

Purdue University Weed Science

Corn shootout programs

Trial ID: 22S-TPAC-CORN-11 Cooperator Trial ID:
 Protocol ID: 22S-TPAC-CORN-11 Location: TPAC Trial Year: 2022
 Project ID: Project ID 2: Project ID 3:
 Study Director: Brent Mansfield Sponsor Contact: FMC, Corteva, AMVAC, SummitAgro
 Investigator (Creator): Dr. Bill Johnson

General Trial Information

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

Discipline: H herbicide
Status: E established
ARM Trial Created On: May-13-2022 **Reliability:** 1 usable data
Initiation Date: May-12-2022

Trial Location

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

Latitude of LL Corner °: 40.2917667 N
Longitude of LL Corner °: -86.90635 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: FMC, Corteva, AMVAC, SummitAgro
Role: COOPER cooperator
Cooperator: Jay Young **Title:** Superintendent
Organization: Purdue University
Address 1: 8343 US 231 S **Phone No.:** 765-538-3422
 Fax No.: 765-538-3423
Country: USA United States **E-mail:** jayyoung@purdue.edu
City: Lafayette **State/Prov:** IN **Postal Code:** 47909

Crop Description

Crop 1: C ZEAMX Zea mays Corn **BBCH Scale:** BCOR
Entry Date: Jun-17-2022 **Stage Scale:** BBCH
Variety: DKC 56-65
Attributes: Glyphosate-R and Glufosinate-R
Planting Date: May-12-2022 **Planting Rate:** 32000 S/A
Depth: 1.75 IN
Rows per Plot: 4 **Planting Method:** PLANTD planted
Row Spacing: 30 IN **Planting Equipment:** PP plot planter
Soil Temperature: 80 F **Soil Moisture:** NORMAL normal, adequate
Emergence Date: May-19-2022
Harvested Width: 5 FT
% Standard Moisture: 15.5 **Harvested Length:** 27 FT

Pest Description

Pest 1 Type: W **Code:** AMBTR Ambrosia trifida **Entry Date:** Jun-17-2022
Common Name: Giant ragweed **Stage Scale:** BBCH
Attributes: ALS-R
Pest 2 Type: W **Code:** GRASS Grass spp. **Entry Date:** Jun-17-2022
Common Name: barnyardgrass/giant foxtail **Stage Scale:** BBCH
Attributes: ALS-R foxtail

Purdue University Weed Science

Corn shootout programs

Trial ID: 22S-TPAC-CORN-11 Cooperator Trial ID:
 Protocol ID: 22S-TPAC-CORN-11 Location: TPAC Trial Year: 2022
 Project ID: Project ID 2: Project ID 3:
 Study Director: Brent Mansfield Sponsor Contact: FMC, Corteva, AMVAC, SummitAgro
 Investigator (Creator): Dr. Bill Johnson

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 **Tillage Type:** CONTIL conventional-till
Replications: 4 **Treatments:** 12 **Plots:** 48 **Study Design:** RACOB� Randomized Complete Block (RCB)

Field Prep./Maintenance:

180 lbs of N applied as Anhydrous Ammonia on 11/23/21

Soil Description

Description Name: TPAC- Field 4AW
% Sand: 17 **% OM:** 3.1 **Texture:** SIL silt loam
% Silt: 56 **Soil Name:** Toronto-Millbrook
% Clay: 27 **Fert. Level:** G good
pH: 6.2 **CEC:** 11.5

No.	Date	Moisture Total	Unit	Min Temp	Max Temp	Avg Temp	Temp Unit
1.	May-1-2022	0	IN	51.1	63.7	55.8	F
2.	May-2-2022	0	IN	43.2	66	55.4	F
3.	May-3-2022	0.71	IN	46	67.8	57.4	F
4.	May-4-2022	0	IN	46	61.5	53.6	F
5.	May-5-2022	0.66	IN	53.6	56.7	54.7	F
6.	May-6-2022	0.07	IN	51.8	57.2	55.2	F
7.	May-7-2022	0	IN	48.7	68.2	58.1	F
8.	May-8-2022	0	IN	44.6	68.7	58.5	F
9.	May-9-2022	0	IN	52.9	81	67.5	F
10.	May-10-2022	0	IN	66.6	88.9	76.6	F
11.	May-11-2022	0	IN	73	92.3	81.5	F
12.	May-12-2022	0	IN	67.8	90	78.1	F
13.	May-13-2022	0	IN	61.9	89.6	76.8	F
14.	May-14-2022	0.74	IN	59.7	88.2	70.7	F
15.	May-15-2022	1.02	IN	57	86.2	67.6	F
16.	May-16-2022	0.01	IN	52.7	76.8	64.6	F
17.	May-17-2022	0	IN	53.4	77.7	66	F
18.	May-18-2022	0.1	IN	57.9	66.9	62.8	F
19.	May-19-2022	0	IN	59.7	82.2	69.6	F
20.	May-20-2022	0	IN	66.4	86.9	77.2	F
21.	May-21-2022	0.1	IN	58.3	77.7	66.7	F
22.	May-22-2022	0	IN	53.2	64.6	58.3	F
23.	May-23-2022	0	IN	48.4	68.7	58.3	F
24.	May-24-2022	0	IN	50.2	75.6	63.7	F
25.	May-25-2022	0.05	IN	61.7	85.6	70.7	F
26.	May-26-2022	1.68	IN	60.8	75.4	67.5	F
27.	May-27-2022	0.03	IN	53.4	67.8	59.9	F
28.	May-28-2022	0	IN	51.6	73.2	63	F
29.	May-29-2022	0	IN	59.5	82.9	71.4	F
30.	May-30-2022	0	IN	67.1	88.5	77.7	F
31.	May-31-2022	0	IN	71.6	89.4	79.7	F
32.	Jun-1-2022	0	IN	66	81	74.7	F
33.	Jun-2-2022	0.01	IN	61.3	79.9	69.8	F
34.	Jun-3-2022	0	IN	54.1	84.2	70.5	F
35.	Jun-4-2022	0	IN	51.4	84.2	70.3	F
36.	Jun-5-2022	0	IN	56.8	85.3	73	F
37.	Jun-6-2022	0	IN	64	85.8	73.8	F
38.	Jun-7-2022	0	IN	62.2	77.9	70	F

Purdue University Weed Science

Corn shootout programs

Trial ID: 22S-TPAC-CORN-11 Cooperator Trial ID:
 Protocol ID: 22S-TPAC-CORN-11 Location: TPAC Trial Year: 2022
 Project ID: Project ID 2: Project ID 3:
 Study Director: Brent Mansfield Sponsor Contact: FMC, Corteva, AMVAC, SummitAgro
 Investigator (Creator): Dr. Bill Johnson

