

Purdue Weed Science

Syngenta post giant ragweed clean up solutions in corn

Trial ID: 21S-TPAC-CORN-04 Location: TPAC Trial Year: 2021
 Protocol ID: 21S-TPAC-CORN-04 Investigator (Creator): Dr. Bill Johnson
 Project ID: Study Director: Brent Mansfield
 Sponsor Contact: Chad Threewits - Syngenta

General Trial Information

Study Director: Brent Mansfield **Title:** Research Associate
Investigator: Dr. Bill Johnson **Title:** Professor

Discipline: H herbicide
Trial Status: E established **Trial Reliability:** 1 usable data

ARM Trial Created On: 6/7/2021
Initiation Date: 5/15/2021

Trial Location

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

Latitude of LL Corner °: 40.291767 N
Longitude of LL Corner °: -86.908705 W

Conducted Under GLP: No
Conducted Under GEP: No

Contacts

Role: STYDIR study director
Study Director: Brent Mansfield **Title:** Research Associate
Organization: Purdue University
Address 1: 915 W. State Street
Country: USA United States **E-mail:** brentmansfield@purdue.edu
City: West Lafayette **State/Prov:** IN **Postal Code:** 47907

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

Role: SPONSR sponsor
Sponsor: Chad Threewits - Syngenta

Crop Description

Crop 1: C ZEAMX Zea mays Corn **Stage Scale:** BBCH **BBCH Scale:** BCOR

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 **Entry Date:** 10/8/2021
Common Name: Giant ragweed **Stage Scale:** BBCH

Pest 2 Type: W **Code:** ECHCG Echinochloa crus-galli **Entry Date:** 10/8/2021
Common Name: common barnyardgrass **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:** 12 **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**Closest Weather Station:** TPAC **Distance:** 0.5 MI

No.	Date	Moisture Total	Unit	Min Temp	Max Temp	Temp Unit
1.	6/1/2021	0	IN	57	71	F
2.	6/2/2021	0.04	IN	58	74	F
3.	6/3/2021	0.03	IN	59	87	F
4.	6/4/2021	0	IN	61	82	F
5.	6/5/2021	0	IN	63	88	F
6.	6/6/2021	0	IN	66	86	F
7.	6/7/2021	0.01	IN	69	83	F
8.	6/8/2021	0.1	IN	69	83	F
9.	6/9/2021	0	IN	70	85	F
10.	6/10/2021	0	IN	67	85	F
11.	6/11/2021	0	IN	69	85	F
12.	6/12/2021	0	IN	67	90	F
13.	6/13/2021	0	IN	69	93	F
14.	6/14/2021	0	IN	63	86	F
15.	6/15/2021	0	IN	57	83	F
16.	6/16/2021	0	IN	53	81	F
17.	6/17/2021	0	IN	53	82	F
18.	6/18/2021	0.01	IN	61	86	F
19.	6/19/2021	0.47	IN	67	93	F
20.	6/20/2021	0	IN	67	81	F
21.	6/21/2021	0.1	IN	70	86	F
22.	6/22/2021	0	IN	49	72	F
23.	6/23/2021	0	IN	54	74	F
24.	6/24/2021	0	IN	60	77	F
25.	6/25/2021	1.19	IN	63	79	F
26.	6/26/2021	0.83	IN	70	81	F
27.	6/27/2021	1.05	IN	69	85	F
28.	6/28/2021	0.11	IN	69	86	F
29.	6/29/2021	0	IN	72	88	F
30.	6/30/2021	0	IN	72	89	F
31.	7/1/2021	0.35	IN	70	78	F
32.	7/2/2021	0	IN	55	82	F
33.	7/3/2021	0	IN	53	75	F
34.	7/4/2021	0	IN	57	78	F
35.	7/5/2021	0	IN	67	85	F
36.	7/6/2021	0	IN	68	86	F
37.	7/7/2021	0	IN	71	86	F
38.	7/8/2021	1.29	IN	67	86	F
39.	7/9/2021	0.05	IN	59	80	F
40.	7/10/2021	0.03	IN	61	73	F
41.	7/11/2021	0.1	IN	65	76	F
42.	7/12/2021	1.3	IN	66	76	F
43.	7/13/2021	0.4	IN	67	82	F
44.	7/14/2021	0.08	IN	65	79	F
45.	7/15/2021	0	IN	66	82	F
46.	7/16/2021	0.16	IN	69	86	F
47.	7/17/2021	0.1	IN	66	78	F
48.	7/18/2021	0.01	IN	66	80	F
49.	7/19/2021	0	IN	61	83	F
50.	7/20/2021	0	IN	61	82	F

