

# Purdue Weed Science

## A23372A: Crop Tolerance and Efficacy in Conventional Till Soybean (University - Medium Soils)

Trial ID: 21S-TPAC-SOY-07      Location: Mroczkiewicz Steve FS      Trial Year: 2021  
 Protocol ID: 21S-TPAC-SOY-07      Investigator (Creator): Steve Mroczkiewicz  
 Study Director:  
 Sponsor Contact:

### General Trial Information

**Investigator:** Dr. Bill Johnson    **Title:** Professor

**Discipline:** H      herbicide  
**Trial Status:** E      established  
**Trial Status Date:** 12/9/2021 8:35 PM  
**ARM Trial Created On:** 3/8/2021      **Trial Reliability:** 1      usable data  
**Initiation Date:** 5/15/2021      **Last Changed By:** Dr. Bill Johnson  
**Completion Date:** 12/9/2021      **Trial Usage/Type:** 0 Research and Development  
**Protocol Revision Number:** 1.0    **Protocol Revision Date:** 3/4/2021

### Trial Location

**Address (Location):** TPAC  
**City:** Lafayette    **Country:** USA United States  
**State/Prov.:** Indiana IN  
**Postal Code:** 47907

**Latitude of LL Corner °:** 40.29176 N  
**Longitude of LL Corner °:** -86.90661 W

**Conducted Under GLP:** No  
**Conducted Under GEP:** No

### Objectives:

Does A23372A (premix) provide greater weed control and crop safety than current Syngenta or competitor residual herbicides in a weed management program in conventional till soybeans?

**Role:** INVEST investigator  
**Investigator:** Dr. Bill Johnson      **Title:** Professor  
**Organization:** Purdue University  
**Address 1:** 915 W. State Street  
**Country:** USA      United States      **E-mail:** wgj@purdue.edu  
**City:** West Lafayette      **State/Prov:** IN    **Postal Code:** 47907

### Crop Description

**Crop 1:** C      GLXMA Glycine max      Soybean      **BBCH Scale:** BSOY  
**Entry Date:** 12/9/2021      **Stage Scale:** BBCH  
**Variety:** AG29XF1  
**Attributes:** XtendFlex  
**Planting Date:** 5/15/2021      **Planting Rate:** 140000    S/A  
**Depth:** 1.5 IN      **Planting Method:** PLANTD planted  
**Rows per Plot:** 7      **Planting Equipment:** PP      plot planter  
**Row Spacing:** 15 IN  
**Emergence Date:** 5/23/2021  
**Harvest Date:** 9/29/2021  
**Harvested Width:** 8.75 FT  
**% Standard Moisture:** 13      **Harvested Length:** 27 FT

### Pest Description

**Pest 1 Type:** W    **Code:** AMBTR    Ambrosia trifida      **Entry Date:** 12/9/2021  
**Common Name:** Giant ragweed      **Stage Scale:** BBCH  
**Attributes:** Gly-R and ALS-R      **Artificial Population:** Y    yes  
**Pest 2 Type:** W    **Code:** CHEAL    Chenopodium album      **Entry Date:** 12/9/2021  
**Common Name:** common lambsquarters      **Stage Scale:** BBCH  
**Artificial Population:** Y    yes  
**Pest 3 Type:** W    **Code:** ECHCG    Echinochloa crus-galli      **Entry Date:** 12/9/2021  
**Common Name:** common barnyardgrass      **Stage Scale:** BBCH  
**Artificial Population:** Y    yes

### Site and Design

**Treated Plot Width:** 10 FT      **Total Plot Width:** 10 FT      **Site Type:** FIELD    field  
**Treated Plot Length:** 30 FT      **Total Plot Length:** 30 FT      **Experimental Unit:** 1    PLOT      plot  
**Treated Plot Area:** 300.0 FT2      **Treatments:** 9      **Tillage Type:** CONTIL    conventional-till  
**Replications:** 4      **Study Design:** RACOBL Randomized Complete Block (RCB)

**Soil Description****Description Name:** TPAC- Field 4AE

**% Sand:** 21      **% OM:** 2.8      **Texture:** SIL      silt loam  
**% Silt:** 54      **pH:** 6.7      **Soil Name:** Toronto-Millbrook Complex  
**% Clay:** 25      **CEC:** 10.9      **Fert. Level:** G      good

**Weather Conditions****Overall Moisture Conditions:** FAIR fair**Closest Weather Station:** TPAC**Distance:** 0.5 MI

No.	Date	Moisture Total	Unit	Min Temp	Max Temp	Temp Unit
1.	5/1/2021	0	IN	40	63	F
2.	5/2/2021	0	IN	49	74	F
3.	5/3/2021	0.26	IN	56	78	F
4.	5/4/2021	0.01	IN	55	66	F
5.	5/5/2021	0.04	IN	43	59	F
6.	5/6/2021	0	IN	42	61	F
7.	5/7/2021	0.25	IN	38	58	F
8.	5/8/2021	0	IN	32	63	F
9.	5/9/2021	1.43	IN	40	57	F
10.	5/10/2021	0.37	IN	37	47	F
11.	5/11/2021	0.09	IN	39	59	F
12.	5/12/2021	0	IN	36	61	F
13.	5/13/2021	0	IN	38	60	F
14.	5/14/2021	0	IN	41	66	F
15.	5/15/2021	0	IN	46	70	F
16.	5/16/2021	0	IN	53	71	F
17.	5/17/2021	0.35	IN	55	71	F
18.	5/18/2021	0.12	IN	58	63	F
19.	5/19/2021	0	IN	59	72	F
20.	5/20/2021	0	IN	64	75	F
21.	5/21/2021	0	IN	64	84	F
22.	5/22/2021	0	IN	63	83	F
23.	5/23/2021	0	IN	63	85	F
24.	5/24/2021	0	IN	68	85	F
25.	5/25/2021	0	IN	67	88	F
26.	5/26/2021	0.32	IN	66	87	F
27.	5/27/2021	0.19	IN	58	81	F
28.	5/28/2021	0.08	IN	60	80	F
29.	5/29/2021	0.47	IN	43	61	F
30.	5/30/2021	0	IN	41	63	F
31.	5/31/2021	0	IN	43	71	F
32.	6/1/2021	0	IN	57	71	F
33.	6/2/2021	0.04	IN	58	74	F
34.	6/3/2021	0.03	IN	59	87	F
35.	6/4/2021	0	IN	61	82	F
36.	6/5/2021	0	IN	63	88	F
37.	6/6/2021	0	IN	66	86	F
38.	6/7/2021	0.01	IN	69	83	F
39.	6/8/2021	0.1	IN	69	83	F
40.	6/9/2021	0	IN	70	85	F
41.	6/10/2021	0	IN	67	85	F
42.	6/11/2021	0	IN	69	85	F
43.	6/12/2021	0	IN	67	90	F
44.	6/13/2021	0	IN	69	93	F
45.	6/14/2021	0	IN	63	86	F
46.	6/15/2021	0	IN	57	83	F
47.	6/16/2021	0	IN	53	81	F
48.	6/17/2021	0	IN	53	82	F
49.	6/18/2021	0.01	IN	61	86	F
50.	6/19/2021	0.47	IN	67	93	F