39.	Jun-8-2022	0.02	IN	55.2	77.5	64.6	F
40.	Jun-9-2022	0	IN	56.7	78.8	66.7	F
41.	Jun-10-2022	0.1	IN	54	79.7	66	F
42.	Jun-11-2022	0.23	IN	58.5	79.7	68.2	F
43.	Jun-12-2022	0.02	IN	65.8	84	73.8	F
44.	Jun-13-2022	0	IN	68.7	91	79.3	F
45.	Jun-14-2022	0	IN	74.8	95.5	85.8	F
46.	Jun-15-2022	0	IN	75	94.6	85.5	F
47.	Jun-16-2022	0	IN	76.6	97.3	86	F
48.	Jun-17-2022	0	IN	69.1	88.2	79.2	F
49.	Jun-18-2022	0	IN	60.8	82.2	70.3	F
50.	Jun-19-2022	0	IN	52.2	83.8	70.3	F
51.	Jun-20-2022	0	IN	57.4	90.1	75.4	F
52.	Jun-21-2022	0	IN	63.9	96.3	81.7	F
53.	Jun-22-2022	0	IN	72	90.3	81.5	F
54.	Jun-23-2022	0	IN	62.4	89.1	76.6	F
55.	Jun-24-2022	0	IN	59	93	76.6	F
56.	Jun-25-2022	0.01	IN	63.9	82.6	74.3	F
57.	Jun-26-2022	0.22	IN	64.2	81.5	74.1	F
58.	Jun-27-2022	0	IN	54.7	79.3	68.4	F
59.	Jun-28-2022	0	IN	55.2	82.9	69.8	F
60.	Jun-29-2022	0	IN	57.6	87.3	73.9	F
61.	Jun-30-2022	0	IN	61	90.5	77.4	F
62.	Jul-1-2022	0	IN	68.5	90.7	77.5	F
63.	Jul-2-2022	0	IN	66.6	86.4	76.3	F
64.	Jul-3-2022	0	IN	57.6	89.8	75.9	F
65.	Jul-4-2022	0.01	IN	64.6	91.4	79	F
66.	Jul-5-2022	0	IN	77.2	98.2	87.3	F
67.	Jul-6-2022	0	IN	74.3	90	81.9	F
68.	Jul-7-2022	0.05	IN	70.3	84.7	77	F
69.	Jul-8-2022	0.23	IN	70	76.3	72.5	F
70.	Jul-9-2022	0	IN	67.5	84.6	74.1	F
71.	Jul-10-2022	0	IN	57.9	90.7	73.4	F
72.	Jul-11-2022	0	IN	59.5	88	75.9	F
73.	Jul-12-2022	0	IN	67.6	83.8	76.1	F
74.	Jul-13-2022	0	IN	62.8	86.5	75	F
75.	Jul-14-2022	0	IN	57.4	84.9	72.5	F
76.	Jul-15-2022	0.1	IN	58.1	77.4	68.2	F
77.	Jul-16-2022	0.49	IN	69.6	89.4	79	F
78.	Jul-17-2022	0.47	IN	68.9	76.3	72.7	F
79.	Jul-18-2022	0	IN	68.9	87.6	75.6	F
80.	Jul-19-2022	0	IN	64.2	87.4	77	F
81.	Jul-20-2022	0	IN	72	90	80.1	F
82.	Jul-21-2022	0	IN	66.4	88.7	77.7	F
83.	Jul-22-2022	0	IN	68.4	89.6	78.8	F
84.	Jul-23-2022	0	IN	69.8	77.4	73.4	F
85.	Jul-24-2022	0.18	IN	73.6	84.6	78.3	F
86.	Jul-25-2022	0	IN	64.9	83.8	73.9	F
87.	Jul-26-2022	0	IN	65.5	75.4	70	F
88.	Jul-27-2022	0.22	IN	69.3	83.1	74.7	F
89.	Jul-28-2022	0.09	IN	65.3	85.6	75	F
90.	Jul-29-2022	0	IN	57.9	80.1	69.6	F
91.	Jul-30-2022	0	IN	57	86.4	71.8	F

Purdue University Weed Science

Corn shootout programs

Trial ID: 22S-TPAC-CORN-11 Cooperator Trial ID:
 Protocol ID: 22S-TPAC-CORN-11 Location: TPAC Trial Year: 2022
 Project ID: Project ID 2: Project ID 3:
 Study Director: Brent Mansfield Sponsor Contact: FMC, Corteva, AMVAC, SummitAgro
 Investigator (Creator): Dr. Bill Johnson

92.	Jul-31-2022	0	IN	59.7	84.6	73.8	F
93.	Aug-1-2022	0.53	IN	67.5	86.5	76.1	F
94.	Aug-2-2022	0	IN	65.8	85.1	73.8	F
95.	Aug-3-2022	0.58	IN	68.9	90.5	76.8	F
96.	Aug-4-2022	0.01	IN	70	85.5	75.9	F
97.	Aug-5-2022	0	IN	69.1	89.2	77.2	F
98.	Aug-6-2022	0	IN	70.2	89.8	79.5	F
99.	Aug-7-2022	0	IN	73.4	88.7	80.1	F
100.	Aug-8-2022	0.24	IN	69.8	86.9	79.3	F
101.	Aug-9-2022	0.39	IN	64.8	80.1	70.3	F
102.	Aug-10-2022	0	IN	62.2	83.1	72	F
103.	Aug-11-2022	0	IN	59	84	71.2	F
104.	Aug-12-2022	0	IN	57.4	77.5	67.6	F
105.	Aug-13-2022	0	IN	55.2	78.4	68.2	F
106.	Aug-14-2022	0.07	IN	66.2	76.8	70.5	F
107.	Aug-15-2022	0	IN	64.9	79.5	70.5	F
108.	Aug-16-2022	0	IN	59	82.9	71.6	F
109.	Aug-17-2022	0	IN	56.1	83.8	70.3	F
110.	Aug-18-2022	0	IN	55.8	86.2	70.5	F
111.	Aug-19-2022	0	IN	58.8	85.3	72.3	F
112.	Aug-20-2022	0.29	IN	65.1	82.4	71.6	F
113.	Aug-21-2022	0.58	IN	63.3	81.1	70.9	F
114.	Aug-22-2022	0	IN	60.3	84.7	70.2	F
115.	Aug-23-2022	0	IN	55.8	85.3	70	F
116.	Aug-24-2022	0	IN	56.3	87.1	71.4	F
117.	Aug-25-2022	0.25	IN	66.2	80.8	73.6	F
118.	Aug-26-2022	0	IN	62.2	83.1	72.5	F
119.	Aug-27-2022	0	IN	59.2	85.6	72.1	F
120.	Aug-28-2022	0.14	IN	67.5	89.6	77.7	F
121.	Aug-29-2022	2.2	IN	65.8	87.4	74.5	F
122.	Aug-30-2022	0.3	IN	60.8	79.9	71.1	F
123.	Aug-31-2022	0	IN	53.4	81.1	68	F
124.	Sep-1-2022	0	IN	59	84	71.8	F
125.	Sep-2-2022	0	IN	64.2	83.3	73	F
126.	Sep-3-2022	0	IN	66.9	81.7	73.6	F
127.	Sep-4-2022	0	IN	66.6	82	73.2	F
128.	Sep-5-2022	0	IN	66.9	74.1	70	F
129.	Sep-6-2022	0	IN	63.7	82.9	71.2	F
130.	Sep-7-2022	0	IN	59.4	82.4	69.6	F
131.	Sep-8-2022	0	IN	52.9	82.4	68.2	F
132.	Sep-9-2022	0	IN	54.1	84.2	69.1	F
133.	Sep-10-2022	0.05	IN	60.8	88.9	73	F
134.	Sep-11-2022	0.2	IN	59.4	74.1	67.6	F
135.	Sep-12-2022	0.14	IN	51.6	62.8	57.4	F
136.	Sep-13-2022	0	IN	53.1	75	62.2	F
137.	Sep-14-2022	0	IN	52	86.5	67.6	F
138.	Sep-15-2022	0	IN	54.7	86.9	69.3	F
139.	Sep-16-2022	0	IN	57.4	84.6	70.2	F
140.	Sep-17-2022	0	IN	63.3	85.3	72.9	F
141.	Sep-18-2022	0	IN	63.3	86.9	74.3	F
142.	Sep-19-2022	0.24	IN	62.4	87.4	73.9	F
143.	Sep-20-2022	0	IN	59.2	92.3	75.2	F
144.	Sep-21-2022	0	IN	68.9	91.9	79.5	F

Purdue University Weed Science

Corn shootout programs

Trial ID: 22S-TPAC-CORN-11 Cooperator Trial ID:
 Protocol ID: 22S-TPAC-CORN-11 Location: TPAC Trial Year: 2022
 Project ID: Project ID 2: Project ID 3:
 Study Director: Brent Mansfield Sponsor Contact: FMC, Corteva, AMVAC, SummitAgro
 Investigator (Creator): Dr. Bill Johnson

145.	Sep-22-2022	0	IN	46.6	69.6	60.1	F
146.	Sep-23-2022	0	IN	40.5	63.3	53.4	F
147.	Sep-24-2022	0.09	IN	51.6	78.4	63.9	F
148.	Sep-25-2022	0	IN	54.3	71.1	62.4	F
149.	Sep-26-2022	0	IN	44.1	68.4	56.8	F
150.	Sep-27-2022	0	IN	39.6	64.9	50.9	F
151.	Sep-28-2022	0	IN	37.4	66	51.8	F
152.	Sep-29-2022	0	IN	38.7	69.3	53.4	F
153.	Sep-30-2022	0	IN	39.2	70.2	54.9	F
154.	Oct-1-2022	0	IN	43.9	75.4	59.4	F
155.	Oct-2-2022	0	IN	48.6	74.3	59.4	F
156.	Oct-3-2022	0	IN	41.7	72.5	54.5	F
157.	Oct-4-2022	0	IN	34.2	77.5	54.1	F
158.	Oct-5-2022	0	IN	38.1	79.9	58.3	F
159.	Oct-6-2022	0.01	IN	53.4	77.5	63.7	F
160.	Oct-7-2022	0	IN	36.9	61.2	51.4	F
161.	Oct-8-2022	0	IN	30.2	58.8	43.9	F
162.	Oct-9-2022	0	IN	34.5	70.3	52.2	F
163.	Oct-10-2022	0	IN	40.5	77.5	59	F
164.	Oct-11-2022	0.1	IN	54.3	69.8	61.7	F
165.	Oct-12-2022	0.07	IN	43.5	68	59	F
166.	Oct-13-2022	0.07	IN	32.9	59.9	47.7	F
167.	Oct-14-2022	0.22	IN	33.3	65.1	50	F