51.	7/21/2021	0	IN	64	83	F
52.	7/22/2021	0	IN	64	79	F
53.	7/23/2021	0	IN	67	83	F
54.	7/24/2021	0	IN	71	86	F
55.	7/25/2021	0	IN	69	87	F
56.	7/26/2021	0	IN	65	88	F
57.	7/27/2021	0	IN	62	87	F
58.	7/28/2021	0	IN	66	86	F
59.	7/29/2021	0	IN	70	87	F
60.	7/30/2021	0	IN	65	88	F
61.	7/31/2021	0	IN	62	78	F
62.	8/1/2021	0	IN	57	73	F
63.	8/2/2021	0	IN	52	80	F
64.	8/3/2021	0	IN	54	77	F
65.	8/4/2021	0	IN	55	80	F
66.	8/5/2021	0	IN	54	81	F
67.	8/6/2021	0	IN	61	83	F
68.	8/7/2021	0	IN	67	82	F
69.	8/8/2021	0	IN	67	85	F
70.	8/9/2021	0	IN	69	86	F
71.	8/10/2021	0	IN	71	80	F
72.	8/11/2021	0	IN	74	90	F
73.	8/12/2021	0.1	IN	75	88	F
74.	8/13/2021	0.24	IN	67	78	F
75.	8/14/2021	0	IN	60	86	F
76.	8/15/2021	0	IN	53	81	F

Application Description

	A
Application Date	6/11/2021
Appl. Start Time	2:55 PM
Appl. Stop Time	3:28 PM
Application Method	SPRAY
Application Timing	POSPOS
Application Placement	BROADC
Appl. Entry Date	10/8/2021
Air Temperature Start, Stop	92, 92 F
% Relative Humidity Start, Stop	48, 48
Wind Velocity+Dir. Start	5 MPH, N
Wind Velocity+Dir. Stop	5 MPH, N
Wind Velocity+Dir. Max	5 MPH, N
Wet Leaves (Y/N)	N, no
Soil Temperature	105 F
Soil Moisture	DRY
% Cloud Cover	60

Crop Stage At Each Application

	A
Crop 1 Code, BBCH Scale	ZEAMX, BCOR
Days after Emergence	19
Stage Majority, Percent	14, -
Stage Minimum, Percent	13, -
Stage Maximum, Percent	15, -
Height Average	11 IN
Height Minimum, Maximum	9, 14

Pest Stage At Each Application

	A
Pest 1 Code, Type, Scale	AMBTR, W, BBCH
Stage Majority, Percent	19, -
Stage Minimum, Percent	17, -
Stage Maximum, Percent	19, -
Height Average	8 IN
Height Minimum, Maximum	6, 11
Density Average	10 FT2
Pest 2 Code, Type, Scale	ECHCG, W, BBCH
Stage Majority, Percent	13, -
Stage Minimum, Percent	12, -
Stage Maximum, Percent	15, -
Height Average	4 IN
Height Minimum, Maximum	3, 5

