

# Purdue Weed Science

## Valent Evaluation of Maverick (V-10494) PRE

Trial ID: 21S-TPAC-CORN-07  
 Protocol ID: 21S-TPAC-CORN-07  
 Project ID:

Location: TPAC Trial Year: 2021  
 Investigator (Creator): Dr. Bill Johnson  
 Study Director:  
 Sponsor Contact:

**Discipline:** H herbicide  
**Trial Status:** E established **Trial Reliability:** 1 usable data  
**ARM Trial Created On:** 10/8/2021  
**Initiation Date:** 5/15/2021

### Trial Location

**City:** Lafayette **Country:** USA United States  
**State/Prov.:** Indiana  
**Postal Code:** 47907

**Latitude of LL Corner °:** 40.291765 N  
**Longitude of LL Corner °:** -86.909495 W

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

**Study Rules:** Default

No.	Guideline	Discipline	Description
1.	ADM-C-EMP	CO	Confidentiality - Employee of Sponsor Conducts Trial

### Objectives:

To evaluate the premix concept of clopyralid plus mesotrione plus pyroxasulfone for use in field corn for pree weed control. Treatments will be applied alone and with atrazine (840 g ai/ha) Measure of success is understanding of competit ive position vs. Bicep II Magnum,Acuron and Resicore

### Crop Description

**Crop 1:** C ZEAMX Zea mays Corn **Stage Scale:** BBCH  
**Entry Date:** 10/8/2021  
**Variety:** DKC62-52 RIB  
**Attributes:** glyphosate and glufosinate resistant corn  
**Planting Date:** 5/15/2021 **Planting Rate:** 32000 S/A  
**Depth:** 1.5 IN  
**Rows per Plot:** 4 **Planting Method:** PLANTD planted  
**Row Spacing:** 30 IN **Planting Equipment:** PP plot planter  
**Soil Temperature:** 69 F **Soil Moisture:** NORMAL normal, adequate  
**Emergence Date:** 5/23/2021  
**Harvested Width:** 10 FT  
**Harvested Length:** 27 FT  
**% Standard Moisture:** 15.5

### Pest Description

**Pest 1 Type:** W **Code:** AMBTR Ambrosia trifida **Stage Scale:** BBCH  
**Common Name:** Giant ragweed  
**Pest 2 Type:** W **Code:** ECHCG Echinochloa crus-galli **Entry Date:** 10/8/2021  
**Common Name:** common barnyardgrass **Stage Scale:** BBCH  
**Pest 3 Type:** W **Code:** CHEAL Chenopodium album **Entry Date:** 10/8/2021  
**Common Name:** common lambsquarters **Stage Scale:** BBCH

### Site and Design

**Treated Plot Width:** 10 FT **Site Type:** FIELD field  
**Treated Plot Length:** 30 FT **Experimental Unit:** 1 PLOT plot  
**Treated Plot Area:** 300.0 FT2 **Treatments:** 11 **Tillage Type:** CONTIL conventional-till  
**Replications:** 4 **Study Design:** RACOB� Randomized Complete Block (RCB)

### Maintenance

No.	Date	Type	Maintenance Product Name	Description	Rate	Rate Unit
1.	5/9/2021	FERT	28% N	28% N	60	LB/A

### Soil Description

**Description Name:** TPAC - Field 4BE  
**% Sand:** 21 **% OM:** 3.4 **Texture:** SIL silt loam  
**% Silt:** 54 **pH:** 5.8 **Soil Name:** Toronto-Millbrook complex  
**% Clay:** 25 **CEC:** 13.5 **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