51.	6/20/2021	0	IN	67	81	F
52.	6/21/2021	0.1	IN	70	86	F
53.	6/22/2021	0	IN	49	72	F
54.	6/23/2021	0	IN	54	74	F
55.	6/24/2021	0	IN	60	77	F
56.	6/25/2021	1.19	IN	63	79	F
57.	6/26/2021	0.83	IN	70	81	F
58.	6/27/2021	1.05	IN	69	85	F
59.	6/28/2021	0.11	IN	69	86	F
60.	6/29/2021	0	IN	72	88	F
61.	6/30/2021	0	IN	72	89	F
62.	7/1/2021	0.35	IN	70	78	F
63.	7/2/2021	0	IN	55	82	F
64.	7/3/2021	0	IN	53	75	F
65.	7/4/2021	0	IN	57	78	F
66.	7/5/2021	0	IN	67	85	F
67.	7/6/2021	0	IN	68	86	F
68.	7/7/2021	0	IN	71	86	F
69.	7/8/2021	1.29	IN	67	86	F
70.	7/9/2021	0.05	IN	59	80	F
71.	7/10/2021	0.03	IN	61	73	F
72.	7/11/2021	0.1	IN	65	76	F
73.	7/12/2021	1.3	IN	66	76	F
74.	7/13/2021	0.4	IN	67	82	F
75.	7/14/2021	0.08	IN	65	79	F
76.	7/15/2021	0	IN	66	82	F
77.	7/16/2021	0.16	IN	69	86	F
78.	7/17/2021	0.1	IN	66	78	F
79.	7/18/2021	0.01	IN	66	80	F
80.	7/19/2021	0	IN	61	83	F
81.	7/20/2021	0	IN	61	82	F
82.	7/21/2021	0	IN	64	83	F
83.	7/22/2021	0	IN	64	79	F
84.	7/23/2021	0	IN	67	83	F
85.	7/24/2021	0	IN	71	86	F
86.	7/25/2021	0	IN	69	87	F
87.	7/26/2021	0	IN	65	88	F
88.	7/27/2021	0	IN	62	87	F
89.	7/28/2021	0	IN	66	86	F
90.	7/29/2021	0	IN	70	87	F
91.	7/30/2021	0	IN	65	88	F
92.	7/31/2021	0	IN	62	78	F
93.	8/1/2021	0	IN	57	73	F
94.	8/2/2021	0	IN	52	80	F
95.	8/3/2021	0	IN	54	77	F
96.	8/4/2021	0	IN	55	80	F
97.	8/5/2021	0	IN	54	81	F
98.	8/6/2021	0	IN	61	83	F
99.	8/7/2021	0	IN	67	82	F
100.	8/8/2021	0	IN	67	85	F
101.	8/9/2021	0	IN	69	86	F
102.	8/10/2021	0	IN	71	80	F
103.	8/11/2021	0	IN	74	90	F
104.	8/12/2021	0.1	IN	75	88	F
105.	8/13/2021	0.24	IN	67	78	F
106.	8/14/2021	0	IN	60	86	F
107.	8/15/2021	0	IN	53	81	F

<b>Application Description</b>		
	<b>A</b>	<b>B</b>
<b>Application Date</b>	5/15/2021	6/11/2021
<b>Appl. Start Time</b>	5:23 PM	1:53 PM
<b>Appl. Stop Time</b>	5:50 PM	2:30 PM
<b>Application Method</b>	SPRAY	SPRAY
<b>Application Timing</b>	PREPRE	POSPOS
<b>Application Placement</b>	BROADC	BROADC
<b>Appl. Entry Date</b>	12/9/2021	12/9/2021
<b>Air Temperature Start, Stop</b>	68, 68 F	90, 90 F
<b>% Relative Humidity Start, Stop</b>	31, 31	51, 51
<b>Wind Velocity+Dir. Start</b>	2.8 MPH, S	6.6 MPH, N
<b>Wind Velocity+Dir. Stop</b>	2.8 MPH, S	6.6 MPH, N
<b>Wind Velocity+Dir. Max</b>	2.8 MPH, S	6.6 MPH, N
<b>Wet Leaves (Y/N)</b>	N, no	N, no
<b>Soil Temperature</b>	58 F	97 F
<b>Soil Moisture</b>	NORMAL	DRY
<b>% Cloud Cover</b>	85	40

<b>Crop Stage At Each Application</b>		
	<b>A</b>	<b>B</b>
<b>Crop 1 Code, BBCH Scale</b>	GLXMA, BSOY	GLXMA, BSOY
<b>Stage Majority, Percent</b>	00, -	12, -
<b>Stage Minimum, Percent</b>	00, -	12, -
<b>Stage Maximum, Percent</b>	00, -	12, -
<b>Height Average</b>	0 IN	5 IN
<b>Height Minimum, Maximum</b>	0, 0	4, 6

<b>Pest Stage At Each Application</b>		
	<b>A</b>	<b>B</b>
<b>Pest 1 Code, Type, Scale</b>	AMBTR, W, BBCH	AMBTR, W, BBCH
<b>Stage Majority, Percent</b>	00, -	18, -
<b>Stage Minimum, Percent</b>	00, -	16, -
<b>Stage Maximum, Percent</b>	00, -	19, -
<b>Height Average</b>	0 IN	4 IN
<b>Height Minimum, Maximum</b>	0, 0	1, 6
<b>Density Average</b>	0 FT2	10 FT2
<b>Pest 2 Code, Type, Scale</b>	CHEAL, W, BBCH	CHEAL, W, BBCH
<b>Stage Majority, Percent</b>	00, -	00, -
<b>Stage Minimum, Percent</b>	00, -	00, -
<b>Stage Maximum, Percent</b>	00, -	00, -
<b>Height Average</b>	0 IN	0 IN
<b>Height Minimum, Maximum</b>	0, 0	0, 0
<b>Density Average</b>	0 FT2	0 FT2
<b>Pest 3 Code, Type, Scale</b>	ECHCG, W, BBCH	ECHCG, W, BBCH
<b>Stage Majority, Percent</b>	00, -	00, -
<b>Stage Minimum, Percent</b>	00, -	00, -
<b>Stage Maximum, Percent</b>	00, -	00, -
<b>Height Average</b>	0 IN	0 IN
<b>Height Minimum, Maximum</b>	0, 0	0, 0
<b>Density Average</b>	0 FT2	0 FT2