Application Equipment

	A
Appl. Equipment	CO2 BACKPACK
Equipment Type	BACCAI
Operation Pressure	26 PSI
Nozzle Model	AIXR
Nozzle Type	FLAFAI
Nozzle TradeName	TEEJET
Nozzle Tip Size, Color	110015, green
Nozzle Spacing	15.0 IN
Nozzles/Row	8.0
Boom Length	10.0 FT
Boom Height	27.0 IN
Ground Speed	3 MPH
Carrier	WATER
Application Amount	15 GAL/AC
Mix Size	1.8 L
Propellant	COMCO2
Tank Mix (Y/N)	Y, yes

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Protocol ID: 21S-TPAC-CORN-04	Investigator (Creator): Dr. Bill Johnson	
Project ID:	Study Director: Brent Mansfield	
Sponsor Contact: Chad Threewits - Syngenta		

Pest Type			W, Weed	W, Weed	W, Weed	W, Weed		
Pest Code			AMBTR	ECHCG	AMBTR	ECHCG		
Pest Scientific Name			Ambrosia trifida	Echinochloa cru>	Ambrosia trifida	Echinochloa cru>		
Pest Name			Giant ragweed	common barnyard>	Giant ragweed	common barnyard>		
Crop Type, Code	C, ZEAMX	C, ZEAMX						
BBCH Scale	BCOR	BCOR						
Crop Scientific Name	Zea mays	Zea mays						
Crop Name	Corn	Corn						
Rating Date	6/25/2021	7/9/2021	6/25/2021	6/25/2021	7/9/2021	7/9/2021		
Part Rated	PLANT, C	PLANT, C	PLANT, P	PLANT, P	PLANT, P	PLANT, P		
Rating Type	PHYGEN	PHYGEN	CONTRO	CONTRO	CONTRO	CONTRO		
Rating Unit/Min/Max	% , 0, 100	% , 0, 100	% , 0, 100	% , 0, 100	% , 0, 100	% , 0, 100		
Sample Size								
Number of Subsamples	1	1	1	1	1	1		
Data Entry Date	10/8/2021	10/8/2021	10/8/2021	10/8/2021	10/8/2021	10/8/2021		
Rating Timing	14 DAA	28 DAA	14 DAA	14 DAA	28 DAA	28 DAA		
Days After First/Last Applic.	14, 14	28, 28	14, 14	14, 14	28, 28	28, 28		
Trt-Eval Interval	14 DA-A	28 DA-A	14 DA-A	14 DA-A	28 DA-A	28 DA-A		
Plant-Eval Interval	41 DP-1	55 DP-1	41 DP-1	41 DP-1	55 DP-1	55 DP-1		
Days After Emergence	33 DE-1	47 DE-1	33 DE-1	33 DE-1	47 DE-1	47 DE-1		
ARM Action Codes								
Number of Decimals								
Trt Treatment No. Name	Rate	Appl Code	1	2	3	4	5	6
1 ACURON GT ACTIVATOR 90 AMSOL	3.75 PT/A 0.25 % V/V 2.5 % V/V	A A A	0.0 -	0.0 -	100.0 -	90.0 -	100.0 -	95.0 -
2 HALEX GT ACTIVATOR 90 AMSOL	3.6 PT/A 0.25 % V/V 2.5 % V/V	A A A	0.5 -	0.0 -	100.0 -	90.0 -	100.0 -	95.0 -
3 ACURON GT AATREX ACTIVATOR 90 AMSOL	3.75 PT/A 1 PT/A 0.25 % V/V 2.5 % V/V	A A A A	0.0 -	0.0 -	100.0 -	90.0 -	100.0 -	95.0 -
4 HALEX GT AATREX ACTIVATOR 90 AMSOL	3.6 PT/A 1 PT/A 0.25 % V/V 2.5 % V/V	A A A A	1.0 -	0.0 -	100.0 -	90.0 -	100.0 -	95.0 -
5 ACURON GT CLARITY ACTIVATOR 90 AMSOL	3.75 PT/A 3 FL OZ/A 0.25 % V/V 2.5 % V/V	A A A A	0.0 -	0.0 -	100.0 -	90.0 -	100.0 -	95.0 -
6 HALEX GT CLARITY ACTIVATOR 90 AMSOL	3.6 PT/A 3 FL OZ/A 0.25 % V/V 2.5 % V/V	A A A A	0.3 -	0.0 -	100.0 -	90.0 -	100.0 -	95.0 -
7 STATUS ROUNDUP POWERMAX ACTIVATOR 90 AMSOL	5 OZ/A 28 FL OZ/A 0.25 % V/V 2.5 % V/V	A A A A	0.0 -	0.0 -	100.0 -	90.0 -	100.0 -	95.0 -
8 ARMEZON PRO AATREX ROUNDUP POWERMAX AMSOL	18 FL OZ/A 1 PT/A 28 FL OZ/A 2.5 % V/V	A A A A	0.0 -	0.0 -	100.0 -	90.0 -	100.0 -	95.0 -
9 CAPRENO AATREX ROUNDUP POWERMAX AMSOL	3 FL OZ/A 1 PT/A 28 FL OZ/A 2.5 % V/V	A A A A	0.0 -	0.0 -	100.0 -	90.0 -	100.0 -	95.0 -
10 ACURON ROUNDUP POWERMAX AMSOL	1.5 QT/A 28 FL OZ/A 2.5 % V/V	A A A	0.0 -	0.0 -	100.0 -	90.0 -	100.0 -	95.0 -

