

# Purdue Weed Science

## Showcase Impact Programs in corn university trials, including programs for glyphosate resistant weeds

Trial ID: 15S-THP-CTC-27      Location: TPAC      Trial Year: 2015  
 Protocol ID: 15S-THP-CTC-27      Investigator: Dr. Bill Johnson  
 Project ID: 15C04H028B      Study Director: Joe Ikley  
 Sponsor Contact: AMVAC - Joseph Argentine

### General Trial Information

**Study Director:** Joe Ikley      **Title:** Research Associate  
**Investigator:** Dr. Bill Johnson      **Title:** Professor

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

### Contacts

**Study Director:** Joe Ikley      **Title:** Research Associate  
**Organization:** Purdue University  
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**City+State/Prov:** West Lafayette      **Mobile No.:** 410-596-9091  
**Postal Code:** 47907      **E-mail:** jikley@purdue.edu

**Investigator:** Dr. Bill Johnson      **Title:** Professor  
**Organization:** Purdue University  
**Address:** 915 West State Street      **Phone No.:** 765-494-4656  
**City+State/Prov:** West Lafayette      **Mobile No.:** 765-404-9801  
**Postal Code:** 47907      **E-mail:** wgj@purdue.edu

### Cooperator/Landowner

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

### Crop Description

**Crop 1:** ZEAMX      Zea mays  
**Variety:** DKC 62-08 RIB      **BBCH Scale:** BCOR  
**Description:** RR/LL  
**Planting Date:** 5/2/2015  
**Planting Method:** SEEDED seeded  
**Planting Equipment:** FPP      Finger Pickup Planter  
**Emergence Date:** 5/9/2015  
**Planting Rate, Unit:** 32000 S/A  
**Depth, Unit:** 1.5 IN  
**Row Spacing, Unit:** 30 IN  
**Spacing Within Row, Unit:** 6 IN  
**Planting Density, Unit:** 32000 S/A  
**Soil Temperature, Unit:** 55 F  
**Soil Moisture:** SLIWET slightly wet, moist  
**Seed Bed:** MEDIUM medium      **% Standard Moisture:** 15.5  
**Harvested Width, Unit:** 5 FT  
**Harvested Length, Unit:** 25 FT

### Pest Description

**Pest 1 Type:** W      **Code:** AMBTR Ambrosia trifida  
**Common Name:** Giant ragweed  
**Pest 2 Type:** W      **Code:** SETFA Setaria faberi  
**Common Name:** Giant foxtail  
**Pest 3 Type:** W      **Code:** CHEAL Chenopodium album  
**Common Name:** Common lambsquarters

### Site and Design

**Treated Plot Width:** 10 FT      **Site Type:** FIELD field  
**Treated Plot Length:** 30 FT      **Experimental Unit:** 1 PLOT plot  
**Treated Plot Area:** 300 FT2      **Treatments:** 6      **Tillage Type:** CONTIL conventional-till  
**Replications:** 4      **Study Design:** RACOB� Randomized Complete Block (RCB)  
**Untreated Arrangement:** INCLUDED single control randomized in each block

**Field Prep./Maintenance:**  
 171 pounds of UAN (28-0-0) applied and disked in on May 1st

# Purdue Weed Science

## Soil Description

**Description Name:** TPAC - Field 4B  
**% OM:** 2.9      **Texture:** SIL      silt loam  
**pH:** 6.2      **Soil Name:** Toronto-Millbrook  
**CEC:** 13.3

## Application Description

	A	B	C
<b>Application Date:</b>	5/2/2015	5/22/2015	6/2/2015
<b>Appl. Start Time:</b>	12:00	8:00	08:45
<b>Appl. Stop Time:</b>	13:00	8:10	9:00
<b>Application Method:</b>	SPRAY	SPRAY	SPRAY
<b>Application Timing:</b>	PRE	EPOST	LPOST
<b>Application Placement:</b>	SOIL	BROADC	BROADC
<b>Applied By:</b>	JI	JI	JI
<b>Air Temperature, Unit:</b>	68 F	54 F	48 F
<b>% Relative Humidity:</b>	37	76	93
<b>Wind Velocity, Unit:</b>	3 MPH	2.4 MPH	4 MPH
<b>Wind Direction:</b>	SW	SW	NE
<b>Dew Presence (Y/N):</b>	N no	N no	Y yes
<b>Soil Temperature, Unit:</b>	55 F	56 F	56 F
<b>Soil Moisture:</b>	SLIWET	SLIDRY	VERWET
<b>% Cloud Cover:</b>	30	10	0
<b>Next Moisture Occurred On:</b>	5/4/2015		

## Crop Stage At Each Application

	A	B	C
<b>Crop 1 Code, BBCH Scale:</b>	ZEAMX BCOR	ZEAMX BCOR	ZEAMX BCOR
<b>Stage Scale Used:</b>	BBCH	BBCH	BBCH
<b>Stage Majority, Percent:</b>	00	33	36
<b>Height, Unit:</b>		5 IN	11 IN
<b>Height Minimum, Maximum:</b>		4 6	10 12