Application Description

	A	B	C
Application Date	May-13-2022	May-24-2022	Jun-9-2022
Appl. Start Time	2:10 PM	9:00 AM	8:15 AM
Appl. Stop Time	2:33 PM	9:20 AM	8:40 AM
Interval to Prev. Appl.		11 DAYS	16 DAYS
Application Method	SPRAY	SPRAY	SPRAY
Application Timing	PRE	V1 CORN	3-5" WEEDS
Application Placement	BROSOI	BROFOL	BROFOL
Applied By	C. BLAND	L. MAIA	L. MAIA
Appl. Entry Date	Jun-17-2022	Jun-17-2022	Jun-17-2022
Air Temperature Start, Stop	88, 88 F	51, 51 F	62, 62 F
% Relative Humidity Start, Stop	34, 34	71, 71	73, 73
Wind Velocity+Dir. Start	1.6 MPH, W	2.1 MPH, E	3 MPH, W
Wind Velocity+Dir. Stop	2.5 MPH, W	3.5 MPH, E	4 MPH, W
Wind Velocity+Dir. Max	5.2 MPH, W	8.6 MPH, E	7 MPH, W
Wet Leaves (Y/N)	N, no	N, no	N, no
Soil Temperature	84 F	54 F	65 C
Soil Moisture	NORMAL	NORMAL	DRY
% Cloud Cover	10	5	50

Purdue University Weed Science

Corn shootout programs

Trial ID: 22S-TPAC-CORN-11 Cooperator Trial ID:
 Protocol ID: 22S-TPAC-CORN-11 Location: TPAC Trial Year: 2022
 Project ID: Project ID 2: Project ID 3:
 Study Director: Brent Mansfield Sponsor Contact: FMC, Corteva, AMVAC, SummitAgro
 Investigator (Creator): Dr. Bill Johnson

Crop Stage At Each Application

	A	B	C
Crop 1 Code, BBCH Scale	ZEAMX, BCOR	ZEAMX, BCOR	ZEAMX, BCOR
Days after Emergence	-6	5	21
Stage Majority, Percent	00, -	V1, -	V4, -
Stage Minimum, Percent	00, -	V1, -	V4, -
Stage Maximum, Percent	00, -	V1, -	V5, -
Height Average	0 IN	2.5 IN	11 IN
Height Minimum, Maximum		1.5, 3	10, 12

Pest Stage At Each Application

	A	B	C
Pest 1 Code, Type, Scale	AMBTR, W, BBCH	AMBTR, W, BBCH	AMBTR, W, BBCH
Height Average	0 IN	1.5 IN	1 IN
Height Minimum, Maximum		0.5, 2.5	1, 3
Density Average	0 IN	5 FT2	1 FT2
Density Minimum, Maximum		1, 9	0, 4
Pest 2 Code, Type, Scale	GRASS, W, BBCH	GRASS, W, BBCH	GRASS, W, BBCH
Height Average	0 IN	0.5 IN	1 IN
Height Minimum, Maximum		0.5, 1.5	0, 2
Density Average	0 IN	1 FT2	1 FT2
Density Minimum, Maximum		0, 3	0, 2

Application Equipment

	A	B	C
Appl. Equipment	CO2 BACKPACK	CO2 BACKPACK	CO2 BACKPACK
Equipment Type	BACSPR	BACSPR	BACSPR
Operation Pressure	20 PSI	21 PSI	20 PSI
Nozzle Model	XR	TT	TT
Nozzle Type	FLAFXR	TEEJTU	TEEJTU
Nozzle TradeName	TEEJET	TEEJET	TEEJET
Nozzle Tip Size, Color	80015, GREEN	110015, GREEN	110015, GREEN
Nozzle Spacing	15 IN	15 IN	15 IN
Nozzles/Row	8	8	8
Boom Length	10 FT	10 FT	10 FT
Ground Speed	3 MPH	3 MPH	3 MPH
Carrier	WATER	WATER	WATER
Application Amount	15 GAL/AC	15 GAL/AC	15 GAL/AC
Mix Size	1.8 L	1.8 L	1.8 L
Propellant	COMCO2	COMCO2	COMCO2

Notes

Context	Date	By	Notes
STATUS	May-13-2022	Dr. Bill Johnson	Automatically added by ARM: Trial Status updated to 'S' during trial creation.
STATUS	Jun-17-2022	Dr. Bill Johnson	Automatically added by ARM: Trial Status changed to: E: changed by (EINJOW).
STATUS	Jun-17-2022	Dr. Bill Johnson	Automatically added by ARM: Trial Status updated to 'E' when Initiation Date entered.

Purdue University Weed Science

Corn shootout programs								
Trial ID: 22S-TPAC-CORN-11		Cooperator Trial ID:						
Protocol ID: 22S-TPAC-CORN-11		Location: TPAC		Trial Year: 2022				
Project ID: Project ID 2: Project ID 3:								
Study Director: Brent Mansfield		Sponsor Contact: FMC, Corteva, AMVAC, SummitAgro						
Investigator (Creator): Dr. Bill Johnson								
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					
BBCH Scale			BCOR					
Crop Scientific Name			Zea mays					
Crop Name			Corn					
Rating Date	May-27-2022	May-27-2022	May-27-2022	May-31-2022	May-31-2022			
Part Rated	PLOT, P	PLOT, P	PLOT, C	PLOT, P	PLOT, P			
Rating Type	CONTRO	CONTRO	PHYGEN	CONTRO	CONTRO			
Rating Unit/Min/Max	% , 0, 100	% , 0, 100	% , 0, 100	% , 0, 100	% , 0, 100			
Sample Size								
Number of Subsamples	1	1	1	1	1			
Assessed By								
Data Entry Date	Jul-19-2022	Jul-19-2022	Jul-19-2022	Jul-19-2022	Jul-19-2022			
Rating Timing	14 DAA	14 DAA	14 DAA	7 DAB	7 DAB			
Days After First/Last Applic.	14, 3	14, 3	14, 3	18, 7	18, 7			
Plant-Eval Interval	15 DP-1	15 DP-1	15 DP-1	19 DP-1	19 DP-1			
Days After Emergence	8 DE-1	8 DE-1	8 DE-1	12 DE-1	12 DE-1			
ARM Action Codes								
Number of Decimals								
Trt No.	Treatment Name	Rate	Appl Code	1	2	3	4	5
		Rate Unit						
1	NONTREATED			0.0	0.0	0.0	0.0	0.0
2	FMC			88.8 a	100.0 -	0.0 -		
	ANTHEM MAXX	4 fl oz/a	A					
	CALLISTO	6 fl oz/a	A					
	AATREX	2 qt/a	A					
	STATUS	3 oz/a	C					
	ROUNDUP POWERMAX 3	30 fl oz/a	C					
	AMSOL	2.5 % v/v	C					
3	FMC						98.5 ab	100.0 -
	ANTHEM MAXX	4 fl oz/a	B					
	CALLISTO	3 fl oz/a	B					
	AATREX	2 qt/a	B					
	ROUNDUP POWERMAX 3	30 fl oz/a	B					
	AMSOL	2.5 % v/v	B					
4	CORTEVA			93.8 a	100.0 -	0.0 -		
	RESICORE XL	2.5 qt/a	A					
	AATREX	1 qt/a	A					
	AMSOL	2.5 % v/v	C					
	REALM Q	4 oz/a	C					
	AATREX	0.5 qt/a	C					
	ROUNDUP POWERMAX 3	30 fl oz/a	C					
5	CORTEVA			88.8 a	100.0 -	0.0 -		
	SURESTART II	1 qt/a	A					
	AATREX	0.5 qt/a	A					
	AMSOL	2.5 % v/v	C					
	RESICORE XL	1.5 qt/a	C					
	AATREX	1 qt/a	C					
	ROUNDUP POWERMAX 3	30 fl oz/a	C					
6	CORTEVA						100.0 a	100.0 -
	AMSOL	2.5 % v/v	B					
	RESICORE XL	2.5 qt/a	B					
	AATREX	1 qt/a	B					
	ROUNDUP POWERMAX 3	30 fl oz/a	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 2,3,5,8 because error mean square = 0.

^Calculated from residual.