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) 12 excluded from analysis.
 Could not calculate LSD (% mean diff) for columns 2,3,4,5,6,7,8,9,10 because error mean square = 0.
 ^Calculated from residual.

Pest Type			W, Weed AMBTR	W, Weed ECHCG	W, Weed AMBTR	W, Weed ECHCG		
Pest Code			Ambrosia trifida	Echinochloa cru>	Ambrosia trifida	Echinochloa cru>		
Pest Scientific Name			Giant ragweed	common barnyard>	Giant ragweed	common barnyard>		
Pest Name								
Crop Type, Code	C, ZEAMX	C, ZEAMX						
BBCH Scale	BCOR	BCOR						
Crop Scientific Name	Zea mays	Zea mays						
Crop Name	Corn	Corn						
Rating Date	6/25/2021	7/9/2021	6/25/2021	6/25/2021	7/9/2021	7/9/2021		
Part Rated	PLANT, C	PLANT, C	PLANT, P	PLANT, P	PLANT, P	PLANT, P		
Rating Type	PHYGEN	PHYGEN	CONTRO	CONTRO	CONTRO	CONTRO		
Rating Unit/Min/Max	% , 0, 100	% , 0, 100	% , 0, 100	% , 0, 100	% , 0, 100	% , 0, 100		
Sample Size								
Number of Subsamples	1	1	1	1	1	1		
Data Entry Date	10/8/2021	10/8/2021	10/8/2021	10/8/2021	10/8/2021	10/8/2021		
Rating Timing	14 DAA	28 DAA	14 DAA	14 DAA	28 DAA	28 DAA		
Days After First/Last Applic.	14, 14	28, 28	14, 14	14, 14	28, 28	28, 28		
Trt-Eval Interval	14 DA-A	28 DA-A	14 DA-A	14 DA-A	28 DA-A	28 DA-A		
Plant-Eval Interval	41 DP-1	55 DP-1	41 DP-1	41 DP-1	55 DP-1	55 DP-1		
Days After Emergence	33 DE-1	47 DE-1	33 DE-1	33 DE-1	47 DE-1	47 DE-1		
ARM Action Codes								
Number of Decimals								
Trt Treatment No. Name	Rate Rate Unit	Appl Code	1	2	3	4	5	6
11 SHIELDDEX	1 FL OZ/A	A	0.3 -	0.0 -	100.0 -	90.0 -	100.0 -	95.0 -
AATREX	1 PT/A	A						
ROUNDUP POWERMAX	28 FL OZ/A	A						
MSO ULTRA	1 % V/V	A						
AMSOL	2.5 % V/V	A						
12 NONTREATED			0.0	0.0	0.0	0.0	0.0	0.0
LSD P=.05	0.74	.						
Standard Deviation	0.51	0.00		0.00		0.00	0.00	0.00
CV	283.21	0.0		0.0		0.0	0.0	0.0
Grand Mean	0.18	0.00		100.00		90.00	100.00	95.00
Levene's F^	2.488
Levene's Prob(F)	0.024*
Rank X2
P(Rank X2)
Skewness^	1.5544*
Kurtosis^	7.2339*
Replicate F	0.686	0.000		0.000		0.000	0.000	0.000
Replicate Prob(F)	0.5678	1.0000		1.0000		1.0000	1.0000	1.0000
Treatment F	1.526	0.000		0.000		0.000	0.000	0.000
Treatment Prob(F)	0.1788	1.0000		1.0000		1.0000	1.0000	1.0000

