

Purdue Weed Science

Corn Herbicide Programs Showcase

Trial ID: 19S-MGS-CORN-11	Location: Meigs	Trial Year:
Protocol ID: 19S-MGS-CORN-11	Investigator (Creator): Dr. Bill Johnson	
Project ID: Showcase	Study Director: Dustin Johnson & Marcelo Zimmer	
	Sponsor Contact: UPL/Summit Agro/AMVAC	

General Trial Information

Study Director: Dustin Johnson & Marcelo Zimmer **Title:** Research Associate
Investigator: Dr. Bill Johnson **Title:** Professor

Discipline: H herbicide
Trial Status: E established

ARM Trial Created On: Apr-23-2019
Initiation Date: Jun-3-2019

Trial Location

City: Lafayette **Country:** USA United States
State/Prov.: Indiana
Postal Code: 47909

Latitude of LL Corner °: 40.27099 N
Longitude of LL Corner °: -86.88009 W

Directions:

Treatments 17 & 18 Spray Blanket PRE of Helmet at 1.67pt/a on 10' of plot

Conducted Under GLP: No
Conducted Under GEP: No

Contacts

Role: STYDIR
Study Director: Dustin Johnson & Marcelo Zimmer **Title:** Research Associate
Organization: Purdue University
Address 1: 915 W. State Street
Country: USA United States **E-mail:** john1357@purdue.edu
City: West Lafayette, IN **Postal Code:** 47907

Role: INVEST
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, IN **Postal Code:** 47907

Role: COOPER
Cooperator: Jay Young **Title:** Superintendent
Organization: Purdue University
Address 1: 8343 US 231 S **Phone No.:** 765-538-3422
Country: USA United States **Fax No.:** 765-538-3423
City: Lafayette **E-mail:** jayyoung@purdue.edu
State/Prov: IN **Postal Code:** 47909

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Crop Description

Crop 1: C	ZEAMX Zea mays	Corn	BBCH Scale: BCOR
Entry Date:	May-23-2019	Stage Scale:	BBCH
Variety:	DKC62-52RIB		
Attributes:	RR/LL Stacked		
Planting Date:	Jun-3-2019	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:	68 F	Soil Moisture:	DAMP damp
Emergence Date:	Jun-12-2019		
% Standard Moisture:	15.5	Harvested Width:	5 FT
		Harvested Length:	20 FT

Pest Description

Pest 1 Type: W	Code: AMATA	Amaranthus tamariscinus	Entry Date: Jul-2-2019
Common Name:	Common waterhemp		Stage Scale: BBCH
Pest 2 Type: W	Code: AMBTR	Ambrosia trifida	Entry Date: Jul-2-2019
Common Name:	Giant ragweed		Stage Scale: BBCH
Pest 3 Type: W	Code: SETFA	Setaria faberi	Entry Date: Jul-2-2019
Common Name:	Giant foxtail		Stage Scale: BBCH

Site and Design

Treated Plot Width:	6.67 FT	Site Type:	FIELD field
Treated Plot Length:	25 FT	Experimental Unit:	1 PLOT plot
Treated Plot Area:	166.75 FT ²	Treatments:	18
Replications:	4	Tillage Type:	NOTILL no-till
		Study Design:	RACOB L Randomized Co

Soil Description

Description Name:	MGS-S3		
% Sand:	40.7	% OM:	2.3
% Silt:	38.6	pH:	6.62
% Clay:	20.7	Soil Name:	Starks-Fincastle complex
		Texture:	L loam
		CEC:	8.5
		Fert. Level:	G good

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Application Description

	A	B	C	D
Application Date	Jun-3-2019	Jun-28-2019	Jun-28-2019	Jul-1-2019
Appl. Start Time	1:15 PM	10:50 AM	10:50 AM	12:30 PM
Appl. Stop Time	2:00 PM	11:20 AM	11:20 AM	12:40 PM
Interval to Prev. Appl.		25 DAYS	25 DAYS	3 DAYS
Application Method	SPRAY	SPRAY	SPRAY	SPRAY
Application Timing	PREPRE	POSPOS	POSPOS	POSPOS
Application Placement	BROADC	BROADC	BROADC	BROADC
Applied By	J. HAARMANN	L. MAIA	L. MAIA	J. HAARMANN
Appl. Entry Date	Jun-10-2019	Jul-2-2019	Jul-2-2019	Jul-2-2019
Air Temperature Start, Stop	78 F	83 F	83 F	85 F
% Relative Humidity Start, Stop	35	61	61	62
Wind Velocity+Dir. Start	3 MPH S	3 MPH SSW	3 MPH SSW	3 MPH S
Soil Temperature	71 F	77 F	77 F	90 F
Soil Moisture	SLIWET	DRY	DRY	VERDRY
% Cloud Cover	0	5	5	0

Crop Stage At Each Application

	A	B	C	D
Crop 1 Code, BBCH Scale	ZEAMX BCOR	BCOR	BCOR	BCOR
Days after Emergence	-9	16	16	19
Stage Scale Used	BBCH	BBCH	BBCH	BBCH
Stage Majority, Percent	00	14	14	15
Stage Minimum, Percent	00	14	14	14
Stage Maximum, Percent	00	14	14	15
Diameter Average	0 IN	0 IN	0 IN	0 IN
Height Average	0 IN	10 IN	10 IN	12 IN
Height Minimum, Maximum	0 00	7 11	7 11	9 14

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Pest Stage At Each Application

	A	B	C	D
Pest 1 Code, Type, Scale	AMATA W BBCH	BBCH	BBCH	BBCH
Stage Majority, Percent	00	14	14	14
Stage Minimum, Percent	00	11	11	11
Stage Maximum, Percent	00	19	19	17
Diameter Average	00 IN	00 IN	00 IN	00 IN
Height Average	00 IN	3 IN	3 IN	3 IN
Height Minimum, Maximum	00 00	0 6	0 6	0 4
Density Average	00 FT2	2 FT2	2 FT2	10 FT2
Density Minimum, Maximum	00 00	0 14	0 14	5 14
Pest 2 Code, Type, Scale	BBCH	BBCH	BBCH	BBCH
Stage Majority, Percent	00	14	14	14
Stage Minimum, Percent	00	11	11	11
Stage Maximum, Percent	00	18	18	19
Diameter Average	00 IN	00 IN	00 IN	00 IN
Height Average	00 IN	5 IN	5 IN	6 IN
Height Minimum, Maximum	00 00	0 8	0 8	0 12
Density Average	00 FT2	2 FT2	2 FT2	1 FT2
Density Minimum, Maximum	00 00	0 6	0 6	0 3
Pest 3 Code, Type, Scale	BBCH	BBCH	BBCH	BBCH
Stage Majority, Percent	00	14	14	14
Stage Minimum, Percent	00	11	11	11
Stage Maximum, Percent	00	18	18	15
Diameter Average	00 IN	00 IN	00 IN	00 IN
Height Average	00 IN	4 IN	4 IN	4 IN
Height Minimum, Maximum	00 00	0 6	0 6	0 6
Density Average	00 FT2	1 FT2	1 FT2	5 FT2
Density Minimum, Maximum	00 00	0 6	0 6	0 10

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Application Equipment

	A	B	C	D
Appl. Equipment	CO2 BACKPACK	CO2 BACKPACK	CO2 BACKPACK	CO2 BACKPACK
Equipment Type	BACSPR	BACSPR	BACSPR	BACSPR
Operation Pressure	27 PSI	27 PSI	27 PSI	27 PSI
Nozzle Type	FLAFXR	FLAFXR	FLAFXR	FLAFXR
Nozzle Size	XR8002	XR8002	XR8002	XR8002
Nozzle Spacing	20 IN	20 IN	20 IN	20 IN
Nozzles/Row	4	4	4	4
Boom Length	6.67 FT	6.67 FT	6.67 FT	6.67 FT
Boom Height	17 IN	17 IN	17 IN	17 IN
Ground Speed	3 MPH	3 MPH	3 MPH	3 MPH
Carrier	WATER	WATER	WATER	WATER
Application Amount	15 GAL/AC	15 GAL/AC	15 GAL/AC	15 GAL/AC
Mix Size	946 mL	946 mL	946 mL	946 mL
Propellant	COMCO2	COMCO2	COMCO2	COMCO2

Context	Date	By	Notes
STATUS	Apr-23-2019	Dr. Bill Johnson	Automatically added by ARM: Trial Status updated to 'S' during trial creation.
MAINT	May-6-2019	Dustin Johnson	180 lbs/a of N applied or 409 lbs of actual ESN applied
STATUS	Jun-10-2019	Dr. Bill Johnson	Automatically added by ARM: Trial Status updated to 'E' when Initiation Date entered.
MAINT	Jun-2-2019	M. ZIMMER	Applied Gramaxone @ 3pt/a to kill of vegetation.
GENTRI	Jun-17-2019	C. HODGSKISS	There was some minor paraquat crop injury to 6th tier from alley spraying.

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Sponsor Contact: UPL/Summit Agro/AMVAC		

Reps: 4

Plots: 6.67 by 25 feet

Appl. Amount: 15 GAL/AC

Mix Size: 946 mL (total for 4 plots; minimum=869.4 mL)

Trt No.	Treatment Name	Form Conc	Form Unit	Form Type	Rate Rate Unit	Appl Amount Unit	Mix Size Unit	Mix Unit	Amt to Measure
1	UNTREATED CHECK								
2	BICEP LITE II MAGNUM	6 LBA/GAL	L	L	1.67 qt/a	15 GAL/AC	946 mL	946 mL	26.33 mL/mx
3	BICEP LITE II MAGNUM	6 LBA/GAL	L	L	1.67 qt/a	15 GAL/AC	946 mL	946 mL	26.33 mL/mx
	SHIELDEX	3.33 LBA/GAL	SC	SC	1 fl oz/a	15 GAL/AC	946 mL	946 mL	0.4927 mL/mx
	AATREX	4 LB/GAL	L	L	1 pt/a	15 GAL/AC	946 mL	946 mL	7.883 mL/mx
	MSO	100 %	SL	SL	1 % v/v	15 GAL/AC	946 mL	946 mL	9.459 mL/mx
	N-PAK AMS	3.4 LBA/GAL	L	L	2.5 % v/v	15 GAL/AC	946 mL	946 mL	23.65 mL/mx
4	BICEP LITE II MAGNUM	6 LBA/GAL	L	L	1.67 qt/a	15 GAL/AC	946 mL	946 mL	26.33 mL/mx
	SHIELDEX	3.33 LBA/GAL	SC	SC	1.3 fl oz/a	15 GAL/AC	946 mL	946 mL	0.6405 mL/mx
	AATREX	4 LB/GAL	L	L	1 pt/a	15 GAL/AC	946 mL	946 mL	7.883 mL/mx
	MSO	100 %	SL	SL	1 % v/v	15 GAL/AC	946 mL	946 mL	9.459 mL/mx
	N-PAK AMS	3.4 LBA/GAL	L	L	2.5 % v/v	15 GAL/AC	946 mL	946 mL	23.65 mL/mx
5	BICEP LITE II MAGNUM	6 LBA/GAL	L	L	1.67 qt/a	15 GAL/AC	946 mL	946 mL	26.33 mL/mx
	IMPACT	2.8 LB/GAL	L	L	1 fl oz/a	15 GAL/AC	946 mL	946 mL	0.4927 mL/mx
	AATREX	4 LB/GAL	L	L	1 pt/a	15 GAL/AC	946 mL	946 mL	7.883 mL/mx
	MSO	100 %	SL	SL	1 % v/v	15 GAL/AC	946 mL	946 mL	9.459 mL/mx
	N-PAK AMS	3.4 LBA/GAL	L	L	2.5 % v/v	15 GAL/AC	946 mL	946 mL	23.65 mL/mx
6	BICEP LITE II MAGNUM	6 LBA/GAL	L	L	1.67 qt/a	15 GAL/AC	946 mL	946 mL	26.33 mL/mx
	LAUDIS	3.5 LB/GAL	L	L	3 fl oz/a	15 GAL/AC	946 mL	946 mL	1.478 mL/mx
	AATREX	4 LB/GAL	L	L	1 pt/a	15 GAL/AC	946 mL	946 mL	7.883 mL/mx
	MSO	100 %	SL	SL	1 % v/v	15 GAL/AC	946 mL	946 mL	9.459 mL/mx
	N-PAK AMS	3.4 LBA/GAL	L	L	2.5 % v/v	15 GAL/AC	946 mL	946 mL	23.65 mL/mx
7	BICEP LITE II MAGNUM	6 LBA/GAL	L	L	1.67 qt/a	15 GAL/AC	946 mL	946 mL	26.33 mL/mx
	CALLISTO	4 LB/GAL	L	L	3 fl oz/a	15 GAL/AC	946 mL	946 mL	1.478 mL/mx
	AATREX	4 LB/GAL	L	L	1 pt/a	15 GAL/AC	946 mL	946 mL	7.883 mL/mx
	ACTIVATOR 90 NIS	100 %	SL	SL	0.25 % v/v	15 GAL/AC	946 mL	946 mL	2.365 mL/mx
	N-PAK AMS	3.4 LBA/GAL	L	L	2.5 % v/v	15 GAL/AC	946 mL	946 mL	23.65 mL/mx
8	AATREX	4 LB/GAL	L	L	2 pt/a	15 GAL/AC	946 mL	946 mL	15.77 mL/mx
9	AATREX	4 LB/GAL	L	L	2 pt/a	15 GAL/AC	946 mL	946 mL	15.77 mL/mx
	INTERMOC	428 g/L	F	F	70 fl oz/a	15 GAL/AC	946 mL	946 mL	34.49 mL/mx
	N-PAK AMS	3.4 LBA/GAL	L	L	2.5 % v/v	15 GAL/AC	946 mL	946 mL	23.65 mL/mx
10	AATREX	4 LB/GAL	L	L	2 pt/a	15 GAL/AC	946 mL	946 mL	15.77 mL/mx
	INTERMOC	428 g/L	F	F	70 fl oz/a	15 GAL/AC	946 mL	946 mL	34.49 mL/mx
	MOTIF	480 g/L	SC	SC	3.36 fl oz/a	15 GAL/AC	946 mL	946 mL	1.655 mL/mx
	N-PAK AMS	3.4 LBA/GAL	L	L	2.5 % v/v	15 GAL/AC	946 mL	946 mL	23.65 mL/mx
	COC	100 %	SL	SL	1 % v/v	15 GAL/AC	946 mL	946 mL	9.459 mL/mx

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Reps: 4

Plots: 6.67 by 25 feet

Appl. Amount: 15 GAL/AC

Mix Size: 946 mL (total for 4 plots; minimum=869.4 mL)

Trt No.	Treatment Name	Form Conc	Form Unit	Form Type	Rate Rate Unit	Appl Amount Unit	Mix Size Unit	Mix Unit	Amt to Measure
11	AATREX	4 LB/GAL	L	L	2 pt/a	15 GAL/AC	946 mL	946 mL	15.77 mL/mx
	HALEX GT	4.389 LBAE/GAL	L	L	2 qt/a	15 GAL/AC	946 mL	946 mL	31.53 mL/mx
	ACTIVATOR 90 NIS	100 %		SL	0.25 % v/v	15 GAL/AC	946 mL	946 mL	2.365 mL/mx
	N-PAK AMS	3.4 LBA/GAL	L	L	2.5 % v/v	15 GAL/AC	946 mL	946 mL	23.65 mL/mx
12	HARNESS XTRA 5.6L	5.6 LB/GAL	SE	SE	3.2 pt/a	15 GAL/AC	946 mL	946 mL	25.23 mL/mx
	IMPACTZ	4.26 LB/GAL	SC	SC	10.7 fl oz/a	15 GAL/AC	946 mL	946 mL	5.272 mL/mx
	MSO	100 %		SL	1 % v/v	15 GAL/AC	946 mL	946 mL	9.459 mL/mx
	N-PAK AMS	3.4 LBA/GAL	L	L	2.5 % v/v	15 GAL/AC	946 mL	946 mL	23.65 mL/mx
13	HARNESS XTRA 5.6L	5.6 LB/GAL	SE	SE	3.2 pt/a	15 GAL/AC	946 mL	946 mL	25.23 mL/mx
	IMPACTZ	4.26 LB/GAL	SC	SC	8 fl oz/a	15 GAL/AC	946 mL	946 mL	3.942 mL/mx
	LIBERTY 280 SL	2.34 LB/GAL	SL	SL	22 fl oz/a	15 GAL/AC	946 mL	946 mL	10.84 mL/mx
	MSO	100 %		SL	0.5 % v/v	15 GAL/AC	946 mL	946 mL	4.729 mL/mx
	N-PAK AMS	3.4 LBA/GAL	L	L	2.5 % v/v	15 GAL/AC	946 mL	946 mL	23.65 mL/mx
14	HARNESS XTRA 5.6L	5.6 LB/GAL	SE	SE	3.2 pt/a	15 GAL/AC	946 mL	946 mL	25.23 mL/mx
	SHIELDDEX	3.33 LBA/GAL	SC	SC	1.35 fl oz/a	15 GAL/AC	946 mL	946 mL	0.6652 mL/mx
	AATREX	4 LB/GAL	L	L	0.67 pt/a	15 GAL/AC	946 mL	946 mL	5.282 mL/mx
	MSO	100 %		SL	1 % v/v	15 GAL/AC	946 mL	946 mL	9.459 mL/mx
	N-PAK AMS	3.4 LBA/GAL	L	L	2.5 % v/v	15 GAL/AC	946 mL	946 mL	23.65 mL/mx
15	HARNESS	7 LB/GAL	EC	EC	1.75 pt/a	15 GAL/AC	946 mL	946 mL	13.8 mL/mx
	IMPACT	2.8 LB/GAL	L	L	1 fl oz/a	15 GAL/AC	946 mL	946 mL	0.4927 mL/mx
	AATREX	4 LB/GAL	L	L	1 pt/a	15 GAL/AC	946 mL	946 mL	7.883 mL/mx
	MSO	100 %		SL	0.5 % v/v	15 GAL/AC	946 mL	946 mL	4.729 mL/mx
	N-PAK AMS	3.4 LBA/GAL	L	L	2.5 % v/v	15 GAL/AC	946 mL	946 mL	23.65 mL/mx
16	HARNESS	7 LB/GAL	EC	EC	1.75 pt/a	15 GAL/AC	946 mL	946 mL	13.8 mL/mx
	IMPACT	2.8 LB/GAL	L	L	0.75 fl oz/a	15 GAL/AC	946 mL	946 mL	0.3695 mL/mx
	ROUNDUP POWERMAX	4.5 LBAE/GAL	SL	SL	32 fl oz/a	15 GAL/AC	946 mL	946 mL	15.77 mL/mx
	AATREX	4 LB/GAL	L	L	1 pt/a	15 GAL/AC	946 mL	946 mL	7.883 mL/mx
	MSO	100 %		SL	0.25 % v/v	15 GAL/AC	946 mL	946 mL	2.365 mL/mx
	N-PAK AMS	3.4 LBA/GAL	L	L	2.5 % v/v	15 GAL/AC	946 mL	946 mL	23.65 mL/mx
17	HELMET	7.8 LB/GAL	L	L	1.67 pt/a	15 GAL/AC	946 mL	946 mL	13.17 mL/mx
	HAI TRADENAME	100 %		L	3.42 fl oz/a	15 GAL/AC	946 mL	946 mL	1.685 mL/mx
	MSO	100 %		SL	1 % v/v	15 GAL/AC	946 mL	946 mL	9.459 mL/mx
	UAN 28%	100 %		L	2.5 % v/v	15 GAL/AC	946 mL	946 mL	23.65 mL/mx
18	HELMET	7.8 LB/GAL	L	L	1.67 pt/a	15 GAL/AC	946 mL	946 mL	13.17 mL/mx
	HAI TRADENAME	100 %		L	3.42 fl oz/a	15 GAL/AC	946 mL	946 mL	1.685 mL/mx
	AATREX	4 LB/GAL	L	L	1.5 pt/a	15 GAL/AC	946 mL	946 mL	11.82 mL/mx
	MSO	100 %		SL	1 % v/v	15 GAL/AC	946 mL	946 mL	9.459 mL/mx
	UAN 28%	100 %		L	2.5 % v/v	15 GAL/AC	946 mL	946 mL	23.65 mL/mx

Sort Order: Replicate 1

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Product quantities required for listed treatments and applications of trials included in this table:

Amount*	Unit	Treatment Name	Form Conc	Form Unit	Form Type	Lot Code
197.477	mL	BICEP LITE II MAGNUM	6	LBA/GAL	L	
2.248	mL	SHIELDEX	3.33	LBA/GAL	SC	
169.196	mL	AATREX	4	LB/GAL	L	
109.369	mL	MSO	100	%	SL	
384.271	mL	N-PAK AMS	3.4	LBA/GAL	L	
1.694	mL	IMPACT	2.8	LB/GAL	L	
1.848	mL	LAUDIS	3.5	LB/GAL	L	
1.848	mL	CALLISTO	4	LB/GAL	L	
5.912	mL	ACTIVATOR 90 NIS	100	%	SL	
86.224	mL	INTERMOC	428	g/L	F	
2.069	mL	MOTIF	480	g/L	SC	
11.824	mL	COC	100	%	SL	
39.417	mL	HALEX GT	4.389	LBAE/GAL	L	
94.600	mL	HARNESS XTRA 5.6L	5.6	LB/GAL	SE	
11.517	mL	IMPACTZ	4.26	LB/GAL	SC	
13.549	mL	LIBERTY 280 SL	2.34	LB/GAL	SL	
34.490	mL	HARNESS	7	LB/GAL	EC	
19.708	mL	ROUNDUP POWERMAX	4.5	LBAE/GAL	SL	
32.913	mL	HELMET	7.8	LB/GAL	L	
4.213	mL	HAI TRADENAME	100	%	L	
59.119	mL	UAN 28%	100	%	L	

* 'Per area' calculations based on application amount= 15 GAL/AC, mix size= 946 mL (mix size basis).

* Product amount calculations increased 25 % for overage adjustment.

* 'Per volume' calculations use spray volume= 15 GAL/AC, mix size= 946 mL.

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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	Jun-17-2019	Jun-28-2019	
Part Rated	PLOT -	PLOT -	
Rating Type	PHYGEN	PHYGEN	
Rating Unit	%	%	
Sample Size			
Number of Subsamples	1	1	
Assessed By	C. HODGSKISS	D. JOHNSON	
Data Entry Date	Jun-25-2019	Jul-18-2019	
Rating Timing	A1	A2	
Days After First/Last Applic.	14 14	25 25	
Trt-Eval Interval	21 DA-A	21 DA-A	
Plant-Eval Interval	14 DP-1	25 DP-1	
Days After Emergence	5 DE-1	16 DE-1	
ARM Action Codes	P	P	
Number of Decimals	0	0	
Trt Treatment	Rate	Appl	
No. Name	Rate Unit	Code	
			1 2
1 UNTREATED CHECK			0 0
2 BICEP LITE II MAGNUM	1.67 qt/a	A	0 a 0 a
3 BICEP LITE II MAGNUM	1.67 qt/a	A	0 a 0 a
SHIELDEX	1 fl oz/a	C	
AATREX	1 pt/a	C	
MSO	1 % v/v	C	
N-PAK AMS	2.5 % v/v	C	
4 BICEP LITE II MAGNUM	1.67 qt/a	A	0 a 0 a
SHIELDEX	1.3 fl oz/a	C	
AATREX	1 pt/a	C	
MSO	1 % v/v	C	
N-PAK AMS	2.5 % 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.

Missing data estimates are included in columns: Yates=2,3,4,5,20,21,22,24

Could not calculate LSD (% mean diff) for columns 2,18 because error mean square = 0.

Purdue Weed Science

Corn Herbicide Programs Showcase

Trial ID: 19S-MGS-CORN-11	Location: Meigs	Trial Year
Protocol ID: 19S-MGS-CORN-11	Investigator (Creator): Dr. Bill Johnson	
Project ID: Showcase	Study Director: Dustin Johnson & Marcelo Zimmer	
	Sponsor Contact: UPL/Summit Agro/AMVAC	

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	Jun-17-2019	Jun-28-2019	
Part Rated	PLOT -	PLOT -	
Rating Type	PHYGEN	PHYGEN	
Rating Unit	%	%	
Sample Size			
Number of Subsamples	1	1	
Assessed By	C. HODGSKISS	D. JOHNSON	
Data Entry Date	Jun-25-2019	Jul-18-2019	
Rating Timing	A1	A2	
Days After First/Last Applic.	14 14	25 25	
Trt-Eval Interval	21 DA-A	21 DA-A	
Plant-Eval Interval	14 DP-1	25 DP-1	
Days After Emergence	5 DE-1	16 DE-1	
ARM Action Codes	P	P	
Number of Decimals	0	0	
Trt Treatment	Rate	Appl	
No. Name	Rate Unit	Code	
			1 2
5 BICEP LITE II MAGNUM	1.67 qt/a	A	3 a 0 a
IMPACT	1 fl oz/a	C	
AATREX	1 pt/a	C	
MSO	1 % v/v	C	
N-PAK AMS	2.5 % v/v	C	
6 BICEP LITE II MAGNUM	1.67 qt/a	A	0 a 0 a
LAUDIS	3 fl oz/a	C	
AATREX	1 pt/a	C	
MSO	1 % v/v	C	
N-PAK AMS	2.5 % 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.

Missing data estimates are included in columns: Yates=2,3,4,5,20,21,22,24

Could not calculate LSD (% mean diff) for columns 2,18 because error mean square = 0.

Purdue Weed Science

Corn Herbicide Programs Showcase

Trial ID: 19S-MGS-CORN-11	Location: Meigs	Trial Year
Protocol ID: 19S-MGS-CORN-11	Investigator (Creator): Dr. Bill Johnson	
Project ID: Showcase	Study Director: Dustin Johnson & Marcelo Zimmer	
	Sponsor Contact: UPL/Summit Agro/AMVAC	

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	Jun-17-2019	Jun-28-2019	
Part Rated	PLOT -	PLOT -	
Rating Type	PHYGEN	PHYGEN	
Rating Unit	%	%	
Sample Size			
Number of Subsamples	1	1	
Assessed By	C. HODGSKISS	D. JOHNSON	
Data Entry Date	Jun-25-2019	Jul-18-2019	
Rating Timing	A1	A2	
Days After First/Last Applic.	14 14	25 25	
Trt-Eval Interval	21 DA-A	21 DA-A	
Plant-Eval Interval	14 DP-1	25 DP-1	
Days After Emergence	5 DE-1	16 DE-1	
ARM Action Codes	P	P	
Number of Decimals	0	0	
Trt Treatment	Rate	Appl	
No. Name	Rate Unit	Code	
			1 2
7 BICEP LITE II MAGNUM	1.67 qt/a	A	0 a 0 a
CALLISTO	3 fl oz/a	C	
AATREX	1 pt/a	C	
ACTIVATOR 90 NIS	0.25 % v/v	C	
N-PAK AMS	2.5 % v/v	C	
8 AATREX	2 pt/a	A	0 a 0 a
9 AATREX	2 pt/a	A	0 a 0 a
INTERMOC	70 fl oz/a	D	
N-PAK AMS	2.5 % v/v	D	

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.

Missing data estimates are included in columns: Yates=2,3,4,5,20,21,22,24

Could not calculate LSD (% mean diff) for columns 2,18 because error mean square = 0.

Purdue Weed Science

Corn Herbicide Programs Showcase

Trial ID: 19S-MGS-CORN-11	Location: Meigs	Trial Year
Protocol ID: 19S-MGS-CORN-11	Investigator (Creator): Dr. Bill Johnson	
Project ID: Showcase	Study Director: Dustin Johnson & Marcelo Zimmer	
	Sponsor Contact: UPL/Summit Agro/AMVAC	

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	Jun-17-2019	Jun-28-2019	
Part Rated	PLOT -	PLOT -	
Rating Type	PHYGEN	PHYGEN	
Rating Unit	%	%	
Sample Size			
Number of Subsamples	1	1	
Assessed By	C. HODGSKISS	D. JOHNSON	
Data Entry Date	Jun-25-2019	Jul-18-2019	
Rating Timing	A1	A2	
Days After First/Last Applic.	14 14	25 25	
Trt-Eval Interval	21 DA-A	21 DA-A	
Plant-Eval Interval	14 DP-1	25 DP-1	
Days After Emergence	5 DE-1	16 DE-1	
ARM Action Codes	P	P	
Number of Decimals	0	0	
Trt Treatment	Rate	Appl	
No. Name	Rate Unit	Code	
			1 2
10 AATREX	2 pt/a	A	0 a 0 a
INTERMOC	70 fl oz/a	D	
MOTIF	3.36 fl oz/a	D	
N-PAK AMS	2.5 % v/v	D	
COC	1 % v/v	D	
11 AATREX	2 pt/a	A	1 a 0 a
HALEX GT	2 qt/a	D	
ACTIVATOR 90 NIS	0.25 % v/v	D	
N-PAK AMS	2.5 % v/v	D	
12 HARNESS XTRA 5.6L	3.2 pt/a	A	0 a 0 a
IMPACTZ	10.7 fl oz/a	C	
MSO	1 % v/v	C	
N-PAK AMS	2.5 % 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.

Missing data estimates are included in columns: Yates=2,3,4,5,20,21,22,24

Could not calculate LSD (% mean diff) for columns 2,18 because error mean square = 0.

Purdue Weed Science

Corn Herbicide Programs Showcase

Trial ID: 19S-MGS-CORN-11	Location: Meigs	Trial Year
Protocol ID: 19S-MGS-CORN-11	Investigator (Creator): Dr. Bill Johnson	
Project ID: Showcase	Study Director: Dustin Johnson & Marcelo Zimmer	
	Sponsor Contact: UPL/Summit Agro/AMVAC	

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	Jun-17-2019	Jun-28-2019	
Part Rated	PLOT -	PLOT -	
Rating Type	PHYGEN	PHYGEN	
Rating Unit	%	%	
Sample Size			
Number of Subsamples	1	1	
Assessed By	C. HODGSKISS	D. JOHNSON	
Data Entry Date	Jun-25-2019	Jul-18-2019	
Rating Timing	A1	A2	
Days After First/Last Applic.	14 14	25 25	
Trt-Eval Interval	21 DA-A	21 DA-A	
Plant-Eval Interval	14 DP-1	25 DP-1	
Days After Emergence	5 DE-1	16 DE-1	
ARM Action Codes	P	P	
Number of Decimals	0	0	
Trt Treatment	Rate	Appl	
No. Name	Rate Unit	Code	
			1 2
13 HARNESS XTRA 5.6L	3.2 pt/a	A	0 a 0 a
IMPACTZ	8 fl oz/a	C	
LIBERTY 280 SL	22 fl oz/a	C	
MSO	0.5 % v/v	C	
N-PAK AMS	2.5 % v/v	C	
14 HARNESS XTRA 5.6L	3.2 pt/a	A	0 a 0 a
SHIELDEX	1.35 fl oz/a	C	
AATREX	0.67 pt/a	C	
MSO	1 % v/v	C	
N-PAK AMS	2.5 % 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.

Missing data estimates are included in columns: Yates=2,3,4,5,20,21,22,24

Could not calculate LSD (% mean diff) for columns 2,18 because error mean square = 0.