## Purdue Weed Science

Pest Stage At Each Application			
	A	B	C
<b>Pest 1 Code, Type, Scale:</b>	AMBTR W	AMBTR W	AMBTR W
<b>Stage Majority, Percent:</b>		12	31G
<b>Stage Minimum, Percent:</b>		11	10D
<b>Stage Maximum, Percent:</b>		13	32G
<b>Height, Unit:</b>		1.5 IN	1.5 IN
<b>Height Minimum, Maximum:</b>		1 2	1 2
<b>Density, Unit:</b>			0.1 YD2
<b>Pest 2 Code, Type, Scale:</b>	SETFA W	SETFA W	SETFA W
<b>Stage Majority, Percent:</b>		12	12
<b>Stage Minimum, Percent:</b>		11	11
<b>Stage Maximum, Percent:</b>		13	13
<b>Height, Unit:</b>		1.5 IN	0.5 IN
<b>Height Minimum, Maximum:</b>		1 2	
<b>Density, Unit:</b>		7 YD2	0.2 YD2
<b>Pest 3 Code, Type, Scale:</b>	CHEAL W	CHEAL W	CHEAL W
<b>Stage Majority, Percent:</b>		12	
<b>Stage Minimum, Percent:</b>		11	
<b>Stage Maximum, Percent:</b>		13	
<b>Height, Unit:</b>		1 IN	
<b>Height Minimum, Maximum:</b>		0.5 1.5	
<b>Density, Unit:</b>		4 YD2	

Application Equipment			
	A	B	C
<b>Appl. Equipment:</b>	CO2 BACKPACK	CO2 BACKPACK	CO2 BACKPACK
<b>Equipment Type:</b>	BACSPR	BACSPR	BACSPR
<b>Operation Pressure, Unit:</b>	18 PSI	18 PSI	18 PSI
<b>Nozzle Type:</b>	FLAT FAN	FLAT FAN	FLAT FAN
<b>Nozzle Size:</b>	XR 11002	XR 11002	XR 11002
<b>Nozzle Spacing, Unit:</b>	15 IN	15 IN	15 IN
<b>Nozzles/Row:</b>	8	8	8
<b>Boom Length, Unit:</b>	10 FT	10 FT	10 FT
<b>Boom Height, Unit:</b>	17 IN	17 IN	17 IN
<b>Ground Speed, Unit:</b>	3 MPH	3 MPH	3 MPH
<b>Carrier:</b>	MEIGS	MEIGS	MEIGS
<b>Spray Volume, Unit:</b>	15 gal/ac	15 gal/ac	15 gal/ac
<b>Mix Size, Unit:</b>	1.8 liters	1.8 liters	1.8 liters
<b>Propellant:</b>	CO2	CO2	CO2

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 Project ID: 15C04H028B      Study Director: Joe Ikley  
 Sponsor Contact: AMVAC - Joseph Argentine

Reps: 4      Plots: 10 by 30 feet  
 Spray vol: 15 GAL/AC      Mix Size: 1.8 liters (calculated mix size 1.5642)

Trt No.	Treatment Name	Form Conc	Form Unit	Form Type	Rate	Growth Stage	Appl Code	Amt Product to Measure	Rep 1	Rep 2	Rep 3	Rep 4
1	Untreated Check								101	203	301	406
2	HARNESS XTRA	5.6 LB/GAL		SE	3.2 pt/a	PRE	A	48.0 ml/mx	102	205	304	403
	IMPACT	2.8 LB/GAL		L	0.75 fl oz/a		C	0.7031 ml/mx				
	AATREX	4 LB/GAL		L	1 pt/a		C	15.0 ml/mx				
	MSO ULTRA	100 %		L	1 % v/v		C	18.0 ml/mx				
	N-PAK - AMS	3.4 LBA/GAL		SL	2.5 % v/v	2-4" WEE	C	45.0 ml/mx				
3	HARNESS XTRA	5.6 LB/GAL		SE	3.2 pt/a	PRE	A	48.0 ml/mx	103	204	302	405
	IMPACT	2.8 LB/GAL		L	0.75 fl oz/a		C	0.7031 ml/mx				
	ROUNDUP POWERMAX	4.5 LBAE/GAL		SL	32 fl oz/a		C	30.0 ml/mx				
	AATREX	4 LB/GAL		L	1 pt/a		C	15.0 ml/mx				
	MSO ULTRA	100 %		L	0.5 % v/v		C	8.999 ml/mx				
N-PAK - AMS	3.4 LBA/GAL		SL	2.5 % v/v	2-4" WEE	C	45.0 ml/mx					
4	HARNESS XTRA	5.6 LB/GAL		SE	3.2 pt/a	PRE	A	48.0 ml/mx	104	206	305	401
	IMPACT	2.8 LB/GAL		L	0.75 fl oz/a		C	0.7031 ml/mx				
	STATUS	61.1 %		WG	3 oz/a		C	2.696 g/mx				
	AATREX	4 LB/GAL		L	1 pt/a		C	15.0 ml/mx				
	MSO ULTRA	100 %		L	1 % v/v		C	18.0 ml/mx				
N-PAK - AMS	3.4 LBA/GAL		SL	2.5 % v/v	2-4" WEE	C	45.0 ml/mx					
5	HARNESS XTRA	5.6 LB/GAL		SE	3.2 pt/a		B	48.0 ml/mx	105	201	306	402
	IMPACT	2.8 LB/GAL		L	1 fl oz/a		B	0.9375 ml/mx				
	MSO ULTRA	100 %		L	0.5 % v/v		B	8.999 ml/mx				
	N-PAK - AMS	3.4 LBA/GAL		SL	2.5 % v/v	V3-V4 CO	B	45.0 ml/mx				
6	HALEX GT	4.389 LBAE/GAL		L	3.6 pt/a		B	54.0 ml/mx	106	202	303	404
	AATREX	4 LB/GAL		L	1 pt/a		B	15.0 ml/mx				
	ACTIVATOR 90 - NIS	90 %		L	0.25 % v/v		B	4.5 ml/mx				
	N-PAK - AMS	3.4 LBA/GAL		SL	2.5 % v/v	V3-V4 CO	B	45.0 ml/mx				