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Untreated treatment(s) 12 excluded from analysis.
Could not calculate LSD (% mean diff) for columns 2,3,4,5,6,7,8,9,10 because error mean square = 0.
^Calculated from residual.

Pest Type	W, Weed	W, Weed	W, Weed	W, Weed				
Pest Code	AMBTR	ECHCG	AMBTR	ECHCG				
Pest Scientific Name	Ambrosia trifida	Echinochloa cru>	Ambrosia trifida	Echinochloa cru>				
Pest Name	Giant ragweed	common barnyard>	Giant ragweed	common barnyard>				
Crop Type, Code					C, ZEAMX	C, ZEAMX		
BBCH Scale					BCOR	BCOR		
Crop Scientific Name					Zea mays	Zea mays		
Crop Name					Corn	Corn		
Rating Date	7/23/2021	7/23/2021	8/6/2021	8/6/2021	10/19/2021	10/19/2021		
Part Rated	PLANT, P	PLANT, P	PLANT, P	PLANT, P				
Rating Type	CONTRO	CONTRO	CONTRO	CONTRO	WEIGHT	MOICON		
Rating Unit/Min/Max	% , 0, 100	% , 0, 100	% , 0, 100	% , 0, 100	LB, -, -	% , 0, 100		
Sample Size					1 PLOT			
Number of Subsamples	1	1	1	1	1	1		
Data Entry Date	10/8/2021	10/8/2021	10/8/2021	10/8/2021	12/6/2021	12/6/2021		
Rating Timing	42 DAA	42 DAA	56 DAA	56 DAA	HARVEST	HARVEST		
Days After First/Last Applic.	42, 42	42, 42	56, 56	56, 56	130, 130	130, 130		
Trt-Eval Interval	42 DA-A	42 DA-A	56 DA-A	56 DA-A	130 DA-A	130 DA-A		
Plant-Eval Interval	69 DP-1	69 DP-1	83 DP-1	83 DP-1	157 DP-1	157 DP-1		
Days After Emergence	61 DE-1	61 DE-1	75 DE-1	75 DE-1	149 DE-1	149 DE-1		
ARM Action Codes								
Number of Decimals								
Trt Treatment No. Name	Rate	Appl Code	7	8	9	10	11	12
1 ACURON GT ACTIVATOR 90 AMSOL	3.75 PT/A 0.25 % V/V 2.5 % V/V	A A A	100.0 -	95.0 -	100.0 -	95.0 -	66.018 -	20.23 -
2 HALEX GT ACTIVATOR 90 AMSOL	3.6 PT/A 0.25 % V/V 2.5 % V/V	A A A	100.0 -	95.0 -	100.0 -	95.0 -	60.340 -	19.95 -
3 ACURON GT AATREX ACTIVATOR 90 AMSOL	3.75 PT/A 1 PT/A 0.25 % V/V 2.5 % V/V	A A A A	100.0 -	95.0 -	100.0 -	95.0 -	67.378 -	20.38 -
4 HALEX GT AATREX ACTIVATOR 90 AMSOL	3.6 PT/A 1 PT/A 0.25 % V/V 2.5 % V/V	A A A A	100.0 -	95.0 -	100.0 -	95.0 -	70.515 -	20.33 -
5 ACURON GT CLARITY ACTIVATOR 90 AMSOL	3.75 PT/A 3 FL OZ/A 0.25 % V/V 2.5 % V/V	A A A A	100.0 -	95.0 -	100.0 -	95.0 -	68.238 -	19.95 -
6 HALEX GT CLARITY ACTIVATOR 90 AMSOL	3.6 PT/A 3 FL OZ/A 0.25 % V/V 2.5 % V/V	A A A A	100.0 -	95.0 -	100.0 -	95.0 -	72.073 -	20.20 -
7 STATUS ROUNDUP POWERMAX ACTIVATOR 90 AMSOL	5 OZ/A 28 FL OZ/A 0.25 % V/V 2.5 % V/V	A A A A	100.0 -	95.0 -	100.0 -	95.0 -	57.885 -	19.75 -
8 ARMEZON PRO AATREX ROUNDUP POWERMAX AMSOL	18 FL OZ/A 1 PT/A 28 FL OZ/A 2.5 % V/V	A A A A	100.0 -	95.0 -	100.0 -	95.0 -	63.538 -	20.25 -
9 CAPRENO AATREX ROUNDUP POWERMAX AMSOL	3 FL OZ/A 1 PT/A 28 FL OZ/A 2.5 % V/V	A A A A	100.0 -	95.0 -	100.0 -	95.0 -	59.423 -	20.13 -
10 ACURON ROUNDUP POWERMAX AMSOL	1.5 QT/A 28 FL OZ/A 2.5 % V/V	A A A	100.0 -	95.0 -	100.0 -	95.0 -	62.203 -	20.23 -