Application Description		
	A	B
Application Date	5/15/2021	6/11/2021
Appl. Start Time	11:24 AM	4:02 PM
Appl. Stop Time	11:50 AM	4:30 PM
Application Method	SPRAY	SPRAY
Application Timing	PREPRE	POSPOS
Application Placement	BROADC	BROADC
Appl. Entry Date	10/8/2021	10/8/2021
Air Temperature Start, Stop	71, 71 F	92, 92 F
% Relative Humidity Start, Stop	39, 39	48, 48
Wind Velocity+Dir. Start	8 MPH, S	5 MPH, N
Wind Velocity+Dir. Stop	8 MPH, S	5 MPH, N
Wind Velocity+Dir. Max	8 MPH, S	5 MPH, N
Wet Leaves (Y/N)	N, no	N, no
Soil Temperature	68 F	105 F
Soil Moisture	NORMAL	DRY
% Cloud Cover	50	50

Crop Stage At Each Application		
	A	B
Crop 1 Code, BBCH Scale	ZEAMX, BCOR	ZEAMX, BCOR
Days after Emergence	-8	19
Stage Majority, Percent	00, -	14, -
Stage Minimum, Percent	00, -	13, -
Stage Maximum, Percent	00, -	15, -
Height Average	0 IN	12 IN
Height Minimum, Maximum		11, 14

Pest Stage At Each Application		
	A	B
Pest 1 Code, Type, Scale	AMBTR, W, BBCH	AMBTR, W, BBCH
Stage Majority, Percent	00, -	18, -
Stage Minimum, Percent	00, -	16, -
Stage Maximum, Percent	00, -	19, -
Height Average	0 IN	6 IN
Height Minimum, Maximum		0.5, 8
Density Average		5 FT2
Density Minimum, Maximum		2, 6
Pest 2 Code, Type, Scale	ECHCG, W, BBCH	ECHCG, W, BBCH
Stage Majority, Percent	00, -	16, -
Stage Minimum, Percent	00, -	14, -
Stage Maximum, Percent	00, -	18, -
Height Average	0 IN	3 IN
Height Minimum, Maximum		0.5, 5
Density Average		3 FT2
Density Minimum, Maximum		1, 5
Pest 3 Code, Type, Scale	CHEAL, W, BBCH	CHEAL, W, BBCH
Stage Majority, Percent	00, -	16, -
Stage Minimum, Percent	00, -	14, -
Stage Maximum, Percent	00, -	19, -
Height Average	0 IN	3 IN
Height Minimum, Maximum		0.25, 6
Density Average		3 FT2
Density Minimum, Maximum		0, 5

**Application Equipment**

	<b>A</b>	<b>B</b>
<b>Appl. Equipment</b>	CO2 BACKPACK	CO2 BACKPACK
<b>Equipment Type</b>	BACSPR	BACCAI
<b>Operation Pressure</b>	19 PSI	30 PSI
<b>Nozzle Model</b>	XR	AIXR
<b>Nozzle Type</b>	FLAFXR	FLAFAI
<b>Nozzle Spacing</b>	15.0 IN	15.0 IN
<b>Nozzles/Row</b>	8.0	8.0
<b>Boom Length</b>	10.0 FT	10.0 FT
<b>Boom Height</b>	17.0 IN	27.0 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
<b>Tank Mix (Y/N)</b>	Y, yes	Y, yes

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Trial ID: 21S-TPAC-CORN-07	Location: TPAC	Trial Year: 2021
Protocol ID: 21S-TPAC-CORN-07	Investigator (Creator): Dr. Bill Johnson	
Project ID:	Study Director:	
	Sponsor Contact:	