Purdue Weed Science

Corn Herbicide Programs Showcase

Trial ID: 19S-MGS-CORN-11	Location: Meigs	Trial Year
Protocol ID: 19S-MGS-CORN-11	Investigator (Creator): Dr. Bill Johnson	
Project ID: Showcase	Study Director: Dustin Johnson & Marcelo Zimmer	
	Sponsor Contact: UPL/Summit Agro/AMVAC	

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	Jun-17-2019	Jun-28-2019	
Part Rated	PLOT -	PLOT -	
Rating Type	PHYGEN	PHYGEN	
Rating Unit	%	%	
Sample Size			
Number of Subsamples	1	1	
Assessed By	C. HODGSKISS	D. JOHNSON	
Data Entry Date	Jun-25-2019	Jul-18-2019	
Rating Timing	A1	A2	
Days After First/Last Applic.	14 14	25 25	
Trt-Eval Interval	21 DA-A	21 DA-A	
Plant-Eval Interval	14 DP-1	25 DP-1	
Days After Emergence	5 DE-1	16 DE-1	
ARM Action Codes	P	P	
Number of Decimals	0	0	
Trt Treatment	Rate	Appl	
No. Name	Rate Unit	Code	
			1 2
15 HARNESS	1.75 pt/a	B	0 a
IMPACT	1 fl oz/a	B	
AATREX	1 pt/a	B	
MSO	0.5 % v/v	B	
N-PAK AMS	2.5 % v/v	B	
16 HARNESS	1.75 pt/a	B	0 a
IMPACT	0.75 fl oz/a	B	
ROUNDUP POWERMAX	32 fl oz/a	B	
AATREX	1 pt/a	B	
MSO	0.25 % v/v	B	
N-PAK AMS	2.5 % v/v	B	

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Untreated treatment(s) 1 excluded from analysis.

Missing data estimates are included in columns: Yates=2,3,4,5,20,21,22,24

Could not calculate LSD (% mean diff) for columns 2,18 because error mean square = 0.

Purdue Weed Science

Corn Herbicide Programs Showcase

Trial ID: 19S-MGS-CORN-11	Location: Meigs	Trial Year
Protocol ID: 19S-MGS-CORN-11	Investigator (Creator): Dr. Bill Johnson	
Project ID: Showcase	Study Director: Dustin Johnson & Marcelo Zimmer	
	Sponsor Contact: UPL/Summit Agro/AMVAC	

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	Jun-17-2019	Jun-28-2019
Part Rated	PLOT -	PLOT -
Rating Type	PHYGEN	PHYGEN
Rating Unit	%	%
Sample Size		
Number of Subsamples	1	1
Assessed By	C. HODGSKISS	D. JOHNSON
Data Entry Date	Jun-25-2019	Jul-18-2019
Rating Timing	A1	A2
Days After First/Last Applic.	14 14	25 25
Trt-Eval Interval	21 DA-A	21 DA-A
Plant-Eval Interval	14 DP-1	25 DP-1
Days After Emergence	5 DE-1	16 DE-1
ARM Action Codes	P	P
Number of Decimals	0	0
Trt Treatment		
No. Name	Rate Unit Appl Code	
	1	2
17 HELMET	1.67 pt/a A	0 a
HAI TRADENAME	3.42 fl oz/a C	0 a
MSO	1 % v/v C	
UAN 28%	2.5 % 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.

Missing data estimates are included in columns: Yates=2,3,4,5,20,21,22,24

Could not calculate LSD (% mean diff) for columns 2,18 because error mean square = 0.

Purdue Weed Science

Corn Herbicide Programs Showcase

Trial ID: 19S-MGS-CORN-11	Location: Meigs	Trial Year
Protocol ID: 19S-MGS-CORN-11	Investigator (Creator): Dr. Bill Johnson	
Project ID: Showcase	Study Director: Dustin Johnson & Marcelo Zimmer	
	Sponsor Contact: UPL/Summit Agro/AMVAC	

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	Jun-17-2019	Jun-28-2019	
Part Rated	PLOT -	PLOT -	
Rating Type	PHYGEN	PHYGEN	
Rating Unit	%	%	
Sample Size			
Number of Subsamples	1	1	
Assessed By	C. HODGSKISS	D. JOHNSON	
Data Entry Date	Jun-25-2019	Jul-18-2019	
Rating Timing	A1	A2	
Days After First/Last Applic.	14 14	25 25	
Trt-Eval Interval	21 DA-A	21 DA-A	
Plant-Eval Interval	14 DP-1	25 DP-1	
Days After Emergence	5 DE-1	16 DE-1	
ARM Action Codes	P	P	
Number of Decimals	0	0	
Trt Treatment	Rate	Appl	
No. Name	Rate Unit	Code	
			1 2
18 HELMET	1.67 pt/a	A	0 a 0 a
HAI TRADENAME	3.42 fl oz/a	C	
AATREX	1.5 pt/a	C	
MSO	1 % v/v	C	
UAN 28%	2.5 % v/v	C	
LSD P=.05	1.9	.	
Standard Deviation	1.3	0.0	
CV	599.07	0.0	
Grand Mean	0.2	0.0	
Levene's F	0.95	0.00	
Levene's Prob(F)	0.522	0.00*	
Rank X2	.	.	
P(Rank X2)	.	.	
Skewness	6.557*	.	

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Untreated treatment(s) 1 excluded from analysis.

Missing data estimates are included in columns: Yates=2,3,4,5,20,21,22,24

Could not calculate LSD (% mean diff) for columns 2,18 because error mean square = 0.

Purdue Weed Science

Corn Herbicide Programs Showcase

Trial ID: 19S-MGS-CORN-11	Location: Meigs	Trial Year
Protocol ID: 19S-MGS-CORN-11	Investigator (Creator): Dr. Bill Johnson	
Project ID: Showcase	Study Director: Dustin Johnson & Marcelo Zimmer	
	Sponsor Contact: UPL/Summit Agro/AMVAC	

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	Jun-17-2019	Jun-28-2019
Part Rated	PLOT -	PLOT -
Rating Type	PHYGEN	PHYGEN
Rating Unit	%	%
Sample Size		
Number of Subsamples	1	1
Assessed By	C. HODGSKISS	D. JOHNSON
Data Entry Date	Jun-25-2019	Jul-18-2019
Rating Timing	A1	A2
Days After First/Last Applic.	14 14	25 25
Trt-Eval Interval	21 DA-A	21 DA-A
Plant-Eval Interval	14 DP-1	25 DP-1
Days After Emergence	5 DE-1	16 DE-1
ARM Action Codes	P	P
Number of Decimals	0	0
Trt Treatment	Rate	Appl
No. Name	Rate Unit	Code
		1
		2
Kurtosis	44.703*	.
Replicate F	1.895	0.000
Replicate Prob(F)	0.1431	1.0000
Treatment F	1.000	0.000
Treatment Prob(F)	0.4727	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.

Missing data estimates are included in columns: Yates=2,3,4,5,20,21,22,24

Could not calculate LSD (% mean diff) for columns 2,18 because error mean square = 0.

Purdue Weed Science

Corn Herbicide Programs Showcase

Trial ID: 19S-MGS-CORN-11	Location: Meigs	Trial Year
Protocol ID: 19S-MGS-CORN-11	Investigator (Creator): Dr. Bill Johnson	
Project ID: Showcase	Study Director: Dustin Johnson & Marcelo Zimmer	
	Sponsor Contact: UPL/Summit Agro/AMVAC	

	W Weed	W Weed
	AMATA	AMBTR
Pest Type	Amaranthus tamariscinus	Ambrosia trifida
Pest Code	Common waterhemp	Giant ragweed
Pest Scientific Name	C ZEAMX	C ZEAMX
Pest Name	BCOR	BCOR
Crop Type, Code	Zea mays	Zea mays
BBCH Scale	Corn	Corn
Crop Scientific Name	Jun-28-2019	Jun-28-2019
Crop Name	PLOT -	PLOT -
Rating Date	CONTRO	CONTRO
Part Rated	%	%
Rating Type		
Rating Unit	1	1
Sample Size	D. JOHNSON	D. JOHNSON
Number of Subsamples	Jul-18-2019	Jul-18-2019
Assessed By	A2	A2
Data Entry Date	25 25	25 25
Rating Timing	21 DA-A	21 DA-A
Days After First/Last Applic.	25 DP-1	25 DP-1
Trt-Eval Interval	16 DE-1	16 DE-1
Plant-Eval Interval	P	P
Days After Emergence	0	0
ARM Action Codes		
Number of Decimals		
Trt Treatment	Rate	Appl
No. Name	Rate Unit	Code
	3	4
1 UNTREATED CHECK	0	0
2 BICEP LITE II MAGNUM	1.67 qt/a A	100 a
		80 a
3 BICEP LITE II MAGNUM	1.67 qt/a A	100 a
		93 a
SHIELDDEX	1 fl oz/a C	
AATREX	1 pt/a C	
MSO	1 % v/v C	
N-PAK AMS	2.5 % v/v C	
4 BICEP LITE II MAGNUM	1.67 qt/a A	100 a
		58 a
SHIELDDEX	1.3 fl oz/a C	
AATREX	1 pt/a C	
MSO	1 % v/v C	
N-PAK AMS	2.5 % 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.

Missing data estimates are included in columns: Yates=2,3,4,5,20,21,22,24

Could not calculate LSD (% mean diff) for columns 2,18 because error mean square = 0.

Purdue Weed Science

Corn Herbicide Programs Showcase

Trial ID: 19S-MGS-CORN-11	Location: Meigs	Trial Year
Protocol ID: 19S-MGS-CORN-11	Investigator (Creator): Dr. Bill Johnson	
Project ID: Showcase	Study Director: Dustin Johnson & Marcelo Zimmer	
	Sponsor Contact: UPL/Summit Agro/AMVAC	

Pest Type	W Weed	W Weed
Pest Code	AMATA	AMBTR
Pest Scientific Name	Amaranthus tamariscinus	Ambrosia trifida
Pest Name	Common waterhemp	Giant ragweed
Crop Type, Code	C ZEAMX	C ZEAMX
BBCH Scale	BCOR	BCOR
Crop Scientific Name	Zea mays	Zea mays
Crop Name	Corn	Corn
Rating Date	Jun-28-2019	Jun-28-2019
Part Rated	PLOT -	PLOT -
Rating Type	CONTRO	CONTRO
Rating Unit	%	%
Sample Size		
Number of Subsamples	1	1
Assessed By	D. JOHNSON	D. JOHNSON
Data Entry Date	Jul-18-2019	Jul-18-2019
Rating Timing	A2	A2
Days After First/Last Applic.	25 25	25 25
Trt-Eval Interval	21 DA-A	21 DA-A
Plant-Eval Interval	25 DP-1	25 DP-1
Days After Emergence	16 DE-1	16 DE-1
ARM Action Codes	P	P
Number of Decimals	0	0
Trt Treatment		
No. Name	Rate Unit Appl Code	
	3	4
5 BICEP LITE II MAGNUM	1.67 qt/a A	
IMPACT	1 fl oz/a C	
AATREX	1 pt/a C	
MSO	1 % v/v C	
N-PAK AMS	2.5 % v/v C	
	100 a	83 a
6 BICEP LITE II MAGNUM	1.67 qt/a A	
LAUDIS	3 fl oz/a C	
AATREX	1 pt/a C	
MSO	1 % v/v C	
N-PAK AMS	2.5 % v/v C	
	100 a	81 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.

Missing data estimates are included in columns: Yates=2,3,4,5,20,21,22,24

Could not calculate LSD (% mean diff) for columns 2,18 because error mean square = 0.

Purdue Weed Science

Corn Herbicide Programs Showcase

Trial ID: 19S-MGS-CORN-11	Location: Meigs	Trial Year
Protocol ID: 19S-MGS-CORN-11	Investigator (Creator): Dr. Bill Johnson	
Project ID: Showcase	Study Director: Dustin Johnson & Marcelo Zimmer	
	Sponsor Contact: UPL/Summit Agro/AMVAC	

Pest Type	W Weed	W Weed
Pest Code	AMATA	AMBTR
Pest Scientific Name	Amaranthus tamariscinus	Ambrosia trifida
Pest Name	Common waterhemp	Giant ragweed
Crop Type, Code	C ZEAMX	C ZEAMX
BBCH Scale	BCOR	BCOR
Crop Scientific Name	Zea mays	Zea mays
Crop Name	Corn	Corn
Rating Date	Jun-28-2019	Jun-28-2019
Part Rated	PLOT -	PLOT -
Rating Type	CONTRO	CONTRO
Rating Unit	%	%
Sample Size		
Number of Subsamples	1	1
Assessed By	D. JOHNSON	D. JOHNSON
Data Entry Date	Jul-18-2019	Jul-18-2019
Rating Timing	A2	A2
Days After First/Last Applic.	25 25	25 25
Trt-Eval Interval	21 DA-A	21 DA-A
Plant-Eval Interval	25 DP-1	25 DP-1
Days After Emergence	16 DE-1	16 DE-1
ARM Action Codes	P	P
Number of Decimals	0	0
Trt Treatment	Rate	Appl
No. Name	Rate Unit	Code
	3	4
7 BICEP LITE II MAGNUM	1.67 qt/a	A
CALLISTO	3 fl oz/a	C
AATREX	1 pt/a	C
ACTIVATOR 90 NIS	0.25 % v/v	C
N-PAK AMS	2.5 % v/v	C
8 AATREX	2 pt/a	A
	44 d	81 a
9 AATREX	2 pt/a	A
INTERMOC	70 fl oz/a	D
N-PAK AMS	2.5 % v/v	D
	60 c	68 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.

Missing data estimates are included in columns: Yates=2,3,4,5,20,21,22,24

Could not calculate LSD (% mean diff) for columns 2,18 because error mean square = 0.

Purdue Weed Science

Corn Herbicide Programs Showcase				Trial Year
Trial ID: 19S-MGS-CORN-11		Location: Meigs		
Protocol ID: 19S-MGS-CORN-11		Investigator (Creator): Dr. Bill Johnson		
Project ID: Showcase		Study Director: Dustin Johnson & Marcelo Zimmer		
Sponsor Contact: UPL/Summit Agro/AMVAC				
Pest Type		W Weed	W Weed	
Pest Code		AMATA	AMBTR	
Pest Scientific Name		Amaranthus tamariscinus	Ambrosia trifida	
Pest Name		Common waterhemp	Giant ragweed	
Crop Type, Code		C ZEAMX	C ZEAMX	
BBCH Scale		BCOR	BCOR	
Crop Scientific Name		Zea mays	Zea mays	
Crop Name		Corn	Corn	
Rating Date		Jun-28-2019	Jun-28-2019	
Part Rated		PLOT -	PLOT -	
Rating Type		CONTRO	CONTRO	
Rating Unit		%	%	
Sample Size				
Number of Subsamples		1	1	
Assessed By		D. JOHNSON	D. JOHNSON	
Data Entry Date		Jul-18-2019	Jul-18-2019	
Rating Timing		A2	A2	
Days After First/Last Applic.		25 25	25 25	
Trt-Eval Interval		21 DA-A	21 DA-A	
Plant-Eval Interval		25 DP-1	25 DP-1	
Days After Emergence		16 DE-1	16 DE-1	
ARM Action Codes		P	P	
Number of Decimals		0	0	
Trt Treatment	Rate	Appl		
No. Name	Rate Unit	Code	3	4
10 AATREX	2 pt/a	A	64 c	56 a
INTERMOC	70 fl oz/a	D		
MOTIF	3.36 fl oz/a	D		
N-PAK AMS	2.5 % v/v	D		
COC	1 % v/v	D		
11 AATREX	2 pt/a	A	66 c	70 a
HALEX GT	2 qt/a	D		
ACTIVATOR 90 NIS	0.25 % v/v	D		
N-PAK AMS	2.5 % v/v	D		
12 HARNESS XTRA 5.6L	3.2 pt/a	A	98 ab	89 a
IMPACTZ	10.7 fl oz/a	C		
MSO	1 % v/v	C		
N-PAK AMS	2.5 % 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.

Missing data estimates are included in columns: Yates=2,3,4,5,20,21,22,24

Could not calculate LSD (% mean diff) for columns 2,18 because error mean square = 0.

Purdue Weed Science

Corn Herbicide Programs Showcase

Trial ID: 19S-MGS-CORN-11	Location: Meigs	Trial Year
Protocol ID: 19S-MGS-CORN-11	Investigator (Creator): Dr. Bill Johnson	
Project ID: Showcase	Study Director: Dustin Johnson & Marcelo Zimmer	
	Sponsor Contact: UPL/Summit Agro/AMVAC	

	W Weed	W Weed
Pest Type	AMATA	AMBTR
Pest Code	AMATA	AMBTR
Pest Scientific Name	Amaranthus tamariscinus	Ambrosia trifida
Pest Name	Common waterhemp	Giant ragweed
Crop Type, Code	C ZEAMX	C ZEAMX
BBCH Scale	BCOR	BCOR
Crop Scientific Name	Zea mays	Zea mays
Crop Name	Corn	Corn
Rating Date	Jun-28-2019	Jun-28-2019
Part Rated	PLOT -	PLOT -
Rating Type	CONTRO	CONTRO
Rating Unit	%	%
Sample Size		
Number of Subsamples	1	1
Assessed By	D. JOHNSON	D. JOHNSON
Data Entry Date	Jul-18-2019	Jul-18-2019
Rating Timing	A2	A2
Days After First/Last Applic.	25 25	25 25
Trt-Eval Interval	21 DA-A	21 DA-A
Plant-Eval Interval	25 DP-1	25 DP-1
Days After Emergence	16 DE-1	16 DE-1
ARM Action Codes	P	P
Number of Decimals	0	0
Trt Treatment		
No. Name	3	4
13 HARNESS XTRA 5.6L	3.2 pt/a A	96 ab
IMPACTZ	8 fl oz/a C	51 a
LIBERTY 280 SL	22 fl oz/a C	
MSO	0.5 % v/v C	
N-PAK AMS	2.5 % v/v C	
14 HARNESS XTRA 5.6L	3.2 pt/a A	92 ab
SHIELDEX	1.35 fl oz/a C	88 a
AATREX	0.67 pt/a C	
MSO	1 % v/v C	
N-PAK AMS	2.5 % 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.

Missing data estimates are included in columns: Yates=2,3,4,5,20,21,22,24

Could not calculate LSD (% mean diff) for columns 2,18 because error mean square = 0.

Purdue Weed Science

Corn Herbicide Programs Showcase				Trial Year
Trial ID: 19S-MGS-CORN-11		Location: Meigs		
Protocol ID: 19S-MGS-CORN-11		Investigator (Creator): Dr. Bill Johnson		
Project ID: Showcase		Study Director: Dustin Johnson & Marcelo Zimmer		
Sponsor Contact: UPL/Summit Agro/AMVAC				
Pest Type		W Weed	W Weed	
Pest Code		AMATA	AMBTR	
Pest Scientific Name		Amaranthus tamariscinus	Ambrosia trifida	
Pest Name		Common waterhemp	Giant ragweed	
Crop Type, Code		C ZEAMX	C ZEAMX	
BBCH Scale		BCOR	BCOR	
Crop Scientific Name		Zea mays	Zea mays	
Crop Name		Corn	Corn	
Rating Date		Jun-28-2019	Jun-28-2019	
Part Rated		PLOT -	PLOT -	
Rating Type		CONTRO	CONTRO	
Rating Unit		%	%	
Sample Size				
Number of Subsamples		1	1	
Assessed By		D. JOHNSON	D. JOHNSON	
Data Entry Date		Jul-18-2019	Jul-18-2019	
Rating Timing		A2	A2	
Days After First/Last Applic.		25 25	25 25	
Trt-Eval Interval		21 DA-A	21 DA-A	
Plant-Eval Interval		25 DP-1	25 DP-1	
Days After Emergence		16 DE-1	16 DE-1	
ARM Action Codes		P	P	
Number of Decimals		0	0	
Trt Treatment	Rate	Appl		
No. Name	Rate Unit	Code	3	4
15 HARNESS	1.75 pt/a	B		
IMPACT	1 fl oz/a	B		
AATREX	1 pt/a	B		
MSO	0.5 % v/v	B		
N-PAK AMS	2.5 % v/v	B		
16 HARNESS	1.75 pt/a	B		
IMPACT	0.75 fl oz/a	B		
ROUNDUP POWERMAX	32 fl oz/a	B		
AATREX	1 pt/a	B		
MSO	0.25 % v/v	B		
N-PAK AMS	2.5 % v/v	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.

Missing data estimates are included in columns: Yates=2,3,4,5,20,21,22,24

Could not calculate LSD (% mean diff) for columns 2,18 because error mean square = 0.

Purdue Weed Science

Corn Herbicide Programs Showcase

Trial ID: 19S-MGS-CORN-11	Location: Meigs	Trial Year
Protocol ID: 19S-MGS-CORN-11	Investigator (Creator): Dr. Bill Johnson	
Project ID: Showcase	Study Director: Dustin Johnson & Marcelo Zimmer	
	Sponsor Contact: UPL/Summit Agro/AMVAC	

Pest Type	W Weed	W Weed
Pest Code	AMATA	AMBTR
Pest Scientific Name	Amaranthus tamariscinus	Ambrosia trifida
Pest Name	Common waterhemp	Giant ragweed
Crop Type, Code	C ZEAMX	C ZEAMX
BBCH Scale	BCOR	BCOR
Crop Scientific Name	Zea mays	Zea mays
Crop Name	Corn	Corn
Rating Date	Jun-28-2019	Jun-28-2019
Part Rated	PLOT -	PLOT -
Rating Type	CONTRO	CONTRO
Rating Unit	%	%
Sample Size		
Number of Subsamples	1	1
Assessed By	D. JOHNSON	D. JOHNSON
Data Entry Date	Jul-18-2019	Jul-18-2019
Rating Timing	A2	A2
Days After First/Last Applic.	25 25	25 25
Trt-Eval Interval	21 DA-A	21 DA-A
Plant-Eval Interval	25 DP-1	25 DP-1
Days After Emergence	16 DE-1	16 DE-1
ARM Action Codes	P	P
Number of Decimals	0	0
Trt Treatment	Rate	Appl
No. Name	Rate Unit	Code
		3
		4
17 HELMET	1.67 pt/a A	85 b
HAI TRADENAME	3.42 fl oz/a C	99 a
MSO	1 % v/v C	
UAN 28%	2.5 % 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.

Missing data estimates are included in columns: Yates=2,3,4,5,20,21,22,24

Could not calculate LSD (% mean diff) for columns 2,18 because error mean square = 0.

Purdue Weed Science

Corn Herbicide Programs Showcase			Trial Year
Trial ID: 19S-MGS-CORN-11	Location: Meigs		
Protocol ID: 19S-MGS-CORN-11	Investigator (Creator): Dr. Bill Johnson		
Project ID: Showcase	Study Director: Dustin Johnson & Marcelo Zimmer		
	Sponsor Contact: UPL/Summit Agro/AMVAC		

Pest Type	W Weed	W Weed
Pest Code	AMATA	AMBTR
Pest Scientific Name	Amaranthus tamariscinus	Ambrosia trifida
Pest Name	Common waterhemp	Giant ragweed
Crop Type, Code	C ZEAMX	C ZEAMX
BBCH Scale	BCOR	BCOR
Crop Scientific Name	Zea mays	Zea mays
Crop Name	Corn	Corn
Rating Date	Jun-28-2019	Jun-28-2019
Part Rated	PLOT -	PLOT -
Rating Type	CONTRO	CONTRO
Rating Unit	%	%
Sample Size		
Number of Subsamples	1	1
Assessed By	D. JOHNSON	D. JOHNSON
Data Entry Date	Jul-18-2019	Jul-18-2019
Rating Timing	A2	A2
Days After First/Last Applic.	25 25	25 25
Trt-Eval Interval	21 DA-A	21 DA-A
Plant-Eval Interval	25 DP-1	25 DP-1
Days After Emergence	16 DE-1	16 DE-1
ARM Action Codes	P	P
Number of Decimals	0	0
Trt Treatment	Rate	Appl
No. Name	Rate Unit	Code
	3	4
18 HELMET	1.67 pt/a	A
HAI TRADENAME	3.42 fl oz/a	C
AATREX	1.5 pt/a	C
MSO	1 % v/v	C
UAN 28%	2.5 % v/v	C
LSD P=.05	12.9	33.2
Standard Deviation	9.0	23.3
CV	10.36	29.77
Grand Mean	87.0	78.1
Levene's F	2.454	0.839
Levene's Prob(F)	0.012*	0.625
Rank X2	.	.
P(Rank X2)	.	.
Skewness	-1.4613*	-1.0059*

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.

Missing data estimates are included in columns: Yates=2,3,4,5,20,21,22,24

Could not calculate LSD (% mean diff) for columns 2,18 because error mean square = 0.

Purdue Weed Science

Corn Herbicide Programs Showcase			Trial Year
Trial ID: 19S-MGS-CORN-11	Location: Meigs		
Protocol ID: 19S-MGS-CORN-11	Investigator (Creator): Dr. Bill Johnson		
Project ID: Showcase	Study Director: Dustin Johnson & Marcelo Zimmer		
	Sponsor Contact: UPL/Summit Agro/AMVAC		

Pest Type	W Weed	W Weed
Pest Code	AMATA	AMBTR
Pest Scientific Name	Amaranthus tamariscinus	Ambrosia trifida
Pest Name	Common waterhemp	Giant ragweed
Crop Type, Code	C ZEAMX	C ZEAMX
BBCH Scale	BCOR	BCOR
Crop Scientific Name	Zea mays	Zea mays
Crop Name	Corn	Corn
Rating Date	Jun-28-2019	Jun-28-2019
Part Rated	PLOT -	PLOT -
Rating Type	CONTRO	CONTRO
Rating Unit	%	%
Sample Size		
Number of Subsamples	1	1
Assessed By	D. JOHNSON	D. JOHNSON
Data Entry Date	Jul-18-2019	Jul-18-2019
Rating Timing	A2	A2
Days After First/Last Applic.	25 25	25 25
Trt-Eval Interval	21 DA-A	21 DA-A
Plant-Eval Interval	25 DP-1	25 DP-1
Days After Emergence	16 DE-1	16 DE-1
ARM Action Codes	P	P
Number of Decimals	0	0
Trt Treatment	Rate Appl	
No. Name	Rate Unit Code	
	3	4
Kurtosis	1.2335*	-0.0786
Replicate F	2.478	0.437
Replicate Prob(F)	0.0747	0.7275
Treatment F	17.490	1.567
Treatment Prob(F)	0.0001	0.1307

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.

Missing data estimates are included in columns: Yates=2,3,4,5,20,21,22,24

Could not calculate LSD (% mean diff) for columns 2,18 because error mean square = 0.

Purdue Weed Science

Corn Herbicide Programs Showcase

Trial ID: 19S-MGS-CORN-11	Location: Meigs	Trial Year
Protocol ID: 19S-MGS-CORN-11	Investigator (Creator): Dr. Bill Johnson	
Project ID: Showcase	Study Director: Dustin Johnson & Marcelo Zimmer	
	Sponsor Contact: UPL/Summit Agro/AMVAC	

Pest Type	W Weed	
Pest Code	SETFA	
Pest Scientific Name	Setaria faberi	
Pest Name	Giant foxtail	
Crop Type, Code	C ZEAMX	C ZEAMX
BBCH Scale	BCOR	BCOR
Crop Scientific Name	Zea mays	Zea mays
Crop Name	Corn	Corn
Rating Date	Jun-28-2019	Jul-5-2019
Part Rated	PLOT -	PLOT -
Rating Type	CONTRO	PHYGEN
Rating Unit	%	%
Sample Size		
Number of Subsamples	1	1
Assessed By	D. JOHNSON	D. JOHNSON
Data Entry Date	Jul-18-2019	Jul-18-2019
Rating Timing	A2	A3
Days After First/Last Applic.	25 25	32 4
Trt-Eval Interval	21 DA-A	21 DA-A
Plant-Eval Interval	25 DP-1	32 DP-1
Days After Emergence	16 DE-1	23 DE-1
ARM Action Codes	P	P
Number of Decimals	0	0
Trt Treatment	Rate	Appl
No. Name	Rate Unit	Code
1 UNTREATED CHECK		
2 BICEP LITE II MAGNUM	1.67 qt/a	A
3 BICEP LITE II MAGNUM	1.67 qt/a	A
SHIELDDEX	1 fl oz/a	C
AATREX	1 pt/a	C
MSO	1 % v/v	C
N-PAK AMS	2.5 % v/v	C
4 BICEP LITE II MAGNUM	1.67 qt/a	A
SHIELDDEX	1.3 fl oz/a	C
AATREX	1 pt/a	C
MSO	1 % v/v	C
N-PAK AMS	2.5 % v/v	C

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Mean comparisons performed only when AOV Treatment P(F) is significant at mean comparison OSL.

Untreated treatment(s) 1 excluded from analysis.

Missing data estimates are included in columns: Yates=2,3,4,5,20,21,22,24

Could not calculate LSD (% mean diff) for columns 2,18 because error mean square = 0.

Purdue Weed Science

Corn Herbicide Programs Showcase

Trial ID: 19S-MGS-CORN-11	Location: Meigs	Trial Year
Protocol ID: 19S-MGS-CORN-11	Investigator (Creator): Dr. Bill Johnson	
Project ID: Showcase	Study Director: Dustin Johnson & Marcelo Zimmer	
	Sponsor Contact: UPL/Summit Agro/AMVAC	

Pest Type	W Weed	
Pest Code	SETFA	
Pest Scientific Name	Setaria faberi	
Pest Name	Giant foxtail	
Crop Type, Code	C ZEAMX	C ZEAMX
BBCH Scale	BCOR	BCOR
Crop Scientific Name	Zea mays	Zea mays
Crop Name	Corn	Corn
Rating Date	Jun-28-2019	Jul-5-2019
Part Rated	PLOT -	PLOT -
Rating Type	CONTRO	PHYGEN
Rating Unit	%	%
Sample Size		
Number of Subsamples	1	1
Assessed By	D. JOHNSON	D. JOHNSON
Data Entry Date	Jul-18-2019	Jul-18-2019
Rating Timing	A2	A3
Days After First/Last Applic.	25 25	32 4
Trt-Eval Interval	21 DA-A	21 DA-A
Plant-Eval Interval	25 DP-1	32 DP-1
Days After Emergence	16 DE-1	23 DE-1
ARM Action Codes	P	P
Number of Decimals	0	0
Trt Treatment	Rate	Appl
No. Name	Rate Unit	Code
		5
		6
5 BICEP LITE II MAGNUM	1.67 qt/a	A
IMPACT	1 fl oz/a	C
AATREX	1 pt/a	C
MSO	1 % v/v	C
N-PAK AMS	2.5 % v/v	C
6 BICEP LITE II MAGNUM	1.67 qt/a	A
LAUDIS	3 fl oz/a	C
AATREX	1 pt/a	C
MSO	1 % v/v	C
N-PAK AMS	2.5 % 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.

Missing data estimates are included in columns: Yates=2,3,4,5,20,21,22,24

Could not calculate LSD (% mean diff) for columns 2,18 because error mean square = 0.