Means followed by same letter or symbol do not significantly differ (P=.05, LSD).
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Untreated treatment(s) 12 excluded from analysis.
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^Calculated from residual.

Pest Type	W, Weed	W, Weed	W, Weed	W, Weed				
Pest Code	AMBTR	ECHCG	AMBTR	ECHCG				
Pest Scientific Name	Ambrosia trifida	Echinochloa cru>	Ambrosia trifida	Echinochloa cru>				
Pest Name	Giant ragweed	common barnyard>	Giant ragweed	common barnyard>				
Crop Type, Code					C, ZEAMX	C, ZEAMX		
BBCH Scale					BCOR	BCOR		
Crop Scientific Name					Zea mays	Zea mays		
Crop Name					Corn	Corn		
Rating Date	7/23/2021	7/23/2021	8/6/2021	8/6/2021	10/19/2021	10/19/2021		
Part Rated	PLANT, P	PLANT, P	PLANT, P	PLANT, P				
Rating Type	CONTRO	CONTRO	CONTRO	CONTRO	WEIGHT	MOICON		
Rating Unit/Min/Max	% , 0, 100	% , 0, 100	% , 0, 100	% , 0, 100	LB, -, -	% , 0, 100		
Sample Size					1 PLOT			
Number of Subsamples	1	1	1	1	1	1		
Data Entry Date	10/8/2021	10/8/2021	10/8/2021	10/8/2021	12/6/2021	12/6/2021		
Rating Timing	42 DAA	42 DAA	56 DAA	56 DAA	HARVEST	HARVEST		
Days After First/Last Applic.	42, 42	42, 42	56, 56	56, 56	130, 130	130, 130		
Trt-Eval Interval	42 DA-A	42 DA-A	56 DA-A	56 DA-A	130 DA-A	130 DA-A		
Plant-Eval Interval	69 DP-1	69 DP-1	83 DP-1	83 DP-1	157 DP-1	157 DP-1		
Days After Emergence	61 DE-1	61 DE-1	75 DE-1	75 DE-1	149 DE-1	149 DE-1		
ARM Action Codes								
Number of Decimals								
Trt Treatment	Rate	Appl	7	8	9	10	11	12
No. Name	Rate Unit	Code						
11 SHIELDDEX	1 FL OZ/A	A	100.0 -	95.0 -	100.0 -	95.0 -	61.713 -	20.75 -
AATREX	1 PT/A	A						
ROUNDUP POWERMAX	28 FL OZ/A	A						
MSO ULTRA	1 % V/V	A						
AMSOL	2.5 % V/V	A						
12 NONTREATED			0.0	0.0	0.0	0.0	11.630	20.26
LSD P=.05			.	.	.	.	11.1229	1.055
Standard Deviation			0.00	0.00	0.00	0.00	7.7023	0.730
CV			0.0	0.0	0.0	0.0	11.94	3.62
Grand Mean			100.00	95.00	100.00	95.00	64.4836	20.193
Levene's F^			.	.	.	.	0.893	0.662
Levene's Prob(F)			.	.	.	.	0.55	0.75
Rank X2			.	.	.	.	.	.
P(Rank X2)			.	.	.	.	.	.