<b>Application Equipment</b>		
	<b>A</b>	<b>B</b>
<b>Appl. Equipment</b>	CO2 BACKPACK	CO2 BACKPACK
<b>Equipment Type</b>	BACSPR	BACSPR
<b>Operation Pressure</b>	26 PSI	30 PSI
<b>Nozzle Model</b>	TTI	TTI
<b>Nozzle Type</b>	TEEJAI	TEEJAI
<b>Nozzle TradeName</b>	TEEJET	TEEJET
<b>Nozzle Tip Size, Color</b>	110015, GREEN	110015, GREEN
<b>Nozzle Spacing</b>	15 IN	15.0 IN
<b>Nozzles/Row</b>	8	8.0
<b>Boom Length</b>	10 FT	10.0 FT
<b>Boom Height</b>	17 IN	24.0 IN
<b>Ground Speed</b>	3 MPH	3 MPH
<b>Carrier</b>	WATER	WATER
<b>Application Amount</b>	15 GAL/AC	15 GAL/AC
<b>Mix Size</b>	1.8 L	1.8 L
<b>Propellant</b>	COMCO2	COMCO2

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**A23372A: Crop Tolerance and Efficacy in Conventional Till Soybean (University - Medium Soils)**  
 Trial ID: 21S-TPAC-SOY-07      Location: Mroczkiewicz Steve FS      Trial Year: 2021  
 Protocol ID: 21S-TPAC-SOY-07      Investigator (Creator): Steve Mroczkiewicz  
 Study Director:  
 Sponsor Contact:

Pest ID Code					1, W, Weed	2, W, Weed		
Pest Code					AMBTR	CHEAL		
Pest Scientific Name					Ambrosia trifida	Chenopodium alb>		
Pest Name					Giant ragweed	common lambsqua>		
Crop ID Code	1, GLXMA	1, GLXMA	1, GLXMA	1, GLXMA	1, GLXMA	1, GLXMA		
BBCH Scale	BSOY	BSOY	BSOY	BSOY	BSOY	BSOY		
Crop Scientific Name	Glycine max	Glycine max	Glycine max	Glycine max	Glycine max	Glycine max		
Crop Name	Soybean	Soybean	Soybean	Soybean	Soybean	Soybean		
Crop Variety	AG29XF1	AG29XF1	AG29XF1	AG29XF1	AG29XF1	AG29XF1		
Rating Date	5/29/2021	6/11/2021	6/25/2021	7/9/2021	6/11/2021	6/11/2021		
SE Group No.	1	2	2	2	3	4		
Part Rated	PLANT, C	PLANT, C	PLANT, C	PLANT, C	PLANT, P	PLANT, P		
Rating Type	PHYGEN	PHYGEN	PHYGEN	PHYGEN	CONTRO	CONTRO		
Rating Unit/Min/Max	%, 0, 100	%, 0, 100	%, 0, 100	%, 0, 100	%, 0, 100	%, 0, 100		
Calculation	EF	EF	EF	EF	EF	EF		
Sample Size	1 PLOT	1 PLOT	1 PLOT	1 PLOT	1 PLOT	1 PLOT		
Collection Basis	1 PLOT	1 PLOT	1 PLOT	1 PLOT	1 PLOT	1 PLOT		
Reporting Basis	1 PLOT	1 PLOT	1 PLOT	1 PLOT	1 PLOT	1 PLOT		
Number of Subsamples	1	1	1	1	1	1		
Data Entry Date	12/9/2021	12/9/2021	12/9/2021	12/9/2021	12/9/2021	12/9/2021		
Rating Timing	6 DAE	0 DAB	14 DAB	28 DAB	0 DAB	0 DAB		
Days After First/Last Applic.	14, 14	27, 27	41, 14	55, 28	27, 27	27, 27		
Plant-Eval Interval	14 DP-1	27 DP-1	41 DP-1	55 DP-1	27 DP-1	27 DP-1		
Days After Emergence	6 DE-1	19 DE-1	33 DE-1	47 DE-1	19 DE-1	19 DE-1		
ARM Action Codes								
Number of Decimals								
Trt Treatment	Rate	Appl	1	2	3	4	5	6
No. Name	Rate Unit	Code						
1 UNTREATED CHECK			0.0	0.0	0.0	0.0	0.0	0.0
2 A23372 [A]	2030 g Al/ha	A	0.0 -	0.0 -	0.0 -	0.0 -	58.8 -	100.0 -
VOLT-EDGE	1.46 L/ha	B						
INTACT	0.5 % V/V	B						
CLASS ACT RIDION	1 % V/V	B						
TAVIUM PLUS VAPORGRIP TECH	1680 g AE/ha	B						
ROUNDUP POWERMAX 4.5 SL	1260 g AE/ha	B						
3 A23372 [A]	2430 g Al/ha	A	0.0 -	0.0 -	0.0 -	0.0 -	65.0 -	100.0 -
VOLT-EDGE	1.46 L/ha	B						
INTACT	0.5 % V/V	B						
CLASS ACT RIDION	1 % V/V	B						
TAVIUM PLUS VAPORGRIP TECH	1680 g AE/ha	B						
ROUNDUP POWERMAX 4.5 SL	1260 g AE/ha	B						
4 BOUNDARY 6.5 EC	1640 g Al/ha	A	0.0 -	0.0 -	0.0 -	0.0 -	51.3 -	100.0 -
VOLT-EDGE	1.46 L/ha	B						
INTACT	0.5 % V/V	B						
CLASS ACT RIDION	1 % V/V	B						
TAVIUM PLUS VAPORGRIP TECH	1680 g AE/ha	B						
ROUNDUP POWERMAX 4.5 SL	1260 g AE/ha	B						
5 BROADAXE XC 7 EC	1530 g Al/ha	A	0.0 -	0.0 -	0.0 -	0.0 -	46.3 -	100.0 -
VOLT-EDGE	1.46 L/ha	B						
INTACT	0.5 % V/V	B						
CLASS ACT RIDION	1 % V/V	B						
TAVIUM PLUS VAPORGRIP TECH	1680 g AE/ha	B						
ROUNDUP POWERMAX 4.5 SL	1260 g AE/ha	B						
6 SONIC 70 DF	316 g Al/ha	A	0.0 -	0.0 -	0.0 -	0.0 -	71.3 -	100.0 -
VOLT-EDGE	1.46 L/ha	B						
INTACT	0.5 % V/V	B						
CLASS ACT RIDION	1 % V/V	B						
TAVIUM PLUS VAPORGRIP TECH	1680 g AE/ha	B						
ROUNDUP POWERMAX 4.5 SL	1260 g AE/ha	B						

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.  
 Could not calculate LSD (% mean diff) for columns 1,2,3,4,6,7,8,9,10,11,12,13,14,15,16 because error mean square = 0.  
 ^Calculated from residual.