Purdue Weed Science

Corn Herbicide Programs Showcase

Trial ID: 19S-MGS-CORN-11	Location: Meigs	Trial Year
Protocol ID: 19S-MGS-CORN-11	Investigator (Creator): Dr. Bill Johnson	
Project ID: Showcase	Study Director: Dustin Johnson & Marcelo Zimmer	
	Sponsor Contact: UPL/Summit Agro/AMVAC	

Pest Type	W Weed	
Pest Code	SETFA	
Pest Scientific Name	Setaria faberi	
Pest Name	Giant foxtail	
Crop Type, Code	C ZEAMX	C ZEAMX
BBCH Scale	BCOR	BCOR
Crop Scientific Name	Zea mays	Zea mays
Crop Name	Corn	Corn
Rating Date	Jun-28-2019	Jul-5-2019
Part Rated	PLOT -	PLOT -
Rating Type	CONTRO	PHYGEN
Rating Unit	%	%
Sample Size		
Number of Subsamples	1	1
Assessed By	D. JOHNSON	D. JOHNSON
Data Entry Date	Jul-18-2019	Jul-18-2019
Rating Timing	A2	A3
Days After First/Last Applic.	25 25	32 4
Trt-Eval Interval	21 DA-A	21 DA-A
Plant-Eval Interval	25 DP-1	32 DP-1
Days After Emergence	16 DE-1	23 DE-1
ARM Action Codes	P	P
Number of Decimals	0	0
Trt Treatment	Rate	Appl
No. Name	Rate Unit	Code
		5
		6
7 BICEP LITE II MAGNUM	1.67 qt/a A	94 ab
CALLISTO	3 fl oz/a C	1 fg
AATREX	1 pt/a C	
ACTIVATOR 90 NIS	0.25 % v/v C	
N-PAK AMS	2.5 % v/v C	
8 AATREX	2 pt/a A	81 ab
9 AATREX	2 pt/a A	78 bc
INTERMOC	70 fl oz/a D	2 efg
N-PAK AMS	2.5 % v/v D	

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.

Missing data estimates are included in columns: Yates=2,3,4,5,20,21,22,24

Could not calculate LSD (% mean diff) for columns 2,18 because error mean square = 0.

Purdue Weed Science

Corn Herbicide Programs Showcase

Trial ID: 19S-MGS-CORN-11	Location: Meigs	Trial Year
Protocol ID: 19S-MGS-CORN-11	Investigator (Creator): Dr. Bill Johnson	
Project ID: Showcase	Study Director: Dustin Johnson & Marcelo Zimmer	
	Sponsor Contact: UPL/Summit Agro/AMVAC	

Pest Type	W Weed			
Pest Code	SETFA			
Pest Scientific Name	Setaria faberi			
Pest Name	Giant foxtail			
Crop Type, Code	C ZEAMX	C ZEAMX		
BBCH Scale	BCOR	BCOR		
Crop Scientific Name	Zea mays	Zea mays		
Crop Name	Corn	Corn		
Rating Date	Jun-28-2019	Jul-5-2019		
Part Rated	PLOT -	PLOT -		
Rating Type	CONTRO	PHYGEN		
Rating Unit	%	%		
Sample Size				
Number of Subsamples	1	1		
Assessed By	D. JOHNSON	D. JOHNSON		
Data Entry Date	Jul-18-2019	Jul-18-2019		
Rating Timing	A2	A3		
Days After First/Last Applic.	25 25	32 4		
Trt-Eval Interval	21 DA-A	21 DA-A		
Plant-Eval Interval	25 DP-1	32 DP-1		
Days After Emergence	16 DE-1	23 DE-1		
ARM Action Codes	P	P		
Number of Decimals	0	0		
Trt Treatment	Rate	Appl		
No. Name	Rate Unit	Code	5	6
10 AATREX	2 pt/a	A	74 bc	7 d
INTERMOC	70 fl oz/a	D		
MOTIF	3.36 fl oz/a	D		
N-PAK AMS	2.5 % v/v	D		
COC	1 % v/v	D		
11 AATREX	2 pt/a	A	59 c	2 efg
HALEX GT	2 qt/a	D		
ACTIVATOR 90 NIS	0.25 % v/v	D		
N-PAK AMS	2.5 % v/v	D		
12 HARNESS XTRA 5.6L	3.2 pt/a	A	94 ab	4 def
IMPACTZ	10.7 fl oz/a	C		
MSO	1 % v/v	C		
N-PAK AMS	2.5 % 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.

Missing data estimates are included in columns: Yates=2,3,4,5,20,21,22,24

Could not calculate LSD (% mean diff) for columns 2,18 because error mean square = 0.

Purdue Weed Science

Corn Herbicide Programs Showcase

Trial ID: 19S-MGS-CORN-11	Location: Meigs	Trial Year
Protocol ID: 19S-MGS-CORN-11	Investigator (Creator): Dr. Bill Johnson	
Project ID: Showcase	Study Director: Dustin Johnson & Marcelo Zimmer	
	Sponsor Contact: UPL/Summit Agro/AMVAC	

Pest Type	W Weed	
Pest Code	SETFA	
Pest Scientific Name	Setaria faberi	
Pest Name	Giant foxtail	
Crop Type, Code	C ZEAMX	C ZEAMX
BBCH Scale	BCOR	BCOR
Crop Scientific Name	Zea mays	Zea mays
Crop Name	Corn	Corn
Rating Date	Jun-28-2019	Jul-5-2019
Part Rated	PLOT -	PLOT -
Rating Type	CONTRO	PHYGEN
Rating Unit	%	%
Sample Size		
Number of Subsamples	1	1
Assessed By	D. JOHNSON	D. JOHNSON
Data Entry Date	Jul-18-2019	Jul-18-2019
Rating Timing	A2	A3
Days After First/Last Applic.	25 25	32 4
Trt-Eval Interval	21 DA-A	21 DA-A
Plant-Eval Interval	25 DP-1	32 DP-1
Days After Emergence	16 DE-1	23 DE-1
ARM Action Codes	P	P
Number of Decimals	0	0
Trt Treatment	Rate	Appl
No. Name	Rate Unit	Code
		5
		6
13 HARNESS XTRA 5.6L	3.2 pt/a A	91 ab
IMPACTZ	8 fl oz/a C	1 fg
LIBERTY 280 SL	22 fl oz/a C	
MSO	0.5 % v/v C	
N-PAK AMS	2.5 % v/v C	
14 HARNESS XTRA 5.6L	3.2 pt/a A	88 ab
SHIELDEX	1.35 fl oz/a C	15 abc
AATREX	0.67 pt/a C	
MSO	1 % v/v C	
N-PAK AMS	2.5 % 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.

Missing data estimates are included in columns: Yates=2,3,4,5,20,21,22,24

Could not calculate LSD (% mean diff) for columns 2,18 because error mean square = 0.

Purdue Weed Science

Corn Herbicide Programs Showcase

Trial ID: 19S-MGS-CORN-11	Location: Meigs	Trial Year
Protocol ID: 19S-MGS-CORN-11	Investigator (Creator): Dr. Bill Johnson	
Project ID: Showcase	Study Director: Dustin Johnson & Marcelo Zimmer	
	Sponsor Contact: UPL/Summit Agro/AMVAC	

Pest Type	W Weed	
Pest Code	SETFA	
Pest Scientific Name	Setaria faberi	
Pest Name	Giant foxtail	
Crop Type, Code	C ZEAMX	C ZEAMX
BBCH Scale	BCOR	BCOR
Crop Scientific Name	Zea mays	Zea mays
Crop Name	Corn	Corn
Rating Date	Jun-28-2019	Jul-5-2019
Part Rated	PLOT -	PLOT -
Rating Type	CONTRO	PHYGEN
Rating Unit	%	%
Sample Size		
Number of Subsamples	1	1
Assessed By	D. JOHNSON	D. JOHNSON
Data Entry Date	Jul-18-2019	Jul-18-2019
Rating Timing	A2	A3
Days After First/Last Applic.	25 25	32 4
Trt-Eval Interval	21 DA-A	21 DA-A
Plant-Eval Interval	25 DP-1	32 DP-1
Days After Emergence	16 DE-1	23 DE-1
ARM Action Codes	P	P
Number of Decimals	0	0
Trt Treatment	Rate	Appl
No. Name	Rate Unit	Code
		5
		6
15 HARNESS	1.75 pt/a B	
IMPACT	1 fl oz/a B	
AATREX	1 pt/a B	
MSO	0.5 % v/v B	
N-PAK AMS	2.5 % v/v B	
		19 a
16 HARNESS	1.75 pt/a B	
IMPACT	0.75 fl oz/a B	
ROUNDUP POWERMAX	32 fl oz/a B	
AATREX	1 pt/a B	
MSO	0.25 % v/v B	
N-PAK AMS	2.5 % v/v B	
		18 ab

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.

Missing data estimates are included in columns: Yates=2,3,4,5,20,21,22,24

Could not calculate LSD (% mean diff) for columns 2,18 because error mean square = 0.

Purdue Weed Science

Corn Herbicide Programs Showcase

Trial ID: 19S-MGS-CORN-11	Location: Meigs	Trial Year
Protocol ID: 19S-MGS-CORN-11	Investigator (Creator): Dr. Bill Johnson	
Project ID: Showcase	Study Director: Dustin Johnson & Marcelo Zimmer	
	Sponsor Contact: UPL/Summit Agro/AMVAC	

Pest Type	W Weed	
Pest Code	SETFA	
Pest Scientific Name	Setaria faberi	
Pest Name	Giant foxtail	
Crop Type, Code	C ZEAMX	C ZEAMX
BBCH Scale	BCOR	BCOR
Crop Scientific Name	Zea mays	Zea mays
Crop Name	Corn	Corn
Rating Date	Jun-28-2019	Jul-5-2019
Part Rated	PLOT -	PLOT -
Rating Type	CONTRO	PHYGEN
Rating Unit	%	%
Sample Size		
Number of Subsamples	1	1
Assessed By	D. JOHNSON	D. JOHNSON
Data Entry Date	Jul-18-2019	Jul-18-2019
Rating Timing	A2	A3
Days After First/Last Applic.	25 25	32 4
Trt-Eval Interval	21 DA-A	21 DA-A
Plant-Eval Interval	25 DP-1	32 DP-1
Days After Emergence	16 DE-1	23 DE-1
ARM Action Codes	P	P
Number of Decimals	0	0
Trt Treatment	Rate	Appl
No. Name	Rate Unit	Code
		5
		6
17 HELMET	1.67 pt/a	A
HAI TRADENAME	3.42 fl oz/a	C
MSO	1 % v/v	C
UAN 28%	2.5 % v/v	C
		100 a
		7 d

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.

Missing data estimates are included in columns: Yates=2,3,4,5,20,21,22,24

Could not calculate LSD (% mean diff) for columns 2,18 because error mean square = 0.

Purdue Weed Science

Corn Herbicide Programs Showcase

Trial ID: 19S-MGS-CORN-11	Location: Meigs	Trial Year
Protocol ID: 19S-MGS-CORN-11	Investigator (Creator): Dr. Bill Johnson	
Project ID: Showcase	Study Director: Dustin Johnson & Marcelo Zimmer	
	Sponsor Contact: UPL/Summit Agro/AMVAC	

Pest Type	W Weed	
Pest Code	SETFA	
Pest Scientific Name	Setaria faberi	
Pest Name	Giant foxtail	
Crop Type, Code	C ZEAMX	C ZEAMX
BBCH Scale	BCOR	BCOR
Crop Scientific Name	Zea mays	Zea mays
Crop Name	Corn	Corn
Rating Date	Jun-28-2019	Jul-5-2019
Part Rated	PLOT -	PLOT -
Rating Type	CONTRO	PHYGEN
Rating Unit	%	%
Sample Size		
Number of Subsamples	1	1
Assessed By	D. JOHNSON	D. JOHNSON
Data Entry Date	Jul-18-2019	Jul-18-2019
Rating Timing	A2	A3
Days After First/Last Applic.	25 25	32 4
Trt-Eval Interval	21 DA-A	21 DA-A
Plant-Eval Interval	25 DP-1	32 DP-1
Days After Emergence	16 DE-1	23 DE-1
ARM Action Codes	P	P
Number of Decimals	0	0
Trt Treatment	Rate	Appl
No. Name	Rate Unit	Code
		5
		6
18 HELMET	1.67 pt/a	A
HAI TRADENAME	3.42 fl oz/a	C
AATREX	1.5 pt/a	C
MSO	1 % v/v	C
UAN 28%	2.5 % v/v	C
LSD P=.05	21.2	3.9
Standard Deviation	14.8	2.8
CV	16.39	36.82
Grand Mean	90.5	7.5
Levene's F	2.478	1.684
Levene's Prob(F)	0.011*	0.081
Rank X2	.	.
P(Rank X2)	.	.
Skewness	-2.2971*	0.5668

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.

Missing data estimates are included in columns: Yates=2,3,4,5,20,21,22,24

Could not calculate LSD (% mean diff) for columns 2,18 because error mean square = 0.

Purdue Weed Science

Corn Herbicide Programs Showcase

Trial ID: 19S-MGS-CORN-11	Location: Meigs	Trial Year
Protocol ID: 19S-MGS-CORN-11	Investigator (Creator): Dr. Bill Johnson	
Project ID: Showcase	Study Director: Dustin Johnson & Marcelo Zimmer	
	Sponsor Contact: UPL/Summit Agro/AMVAC	

Pest Type	W Weed	
Pest Code	SETFA	
Pest Scientific Name	Setaria faberi	
Pest Name	Giant foxtail	
Crop Type, Code	C ZEAMX	C ZEAMX
BBCH Scale	BCOR	BCOR
Crop Scientific Name	Zea mays	Zea mays
Crop Name	Corn	Corn
Rating Date	Jun-28-2019	Jul-5-2019
Part Rated	PLOT -	PLOT -
Rating Type	CONTRO	PHYGEN
Rating Unit	%	%
Sample Size		
Number of Subsamples	1	1
Assessed By	D. JOHNSON	D. JOHNSON
Data Entry Date	Jul-18-2019	Jul-18-2019
Rating Timing	A2	A3
Days After First/Last Applic.	25 25	32 4
Trt-Eval Interval	21 DA-A	21 DA-A
Plant-Eval Interval	25 DP-1	32 DP-1
Days After Emergence	16 DE-1	23 DE-1
ARM Action Codes	P	P
Number of Decimals	0	0
Trt Treatment	Rate	Appl
No. Name	Rate Unit	Code
	5	6
Kurtosis	5.1735*	-0.8989
Replicate F	1.348	7.418
Replicate Prob(F)	0.2722	0.0004
Treatment F	2.832	21.193
Treatment Prob(F)	0.0048	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.

Missing data estimates are included in columns: Yates=2,3,4,5,20,21,22,24

Could not calculate LSD (% mean diff) for columns 2,18 because error mean square = 0.

Purdue Weed Science

Corn Herbicide Programs Showcase

Trial ID: 19S-MGS-CORN-11	Location: Meigs	Trial Year
Protocol ID: 19S-MGS-CORN-11	Investigator (Creator): Dr. Bill Johnson	
Project ID: Showcase	Study Director: Dustin Johnson & Marcelo Zimmer	
	Sponsor Contact: UPL/Summit Agro/AMVAC	

	W Weed	W Weed
Pest Type	AMATA	AMBTR
Pest Code	AMATA	AMBTR
Pest Scientific Name	Amaranthus tamariscinus	Ambrosia trifida
Pest Name	Common waterhemp	Giant ragweed
Crop Type, Code	C ZEAMX	C ZEAMX
BBCH Scale	BCOR	BCOR
Crop Scientific Name	Zea mays	Zea mays
Crop Name	Corn	Corn
Rating Date	Jul-5-2019	Jul-5-2019
Part Rated	PLOT -	PLOT -
Rating Type	CONTRO	CONTRO
Rating Unit	%	%
Sample Size		
Number of Subsamples	1	1
Assessed By	D. JOHNSON	D. JOHNSON
Data Entry Date	Jul-18-2019	Jul-18-2019
Rating Timing	A3	A3
Days After First/Last Applic.	32 4	32 4
Trt-Eval Interval	21 DA-A	21 DA-A
Plant-Eval Interval	32 DP-1	32 DP-1
Days After Emergence	23 DE-1	23 DE-1
ARM Action Codes	P	P
Number of Decimals	0	0
Trt Treatment		
No. Name	Rate Unit Code	
	7	8
1 UNTREATED CHECK	0	0
2 BICEP LITE II MAGNUM 1.67 qt/a A	93 b	92 a
3 BICEP LITE II MAGNUM 1.67 qt/a A SHIELDDEX 1 fl oz/a C AATREX 1 pt/a C MSO 1 % v/v C N-PAK AMS 2.5 % v/v C	100 a	93 a
4 BICEP LITE II MAGNUM 1.67 qt/a A SHIELDDEX 1.3 fl oz/a C AATREX 1 pt/a C MSO 1 % v/v C N-PAK AMS 2.5 % v/v C	100 a	100 a

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Untreated treatment(s) 1 excluded from analysis.

Missing data estimates are included in columns: Yates=2,3,4,5,20,21,22,24

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Purdue Weed Science

Corn Herbicide Programs Showcase

Trial ID: 19S-MGS-CORN-11	Location: Meigs	Trial Year
Protocol ID: 19S-MGS-CORN-11	Investigator (Creator): Dr. Bill Johnson	
Project ID: Showcase	Study Director: Dustin Johnson & Marcelo Zimmer	
	Sponsor Contact: UPL/Summit Agro/AMVAC	

Pest Type	W Weed	W Weed
Pest Code	AMATA	AMBTR
Pest Scientific Name	Amaranthus tamariscinus	Ambrosia trifida
Pest Name	Common waterhemp	Giant ragweed
Crop Type, Code	C ZEAMX	C ZEAMX
BBCH Scale	BCOR	BCOR
Crop Scientific Name	Zea mays	Zea mays
Crop Name	Corn	Corn
Rating Date	Jul-5-2019	Jul-5-2019
Part Rated	PLOT -	PLOT -
Rating Type	CONTRO	CONTRO
Rating Unit	%	%
Sample Size		
Number of Subsamples	1	1
Assessed By	D. JOHNSON	D. JOHNSON
Data Entry Date	Jul-18-2019	Jul-18-2019
Rating Timing	A3	A3
Days After First/Last Applic.	32 4	32 4
Trt-Eval Interval	21 DA-A	21 DA-A
Plant-Eval Interval	32 DP-1	32 DP-1
Days After Emergence	23 DE-1	23 DE-1
ARM Action Codes	P	P
Number of Decimals	0	0
Trt Treatment		
No. Name	Rate Unit Appl Code	
		7
		8
5 BICEP LITE II MAGNUM	1.67 qt/a A	100 a
IMPACT	1 fl oz/a C	
AATREX	1 pt/a C	
MSO	1 % v/v C	
N-PAK AMS	2.5 % v/v C	
6 BICEP LITE II MAGNUM	1.67 qt/a A	100 a
LAUDIS	3 fl oz/a C	
AATREX	1 pt/a C	
MSO	1 % v/v C	
N-PAK AMS	2.5 % 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.

Missing data estimates are included in columns: Yates=2,3,4,5,20,21,22,24

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Purdue Weed Science

Corn Herbicide Programs Showcase

Trial ID: 19S-MGS-CORN-11	Location: Meigs	Trial Year
Protocol ID: 19S-MGS-CORN-11	Investigator (Creator): Dr. Bill Johnson	
Project ID: Showcase	Study Director: Dustin Johnson & Marcelo Zimmer	
	Sponsor Contact: UPL/Summit Agro/AMVAC	

Pest Type	W Weed	W Weed
Pest Code	AMATA	AMBTR
Pest Scientific Name	Amaranthus tamariscinus	Ambrosia trifida
Pest Name	Common waterhemp	Giant ragweed
Crop Type, Code	C ZEAMX	C ZEAMX
BBCH Scale	BCOR	BCOR
Crop Scientific Name	Zea mays	Zea mays
Crop Name	Corn	Corn
Rating Date	Jul-5-2019	Jul-5-2019
Part Rated	PLOT -	PLOT -
Rating Type	CONTRO	CONTRO
Rating Unit	%	%
Sample Size		
Number of Subsamples	1	1
Assessed By	D. JOHNSON	D. JOHNSON
Data Entry Date	Jul-18-2019	Jul-18-2019
Rating Timing	A3	A3
Days After First/Last Applic.	32 4	32 4
Trt-Eval Interval	21 DA-A	21 DA-A
Plant-Eval Interval	32 DP-1	32 DP-1
Days After Emergence	23 DE-1	23 DE-1
ARM Action Codes	P	P
Number of Decimals	0	0
Trt Treatment	Rate	Appl
No. Name	Rate Unit	Code
	7	8
7 BICEP LITE II MAGNUM	1.67 qt/a	A
CALLISTO	3 fl oz/a	C
AATREX	1 pt/a	C
ACTIVATOR 90 NIS	0.25 % v/v	C
N-PAK AMS	2.5 % v/v	C
8 AATREX	2 pt/a	A
	78 c	97 a
9 AATREX	2 pt/a	A
INTERMOC	70 fl oz/a	D
N-PAK AMS	2.5 % v/v	D
	100 a	100 a

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Untreated treatment(s) 1 excluded from analysis.

Missing data estimates are included in columns: Yates=2,3,4,5,20,21,22,24

Could not calculate LSD (% mean diff) for columns 2,18 because error mean square = 0.

Purdue Weed Science

Corn Herbicide Programs Showcase			Trial Year
Trial ID: 19S-MGS-CORN-11	Location: Meigs		
Protocol ID: 19S-MGS-CORN-11	Investigator (Creator): Dr. Bill Johnson		
Project ID: Showcase	Study Director: Dustin Johnson & Marcelo Zimmer		
	Sponsor Contact: UPL/Summit Agro/AMVAC		

	W Weed	W Weed
Pest Type	AMATA	AMBTR
Pest Code	AMATA	AMBTR
Pest Scientific Name	Amaranthus tamariscinus	Ambrosia trifida
Pest Name	Common waterhemp	Giant ragweed
Crop Type, Code	C ZEAMX	C ZEAMX
BBCH Scale	BCOR	BCOR
Crop Scientific Name	Zea mays	Zea mays
Crop Name	Corn	Corn
Rating Date	Jul-5-2019	Jul-5-2019
Part Rated	PLOT -	PLOT -
Rating Type	CONTRO	CONTRO
Rating Unit	%	%
Sample Size		
Number of Subsamples	1	1
Assessed By	D. JOHNSON	D. JOHNSON
Data Entry Date	Jul-18-2019	Jul-18-2019
Rating Timing	A3	A3
Days After First/Last Applic.	32 4	32 4
Trt-Eval Interval	21 DA-A	21 DA-A
Plant-Eval Interval	32 DP-1	32 DP-1
Days After Emergence	23 DE-1	23 DE-1
ARM Action Codes	P	P
Number of Decimals	0	0
Trt Treatment		
No. Name	Rate Appl Rate Unit Code	
	7	8
10 AATREX	2 pt/a A	100 a
INTERMOC	70 fl oz/a D	
MOTIF	3.36 fl oz/a D	
N-PAK AMS	2.5 % v/v D	
COC	1 % v/v D	
11 AATREX	2 pt/a A	97 ab
HALEX GT	2 qt/a D	
ACTIVATOR 90 NIS	0.25 % v/v D	
N-PAK AMS	2.5 % v/v D	
12 HARNESS XTRA 5.6L	3.2 pt/a A	100 a
IMPACTZ	10.7 fl oz/a C	
MSO	1 % v/v C	
N-PAK AMS	2.5 % v/v C	

Means followed by same letter or symbol do not significantly differ (P=.05, LSD).

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Untreated treatment(s) 1 excluded from analysis.

Missing data estimates are included in columns: Yates=2,3,4,5,20,21,22,24

Could not calculate LSD (% mean diff) for columns 2,18 because error mean square = 0.

Purdue Weed Science

Corn Herbicide Programs Showcase

Trial ID: 19S-MGS-CORN-11	Location: Meigs	Trial Year
Protocol ID: 19S-MGS-CORN-11	Investigator (Creator): Dr. Bill Johnson	
Project ID: Showcase	Study Director: Dustin Johnson & Marcelo Zimmer	
	Sponsor Contact: UPL/Summit Agro/AMVAC	

	W Weed	W Weed
Pest Type	AMATA	AMBTR
Pest Code	AMATA	AMBTR
Pest Scientific Name	Amaranthus tamariscinus	Ambrosia trifida
Pest Name	Common waterhemp	Giant ragweed
Crop Type, Code	C ZEAMX	C ZEAMX
BBCH Scale	BCOR	BCOR
Crop Scientific Name	Zea mays	Zea mays
Crop Name	Corn	Corn
Rating Date	Jul-5-2019	Jul-5-2019
Part Rated	PLOT -	PLOT -
Rating Type	CONTRO	CONTRO
Rating Unit	%	%
Sample Size		
Number of Subsamples	1	1
Assessed By	D. JOHNSON	D. JOHNSON
Data Entry Date	Jul-18-2019	Jul-18-2019
Rating Timing	A3	A3
Days After First/Last Applic.	32 4	32 4
Trt-Eval Interval	21 DA-A	21 DA-A
Plant-Eval Interval	32 DP-1	32 DP-1
Days After Emergence	23 DE-1	23 DE-1
ARM Action Codes	P	P
Number of Decimals	0	0
Trt Treatment		
No. Name	7	8
Rate		
Rate Unit		
Appl Code		
13 HARNESS XTRA 5.6L	100 a	100 a
IMPACTZ		
LIBERTY 280 SL		
MSO		
N-PAK AMS		
14 HARNESS XTRA 5.6L	100 a	100 a
SHIELDEX		
AATREX		
MSO		
N-PAK AMS		

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Untreated treatment(s) 1 excluded from analysis.

Missing data estimates are included in columns: Yates=2,3,4,5,20,21,22,24

Could not calculate LSD (% mean diff) for columns 2,18 because error mean square = 0.

Purdue Weed Science

Corn Herbicide Programs Showcase

Trial ID: 19S-MGS-CORN-11	Location: Meigs	Trial Year
Protocol ID: 19S-MGS-CORN-11	Investigator (Creator): Dr. Bill Johnson	
Project ID: Showcase	Study Director: Dustin Johnson & Marcelo Zimmer	
	Sponsor Contact: UPL/Summit Agro/AMVAC	

	W Weed	W Weed
Pest Type	AMATA	AMBTR
Pest Code	AMATA	AMBTR
Pest Scientific Name	Amaranthus tamariscinus	Ambrosia trifida
Pest Name	Common waterhemp	Giant ragweed
Crop Type, Code	C ZEAMX	C ZEAMX
BBCH Scale	BCOR	BCOR
Crop Scientific Name	Zea mays	Zea mays
Crop Name	Corn	Corn
Rating Date	Jul-5-2019	Jul-5-2019
Part Rated	PLOT -	PLOT -
Rating Type	CONTRO	CONTRO
Rating Unit	%	%
Sample Size		
Number of Subsamples	1	1
Assessed By	D. JOHNSON	D. JOHNSON
Data Entry Date	Jul-18-2019	Jul-18-2019
Rating Timing	A3	A3
Days After First/Last Applic.	32 4	32 4
Trt-Eval Interval	21 DA-A	21 DA-A
Plant-Eval Interval	32 DP-1	32 DP-1
Days After Emergence	23 DE-1	23 DE-1
ARM Action Codes	P	P
Number of Decimals	0	0
Trt Treatment		
No. Name	7	8
Rate		
Rate Unit		
Appl Code		
15 HARNESS	100 a	100 a
IMPACT		
AATREX		
MSO		
N-PAK AMS		
16 HARNESS	100 a	100 a
IMPACT		
ROUNDUP POWERMAX		
AATREX		
MSO		
N-PAK AMS		

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.

Missing data estimates are included in columns: Yates=2,3,4,5,20,21,22,24

Could not calculate LSD (% mean diff) for columns 2,18 because error mean square = 0.

Purdue Weed Science

Corn Herbicide Programs Showcase				Trial Year
Trial ID: 19S-MGS-CORN-11		Location: Meigs		
Protocol ID: 19S-MGS-CORN-11		Investigator (Creator): Dr. Bill Johnson		
Project ID: Showcase		Study Director: Dustin Johnson & Marcelo Zimmer		
Sponsor Contact: UPL/Summit Agro/AMVAC				
Pest Type		W Weed	W Weed	
Pest Code		AMATA	AMBTR	
Pest Scientific Name		Amaranthus tamariscinus	Ambrosia trifida	
Pest Name		Common waterhemp	Giant ragweed	
Crop Type, Code		C ZEAMX	C ZEAMX	
BBCH Scale		BCOR	BCOR	
Crop Scientific Name		Zea mays	Zea mays	
Crop Name		Corn	Corn	
Rating Date		Jul-5-2019	Jul-5-2019	
Part Rated		PLOT -	PLOT -	
Rating Type		CONTRO	CONTRO	
Rating Unit		%	%	
Sample Size				
Number of Subsamples		1	1	
Assessed By		D. JOHNSON	D. JOHNSON	
Data Entry Date		Jul-18-2019	Jul-18-2019	
Rating Timing		A3	A3	
Days After First/Last Applic.		32 4	32 4	
Trt-Eval Interval		21 DA-A	21 DA-A	
Plant-Eval Interval		32 DP-1	32 DP-1	
Days After Emergence		23 DE-1	23 DE-1	
ARM Action Codes		P	P	
Number of Decimals		0	0	
Trt Treatment	Rate	Appl		
No. Name	Rate Unit	Code	7	8
17 HELMET	1.67 pt/a	A	100 a	95 a
HAI TRADENAME	3.42 fl oz/a	C		
MSO	1 % v/v	C		
UAN 28%	2.5 % 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.

Missing data estimates are included in columns: Yates=2,3,4,5,20,21,22,24

Could not calculate LSD (% mean diff) for columns 2,18 because error mean square = 0.

Purdue Weed Science

Corn Herbicide Programs Showcase

Trial ID: 19S-MGS-CORN-11	Location: Meigs	Trial Year
Protocol ID: 19S-MGS-CORN-11	Investigator (Creator): Dr. Bill Johnson	
Project ID: Showcase	Study Director: Dustin Johnson & Marcelo Zimmer	
	Sponsor Contact: UPL/Summit Agro/AMVAC	

	W Weed	W Weed
Pest Type	AMATA	AMBTR
Pest Code	AMATA	AMBTR
Pest Scientific Name	Amaranthus tamariscinus	Ambrosia trifida
Pest Name	Common waterhemp	Giant ragweed
Crop Type, Code	C ZEAMX	C ZEAMX
BBCH Scale	BCOR	BCOR
Crop Scientific Name	Zea mays	Zea mays
Crop Name	Corn	Corn
Rating Date	Jul-5-2019	Jul-5-2019
Part Rated	PLOT -	PLOT -
Rating Type	CONTRO	CONTRO
Rating Unit	%	%
Sample Size		
Number of Subsamples	1	1
Assessed By	D. JOHNSON	D. JOHNSON
Data Entry Date	Jul-18-2019	Jul-18-2019
Rating Timing	A3	A3
Days After First/Last Applic.	32 4	32 4
Trt-Eval Interval	21 DA-A	21 DA-A
Plant-Eval Interval	32 DP-1	32 DP-1
Days After Emergence	23 DE-1	23 DE-1
ARM Action Codes	P	P
Number of Decimals	0	0
Trt Treatment		
No. Name	Rate Appl Rate Unit Code	
	7	8
18 HELMET	1.67 pt/a A	96 ab
HAI TRADENAME	3.42 fl oz/a C	100 a
AATREX	1.5 pt/a C	
MSO	1 % v/v C	
UAN 28%	2.5 % v/v C	
LSD P=.05	6.6	6.8
Standard Deviation	4.7	4.7
CV	4.77	4.82
Grand Mean	97.8	98.5
Levene's F	4.535	1.271
Levene's Prob(F)	0.001*	0.251
Rank X2	.	.
P(Rank X2)	.	.
Skewness	-3.9721*	-4.1332*

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.