			W, Weed AMBTR Giant ragweed	W, Weed CHEAL common lambsqua>	W, Weed ECHCG common barnyard>			
Pest Type								
Pest Code								
Pest Name								
Crop Type, Code	C, ZEAMX	C, ZEAMX						
Crop Name	Corn	Corn						
Rating Date	5/29/2021	6/11/2021	6/11/2021	6/11/2021	6/11/2021			
Part Rated	PLANT, C	PLANT, C	PLANT, P	PLANT, P	PLANT, P			
Rating Type	PHYGEN	PHYGEN	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	10/8/2021	10/8/2021	10/8/2021	10/8/2021	10/8/2021			
Rating Timing	14 DAA	27 DAA	27 DAA	27 DAA	27 DAA			
Days After First/Last Applic.	14, 14	27, 27	27, 27	27, 27	27, 27			
Days After Emergence	6 DE-1	19 DE-1	19 DE-1	19 DE-1	19 DE-1			
ARM Action Codes								
Number of Decimals								
Trt No.	Treatment Name	Rate Rate Unit	Appl Code	1	2	3	4	5
1	UNTREATED CHECK			0.0	0.0	0.0	0.0	0.0
2	ROUNDUP POWER MAX(AE) AMSOL	32 FL OZ/A B 5.9 % V/V B		0.0 -	0.0 -			
3	ACURON HERBICIDE ROUNDUP POWER MAX(AE) AMSOL	3 QT/A A 32 FL OZ/A B 5.9 % V/V B		0.0 -	0.0 -	98.3 a	100.0 -	100.0 -
4	BICEP II MAGNUM ROUNDUP POWER MAX(AE) AMSOL	2.1 QT/A A 32 FL OZ/A B 5.9 % V/V B		0.0 -	0.0 -	67.5 c	100.0 -	100.0 -
5	RESICORE ROUNDUP POWER MAX(AE) AMSOL	88 FL OZ/A A 32 FL OZ/A B 5.9 % V/V B		0.0 -	0.0 -	96.8 a	100.0 -	100.0 -
6	V-10494 2.04 LBAI/GAL SC 2146 ROUNDUP POWER MAX(AE) AMSOL	1 PT/A A 32 FL OZ/A B 5.9 % V/V B		0.0 -	0.0 -	85.0 b	100.0 -	100.0 -
7	V-10494 2.04 LBAI/GAL SC 2146 AATREX ROUNDUP POWER MAX(AE) AMSOL	1 PT/A A 1.5 PT/A A 32 FL OZ/A B 5.9 % V/V B		0.0 -	0.0 -	96.0 a	100.0 -	100.0 -
8	V-10494 2.04 LBAI/GAL SC 2146 ROUNDUP POWER MAX(AE) AMSOL	1.5 PT/A A 32 FL OZ/A B 5.9 % V/V B		0.0 -	0.0 -	95.8 ab	100.0 -	99.3 -
9	V-10494 2.04 LBAI/GAL SC 2146 AATREX ROUNDUP POWER MAX(AE) AMSOL	1.5 PT/A A 1.5 PT/A A 32 FL OZ/A B 5.9 % V/V B		0.0 -	0.0 -	98.5 a	100.0 -	100.0 -
10	V-10494 2.04 LBAI/GAL SC 2146 ROUNDUP POWER MAX(AE) AMSOL	1 QT/A A 32 FL OZ/A B 5.9 % V/V B		0.0 -	0.0 -	98.3 a	100.0 -	100.0 -

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 1,2,4,8,10,11,12,13,14 because error mean square = 0.  
 ^Calculated from residual.