Purdue University Weed Science

Corn shootout programs								
Trial ID: 22S-TPAC-CORN-11		Cooperator Trial ID:						
Protocol ID: 22S-TPAC-CORN-11		Location: TPAC		Trial Year: 2022				
Project ID: Project ID 2: Project ID 3:								
Study Director: Brent Mansfield		Sponsor Contact: FMC, Corteva, AMVAC, SummitAgro						
Investigator (Creator): Dr. Bill Johnson								
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					
BBCH Scale			BCOR					
Crop Scientific Name			Zea mays					
Crop Name			Corn					
Rating Date	May-27-2022	May-27-2022	May-27-2022	May-31-2022	May-31-2022			
Part Rated	PLOT, P	PLOT, P	PLOT, C	PLOT, P	PLOT, P			
Rating Type	CONTRO	CONTRO	PHYGEN	CONTRO	CONTRO			
Rating Unit/Min/Max	%, 0, 100	%, 0, 100	%, 0, 100	%, 0, 100	%, 0, 100			
Sample Size								
Number of Subsamples	1	1	1	1	1			
Assessed By								
Data Entry Date	Jul-19-2022	Jul-19-2022	Jul-19-2022	Jul-19-2022	Jul-19-2022			
Rating Timing	14 DAA	14 DAA	14 DAA	7 DAB	7 DAB			
Days After First/Last Applic.	14, 3	14, 3	14, 3	18, 7	18, 7			
Plant-Eval Interval	15 DP-1	15 DP-1	15 DP-1	19 DP-1	19 DP-1			
Days After Emergence	8 DE-1	8 DE-1	8 DE-1	12 DE-1	12 DE-1			
ARM Action Codes								
Number of Decimals								
Trt No.	Treatment Name	Rate	Appl Code	1	2	3	4	5
		Rate Unit						
7	AMVAC		B				97.8 b	100.0 -
	AMSOL	4.9 % v/v	B					
	IMPACT CORE	20 fl oz/a	B					
	IMPACT	0.5 fl oz/a	B					
	AATREX	3 pt/a	B					
	MSO ULTRA	1 % v/v	B					
8	AMVAC		B				98.5 ab	100.0 -
	AMSOL	4.9 % v/v	B					
	IMPACT CORE	20 fl oz/a	B					
	AATREX	3 pt/a	B					
	ROUNDUP POWERMAX 3	26.7 fl oz/a	B					
	MSO ULTRA	0.5 % v/v	B					
9	AMVAC		B				97.3 b	100.0 -
	AMSOL	4.9 % v/v	B					
	IMPACT CORE	20 fl oz/a	B					
	HORNET	3 oz/a	B					
	ROUNDUP POWERMAX 3	26.7 fl oz/a	B					
	MSO ULTRA	0.5 % v/v	B					
10	SUMMITAGRO		A	65.0 b	100.0 -	0.0 -		
	BICEP II MAGNUM	1.6 qt/a	C					
	AMSOL	8.5 lb ai/100 gal	C					
	SHIELDEX	1.35 fl oz/a	C					
	AATREX	1 qt/a	C					
	PRIIME OIL	1 % v/v	C					
11	SUMMITAGRO		A	86.3 a	100.0 -	0.0 -		
	RESTRAINT	36 fl oz/a	C					
	AATREX	1 qt/a	C					
	AMSOL	8.5 lb ai/100 gal	C					
	SHIELDEX	1.35 fl oz/a	C					
	AATREX	1 qt/a	C					
	PRIIME OIL	1 % v/v	C					

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 2,3,5,8 because error mean square = 0.

^Calculated from residual.

Purdue University Weed Science

Corn shootout programs

Trial ID: 22S-TPAC-CORN-11 Cooperator Trial ID:
 Protocol ID: 22S-TPAC-CORN-11 Location: TPAC Trial Year: 2022
 Project ID: Project ID 2: Project ID 3:
 Study Director: Brent Mansfield Sponsor Contact: FMC, Corteva, AMVAC, SummitAgro
 Investigator (Creator): Dr. Bill Johnson

	W, Weed AMBTR Ambrosia trifida Giant ragweed	W, Weed ECHCG Echinochloa cru> common barnyard>	C, ZEAMX BCOR Zea mays Corn	W, Weed AMBTR Ambrosia trifida Giant ragweed	W, Weed ECHCG Echinochloa cru> common barnyard>
Pest Type					
Pest Code					
Pest Scientific Name					
Pest Name					
Crop Type, Code					
BBCH Scale					
Crop Scientific Name					
Crop Name					
Rating Date	May-27-2022	May-27-2022	May-27-2022	May-31-2022	May-31-2022
Part Rated	PLOT, P	PLOT, P	PLOT, C	PLOT, P	PLOT, P
Rating Type	CONTRO	CONTRO	PHYGEN	CONTRO	CONTRO
Rating Unit/Min/Max	%, 0, 100	%, 0, 100	%, 0, 100	%, 0, 100	%, 0, 100
Sample Size					
Number of Subsamples	1	1	1	1	1
Assessed By					
Data Entry Date	Jul-19-2022	Jul-19-2022	Jul-19-2022	Jul-19-2022	Jul-19-2022
Rating Timing	14 DAA	14 DAA	14 DAA	7 DAB	7 DAB
Days After First/Last Applic.	14, 3	14, 3	14, 3	18, 7	18, 7
Plant-Eval Interval	15 DP-1	15 DP-1	15 DP-1	19 DP-1	19 DP-1
Days After Emergence	8 DE-1	8 DE-1	8 DE-1	12 DE-1	12 DE-1
ARM Action Codes					
Number of Decimals					
Trt Treatment	1	2	3	4	5
No. Name					
Rate					
Rate Unit					
Appl Code					
12 ACURON	88.8 a		0.0 -		
ACURON		100.0 -			
ROUNDUP POWERMAX 3					
AMSOL					
LSD P=.05	15.48	.	.	1.63	.
Standard Deviation	10.27	0.00	0.00	1.06	0.00
CV	12.05	0.0	0.0	1.08	0.0
Levene's F^	0.986	.	.	0.772	.
Levene's Prob(F)	0.453	.	.	0.56	.
Shapiro-Wilk^	0.8848*	.	.	0.9501	.
P(Shapiro-Wilk)^	0.0104*	.	.	0.3683	.
Skewness^	-1.5287*	.	.	-0.0879	.
P(Skewness)^	0.0057*	.	.	0.8747	.
Kurtosis^	4.827*	.	.	-1.0079	.
P(Kurtosis)^	0.0*	.	.	0.356	.
Replicate F	1.932	0.000	0.000	7.111	0.000
Replicate Prob(F)	0.1678	1.0000	1.0000	0.0053	1.0000
Treatment F	3.944	0.000	0.000	3.844	0.000
Treatment Prob(F)	0.0175	1.0000	1.0000	0.0310	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 2,3,5,8 because error mean square = 0.
 ^Calculated from residual.

Purdue University Weed Science

Corn shootout programs

Trial ID: 22S-TPAC-CORN-11 Cooperator Trial ID:
 Protocol ID: 22S-TPAC-CORN-11 Location: TPAC Trial Year: 2022
 Project ID: Project ID 2: Project ID 3:
 Study Director: Brent Mansfield Sponsor Contact: FMC, Corteva, AMVAC, SummitAgro
 Investigator (Creator): Dr. Bill Johnson

Pest Type		W, Weed AMBTR	W, Weed ECHCG		W, Weed AMBTR		
Pest Code		Ambrosia trifida	Echinochloa cru>		Ambrosia trifida		
Pest Scientific Name		Giant ragweed	common barnyard>		Giant ragweed		
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	May-31-2022	Jun-8-2022	Jun-8-2022	Jun-8-2022	Jun-24-2022		
Part Rated	PLOT, C	PLOT, P	PLOT, P	PLOT, C	PLOT, P		
Rating Type	PHYGEN	CONTRO	CONTRO	PHYGEN	CONTRO		
Rating Unit/Min/Max	% , 0, 100	% , 0, 100	% , 0, 100	% , 0, 100	% , 0, 100		
Sample Size							
Number of Subsamples	1	1	1	1	1		
Assessed By							
Data Entry Date	Jul-19-2022	Jul-19-2022	Jul-19-2022	Jul-19-2022	Jul-19-2022		
Rating Timing	7 DAB	26 DAA	26 DAA	15 DAB	42 DAA		
Days After First/Last Applic.	18, 7	26, 15	26, 15	26, 15	42, 15		
Plant-Eval Interval	19 DP-1	27 DP-1	27 DP-1	27 DP-1	43 DP-1		
Days After Emergence	12 DE-1	20 DE-1	20 DE-1	20 DE-1	36 DE-1		
ARM Action Codes							
Number of Decimals							
Trt Treatment	Rate	Appl	6	7	8	9	10
No. Name	Rate Unit	Code					
1 NONTREATED			0.0	0.0	0.0	0.0	0.0
2 FMC				83.8 cd	100.0 -	0.0 c	100.0 a
ANTHEM MAXX	4 fl oz/a	A					
CALLISTO	6 fl oz/a	A					
AATREX	2 qt/a	A					
STATUS	3 oz/a	C					
ROUNDUP POWERMAX 3	30 fl oz/a	C					
AMSOL	2.5 % v/v	C					
3 FMC			1.5 c	100.0 a	100.0 -	0.0 c	95.5 bc
ANTHEM MAXX	4 fl oz/a	B					
CALLISTO	3 fl oz/a	B					
AATREX	2 qt/a	B					
ROUNDUP POWERMAX 3	30 fl oz/a	B					
AMSOL	2.5 % v/v	B					
4 CORTEVA				88.8 bc	100.0 -	0.0 c	97.5 ab
RESICORE XL	2.5 qt/a	A					
AATREX	1 qt/a	A					
AMSOL	2.5 % v/v	C					
REALM Q	4 oz/a	C					
AATREX	0.5 qt/a	C					
ROUNDUP POWERMAX 3	30 fl oz/a	C					
5 CORTEVA				80.0 d	100.0 -	0.0 c	100.0 a
SURESTART II	1 qt/a	A					
AATREX	0.5 qt/a	A					
AMSOL	2.5 % v/v	C					
RESICORE XL	1.5 qt/a	C					
AATREX	1 qt/a	C					
ROUNDUP POWERMAX 3	30 fl oz/a	C					
6 CORTEVA			1.3 c	100.0 a	100.0 -	0.0 c	100.0 a
AMSOL	2.5 % v/v	B					
RESICORE XL	2.5 qt/a	B					
AATREX	1 qt/a	B					
ROUNDUP POWERMAX 3	30 fl oz/a	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 2,3,5,8 because error mean square = 0.
 ^Calculated from residual.