Pest ID Code					1, W, Weed	2, W, Weed		
Pest Code					AMBTR	CHEAL		
Pest Scientific Name					Ambrosia trifida	Chenopodium alb>		
Pest Name					Giant ragweed	common lambsqua>		
Crop ID Code	1, GLXMA	1, GLXMA	1, GLXMA	1, GLXMA	1, GLXMA	1, GLXMA		
BBCH Scale	BSOY	BSOY	BSOY	BSOY	BSOY	BSOY		
Crop Scientific Name	Glycine max	Glycine max	Glycine max	Glycine max	Glycine max	Glycine max		
Crop Name	Soybean	Soybean	Soybean	Soybean	Soybean	Soybean		
Crop Variety	AG29XF1	AG29XF1	AG29XF1	AG29XF1	AG29XF1	AG29XF1		
Rating Date	5/29/2021	6/11/2021	6/25/2021	7/9/2021	6/11/2021	6/11/2021		
SE Group No.	1	2	2	2	3	4		
Part Rated	PLANT, C	PLANT, C	PLANT, C	PLANT, C	PLANT, P	PLANT, P		
Rating Type	PHYGEN	PHYGEN	PHYGEN	PHYGEN	CONTRO	CONTRO		
Rating Unit/Min/Max	%, 0, 100	%, 0, 100	%, 0, 100	%, 0, 100	%, 0, 100	%, 0, 100		
Calculation	EF	EF	EF	EF	EF	EF		
Sample Size	1 PLOT	1 PLOT	1 PLOT	1 PLOT	1 PLOT	1 PLOT		
Collection Basis	1 PLOT	1 PLOT	1 PLOT	1 PLOT	1 PLOT	1 PLOT		
Reporting Basis	1 PLOT	1 PLOT	1 PLOT	1 PLOT	1 PLOT	1 PLOT		
Number of Subsamples	1	1	1	1	1	1		
Data Entry Date	12/9/2021	12/9/2021	12/9/2021	12/9/2021	12/9/2021	12/9/2021		
Rating Timing	6 DAE	0 DAB	14 DAB	28 DAB	0 DAB	0 DAB		
Days After First/Last Applic.	14, 14	27, 27	41, 14	55, 28	27, 27	27, 27		
Plant-Eval Interval	14 DP-1	27 DP-1	41 DP-1	55 DP-1	27 DP-1	27 DP-1		
Days After Emergence	6 DE-1	19 DE-1	33 DE-1	47 DE-1	19 DE-1	19 DE-1		
ARM Action Codes								
Number of Decimals								
Trt Treatment No. Name	Rate	Appl Code	1	2	3	4	5	6
7 FIERCE XLT 62.41 WG	197 g AI/ha	A	0.0 -	0.0 -	0.0 -	0.0 -	47.5 -	100.0 -
VOLT-EDGE	1.46 L/ha	B						
INTACT	0.5 % V/V	B						
CLASS ACT RIDION	1 % V/V	B						
TAVIUM PLUS VAPORGRIP TECH	1680 g AE/ha	B						
ROUNDUP POWERMAX 4.5 SL	1260 g AE/ha	B						
8 ZIDUA PRO 4.09 SC	215 g AI/ha	A	0.0 -	0.0 -	0.0 -	0.0 -	79.3 -	100.0 -
VOLT-EDGE	1.46 L/ha	B						
INTACT	0.5 % V/V	B						
CLASS ACT RIDION	1 % V/V	B						
TAVIUM PLUS VAPORGRIP TECH	1680 g AE/ha	B						
ROUNDUP POWERMAX 4.5 SL	1260 g AE/ha	B						
9 AUTHORITY EDGE	333 g AI/ha	A	0.0 -	0.0 -	0.0 -	0.0 -	60.0 -	100.0 -
VOLT-EDGE	1.46 L/ha	B						
INTACT	0.5 % V/V	B						
CLASS ACT RIDION	1 % V/V	B						
TAVIUM PLUS VAPORGRIP TECH	1680 g AE/ha	B						
ROUNDUP POWERMAX 4.5 SL	1260 g AE/ha	B						
LSD P=.05			.	.	.	.	32.56	.
Standard Deviation			0.00	0.00	0.00	0.00	22.14	0.00
CV			0.0	0.0	0.0	0.0	36.96	0.0
Grand Mean			0.00	0.00	0.00	0.00	59.91	100.00
Levene's F^			.	.	.	.	1.388	.
Levene's Prob(F)			.	.	.	.	0.255	.
Rank X2			.	.	.	.	.	.
P(Rank X2)			.	.	.	.	.	.
Skewness^			.	.	.	.	-0.1148	.
Kurtosis^			.	.	.	.	-0.5157	.
Replicate F			0.000	0.000	0.000	0.000	1.968	0.000
Replicate Prob(F)			1.0000	1.0000	1.0000	1.0000	0.1498	1.0000
Treatment F			0.000	0.000	0.000	0.000	1.102	0.000
Treatment Prob(F)			1.0000	1.0000	1.0000	1.0000	0.3975	1.0000

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.  
Could not calculate LSD (% mean diff) for columns 1,2,3,4,6,7,8,9,10,11,12,13,14,15,16 because error mean square = 0.  
^Calculated from residual.