Pest Type			W, Weed AMBTR	W, Weed CHEAL	W, Weed ECHCG		
Pest Code			Giant ragweed	common lambsqua>	common barnyard>		
Pest Name							
Crop Type, Code	C, ZEAMX	C, ZEAMX					
Crop Name	Corn	Corn					
Rating Date	5/29/2021	6/11/2021	6/11/2021	6/11/2021	6/11/2021		
Part Rated	PLANT, C	PLANT, C	PLANT, P	PLANT, P	PLANT, P		
Rating Type	PHYGEN	PHYGEN	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	10/8/2021	10/8/2021	10/8/2021	10/8/2021	10/8/2021		
Rating Timing	14 DAA	27 DAA	27 DAA	27 DAA	27 DAA		
Days After First/Last Applic.	14, 14	27, 27	27, 27	27, 27	27, 27		
Days After Emergence	6 DE-1	19 DE-1	19 DE-1	19 DE-1	19 DE-1		
ARM Action Codes							
Number of Decimals							
Trt Treatment	Rate	Appl	1	2	3	4	5
No. Name	Rate Unit	Code					
11 V-10494 2.04 LBAI/GAL SC 2146	1 QT/A	A	0.0 -	0.0 -	98.0 a	100.0 -	99.8 -
AATREX	1.5 PT/A	A					
ROUNDUP POWER MAX(AE)	32 FL OZ/A	B					
AMSOL	5.9 % V/V	B					
LSD P=.05			.	.	10.95	.	0.78
Standard Deviation			0.00	0.00	7.51	0.00	0.53
CV			0.0	0.0	8.1	0.0	0.53
Grand Mean			0.00	0.00	92.67	100.00	99.89
Levene's F^			.	.	1.901	.	0.702
Levene's Prob(F)			.	.	0.101	.	0.687
Rank X2			.	.	.	.	.
P(Rank X2)			.	.	.	.	.
Skewness^			.	.	-0.6573	.	-2.682*
Kurtosis^			.	.	8.0969*	.	12.6913*
Replicate F			0.000	0.000	1.211	0.000	0.780
Replicate Prob(F)			1.0000	1.0000	0.3272	1.0000	0.5164
Treatment F			0.000	0.000	7.580	0.000	0.902
Treatment Prob(F)			1.0000	1.0000	0.0001	1.0000	0.5303

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^Calculated from residual.

Pest Type			W, Weed	W, Weed
Pest Code			AMBTR	CHEAL
Pest Name			Giant ragweed	common lambsqua>
Crop Type, Code				
Crop Name				
Rating Date			7/9/2021	7/9/2021
Part Rated			PLANT, P	PLANT, P
Rating Type			CONTRO	CONTRO
Rating Unit/Min/Max			%, 0, 100	%, 0, 100
Number of Subsamples			1	1
Data Entry Date			10/8/2021	10/8/2021
Rating Timing			28 DAB	28 DAB
Days After First/Last Applic.			55, 28	55, 28
Days After Emergence			47 DE-1	47 DE-1
ARM Action Codes				
Number of Decimals				
Trt No.	Treatment Name	Rate Rate Unit	Appl Code	
				6
				7
1	UNTREATED CHECK			0.0
2	ROUNDUP POWER MAX(AE) AMSOL	32 FL OZ/A B 5.9 % V/V B		82.5 b
3	ACURON HERBICIDE ROUNDUP POWER MAX(AE) AMSOL	3 QT/A A 32 FL OZ/A B 5.9 % V/V B		100.0 a
4	BICEP II MAGNUM ROUNDUP POWER MAX(AE) AMSOL	2.1 QT/A A 32 FL OZ/A B 5.9 % V/V B		100.0 a
5	RESICORE ROUNDUP POWER MAX(AE) AMSOL	88 FL OZ/A A 32 FL OZ/A B 5.9 % V/V B		100.0 a
6	V-10494 2.04 LBAI/GAL SC 2146 ROUNDUP POWER MAX(AE) AMSOL	1 PT/A A 32 FL OZ/A B 5.9 % V/V B		100.0 a
7	V-10494 2.04 LBAI/GAL SC 2146 AATREX ROUNDUP POWER MAX(AE) AMSOL	1 PT/A A 1.5 PT/A A 32 FL OZ/A B 5.9 % V/V B		100.0 a
8	V-10494 2.04 LBAI/GAL SC 2146 ROUNDUP POWER MAX(AE) AMSOL	1.5 PT/A A 32 FL OZ/A B 5.9 % V/V B		100.0 a
9	V-10494 2.04 LBAI/GAL SC 2146 AATREX ROUNDUP POWER MAX(AE) AMSOL	1.5 PT/A A 1.5 PT/A A 32 FL OZ/A B 5.9 % V/V B		100.0 a
10	V-10494 2.04 LBAI/GAL SC 2146 ROUNDUP POWER MAX(AE) AMSOL	1 QT/A A 32 FL OZ/A B 5.9 % V/V B		100.0 a

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^Calculated from residual.