Purdue University Weed Science

Corn shootout programs

Trial ID: 22S-TPAC-CORN-11 Cooperator Trial ID:
 Protocol ID: 22S-TPAC-CORN-11 Location: TPAC Trial Year: 2022
 Project ID: Project ID 2: Project ID 3:
 Study Director: Brent Mansfield Sponsor Contact: FMC, Corteva, AMVAC, SummitAgro
 Investigator (Creator): Dr. Bill Johnson

Pest Type		W, Weed AMBTR	W, Weed ECHCG		W, Weed AMBTR		
Pest Code		Ambrosia trifida	Echinochloa cru		Ambrosia trifida		
Pest Scientific Name		Giant ragweed	common barnyard>		Giant ragweed		
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	May-31-2022	Jun-8-2022	Jun-8-2022	Jun-8-2022	Jun-24-2022		
Part Rated	PLOT, C	PLOT, P	PLOT, P	PLOT, C	PLOT, P		
Rating Type	PHYGEN	CONTRO	CONTRO	PHYGEN	CONTRO		
Rating Unit/Min/Max	% , 0, 100	% , 0, 100	% , 0, 100	% , 0, 100	% , 0, 100		
Sample Size							
Number of Subsamples	1	1	1	1	1		
Assessed By							
Data Entry Date	Jul-19-2022	Jul-19-2022	Jul-19-2022	Jul-19-2022	Jul-19-2022		
Rating Timing	7 DAB	26 DAA	26 DAA	15 DAB	42 DAA		
Days After First/Last Applic.	18, 7	26, 15	26, 15	26, 15	42, 15		
Plant-Eval Interval	19 DP-1	27 DP-1	27 DP-1	27 DP-1	43 DP-1		
Days After Emergence	12 DE-1	20 DE-1	20 DE-1	20 DE-1	36 DE-1		
ARM Action Codes							
Number of Decimals							
Trt Treatment	Rate	Appl	6	7	8	9	10
No. Name	Rate Unit	Code					
7 AMVAC			3.5 ab	100.0 a	100.0 -	2.8 b	93.3 cd
AMSOL	4.9 % v/v	B					
IMPACT CORE	20 fl oz/a	B					
IMPACT	0.5 fl oz/a	B					
AATREX	3 pt/a	B					
MSO ULTRA	1 % v/v	B					
8 AMVAC			5.0 a	100.0 a	100.0 -	4.5 a	95.0 bc
AMSOL	4.9 % v/v	B					
IMPACT CORE	20 fl oz/a	B					
AATREX	3 pt/a	B					
ROUNDUP POWERMAX 3	26.7 fl oz/a	B					
MSO ULTRA	0.5 % v/v	B					
9 AMVAC			2.8 bc	100.0 a	100.0 -	2.3 b	96.0 b
AMSOL	4.9 % v/v	B					
IMPACT CORE	20 fl oz/a	B					
HORNET	3 oz/a	B					
ROUNDUP POWERMAX 3	26.7 fl oz/a	B					
MSO ULTRA	0.5 % v/v	B					
10 SUMMITAGRO				67.5 e	100.0 -	0.0 c	91.3 d
BICEP II MAGNUM	1.6 qt/a	A					
AMSOL	8.5 lb ai/100 gal	C					
SHIELDEX	1.35 fl oz/a	C					
AATREX	1 qt/a	C					
PRIIME OIL	1 % v/v	C					
11 SUMMITAGRO				88.8 bc	100.0 -	0.0 c	97.5 ab
RESTRAINT	36 fl oz/a	A					
AATREX	1 qt/a	A					
AMSOL	8.5 lb ai/100 gal	C					
SHIELDEX	1.35 fl oz/a	C					
AATREX	1 qt/a	C					
PRIIME OIL	1 % v/v	C					

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 2,3,5,8 because error mean square = 0.
 ^Calculated from residual.

Purdue University Weed Science

Corn shootout programs

Trial ID: 22S-TPAC-CORN-11 Cooperator Trial ID:
 Protocol ID: 22S-TPAC-CORN-11 Location: TPAC Trial Year: 2022
 Project ID: Project ID 2: Project ID 3:
 Study Director: Brent Mansfield Sponsor Contact: FMC, Corteva, AMVAC, SummitAgro
 Investigator (Creator): Dr. Bill Johnson

Pest Type		W, Weed AMBTR	W, Weed ECHCG	W, Weed AMBTR			
Pest Code		Ambrosia trifida	Echinochloa cru>	Ambrosia trifida			
Pest Scientific Name		Giant ragweed	common barnyard>	Giant ragweed			
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	May-31-2022	Jun-8-2022	Jun-8-2022	Jun-8-2022			
Part Rated	PLOT, C	PLOT, P	PLOT, P	PLOT, C			
Rating Type	PHYGEN	CONTRO	CONTRO	PHYGEN			
Rating Unit/Min/Max	% , 0, 100	% , 0, 100	% , 0, 100	% , 0, 100			
Sample Size							
Number of Subsamples	1	1	1	1			
Assessed By							
Data Entry Date	Jul-19-2022	Jul-19-2022	Jul-19-2022	Jul-19-2022			
Rating Timing	7 DAB	26 DAA	26 DAA	15 DAB			
Days After First/Last Applic.	18, 7	26, 15	26, 15	26, 15			
Plant-Eval Interval	19 DP-1	27 DP-1	27 DP-1	27 DP-1			
Days After Emergence	12 DE-1	20 DE-1	20 DE-1	20 DE-1			
ARM Action Codes							
Number of Decimals							
Trt Treatment	Rate	Appl	6	7	8	9	10
No. Name	Rate Unit	Code					
12 ACURON	1.5 qt/a	A		90.0 b	100.0 -	0.0 c	100.0 a
ACURON	1.5 qt/a	C					
ROUNDUP POWERMAX 3	30 fl oz/a	C					
AMSOL	2.5 % v/v	C					
LSD P=.05	1.92		6.04		.	1.25	2.51
Standard Deviation	1.25		4.18		0.00	0.87	1.74
CV	44.58		4.61		0.0	100.48	1.79
Levene's F^	0.70		0.98		.	1.439	4.178*
Levene's Prob(F)	0.604		0.479		.	0.207	0.001*
Shapiro-Wilk^	0.9775		0.941*		.	0.8298*	0.9461*
P(Shapiro-Wilk)^	0.8982		0.0257*		.	0.0*	0.0394*
Skewness^	-0.2911		-0.3597		.	-0.276	0.1893
P(Skewness)^	0.6026		0.3358		.	0.4592	0.6111
Kurtosis^	-0.4298		2.01*		.	4.7523*	0.4761
P(Kurtosis)^	0.6911		0.0082*		.	0.0*	0.5151
Replicate F	0.599		3.929		0.000	1.730	0.221
Replicate Prob(F)	0.6279		0.0177		1.0000	0.1819	0.8810
Treatment F	6.048		26.091		0.000	13.105	12.038
Treatment Prob(F)	0.0067		0.0001		1.0000	0.0001	0.0001

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 2,3,5,8 because error mean square = 0.
 ^Calculated from residual.