Pest ID Code			3, W, Weed	1, W, Weed	2, W, Weed	3, W, Weed
Pest Code			ECHCG	AMBTR	CHEAL	ECHCG
Pest Scientific Name			Echinochloa cru>	Ambrosia trifida	Chenopodium alb>	Echinochloa cru>
Pest Name			common barnyard>	Giant ragweed	common lambsqua>	common barnyard>
Crop ID Code			1, GLXMA	1, GLXMA	1, GLXMA	1, GLXMA
BBCH Scale			BSOY	BSOY	BSOY	BSOY
Crop Scientific Name			Glycine max	Glycine max	Glycine max	Glycine max
Crop Name			Soybean	Soybean	Soybean	Soybean
Crop Variety			AG29XF1	AG29XF1	AG29XF1	AG29XF1
Rating Date			6/11/2021	6/25/2021	6/25/2021	6/25/2021
SE Group No.			5	6	4	5
Part Rated			PLANT, P	PLANT, P	PLANT, P	PLANT, P
Rating Type			CONTRO	CONTRO	CONTRO	CONTRO
Rating Unit/Min/Max			%, 0, 100	%, 0, 100	%, 0, 100	%, 0, 100
Calculation			EF	EF	EF	EF
Sample Size			1 PLOT	1 PLOT	1 PLOT	1 PLOT
Collection Basis			1 PLOT	1 PLOT	1 PLOT	1 PLOT
Reporting Basis			1 PLOT	1 PLOT	1 PLOT	1 PLOT
Number of Subsamples			1	1	1	1
Data Entry Date			12/9/2021	12/9/2021	12/9/2021	12/9/2021
Rating Timing			0 DAB	14 DAB	14 DAB	14 DAB
Days After First/Last Applic.			27, 27	41, 14	41, 14	41, 14
Plant-Eval Interval			27 DP-1	41 DP-1	41 DP-1	41 DP-1
Days After Emergence			19 DE-1	33 DE-1	33 DE-1	33 DE-1
ARM Action Codes						
Number of Decimals						
Trt Treatment	Rate	Appl	7	8	9	10
No. Name	Rate Unit	Code				
1 UNTREATED CHECK			0.0	0.0	0.0	0.0
2 A23372 [A]	2030 g Al/ha	A	100.0 -	100.0 -	100.0 -	100.0 -
VOLT-EDGE	1.46 L/ha	B				
INTACT	0.5 % V/V	B				
CLASS ACT RIDION	1 % V/V	B				
TAVIUM PLUS VAPORGRIP TECH	1680 g AE/ha	B				
ROUNDUP POWERMAX 4.5 SL	1260 g AE/ha	B				
3 A23372 [A]	2430 g Al/ha	A	100.0 -	100.0 -	100.0 -	100.0 -
VOLT-EDGE	1.46 L/ha	B				
INTACT	0.5 % V/V	B				
CLASS ACT RIDION	1 % V/V	B				
TAVIUM PLUS VAPORGRIP TECH	1680 g AE/ha	B				
ROUNDUP POWERMAX 4.5 SL	1260 g AE/ha	B				
4 BOUNDARY 6.5 EC	1640 g Al/ha	A	100.0 -	100.0 -	100.0 -	100.0 -
VOLT-EDGE	1.46 L/ha	B				
INTACT	0.5 % V/V	B				
CLASS ACT RIDION	1 % V/V	B				
TAVIUM PLUS VAPORGRIP TECH	1680 g AE/ha	B				
ROUNDUP POWERMAX 4.5 SL	1260 g AE/ha	B				
5 BROADAXE XC 7 EC	1530 g Al/ha	A	100.0 -	100.0 -	100.0 -	100.0 -
VOLT-EDGE	1.46 L/ha	B				
INTACT	0.5 % V/V	B				
CLASS ACT RIDION	1 % V/V	B				
TAVIUM PLUS VAPORGRIP TECH	1680 g AE/ha	B				
ROUNDUP POWERMAX 4.5 SL	1260 g AE/ha	B				
6 SONIC 70 DF	316 g Al/ha	A	100.0 -	100.0 -	100.0 -	100.0 -
VOLT-EDGE	1.46 L/ha	B				
INTACT	0.5 % V/V	B				
CLASS ACT RIDION	1 % V/V	B				
TAVIUM PLUS VAPORGRIP TECH	1680 g AE/ha	B				
ROUNDUP POWERMAX 4.5 SL	1260 g AE/ha	B				

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.

Could not calculate LSD (% mean diff) for columns 1,2,3,4,6,7,8,9,10,11,12,13,14,15,16 because error mean square = 0.

^Calculated from residual.



Pest ID Code	3, W, Weed	1, W, Weed	2, W, Weed	3, W, Weed		
Pest Code	ECHCG	AMBTR	CHEAL	ECHCG		
Pest Scientific Name	Echinochloa cru>	Ambrosia trifida	Chenopodium alb>	Echinochloa cru>		
Pest Name	common barnyard>	Giant ragweed	common lambsqua>	common barnyard>		
Crop ID Code	1, GLXMA	1, GLXMA	1, GLXMA	1, GLXMA		
BBCH Scale	BSOY	BSOY	BSOY	BSOY		
Crop Scientific Name	Glycine max	Glycine max	Glycine max	Glycine max		
Crop Name	Soybean	Soybean	Soybean	Soybean		
Crop Variety	AG29XF1	AG29XF1	AG29XF1	AG29XF1		
Rating Date	6/11/2021	6/25/2021	6/25/2021	6/25/2021		
SE Group No.	5	6	4	5		
Part Rated	PLANT, P	PLANT, P	PLANT, P	PLANT, P		
Rating Type	CONTRO	CONTRO	CONTRO	CONTRO		
Rating Unit/Min/Max	%, 0, 100	%, 0, 100	%, 0, 100	%, 0, 100		
Calculation	EF	EF	EF	EF		
Sample Size	1 PLOT	1 PLOT	1 PLOT	1 PLOT		
Collection Basis	1 PLOT	1 PLOT	1 PLOT	1 PLOT		
Reporting Basis	1 PLOT	1 PLOT	1 PLOT	1 PLOT		
Number of Subsamples	1	1	1	1		
Data Entry Date	12/9/2021	12/9/2021	12/9/2021	12/9/2021		
Rating Timing	0 DAB	14 DAB	14 DAB	14 DAB		
Days After First/Last Applic.	27, 27	41, 14	41, 14	41, 14		
Plant-Eval Interval	27 DP-1	41 DP-1	41 DP-1	41 DP-1		
Days After Emergence	19 DE-1	33 DE-1	33 DE-1	33 DE-1		
ARM Action Codes						
Number of Decimals						
Trt Treatment No. Name	Rate Unit	Appl Code	7	8	9	10
7 FIERCE XLT 62.41 WG	197 g AI/ha	A	100.0 -	100.0 -	100.0 -	100.0 -
VOLT-EDGE	1.46 L/ha	B				
INTACT	0.5 % V/V	B				
CLASS ACT RIDION	1 % V/V	B				
TAVIUM PLUS VAPORGRIP TECH	1680 g AE/ha	B				
ROUNDUP POWERMAX 4.5 SL	1260 g AE/ha	B				
8 ZIDUA PRO 4.09 SC	215 g AI/ha	A	100.0 -	100.0 -	100.0 -	100.0 -
VOLT-EDGE	1.46 L/ha	B				
INTACT	0.5 % V/V	B				
CLASS ACT RIDION	1 % V/V	B				
TAVIUM PLUS VAPORGRIP TECH	1680 g AE/ha	B				
ROUNDUP POWERMAX 4.5 SL	1260 g AE/ha	B				
9 AUTHORITY EDGE	333 g AI/ha	A	100.0 -	100.0 -	100.0 -	100.0 -
VOLT-EDGE	1.46 L/ha	B				
INTACT	0.5 % V/V	B				
CLASS ACT RIDION	1 % V/V	B				
TAVIUM PLUS VAPORGRIP TECH	1680 g AE/ha	B				
ROUNDUP POWERMAX 4.5 SL	1260 g AE/ha	B				
LSD P=.05			.	.	.	.
Standard Deviation			0.00	0.00	0.00	0.00
CV			0.0	0.0	0.0	0.0
Grand Mean			100.00	100.00	100.00	100.00
Levene's F^			.	.	.	.
Levene's Prob(F)			.	.	.	.
Rank X2			.	.	.	.
P(Rank X2)			.	.	.	.
Skewness^			.	.	.	.
Kurtosis^			.	.	.	.
Replicate F			0.000	0.000	0.000	0.000
Replicate Prob(F)			1.0000	1.0000	1.0000	1.0000
Treatment F			0.000	0.000	0.000	0.000
Treatment Prob(F)			1.0000	1.0000	1.0000	1.0000

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.  
Could not calculate LSD (% mean diff) for columns 1,2,3,4,6,7,8,9,10,11,12,13,14,15,16 because error mean square = 0.  
^Calculated from residual.