Missing data estimates are included in columns: Yates=2,3,4,5,20,21,22,24

Could not calculate LSD (% mean diff) for columns 2,18 because error mean square = 0.

Purdue Weed Science

Corn Herbicide Programs Showcase				
Trial ID: 19S-MGS-CORN-11		Location: Meigs		Trial Year
Protocol ID: 19S-MGS-CORN-11		Investigator (Creator): Dr. Bill Johnson		
Project ID: Showcase		Study Director: Dustin Johnson & Marcelo Zimmer		
		Sponsor Contact: UPL/Summit Agro/AMVAC		
Pest Type		W Weed	W Weed	
Pest Code		AMATA	AMBTR	
Pest Scientific Name		Amaranthus tamariscinus	Ambrosia trifida	
Pest Name		Common waterhemp	Giant ragweed	
Crop Type, Code		C ZEAMX	C ZEAMX	
BBCH Scale		BCOR	BCOR	
Crop Scientific Name		Zea mays	Zea mays	
Crop Name		Corn	Corn	
Rating Date		Jul-5-2019	Jul-5-2019	
Part Rated		PLOT -	PLOT -	
Rating Type		CONTRO	CONTRO	
Rating Unit		%	%	
Sample Size				
Number of Subsamples		1	1	
Assessed By		D. JOHNSON	D. JOHNSON	
Data Entry Date		Jul-18-2019	Jul-18-2019	
Rating Timing		A3	A3	
Days After First/Last Applic.		32 4	32 4	
Trt-Eval Interval		21 DA-A	21 DA-A	
Plant-Eval Interval		32 DP-1	32 DP-1	
Days After Emergence		23 DE-1	23 DE-1	
ARM Action Codes		P	P	
Number of Decimals		0	0	
Trt Treatment	Rate	Appl		
No. Name	Rate Unit	Code	7	8
Kurtosis			16.8628*	17.9682*
Replicate F			2.230	1.963
Replicate Prob(F)			0.0968	0.1321
Treatment F			5.798	1.405
Treatment Prob(F)			0.0001	0.1798

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.

Missing data estimates are included in columns: Yates=2,3,4,5,20,21,22,24

Could not calculate LSD (% mean diff) for columns 2,18 because error mean square = 0.

Purdue Weed Science

Corn Herbicide Programs Showcase

Trial ID: 19S-MGS-CORN-11	Location: Meigs	Trial Year
Protocol ID: 19S-MGS-CORN-11	Investigator (Creator): Dr. Bill Johnson	
Project ID: Showcase	Study Director: Dustin Johnson & Marcelo Zimmer	
	Sponsor Contact: UPL/Summit Agro/AMVAC	

Pest Type	W Weed	
Pest Code	SETFA	
Pest Scientific Name	Setaria faberi	
Pest Name	Giant foxtail	
Crop Type, Code	C ZEAMX	C ZEAMX
BBCH Scale	BCOR	BCOR
Crop Scientific Name	Zea mays	Zea mays
Crop Name	Corn	Corn
Rating Date	Jul-5-2019	Jul-13-2019
Part Rated	PLOT -	PLOT -
Rating Type	CONTRO	PHYGEN
Rating Unit	%	%
Sample Size		
Number of Subsamples	1	1
Assessed By	D. JOHNSON	D. JOHNSON
Data Entry Date	Jul-18-2019	Jul-18-2019
Rating Timing	A3	A4
Days After First/Last Applic.	32 4	40 12
Trt-Eval Interval	21 DA-A	21 DA-A
Plant-Eval Interval	32 DP-1	40 DP-1
Days After Emergence	23 DE-1	31 DE-1
ARM Action Codes	P	P
Number of Decimals	0	0
Trt Treatment	Rate	Appl
No. Name	Rate Unit	Code
		9
		10
1 UNTREATED CHECK		0
2 BICEP LITE II MAGNUM	1.67 qt/a A	100 a
3 BICEP LITE II MAGNUM	1.67 qt/a A	100 a
SHIELDEX	1 fl oz/a C	
AATREX	1 pt/a C	
MSO	1 % v/v C	
N-PAK AMS	2.5 % v/v C	
4 BICEP LITE II MAGNUM	1.67 qt/a A	100 a
SHIELDEX	1.3 fl oz/a C	
AATREX	1 pt/a C	
MSO	1 % v/v C	
N-PAK AMS	2.5 % 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.

Missing data estimates are included in columns: Yates=2,3,4,5,20,21,22,24

Could not calculate LSD (% mean diff) for columns 2,18 because error mean square = 0.

Purdue Weed Science

Corn Herbicide Programs Showcase

Trial ID: 19S-MGS-CORN-11	Location: Meigs	Trial Year
Protocol ID: 19S-MGS-CORN-11	Investigator (Creator): Dr. Bill Johnson	
Project ID: Showcase	Study Director: Dustin Johnson & Marcelo Zimmer	
	Sponsor Contact: UPL/Summit Agro/AMVAC	

Pest Type	W Weed	
Pest Code	SETFA	
Pest Scientific Name	Setaria faberi	
Pest Name	Giant foxtail	
Crop Type, Code	C ZEAMX	C ZEAMX
BBCH Scale	BCOR	BCOR
Crop Scientific Name	Zea mays	Zea mays
Crop Name	Corn	Corn
Rating Date	Jul-5-2019	Jul-13-2019
Part Rated	PLOT -	PLOT -
Rating Type	CONTRO	PHYGEN
Rating Unit	%	%
Sample Size		
Number of Subsamples	1	1
Assessed By	D. JOHNSON	D. JOHNSON
Data Entry Date	Jul-18-2019	Jul-18-2019
Rating Timing	A3	A4
Days After First/Last Applic.	32 4	40 12
Trt-Eval Interval	21 DA-A	21 DA-A
Plant-Eval Interval	32 DP-1	40 DP-1
Days After Emergence	23 DE-1	31 DE-1
ARM Action Codes	P	P
Number of Decimals	0	0
Trt Treatment	Rate	Appl
No. Name	Rate Unit	Code
		9
		10
5 BICEP LITE II MAGNUM	1.67 qt/a A	100 a
IMPACT	1 fl oz/a C	1 cd
AATREX	1 pt/a C	
MSO	1 % v/v C	
N-PAK AMS	2.5 % v/v C	
6 BICEP LITE II MAGNUM	1.67 qt/a A	98 a
LAUDIS	3 fl oz/a C	0 d
AATREX	1 pt/a C	
MSO	1 % v/v C	
N-PAK AMS	2.5 % 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.

Missing data estimates are included in columns: Yates=2,3,4,5,20,21,22,24

Could not calculate LSD (% mean diff) for columns 2,18 because error mean square = 0.

Purdue Weed Science

Corn Herbicide Programs Showcase

Trial ID: 19S-MGS-CORN-11	Location: Meigs	Trial Year
Protocol ID: 19S-MGS-CORN-11	Investigator (Creator): Dr. Bill Johnson	
Project ID: Showcase	Study Director: Dustin Johnson & Marcelo Zimmer	
	Sponsor Contact: UPL/Summit Agro/AMVAC	

Pest Type	W Weed	
Pest Code	SETFA	
Pest Scientific Name	Setaria faberi	
Pest Name	Giant foxtail	
Crop Type, Code	C ZEAMX	C ZEAMX
BBCH Scale	BCOR	BCOR
Crop Scientific Name	Zea mays	Zea mays
Crop Name	Corn	Corn
Rating Date	Jul-5-2019	Jul-13-2019
Part Rated	PLOT -	PLOT -
Rating Type	CONTRO	PHYGEN
Rating Unit	%	%
Sample Size		
Number of Subsamples	1	1
Assessed By	D. JOHNSON	D. JOHNSON
Data Entry Date	Jul-18-2019	Jul-18-2019
Rating Timing	A3	A4
Days After First/Last Applic.	32 4	40 12
Trt-Eval Interval	21 DA-A	21 DA-A
Plant-Eval Interval	32 DP-1	40 DP-1
Days After Emergence	23 DE-1	31 DE-1
ARM Action Codes	P	P
Number of Decimals	0	0
Trt Treatment	Rate	Appl
No. Name	Rate Unit	Code
		9
		10
7 BICEP LITE II MAGNUM	1.67 qt/a A	95 a
CALLISTO	3 fl oz/a C	1 cd
AATREX	1 pt/a C	
ACTIVATOR 90 NIS	0.25 % v/v C	
N-PAK AMS	2.5 % v/v C	
8 AATREX	2 pt/a A	64 b
9 AATREX	2 pt/a A	100 a
INTERMOC	70 fl oz/a D	0 d
N-PAK AMS	2.5 % v/v D	

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.

Missing data estimates are included in columns: Yates=2,3,4,5,20,21,22,24

Could not calculate LSD (% mean diff) for columns 2,18 because error mean square = 0.

Purdue Weed Science

Corn Herbicide Programs Showcase

Trial ID: 19S-MGS-CORN-11	Location: Meigs	Trial Year
Protocol ID: 19S-MGS-CORN-11	Investigator (Creator): Dr. Bill Johnson	
Project ID: Showcase	Study Director: Dustin Johnson & Marcelo Zimmer	
	Sponsor Contact: UPL/Summit Agro/AMVAC	

Pest Type	W Weed	
Pest Code	SETFA	
Pest Scientific Name	Setaria faberi	
Pest Name	Giant foxtail	
Crop Type, Code	C ZEAMX	C ZEAMX
BBCH Scale	BCOR	BCOR
Crop Scientific Name	Zea mays	Zea mays
Crop Name	Corn	Corn
Rating Date	Jul-5-2019	Jul-13-2019
Part Rated	PLOT -	PLOT -
Rating Type	CONTRO	PHYGEN
Rating Unit	%	%
Sample Size		
Number of Subsamples	1	1
Assessed By	D. JOHNSON	D. JOHNSON
Data Entry Date	Jul-18-2019	Jul-18-2019
Rating Timing	A3	A4
Days After First/Last Applic.	32 4	40 12
Trt-Eval Interval	21 DA-A	21 DA-A
Plant-Eval Interval	32 DP-1	40 DP-1
Days After Emergence	23 DE-1	31 DE-1
ARM Action Codes	P	P
Number of Decimals	0	0
Trt Treatment	Rate	Appl
No. Name	Rate Unit	Code
		9
		10
10 AATREX	2 pt/a A	100 a
INTERMOC	70 fl oz/a D	3 cd
MOTIF	3.36 fl oz/a D	
N-PAK AMS	2.5 % v/v D	
COC	1 % v/v D	
11 AATREX	2 pt/a A	95 a
HALEX GT	2 qt/a D	0 d
ACTIVATOR 90 NIS	0.25 % v/v D	
N-PAK AMS	2.5 % v/v D	
12 HARNESS XTRA 5.6L	3.2 pt/a A	100 a
IMPACTZ	10.7 fl oz/a C	1 cd
MSO	1 % v/v C	
N-PAK AMS	2.5 % 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.

Missing data estimates are included in columns: Yates=2,3,4,5,20,21,22,24

Could not calculate LSD (% mean diff) for columns 2,18 because error mean square = 0.

Purdue Weed Science

Corn Herbicide Programs Showcase

Trial ID: 19S-MGS-CORN-11	Location: Meigs	Trial Year
Protocol ID: 19S-MGS-CORN-11	Investigator (Creator): Dr. Bill Johnson	
Project ID: Showcase	Study Director: Dustin Johnson & Marcelo Zimmer	
	Sponsor Contact: UPL/Summit Agro/AMVAC	

Pest Type	W Weed	
Pest Code	SETFA	
Pest Scientific Name	Setaria faberi	
Pest Name	Giant foxtail	
Crop Type, Code	C ZEAMX	C ZEAMX
BBCH Scale	BCOR	BCOR
Crop Scientific Name	Zea mays	Zea mays
Crop Name	Corn	Corn
Rating Date	Jul-5-2019	Jul-13-2019
Part Rated	PLOT -	PLOT -
Rating Type	CONTRO	PHYGEN
Rating Unit	%	%
Sample Size		
Number of Subsamples	1	1
Assessed By	D. JOHNSON	D. JOHNSON
Data Entry Date	Jul-18-2019	Jul-18-2019
Rating Timing	A3	A4
Days After First/Last Applic.	32 4	40 12
Trt-Eval Interval	21 DA-A	21 DA-A
Plant-Eval Interval	32 DP-1	40 DP-1
Days After Emergence	23 DE-1	31 DE-1
ARM Action Codes	P	P
Number of Decimals	0	0
Trt Treatment	Rate	Appl
No. Name	Rate Unit	Code
		9
		10
13 HARNESS XTRA 5.6L	3.2 pt/a	A
IMPACTZ	8 fl oz/a	C
LIBERTY 280 SL	22 fl oz/a	C
MSO	0.5 % v/v	C
N-PAK AMS	2.5 % v/v	C
14 HARNESS XTRA 5.6L	3.2 pt/a	A
SHIELDEX	1.35 fl oz/a	C
AATREX	0.67 pt/a	C
MSO	1 % v/v	C
N-PAK AMS	2.5 % 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.

Missing data estimates are included in columns: Yates=2,3,4,5,20,21,22,24

Could not calculate LSD (% mean diff) for columns 2,18 because error mean square = 0.

Purdue Weed Science

Corn Herbicide Programs Showcase

Trial ID: 19S-MGS-CORN-11	Location: Meigs	Trial Year
Protocol ID: 19S-MGS-CORN-11	Investigator (Creator): Dr. Bill Johnson	
Project ID: Showcase	Study Director: Dustin Johnson & Marcelo Zimmer	
	Sponsor Contact: UPL/Summit Agro/AMVAC	

Pest Type	W Weed	
Pest Code	SETFA	
Pest Scientific Name	Setaria faberi	
Pest Name	Giant foxtail	
Crop Type, Code	C ZEAMX	C ZEAMX
BBCH Scale	BCOR	BCOR
Crop Scientific Name	Zea mays	Zea mays
Crop Name	Corn	Corn
Rating Date	Jul-5-2019	Jul-13-2019
Part Rated	PLOT -	PLOT -
Rating Type	CONTRO	PHYGEN
Rating Unit	%	%
Sample Size		
Number of Subsamples	1	1
Assessed By	D. JOHNSON	D. JOHNSON
Data Entry Date	Jul-18-2019	Jul-18-2019
Rating Timing	A3	A4
Days After First/Last Applic.	32 4	40 12
Trt-Eval Interval	21 DA-A	21 DA-A
Plant-Eval Interval	32 DP-1	40 DP-1
Days After Emergence	23 DE-1	31 DE-1
ARM Action Codes	P	P
Number of Decimals	0	0
Trt Treatment	Rate	Appl
No. Name	Rate Unit	Code
		9
		10
15 HARNESS	1.75 pt/a B	100 a
IMPACT	1 fl oz/a B	2 cd
AATREX	1 pt/a B	
MSO	0.5 % v/v B	
N-PAK AMS	2.5 % v/v B	
16 HARNESS	1.75 pt/a B	100 a
IMPACT	0.75 fl oz/a B	2 cd
ROUNDUP POWERMAX	32 fl oz/a B	
AATREX	1 pt/a B	
MSO	0.25 % v/v B	
N-PAK AMS	2.5 % v/v 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.

Missing data estimates are included in columns: Yates=2,3,4,5,20,21,22,24

Could not calculate LSD (% mean diff) for columns 2,18 because error mean square = 0.

Purdue Weed Science

Corn Herbicide Programs Showcase			Trial Year
Trial ID: 19S-MGS-CORN-11	Location: Meigs		
Protocol ID: 19S-MGS-CORN-11	Investigator (Creator): Dr. Bill Johnson		
Project ID: Showcase	Study Director: Dustin Johnson & Marcelo Zimmer		
	Sponsor Contact: UPL/Summit Agro/AMVAC		

Pest Type	W Weed	
Pest Code	SETFA	
Pest Scientific Name	Setaria faberi	
Pest Name	Giant foxtail	
Crop Type, Code	C ZEAMX	C ZEAMX
BBCH Scale	BCOR	BCOR
Crop Scientific Name	Zea mays	Zea mays
Crop Name	Corn	Corn
Rating Date	Jul-5-2019	Jul-13-2019
Part Rated	PLOT -	PLOT -
Rating Type	CONTRO	PHYGEN
Rating Unit	%	%
Sample Size		
Number of Subsamples	1	1
Assessed By	D. JOHNSON	D. JOHNSON
Data Entry Date	Jul-18-2019	Jul-18-2019
Rating Timing	A3	A4
Days After First/Last Applic.	32 4	40 12
Trt-Eval Interval	21 DA-A	21 DA-A
Plant-Eval Interval	32 DP-1	40 DP-1
Days After Emergence	23 DE-1	31 DE-1
ARM Action Codes	P	P
Number of Decimals	0	0
Trt Treatment	Rate	Appl
No. Name	Rate Unit	Code
		9
		10
17 HELMET	1.67 pt/a	A
HAI TRADENAME	3.42 fl oz/a	C
MSO	1 % v/v	C
UAN 28%	2.5 % v/v	C
		96 a
		3 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.

Missing data estimates are included in columns: Yates=2,3,4,5,20,21,22,24

Could not calculate LSD (% mean diff) for columns 2,18 because error mean square = 0.

Purdue Weed Science

Corn Herbicide Programs Showcase

Trial ID: 19S-MGS-CORN-11	Location: Meigs	Trial Year
Protocol ID: 19S-MGS-CORN-11	Investigator (Creator): Dr. Bill Johnson	
Project ID: Showcase	Study Director: Dustin Johnson & Marcelo Zimmer	
	Sponsor Contact: UPL/Summit Agro/AMVAC	

Pest Type	W Weed	
Pest Code	SETFA	
Pest Scientific Name	Setaria faberi	
Pest Name	Giant foxtail	
Crop Type, Code	C ZEAMX	C ZEAMX
BBCH Scale	BCOR	BCOR
Crop Scientific Name	Zea mays	Zea mays
Crop Name	Corn	Corn
Rating Date	Jul-5-2019	Jul-13-2019
Part Rated	PLOT -	PLOT -
Rating Type	CONTRO	PHYGEN
Rating Unit	%	%
Sample Size		
Number of Subsamples	1	1
Assessed By	D. JOHNSON	D. JOHNSON
Data Entry Date	Jul-18-2019	Jul-18-2019
Rating Timing	A3	A4
Days After First/Last Applic.	32 4	40 12
Trt-Eval Interval	21 DA-A	21 DA-A
Plant-Eval Interval	32 DP-1	40 DP-1
Days After Emergence	23 DE-1	31 DE-1
ARM Action Codes	P	P
Number of Decimals	0	0
Trt Treatment	Rate	Appl
No. Name	Rate Unit	Code
		9
		10
18 HELMET	1.67 pt/a A	100 a
HAI TRADENAME	3.42 fl oz/a C	12 ab
AATREX	1.5 pt/a C	
MSO	1 % v/v C	
UAN 28%	2.5 % v/v C	
LSD P=.05	11.2	2.7
Standard Deviation	7.9	1.9
CV	8.14	53.28
Grand Mean	96.8	3.5
Levene's F	8.23	1.226
Levene's Prob(F)	0.001*	0.282
Rank X2	.	.
P(Rank X2)	.	.
Skewness	-4.5278*	1.1656*

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.

Missing data estimates are included in columns: Yates=2,3,4,5,20,21,22,24

Could not calculate LSD (% mean diff) for columns 2,18 because error mean square = 0.

Purdue Weed Science

Corn Herbicide Programs Showcase

Trial ID: 19S-MGS-CORN-11	Location: Meigs	Trial Year
Protocol ID: 19S-MGS-CORN-11	Investigator (Creator): Dr. Bill Johnson	
Project ID: Showcase	Study Director: Dustin Johnson & Marcelo Zimmer	
	Sponsor Contact: UPL/Summit Agro/AMVAC	

Pest Type	W Weed	
Pest Code	SETFA	
Pest Scientific Name	Setaria faberi	
Pest Name	Giant foxtail	
Crop Type, Code	C ZEAMX	C ZEAMX
BBCH Scale	BCOR	BCOR
Crop Scientific Name	Zea mays	Zea mays
Crop Name	Corn	Corn
Rating Date	Jul-5-2019	Jul-13-2019
Part Rated	PLOT -	PLOT -
Rating Type	CONTRO	PHYGEN
Rating Unit	%	%
Sample Size		
Number of Subsamples	1	1
Assessed By	D. JOHNSON	D. JOHNSON
Data Entry Date	Jul-18-2019	Jul-18-2019
Rating Timing	A3	A4
Days After First/Last Applic.	32 4	40 12
Trt-Eval Interval	21 DA-A	21 DA-A
Plant-Eval Interval	32 DP-1	40 DP-1
Days After Emergence	23 DE-1	31 DE-1
ARM Action Codes	P	P
Number of Decimals	0	0
Trt Treatment	Rate	Appl
No. Name	Rate Unit	Code
	9	10
Kurtosis	21.3256*	-0.1416
Replicate F	0.486	2.509
Replicate Prob(F)	0.6938	0.0699
Treatment F	4.912	28.480
Treatment Prob(F)	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.

Missing data estimates are included in columns: Yates=2,3,4,5,20,21,22,24

Could not calculate LSD (% mean diff) for columns 2,18 because error mean square = 0.

Purdue Weed Science

Corn Herbicide Programs Showcase

Trial ID: 19S-MGS-CORN-11	Location: Meigs	Trial Year
Protocol ID: 19S-MGS-CORN-11	Investigator (Creator): Dr. Bill Johnson	
Project ID: Showcase	Study Director: Dustin Johnson & Marcelo Zimmer	
	Sponsor Contact: UPL/Summit Agro/AMVAC	

	W Weed	W Weed
Pest Type	AMATA	AMBTR
Pest Code	AMATA	AMBTR
Pest Scientific Name	Amaranthus tamariscinus	Ambrosia trifida
Pest Name	Common waterhemp	Giant ragweed
Crop Type, Code	C ZEAMX	C ZEAMX
BBCH Scale	BCOR	BCOR
Crop Scientific Name	Zea mays	Zea mays
Crop Name	Corn	Corn
Rating Date	Jul-13-2019	Jul-13-2019
Part Rated	PLOT -	PLOT -
Rating Type	CONTRO	CONTRO
Rating Unit	%	%
Sample Size		
Number of Subsamples	1	1
Assessed By	D. JOHNSON	D. JOHNSON
Data Entry Date	Jul-18-2019	Jul-18-2019
Rating Timing	A4	A4
Days After First/Last Applic.	40 12	40 12
Trt-Eval Interval	21 DA-A	21 DA-A
Plant-Eval Interval	40 DP-1	40 DP-1
Days After Emergence	31 DE-1	31 DE-1
ARM Action Codes	P	P
Number of Decimals	0	0
Trt Treatment		
No. Name	Rate Unit Code	
	11	12
1 UNTREATED CHECK	0	0
2 BICEP LITE II MAGNUM 1.67 qt/a A	69 b	67 b
3 BICEP LITE II MAGNUM 1.67 qt/a A SHIELDDEX 1 fl oz/a C AATREX 1 pt/a C MSO 1 % v/v C N-PAK AMS 2.5 % v/v C	100 a	100 a
4 BICEP LITE II MAGNUM 1.67 qt/a A SHIELDDEX 1.3 fl oz/a C AATREX 1 pt/a C MSO 1 % v/v C N-PAK AMS 2.5 % v/v C	100 a	100 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.

Missing data estimates are included in columns: Yates=2,3,4,5,20,21,22,24

Could not calculate LSD (% mean diff) for columns 2,18 because error mean square = 0.

Purdue Weed Science

Corn Herbicide Programs Showcase

Trial ID: 19S-MGS-CORN-11	Location: Meigs	Trial Year
Protocol ID: 19S-MGS-CORN-11	Investigator (Creator): Dr. Bill Johnson	
Project ID: Showcase	Study Director: Dustin Johnson & Marcelo Zimmer	
	Sponsor Contact: UPL/Summit Agro/AMVAC	

	W Weed	W Weed
Pest Type	AMATA	AMBTR
Pest Code	AMATA	AMBTR
Pest Scientific Name	Amaranthus tamariscinus	Ambrosia trifida
Pest Name	Common waterhemp	Giant ragweed
Crop Type, Code	C ZEAMX	C ZEAMX
BBCH Scale	BCOR	BCOR
Crop Scientific Name	Zea mays	Zea mays
Crop Name	Corn	Corn
Rating Date	Jul-13-2019	Jul-13-2019
Part Rated	PLOT -	PLOT -
Rating Type	CONTRO	CONTRO
Rating Unit	%	%
Sample Size		
Number of Subsamples	1	1
Assessed By	D. JOHNSON	D. JOHNSON
Data Entry Date	Jul-18-2019	Jul-18-2019
Rating Timing	A4	A4
Days After First/Last Applic.	40 12	40 12
Trt-Eval Interval	21 DA-A	21 DA-A
Plant-Eval Interval	40 DP-1	40 DP-1
Days After Emergence	31 DE-1	31 DE-1
ARM Action Codes	P	P
Number of Decimals	0	0
Trt Treatment		
No. Name	11	12
5 BICEP LITE II MAGNUM	1.67 qt/a A	100 a
IMPACT	1 fl oz/a C	
AATREX	1 pt/a C	
MSO	1 % v/v C	
N-PAK AMS	2.5 % v/v C	
6 BICEP LITE II MAGNUM	1.67 qt/a A	100 a
LAUDIS	3 fl oz/a C	
AATREX	1 pt/a C	
MSO	1 % v/v C	
N-PAK AMS	2.5 % 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.

Missing data estimates are included in columns: Yates=2,3,4,5,20,21,22,24

Could not calculate LSD (% mean diff) for columns 2,18 because error mean square = 0.

Purdue Weed Science

Corn Herbicide Programs Showcase

Trial ID: 19S-MGS-CORN-11	Location: Meigs	Trial Year
Protocol ID: 19S-MGS-CORN-11	Investigator (Creator): Dr. Bill Johnson	
Project ID: Showcase	Study Director: Dustin Johnson & Marcelo Zimmer	
	Sponsor Contact: UPL/Summit Agro/AMVAC	

	W Weed	W Weed
Pest Type	AMATA	AMBTR
Pest Code	AMATA	AMBTR
Pest Scientific Name	Amaranthus tamariscinus	Ambrosia trifida
Pest Name	Common waterhemp	Giant ragweed
Crop Type, Code	C ZEAMX	C ZEAMX
BBCH Scale	BCOR	BCOR
Crop Scientific Name	Zea mays	Zea mays
Crop Name	Corn	Corn
Rating Date	Jul-13-2019	Jul-13-2019
Part Rated	PLOT -	PLOT -
Rating Type	CONTRO	CONTRO
Rating Unit	%	%
Sample Size		
Number of Subsamples	1	1
Assessed By	D. JOHNSON	D. JOHNSON
Data Entry Date	Jul-18-2019	Jul-18-2019
Rating Timing	A4	A4
Days After First/Last Applic.	40 12	40 12
Trt-Eval Interval	21 DA-A	21 DA-A
Plant-Eval Interval	40 DP-1	40 DP-1
Days After Emergence	31 DE-1	31 DE-1
ARM Action Codes	P	P
Number of Decimals	0	0
Trt Treatment		
No. Name	11	12
7 BICEP LITE II MAGNUM	1.67 qt/a A	100 a
CALLISTO	3 fl oz/a C	100 a
AATREX	1 pt/a C	
ACTIVATOR 90 NIS	0.25 % v/v C	
N-PAK AMS	2.5 % v/v C	
8 AATREX	2 pt/a A	58 b
9 AATREX	2 pt/a A	100 a
INTERMOC	70 fl oz/a D	
N-PAK AMS	2.5 % v/v D	

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.

Missing data estimates are included in columns: Yates=2,3,4,5,20,21,22,24

Could not calculate LSD (% mean diff) for columns 2,18 because error mean square = 0.

Purdue Weed Science

Corn Herbicide Programs Showcase			Trial Year
Trial ID: 19S-MGS-CORN-11	Location: Meigs		
Protocol ID: 19S-MGS-CORN-11	Investigator (Creator): Dr. Bill Johnson		
Project ID: Showcase	Study Director: Dustin Johnson & Marcelo Zimmer		
	Sponsor Contact: UPL/Summit Agro/AMVAC		

	W Weed	W Weed
Pest Type	AMATA	AMBTR
Pest Code	AMATA	AMBTR
Pest Scientific Name	Amaranthus tamariscinus	Ambrosia trifida
Pest Name	Common waterhemp	Giant ragweed
Crop Type, Code	C ZEAMX	C ZEAMX
BBCH Scale	BCOR	BCOR
Crop Scientific Name	Zea mays	Zea mays
Crop Name	Corn	Corn
Rating Date	Jul-13-2019	Jul-13-2019
Part Rated	PLOT -	PLOT -
Rating Type	CONTRO	CONTRO
Rating Unit	%	%
Sample Size		
Number of Subsamples	1	1
Assessed By	D. JOHNSON	D. JOHNSON
Data Entry Date	Jul-18-2019	Jul-18-2019
Rating Timing	A4	A4
Days After First/Last Applic.	40 12	40 12
Trt-Eval Interval	21 DA-A	21 DA-A
Plant-Eval Interval	40 DP-1	40 DP-1
Days After Emergence	31 DE-1	31 DE-1
ARM Action Codes	P	P
Number of Decimals	0	0
Trt Treatment		
No. Name	Rate Appl Rate Unit Code	
	11	12
10 AATREX	2 pt/a A	100 a
INTERMOC	70 fl oz/a D	
MOTIF	3.36 fl oz/a D	
N-PAK AMS	2.5 % v/v D	
COC	1 % v/v D	
11 AATREX	2 pt/a A	100 a
HALEX GT	2 qt/a D	
ACTIVATOR 90 NIS	0.25 % v/v D	
N-PAK AMS	2.5 % v/v D	
12 HARNESS XTRA 5.6L	3.2 pt/a A	100 a
IMPACTZ	10.7 fl oz/a C	
MSO	1 % v/v C	
N-PAK AMS	2.5 % 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.

Missing data estimates are included in columns: Yates=2,3,4,5,20,21,22,24

Could not calculate LSD (% mean diff) for columns 2,18 because error mean square = 0.