Purdue University Weed Science

Corn shootout programs

Trial ID: 22S-TPAC-CORN-11 Cooperator Trial ID:
 Protocol ID: 22S-TPAC-CORN-11 Location: TPAC Trial Year: 2022
 Project ID: Project ID 2: Project ID 3:
 Study Director: Brent Mansfield Sponsor Contact: FMC, Corteva, AMVAC, SummitAgro
 Investigator (Creator): Dr. Bill Johnson

Pest Type	W, Weed ECHCG	W, Weed AMBTR	W, Weed ECHCG			
Pest Code	Echinochloa cru>	Ambrosia trifida	Echinochloa cru>			
Pest Scientific Name	common barnyard>	Giant ragweed	common barnyard>			
Pest Name						
Crop Type, Code				C, ZEAMX		
BBCH Scale				BCOR		
Crop Scientific Name				Zea mays		
Crop Name				Corn		
Rating Date	Jun-24-2022	Jul-8-2022	Jul-8-2022	Oct-7-2022		
Part Rated	PLOT, P	PLOT, P	PLOT, P	PLOT, C		
Rating Type	CONTRO	CONTRO	CONTRO	YIELD		
Rating Unit/Min/Max	%, 0, 100	%, 0, 100	%, 0, 100	lb/plot, -, -		
Sample Size				1 PLOT		
Number of Subsamples	1	1	1	1		
Assessed By				J. HAARMANN		
Data Entry Date	Jul-19-2022	Jul-19-2022	Jul-19-2022	Oct-19-2022		
Rating Timing	42 DAA	56 DAA	56 DAA	H1		
Days After First/Last Applic.	42, 15	56, 29	56, 29	147, 120		
Plant-Eval Interval	43 DP-1	57 DP-1	57 DP-1	148 DP-1		
Days After Emergence	36 DE-1	50 DE-1	50 DE-1	141 DE-1		
ARM Action Codes						
Number of Decimals						
Trt Treatment	Rate	Appl				
No. Name	Rate Unit	Code	11	12		
11	12	13	14			
1 NONTREATED			0.0	0.0	0.0	7.835
2 FMC			100.0 a	100.0 a	100.0 a	38.488 ab
ANTHEM MAXX	4 fl oz/a	A				
CALLISTO	6 fl oz/a	A				
AATREX	2 qt/a	A				
STATUS	3 oz/a	C				
ROUNDUP POWERMAX 3	30 fl oz/a	C				
AMSOL	2.5 % v/v	C				
3 FMC			96.0 b	92.5 de	90.0 d	38.923 ab
ANTHEM MAXX	4 fl oz/a	B				
CALLISTO	3 fl oz/a	B				
AATREX	2 qt/a	B				
ROUNDUP POWERMAX 3	30 fl oz/a	B				
AMSOL	2.5 % v/v	B				
4 CORTEVA			100.0 a	98.5 ab	94.3 bc	38.053 b
RESICORE XL	2.5 qt/a	A				
AATREX	1 qt/a	A				
AMSOL	2.5 % v/v	C				
REALM Q	4 oz/a	C				
AATREX	0.5 qt/a	C				
ROUNDUP POWERMAX 3	30 fl oz/a	C				
5 CORTEVA			100.0 a	100.0 a	100.0 a	37.903 b
SURESTART II	1 qt/a	A				
AATREX	0.5 qt/a	A				
AMSOL	2.5 % v/v	C				
RESICORE XL	1.5 qt/a	C				
AATREX	1 qt/a	C				
ROUNDUP POWERMAX 3	30 fl oz/a	C				
6 CORTEVA			100.0 a	100.0 a	95.0 b	37.748 bc
AMSOL	2.5 % v/v	B				
RESICORE XL	2.5 qt/a	B				
AATREX	1 qt/a	B				
ROUNDUP POWERMAX 3	30 fl oz/a	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 2,3,5,8 because error mean square = 0.
 ^Calculated from residual.

Purdue University Weed Science

Corn shootout programs

Trial ID: 22S-TPAC-CORN-11 Cooperator Trial ID:
 Protocol ID: 22S-TPAC-CORN-11 Location: TPAC Trial Year: 2022
 Project ID: Project ID 2: Project ID 3:
 Study Director: Brent Mansfield Sponsor Contact: FMC, Corteva, AMVAC, SummitAgro
 Investigator (Creator): Dr. Bill Johnson

Pest Type	W, Weed ECHCG	W, Weed AMBTR	W, Weed ECHCG	
Pest Code	Echinochloa cru>	Ambrosia trifida	Echinochloa cru>	
Pest Scientific Name	common barnyard>	Giant ragweed	common barnyard>	
Pest Name				
Crop Type, Code				C, ZEAMX
BBCH Scale				BCOR
Crop Scientific Name				Zea mays
Crop Name				Corn
Rating Date	Jun-24-2022	Jul-8-2022	Jul-8-2022	Oct-7-2022
Part Rated	PLOT, P	PLOT, P	PLOT, P	PLOT, C
Rating Type	CONTRO	CONTRO	CONTRO	YIELD
Rating Unit/Min/Max	%, 0, 100	%, 0, 100	%, 0, 100	lb/plot, -, -
Sample Size				1 PLOT
Number of Subsamples	1	1	1	1
Assessed By				J. HAARMANN
Data Entry Date	Jul-19-2022	Jul-19-2022	Jul-19-2022	Oct-19-2022
Rating Timing	42 DAA	56 DAA	56 DAA	H1
Days After First/Last Applic.	42, 15	56, 29	56, 29	147, 120
Plant-Eval Interval	43 DP-1	57 DP-1	57 DP-1	148 DP-1
Days After Emergence	36 DE-1	50 DE-1	50 DE-1	141 DE-1
ARM Action Codes				
Number of Decimals				
Trt Treatment	Rate	Appl		
No. Name	Rate Unit	Code	11	12
7 AMVAC			90.0 d	88.8 f
AMSOL	4.9 % v/v	B		
IMPACT CORE	20 fl oz/a	B		
IMPACT	0.5 fl oz/a	B		
AATREX	3 pt/a	B		
MSO ULTRA	1 % v/v	B		
8 AMVAC			94.3 c	90.0 ef
AMSOL	4.9 % v/v	B		
IMPACT CORE	20 fl oz/a	B		
AATREX	3 pt/a	B		
ROUNDUP POWERMAX 3	26.7 fl oz/a	B		
MSO ULTRA	0.5 % v/v	B		
9 AMVAC			96.0 b	93.8 cd
AMSOL	4.9 % v/v	B		
IMPACT CORE	20 fl oz/a	B		
HORNET	3 oz/a	B		
ROUNDUP POWERMAX 3	26.7 fl oz/a	B		
MSO ULTRA	0.5 % v/v	B		
10 SUMMITAGRO			100.0 a	85.0 g
BICEP II MAGNUM	1.6 qt/a	A		
AMSOL	8.5 lb ai/100 gal	C		
SHIELDEX	1.35 fl oz/a	C		
AATREX	1 qt/a	C		
PRIIME OIL	1 % v/v	C		
11 SUMMITAGRO			100.0 a	96.0 bc
RESTRAINT	36 fl oz/a	A		
AATREX	1 qt/a	A		
AMSOL	8.5 lb ai/100 gal	C		
SHIELDEX	1.35 fl oz/a	C		
AATREX	1 qt/a	C		
PRIIME OIL	1 % v/v	C		

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 2,3,5,8 because error mean square = 0.
 ^Calculated from residual.

Purdue University Weed Science

Corn shootout programs

Trial ID: 22S-TPAC-CORN-11 Cooperator Trial ID:
 Protocol ID: 22S-TPAC-CORN-11 Location: TPAC Trial Year: 2022
 Project ID: Project ID 2: Project ID 3:
 Study Director: Brent Mansfield Sponsor Contact: FMC, Corteva, AMVAC, SummitAgro
 Investigator (Creator): Dr. Bill Johnson