Pest ID Code	1, W, Weed	2, W, Weed	3, W, Weed	1, W, Weed		
Pest Code	AMBTR	CHEAL	ECHCG	AMBTR		
Pest Scientific Name	Ambrosia trifida	Chenopodium alb>	Echinochloa cru>	Ambrosia trifida		
Pest Name	Giant ragweed	common lambsqua>	common barnyard>	Giant ragweed		
Crop ID Code	1, GLXMA	1, GLXMA	1, GLXMA	1, GLXMA		
BBCH Scale	BSOY	BSOY	BSOY	BSOY		
Crop Scientific Name	Glycine max	Glycine max	Glycine max	Glycine max		
Crop Name	Soybean	Soybean	Soybean	Soybean		
Crop Variety	AG29XF1	AG29XF1	AG29XF1	AG29XF1		
Rating Date	7/9/2021	7/9/2021	7/9/2021	9/29/2021		
SE Group No.	7	8	9	6		
Part Rated	PLANT, P	PLANT, P	PLANT, P	PLANT, P		
Rating Type	CONTRO	CONTRO	CONTRO	CONTRO		
Rating Unit/Min/Max	%, 0, 100	%, 0, 100	%, 0, 100	%, 0, 100		
Calculation	EF	EF	EF	EF		
Sample Size	1 PLOT	1 PLOT	1 PLOT	1 PLOT		
Collection Basis	1 PLOT	1 PLOT	1 PLOT	1 PLOT		
Reporting Basis	1 PLOT	1 PLOT	1 PLOT	1 PLOT		
Number of Subsamples	1	1	1	1		
Data Entry Date	12/9/2021	12/9/2021	12/9/2021	12/9/2021		
Rating Timing	28 DAB	28 DAB	28 DAB	HARVEST		
Days After First/Last Applic.	55, 28	55, 28	55, 28	137, 110		
Plant-Eval Interval	55 DP-1	55 DP-1	55 DP-1	137 DP-1		
Days After Emergence	47 DE-1	47 DE-1	47 DE-1	129 DE-1		
ARM Action Codes						
Number of Decimals						
Trt Treatment	Rate	Appl	11	12	13	14
No. Name	Rate Unit	Code				
1 UNTREATED CHECK			0.0	0.0	0.0	0.0
2 A23372 [A]	2030 g Al/ha	A	100.0 -	100.0 -	100.0 -	100.0 -
VOLT-EDGE	1.46 L/ha	B				
INTACT	0.5 % V/V	B				
CLASS ACT RIDION	1 % V/V	B				
TAVIUM PLUS VAPORGRIP TECH	1680 g AE/ha	B				
ROUNDUP POWERMAX 4.5 SL	1260 g AE/ha	B				
3 A23372 [A]	2430 g Al/ha	A	100.0 -	100.0 -	100.0 -	100.0 -
VOLT-EDGE	1.46 L/ha	B				
INTACT	0.5 % V/V	B				
CLASS ACT RIDION	1 % V/V	B				
TAVIUM PLUS VAPORGRIP TECH	1680 g AE/ha	B				
ROUNDUP POWERMAX 4.5 SL	1260 g AE/ha	B				
4 BOUNDARY 6.5 EC	1640 g Al/ha	A	100.0 -	100.0 -	100.0 -	100.0 -
VOLT-EDGE	1.46 L/ha	B				
INTACT	0.5 % V/V	B				
CLASS ACT RIDION	1 % V/V	B				
TAVIUM PLUS VAPORGRIP TECH	1680 g AE/ha	B				
ROUNDUP POWERMAX 4.5 SL	1260 g AE/ha	B				
5 BROADAXE XC 7 EC	1530 g Al/ha	A	100.0 -	100.0 -	100.0 -	100.0 -
VOLT-EDGE	1.46 L/ha	B				
INTACT	0.5 % V/V	B				
CLASS ACT RIDION	1 % V/V	B				
TAVIUM PLUS VAPORGRIP TECH	1680 g AE/ha	B				
ROUNDUP POWERMAX 4.5 SL	1260 g AE/ha	B				
6 SONIC 70 DF	316 g Al/ha	A	100.0 -	100.0 -	100.0 -	100.0 -
VOLT-EDGE	1.46 L/ha	B				
INTACT	0.5 % V/V	B				
CLASS ACT RIDION	1 % V/V	B				
TAVIUM PLUS VAPORGRIP TECH	1680 g AE/ha	B				
ROUNDUP POWERMAX 4.5 SL	1260 g AE/ha	B				

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.

Could not calculate LSD (% mean diff) for columns 1,2,3,4,6,7,8,9,10,11,12,13,14,15,16 because error mean square = 0.

^Calculated from residual.