Pest Type			W, Weed	W, Weed
Pest Code			AMBTR	CHEAL
Pest Name			Giant ragweed	common lambsqua>
Crop Type, Code				
Crop Name				
Rating Date			7/9/2021	7/9/2021
Part Rated			PLANT, P	PLANT, P
Rating Type			CONTRO	CONTRO
Rating Unit/Min/Max			%, 0, 100	%, 0, 100
Number of Subsamples			1	1
Data Entry Date			10/8/2021	10/8/2021
Rating Timing			28 DAB	28 DAB
Days After First/Last Applic.			55, 28	55, 28
Days After Emergence			47 DE-1	47 DE-1
ARM Action Codes				
Number of Decimals				
Trt Treatment		Rate	Appl	
No. Name		Rate Unit	Code	
11 V-10494 2.04 LBAI/GAL SC 2146		1 QT/A	A	
AATREX		1.5 PT/A	A	
ROUNDUP POWER MAX(AE)		32 FL OZ/A	B	
AMSOL		5.9 % V/V	B	
			100.0 a	100.0 a
LSD P=.05			1.32	0.79
Standard Deviation			0.91	0.55
CV			0.93	0.55
Grand Mean			98.25	99.85
Levene's F^	14568766710367100000000000000.00		3407102713477650000000000000.00	
Levene's Prob(F)			0.00*	0.00*
Rank X2			.	.
P(Rank X2)			.	.
Skewness^			0.0	0.0
Kurtosis^			5.9791*	5.9791*
Replicate F			1.000	1.000
Replicate Prob(F)			0.4079	0.4079
Treatment F			147.000	3.000
Treatment Prob(F)			0.0001	0.0130

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Untreated treatment(s) 1 excluded from analysis.  
Could not calculate LSD (% mean diff) for columns 1,2,4,8,10,11,12,13,14 because error mean square = 0.  
^Calculated from residual.