Pest Type	W, Weed ECHCG	W, Weed AMBTR	W, Weed ECHCG	
Pest Code	Echinochloa cru>	Ambrosia trifida	Echinochloa cru>	
Pest Scientific Name	common barnyard>	Giant ragweed	common barnyard>	
Pest Name				
Crop Type, Code				C, ZEAMX
BBCH Scale				BCOR
Crop Scientific Name				Zea mays
Crop Name				Corn
Rating Date	Jun-24-2022	Jul-8-2022	Jul-8-2022	Oct-7-2022
Part Rated	PLOT, P	PLOT, P	PLOT, P	PLOT, C
Rating Type	CONTRO	CONTRO	CONTRO	YIELD
Rating Unit/Min/Max	%, 0, 100	%, 0, 100	%, 0, 100	lb/plot, -, -
Sample Size				1 PLOT
Number of Subsamples	1	1	1	1
Assessed By				J. HAARMANN
Data Entry Date	Jul-19-2022	Jul-19-2022	Jul-19-2022	Oct-19-2022
Rating Timing	42 DAA	56 DAA	56 DAA	H1
Days After First/Last Applic.	42, 15	56, 29	56, 29	147, 120
Plant-Eval Interval	43 DP-1	57 DP-1	57 DP-1	148 DP-1
Days After Emergence	36 DE-1	50 DE-1	50 DE-1	141 DE-1
ARM Action Codes				
Number of Decimals				
Trt Treatment				
No. Name	Rate	Appl	11	12
	Rate Unit	Code	13	14
12 ACURON	1.5 qt/a	A	100.0 a	100.0 a
ACURON	1.5 qt/a	C		
ROUNDUP POWERMAX 3	30 fl oz/a	C		
AMSOL	2.5 % v/v	C		
LSD P=.05	1.44	2.79	2.16	2.3506
Standard Deviation	1.00	1.93	1.49	1.6277
CV	1.02	2.03	1.56	4.23
Levene's F^	1.639	2.205*	1.922	1.869
Levene's Prob(F)	0.139	0.043*	0.077	0.087
Shapiro-Wilk^	0.7636*	0.9417*	0.8832*	0.9733
P(Shapiro-Wilk)^	0.0*	0.0273*	0.0003*	0.3921
Skewness^	-1.433*	-0.2888	-0.7551*	0.3352
P(Skewness)^	0.0004*	0.4388	0.0472*	0.3695
Kurtosis^	9.5805*	2.4838*	2.6365*	-0.476
P(Kurtosis)^	0.0*	0.0014*	0.0007*	0.5152
Replicate F	1.672	1.246	0.978	8.612
Replicate Prob(F)	0.1941	0.3104	0.4163	0.0003
Treatment F	45.861	30.659	33.179	2.823
Treatment Prob(F)	0.0001	0.0001	0.0001	0.0135

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 2,3,5,8 because error mean square = 0.
 ^Calculated from residual.

Purdue University Weed Science

Corn shootout programs

Trial ID: 22S-TPAC-CORN-11 Cooperator Trial ID:
 Protocol ID: 22S-TPAC-CORN-11 Location: TPAC Trial Year: 2022
 Project ID: Project ID 2: Project ID 3:
 Study Director: Brent Mansfield Sponsor Contact: FMC, Corteva, AMVAC, SummitAgro
 Investigator (Creator): Dr. Bill Johnson

Trt No.	Treatment Name	Rate	Unit	Appl Code	15	16
1	NONTREATED				16.28	43.8
2	FMC				19.50 -	211.3 ab
	ANTHEM MAXX	4 fl oz/a		A		
	CALLISTO	6 fl oz/a		A		
	AATREX	2 qt/a		A		
	STATUS	3 oz/a		C		
	ROUNDUP POWERMAX 3	30 fl oz/a		C		
	AMSOL	2.5 % v/v		C		
3	FMC				19.28 -	214.2 ab
	ANTHEM MAXX	4 fl oz/a		B		
	CALLISTO	3 fl oz/a		B		
	AATREX	2 qt/a		B		
	ROUNDUP POWERMAX 3	30 fl oz/a		B		
	AMSOL	2.5 % v/v		B		
4	CORTEVA				19.30 -	209.4 ab
	RESICORE XL	2.5 qt/a		A		
	AATREX	1 qt/a		A		
	AMSOL	2.5 % v/v		C		
	REALM Q	4 oz/a		C		
	AATREX	0.5 qt/a		C		
	ROUNDUP POWERMAX 3	30 fl oz/a		C		
5	CORTEVA				19.73 -	207.6 bc
	SURESTART II	1 qt/a		A		
	AATREX	0.5 qt/a		A		
	AMSOL	2.5 % v/v		C		
	RESICORE XL	1.5 qt/a		C		
	AATREX	1 qt/a		C		
	ROUNDUP POWERMAX 3	30 fl oz/a		C		
6	CORTEVA				19.65 -	206.9 bc
	AMSOL	2.5 % v/v		B		
	RESICORE XL	2.5 qt/a		B		
	AATREX	1 qt/a		B		
	ROUNDUP POWERMAX 3	30 fl oz/a		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 2,3,5,8 because error mean square = 0.
 ^Calculated from residual.

Purdue University Weed Science

Corn shootout programs

Trial ID: 22S-TPAC-CORN-11 Cooperator Trial ID:
 Protocol ID: 22S-TPAC-CORN-11 Location: TPAC Trial Year: 2022
 Project ID: Project ID 2: Project ID 3:
 Study Director: Brent Mansfield Sponsor Contact: FMC, Corteva, AMVAC, SummitAgro
 Investigator (Creator): Dr. Bill Johnson

Pest Type				
Pest Code				
Pest Scientific Name				
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		Oct-7-2022	Oct-7-2022	
Part Rated		PLOT, C	PLOT, C	
Rating Type		MOICON	YIELD	
Rating Unit/Min/Max		%, 0, 100	bu/ac, -, -	
Sample Size			1 A	
Number of Subsamples		1	1	
Assessed By		J. HAARMANN	J. HAARMANN	
Data Entry Date		Oct-19-2022		
Rating Timing		H1	H1	
Days After First/Last Applic.		147, 120	147, 120	
Plant-Eval Interval		148 DP-1	148 DP-1	
Days After Emergence		141 DE-1	141 DE-1	
ARM Action Codes			TY1	
Number of Decimals			1	
Trt No.	Treatment Name	Rate Rate Unit	Appl Code	
				15 16
7	AMVAC			19.18 - 195.7 c
	AMSOL	4.9 % v/v	B	
	IMPACT CORE	20 fl oz/a	B	
	IMPACT	0.5 fl oz/a	B	
	AATREX	3 pt/a	B	
	MSO ULTRA	1 % v/v	B	
8	AMVAC			19.73 - 217.7 ab
	AMSOL	4.9 % v/v	B	
	IMPACT CORE	20 fl oz/a	B	
	AATREX	3 pt/a	B	
	ROUNDUP POWERMAX 3	26.7 fl oz/a	B	
	MSO ULTRA	0.5 % v/v	B	
9	AMVAC			19.25 - 207.1 bc
	AMSOL	4.9 % v/v	B	
	IMPACT CORE	20 fl oz/a	B	
	HORNET	3 oz/a	B	
	ROUNDUP POWERMAX 3	26.7 fl oz/a	B	
	MSO ULTRA	0.5 % v/v	B	
10	SUMMITAGRO			19.65 - 216.6 ab
	BICEP II MAGNUM	1.6 qt/a	A	
	AMSOL	8.5 lb ai/100 gal	C	
	SHIELDEX	1.35 fl oz/a	C	
	AATREX	1 qt/a	C	
	PRIIME OIL	1 % v/v	C	
11	SUMMITAGRO			19.73 - 214.3 ab
	RESTRAINT	36 fl oz/a	A	
	AATREX	1 qt/a	A	
	AMSOL	8.5 lb ai/100 gal	C	
	SHIELDEX	1.35 fl oz/a	C	
	AATREX	1 qt/a	C	
	PRIIME OIL	1 % v/v	C	

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 2,3,5,8 because error mean square = 0.
 ^Calculated from residual.

Purdue University Weed Science

Corn shootout programs

Trial ID: 22S-TPAC-CORN-11 Cooperator Trial ID:
 Protocol ID: 22S-TPAC-CORN-11 Location: TPAC Trial Year: 2022
 Project ID: Project ID 2: Project ID 3:
 Study Director: Brent Mansfield Sponsor Contact: FMC, Corteva, AMVAC, SummitAgro
 Investigator (Creator): Dr. Bill Johnson

Pest Type				
Pest Code				
Pest Scientific Name				
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		Oct-7-2022	Oct-7-2022	
Part Rated		PLOT, C	PLOT, C	
Rating Type		MOICON	YIELD	
Rating Unit/Min/Max		%, 0, 100	bu/ac, -, -	
Sample Size			1 A	
Number of Subsamples		1	1	
Assessed By		J. HAARMANN	J. HAARMANN	
Data Entry Date		Oct-19-2022		
Rating Timing		H1	H1	
Days After First/Last Applic.		147, 120	147, 120	
Plant-Eval Interval		148 DP-1	148 DP-1	
Days After Emergence		141 DE-1	141 DE-1	
ARM Action Codes			TY1	
Number of Decimals			1	
Trt Treatment	Rate	Appl	15	16
No. Name	Rate Unit	Code		
12 ACURON	1.5 qt/a	A	19.85 -	222.1 a
ACURON	1.5 qt/a	C		
ROUNDUP POWERMAX 3	30 fl oz/a	C		
AMSOL	2.5 % v/v	C		
LSD P=.05			1.055	12.71
Standard Deviation			0.730	8.80
CV			3.74	4.17
Levene's F^			0.723	1.53
Levene's Prob(F)			0.697	0.173
Shapiro-Wilk^			0.9793	0.9683
P(Shapiro-Wilk)^			0.605	0.2624
Skewness^			0.3567	0.5082
P(Skewness)^			0.3399	0.1762
Kurtosis^			0.9962	-0.2251
P(Kurtosis)^			0.1767	0.7579
Replicate F			1.709	10.454
Replicate Prob(F)			0.1862	0.0001
Treatment F			0.426	2.593
Treatment Prob(F)			0.9222	0.0213

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 2,3,5,8 because error mean square = 0.
 ^Calculated from residual.