Purdue Weed Science

Corn Herbicide Programs Showcase

Trial ID: 19S-MGS-CORN-11	Location: Meigs	Trial Year
Protocol ID: 19S-MGS-CORN-11	Investigator (Creator): Dr. Bill Johnson	
Project ID: Showcase	Study Director: Dustin Johnson & Marcelo Zimmer	
	Sponsor Contact: UPL/Summit Agro/AMVAC	

	W Weed	W Weed
Pest Type	AMATA	AMBTR
Pest Code	AMATA	AMBTR
Pest Scientific Name	Amaranthus tamariscinus	Ambrosia trifida
Pest Name	Common waterhemp	Giant ragweed
Crop Type, Code	C ZEAMX	C ZEAMX
BBCH Scale	BCOR	BCOR
Crop Scientific Name	Zea mays	Zea mays
Crop Name	Corn	Corn
Rating Date	Jul-13-2019	Jul-13-2019
Part Rated	PLOT -	PLOT -
Rating Type	CONTRO	CONTRO
Rating Unit	%	%
Sample Size		
Number of Subsamples	1	1
Assessed By	D. JOHNSON	D. JOHNSON
Data Entry Date	Jul-18-2019	Jul-18-2019
Rating Timing	A4	A4
Days After First/Last Applic.	40 12	40 12
Trt-Eval Interval	21 DA-A	21 DA-A
Plant-Eval Interval	40 DP-1	40 DP-1
Days After Emergence	31 DE-1	31 DE-1
ARM Action Codes	P	P
Number of Decimals	0	0
Trt Treatment		
No. Name	11	12
13 HARNESS XTRA 5.6L	3.2 pt/a A	100 a
IMPACTZ	8 fl oz/a C	100 a
LIBERTY 280 SL	22 fl oz/a C	
MSO	0.5 % v/v C	
N-PAK AMS	2.5 % v/v C	
14 HARNESS XTRA 5.6L	3.2 pt/a A	100 a
SHIELDEX	1.35 fl oz/a C	
AATREX	0.67 pt/a C	
MSO	1 % v/v C	
N-PAK AMS	2.5 % 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.

Missing data estimates are included in columns: Yates=2,3,4,5,20,21,22,24

Could not calculate LSD (% mean diff) for columns 2,18 because error mean square = 0.

Purdue Weed Science

Corn Herbicide Programs Showcase

Trial ID: 19S-MGS-CORN-11	Location: Meigs	Trial Year
Protocol ID: 19S-MGS-CORN-11	Investigator (Creator): Dr. Bill Johnson	
Project ID: Showcase	Study Director: Dustin Johnson & Marcelo Zimmer	
	Sponsor Contact: UPL/Summit Agro/AMVAC	

Pest Type	W Weed	W Weed
Pest Code	AMATA	AMBTR
Pest Scientific Name	Amaranthus tamariscinus	Ambrosia trifida
Pest Name	Common waterhemp	Giant ragweed
Crop Type, Code	C ZEAMX	C ZEAMX
BBCH Scale	BCOR	BCOR
Crop Scientific Name	Zea mays	Zea mays
Crop Name	Corn	Corn
Rating Date	Jul-13-2019	Jul-13-2019
Part Rated	PLOT -	PLOT -
Rating Type	CONTRO	CONTRO
Rating Unit	%	%
Sample Size		
Number of Subsamples	1	1
Assessed By	D. JOHNSON	D. JOHNSON
Data Entry Date	Jul-18-2019	Jul-18-2019
Rating Timing	A4	A4
Days After First/Last Applic.	40 12	40 12
Trt-Eval Interval	21 DA-A	21 DA-A
Plant-Eval Interval	40 DP-1	40 DP-1
Days After Emergence	31 DE-1	31 DE-1
ARM Action Codes	P	P
Number of Decimals	0	0
Trt Treatment	Rate Appl	
No. Name	Rate Unit Code	
	11	12
15 HARNESS	1.75 pt/a B	100 a
IMPACT	1 fl oz/a B	
AATREX	1 pt/a B	
MSO	0.5 % v/v B	
N-PAK AMS	2.5 % v/v B	
16 HARNESS	1.75 pt/a B	100 a
IMPACT	0.75 fl oz/a B	
ROUNDUP POWERMAX	32 fl oz/a B	
AATREX	1 pt/a B	
MSO	0.25 % v/v B	
N-PAK AMS	2.5 % v/v 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.

Missing data estimates are included in columns: Yates=2,3,4,5,20,21,22,24

Could not calculate LSD (% mean diff) for columns 2,18 because error mean square = 0.

Purdue Weed Science

Corn Herbicide Programs Showcase				Trial Year
Trial ID: 19S-MGS-CORN-11		Location: Meigs		
Protocol ID: 19S-MGS-CORN-11		Investigator (Creator): Dr. Bill Johnson		
Project ID: Showcase		Study Director: Dustin Johnson & Marcelo Zimmer		
Sponsor Contact: UPL/Summit Agro/AMVAC				
Pest Type		W Weed	W Weed	
Pest Code		AMATA	AMBTR	
Pest Scientific Name		Amaranthus tamariscinus	Ambrosia trifida	
Pest Name		Common waterhemp	Giant ragweed	
Crop Type, Code		C ZEAMX	C ZEAMX	
BBCH Scale		BCOR	BCOR	
Crop Scientific Name		Zea mays	Zea mays	
Crop Name		Corn	Corn	
Rating Date		Jul-13-2019	Jul-13-2019	
Part Rated		PLOT -	PLOT -	
Rating Type		CONTRO	CONTRO	
Rating Unit		%	%	
Sample Size				
Number of Subsamples		1	1	
Assessed By		D. JOHNSON	D. JOHNSON	
Data Entry Date		Jul-18-2019	Jul-18-2019	
Rating Timing		A4	A4	
Days After First/Last Applic.		40 12	40 12	
Trt-Eval Interval		21 DA-A	21 DA-A	
Plant-Eval Interval		40 DP-1	40 DP-1	
Days After Emergence		31 DE-1	31 DE-1	
ARM Action Codes		P	P	
Number of Decimals		0	0	
Trt Treatment	Rate	Appl		
No. Name	Rate Unit	Code	11	12
17 HELMET	1.67 pt/a	A	100 a	100 a
HAI TRADENAME	3.42 fl oz/a	C		
MSO	1 % v/v	C		
UAN 28%	2.5 % 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.

Missing data estimates are included in columns: Yates=2,3,4,5,20,21,22,24

Could not calculate LSD (% mean diff) for columns 2,18 because error mean square = 0.

Purdue Weed Science

Corn Herbicide Programs Showcase

Trial ID: 19S-MGS-CORN-11	Location: Meigs	Trial Year
Protocol ID: 19S-MGS-CORN-11	Investigator (Creator): Dr. Bill Johnson	
Project ID: Showcase	Study Director: Dustin Johnson & Marcelo Zimmer	
Sponsor Contact: UPL/Summit Agro/AMVAC		

	W Weed	W Weed
Pest Type	AMATA	AMBTR
Pest Code	AMATA	AMBTR
Pest Scientific Name	Amaranthus tamariscinus	Ambrosia trifida
Pest Name	Common waterhemp	Giant ragweed
Crop Type, Code	C ZEAMX	C ZEAMX
BBCH Scale	BCOR	BCOR
Crop Scientific Name	Zea mays	Zea mays
Crop Name	Corn	Corn
Rating Date	Jul-13-2019	Jul-13-2019
Part Rated	PLOT -	PLOT -
Rating Type	CONTRO	CONTRO
Rating Unit	%	%
Sample Size		
Number of Subsamples	1	1
Assessed By	D. JOHNSON	D. JOHNSON
Data Entry Date	Jul-18-2019	Jul-18-2019
Rating Timing	A4	A4
Days After First/Last Applic.	40 12	40 12
Trt-Eval Interval	21 DA-A	21 DA-A
Plant-Eval Interval	40 DP-1	40 DP-1
Days After Emergence	31 DE-1	31 DE-1
ARM Action Codes	P	P
Number of Decimals	0	0
Trt Treatment		
No. Name	Rate Appl Rate Unit Code	
	11	12
18 HELMET	1.67 pt/a A	100 a
HAI TRADENAME	3.42 fl oz/a C	100 a
AATREX	1.5 pt/a C	
MSO	1 % v/v C	
UAN 28%	2.5 % v/v C	
LSD P=.05	17.7	15.6
Standard Deviation	12.4	11.0
CV	13.01	11.23
Grand Mean	95.6	97.9
Levene's F	2.14	1.475
Levene's Prob(F)	0.02*	0.146
Rank X2	.	.
P(Rank X2)	.	.
Skewness	-4.4915*	-7.7093*

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Mean comparisons performed only when AOV Treatment P(F) is significant at mean comparison OSL.

Untreated treatment(s) 1 excluded from analysis.

Missing data estimates are included in columns: Yates=2,3,4,5,20,21,22,24

Could not calculate LSD (% mean diff) for columns 2,18 because error mean square = 0.

Purdue Weed Science

Corn Herbicide Programs Showcase			
Trial ID: 19S-MGS-CORN-11		Location: Meigs	
Protocol ID: 19S-MGS-CORN-11		Investigator (Creator): Dr. Bill Johnson	
Project ID: Showcase		Study Director: Dustin Johnson & Marcelo Zimmer	
Sponsor Contact: UPL/Summit Agro/AMVAC			
		W Weed	W Weed
		AMATA	AMBTR
Pest Type		Amaranthus tamariscinus	Ambrosia trifida
Pest Code		Common waterhemp	Giant ragweed
Pest Scientific Name		C ZEAMX	C ZEAMX
Pest Name		BCOR	BCOR
Crop Type, Code		Zea mays	Zea mays
BBCH Scale		Corn	Corn
Crop Scientific Name		Jul-13-2019	Jul-13-2019
Crop Name		PLOT -	PLOT -
Rating Date		CONTRO	CONTRO
Part Rated		%	%
Rating Type			
Rating Unit		1	1
Sample Size		D. JOHNSON	D. JOHNSON
Number of Subsamples		Jul-18-2019	Jul-18-2019
Assessed By		A4	A4
Data Entry Date		40 12	40 12
Rating Timing		21 DA-A	21 DA-A
Days After First/Last Applic.		40 DP-1	40 DP-1
Trt-Eval Interval		31 DE-1	31 DE-1
Plant-Eval Interval		P	P
Days After Emergence		0	0
ARM Action Codes			
Number of Decimals			
Trt Treatment	Rate	Appl	
No. Name	Rate Unit	Code	
		11	12
Kurtosis		21.5045*	61.5618*
Replicate F		0.445	1.061
Replicate Prob(F)		0.7222	0.3744
Treatment F		3.994	2.080
Treatment Prob(F)		0.0001	0.0260

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.

Missing data estimates are included in columns: Yates=2,3,4,5,20,21,22,24

Could not calculate LSD (% mean diff) for columns 2,18 because error mean square = 0.

Purdue Weed Science

Corn Herbicide Programs Showcase

Trial ID: 19S-MGS-CORN-11	Location: Meigs	Trial Year
Protocol ID: 19S-MGS-CORN-11	Investigator (Creator): Dr. Bill Johnson	
Project ID: Showcase	Study Director: Dustin Johnson & Marcelo Zimmer	
	Sponsor Contact: UPL/Summit Agro/AMVAC	

Pest Type	W Weed	
Pest Code	SETFA	
Pest Scientific Name	Setaria faberi	
Pest Name	Giant foxtail	
Crop Type, Code	C ZEAMX	C ZEAMX
BBCH Scale	BCOR	BCOR
Crop Scientific Name	Zea mays	Zea mays
Crop Name	Corn	Corn
Rating Date	Jul-13-2019	Jul-26-2019
Part Rated	PLOT -	PLOT -
Rating Type	CONTRO	PHYGEN
Rating Unit	%	%
Sample Size		
Number of Subsamples	1	1
Assessed By	D. JOHNSON	D. JOHNSON
Data Entry Date	Jul-18-2019	Jul-18-2019
Rating Timing	A4	A5
Days After First/Last Applic.	40 12	53 25
Trt-Eval Interval	21 DA-A	21 DA-A
Plant-Eval Interval	40 DP-1	53 DP-1
Days After Emergence	31 DE-1	44 DE-1
ARM Action Codes	P	P
Number of Decimals	0	0
Trt Treatment	Rate	Appl
No. Name	Rate Unit	Code
		13
		14
1 UNTREATED CHECK		0
2 BICEP LITE II MAGNUM	1.67 qt/a A	74 bc
3 BICEP LITE II MAGNUM	1.67 qt/a A	100 a
SHIELDEX	1 fl oz/a C	
AATREX	1 pt/a C	
MSO	1 % v/v C	
N-PAK AMS	2.5 % v/v C	
4 BICEP LITE II MAGNUM	1.67 qt/a A	100 a
SHIELDEX	1.3 fl oz/a C	
AATREX	1 pt/a C	
MSO	1 % v/v C	
N-PAK AMS	2.5 % v/v C	

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Mean comparisons performed only when AOV Treatment P(F) is significant at mean comparison OSL.

Untreated treatment(s) 1 excluded from analysis.

Missing data estimates are included in columns: Yates=2,3,4,5,20,21,22,24

Could not calculate LSD (% mean diff) for columns 2,18 because error mean square = 0.

Purdue Weed Science

Corn Herbicide Programs Showcase

Trial ID: 19S-MGS-CORN-11	Location: Meigs	Trial Year
Protocol ID: 19S-MGS-CORN-11	Investigator (Creator): Dr. Bill Johnson	
Project ID: Showcase	Study Director: Dustin Johnson & Marcelo Zimmer	
	Sponsor Contact: UPL/Summit Agro/AMVAC	

Pest Type	W Weed	
Pest Code	SETFA	
Pest Scientific Name	Setaria faberi	
Pest Name	Giant foxtail	
Crop Type, Code	C ZEAMX	C ZEAMX
BBCH Scale	BCOR	BCOR
Crop Scientific Name	Zea mays	Zea mays
Crop Name	Corn	Corn
Rating Date	Jul-13-2019	Jul-26-2019
Part Rated	PLOT -	PLOT -
Rating Type	CONTRO	PHYGEN
Rating Unit	%	%
Sample Size		
Number of Subsamples	1	1
Assessed By	D. JOHNSON	D. JOHNSON
Data Entry Date	Jul-18-2019	Jul-18-2019
Rating Timing	A4	A5
Days After First/Last Applic.	40 12	53 25
Trt-Eval Interval	21 DA-A	21 DA-A
Plant-Eval Interval	40 DP-1	53 DP-1
Days After Emergence	31 DE-1	44 DE-1
ARM Action Codes	P	P
Number of Decimals	0	0
Trt Treatment	Rate	Appl
No. Name	Rate Unit	Code
		13
		14
5 BICEP LITE II MAGNUM	1.67 qt/a	A
IMPACT	1 fl oz/a	C
AATREX	1 pt/a	C
MSO	1 % v/v	C
N-PAK AMS	2.5 % v/v	C
6 BICEP LITE II MAGNUM	1.67 qt/a	A
LAUDIS	3 fl oz/a	C
AATREX	1 pt/a	C
MSO	1 % v/v	C
N-PAK AMS	2.5 % 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.

Missing data estimates are included in columns: Yates=2,3,4,5,20,21,22,24

Could not calculate LSD (% mean diff) for columns 2,18 because error mean square = 0.

Purdue Weed Science

Corn Herbicide Programs Showcase

Trial ID: 19S-MGS-CORN-11	Location: Meigs	Trial Year
Protocol ID: 19S-MGS-CORN-11	Investigator (Creator): Dr. Bill Johnson	
Project ID: Showcase	Study Director: Dustin Johnson & Marcelo Zimmer	
	Sponsor Contact: UPL/Summit Agro/AMVAC	

Pest Type	W Weed	
Pest Code	SETFA	
Pest Scientific Name	Setaria faberi	
Pest Name	Giant foxtail	
Crop Type, Code	C ZEAMX	C ZEAMX
BBCH Scale	BCOR	BCOR
Crop Scientific Name	Zea mays	Zea mays
Crop Name	Corn	Corn
Rating Date	Jul-13-2019	Jul-26-2019
Part Rated	PLOT -	PLOT -
Rating Type	CONTRO	PHYGEN
Rating Unit	%	%
Sample Size		
Number of Subsamples	1	1
Assessed By	D. JOHNSON	D. JOHNSON
Data Entry Date	Jul-18-2019	Jul-18-2019
Rating Timing	A4	A5
Days After First/Last Applic.	40 12	53 25
Trt-Eval Interval	21 DA-A	21 DA-A
Plant-Eval Interval	40 DP-1	53 DP-1
Days After Emergence	31 DE-1	44 DE-1
ARM Action Codes	P	P
Number of Decimals	0	0
Trt Treatment	Rate	Appl
No. Name	Rate Unit	Code
		13
		14
7 BICEP LITE II MAGNUM	1.67 qt/a A	93 ab
CALLISTO	3 fl oz/a C	0 c
AATREX	1 pt/a C	
ACTIVATOR 90 NIS	0.25 % v/v C	
N-PAK AMS	2.5 % v/v C	
8 AATREX	2 pt/a A	60 c
9 AATREX	2 pt/a A	100 a
INTERMOC	70 fl oz/a D	0 c
N-PAK AMS	2.5 % v/v D	

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.

Missing data estimates are included in columns: Yates=2,3,4,5,20,21,22,24

Could not calculate LSD (% mean diff) for columns 2,18 because error mean square = 0.

Purdue Weed Science

Corn Herbicide Programs Showcase

Trial ID: 19S-MGS-CORN-11	Location: Meigs	Trial Year
Protocol ID: 19S-MGS-CORN-11	Investigator (Creator): Dr. Bill Johnson	
Project ID: Showcase	Study Director: Dustin Johnson & Marcelo Zimmer	
	Sponsor Contact: UPL/Summit Agro/AMVAC	

Pest Type	W Weed	
Pest Code	SETFA	
Pest Scientific Name	Setaria faberi	
Pest Name	Giant foxtail	
Crop Type, Code	C ZEAMX	C ZEAMX
BBCH Scale	BCOR	BCOR
Crop Scientific Name	Zea mays	Zea mays
Crop Name	Corn	Corn
Rating Date	Jul-13-2019	Jul-26-2019
Part Rated	PLOT -	PLOT -
Rating Type	CONTRO	PHYGEN
Rating Unit	%	%
Sample Size		
Number of Subsamples	1	1
Assessed By	D. JOHNSON	D. JOHNSON
Data Entry Date	Jul-18-2019	Jul-18-2019
Rating Timing	A4	A5
Days After First/Last Applic.	40 12	53 25
Trt-Eval Interval	21 DA-A	21 DA-A
Plant-Eval Interval	40 DP-1	53 DP-1
Days After Emergence	31 DE-1	44 DE-1
ARM Action Codes	P	P
Number of Decimals	0	0
Trt Treatment	Rate	Appl
No. Name	Rate Unit	Code
		13
		14
10 AATREX	2 pt/a A	100 a
INTERMOC	70 fl oz/a D	1 c
MOTIF	3.36 fl oz/a D	
N-PAK AMS	2.5 % v/v D	
COC	1 % v/v D	
11 AATREX	2 pt/a A	100 a
HALEX GT	2 qt/a D	0 c
ACTIVATOR 90 NIS	0.25 % v/v D	
N-PAK AMS	2.5 % v/v D	
12 HARNESS XTRA 5.6L	3.2 pt/a A	100 a
IMPACTZ	10.7 fl oz/a C	0 c
MSO	1 % v/v C	
N-PAK AMS	2.5 % 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.

Missing data estimates are included in columns: Yates=2,3,4,5,20,21,22,24

Could not calculate LSD (% mean diff) for columns 2,18 because error mean square = 0.

Purdue Weed Science

Corn Herbicide Programs Showcase

Trial ID: 19S-MGS-CORN-11	Location: Meigs	Trial Year
Protocol ID: 19S-MGS-CORN-11	Investigator (Creator): Dr. Bill Johnson	
Project ID: Showcase	Study Director: Dustin Johnson & Marcelo Zimmer	
	Sponsor Contact: UPL/Summit Agro/AMVAC	

Pest Type	W Weed	
Pest Code	SETFA	
Pest Scientific Name	Setaria faberi	
Pest Name	Giant foxtail	
Crop Type, Code	C ZEAMX	C ZEAMX
BBCH Scale	BCOR	BCOR
Crop Scientific Name	Zea mays	Zea mays
Crop Name	Corn	Corn
Rating Date	Jul-13-2019	Jul-26-2019
Part Rated	PLOT -	PLOT -
Rating Type	CONTRO	PHYGEN
Rating Unit	%	%
Sample Size		
Number of Subsamples	1	1
Assessed By	D. JOHNSON	D. JOHNSON
Data Entry Date	Jul-18-2019	Jul-18-2019
Rating Timing	A4	A5
Days After First/Last Applic.	40 12	53 25
Trt-Eval Interval	21 DA-A	21 DA-A
Plant-Eval Interval	40 DP-1	53 DP-1
Days After Emergence	31 DE-1	44 DE-1
ARM Action Codes	P	P
Number of Decimals	0	0
Trt Treatment	Rate	Appl
No. Name	Rate Unit	Code
		13
		14
13 HARNESS XTRA 5.6L	3.2 pt/a	A
IMPACTZ	8 fl oz/a	C
LIBERTY 280 SL	22 fl oz/a	C
MSO	0.5 % v/v	C
N-PAK AMS	2.5 % v/v	C
14 HARNESS XTRA 5.6L	3.2 pt/a	A
SHIELDEX	1.35 fl oz/a	C
AATREX	0.67 pt/a	C
MSO	1 % v/v	C
N-PAK AMS	2.5 % 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.

Missing data estimates are included in columns: Yates=2,3,4,5,20,21,22,24

Could not calculate LSD (% mean diff) for columns 2,18 because error mean square = 0.

Purdue Weed Science

Corn Herbicide Programs Showcase

Trial ID: 19S-MGS-CORN-11	Location: Meigs	Trial Year
Protocol ID: 19S-MGS-CORN-11	Investigator (Creator): Dr. Bill Johnson	
Project ID: Showcase	Study Director: Dustin Johnson & Marcelo Zimmer	
	Sponsor Contact: UPL/Summit Agro/AMVAC	

Pest Type	W Weed	
Pest Code	SETFA	
Pest Scientific Name	Setaria faberi	
Pest Name	Giant foxtail	
Crop Type, Code	C ZEAMX	C ZEAMX
BBCH Scale	BCOR	BCOR
Crop Scientific Name	Zea mays	Zea mays
Crop Name	Corn	Corn
Rating Date	Jul-13-2019	Jul-26-2019
Part Rated	PLOT -	PLOT -
Rating Type	CONTRO	PHYGEN
Rating Unit	%	%
Sample Size		
Number of Subsamples	1	1
Assessed By	D. JOHNSON	D. JOHNSON
Data Entry Date	Jul-18-2019	Jul-18-2019
Rating Timing	A4	A5
Days After First/Last Applic.	40 12	53 25
Trt-Eval Interval	21 DA-A	21 DA-A
Plant-Eval Interval	40 DP-1	53 DP-1
Days After Emergence	31 DE-1	44 DE-1
ARM Action Codes	P	P
Number of Decimals	0	0
Trt Treatment	Rate	Appl
No. Name	Rate Unit	Code
		13
		14
15 HARNESS	1.75 pt/a B	100 a
IMPACT	1 fl oz/a B	0 c
AATREX	1 pt/a B	
MSO	0.5 % v/v B	
N-PAK AMS	2.5 % v/v B	
16 HARNESS	1.75 pt/a B	100 a
IMPACT	0.75 fl oz/a B	1 c
ROUNDUP POWERMAX	32 fl oz/a B	
AATREX	1 pt/a B	
MSO	0.25 % v/v B	
N-PAK AMS	2.5 % v/v 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.

Missing data estimates are included in columns: Yates=2,3,4,5,20,21,22,24

Could not calculate LSD (% mean diff) for columns 2,18 because error mean square = 0.

Purdue Weed Science

Corn Herbicide Programs Showcase

Trial ID: 19S-MGS-CORN-11	Location: Meigs	Trial Year
Protocol ID: 19S-MGS-CORN-11	Investigator (Creator): Dr. Bill Johnson	
Project ID: Showcase	Study Director: Dustin Johnson & Marcelo Zimmer	
	Sponsor Contact: UPL/Summit Agro/AMVAC	

Pest Type	W Weed	
Pest Code	SETFA	
Pest Scientific Name	Setaria faberi	
Pest Name	Giant foxtail	
Crop Type, Code	C ZEAMX	C ZEAMX
BBCH Scale	BCOR	BCOR
Crop Scientific Name	Zea mays	Zea mays
Crop Name	Corn	Corn
Rating Date	Jul-13-2019	Jul-26-2019
Part Rated	PLOT -	PLOT -
Rating Type	CONTRO	PHYGEN
Rating Unit	%	%
Sample Size		
Number of Subsamples	1	1
Assessed By	D. JOHNSON	D. JOHNSON
Data Entry Date	Jul-18-2019	Jul-18-2019
Rating Timing	A4	A5
Days After First/Last Applic.	40 12	53 25
Trt-Eval Interval	21 DA-A	21 DA-A
Plant-Eval Interval	40 DP-1	53 DP-1
Days After Emergence	31 DE-1	44 DE-1
ARM Action Codes	P	P
Number of Decimals	0	0
Trt Treatment	Rate	Appl
No. Name	Rate Unit	Code
		13
		14
17 HELMET	1.67 pt/a	A
HAI TRADENAME	3.42 fl oz/a	C
MSO	1 % v/v	C
UAN 28%	2.5 % 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.

Missing data estimates are included in columns: Yates=2,3,4,5,20,21,22,24

Could not calculate LSD (% mean diff) for columns 2,18 because error mean square = 0.

Purdue Weed Science

Corn Herbicide Programs Showcase

Trial ID: 19S-MGS-CORN-11	Location: Meigs	Trial Year
Protocol ID: 19S-MGS-CORN-11	Investigator (Creator): Dr. Bill Johnson	
Project ID: Showcase	Study Director: Dustin Johnson & Marcelo Zimmer	
Sponsor Contact: UPL/Summit Agro/AMVAC		

Pest Type	W Weed		
Pest Code	SETFA		
Pest Scientific Name	Setaria faberi		
Pest Name	Giant foxtail		
Crop Type, Code	C ZEAMX	C ZEAMX	
BBCH Scale	BCOR	BCOR	
Crop Scientific Name	Zea mays	Zea mays	
Crop Name	Corn	Corn	
Rating Date	Jul-13-2019	Jul-26-2019	
Part Rated	PLOT -	PLOT -	
Rating Type	CONTRO	PHYGEN	
Rating Unit	%	%	
Sample Size			
Number of Subsamples	1	1	
Assessed By	D. JOHNSON	D. JOHNSON	
Data Entry Date	Jul-18-2019	Jul-18-2019	
Rating Timing	A4	A5	
Days After First/Last Applic.	40 12	53 25	
Trt-Eval Interval	21 DA-A	21 DA-A	
Plant-Eval Interval	40 DP-1	53 DP-1	
Days After Emergence	31 DE-1	44 DE-1	
ARM Action Codes	P	P	
Number of Decimals	0	0	
Trt Treatment	Rate	Appl	
No. Name	Rate Unit	Code	
			13 14
18 HELMET	1.67 pt/a	A	100 a 6 b
HAI TRADENAME	3.42 fl oz/a	C	
AATREX	1.5 pt/a	C	
MSO	1 % v/v	C	
UAN 28%	2.5 % v/v	C	
LSD P=.05	20.2	1.4	
Standard Deviation	14.2	1.0	
CV	14.84	64.54	
Grand Mean	95.7	1.5	
Levene's F	1.089	0.982	
Levene's Prob(F)	0.389	0.489	
Rank X2	.	.	
P(Rank X2)	.	.	
Skewness	-4.2831*	1.4563*	

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.

Missing data estimates are included in columns: Yates=2,3,4,5,20,21,22,24

Could not calculate LSD (% mean diff) for columns 2,18 because error mean square = 0.

Purdue Weed Science

Corn Herbicide Programs Showcase

Trial ID: 19S-MGS-CORN-11	Location: Meigs	Trial Year
Protocol ID: 19S-MGS-CORN-11	Investigator (Creator): Dr. Bill Johnson	
Project ID: Showcase	Study Director: Dustin Johnson & Marcelo Zimmer	
	Sponsor Contact: UPL/Summit Agro/AMVAC	

Pest Type	W Weed	
Pest Code	SETFA	
Pest Scientific Name	Setaria faberi	
Pest Name	Giant foxtail	
Crop Type, Code	C ZEAMX	C ZEAMX
BBCH Scale	BCOR	BCOR
Crop Scientific Name	Zea mays	Zea mays
Crop Name	Corn	Corn
Rating Date	Jul-13-2019	Jul-26-2019
Part Rated	PLOT -	PLOT -
Rating Type	CONTRO	PHYGEN
Rating Unit	%	%
Sample Size		
Number of Subsamples	1	1
Assessed By	D. JOHNSON	D. JOHNSON
Data Entry Date	Jul-18-2019	Jul-18-2019
Rating Timing	A4	A5
Days After First/Last Applic.	40 12	53 25
Trt-Eval Interval	21 DA-A	21 DA-A
Plant-Eval Interval	40 DP-1	53 DP-1
Days After Emergence	31 DE-1	44 DE-1
ARM Action Codes	P	P
Number of Decimals	0	0
Trt Treatment	Rate	Appl
No. Name	Rate Unit	Code
	13	14
Kurtosis	19.4571*	0.8469
Replicate F	0.785	2.542
Replicate Prob(F)	0.5084	0.0673
Treatment F	2.504	25.901
Treatment Prob(F)	0.0073	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.

Missing data estimates are included in columns: Yates=2,3,4,5,20,21,22,24

Could not calculate LSD (% mean diff) for columns 2,18 because error mean square = 0.

Purdue Weed Science

Corn Herbicide Programs Showcase

Trial ID: 19S-MGS-CORN-11	Location: Meigs	Trial Year
Protocol ID: 19S-MGS-CORN-11	Investigator (Creator): Dr. Bill Johnson	
Project ID: Showcase	Study Director: Dustin Johnson & Marcelo Zimmer	
	Sponsor Contact: UPL/Summit Agro/AMVAC	

	W Weed	W Weed
Pest Type	AMATA	AMBTR
Pest Code	AMATA	AMBTR
Pest Scientific Name	Amaranthus tamariscinus	Ambrosia trifida
Pest Name	Common waterhemp	Giant ragweed
Crop Type, Code	C ZEAMX	C ZEAMX
BBCH Scale	BCOR	BCOR
Crop Scientific Name	Zea mays	Zea mays
Crop Name	Corn	Corn
Rating Date	Jul-26-2019	Jul-26-2019
Part Rated	PLOT -	PLOT -
Rating Type	CONTRO	CONTRO
Rating Unit	%	%
Sample Size		
Number of Subsamples	1	1
Assessed By	D. JOHNSON	D. JOHNSON
Data Entry Date	Jul-18-2019	Jul-18-2019
Rating Timing	A5	A5
Days After First/Last Applic.	53 25	53 25
Trt-Eval Interval	21 DA-A	21 DA-A
Plant-Eval Interval	53 DP-1	53 DP-1
Days After Emergence	44 DE-1	44 DE-1
ARM Action Codes	P	P
Number of Decimals	0	0
Trt Treatment		
No. Name	Rate Unit Code	
	15	16
1 UNTREATED CHECK	0	0
2 BICEP LITE II MAGNUM 1.67 qt/a A	84 b	52 b
3 BICEP LITE II MAGNUM 1.67 qt/a A SHIELDDEX 1 fl oz/a C AATREX 1 pt/a C MSO 1 % v/v C N-PAK AMS 2.5 % v/v C	100 a	100 a
4 BICEP LITE II MAGNUM 1.67 qt/a A SHIELDDEX 1.3 fl oz/a C AATREX 1 pt/a C MSO 1 % v/v C N-PAK AMS 2.5 % v/v C	100 a	100 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.

Missing data estimates are included in columns: Yates=2,3,4,5,20,21,22,24

Could not calculate LSD (% mean diff) for columns 2,18 because error mean square = 0.