Pest Type	W, Weed	W, Weed	W, Weed	W, Weed	W, Weed		
Pest Code	ECHCG	AMBTR	CHEAL	ECHCG	AMBTR		
Pest Name	common barnyard>	Giant ragweed	common lambsqua>	common barnyard>	Giant ragweed		
Crop Type, Code							
Crop Name							
Rating Date	7/9/2021	7/23/2021	7/23/2021	7/23/2021	8/6/2021		
Part Rated	PLANT, P	PLANT, P	PLANT, P	PLANT, P	PLANT, P		
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	10/8/2021	10/8/2021	10/8/2021	10/8/2021	10/8/2021		
Rating Timing	28 DAB	42 DAB	42 DAB	42 DAB	56 DAB		
Days After First/Last Applic.	55, 28	69, 42	69, 42	69, 42	83, 56		
Days After Emergence	47 DE-1	61 DE-1	61 DE-1	61 DE-1	75 DE-1		
ARM Action Codes							
Number of Decimals							
Trt Treatment	Rate	Appl	8	9	10	11	12
No. Name	Rate Unit	Code					
1 UNTREATED CHECK			0.0	0.0	0.0	0.0	0.0
2 ROUNDUP POWER MAX(AE) AMSOL	32 FL OZ/A B 5.9 % V/V B		90.0 b	83.8 b	100.0 -	95.0 b	90.0 b
3 ACURON HERBICIDE ROUNDUP POWER MAX(AE) AMSOL	3 QT/A A 32 FL OZ/A B 5.9 % V/V B		100.0 a	100.0 a	100.0 -	100.0 a	100.0 a
4 BICEP II MAGNUM ROUNDUP POWER MAX(AE) AMSOL	2.1 QT/A A 32 FL OZ/A B 5.9 % V/V B		100.0 a	100.0 a	100.0 -	100.0 a	100.0 a
5 RESICORE ROUNDUP POWER MAX(AE) AMSOL	88 FL OZ/A A 32 FL OZ/A B 5.9 % V/V B		100.0 a	100.0 a	100.0 -	100.0 a	100.0 a
6 V-10494 2.04 LBAI/GAL SC 2146 ROUNDUP POWER MAX(AE) AMSOL	1 PT/A A 32 FL OZ/A B 5.9 % V/V B		100.0 a	100.0 a	100.0 -	100.0 a	100.0 a
7 V-10494 2.04 LBAI/GAL SC 2146 AATREX ROUNDUP POWER MAX(AE) AMSOL	1 PT/A A 1.5 PT/A A 32 FL OZ/A B 5.9 % V/V B		100.0 a	100.0 a	100.0 -	100.0 a	100.0 a
8 V-10494 2.04 LBAI/GAL SC 2146 ROUNDUP POWER MAX(AE) AMSOL	1.5 PT/A A 32 FL OZ/A B 5.9 % V/V B		100.0 a	100.0 a	100.0 -	100.0 a	100.0 a
9 V-10494 2.04 LBAI/GAL SC 2146 AATREX ROUNDUP POWER MAX(AE) AMSOL	1.5 PT/A A 1.5 PT/A A 32 FL OZ/A B 5.9 % V/V B		100.0 a	100.0 a	100.0 -	100.0 a	100.0 a
10 V-10494 2.04 LBAI/GAL SC 2146 ROUNDUP POWER MAX(AE) AMSOL	1 QT/A A 32 FL OZ/A B 5.9 % V/V B		100.0 a	100.0 a	100.0 -	100.0 a	100.0 a

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 1,2,4,8,10,11,12,13,14 because error mean square = 0.  
^Calculated from residual.

Pest Type	W, Weed	W, Weed	W, Weed	W, Weed	W, Weed		
Pest Code	ECHCG	AMBTR	CHEAL	ECHCG	AMBTR		
Pest Name	common barnyard>	Giant ragweed	common lambsqua>	common barnyard>	Giant ragweed		
Crop Type, Code							
Crop Name							
Rating Date	7/9/2021	7/23/2021	7/23/2021	7/23/2021	8/6/2021		
Part Rated	PLANT, P	PLANT, P	PLANT, P	PLANT, P	PLANT, P		
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	10/8/2021	10/8/2021	10/8/2021	10/8/2021	10/8/2021		
Rating Timing	28 DAB	42 DAB	42 DAB	42 DAB	56 DAB		
Days After First/Last Applic.	55, 28	69, 42	69, 42	69, 42	83, 56		
Days After Emergence	47 DE-1	61 DE-1	61 DE-1	61 DE-1	75 DE-1		
ARM Action Codes							
Number of Decimals							
Trt Treatment	Rate	Appl	8	9	10	11	12
No. Name	Rate Unit	Code					
11 V-10494 2.04 LBAI/GAL SC 2146	1 QT/A	A	100.0 a	100.0 a	100.0 -	100.0 a	100.0 a
AATREX	1.5 PT/A	A					
ROUNDUP POWER MAX(AE)	32 FL OZ/A	B					
AMSOL	5.9 % V/V	B					
LSD P=.05				1.15			
Standard Deviation			0.00	0.79	0.00	0.00	0.00
CV			0.0	0.8	0.0	0.0	0.0
Grand Mean			99.00	98.38	100.00	99.50	99.00
Levene's F^				0.711			
Levene's Prob(F)				0.694			
Rank X2							
P(Rank X2)							
Skewness^				-3.2005*			
Kurtosis^				18.2785*			
Replicate F			0.000	1.000	0.000	0.000	0.000
Replicate Prob(F)			1.0000	0.4079	1.0000	1.0000	1.0000
Treatment F			0.000	169.000	0.000	0.000	0.000
Treatment Prob(F)			1.0000	0.0001	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 1,2,4,8,10,11,12,13,14 because error mean square = 0.  
^Calculated from residual.