Skewness^			.	.	.	.	0.0267	-0.3555
Kurtosis^			.	.	.	.	-0.7987	-0.2581
Replicate F			0.000	0.000	0.000	0.000	1.994	3.613
Replicate Prob(F)			1.0000	1.0000	1.0000	1.0000	0.1361	0.0244
Treatment F			0.000	0.000	0.000	0.000	1.476	0.514
Treatment Prob(F)			1.0000	1.0000	1.0000	1.0000	0.1969	0.8668

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) 12 excluded from analysis.
Could not calculate LSD (% mean diff) for columns 2,3,4,5,6,7,8,9,10 because error mean square = 0.
^Calculated from residual.

Pest Type				
Pest Code				
Pest Scientific Name				
Pest Name				
Crop Type, Code				C, ZEAMX
BBCH Scale				BCOR
Crop Scientific Name				Zea mays
Crop Name				Corn
Rating Date				10/19/2021
Part Rated				
Rating Type				YIELD
Rating Unit/Min/Max				BU, -, -
Sample Size				1 A
Number of Subsamples				1
Data Entry Date				
Rating Timing				HARVEST
Days After First/Last Applic.				130, 130
Trt-Eval Interval				130 DA-A
Plant-Eval Interval				157 DP-1
Days After Emergence				149 DE-1
ARM Action Codes				TY1
Number of Decimals				1
Trt No.	Treatment Name	Rate	Unit	Appl Code
				13
1	ACURON GT	3.75	PT/A	A
	ACTIVATOR 90	0.25	% V/V	A
	AMSOL	2.5	% V/V	A
				179.6 -
2	HALEX GT	3.6	PT/A	A
	ACTIVATOR 90	0.25	% V/V	A
	AMSOL	2.5	% V/V	A
				164.9 -
3	ACURON GT	3.75	PT/A	A
	AATREX	1	PT/A	A
	ACTIVATOR 90	0.25	% V/V	A
	AMSOL	2.5	% V/V	A
				182.9 -
4	HALEX GT	3.6	PT/A	A
	AATREX	1	PT/A	A
	ACTIVATOR 90	0.25	% V/V	A
	AMSOL	2.5	% V/V	A
				191.5 -
5	ACURON GT	3.75	PT/A	A
	CLARITY	3	FL OZ/A	A
	ACTIVATOR 90	0.25	% V/V	A
	AMSOL	2.5	% V/V	A
				186.1 -
6	HALEX GT	3.6	PT/A	A
	CLARITY	3	FL OZ/A	A
	ACTIVATOR 90	0.25	% V/V	A
	AMSOL	2.5	% V/V	A
				196.2 -
7	STATUS	5	OZ/A	A
	ROUNDUP POWERMAX	28	FL OZ/A	A
	ACTIVATOR 90	0.25	% V/V	A
	AMSOL	2.5	% V/V	A
				158.5 -
8	ARMEZON PRO	18	FL OZ/A	A
	AATREX	1	PT/A	A
	ROUNDUP POWERMAX	28	FL OZ/A	A
	AMSOL	2.5	% V/V	A
				172.8 -
9	CAPRENO	3	FL OZ/A	A
	AATREX	1	PT/A	A
	ROUNDUP POWERMAX	28	FL OZ/A	A
	AMSOL	2.5	% V/V	A
				161.6 -
10	ACURON	1.5	QT/A	A
	ROUNDUP POWERMAX	28	FL OZ/A	A
	AMSOL	2.5	% V/V	A
				169.1 -