Purdue Weed Science

Corn Herbicide Programs Showcase				Trial Year
Trial ID: 19S-MGS-CORN-11		Location: Meigs		
Protocol ID: 19S-MGS-CORN-11		Investigator (Creator): Dr. Bill Johnson		
Project ID: Showcase		Study Director: Dustin Johnson & Marcelo Zimmer		
				Sponsor Contact: UPL/Summit Agro/AMVAC
Pest Type		W Weed	W Weed	
Pest Code		AMATA	AMBTR	
Pest Scientific Name		Amaranthus tamariscinus	Ambrosia trifida	
Pest Name		Common waterhemp	Giant ragweed	
Crop Type, Code		C ZEAMX	C ZEAMX	
BBCH Scale		BCOR	BCOR	
Crop Scientific Name		Zea mays	Zea mays	
Crop Name		Corn	Corn	
Rating Date		Jul-26-2019	Jul-26-2019	
Part Rated		PLOT -	PLOT -	
Rating Type		CONTRO	CONTRO	
Rating Unit		%	%	
Sample Size				
Number of Subsamples		1	1	
Assessed By		D. JOHNSON	D. JOHNSON	
Data Entry Date		Jul-18-2019	Jul-18-2019	
Rating Timing		A5	A5	
Days After First/Last Applic.		53 25	53 25	
Trt-Eval Interval		21 DA-A	21 DA-A	
Plant-Eval Interval		53 DP-1	53 DP-1	
Days After Emergence		44 DE-1	44 DE-1	
ARM Action Codes		P	P	
Number of Decimals		0	0	
Trt Treatment	Rate	Appl		
No. Name	Rate Unit	Code	15	16
5 BICEP LITE II MAGNUM	1.67 qt/a	A	100 a	100 a
IMPACT	1 fl oz/a	C		
AATREX	1 pt/a	C		
MSO	1 % v/v	C		
N-PAK AMS	2.5 % v/v	C		
6 BICEP LITE II MAGNUM	1.67 qt/a	A	100 a	100 a
LAUDIS	3 fl oz/a	C		
AATREX	1 pt/a	C		
MSO	1 % v/v	C		
N-PAK AMS	2.5 % 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.

Missing data estimates are included in columns: Yates=2,3,4,5,20,21,22,24

Could not calculate LSD (% mean diff) for columns 2,18 because error mean square = 0.

Purdue Weed Science

Corn Herbicide Programs Showcase				Trial Year
Trial ID: 19S-MGS-CORN-11		Location: Meigs		
Protocol ID: 19S-MGS-CORN-11		Investigator (Creator): Dr. Bill Johnson		
Project ID: Showcase		Study Director: Dustin Johnson & Marcelo Zimmer		
				Sponsor Contact: UPL/Summit Agro/AMVAC
Pest Type		W Weed	W Weed	
Pest Code		AMATA	AMBTR	
Pest Scientific Name		Amaranthus tamariscinus	Ambrosia trifida	
Pest Name		Common waterhemp	Giant ragweed	
Crop Type, Code		C ZEAMX	C ZEAMX	
BBCH Scale		BCOR	BCOR	
Crop Scientific Name		Zea mays	Zea mays	
Crop Name		Corn	Corn	
Rating Date		Jul-26-2019	Jul-26-2019	
Part Rated		PLOT -	PLOT -	
Rating Type		CONTRO	CONTRO	
Rating Unit		%	%	
Sample Size				
Number of Subsamples		1	1	
Assessed By		D. JOHNSON	D. JOHNSON	
Data Entry Date		Jul-18-2019	Jul-18-2019	
Rating Timing		A5	A5	
Days After First/Last Applic.		53 25	53 25	
Trt-Eval Interval		21 DA-A	21 DA-A	
Plant-Eval Interval		53 DP-1	53 DP-1	
Days After Emergence		44 DE-1	44 DE-1	
ARM Action Codes		P	P	
Number of Decimals		0	0	
Trt Treatment	Rate	Appl		
No. Name	Rate Unit	Code	15	16
7 BICEP LITE II MAGNUM	1.67 qt/a	A	100 a	100 a
CALLISTO	3 fl oz/a	C		
AATREX	1 pt/a	C		
ACTIVATOR 90 NIS	0.25 % v/v	C		
N-PAK AMS	2.5 % v/v	C		
8 AATREX	2 pt/a	A	41 c	69 b
9 AATREX	2 pt/a	A	100 a	100 a
INTERMOC	70 fl oz/a	D		
N-PAK AMS	2.5 % v/v	D		

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.

Missing data estimates are included in columns: Yates=2,3,4,5,20,21,22,24

Could not calculate LSD (% mean diff) for columns 2,18 because error mean square = 0.

Purdue Weed Science

Corn Herbicide Programs Showcase				Trial Year
Trial ID: 19S-MGS-CORN-11		Location: Meigs		
Protocol ID: 19S-MGS-CORN-11		Investigator (Creator): Dr. Bill Johnson		
Project ID: Showcase		Study Director: Dustin Johnson & Marcelo Zimmer		
Sponsor Contact: UPL/Summit Agro/AMVAC				
Pest Type		W Weed	W Weed	
Pest Code		AMATA	AMBTR	
Pest Scientific Name		Amaranthus tamariscinus	Ambrosia trifida	
Pest Name		Common waterhemp	Giant ragweed	
Crop Type, Code		C ZEAMX	C ZEAMX	
BBCH Scale		BCOR	BCOR	
Crop Scientific Name		Zea mays	Zea mays	
Crop Name		Corn	Corn	
Rating Date		Jul-26-2019	Jul-26-2019	
Part Rated		PLOT -	PLOT -	
Rating Type		CONTRO	CONTRO	
Rating Unit		%	%	
Sample Size				
Number of Subsamples		1	1	
Assessed By		D. JOHNSON	D. JOHNSON	
Data Entry Date		Jul-18-2019	Jul-18-2019	
Rating Timing		A5	A5	
Days After First/Last Applic.		53 25	53 25	
Trt-Eval Interval		21 DA-A	21 DA-A	
Plant-Eval Interval		53 DP-1	53 DP-1	
Days After Emergence		44 DE-1	44 DE-1	
ARM Action Codes		P	P	
Number of Decimals		0	0	
Trt Treatment	Rate	Appl		
No. Name	Rate Unit	Code	15	16
10 AATREX	2 pt/a	A	100 a	100 a
INTERMOC	70 fl oz/a	D		
MOTIF	3.36 fl oz/a	D		
N-PAK AMS	2.5 % v/v	D		
COC	1 % v/v	D		
11 AATREX	2 pt/a	A	98 a	100 a
HALEX GT	2 qt/a	D		
ACTIVATOR 90 NIS	0.25 % v/v	D		
N-PAK AMS	2.5 % v/v	D		
12 HARNESS XTRA 5.6L	3.2 pt/a	A	100 a	100 a
IMPACTZ	10.7 fl oz/a	C		
MSO	1 % v/v	C		
N-PAK AMS	2.5 % 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.

Missing data estimates are included in columns: Yates=2,3,4,5,20,21,22,24

Could not calculate LSD (% mean diff) for columns 2,18 because error mean square = 0.

Purdue Weed Science

Corn Herbicide Programs Showcase

Trial ID: 19S-MGS-CORN-11	Location: Meigs	Trial Year
Protocol ID: 19S-MGS-CORN-11	Investigator (Creator): Dr. Bill Johnson	
Project ID: Showcase	Study Director: Dustin Johnson & Marcelo Zimmer	
	Sponsor Contact: UPL/Summit Agro/AMVAC	

	W Weed	W Weed
Pest Type	AMATA	AMBTR
Pest Code	AMATA	AMBTR
Pest Scientific Name	Amaranthus tamariscinus	Ambrosia trifida
Pest Name	Common waterhemp	Giant ragweed
Crop Type, Code	C ZEAMX	C ZEAMX
BBCH Scale	BCOR	BCOR
Crop Scientific Name	Zea mays	Zea mays
Crop Name	Corn	Corn
Rating Date	Jul-26-2019	Jul-26-2019
Part Rated	PLOT -	PLOT -
Rating Type	CONTRO	CONTRO
Rating Unit	%	%
Sample Size		
Number of Subsamples	1	1
Assessed By	D. JOHNSON	D. JOHNSON
Data Entry Date	Jul-18-2019	Jul-18-2019
Rating Timing	A5	A5
Days After First/Last Applic.	53 25	53 25
Trt-Eval Interval	21 DA-A	21 DA-A
Plant-Eval Interval	53 DP-1	53 DP-1
Days After Emergence	44 DE-1	44 DE-1
ARM Action Codes	P	P
Number of Decimals	0	0
Trt Treatment		
No. Name	Rate Unit Appl Code	
	15	16
13 HARNESS XTRA 5.6L	3.2 pt/a A	100 a
IMPACTZ	8 fl oz/a C	
LIBERTY 280 SL	22 fl oz/a C	
MSO	0.5 % v/v C	
N-PAK AMS	2.5 % v/v C	
14 HARNESS XTRA 5.6L	3.2 pt/a A	100 a
SHIELDEX	1.35 fl oz/a C	
AATREX	0.67 pt/a C	
MSO	1 % v/v C	
N-PAK AMS	2.5 % v/v C	

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Mean comparisons performed only when AOV Treatment P(F) is significant at mean comparison OSL.

Untreated treatment(s) 1 excluded from analysis.

Missing data estimates are included in columns: Yates=2,3,4,5,20,21,22,24

Could not calculate LSD (% mean diff) for columns 2,18 because error mean square = 0.

Purdue Weed Science

Corn Herbicide Programs Showcase

Trial ID: 19S-MGS-CORN-11	Location: Meigs	Trial Year
Protocol ID: 19S-MGS-CORN-11	Investigator (Creator): Dr. Bill Johnson	
Project ID: Showcase	Study Director: Dustin Johnson & Marcelo Zimmer	
	Sponsor Contact: UPL/Summit Agro/AMVAC	

Pest Type	W Weed	W Weed
Pest Code	AMATA	AMBTR
Pest Scientific Name	Amaranthus tamariscinus	Ambrosia trifida
Pest Name	Common waterhemp	Giant ragweed
Crop Type, Code	C ZEAMX	C ZEAMX
BBCH Scale	BCOR	BCOR
Crop Scientific Name	Zea mays	Zea mays
Crop Name	Corn	Corn
Rating Date	Jul-26-2019	Jul-26-2019
Part Rated	PLOT -	PLOT -
Rating Type	CONTRO	CONTRO
Rating Unit	%	%
Sample Size		
Number of Subsamples	1	1
Assessed By	D. JOHNSON	D. JOHNSON
Data Entry Date	Jul-18-2019	Jul-18-2019
Rating Timing	A5	A5
Days After First/Last Applic.	53 25	53 25
Trt-Eval Interval	21 DA-A	21 DA-A
Plant-Eval Interval	53 DP-1	53 DP-1
Days After Emergence	44 DE-1	44 DE-1
ARM Action Codes	P	P
Number of Decimals	0	0
Trt Treatment	Rate	Appl
No. Name	Rate Unit	Code
	15	16
15 HARNESS	1.75 pt/a B	100 a
IMPACT	1 fl oz/a B	
AATREX	1 pt/a B	
MSO	0.5 % v/v B	
N-PAK AMS	2.5 % v/v B	
16 HARNESS	1.75 pt/a B	100 a
IMPACT	0.75 fl oz/a B	
ROUNDUP POWERMAX	32 fl oz/a B	
AATREX	1 pt/a B	
MSO	0.25 % v/v B	
N-PAK AMS	2.5 % v/v 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.

Missing data estimates are included in columns: Yates=2,3,4,5,20,21,22,24

Could not calculate LSD (% mean diff) for columns 2,18 because error mean square = 0.

Purdue Weed Science

Corn Herbicide Programs Showcase

Trial ID: 19S-MGS-CORN-11	Location: Meigs	Trial Year
Protocol ID: 19S-MGS-CORN-11	Investigator (Creator): Dr. Bill Johnson	
Project ID: Showcase	Study Director: Dustin Johnson & Marcelo Zimmer	
	Sponsor Contact: UPL/Summit Agro/AMVAC	

Pest Type	W Weed	W Weed
Pest Code	AMATA	AMBTR
Pest Scientific Name	Amaranthus tamariscinus	Ambrosia trifida
Pest Name	Common waterhemp	Giant ragweed
Crop Type, Code	C ZEAMX	C ZEAMX
BBCH Scale	BCOR	BCOR
Crop Scientific Name	Zea mays	Zea mays
Crop Name	Corn	Corn
Rating Date	Jul-26-2019	Jul-26-2019
Part Rated	PLOT -	PLOT -
Rating Type	CONTRO	CONTRO
Rating Unit	%	%
Sample Size		
Number of Subsamples	1	1
Assessed By	D. JOHNSON	D. JOHNSON
Data Entry Date	Jul-18-2019	Jul-18-2019
Rating Timing	A5	A5
Days After First/Last Applic.	53 25	53 25
Trt-Eval Interval	21 DA-A	21 DA-A
Plant-Eval Interval	53 DP-1	53 DP-1
Days After Emergence	44 DE-1	44 DE-1
ARM Action Codes	P	P
Number of Decimals	0	0
Trt Treatment	Rate Appl	
No. Name	Rate Unit Code	
17 HELMET	1.67 pt/a A	15
HAI TRADENAME	3.42 fl oz/a C	16
MSO	1 % v/v C	100 a
UAN 28%	2.5 % v/v C	100 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.

Missing data estimates are included in columns: Yates=2,3,4,5,20,21,22,24

Could not calculate LSD (% mean diff) for columns 2,18 because error mean square = 0.

Purdue Weed Science

Corn Herbicide Programs Showcase			Trial Year
Trial ID: 19S-MGS-CORN-11	Location: Meigs		
Protocol ID: 19S-MGS-CORN-11	Investigator (Creator): Dr. Bill Johnson		
Project ID: Showcase	Study Director: Dustin Johnson & Marcelo Zimmer		
	Sponsor Contact: UPL/Summit Agro/AMVAC		

	W Weed	W Weed
Pest Type	AMATA	AMBTR
Pest Code	AMATA	AMBTR
Pest Scientific Name	Amaranthus tamariscinus	Ambrosia trifida
Pest Name	Common waterhemp	Giant ragweed
Crop Type, Code	C ZEAMX	C ZEAMX
BBCH Scale	BCOR	BCOR
Crop Scientific Name	Zea mays	Zea mays
Crop Name	Corn	Corn
Rating Date	Jul-26-2019	Jul-26-2019
Part Rated	PLOT -	PLOT -
Rating Type	CONTRO	CONTRO
Rating Unit	%	%
Sample Size		
Number of Subsamples	1	1
Assessed By	D. JOHNSON	D. JOHNSON
Data Entry Date	Jul-18-2019	Jul-18-2019
Rating Timing	A5	A5
Days After First/Last Applic.	53 25	53 25
Trt-Eval Interval	21 DA-A	21 DA-A
Plant-Eval Interval	53 DP-1	53 DP-1
Days After Emergence	44 DE-1	44 DE-1
ARM Action Codes	P	P
Number of Decimals	0	0
Trt Treatment		
No. Name	Rate Appl Rate Unit Code	
	15	16
18 HELMET	1.67 pt/a A	100 a
HAI TRADENAME	3.42 fl oz/a C	100 a
AATREX	1.5 pt/a C	
MSO	1 % v/v C	
UAN 28%	2.5 % v/v C	
LSD P=.05	6.4	17.3
Standard Deviation	4.5	12.1
CV	4.75	12.74
Grand Mean	95.5	95.3
Levene's F	4.75	8.616
Levene's Prob(F)	0.001*	0.001*
Rank X2	.	.
P(Rank X2)	.	.
Skewness	-3.7623*	-4.2553*

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.

Missing data estimates are included in columns: Yates=2,3,4,5,20,21,22,24

Could not calculate LSD (% mean diff) for columns 2,18 because error mean square = 0.

Purdue Weed Science

Corn Herbicide Programs Showcase			
Trial ID: 19S-MGS-CORN-11		Location: Meigs	
Protocol ID: 19S-MGS-CORN-11		Investigator (Creator): Dr. Bill Johnson	
Project ID: Showcase		Study Director: Dustin Johnson & Marcelo Zimmer	
Sponsor Contact: UPL/Summit Agro/AMVAC			
Pest Type		W Weed	W Weed
Pest Code		AMATA	AMBTR
Pest Scientific Name		Amaranthus tamariscinus	Ambrosia trifida
Pest Name		Common waterhemp	Giant ragweed
Crop Type, Code		C ZEAMX	C ZEAMX
BBCH Scale		BCOR	BCOR
Crop Scientific Name		Zea mays	Zea mays
Crop Name		Corn	Corn
Rating Date		Jul-26-2019	Jul-26-2019
Part Rated		PLOT -	PLOT -
Rating Type		CONTRO	CONTRO
Rating Unit		%	%
Sample Size			
Number of Subsamples		1	1
Assessed By		D. JOHNSON	D. JOHNSON
Data Entry Date		Jul-18-2019	Jul-18-2019
Rating Timing		A5	A5
Days After First/Last Applic.		53 25	53 25
Trt-Eval Interval		21 DA-A	21 DA-A
Plant-Eval Interval		53 DP-1	53 DP-1
Days After Emergence		44 DE-1	44 DE-1
ARM Action Codes		P	P
Number of Decimals		0	0
Trt Treatment	Rate	Appl	
No. Name	Rate Unit	Code	
		15	16
Kurtosis		14.2874*	18.9018*
Replicate F		1.084	1.155
Replicate Prob(F)		0.3650	0.3365
Treatment F		40.983	4.937
Treatment Prob(F)		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.

Missing data estimates are included in columns: Yates=2,3,4,5,20,21,22,24

Could not calculate LSD (% mean diff) for columns 2,18 because error mean square = 0.

Purdue Weed Science

Corn Herbicide Programs Showcase

Trial ID: 19S-MGS-CORN-11	Location: Meigs	Trial Year
Protocol ID: 19S-MGS-CORN-11	Investigator (Creator): Dr. Bill Johnson	
Project ID: Showcase	Study Director: Dustin Johnson & Marcelo Zimmer	
	Sponsor Contact: UPL/Summit Agro/AMVAC	

Pest Type	W Weed		
Pest Code	SETFA		
Pest Scientific Name	Setaria faberi		
Pest Name	Giant foxtail		
Crop Type, Code	C ZEAMX	C ZEAMX	
BBCH Scale	BCOR	BCOR	
Crop Scientific Name	Zea mays	Zea mays	
Crop Name	Corn	Corn	
Rating Date	Jul-26-2019	Aug-9-2019	
Part Rated	PLOT -	PLOT -	
Rating Type	CONTRO	PHYGEN	
Rating Unit	%	%	
Sample Size			
Number of Subsamples	1	1	
Assessed By	D. JOHNSON	J. HAARMANN	
Data Entry Date	Jul-18-2019	Jul-18-2019	
Rating Timing	A5	A6	
Days After First/Last Applic.	53 25	67 39	
Trt-Eval Interval	21 DA-A	21 DA-A	
Plant-Eval Interval	53 DP-1	67 DP-1	
Days After Emergence	44 DE-1	58 DE-1	
ARM Action Codes	P	P	
Number of Decimals	0	0	
Trt Treatment	Rate	Appl	
No. Name	Rate Unit	Code	
			17
			18
1 UNTREATED CHECK			0
2 BICEP LITE II MAGNUM	1.67 qt/a	A	93 a
3 BICEP LITE II MAGNUM	1.67 qt/a	A	100 a
SHIELDEX	1 fl oz/a	C	
AATREX	1 pt/a	C	
MSO	1 % v/v	C	
N-PAK AMS	2.5 % v/v	C	
4 BICEP LITE II MAGNUM	1.67 qt/a	A	100 a
SHIELDEX	1.3 fl oz/a	C	
AATREX	1 pt/a	C	
MSO	1 % v/v	C	
N-PAK AMS	2.5 % 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.

Missing data estimates are included in columns: Yates=2,3,4,5,20,21,22,24

Could not calculate LSD (% mean diff) for columns 2,18 because error mean square = 0.

Purdue Weed Science

Corn Herbicide Programs Showcase

Trial ID: 19S-MGS-CORN-11	Location: Meigs	Trial Year
Protocol ID: 19S-MGS-CORN-11	Investigator (Creator): Dr. Bill Johnson	
Project ID: Showcase	Study Director: Dustin Johnson & Marcelo Zimmer	
	Sponsor Contact: UPL/Summit Agro/AMVAC	

Pest Type	W Weed	
Pest Code	SETFA	
Pest Scientific Name	Setaria faberi	
Pest Name	Giant foxtail	
Crop Type, Code	C ZEAMX	C ZEAMX
BBCH Scale	BCOR	BCOR
Crop Scientific Name	Zea mays	Zea mays
Crop Name	Corn	Corn
Rating Date	Jul-26-2019	Aug-9-2019
Part Rated	PLOT -	PLOT -
Rating Type	CONTRO	PHYGEN
Rating Unit	%	%
Sample Size		
Number of Subsamples	1	1
Assessed By	D. JOHNSON	J. HAARMANN
Data Entry Date	Jul-18-2019	Jul-18-2019
Rating Timing	A5	A6
Days After First/Last Applic.	53 25	67 39
Trt-Eval Interval	21 DA-A	21 DA-A
Plant-Eval Interval	53 DP-1	67 DP-1
Days After Emergence	44 DE-1	58 DE-1
ARM Action Codes	P	P
Number of Decimals	0	0
Trt Treatment	Rate	Appl
No. Name	Rate Unit	Code
	17	18
5 BICEP LITE II MAGNUM	1.67 qt/a	A
IMPACT	1 fl oz/a	C
AATREX	1 pt/a	C
MSO	1 % v/v	C
N-PAK AMS	2.5 % v/v	C
	100 a	0 a
6 BICEP LITE II MAGNUM	1.67 qt/a	A
LAUDIS	3 fl oz/a	C
AATREX	1 pt/a	C
MSO	1 % v/v	C
N-PAK AMS	2.5 % v/v	C
	99 a	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.

Missing data estimates are included in columns: Yates=2,3,4,5,20,21,22,24

Could not calculate LSD (% mean diff) for columns 2,18 because error mean square = 0.

Purdue Weed Science

Corn Herbicide Programs Showcase

Trial ID: 19S-MGS-CORN-11	Location: Meigs	Trial Year
Protocol ID: 19S-MGS-CORN-11	Investigator (Creator): Dr. Bill Johnson	
Project ID: Showcase	Study Director: Dustin Johnson & Marcelo Zimmer	
	Sponsor Contact: UPL/Summit Agro/AMVAC	

Pest Type	W Weed		
Pest Code	SETFA		
Pest Scientific Name	Setaria faberi		
Pest Name	Giant foxtail		
Crop Type, Code	C ZEAMX	C ZEAMX	
BBCH Scale	BCOR	BCOR	
Crop Scientific Name	Zea mays	Zea mays	
Crop Name	Corn	Corn	
Rating Date	Jul-26-2019	Aug-9-2019	
Part Rated	PLOT -	PLOT -	
Rating Type	CONTRO	PHYGEN	
Rating Unit	%	%	
Sample Size			
Number of Subsamples	1	1	
Assessed By	D. JOHNSON	J. HAARMANN	
Data Entry Date	Jul-18-2019	Jul-18-2019	
Rating Timing	A5	A6	
Days After First/Last Applic.	53 25	67 39	
Trt-Eval Interval	21 DA-A	21 DA-A	
Plant-Eval Interval	53 DP-1	67 DP-1	
Days After Emergence	44 DE-1	58 DE-1	
ARM Action Codes	P	P	
Number of Decimals	0	0	
Trt Treatment	Rate	Appl	
No. Name	Rate Unit	Code	
			17
			18
7 BICEP LITE II MAGNUM	1.67 qt/a	A	88 a
CALLISTO	3 fl oz/a	C	0 a
AATREX	1 pt/a	C	
ACTIVATOR 90 NIS	0.25 % v/v	C	
N-PAK AMS	2.5 % v/v	C	
8 AATREX	2 pt/a	A	30 b
9 AATREX	2 pt/a	A	100 a
INTERMOC	70 fl oz/a	D	0 a
N-PAK AMS	2.5 % v/v	D	

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.

Missing data estimates are included in columns: Yates=2,3,4,5,20,21,22,24

Could not calculate LSD (% mean diff) for columns 2,18 because error mean square = 0.

Purdue Weed Science

Corn Herbicide Programs Showcase

Trial ID: 19S-MGS-CORN-11	Location: Meigs	Trial Year
Protocol ID: 19S-MGS-CORN-11	Investigator (Creator): Dr. Bill Johnson	
Project ID: Showcase	Study Director: Dustin Johnson & Marcelo Zimmer	
	Sponsor Contact: UPL/Summit Agro/AMVAC	

Pest Type	W Weed		
Pest Code	SETFA		
Pest Scientific Name	Setaria faberi		
Pest Name	Giant foxtail		
Crop Type, Code	C ZEAMX	C ZEAMX	
BBCH Scale	BCOR	BCOR	
Crop Scientific Name	Zea mays	Zea mays	
Crop Name	Corn	Corn	
Rating Date	Jul-26-2019	Aug-9-2019	
Part Rated	PLOT -	PLOT -	
Rating Type	CONTRO	PHYGEN	
Rating Unit	%	%	
Sample Size			
Number of Subsamples	1	1	
Assessed By	D. JOHNSON	J. HAARMANN	
Data Entry Date	Jul-18-2019	Jul-18-2019	
Rating Timing	A5	A6	
Days After First/Last Applic.	53 25	67 39	
Trt-Eval Interval	21 DA-A	21 DA-A	
Plant-Eval Interval	53 DP-1	67 DP-1	
Days After Emergence	44 DE-1	58 DE-1	
ARM Action Codes	P	P	
Number of Decimals	0	0	
Trt Treatment	Rate	Appl	
No. Name	Rate Unit	Code	
			17 18
10 AATREX	2 pt/a	A	100 a 0 a
INTERMOC	70 fl oz/a	D	
MOTIF	3.36 fl oz/a	D	
N-PAK AMS	2.5 % v/v	D	
COC	1 % v/v	D	
11 AATREX	2 pt/a	A	100 a 0 a
HALEX GT	2 qt/a	D	
ACTIVATOR 90 NIS	0.25 % v/v	D	
N-PAK AMS	2.5 % v/v	D	
12 HARNESS XTRA 5.6L	3.2 pt/a	A	100 a 0 a
IMPACTZ	10.7 fl oz/a	C	
MSO	1 % v/v	C	
N-PAK AMS	2.5 % 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.

Missing data estimates are included in columns: Yates=2,3,4,5,20,21,22,24

Could not calculate LSD (% mean diff) for columns 2,18 because error mean square = 0.

Purdue Weed Science

Corn Herbicide Programs Showcase

Trial ID: 19S-MGS-CORN-11	Location: Meigs	Trial Year
Protocol ID: 19S-MGS-CORN-11	Investigator (Creator): Dr. Bill Johnson	
Project ID: Showcase	Study Director: Dustin Johnson & Marcelo Zimmer	
	Sponsor Contact: UPL/Summit Agro/AMVAC	

Pest Type	W Weed	
Pest Code	SETFA	
Pest Scientific Name	Setaria faberi	
Pest Name	Giant foxtail	
Crop Type, Code	C ZEAMX	C ZEAMX
BBCH Scale	BCOR	BCOR
Crop Scientific Name	Zea mays	Zea mays
Crop Name	Corn	Corn
Rating Date	Jul-26-2019	Aug-9-2019
Part Rated	PLOT -	PLOT -
Rating Type	CONTRO	PHYGEN
Rating Unit	%	%
Sample Size		
Number of Subsamples	1	1
Assessed By	D. JOHNSON	J. HAARMANN
Data Entry Date	Jul-18-2019	Jul-18-2019
Rating Timing	A5	A6
Days After First/Last Applic.	53 25	67 39
Trt-Eval Interval	21 DA-A	21 DA-A
Plant-Eval Interval	53 DP-1	67 DP-1
Days After Emergence	44 DE-1	58 DE-1
ARM Action Codes	P	P
Number of Decimals	0	0
Trt Treatment	Rate	Appl
No. Name	Rate Unit	Code
		17
		18
13 HARNESS XTRA 5.6L	3.2 pt/a A	99 a
IMPACTZ	8 fl oz/a C	0 a
LIBERTY 280 SL	22 fl oz/a C	
MSO	0.5 % v/v C	
N-PAK AMS	2.5 % v/v C	
14 HARNESS XTRA 5.6L	3.2 pt/a A	100 a
SHIELDEX	1.35 fl oz/a C	0 a
AATREX	0.67 pt/a C	
MSO	1 % v/v C	
N-PAK AMS	2.5 % 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.

Missing data estimates are included in columns: Yates=2,3,4,5,20,21,22,24

Could not calculate LSD (% mean diff) for columns 2,18 because error mean square = 0.

Purdue Weed Science

Corn Herbicide Programs Showcase

Trial ID: 19S-MGS-CORN-11	Location: Meigs	Trial Year
Protocol ID: 19S-MGS-CORN-11	Investigator (Creator): Dr. Bill Johnson	
Project ID: Showcase	Study Director: Dustin Johnson & Marcelo Zimmer	
	Sponsor Contact: UPL/Summit Agro/AMVAC	

Pest Type	W Weed	
Pest Code	SETFA	
Pest Scientific Name	Setaria faberi	
Pest Name	Giant foxtail	
Crop Type, Code	C ZEAMX	C ZEAMX
BBCH Scale	BCOR	BCOR
Crop Scientific Name	Zea mays	Zea mays
Crop Name	Corn	Corn
Rating Date	Jul-26-2019	Aug-9-2019
Part Rated	PLOT -	PLOT -
Rating Type	CONTRO	PHYGEN
Rating Unit	%	%
Sample Size		
Number of Subsamples	1	1
Assessed By	D. JOHNSON	J. HAARMANN
Data Entry Date	Jul-18-2019	Jul-18-2019
Rating Timing	A5	A6
Days After First/Last Applic.	53 25	67 39
Trt-Eval Interval	21 DA-A	21 DA-A
Plant-Eval Interval	53 DP-1	67 DP-1
Days After Emergence	44 DE-1	58 DE-1
ARM Action Codes	P	P
Number of Decimals	0	0
Trt Treatment	Rate	Appl
No. Name	Rate Unit	Code
		17
		18
15 HARNESS	1.75 pt/a B	100 a
IMPACT	1 fl oz/a B	0 a
AATREX	1 pt/a B	
MSO	0.5 % v/v B	
N-PAK AMS	2.5 % v/v B	
16 HARNESS	1.75 pt/a B	100 a
IMPACT	0.75 fl oz/a B	0 a
ROUNDUP POWERMAX	32 fl oz/a B	
AATREX	1 pt/a B	
MSO	0.25 % v/v B	
N-PAK AMS	2.5 % v/v 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.

Missing data estimates are included in columns: Yates=2,3,4,5,20,21,22,24

Could not calculate LSD (% mean diff) for columns 2,18 because error mean square = 0.