Pest Type				W, Weed	W, Weed			
Pest Code				CHEAL	ECHCG			
Pest Name				common lambsqua>	common barnyard>			
Crop Type, Code						C, ZEAMX	C, ZEAMX	C, ZEAMX
Crop Name						Corn	Corn	Corn
Rating Date				8/6/2021	8/6/2021	10/19/2021	10/19/2021	10/19/2021
Part Rated				PLANT, P	PLANT, P	PLANT, C	PLANT, C	PLANT, C
Rating Type				CONTRO	CONTRO	WEIGHT	MOICON	YIELD
Rating Unit/Min/Max				% , 0, 100	% , 0, 100	LB, -, -	% , 0, 100	BU, -, -
Number of Subsamples				1	1	1	1	1
Data Entry Date				10/8/2021	10/8/2021	12/10/2021	12/10/2021	HARVEST
Rating Timing				56 DAB	56 DAB	HARVEST	HARVEST	HARVEST
Days After First/Last Applic.				83, 56	83, 56	157, 130	157, 130	157, 130
Days After Emergence				75 DE-1	75 DE-1	149 DE-1	149 DE-1	149 DE-1
ARM Action Codes								TY1
Number of Decimals								1
Trt No.	Treatment Name	Rate Rate Unit	Appl Code	13	14	15	16	17
1	UNTREATED CHECK			0.0	0.0	17.998	16.40	51.4
2	ROUNDUP POWER MAX(AE) AMSOL	32 FL OZ/A B 5.9 % V/V B		100.0 -	95.0 b	62.500 -	16.70 -	177.5 -
3	ACURON HERBICIDE ROUNDUP POWER MAX(AE) AMSOL	3 QT/A A 32 FL OZ/A B 5.9 % V/V B		100.0 -	100.0 a	67.283 -	15.98 -	192.8 -
4	BICEP II MAGNUM ROUNDUP POWER MAX(AE) AMSOL	2.1 QT/A A 32 FL OZ/A B 5.9 % V/V B		100.0 -	100.0 a	69.290 -	16.88 -	196.4 -
5	RESICORE ROUNDUP POWER MAX(AE) AMSOL	88 FL OZ/A A 32 FL OZ/A B 5.9 % V/V B		100.0 -	100.0 a	65.065 -	15.98 -	186.5 -
6	V-10494 2.04 LBAI/GAL SC 2146 ROUNDUP POWER MAX(AE) AMSOL	1 PT/A A 32 FL OZ/A B 5.9 % V/V B		100.0 -	100.0 a	71.720 -	16.35 -	204.6 -
7	V-10494 2.04 LBAI/GAL SC 2146 AATREX ROUNDUP POWER MAX(AE) AMSOL	1 PT/A A 1.5 PT/A A 32 FL OZ/A B 5.9 % V/V B		100.0 -	100.0 a	59.180 -	16.65 -	168.1 -
8	V-10494 2.04 LBAI/GAL SC 2146 ROUNDUP POWER MAX(AE) AMSOL	1.5 PT/A A 32 FL OZ/A B 5.9 % V/V B		100.0 -	100.0 a	68.603 -	16.60 -	195.0 -
9	V-10494 2.04 LBAI/GAL SC 2146 AATREX ROUNDUP POWER MAX(AE) AMSOL	1.5 PT/A A 1.5 PT/A A 32 FL OZ/A B 5.9 % V/V B		100.0 -	100.0 a	63.505 -	16.30 -	181.2 -
10	V-10494 2.04 LBAI/GAL SC 2146 ROUNDUP POWER MAX(AE) AMSOL	1 QT/A A 32 FL OZ/A B 5.9 % V/V B		100.0 -	100.0 a	63.920 -	16.70 -	181.5 -

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 1,2,4,8,10,11,12,13,14 because error mean square = 0.  
^Calculated from residual.