Pest ID Code	1, W, Weed	2, W, Weed	3, W, Weed	1, W, Weed		
Pest Code	AMBTR	CHEAL	ECHCG	AMBTR		
Pest Scientific Name	Ambrosia trifida	Chenopodium alb>	Echinochloa cru>	Ambrosia trifida		
Pest Name	Giant ragweed	common lambsqua>	common barnyard>	Giant ragweed		
Crop ID Code	1, GLXMA	1, GLXMA	1, GLXMA	1, GLXMA		
BBCH Scale	BSOY	BSOY	BSOY	BSOY		
Crop Scientific Name	Glycine max	Glycine max	Glycine max	Glycine max		
Crop Name	Soybean	Soybean	Soybean	Soybean		
Crop Variety	AG29XF1	AG29XF1	AG29XF1	AG29XF1		
Rating Date	7/9/2021	7/9/2021	7/9/2021	9/29/2021		
SE Group No.	7	8	9	6		
Part Rated	PLANT, P	PLANT, P	PLANT, P	PLANT, P		
Rating Type	CONTRO	CONTRO	CONTRO	CONTRO		
Rating Unit/Min/Max	%, 0, 100	%, 0, 100	%, 0, 100	%, 0, 100		
Calculation	EF	EF	EF	EF		
Sample Size	1 PLOT	1 PLOT	1 PLOT	1 PLOT		
Collection Basis	1 PLOT	1 PLOT	1 PLOT	1 PLOT		
Reporting Basis	1 PLOT	1 PLOT	1 PLOT	1 PLOT		
Number of Subsamples	1	1	1	1		
Data Entry Date	12/9/2021	12/9/2021	12/9/2021	12/9/2021		
Rating Timing	28 DAB	28 DAB	28 DAB	HARVEST		
Days After First/Last Applic.	55, 28	55, 28	55, 28	137, 110		
Plant-Eval Interval	55 DP-1	55 DP-1	55 DP-1	137 DP-1		
Days After Emergence	47 DE-1	47 DE-1	47 DE-1	129 DE-1		
ARM Action Codes						
Number of Decimals						
Trt Treatment No. Name	Rate Unit	Appl Code	11	12	13	14
7 FIERCE XLT 62.41 WG	197 g AI/ha	A	100.0 -	100.0 -	100.0 -	100.0 -
VOLT-EDGE	1.46 L/ha	B				
INTACT	0.5 % V/V	B				
CLASS ACT RIDION	1 % V/V	B				
TAVIUM PLUS VAPORGRIP TECH	1680 g AE/ha	B				
ROUNDUP POWERMAX 4.5 SL	1260 g AE/ha	B				
8 ZIDUA PRO 4.09 SC	215 g AI/ha	A	100.0 -	100.0 -	100.0 -	100.0 -
VOLT-EDGE	1.46 L/ha	B				
INTACT	0.5 % V/V	B				
CLASS ACT RIDION	1 % V/V	B				
TAVIUM PLUS VAPORGRIP TECH	1680 g AE/ha	B				
ROUNDUP POWERMAX 4.5 SL	1260 g AE/ha	B				
9 AUTHORITY EDGE	333 g AI/ha	A	100.0 -	100.0 -	100.0 -	100.0 -
VOLT-EDGE	1.46 L/ha	B				
INTACT	0.5 % V/V	B				
CLASS ACT RIDION	1 % V/V	B				
TAVIUM PLUS VAPORGRIP TECH	1680 g AE/ha	B				
ROUNDUP POWERMAX 4.5 SL	1260 g AE/ha	B				
LSD P=.05			.	.	.	.
Standard Deviation			0.00	0.00	0.00	0.00
CV			0.0	0.0	0.0	0.0
Grand Mean			100.00	100.00	100.00	100.00
Levene's F^			.	.	.	.
Levene's Prob(F)			.	.	.	.
Rank X2			.	.	.	.
P(Rank X2)			.	.	.	.
Skewness^			.	.	.	.
Kurtosis^			.	.	.	.
Replicate F			0.000	0.000	0.000	0.000
Replicate Prob(F)			1.0000	1.0000	1.0000	1.0000
Treatment F			0.000	0.000	0.000	0.000
Treatment Prob(F)			1.0000	1.0000	1.0000	1.0000

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.  
Could not calculate LSD (% mean diff) for columns 1,2,3,4,6,7,8,9,10,11,12,13,14,15,16 because error mean square = 0.  
^Calculated from residual.

Pest ID Code			2, W, Weed	3, W, Weed			
Pest Code			CHEAL	ECHCG			
Pest Scientific Name			Chenopodium alb>	Echinochloa cru>			
Pest Name			common lambsqua>	common barnyard>			
Crop ID Code			1, GLXMA	1, GLXMA	1, GLXMA	1, GLXMA	
BBCH Scale			BSOY	BSOY	BSOY	BSOY	
Crop Scientific Name			Glycine max	Glycine max	Glycine max	Glycine max	
Crop Name			Soybean	Soybean	Soybean	Soybean	
Crop Variety			AG29XF1	AG29XF1	AG29XF1	AG29XF1	
Rating Date			9/29/2021	9/29/2021	9/29/2021	9/29/2021	
SE Group No.			4	5	10	11	
Part Rated			PLANT, P	PLANT, P	PLANT, C	PLANT, C	
Rating Type			CONTRO	CONTRO	WEIGHT	YIELD	
Rating Unit/Min/Max			%, 0, 100	%, 0, 100	LB, -, -	BU, -, -	
Calculation			EF	EF	NC	NC	
Sample Size			1 PLOT	1 PLOT	1 PLOT	1 PLOT	
Collection Basis			1 PLOT	1 PLOT	1 PLOT	1 PLOT	
Reporting Basis			1 PLOT	1 PLOT	1 PLOT	1 PLOT	
Number of Subsamples			1	1	1	1	
Data Entry Date			12/9/2021	12/9/2021	12/9/2021		
Rating Timing			HARVEST	HARVEST	HARVEST	HARVEST	
Days After First/Last Applic.			137, 110	137, 110	137, 110	137, 110	
Plant-Eval Interval			137 DP-1	137 DP-1	137 DP-1	137 DP-1	
Days After Emergence			129 DE-1	129 DE-1	129 DE-1	129 DE-1	
ARM Action Codes						TY1	
Number of Decimals						1	
Trt No.	Treatment Name	Rate	Appl Code	15	16	17	18
		Rate Unit					
1	UNTREATED CHECK			0.0	0.0	11.410	34.5
2	A23372 [A] VOLT-EDGE INTACT CLASS ACT RIDION TAVIUM PLUS VAPORGRIP TECH ROUNDUP POWERMAX 4.5 SL	2030 g Al/ha 1.46 L/ha 0.5 % V/V 1 % V/V 1680 g AE/ha 1260 g AE/ha	A B B B B B	100.0 -	100.0 -	21.205 -	64.1 -
3	A23372 [A] VOLT-EDGE INTACT CLASS ACT RIDION TAVIUM PLUS VAPORGRIP TECH ROUNDUP POWERMAX 4.5 SL	2430 g Al/ha 1.46 L/ha 0.5 % V/V 1 % V/V 1680 g AE/ha 1260 g AE/ha	A B B B B B	100.0 -	100.0 -	22.718 -	68.7 -
4	BOUNDARY 6.5 EC VOLT-EDGE INTACT CLASS ACT RIDION TAVIUM PLUS VAPORGRIP TECH ROUNDUP POWERMAX 4.5 SL	1640 g Al/ha 1.46 L/ha 0.5 % V/V 1 % V/V 1680 g AE/ha 1260 g AE/ha	A B B B B B	100.0 -	100.0 -	20.875 -	63.1 -
5	BROADAXE XC 7 EC VOLT-EDGE INTACT CLASS ACT RIDION TAVIUM PLUS VAPORGRIP TECH ROUNDUP POWERMAX 4.5 SL	1530 g Al/ha 1.46 L/ha 0.5 % V/V 1 % V/V 1680 g AE/ha 1260 g AE/ha	A B B B B B	100.0 -	100.0 -	21.600 -	65.3 -
6	SONIC 70 DF VOLT-EDGE INTACT CLASS ACT RIDION TAVIUM PLUS VAPORGRIP TECH ROUNDUP POWERMAX 4.5 SL	316 g Al/ha 1.46 L/ha 0.5 % V/V 1 % V/V 1680 g AE/ha 1260 g AE/ha	A B B B B B	100.0 -	100.0 -	20.635 -	62.4 -

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.