Purdue Weed Science

Corn Herbicide Programs Showcase

Trial ID: 19S-MGS-CORN-11	Location: Meigs	Trial Year
Protocol ID: 19S-MGS-CORN-11	Investigator (Creator): Dr. Bill Johnson	
Project ID: Showcase	Study Director: Dustin Johnson & Marcelo Zimmer	
Sponsor Contact: UPL/Summit Agro/AMVAC		

Pest Type	W Weed	
Pest Code	SETFA	
Pest Scientific Name	Setaria faberi	
Pest Name	Giant foxtail	
Crop Type, Code	C ZEAMX	C ZEAMX
BBCH Scale	BCOR	BCOR
Crop Scientific Name	Zea mays	Zea mays
Crop Name	Corn	Corn
Rating Date	Jul-26-2019	Aug-9-2019
Part Rated	PLOT -	PLOT -
Rating Type	CONTRO	PHYGEN
Rating Unit	%	%
Sample Size		
Number of Subsamples	1	1
Assessed By	D. JOHNSON	J. HAARMANN
Data Entry Date	Jul-18-2019	Jul-18-2019
Rating Timing	A5	A6
Days After First/Last Applic.	53 25	67 39
Trt-Eval Interval	21 DA-A	21 DA-A
Plant-Eval Interval	53 DP-1	67 DP-1
Days After Emergence	44 DE-1	58 DE-1
ARM Action Codes	P	P
Number of Decimals	0	0
Trt Treatment	Rate	Appl
No. Name	Rate Unit	Code
		17
		18
17 HELMET	1.67 pt/a	A
HAI TRADENAME	3.42 fl oz/a	C
MSO	1 % v/v	C
UAN 28%	2.5 % v/v	C
		100 a
		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.

Missing data estimates are included in columns: Yates=2,3,4,5,20,21,22,24

Could not calculate LSD (% mean diff) for columns 2,18 because error mean square = 0.

Purdue Weed Science

Corn Herbicide Programs Showcase

Trial ID: 19S-MGS-CORN-11	Location: Meigs	Trial Year
Protocol ID: 19S-MGS-CORN-11	Investigator (Creator): Dr. Bill Johnson	
Project ID: Showcase	Study Director: Dustin Johnson & Marcelo Zimmer	
	Sponsor Contact: UPL/Summit Agro/AMVAC	

Pest Type	W Weed	
Pest Code	SETFA	
Pest Scientific Name	Setaria faberi	
Pest Name	Giant foxtail	
Crop Type, Code	C ZEAMX	C ZEAMX
BBCH Scale	BCOR	BCOR
Crop Scientific Name	Zea mays	Zea mays
Crop Name	Corn	Corn
Rating Date	Jul-26-2019	Aug-9-2019
Part Rated	PLOT -	PLOT -
Rating Type	CONTRO	PHYGEN
Rating Unit	%	%
Sample Size		
Number of Subsamples	1	1
Assessed By	D. JOHNSON	J. HAARMANN
Data Entry Date	Jul-18-2019	Jul-18-2019
Rating Timing	A5	A6
Days After First/Last Applic.	53 25	67 39
Trt-Eval Interval	21 DA-A	21 DA-A
Plant-Eval Interval	53 DP-1	67 DP-1
Days After Emergence	44 DE-1	58 DE-1
ARM Action Codes	P	P
Number of Decimals	0	0
Trt Treatment	Rate	Appl
No. Name	Rate Unit	Code
	17	18
18 HELMET	1.67 pt/a	A
HAI TRADENAME	3.42 fl oz/a	C
AATREX	1.5 pt/a	C
MSO	1 % v/v	C
UAN 28%	2.5 % v/v	C
LSD P=.05	19.8	.
Standard Deviation	14.0	0.0
CV	14.76	0.0
Grand Mean	94.6	0.0
Levene's F	1.649	0.00
Levene's Prob(F)	0.089	0.00*
Rank X2	.	.
P(Rank X2)	.	.
Skewness	-3.996*	.

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.

Missing data estimates are included in columns: Yates=2,3,4,5,20,21,22,24

Could not calculate LSD (% mean diff) for columns 2,18 because error mean square = 0.

Purdue Weed Science

Corn Herbicide Programs Showcase

Trial ID: 19S-MGS-CORN-11	Location: Meigs	Trial Year
Protocol ID: 19S-MGS-CORN-11	Investigator (Creator): Dr. Bill Johnson	
Project ID: Showcase	Study Director: Dustin Johnson & Marcelo Zimmer	
	Sponsor Contact: UPL/Summit Agro/AMVAC	

Pest Type	W Weed	
Pest Code	SETFA	
Pest Scientific Name	Setaria faberi	
Pest Name	Giant foxtail	
Crop Type, Code	C ZEAMX	C ZEAMX
BBCH Scale	BCOR	BCOR
Crop Scientific Name	Zea mays	Zea mays
Crop Name	Corn	Corn
Rating Date	Jul-26-2019	Aug-9-2019
Part Rated	PLOT -	PLOT -
Rating Type	CONTRO	PHYGEN
Rating Unit	%	%
Sample Size		
Number of Subsamples	1	1
Assessed By	D. JOHNSON	J. HAARMANN
Data Entry Date	Jul-18-2019	Jul-18-2019
Rating Timing	A5	A6
Days After First/Last Applic.	53 25	67 39
Trt-Eval Interval	21 DA-A	21 DA-A
Plant-Eval Interval	53 DP-1	67 DP-1
Days After Emergence	44 DE-1	58 DE-1
ARM Action Codes	P	P
Number of Decimals	0	0
Trt Treatment	Rate	Appl
No. Name	Rate Unit	Code
	17	18
Kurtosis	15.334*	.
Replicate F	0.044	0.000
Replicate Prob(F)	0.9874	1.0000
Treatment F	5.922	0.000
Treatment Prob(F)	0.0001	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.

Missing data estimates are included in columns: Yates=2,3,4,5,20,21,22,24

Could not calculate LSD (% mean diff) for columns 2,18 because error mean square = 0.

Purdue Weed Science

Corn Herbicide Programs Showcase

Trial ID: 19S-MGS-CORN-11	Location: Meigs	Trial Year
Protocol ID: 19S-MGS-CORN-11	Investigator (Creator): Dr. Bill Johnson	
Project ID: Showcase	Study Director: Dustin Johnson & Marcelo Zimmer	
	Sponsor Contact: UPL/Summit Agro/AMVAC	

	W Weed	W Weed
Pest Type	AMATA	AMBTR
Pest Code	AMATA	AMBTR
Pest Scientific Name	Amaranthus tamariscinus	Ambrosia trifida
Pest Name	Common waterhemp	Giant ragweed
Crop Type, Code	C ZEAMX	C ZEAMX
BBCH Scale	BCOR	BCOR
Crop Scientific Name	Zea mays	Zea mays
Crop Name	Corn	Corn
Rating Date	Aug-9-2019	Aug-9-2019
Part Rated	PLOT -	PLOT -
Rating Type	CONTRO	CONTRO
Rating Unit	%	%
Sample Size		
Number of Subsamples	1	1
Assessed By	J. HAARMANN	J. HAARMANN
Data Entry Date	Jul-18-2019	Jul-18-2019
Rating Timing	A6	A6
Days After First/Last Applic.	67 39	67 39
Trt-Eval Interval	21 DA-A	21 DA-A
Plant-Eval Interval	67 DP-1	67 DP-1
Days After Emergence	58 DE-1	58 DE-1
ARM Action Codes	P	P
Number of Decimals	0	0
Trt Treatment		
No. Name	Rate Unit Code	
	19	20
1 UNTREATED CHECK	0	0
2 BICEP LITE II MAGNUM	1.67 qt/a A	86 b
		96 a
3 BICEP LITE II MAGNUM	1.67 qt/a A	100 a
SHIELDDEX	1 fl oz/a C	
AATREX	1 pt/a C	
MSO	1 % v/v C	
N-PAK AMS	2.5 % v/v C	
4 BICEP LITE II MAGNUM	1.67 qt/a A	100 a
SHIELDDEX	1.3 fl oz/a C	
AATREX	1 pt/a C	
MSO	1 % v/v C	
N-PAK AMS	2.5 % 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.

Missing data estimates are included in columns: Yates=2,3,4,5,20,21,22,24

Could not calculate LSD (% mean diff) for columns 2,18 because error mean square = 0.

Purdue Weed Science

Corn Herbicide Programs Showcase

Trial ID: 19S-MGS-CORN-11	Location: Meigs	Trial Year
Protocol ID: 19S-MGS-CORN-11	Investigator (Creator): Dr. Bill Johnson	
Project ID: Showcase	Study Director: Dustin Johnson & Marcelo Zimmer	
	Sponsor Contact: UPL/Summit Agro/AMVAC	

Pest Type	W Weed	W Weed
Pest Code	AMATA	AMBTR
Pest Scientific Name	Amaranthus tamariscinus	Ambrosia trifida
Pest Name	Common waterhemp	Giant ragweed
Crop Type, Code	C ZEAMX	C ZEAMX
BBCH Scale	BCOR	BCOR
Crop Scientific Name	Zea mays	Zea mays
Crop Name	Corn	Corn
Rating Date	Aug-9-2019	Aug-9-2019
Part Rated	PLOT -	PLOT -
Rating Type	CONTRO	CONTRO
Rating Unit	%	%
Sample Size		
Number of Subsamples	1	1
Assessed By	J. HAARMANN	J. HAARMANN
Data Entry Date	Jul-18-2019	Jul-18-2019
Rating Timing	A6	A6
Days After First/Last Applic.	67 39	67 39
Trt-Eval Interval	21 DA-A	21 DA-A
Plant-Eval Interval	67 DP-1	67 DP-1
Days After Emergence	58 DE-1	58 DE-1
ARM Action Codes	P	P
Number of Decimals	0	0
Trt Treatment	Rate	Appl
No. Name	Rate Unit	Code
	19	20
5 BICEP LITE II MAGNUM	1.67 qt/a	A
IMPACT	1 fl oz/a	C
AATREX	1 pt/a	C
MSO	1 % v/v	C
N-PAK AMS	2.5 % v/v	C
6 BICEP LITE II MAGNUM	1.67 qt/a	A
LAUDIS	3 fl oz/a	C
AATREX	1 pt/a	C
MSO	1 % v/v	C
N-PAK AMS	2.5 % 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.

Missing data estimates are included in columns: Yates=2,3,4,5,20,21,22,24

Could not calculate LSD (% mean diff) for columns 2,18 because error mean square = 0.

Purdue Weed Science

Corn Herbicide Programs Showcase

Trial ID: 19S-MGS-CORN-11	Location: Meigs	Trial Year
Protocol ID: 19S-MGS-CORN-11	Investigator (Creator): Dr. Bill Johnson	
Project ID: Showcase	Study Director: Dustin Johnson & Marcelo Zimmer	
	Sponsor Contact: UPL/Summit Agro/AMVAC	

Pest Type	W Weed	W Weed
Pest Code	AMATA	AMBTR
Pest Scientific Name	Amaranthus tamariscinus	Ambrosia trifida
Pest Name	Common waterhemp	Giant ragweed
Crop Type, Code	C ZEAMX	C ZEAMX
BBCH Scale	BCOR	BCOR
Crop Scientific Name	Zea mays	Zea mays
Crop Name	Corn	Corn
Rating Date	Aug-9-2019	Aug-9-2019
Part Rated	PLOT -	PLOT -
Rating Type	CONTRO	CONTRO
Rating Unit	%	%
Sample Size		
Number of Subsamples	1	1
Assessed By	J. HAARMANN	J. HAARMANN
Data Entry Date	Jul-18-2019	Jul-18-2019
Rating Timing	A6	A6
Days After First/Last Applic.	67 39	67 39
Trt-Eval Interval	21 DA-A	21 DA-A
Plant-Eval Interval	67 DP-1	67 DP-1
Days After Emergence	58 DE-1	58 DE-1
ARM Action Codes	P	P
Number of Decimals	0	0
Trt Treatment	Rate	Appl
No. Name	Rate Unit	Code
	19	20
7 BICEP LITE II MAGNUM	1.67 qt/a	A
CALLISTO	3 fl oz/a	C
AATREX	1 pt/a	C
ACTIVATOR 90 NIS	0.25 % v/v	C
N-PAK AMS	2.5 % v/v	C
8 AATREX	2 pt/a	A
	54 c	55 b
9 AATREX	2 pt/a	A
INTERMOC	70 fl oz/a	D
N-PAK AMS	2.5 % v/v	D
	100 a	100 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.

Missing data estimates are included in columns: Yates=2,3,4,5,20,21,22,24

Could not calculate LSD (% mean diff) for columns 2,18 because error mean square = 0.

Purdue Weed Science

Corn Herbicide Programs Showcase				Trial Year
Trial ID: 19S-MGS-CORN-11		Location: Meigs		
Protocol ID: 19S-MGS-CORN-11		Investigator (Creator): Dr. Bill Johnson		
Project ID: Showcase		Study Director: Dustin Johnson & Marcelo Zimmer		
Sponsor Contact: UPL/Summit Agro/AMVAC				
Pest Type		W Weed	W Weed	
Pest Code		AMATA	AMBTR	
Pest Scientific Name		Amaranthus tamariscinus	Ambrosia trifida	
Pest Name		Common waterhemp	Giant ragweed	
Crop Type, Code		C ZEAMX	C ZEAMX	
BBCH Scale		BCOR	BCOR	
Crop Scientific Name		Zea mays	Zea mays	
Crop Name		Corn	Corn	
Rating Date		Aug-9-2019	Aug-9-2019	
Part Rated		PLOT -	PLOT -	
Rating Type		CONTRO	CONTRO	
Rating Unit		%	%	
Sample Size				
Number of Subsamples		1	1	
Assessed By		J. HAARMANN	J. HAARMANN	
Data Entry Date		Jul-18-2019	Jul-18-2019	
Rating Timing		A6	A6	
Days After First/Last Applic.		67 39	67 39	
Trt-Eval Interval		21 DA-A	21 DA-A	
Plant-Eval Interval		67 DP-1	67 DP-1	
Days After Emergence		58 DE-1	58 DE-1	
ARM Action Codes		P	P	
Number of Decimals		0	0	
Trt Treatment	Rate	Appl		
No. Name	Rate Unit	Code	19	20
10 AATREX	2 pt/a	A	100 a	100 a
INTERMOC	70 fl oz/a	D		
MOTIF	3.36 fl oz/a	D		
N-PAK AMS	2.5 % v/v	D		
COC	1 % v/v	D		
11 AATREX	2 pt/a	A	100 ab	100 a
HALEX GT	2 qt/a	D		
ACTIVATOR 90 NIS	0.25 % v/v	D		
N-PAK AMS	2.5 % v/v	D		
12 HARNESS XTRA 5.6L	3.2 pt/a	A	100 a	100 a
IMPACTZ	10.7 fl oz/a	C		
MSO	1 % v/v	C		
N-PAK AMS	2.5 % 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.

Missing data estimates are included in columns: Yates=2,3,4,5,20,21,22,24

Could not calculate LSD (% mean diff) for columns 2,18 because error mean square = 0.

Purdue Weed Science

Corn Herbicide Programs Showcase

Trial ID: 19S-MGS-CORN-11	Location: Meigs	Trial Year
Protocol ID: 19S-MGS-CORN-11	Investigator (Creator): Dr. Bill Johnson	
Project ID: Showcase	Study Director: Dustin Johnson & Marcelo Zimmer	
	Sponsor Contact: UPL/Summit Agro/AMVAC	

	W Weed	W Weed
Pest Type	AMATA	AMBTR
Pest Code	AMATA	AMBTR
Pest Scientific Name	Amaranthus tamariscinus	Ambrosia trifida
Pest Name	Common waterhemp	Giant ragweed
Crop Type, Code	C ZEAMX	C ZEAMX
BBCH Scale	BCOR	BCOR
Crop Scientific Name	Zea mays	Zea mays
Crop Name	Corn	Corn
Rating Date	Aug-9-2019	Aug-9-2019
Part Rated	PLOT -	PLOT -
Rating Type	CONTRO	CONTRO
Rating Unit	%	%
Sample Size		
Number of Subsamples	1	1
Assessed By	J. HAARMANN	J. HAARMANN
Data Entry Date	Jul-18-2019	Jul-18-2019
Rating Timing	A6	A6
Days After First/Last Applic.	67 39	67 39
Trt-Eval Interval	21 DA-A	21 DA-A
Plant-Eval Interval	67 DP-1	67 DP-1
Days After Emergence	58 DE-1	58 DE-1
ARM Action Codes	P	P
Number of Decimals	0	0
Trt Treatment		
No. Name	19	20
Rate		
Unit		
Appl Code		
13 HARNESS XTRA 5.6L	100 a	100 a
IMPACTZ		
LIBERTY 280 SL		
MSO		
N-PAK AMS		
14 HARNESS XTRA 5.6L	100 a	100 a
SHIELDEX		
AATREX		
MSO		
N-PAK AMS		

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.

Missing data estimates are included in columns: Yates=2,3,4,5,20,21,22,24

Could not calculate LSD (% mean diff) for columns 2,18 because error mean square = 0.

Purdue Weed Science

Corn Herbicide Programs Showcase				Trial Ye
Trial ID: 19S-MGS-CORN-11		Location: Meigs		
Protocol ID: 19S-MGS-CORN-11		Investigator (Creator): Dr. Bill Johnson		
Project ID: Showcase		Study Director: Dustin Johnson & Marcelo Zimmer		
Sponsor Contact: UPL/Summit Agro/AMVAC				
Pest Type		W Weed	W Weed	
Pest Code		AMATA	AMBTR	
Pest Scientific Name		Amaranthus tamariscinus	Ambrosia trifida	
Pest Name		Common waterhemp	Giant ragweed	
Crop Type, Code		C ZEAMX	C ZEAMX	
BBCH Scale		BCOR	BCOR	
Crop Scientific Name		Zea mays	Zea mays	
Crop Name		Corn	Corn	
Rating Date		Aug-9-2019	Aug-9-2019	
Part Rated		PLOT -	PLOT -	
Rating Type		CONTRO	CONTRO	
Rating Unit		%	%	
Sample Size				
Number of Subsamples		1	1	
Assessed By		J. HAARMANN	J. HAARMANN	
Data Entry Date		Jul-18-2019	Jul-18-2019	
Rating Timing		A6	A6	
Days After First/Last Applic.		67 39	67 39	
Trt-Eval Interval		21 DA-A	21 DA-A	
Plant-Eval Interval		67 DP-1	67 DP-1	
Days After Emergence		58 DE-1	58 DE-1	
ARM Action Codes		P	P	
Number of Decimals		0	0	
Trt Treatment	Rate	Appl		
No. Name	Rate Unit	Code	19	20
15 HARNESS	1.75 pt/a	B	100 a	100 a
IMPACT	1 fl oz/a	B		
AATREX	1 pt/a	B		
MSO	0.5 % v/v	B		
N-PAK AMS	2.5 % v/v	B		
16 HARNESS	1.75 pt/a	B	100 a	100 a
IMPACT	0.75 fl oz/a	B		
ROUNDUP POWERMAX	32 fl oz/a	B		
AATREX	1 pt/a	B		
MSO	0.25 % v/v	B		
N-PAK AMS	2.5 % v/v	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.

Missing data estimates are included in columns: Yates=2,3,4,5,20,21,22,24

Could not calculate LSD (% mean diff) for columns 2,18 because error mean square = 0.

Purdue Weed Science

Corn Herbicide Programs Showcase

Trial ID: 19S-MGS-CORN-11	Location: Meigs	Trial Year
Protocol ID: 19S-MGS-CORN-11	Investigator (Creator): Dr. Bill Johnson	
Project ID: Showcase	Study Director: Dustin Johnson & Marcelo Zimmer	
	Sponsor Contact: UPL/Summit Agro/AMVAC	

Pest Type	W Weed	W Weed
Pest Code	AMATA	AMBTR
Pest Scientific Name	Amaranthus tamariscinus	Ambrosia trifida
Pest Name	Common waterhemp	Giant ragweed
Crop Type, Code	C ZEAMX	C ZEAMX
BBCH Scale	BCOR	BCOR
Crop Scientific Name	Zea mays	Zea mays
Crop Name	Corn	Corn
Rating Date	Aug-9-2019	Aug-9-2019
Part Rated	PLOT -	PLOT -
Rating Type	CONTRO	CONTRO
Rating Unit	%	%
Sample Size		
Number of Subsamples	1	1
Assessed By	J. HAARMANN	J. HAARMANN
Data Entry Date	Jul-18-2019	Jul-18-2019
Rating Timing	A6	A6
Days After First/Last Applic.	67 39	67 39
Trt-Eval Interval	21 DA-A	21 DA-A
Plant-Eval Interval	67 DP-1	67 DP-1
Days After Emergence	58 DE-1	58 DE-1
ARM Action Codes	P	P
Number of Decimals	0	0
Trt Treatment		
No. Name	Rate Unit Code	
	19	20
17 HELMET	1.67 pt/a A	100 a
HAI TRADENAME	3.42 fl oz/a C	100 a
MSO	1 % v/v C	
UAN 28%	2.5 % 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.

Missing data estimates are included in columns: Yates=2,3,4,5,20,21,22,24

Could not calculate LSD (% mean diff) for columns 2,18 because error mean square = 0.

Purdue Weed Science

Corn Herbicide Programs Showcase

Trial ID: 19S-MGS-CORN-11	Location: Meigs	Trial Year
Protocol ID: 19S-MGS-CORN-11	Investigator (Creator): Dr. Bill Johnson	
Project ID: Showcase	Study Director: Dustin Johnson & Marcelo Zimmer	
	Sponsor Contact: UPL/Summit Agro/AMVAC	

	W Weed	W Weed
Pest Type	AMATA	AMBTR
Pest Code	AMATA	AMBTR
Pest Scientific Name	Amaranthus tamariscinus	Ambrosia trifida
Pest Name	Common waterhemp	Giant ragweed
Crop Type, Code	C ZEAMX	C ZEAMX
BBCH Scale	BCOR	BCOR
Crop Scientific Name	Zea mays	Zea mays
Crop Name	Corn	Corn
Rating Date	Aug-9-2019	Aug-9-2019
Part Rated	PLOT -	PLOT -
Rating Type	CONTRO	CONTRO
Rating Unit	%	%
Sample Size		
Number of Subsamples	1	1
Assessed By	J. HAARMANN	J. HAARMANN
Data Entry Date	Jul-18-2019	Jul-18-2019
Rating Timing	A6	A6
Days After First/Last Applic.	67 39	67 39
Trt-Eval Interval	21 DA-A	21 DA-A
Plant-Eval Interval	67 DP-1	67 DP-1
Days After Emergence	58 DE-1	58 DE-1
ARM Action Codes	P	P
Number of Decimals	0	0
Trt Treatment		
No. Name	19	20
Rate		
Rate Unit		
Appl Code		
18 HELMET	100 a	100 a
HAI TRADENAME		
AATREX		
MSO		
UAN 28%		
LSD P=.05	14.4	14.7
Standard Deviation	10.1	10.4
CV	10.5	10.66
Grand Mean	96.4	97.1
Levene's F	4.999	5.727
Levene's Prob(F)	0.001*	0.001*
Rank X2	.	.
P(Rank X2)	.	.
Skewness	-5.4123*	-5.9311*

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.

Missing data estimates are included in columns: Yates=2,3,4,5,20,21,22,24

Could not calculate LSD (% mean diff) for columns 2,18 because error mean square = 0.

Purdue Weed Science

Corn Herbicide Programs Showcase			
Trial ID: 19S-MGS-CORN-11	Location: Meigs		Trial Year
Protocol ID: 19S-MGS-CORN-11	Investigator (Creator): Dr. Bill Johnson		
Project ID: Showcase	Study Director: Dustin Johnson & Marcelo Zimmer		
Sponsor Contact: UPL/Summit Agro/AMVAC			
Pest Type	W Weed	W Weed	
Pest Code	AMATA	AMBTR	
Pest Scientific Name	Amaranthus tamariscinus	Ambrosia trifida	
Pest Name	Common waterhemp	Giant ragweed	
Crop Type, Code	C ZEAMX	C ZEAMX	
BBCH Scale	BCOR	BCOR	
Crop Scientific Name	Zea mays	Zea mays	
Crop Name	Corn	Corn	
Rating Date	Aug-9-2019	Aug-9-2019	
Part Rated	PLOT -	PLOT -	
Rating Type	CONTRO	CONTRO	
Rating Unit	%	%	
Sample Size			
Number of Subsamples	1	1	
Assessed By	J. HAARMANN	J. HAARMANN	
Data Entry Date	Jul-18-2019	Jul-18-2019	
Rating Timing	A6	A6	
Days After First/Last Applic.	67 39	67 39	
Trt-Eval Interval	21 DA-A	21 DA-A	
Plant-Eval Interval	67 DP-1	67 DP-1	
Days After Emergence	58 DE-1	58 DE-1	
ARM Action Codes	P	P	
Number of Decimals	0	0	
Trt Treatment	Rate	Appl	
No. Name	Rate Unit	Code	
			19
			20
Kurtosis			32.7131*
			37.7839*
Replicate F			0.901
Replicate Prob(F)			0.4478
Treatment F			5.195
Treatment Prob(F)			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.

Missing data estimates are included in columns: Yates=2,3,4,5,20,21,22,24

Could not calculate LSD (% mean diff) for columns 2,18 because error mean square = 0.

Purdue Weed Science

Corn Herbicide Programs Showcase

Trial ID: 19S-MGS-CORN-11	Location: Meigs	Trial Year:
Protocol ID: 19S-MGS-CORN-11	Investigator (Creator): Dr. Bill Johnson	
Project ID: Showcase	Study Director: Dustin Johnson & Marcelo Zimmer	
	Sponsor Contact: UPL/Summit Agro/AMVAC	

Pest Type	W Weed		
Pest Code	SETFA		
Pest Scientific Name	Setaria faberi		
Pest Name	Giant foxtail		
Crop Type, Code	C ZEAMX	C ZEAMX	C ZEAMX
BBCH Scale	BCOR	BCOR	BCOR
Crop Scientific Name	Zea mays	Zea mays	Zea mays
Crop Name	Corn	Corn	Corn
Rating Date	Aug-9-2019	Oct-25-2019	Oct-25-2019
Part Rated	PLOT -	PLOT -	PLOT -
Rating Type	CONTRO	YIELD	MOICON
Rating Unit	%	lb/plot	%
Sample Size		1 PLOT	
Number of Subsamples	1	1	1
Assessed By	J. HAARMANN	J. HAARMANN	J. HAARMANN
Data Entry Date	Jul-18-2019	Oct-29-2019	Oct-29-2019
Rating Timing	A6	H1	H1
Days After First/Last Applic.	67 39	144 116	144 116
Trt-Eval Interval	21 DA-A		
Plant-Eval Interval	67 DP-1	144 DP-1	144 DP-1
Days After Emergence	58 DE-1	135 DE-1	135 DE-1
ARM Action Codes	P		
Number of Decimals	0	1	1
Trt Treatment	Rate	Appl	
No. Name	Rate Unit	Code	
1 UNTREATED CHECK			21
2 BICEP LITE II MAGNUM	1.67 qt/a	A	22
3 BICEP LITE II MAGNUM	1.67 qt/a	A	23
SHIELDDEX	1 fl oz/a	C	
AATREX	1 pt/a	C	
MSO	1 % v/v	C	
N-PAK AMS	2.5 % v/v	C	
4 BICEP LITE II MAGNUM	1.67 qt/a	A	21
SHIELDDEX	1.3 fl oz/a	C	
AATREX	1 pt/a	C	
MSO	1 % v/v	C	
N-PAK AMS	2.5 % v/v	C	

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Mean comparisons performed only when AOV Treatment P(F) is significant at mean comparison OSL.

Untreated treatment(s) 1 excluded from analysis.

Missing data estimates are included in columns: Yates=2,3,4,5,20,21,22,24

Could not calculate LSD (% mean diff) for columns 2,18 because error mean square = 0.

Purdue Weed Science

Corn Herbicide Programs Showcase

Trial ID: 19S-MGS-CORN-11	Location: Meigs	Trial Year:
Protocol ID: 19S-MGS-CORN-11	Investigator (Creator): Dr. Bill Johnson	
Project ID: Showcase	Study Director: Dustin Johnson & Marcelo Zimmer	
	Sponsor Contact: UPL/Summit Agro/AMVAC	

Pest Type	W Weed		
Pest Code	SETFA		
Pest Scientific Name	Setaria faberi		
Pest Name	Giant foxtail		
Crop Type, Code	C ZEAMX	C ZEAMX	C ZEAMX
BBCH Scale	BCOR	BCOR	BCOR
Crop Scientific Name	Zea mays	Zea mays	Zea mays
Crop Name	Corn	Corn	Corn
Rating Date	Aug-9-2019	Oct-25-2019	Oct-25-2019
Part Rated	PLOT -	PLOT -	PLOT -
Rating Type	CONTRO	YIELD	MOICON
Rating Unit	%	lb/plot	%
Sample Size		1 PLOT	
Number of Subsamples	1	1	1
Assessed By	J. HAARMANN	J. HAARMANN	J. HAARMANN
Data Entry Date	Jul-18-2019	Oct-29-2019	Oct-29-2019
Rating Timing	A6	H1	H1
Days After First/Last Applic.	67 39	144 116	144 116
Trt-Eval Interval	21 DA-A		
Plant-Eval Interval	67 DP-1	144 DP-1	144 DP-1
Days After Emergence	58 DE-1	135 DE-1	135 DE-1
ARM Action Codes	P		
Number of Decimals	0	1	1
Trt Treatment	Rate	Appl	
No. Name	Rate Unit	Code	
			21
5 BICEP LITE II MAGNUM	1.67 qt/a	A	99 a
IMPACT	1 fl oz/a	C	
AATREX	1 pt/a	C	
MSO	1 % v/v	C	
N-PAK AMS	2.5 % v/v	C	
			32.0 a
			22.6 a
6 BICEP LITE II MAGNUM	1.67 qt/a	A	98 a
LAUDIS	3 fl oz/a	C	
AATREX	1 pt/a	C	
MSO	1 % v/v	C	
N-PAK AMS	2.5 % v/v	C	
			31.2 a
			22.5 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.

Missing data estimates are included in columns: Yates=2,3,4,5,20,21,22,24

Could not calculate LSD (% mean diff) for columns 2,18 because error mean square = 0.

Purdue Weed Science

Corn Herbicide Programs Showcase

Trial ID: 19S-MGS-CORN-11	Location: Meigs	Trial Year:
Protocol ID: 19S-MGS-CORN-11	Investigator (Creator): Dr. Bill Johnson	
Project ID: Showcase	Study Director: Dustin Johnson & Marcelo Zimmer	
	Sponsor Contact: UPL/Summit Agro/AMVAC	

Pest Type	W Weed		
Pest Code	SETFA		
Pest Scientific Name	Setaria faberi		
Pest Name	Giant foxtail		
Crop Type, Code	C ZEAMX	C ZEAMX	C ZEAMX
BBCH Scale	BCOR	BCOR	BCOR
Crop Scientific Name	Zea mays	Zea mays	Zea mays
Crop Name	Corn	Corn	Corn
Rating Date	Aug-9-2019	Oct-25-2019	Oct-25-2019
Part Rated	PLOT -	PLOT -	PLOT -
Rating Type	CONTRO	YIELD	MOICON
Rating Unit	%	lb/plot	%
Sample Size		1 PLOT	
Number of Subsamples	1	1	1
Assessed By	J. HAARMANN	J. HAARMANN	J. HAARMANN
Data Entry Date	Jul-18-2019	Oct-29-2019	Oct-29-2019
Rating Timing	A6	H1	H1
Days After First/Last Applic.	67 39	144 116	144 116
Trt-Eval Interval	21 DA-A		
Plant-Eval Interval	67 DP-1	144 DP-1	144 DP-1
Days After Emergence	58 DE-1	135 DE-1	135 DE-1
ARM Action Codes	P		
Number of Decimals	0	1	1
Trt Treatment	Rate	Appl	
No. Name	Rate Unit	Code	
7 BICEP LITE II MAGNUM	1.67 qt/a	A	
CALLISTO	3 fl oz/a	C	
AATREX	1 pt/a	C	
ACTIVATOR 90 NIS	0.25 % v/v	C	
N-PAK AMS	2.5 % v/v	C	
8 AATREX	2 pt/a	A	
9 AATREX	2 pt/a	A	
INTERMOC	70 fl oz/a	D	
N-PAK AMS	2.5 % v/v	D	

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.