Pest Type	W, Weed	W, Weed					
Pest Code	CHEAL	ECHCG					
Pest Name	common lambsqua>	common barnyard>					
Crop Type, Code			C, ZEAMX	C, ZEAMX	C, ZEAMX		
Crop Name			Corn	Corn	Corn		
Rating Date	8/6/2021	8/6/2021	10/19/2021	10/19/2021	10/19/2021		
Part Rated	PLANT, P	PLANT, P	PLANT, C	PLANT, C	PLANT, C		
Rating Type	CONTRO	CONTRO	WEIGHT	MOICON	YIELD		
Rating Unit/Min/Max	%, 0, 100	%, 0, 100	LB, -, -	%, 0, 100	BU, -, -		
Number of Subsamples	1	1	1	1	1		
Data Entry Date	10/8/2021	10/8/2021	12/10/2021	12/10/2021			
Rating Timing	56 DAB	56 DAB	HARVEST	HARVEST	HARVEST		
Days After First/Last Applic.	83, 56	83, 56	157, 130	157, 130	157, 130		
Days After Emergence	75 DE-1	75 DE-1	149 DE-1	149 DE-1	149 DE-1		
ARM Action Codes					TY1		
Number of Decimals					1		
Trt Treatment	Rate	Appl	13	14	15	16	17
No. Name	Rate Unit	Code					
11 V-10494 2.04 LBAI/GAL SC 2146	1 QT/A	A	100.0 -	100.0 a	67.213 -	16.30 -	191.8 -
AATREX	1.5 PT/A	A					
ROUNDUP POWER MAX(AE)	32 FL OZ/A	B					
AMSOL	5.9 % V/V	B					
LSD P=.05	.	.			7.5979	0.720	21.99
Standard Deviation	0.00	0.00			5.2368	0.496	15.16
CV	0.0	0.0			7.96	3.02	8.08
Grand Mean	100.00	99.50			65.8278	16.443	187.54
Levene's F^	.	.			0.241	0.356	0.257
Levene's Prob(F)	.	.			0.985	0.947	0.981
Rank X2	.	.			.	.	.
P(Rank X2)	.	.			.	.	.
Skewness^	.	.			0.3636	-0.4473	0.3756
Kurtosis^	.	.			-0.2166	0.4388	-0.2405
Replicate F	0.000	0.000			7.520	4.429	7.205
Replicate Prob(F)	1.0000	1.0000			0.0008	0.0117	0.0011
Treatment F	0.000	0.000			1.999	1.577	1.989
Treatment Prob(F)	1.0000	1.0000			0.0795	0.1725	0.0810

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 1,2,4,8,10,11,12,13,14 because error mean square = 0.  
^Calculated from residual.

# Purdue Weed Science

## Valent Evaluation of Maverick (V-10494) PRE

Trial ID: 21S-TPAC-CORN-07  
Protocol ID: 21S-TPAC-CORN-07  
Project ID:

Location: TPAC      Trial Year: 2021  
Investigator (Creator): Dr. Bill Johnson  
Study Director:  
Sponsor Contact:

Pest Type

W, Weed = Weed or volunteer crop

Pest Code

AMBTR, Ambrosia trifida, Giant ragweed = US

CHEAL, Chenopodium album, common lambsquarters = US

ECHCG, Echinochloa crus-galli, common barnyardgrass = US

Crop Type, Code

C = EPPO species (Bayer) codes

ZEAMX, BCOR, Zea mays, Corn = US

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

MOICON = moisture content

YIELD = yield

Rating Unit/Min/Max

%, 0, 100 = percent

LB, , = pound

BU, , = bushel

ARM Action Codes

TY1 = 2.88095238\*[15]\*(100-[16])/84.5