANOPY -
Rating Type	CONTRO	CONTRO
Rating Unit/Min/Max	% 0 100	% 0 100
Number of Subsamples	1	1
Data Entry Date	Jul-6-2021	Jul-6-2021
Days After First/Last Applic.	81 28	81 28
Trt-Eval Interval	28 DA-B	28 DA-B
Days After Emergence	35 DE-1	35 DE-1
ARM Action Codes		
Number of Decimals	0	0

Trt No.	Treatment Name	Other Rate	Other Rate	Appl Unit Code	37*	38*
1	UTC				0 b	77 -
2	Reviton	2 oz/a		A	78 a	73 -
	HC MSO	19.2 oz/a		A		
3	Reviton	2 oz/a		A	62 a	37 -
	Roundup Powermax	22 oz/a		A		
	HC MSO	19.2 oz/a		A		
	AMSOL	48 oz/a		A		
4	Sharpen	1.5 oz/a		A	55 a	50 -
	Roundup Powermax	22 oz/a		A		
	HC MSO	19.2 oz/a		A		
	AMSOL	48 oz/a		A		
5	Reviton	2 oz/a		A	75 a	57 -
	Roundup Powermax	22 oz/a		A		
	Zone Elite	32 oz/a		A		
	HC MSO	19.2 oz/a		A		
	AMSOL	48 oz/a		A		

The Ohio State University

Reviton Soybean Burndown

Trial ID: 21RRXNT Location: Trial Year: 2021
 Protocol ID: 2021-H-US11-S, Fierce MD 64.02 Investigator (Creator): Dr. Mark M. Loux
 Project ID: Study Director:
 Sponsor Contact:

Pest Type	W Weed	W Weed
Pest Code	AMARE	SIDSP
Pest Name	Redroot pigweed	Prickly sida

Crop Type, Code		
Crop Name		
Rating Date	Jul-6-2021	Jul-6-2021
Part Rated	CANOPY -	CANOPY -
Rating Type	CONTRO	CONTRO
Rating Unit/Min/Max	% 0 100	% 0 100
Number of Subsamples	1	1
Data Entry Date	Jul-6-2021	Jul-6-2021
Days After First/Last Applic.	81 28	81 28
Trt-Eval Interval	28 DA-B	28 DA-B
Days After Emergence	35 DE-1	35 DE-1
ARM Action Codes		
Number of Decimals	0	0

Trt No.	Treatment Name	Other Rate	Other Rate	Appl Unit Code	37*	38*
6	Fierce EZ	6 oz/a		A	72 a	47 -
	Roundup Powermax	22 oz/a		A		
	Xtendimax	22 oz/a		A		
	NIS	4.8 oz/a		A		
	On Target	9.6 oz/a		A		
	Volt Edge	20 oz/a		A		
	Roundup Powermax	22 oz/a		B		
	Xtendimax	22 oz/a		B		
	Perpetuo	6 oz/a		B		
	Select Max	9 oz/a		B		
	NIS	4.8 oz/a		B		
	On Target	9.6 oz/a		B		
	Volt Edge	20 oz/a		B		
7	Fierce MTZ	1 pt/a		A	70 a	50 -
	Roundup Powermax	22 oz/a		A		
	Xtendimax	22 oz/a		A		
	NIS	4.8 oz/a		A		
	On Target	9.6 oz/a		A		
	Volt Edge	20 oz/a		A		
	Roundup Powermax	22 oz/a		B		
	Xtendimax	22 oz/a		B		
	Perpetuo	6 oz/a		B		
	Select Max	9 oz/a		B		
	NIS	4.8 oz/a		B		
	On Target	9.6 oz/a		B		
	Volt Edge	20 oz/a		B		
8	Fierce XLT	4 oz/a		A	77 a	75 -
	Roundup Powermax	22 oz/a		A		
	Xtendimax	22 oz/a		A		
	NIS	4.8 oz/a		A		
	On Target	9.6 oz/a		A		
	Volt Edge	20 oz/a		A		
	Roundup Powermax	22 oz/a		B		
	Xtendimax	22 oz/a		B		
	Perpetuo	6 oz/a		B		
	Select Max	9 oz/a		B		
	NIS	4.8 oz/a		B		
	On Target	9.6 oz/a		B		
	Volt Edge	20 oz/a		B		

LSD P=.05	23.2	28.0
Standard Deviation	13.2	16.0
CV	21.68	27.5
Levene's F^	0.46	0.416
Levene's Prob(F)	0.849	0.879
Skewness^	-0.2197	-0.2395
Kurtosis^	-0.2337	-0.6461

Replicate F	1.326	0.599
Replicate Prob(F)	0.2969	0.5627
Treatment F	11.486	2.660
Treatment Prob(F)	0.0001	0.0565

The Ohio State University

Reviton Soybean Burndown

Trial ID: 21RRXNT Location: Trial Year: 2021
 Protocol ID: 2021-H-US11-S, Fierce MD 64.02 Investigator (Creator): Dr. Mark M. Loux
 Project ID: Study Director:
 Sponsor Contact:

Pest Type

W, Weed = Weed or volunteer crop

Pest Code

STEME, Stellaria media, Common chickweed = US
 LAMPU, Lamium purpureum, Purple deadnettle = US
 TAROF, Taraxacum officinale, Blowball = US
 CARPE, Cardamine pensylvanica, Pennsylvania bittercress = US
 VERAG, Veronica agrestis, Field speedwell = US
 RANAB, Ranunculus abortivus, Smallflower buttercup = US
 ERYRE, Erysimum repandum, Bushy wallflower = US
 AMBTR, Ambrosia trifida, Giant ragweed = US
 ERICA, Erigeron canadensis, Canada horseweed = US
 SETFA, Setaria faberi, Giant foxtail = US
 CHEAL, Chenopodium album, common lambsquarters = US
 AMARE, Amaranthus retroflexus, Redroot pigweed = US
 ECHCG, Echinochloa crus-galli, Common barnyard grass = US
 SIDSP, Sida spinosa, Prickly sida = US

Crop Type, Code

C = EPP0 species (Bayer) codes
 GLXMA, BSOY, Glycine max, Soybean = US

Part Rated

CANOPY = canopy
 C = Crop is Part Rated

Rating Type

CONTRO = control / burndown or knockdown
 PHYNEC = phytotoxicity - necrosis /burn

Rating Unit/Min/Max

%, 0, 100 = percent

ARM Action Codes

ET5 = Excluded treatment 5
 ET3 = Excluded treatment 3
 EC = Do not analyze untreated check, while still reporting treatment mean on AOV Means Table
 AS = Automatic square root transformation of X+0.5
 AA = Automatic arcsine square root % transformation
 ET2 = Excluded treatment 2
 AL = Automatic log transformation of X+1