Purdue University Weed Science

Corn shootout programs

Trial ID: 22S-TPAC-CORN-11 Cooperator Trial ID:
 Protocol ID: 22S-TPAC-CORN-11 Location: TPAC Trial Year: 2022
 Project ID: Project ID 2: Project ID 3:
 Study Director: Brent Mansfield Sponsor Contact: FMC, Corteva, AMVAC, SummitAgro
 Investigator (Creator): Dr. Bill Johnson

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

PLOT = plot

P = Pest is Part Rated

C = Crop is Part Rated

Rating Type

CONTRO = control / burndown or knockdown

PHYGEN = phytotoxicity - general / injury

YIELD = yield

MOICON = moisture content

Rating Unit/Min/Max

%, 0, 100 = percent

lb/plot, , = pounds per plot

bu/ac, , = bushels per acre

PLOT = total plot

A = acre

Rating Timing

H1 = 1st Harvest

Plant-Eval Interval

15 DP-1 = 1 ZEAMX May-12-2022

19 DP-1 = 1 ZEAMX May-12-2022

27 DP-1 = 1 ZEAMX May-12-2022

43 DP-1 = 1 ZEAMX May-12-2022

57 DP-1 = 1 ZEAMX May-12-2022

148 DP-1 = 1 ZEAMX May-12-2022

ARM Action Codes

TY1 = 5.76190476*[14]*(100-[15])/84.5

Trt No.	Treatment Name	Form Conc	Form Unit	Form Type	Rate	Rate Unit	Appl Code	Rep 1	2	3	4	Notes
1	CHK NONTREATED							101	306	602	705	
2	FMC							102	303	502	806	
	HERB ANTHEM MAXX	4.3	LBA/GAL	SC	4	fl oz/a	A					
	HERB CALLISTO	4	LBA/GAL	SC	6	fl oz/a	A					
	HERB AATREX	4	LBA/GAL	SC	2	qt/a	A					
	HERB STATUS	56	%	WG	3	oz/a	C					
	HERB ROUNDUP POWERMAX 3	4.8	LBAE/GAL	SL	30	fl oz/a	C					
	ADJ AMSOL	3.4	LBA/GAL	L	2.5	% v/v	C					
3	FMC							103	302	606	805	
	HERB ANTHEM MAXX	4.3	LBA/GAL	SC	4	fl oz/a	B					
	HERB CALLISTO	4	LBA/GAL	SC	3	fl oz/a	B					
	HERB AATREX	4	LBA/GAL	SC	2	qt/a	B					
	HERB ROUNDUP POWERMAX 3	4.8	LBAE/GAL	SL	30	fl oz/a	B					
	ADJ AMSOL	3.4	LBA/GAL	L	2.5	% v/v	B					
4	CORTEVA							104	305	604	801	
	HERB RESICORE XL	100	%	L	2.5	qt/a	A					
	HERB AATREX	4	LBA/GAL	SC	1	qt/a	A					
	ADJ AMSOL	3.4	LBA/GAL	L	2.5	% v/v	C					
	HERB REALM Q	100	%	WG	4	oz/a	C					
	HERB AATREX	4	LBA/GAL	SC	0.5	qt/a	C					
	HERB ROUNDUP POWERMAX 3	4.8	LBAE/GAL	SL	30	fl oz/a	C					
5	CORTEVA							105	405	506	702	
	HERB SURESTART II	100	%	L	1	qt/a	A					
	HERB AATREX	4	LBA/GAL	SC	0.5	qt/a	A					
	ADJ AMSOL	3.4	LBA/GAL	L	2.5	% v/v	C					
	HERB RESICORE XL	100	%	L	1.5	qt/a	C					
	HERB AATREX	4	LBA/GAL	SC	1	qt/a	C					
	HERB ROUNDUP POWERMAX 3	4.8	LBAE/GAL	SL	30	fl oz/a	C					
6	CORTEVA							106	404	601	706	
	ADJ AMSOL	3.4	LBA/GAL	L	2.5	% v/v	B					
	HERB RESICORE XL	100	%	L	2.5	qt/a	B					
	HERB AATREX	4	LBA/GAL	SC	1	qt/a	B					
	HERB ROUNDUP POWERMAX 3	4.8	LBAE/GAL	SL	30	fl oz/a	B					

Purdue University Weed Science

Corn shootout programs

Trial ID: 22S-TPAC-CORN-11 Cooperator Trial ID:
 Protocol ID: 22S-TPAC-CORN-11 Location: TPAC Trial Year: 2022
 Project ID: Project ID 2: Project ID 3:
 Study Director: Brent Mansfield Sponsor Contact: FMC, Corteva, AMVAC, SummitAgro
 Investigator (Creator): Dr. Bill Johnson

Trt No.	Treatment Type	Form Conc	Form Unit	Form Type	Rate	Rate Unit	Appl Code	Rep 1	2	3	4	Notes
7	AMVAC							201	406	503	701	
	ADJ AMSOL	3.4	LBA/GAL	L	4.9 %	v/v	B					
	HERB IMPACT CORE	7.15	LBA/GAL	EC	20	fl oz/a	B					
	HERB IMPACT	2.8	LBA/GAL	SC	0.5	fl oz/a	B					
	HERB AATREX	4	LBA/GAL	SC	3	pt/a	B					
ADJ MSO ULTRA	100 %		L	1 %	v/v	B						
8	AMVAC							202	304	501	804	
	ADJ AMSOL	3.4	LBA/GAL	L	4.9 %	v/v	B					
	HERB IMPACT CORE	7.15	LBA/GAL	EC	20	fl oz/a	B					
	HERB AATREX	4	LBA/GAL	SC	3	pt/a	B					
	HERB ROUNDUP POWERMAX 3	4.8	LBAE/GAL	SL	26.7	fl oz/a	B					
ADJ MSO ULTRA	100 %		L	0.5 %	v/v	B						
9	AMVAC							203	402	603	704	
	ADJ AMSOL	3.4	LBA/GAL	L	4.9 %	v/v	B					
	HERB IMPACT CORE	7.15	LBA/GAL	EC	20	fl oz/a	B					
	HERB HORNET	68.5 %		WG	3	oz/a	B					
	HERB ROUNDUP POWERMAX 3	4.8	LBAE/GAL	SL	26.7	fl oz/a	B					
ADJ MSO ULTRA	100 %		L	0.5 %	v/v	B						
10	SUMMITAGRO							204	401	504	803	
	HERB BICEP II MAGNUM	5.5	LBA/GAL	SC	1.6	qt/a	A					
	ADJ AMSOL	3.4	LBA/GAL	L	8.5	lb ai/100 gal	C					
	HERB SHIELDDEX	3.33	LBA/GAL	SC	1.35	fl oz/a	C					
	HERB AATREX	4	LBA/GAL	SC	1	qt/a	C					
ADJ PRIIME OIL	100 %		L	1 %	v/v	C						
11	SUMMITAGRO							205	403	505	802	
	HERB RESTRAINT	6.498	LBA/GAL	EC	36	fl oz/a	A					
	HERB AATREX	4	LBA/GAL	SC	1	qt/a	A					
	ADJ AMSOL	3.4	LBA/GAL	L	8.5	lb ai/100 gal	C					
	HERB SHIELDDEX	3.33	LBA/GAL	SC	1.35	fl oz/a	C					
HERB AATREX	4	LBA/GAL	SC	1	qt/a	C						
ADJ PRIIME OIL	100 %		L	1 %	v/v	C						
12	HERB ACURON	3.44	LBA/GAL	ZC	1.5	qt/a	A	206	301	605	703	
	HERB ACURON	3.44	LBA/GAL	ZC	1.5	qt/a	C					
	HERB ROUNDUP POWERMAX 3	4.8	LBAE/GAL	SL	30	fl oz/a	C					
	ADJ AMSOL	3.4	LBA/GAL	L	2.5 %	v/v	C					

Sort Order: Replicate 1