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Untreated treatment(s) 12 excluded from analysis.
Could not calculate LSD (% mean diff) for columns 2,3,4,5,6,7,8,9,10 because error mean square = 0.
^Calculated from residual.

Pest Type		
Pest Code		
Pest Scientific Name		
Pest Name		
Crop Type, Code	C, ZEAMX	
BBCH Scale	BCOR	
Crop Scientific Name	Zea mays	
Crop Name	Corn	
Rating Date	10/19/2021	
Part Rated		
Rating Type	YIELD	
Rating Unit/Min/Max	BU, -, -	
Sample Size	1 A	
Number of Subsamples	1	
Data Entry Date		
Rating Timing	HARVEST	
Days After First/Last Applic.	130, 130	
Trt-Eval Interval	130 DA-A	
Plant-Eval Interval	157 DP-1	
Days After Emergence	149 DE-1	
ARM Action Codes	TY1	
Number of Decimals	1	
Trt Treatment	Rate Appl	13
No. Name	Rate Unit Code	
11 SHIELDDEX	1 FL OZ/A A	166.8 -
AATREX	1 PT/A A	
ROUNDUP POWERMAX	28 FL OZ/A A	
MSO ULTRA	1 % V/V A	
AMSOL	2.5 % V/V A	
12 NONTREATED		31.6
LSD P=.05		29.76
Standard Deviation		20.61
CV		11.75
Grand Mean		175.44
Levene's F^		0.861
Levene's Prob(F)		0.577
Rank X2		.
P(Rank X2)		.
Skewness^		0.0412
Kurtosis^		-0.7754
Replicate F		2.459
Replicate Prob(F)		0.0820
Treatment F		1.494
Treatment Prob(F)		0.1903

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Untreated treatment(s) 12 excluded from analysis.
Could not calculate LSD (% mean diff) for columns 2,3,4,5,6,7,8,9,10 because error mean square = 0.
^Calculated from residual.

Purdue Weed Science

Syngenta post giant ragweed clean up solutions in corn

Trial ID: 21S-TPAC-CORN-04	Location: TPAC	Trial Year: 2021
Protocol ID: 21S-TPAC-CORN-04	Investigator (Creator): Dr. Bill Johnson	
Project ID:	Study Director: Brent Mansfield	
	Sponsor Contact: Chad Threewits - Syngenta	

Pest Type

W, Weed = Weed or volunteer crop

Pest Code

AMBTR, Ambrosia trifida, Giant ragweed = 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

PLOT = total plot

A = acre

Plant-Eval Interval

41 DP-1 = 1 ZEAMX 5/15/2021

55 DP-1 = 1 ZEAMX 5/15/2021

69 DP-1 = 1 ZEAMX 5/15/2021

83 DP-1 = 1 ZEAMX 5/15/2021

157 DP-1 = 1 ZEAMX 5/15/2021

ARM Action Codes

TY1 = 2.88095238*[11]*(100-[12])/84.5