Could not calculate LSD (% mean diff) for columns 1,2,3,4,6,7,8,9,10,11,12,13,14,15,16 because error mean square = 0.

^Calculated from residual.

Pest ID Code	2, W, Weed	3, W, Weed				
Pest Code	CHEAL	ECHCG				
Pest Scientific Name	Chenopodium alb>	Echinochloa cru>				
Pest Name	common lambsqua>	common barnyard>				
Crop ID Code	1, GLXMA	1, GLXMA	1, GLXMA	1, GLXMA		
BBCH Scale	BSOY	BSOY	BSOY	BSOY		
Crop Scientific Name	Glycine max	Glycine max	Glycine max	Glycine max		
Crop Name	Soybean	Soybean	Soybean	Soybean		
Crop Variety	AG29XF1	AG29XF1	AG29XF1	AG29XF1		
Rating Date	9/29/2021	9/29/2021	9/29/2021	9/29/2021		
SE Group No.	4	5	10	11		
Part Rated	PLANT, P	PLANT, P	PLANT, C	PLANT, C		
Rating Type	CONTRO	CONTRO	WEIGHT	YIELD		
Rating Unit/Min/Max	%, 0, 100	%, 0, 100	LB, -, -	BU, -, -		
Calculation	EF	EF	NC	NC		
Sample Size	1 PLOT	1 PLOT	1 PLOT	1 PLOT		
Collection Basis	1 PLOT	1 PLOT	1 PLOT	1 PLOT		
Reporting Basis	1 PLOT	1 PLOT	1 PLOT	1 PLOT		
Number of Subsamples	1	1	1	1		
Data Entry Date	12/9/2021	12/9/2021	12/9/2021			
Rating Timing	HARVEST	HARVEST	HARVEST	HARVEST		
Days After First/Last Applic.	137, 110	137, 110	137, 110	137, 110		
Plant-Eval Interval	137 DP-1	137 DP-1	137 DP-1	137 DP-1		
Days After Emergence	129 DE-1	129 DE-1	129 DE-1	129 DE-1		
ARM Action Codes				TY1		
Number of Decimals				1		
Trt Treatment No. Name	Rate Unit	Appl Code	15	16	17	18
7 FIERCE XLT 62.41 WG	197 g AI/ha	A	100.0 -	100.0 -	22.040 -	66.6 -
VOLT-EDGE	1.46 L/ha	B				
INTACT	0.5 % V/V	B				
CLASS ACT RIDION	1 % V/V	B				
TAVIUM PLUS VAPORGRIP TECH	1680 g AE/ha	B				
ROUNDUP POWERMAX 4.5 SL	1260 g AE/ha	B				
8 ZIDUA PRO 4.09 SC	215 g AI/ha	A	100.0 -	100.0 -	19.418 -	58.7 -
VOLT-EDGE	1.46 L/ha	B				
INTACT	0.5 % V/V	B				
CLASS ACT RIDION	1 % V/V	B				
TAVIUM PLUS VAPORGRIP TECH	1680 g AE/ha	B				
ROUNDUP POWERMAX 4.5 SL	1260 g AE/ha	B				
9 AUTHORITY EDGE	333 g AI/ha	A	100.0 -	100.0 -	20.918 -	63.2 -
VOLT-EDGE	1.46 L/ha	B				
INTACT	0.5 % V/V	B				
CLASS ACT RIDION	1 % V/V	B				
TAVIUM PLUS VAPORGRIP TECH	1680 g AE/ha	B				
ROUNDUP POWERMAX 4.5 SL	1260 g AE/ha	B				
LSD P=.05			.	.	3.2661	9.88
Standard Deviation			0.00	0.00	2.2211	6.72
CV			0.0	0.0	10.49	10.49
Grand Mean			100.00	100.00	21.1759	64.03
Levene's F^			.	.	0.65	0.65
Levene's Prob(F)			.	.	0.711	0.711
Rank X2			.	.	.	.
P(Rank X2)			.	.	.	.
Skewness^			.	.	0.3218	0.3218
Kurtosis^			.	.	-0.4414	-0.4414
Replicate F			0.000	0.000	2.888	2.888
Replicate Prob(F)			1.0000	1.0000	0.0597	0.0597
Treatment F			0.000	0.000	0.793	0.793
Treatment Prob(F)			1.0000	1.0000	0.6014	0.6014

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.

Could not calculate LSD (% mean diff) for columns 1,2,3,4,6,7,8,9,10,11,12,13,14,15,16 because error mean square = 0.

^Calculated from residual.

# Purdue Weed Science

**A23372A: Crop Tolerance and Efficacy in Conventional Till Soybean (University - Medium Soils)**

Trial ID: 21S-TPAC-SOY-07      Location: Mroczkiewicz Steve FS      Trial Year: 2021  
 Protocol ID: 21S-TPAC-SOY-07      Investigator (Creator): Steve Mroczkiewicz  
 Study Director:  
 Sponsor Contact:

Pest ID Code  
 1, W, Weed, AMBTR, Ambrosia trifida, Giant ragweed, Gly-R and ALS-R = Y  
 2, W, Weed, CHEAL, Chenopodium album, common lambsquarters, = Y  
 3, W, Weed, ECHCG, Echinochloa crus-galli, common barnyardgrass, = Y

Crop ID Code  
 1, GLXMA, BSOY, Glycine max, Soybean, AG29XF1 = XtendFlex

Part Rated  
 PLANT = plant  
 C = Crop is Part Rated  
 P = Pest is Part Rated

Rating Type  
 PHYGEN = phytotoxicity - general / injury  
 CONTRO = control / burndown or knockdown  
 WEIGHT = weight  
 YIELD = yield

Rating Unit/Min/Max  
 %, 0, 100 = percent  
 LB, , = pound  
 BU, , = bushel

Calculation  
 EF = efficacy  
 NC = no calculation

PLOT = total plot

PLOT = total plot

PLOT = total plot

Plant-Eval Interval  
 14 DP-1 = 1 GLXMA 5/15/2021  
 27 DP-1 = 1 GLXMA 5/15/2021  
 41 DP-1 = 1 GLXMA 5/15/2021  
 55 DP-1 = 1 GLXMA 5/15/2021  
 137 DP-1 = 1 GLXMA 5/15/2021

ARM Action Codes  
 TY1 = 3.02356504\*[17]