Missing data estimates are included in columns: Yates=2,3,4,5,20,21,22,24

Could not calculate LSD (% mean diff) for columns 2,18 because error mean square = 0.

Purdue Weed Science

Corn Herbicide Programs Showcase

Trial ID: 19S-MGS-CORN-11	Location: Meigs	Trial Year:
Protocol ID: 19S-MGS-CORN-11	Investigator (Creator): Dr. Bill Johnson	
Project ID: Showcase	Study Director: Dustin Johnson & Marcelo Zimmer	
	Sponsor Contact: UPL/Summit Agro/AMVAC	

Pest Type	W Weed		
Pest Code	SETFA		
Pest Scientific Name	Setaria faberi		
Pest Name	Giant foxtail		
Crop Type, Code	C ZEAMX	C ZEAMX	C ZEAMX
BBCH Scale	BCOR	BCOR	BCOR
Crop Scientific Name	Zea mays	Zea mays	Zea mays
Crop Name	Corn	Corn	Corn
Rating Date	Aug-9-2019	Oct-25-2019	Oct-25-2019
Part Rated	PLOT -	PLOT -	PLOT -
Rating Type	CONTRO	YIELD	MOICON
Rating Unit	%	lb/plot	%
Sample Size		1 PLOT	
Number of Subsamples	1	1	1
Assessed By	J. HAARMANN	J. HAARMANN	J. HAARMANN
Data Entry Date	Jul-18-2019	Oct-29-2019	Oct-29-2019
Rating Timing	A6	H1	H1
Days After First/Last Applic.	67 39	144 116	144 116
Trt-Eval Interval	21 DA-A		
Plant-Eval Interval	67 DP-1	144 DP-1	144 DP-1
Days After Emergence	58 DE-1	135 DE-1	135 DE-1
ARM Action Codes	P		
Number of Decimals	0	1	1
Trt Treatment	Rate	Appl	
No. Name	Rate Unit	Code	
10 AATREX	2 pt/a	A	21
INTERMOC	70 fl oz/a	D	22
MOTIF	3.36 fl oz/a	D	23
N-PAK AMS	2.5 % v/v	D	
COC	1 % v/v	D	
11 AATREX	2 pt/a	A	21
HALEX GT	2 qt/a	D	22
ACTIVATOR 90 NIS	0.25 % v/v	D	23
N-PAK AMS	2.5 % v/v	D	
12 HARNESS XTRA 5.6L	3.2 pt/a	A	21
IMPACTZ	10.7 fl oz/a	C	22
MSO	1 % v/v	C	23
N-PAK AMS	2.5 % 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.

Missing data estimates are included in columns: Yates=2,3,4,5,20,21,22,24

Could not calculate LSD (% mean diff) for columns 2,18 because error mean square = 0.

Purdue Weed Science

Corn Herbicide Programs Showcase

Trial ID: 19S-MGS-CORN-11	Location: Meigs	Trial Year:
Protocol ID: 19S-MGS-CORN-11	Investigator (Creator): Dr. Bill Johnson	
Project ID: Showcase	Study Director: Dustin Johnson & Marcelo Zimmer	
	Sponsor Contact: UPL/Summit Agro/AMVAC	

Pest Type	W Weed		
Pest Code	SETFA		
Pest Scientific Name	Setaria faberi		
Pest Name	Giant foxtail		
Crop Type, Code	C ZEAMX	C ZEAMX	C ZEAMX
BBCH Scale	BCOR	BCOR	BCOR
Crop Scientific Name	Zea mays	Zea mays	Zea mays
Crop Name	Corn	Corn	Corn
Rating Date	Aug-9-2019	Oct-25-2019	Oct-25-2019
Part Rated	PLOT -	PLOT -	PLOT -
Rating Type	CONTRO	YIELD	MOICON
Rating Unit	%	lb/plot	%
Sample Size		1 PLOT	
Number of Subsamples	1	1	1
Assessed By	J. HAARMANN	J. HAARMANN	J. HAARMANN
Data Entry Date	Jul-18-2019	Oct-29-2019	Oct-29-2019
Rating Timing	A6	H1	H1
Days After First/Last Applic.	67 39	144 116	144 116
Trt-Eval Interval	21 DA-A		
Plant-Eval Interval	67 DP-1	144 DP-1	144 DP-1
Days After Emergence	58 DE-1	135 DE-1	135 DE-1
ARM Action Codes	P		
Number of Decimals	0	1	1
Trt Treatment	Rate	Appl	
No. Name	Rate Unit	Code	
13 HARNESS XTRA 5.6L	3.2 pt/a	A	21
IMPACTZ	8 fl oz/a	C	22
LIBERTY 280 SL	22 fl oz/a	C	23
MSO	0.5 % v/v	C	
N-PAK AMS	2.5 % v/v	C	
14 HARNESS XTRA 5.6L	3.2 pt/a	A	100 a
SHIELDX	1.35 fl oz/a	C	29.0 a
AATREX	0.67 pt/a	C	22.7 a
MSO	1 % v/v	C	
N-PAK AMS	2.5 % 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.

Missing data estimates are included in columns: Yates=2,3,4,5,20,21,22,24

Could not calculate LSD (% mean diff) for columns 2,18 because error mean square = 0.

Purdue Weed Science

Corn Herbicide Programs Showcase

Trial ID: 19S-MGS-CORN-11	Location: Meigs	Trial Year:
Protocol ID: 19S-MGS-CORN-11	Investigator (Creator): Dr. Bill Johnson	
Project ID: Showcase	Study Director: Dustin Johnson & Marcelo Zimmer	
	Sponsor Contact: UPL/Summit Agro/AMVAC	

Pest Type	W Weed		
Pest Code	SETFA		
Pest Scientific Name	Setaria faberi		
Pest Name	Giant foxtail		
Crop Type, Code	C ZEAMX	C ZEAMX	C ZEAMX
BBCH Scale	BCOR	BCOR	BCOR
Crop Scientific Name	Zea mays	Zea mays	Zea mays
Crop Name	Corn	Corn	Corn
Rating Date	Aug-9-2019	Oct-25-2019	Oct-25-2019
Part Rated	PLOT -	PLOT -	PLOT -
Rating Type	CONTRO	YIELD	MOICON
Rating Unit	%	lb/plot	%
Sample Size		1 PLOT	
Number of Subsamples	1	1	1
Assessed By	J. HAARMANN	J. HAARMANN	J. HAARMANN
Data Entry Date	Jul-18-2019	Oct-29-2019	Oct-29-2019
Rating Timing	A6	H1	H1
Days After First/Last Applic.	67 39	144 116	144 116
Trt-Eval Interval	21 DA-A		
Plant-Eval Interval	67 DP-1	144 DP-1	144 DP-1
Days After Emergence	58 DE-1	135 DE-1	135 DE-1
ARM Action Codes	P		
Number of Decimals	0	1	1
Trt Treatment	Rate	Appl	
No. Name	Rate Unit	Code	
15 HARNESS	1.75 pt/a	B	100 a
IMPACT	1 fl oz/a	B	
AATREX	1 pt/a	B	
MSO	0.5 % v/v	B	
N-PAK AMS	2.5 % v/v	B	
16 HARNESS	1.75 pt/a	B	100 a
IMPACT	0.75 fl oz/a	B	
ROUNDUP POWERMAX	32 fl oz/a	B	
AATREX	1 pt/a	B	
MSO	0.25 % v/v	B	
N-PAK AMS	2.5 % v/v	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.

Missing data estimates are included in columns: Yates=2,3,4,5,20,21,22,24

Could not calculate LSD (% mean diff) for columns 2,18 because error mean square = 0.

Purdue Weed Science

Corn Herbicide Programs Showcase

Trial ID: 19S-MGS-CORN-11	Location: Meigs	Trial Year:
Protocol ID: 19S-MGS-CORN-11	Investigator (Creator): Dr. Bill Johnson	
Project ID: Showcase	Study Director: Dustin Johnson & Marcelo Zimmer	
	Sponsor Contact: UPL/Summit Agro/AMVAC	

Pest Type	W Weed		
Pest Code	SETFA		
Pest Scientific Name	Setaria faberi		
Pest Name	Giant foxtail		
Crop Type, Code	C ZEAMX	C ZEAMX	C ZEAMX
BBCH Scale	BCOR	BCOR	BCOR
Crop Scientific Name	Zea mays	Zea mays	Zea mays
Crop Name	Corn	Corn	Corn
Rating Date	Aug-9-2019	Oct-25-2019	Oct-25-2019
Part Rated	PLOT -	PLOT -	PLOT -
Rating Type	CONTRO	YIELD	MOICON
Rating Unit	%	lb/plot	%
Sample Size		1 PLOT	
Number of Subsamples	1	1	1
Assessed By	J. HAARMANN	J. HAARMANN	J. HAARMANN
Data Entry Date	Jul-18-2019	Oct-29-2019	Oct-29-2019
Rating Timing	A6	H1	H1
Days After First/Last Applic.	67 39	144 116	144 116
Trt-Eval Interval	21 DA-A		
Plant-Eval Interval	67 DP-1	144 DP-1	144 DP-1
Days After Emergence	58 DE-1	135 DE-1	135 DE-1
ARM Action Codes	P		
Number of Decimals	0	1	1
Trt Treatment	Rate Appl		
No. Name	Rate Unit Code		
		21	22
17 HELMET	1.67 pt/a A	99 a	31.1 a
HAI TRADENAME	3.42 fl oz/a C		22.1 a
MSO	1 % v/v C		
UAN 28%	2.5 % 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.

Missing data estimates are included in columns: Yates=2,3,4,5,20,21,22,24

Could not calculate LSD (% mean diff) for columns 2,18 because error mean square = 0.

Purdue Weed Science

Corn Herbicide Programs Showcase

Trial ID: 19S-MGS-CORN-11	Location: Meigs	Trial Year
Protocol ID: 19S-MGS-CORN-11	Investigator (Creator): Dr. Bill Johnson	
Project ID: Showcase	Study Director: Dustin Johnson & Marcelo Zimmer	
	Sponsor Contact: UPL/Summit Agro/AMVAC	

Pest Type	W Weed		
Pest Code	SETFA		
Pest Scientific Name	Setaria faberi		
Pest Name	Giant foxtail		
Crop Type, Code	C ZEAMX	C ZEAMX	C ZEAMX
BBCH Scale	BCOR	BCOR	BCOR
Crop Scientific Name	Zea mays	Zea mays	Zea mays
Crop Name	Corn	Corn	Corn
Rating Date	Aug-9-2019	Oct-25-2019	Oct-25-2019
Part Rated	PLOT -	PLOT -	PLOT -
Rating Type	CONTRO	YIELD	MOICON
Rating Unit	%	lb/plot	%
Sample Size		1 PLOT	
Number of Subsamples	1	1	1
Assessed By	J. HAARMANN	J. HAARMANN	J. HAARMANN
Data Entry Date	Jul-18-2019	Oct-29-2019	Oct-29-2019
Rating Timing	A6	H1	H1
Days After First/Last Applic.	67 39	144 116	144 116
Trt-Eval Interval	21 DA-A		
Plant-Eval Interval	67 DP-1	144 DP-1	144 DP-1
Days After Emergence	58 DE-1	135 DE-1	135 DE-1
ARM Action Codes	P		
Number of Decimals	0	1	1
Trt Treatment	Rate	Appl	
No. Name	Rate Unit	Code	
			21 22 23
18 HELMET	1.67 pt/a	A	100 a 29.2 a 22.9 a
HAI TRADENAME	3.42 fl oz/a	C	
AATREX	1.5 pt/a	C	
MSO	1 % v/v	C	
UAN 28%	2.5 % v/v	C	
LSD P=.05	9.3	6.73	1.19
Standard Deviation	6.6	4.72	0.84
CV	6.99	15.58	3.68
Grand Mean	93.7	30.27	22.78
Levene's F	0.952	0.343	0.735
Levene's Prob(F)	0.52	0.989	0.746
Rank X2	.	.	.
P(Rank X2)	.	.	.
Skewness	-4.0104*	-0.4696	0.2843

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Missing data estimates are included in columns: Yates=2,3,4,5,20,21,22,24

Could not calculate LSD (% mean diff) for columns 2,18 because error mean square = 0.

Purdue Weed Science

Corn Herbicide Programs Showcase

Trial ID: 19S-MGS-CORN-11	Location: Meigs	Trial Year
Protocol ID: 19S-MGS-CORN-11	Investigator (Creator): Dr. Bill Johnson	
Project ID: Showcase	Study Director: Dustin Johnson & Marcelo Zimmer	
	Sponsor Contact: UPL/Summit Agro/AMVAC	

Pest Type	W Weed		
Pest Code	SETFA		
Pest Scientific Name	Setaria faberi		
Pest Name	Giant foxtail		
Crop Type, Code	C ZEAMX	C ZEAMX	C ZEAMX
BBCH Scale	BCOR	BCOR	BCOR
Crop Scientific Name	Zea mays	Zea mays	Zea mays
Crop Name	Corn	Corn	Corn
Rating Date	Aug-9-2019	Oct-25-2019	Oct-25-2019
Part Rated	PLOT -	PLOT -	PLOT -
Rating Type	CONTRO	YIELD	MOICON
Rating Unit	%	lb/plot	%
Sample Size		1 PLOT	
Number of Subsamples	1	1	1
Assessed By	J. HAARMANN	J. HAARMANN	J. HAARMANN
Data Entry Date	Jul-18-2019	Oct-29-2019	Oct-29-2019
Rating Timing	A6	H1	H1
Days After First/Last Applic.	67 39	144 116	144 116
Trt-Eval Interval	21 DA-A		
Plant-Eval Interval	67 DP-1	144 DP-1	144 DP-1
Days After Emergence	58 DE-1	135 DE-1	135 DE-1
ARM Action Codes	P		
Number of Decimals	0	1	1
Trt Treatment	Rate Appl		
No. Name	Rate Unit Code		
		21	22
			23
Kurtosis		15.2273*	-0.5699
			-0.5401
Replicate F		1.518	9.181
Replicate Prob(F)		0.2222	0.0001
Treatment F		41.027	0.825
Treatment Prob(F)		0.0001	0.6519
			0.7138

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Untreated treatment(s) 1 excluded from analysis.

Missing data estimates are included in columns: Yates=2,3,4,5,20,21,22,24

Could not calculate LSD (% mean diff) for columns 2,18 because error mean square = 0.

Purdue Weed Science

Corn Herbicide Programs Showcase

Trial ID: 19S-MGS-CORN-11	Location: Meigs	Trial Year
Protocol ID: 19S-MGS-CORN-11	Investigator (Creator): Dr. Bill Johnson	
Project ID: Showcase	Study Director: Dustin Johnson & Marcelo Zimmer	
	Sponsor Contact: UPL/Summit Agro/AMVAC	

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		Oct-25-2019
Part Rated		PLOT -
Rating Type		YIELD
Rating Unit		BU
Sample Size	1	A
Number of Subsamples		1
Assessed By	J.	HAARMANN
Data Entry Date		Oct-29-2019
Rating Timing		H1
Days After First/Last Applic.	144	116
Trt-Eval Interval		
Plant-Eval Interval	144	DP-1
Days After Emergence	135	DE-1
ARM Action Codes		TY1
Number of Decimals		1
Trt Treatment	Rate	Appl
No. Name	Rate Unit	Code
		24
1 UNTREATED CHECK		180.3
2 BICEP LITE II MAGNUM	1.67 qt/a	A
		194.6 a
3 BICEP LITE II MAGNUM	1.67 qt/a	A
SHIELDDEX	1 fl oz/a	C
AATREX	1 pt/a	C
MSO	1 % v/v	C
N-PAK AMS	2.5 % v/v	C
		186.9 a
4 BICEP LITE II MAGNUM	1.67 qt/a	A
SHIELDDEX	1.3 fl oz/a	C
AATREX	1 pt/a	C
MSO	1 % v/v	C
N-PAK AMS	2.5 % v/v	C
		190.0 a

Means followed by same letter or symbol do not significantly differ (P=.05, LSD).

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Untreated treatment(s) 1 excluded from analysis.

Missing data estimates are included in columns: Yates=2,3,4,5,20,21,22,24

Could not calculate LSD (% mean diff) for columns 2,18 because error mean square = 0.

Purdue Weed Science

Corn Herbicide Programs Showcase

Trial ID: 19S-MGS-CORN-11	Location: Meigs	Trial Year
Protocol ID: 19S-MGS-CORN-11	Investigator (Creator): Dr. Bill Johnson	
Project ID: Showcase	Study Director: Dustin Johnson & Marcelo Zimmer	
	Sponsor Contact: UPL/Summit Agro/AMVAC	

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	Oct-25-2019	
Part Rated	PLOT -	
Rating Type	YIELD	
Rating Unit	BU	
Sample Size	1 A	
Number of Subsamples	1	
Assessed By	J. HAARMANN	
Data Entry Date	Oct-29-2019	
Rating Timing	H1	
Days After First/Last Applic.	144 116	
Trt-Eval Interval		
Plant-Eval Interval	144 DP-1	
Days After Emergence	135 DE-1	
ARM Action Codes	TY1	
Number of Decimals	1	
Trt Treatment	Rate	Appl
No. Name	Rate Unit	Code
		24
5 BICEP LITE II MAGNUM	1.67 qt/a	A
IMPACT	1 fl oz/a	C
AATREX	1 pt/a	C
MSO	1 % v/v	C
N-PAK AMS	2.5 % v/v	C
		228.0 a
6 BICEP LITE II MAGNUM	1.67 qt/a	A
LAUDIS	3 fl oz/a	C
AATREX	1 pt/a	C
MSO	1 % v/v	C
N-PAK AMS	2.5 % v/v	C
		222.2 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.

Missing data estimates are included in columns: Yates=2,3,4,5,20,21,22,24

Could not calculate LSD (% mean diff) for columns 2,18 because error mean square = 0.

Purdue Weed Science

Corn Herbicide Programs Showcase

Trial ID: 19S-MGS-CORN-11	Location: Meigs	Trial Year
Protocol ID: 19S-MGS-CORN-11	Investigator (Creator): Dr. Bill Johnson	
Project ID: Showcase	Study Director: Dustin Johnson & Marcelo Zimmer	
	Sponsor Contact: UPL/Summit Agro/AMVAC	

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		Oct-25-2019
Part Rated		PLOT -
Rating Type		YIELD
Rating Unit		BU
Sample Size		1 A
Number of Subsamples		1
Assessed By		J. HAARMANN
Data Entry Date		Oct-29-2019
Rating Timing		H1
Days After First/Last Applic.		144 116
Trt-Eval Interval		
Plant-Eval Interval		144 DP-1
Days After Emergence		135 DE-1
ARM Action Codes		TY1
Number of Decimals		1
Trt Treatment	Rate	Appl
No. Name	Rate Unit	Code
		24
7 BICEP LITE II MAGNUM	1.67 qt/a	A
CALLISTO	3 fl oz/a	C
AATREX	1 pt/a	C
ACTIVATOR 90 NIS	0.25 % v/v	C
N-PAK AMS	2.5 % v/v	C
8 AATREX	2 pt/a	A
		219.0 a
9 AATREX	2 pt/a	A
INTERMOC	70 fl oz/a	D
N-PAK AMS	2.5 % v/v	D
		216.2 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.

Missing data estimates are included in columns: Yates=2,3,4,5,20,21,22,24

Could not calculate LSD (% mean diff) for columns 2,18 because error mean square = 0.

Purdue Weed Science

Corn Herbicide Programs Showcase

Trial ID: 19S-MGS-CORN-11	Location: Meigs	Trial Year
Protocol ID: 19S-MGS-CORN-11	Investigator (Creator): Dr. Bill Johnson	
Project ID: Showcase	Study Director: Dustin Johnson & Marcelo Zimmer	
	Sponsor Contact: UPL/Summit Agro/AMVAC	

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		Oct-25-2019	
Part Rated		PLOT -	
Rating Type		YIELD	
Rating Unit		BU	
Sample Size		1	A
Number of Subsamples			1
Assessed By		J. HAARMANN	
Data Entry Date		Oct-29-2019	
Rating Timing		H1	
Days After First/Last Applic.		144	116
Trt-Eval Interval			
Plant-Eval Interval		144	DP-1
Days After Emergence		135	DE-1
ARM Action Codes			TY1
Number of Decimals			1
Trt Treatment	Rate	Appl	
No. Name	Rate Unit	Code	24
10 AATREX	2 pt/a	A	237.0 a
INTERMOC	70 fl oz/a	D	
MOTIF	3.36 fl oz/a	D	
N-PAK AMS	2.5 % v/v	D	
COC	1 % v/v	D	
11 AATREX	2 pt/a	A	218.2 a
HALEX GT	2 qt/a	D	
ACTIVATOR 90 NIS	0.25 % v/v	D	
N-PAK AMS	2.5 % v/v	D	
12 HARNESS XTRA 5.6L	3.2 pt/a	A	215.2 a
IMPACTZ	10.7 fl oz/a	C	
MSO	1 % v/v	C	
N-PAK AMS	2.5 % 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.

Missing data estimates are included in columns: Yates=2,3,4,5,20,21,22,24

Could not calculate LSD (% mean diff) for columns 2,18 because error mean square = 0.

Purdue Weed Science

Corn Herbicide Programs Showcase			Trial Year
Trial ID: 19S-MGS-CORN-11	Location: Meigs		
Protocol ID: 19S-MGS-CORN-11	Investigator (Creator): Dr. Bill Johnson		
Project ID: Showcase	Study Director: Dustin Johnson & Marcelo Zimmer		
	Sponsor Contact: UPL/Summit Agro/AMVAC		

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	Oct-25-2019
Part Rated	PLOT -
Rating Type	YIELD
Rating Unit	BU
Sample Size	1 A
Number of Subsamples	1
Assessed By	J. HAARMANN
Data Entry Date	Oct-29-2019
Rating Timing	H1
Days After First/Last Applic.	144 116
Trt-Eval Interval	
Plant-Eval Interval	144 DP-1
Days After Emergence	135 DE-1
ARM Action Codes	TY1
Number of Decimals	1

Trt No.	Treatment Name	Rate	Appl Unit	Code	Mean
					24
13	HARNESS XTRA 5.6L	3.2 pt/a	A		206.3 a
	IMPACTZ	8 fl oz/a	C		
	LIBERTY 280 SL	22 fl oz/a	C		
	MSO	0.5 % v/v	C		
	N-PAK AMS	2.5 % v/v	C		
14	HARNESS XTRA 5.6L	3.2 pt/a	A		200.9 a
	SHIELDEX	1.35 fl oz/a	C		
	AATREX	0.67 pt/a	C		
	MSO	1 % v/v	C		
	N-PAK AMS	2.5 % 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.
 Missing data estimates are included in columns: Yates=2,3,4,5,20,21,22,24
 Could not calculate LSD (% mean diff) for columns 2,18 because error mean square = 0.

Purdue Weed Science

Corn Herbicide Programs Showcase			Trial Year
Trial ID: 19S-MGS-CORN-11	Location: Meigs		
Protocol ID: 19S-MGS-CORN-11	Investigator (Creator): Dr. Bill Johnson		
Project ID: Showcase	Study Director: Dustin Johnson & Marcelo Zimmer		
	Sponsor Contact: UPL/Summit Agro/AMVAC		

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	Oct-25-2019
Part Rated	PLOT -
Rating Type	YIELD
Rating Unit	BU
Sample Size	1 A
Number of Subsamples	1
Assessed By	J. HAARMANN
Data Entry Date	Oct-29-2019
Rating Timing	H1
Days After First/Last Applic.	144 116
Trt-Eval Interval	
Plant-Eval Interval	144 DP-1
Days After Emergence	135 DE-1
ARM Action Codes	TY1
Number of Decimals	1

Trt No.	Treatment Name	Rate	Unit	Appl Code	
					24
15	HARNESS	1.75	pt/a	B	224.2 a
	IMPACT	1	fl oz/a	B	
	AATREX	1	pt/a	B	
	MSO	0.5	% v/v	B	
	N-PAK AMS	2.5	% v/v	B	
16	HARNESS	1.75	pt/a	B	231.6 a
	IMPACT	0.75	fl oz/a	B	
	ROUNDUP POWERMAX	32	fl oz/a	B	
	AATREX	1	pt/a	B	
	MSO	0.25	% v/v	B	
	N-PAK AMS	2.5	% v/v	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.
 Missing data estimates are included in columns: Yates=2,3,4,5,20,21,22,24
 Could not calculate LSD (% mean diff) for columns 2,18 because error mean square = 0.

Purdue Weed Science

Corn Herbicide Programs Showcase

Trial ID: 19S-MGS-CORN-11	Location: Meigs	Trial Year
Protocol ID: 19S-MGS-CORN-11	Investigator (Creator): Dr. Bill Johnson	
Project ID: Showcase	Study Director: Dustin Johnson & Marcelo Zimmer	
	Sponsor Contact: UPL/Summit Agro/AMVAC	

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		Oct-25-2019
Part Rated		PLOT -
Rating Type		YIELD
Rating Unit		BU
Sample Size	1	A
Number of Subsamples		1
Assessed By	J.	HAARMANN
Data Entry Date		Oct-29-2019
Rating Timing		H1
Days After First/Last Applic.	144	116
Trt-Eval Interval		
Plant-Eval Interval	144	DP-1
Days After Emergence	135	DE-1
ARM Action Codes		TY1
Number of Decimals		1
Trt Treatment	Rate	Appl
No. Name	Rate Unit	Code
		24
17 HELMET	1.67 pt/a	A
HAI TRADENAME	3.42 fl oz/a	C
MSO	1 % v/v	C
UAN 28%	2.5 % v/v	C
		223.1 a

Means followed by same letter or symbol do not significantly differ (P=.05, LSD).

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Missing data estimates are included in columns: Yates=2,3,4,5,20,21,22,24

Could not calculate LSD (% mean diff) for columns 2,18 because error mean square = 0.

Purdue Weed Science

Corn Herbicide Programs Showcase

Trial ID: 19S-MGS-CORN-11	Location: Meigs	Trial Year
Protocol ID: 19S-MGS-CORN-11	Investigator (Creator): Dr. Bill Johnson	
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Pest Type		
Pest Code		
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Crop Type, Code	C	ZEAMX
BBCH Scale		BCOR
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Rating Date		Oct-25-2019
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Rating Type		YIELD
Rating Unit		BU
Sample Size		1 A
Number of Subsamples		1
Assessed By	J. HAARMANN	
Data Entry Date		Oct-29-2019
Rating Timing		H1
Days After First/Last Applic.		144 116
Trt-Eval Interval		
Plant-Eval Interval		144 DP-1
Days After Emergence		135 DE-1
ARM Action Codes		TY1
Number of Decimals		1
Trt Treatment	Rate	Appl
No. Name	Rate Unit	Code
		24
18 HELMET	1.67 pt/a	A
HAI TRADENAME	3.42 fl oz/a	C
AATREX	1.5 pt/a	C
MSO	1 % v/v	C
UAN 28%	2.5 % v/v	C
LSD P=.05		47.33
Standard Deviation		33.19
CV		15.44
Grand Mean		215.03
Levene's F		0.347
Levene's Prob(F)		0.988
Rank X2		.
P(Rank X2)		.
Skewness		-0.4533

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Mean comparisons performed only when AOV Treatment P(F) is significant at mean comparison OSL.

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Could not calculate LSD (% mean diff) for columns 2,18 because error mean square = 0.

Purdue Weed Science

Corn Herbicide Programs Showcase

Trial ID: 19S-MGS-CORN-11	Location: Meigs	Trial Year
Protocol ID: 19S-MGS-CORN-11	Investigator (Creator): Dr. Bill Johnson	
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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	Oct-25-2019
Part Rated	PLOT -
Rating Type	YIELD
Rating Unit	BU
Sample Size	1 A
Number of Subsamples	1
Assessed By	J. HAARMANN
Data Entry Date	Oct-29-2019
Rating Timing	H1
Days After First/Last Applic.	144 116
Trt-Eval Interval	
Plant-Eval Interval	144 DP-1
Days After Emergence	135 DE-1
ARM Action Codes	TY1
Number of Decimals	1
Trt Treatment	Rate Appl
No. Name	Rate Unit Code
	24
Kurtosis	-0.5967
Replicate F	10.063
Replicate Prob(F)	0.0001
Treatment F	0.840
Treatment Prob(F)	0.6361

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.

Missing data estimates are included in columns: Yates=2,3,4,5,20,21,22,24

Could not calculate LSD (% mean diff) for columns 2,18 because error mean square = 0.

Purdue Weed Science

Corn Herbicide Programs Showcase

Trial ID: 19S-MGS-CORN-11	Location: Meigs	Trial Year
Protocol ID: 19S-MGS-CORN-11	Investigator (Creator): Dr. Bill Johnson	
Project ID: Showcase	Study Director: Dustin Johnson & Marcelo Zimmer	
	Sponsor Contact: UPL/Summit Agro/AMVAC	

Pest Type

W, Weed = Weed or volunteer crop

Pest Code

AMATA, Amaranthus tamariscinus, Common waterhemp = US

AMBTR, Ambrosia trifida, Giant ragweed = US

SETFA, Setaria faberi, Giant foxtail = US

Crop Type, Code

C = EPPO species (Bayer) codes

ZEAMX, BCOR, Zea mays, Corn = US

Part Rated

PLOT = plot

Rating Type

PHYGEN = phytotoxicity - general / injury

CONTRO = control / burndown or knockdown

YIELD = yield

MOICON = moisture content

Rating Unit

% = percent

lb/plot = pounds per plot

BU = bushel

PLOT = total plot

A = acre

Rating Timing

A1 = 1st Assessment According to Trial Schedule

A2 = 2nd Assessment According to trial Schedule

A3 = 3rd Assessment According to Trial Schedule

A4 = 4th Assessment According to Trial Schedule

A5 = 5th Assessment According to Trial Schedule

A6 = 6th Assessment according to Trial Schedule

H1 = 1st Harvest

Plant-Eval Interval

14 DP-1 = 1 ZEAMX Jun-3-2019

25 DP-1 = 1 ZEAMX Jun-3-2019

32 DP-1 = 1 ZEAMX Jun-3-2019

40 DP-1 = 1 ZEAMX Jun-3-2019

53 DP-1 = 1 ZEAMX Jun-3-2019

67 DP-1 = 1 ZEAMX Jun-3-2019

144 DP-1 = 1 ZEAMX Jun-3-2019

ARM Action Codes

P = Rating scale of 0 to 100 (e.g. % control or injury)

TY1 = $7.778572 * [22] * (100 - [23]) / 84.5$