Sort Order: Replicate 1

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

Amount*	Unit	Treatment Name	Form Conc	Form Type	Lot Code
240.000	ml	HARNESS XTRA	5.6	SE	
3.809	ml	IMPACT	2.8	L	
75.000	ml	AATREX	4	L	
67.493	ml	MSO ULTRA	100	L	
281.219	ml	N-PAK - AMS	3.4	SL	
37.500	ml	ROUNDUP POWERMAX	4.5	SL	
3.370	g	STATUS	61.1	WG	
67.500	ml	HALEX GT	4.389	L	
5.624	ml	ACTIVATOR 90 - NIS	90	L	

\* 'Per area' calculations based on spray volume= 15 GAL/AC, mix size= 1.8 liters (mix size basis).

\* Product amount calculations increased 25 % for overage adjustment.

\* 'Per volume' calculations use spray volume= 15 GAL/AC, mix size= 1.8 liters.

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Pest Type		W Weed		W Weed		W Weed		W Weed
Pest Code		SETFA		CHEAL		SETFA		CHEAL
Pest Name		Giant foxtail		Common lambsqu>		Giant foxtail		Common lambsqu>
Crop Code	ZEAMX					ZEAMX		
Crop Name	Corn					Corn		
Part Rated	PLOT C	PLOT P		PLOT P		PLOT C	PLOT P	PLOT P
Rating Date	5/17/2015	5/17/2015		5/17/2015		5/29/2015	5/29/2015	5/29/2015
Rating Type	PHYGEN	CONTRO		CONTRO		PHYGEN	CONTRO	CONTRO
Rating Unit	%	%		%		%	%	%
Number of Subsamples	1	1		1		1	1	1
Days After First/Last Applic.	15 15	15 15		15 15		27 7	27 7	27 7
Trt-Eval Interval	15 DA-A	15 DA-A		15 DA-A		7 DA-B	7 DA-B	7 DA-B
Days After Emergence	8 DE-1	8 DE-1		8 DE-1		20 DE-1	20 DE-1	20 DE-1
ARM Action Codes	P	P		P		P	P	P
Number of Decimals	0	0		0		0	0	0
Trt Treatment	Rate	Appl						
No. Name	Rate Unit	Code Plot	1	2	3	4	5	6
1 Untreated Check		101	0	0	0	0	0	0
		203	0	0	0	0	0	0
		301	0	0	0	0	0	0
		406	0	0	0	0	0	0
		Mean =	0	0	0	0	0	0
2 HARNES XTRA	3.2 pt/a	A 102	0	100	100	0	100	100
IMPACT	0.75 fl oz/a	C 205	0	100	100	0	100	100
AATREX	1 pt/a	C 304	0	100	100	0	100	100
MSO ULTRA	1 % v/v	C 403	0	100	100	0	100	100
N-PAK - AMS	2.5 % v/v	C						
		Mean =	0	100	100	0	100	100
3 HARNES XTRA	3.2 pt/a	A 103	0	100	100	0	100	100
IMPACT	0.75 fl oz/a	C 204	0	100	100	0	100	100
ROUNDUP POWERMAX	32 fl oz/a	C 302	0	100	100	0	100	100
AATREX	1 pt/a	C 405	0	100	100	0	100	100
MSO ULTRA	0.5 % v/v	C						
N-PAK - AMS	2.5 % v/v	C						
		Mean =	0	100	100	0	100	100
4 HARNES XTRA	3.2 pt/a	A 104	0	100	100	0	100	100
IMPACT	0.75 fl oz/a	C 206	0	100	100	0	100	100
STATUS	3 oz/a	C 305	0	100	100	0	100	100
AATREX	1 pt/a	C 401	0	100	100	0	100	100
MSO ULTRA	1 % v/v	C						
N-PAK - AMS	2.5 % v/v	C						
		Mean =	0	100	100	0	100	100
5 HARNES XTRA	3.2 pt/a	B 105	0	0	0	10	95	100
IMPACT	1 fl oz/a	B 201	0	0	0	10	95	100
MSO ULTRA	0.5 % v/v	B 306	0	0	0	10	100	100
N-PAK - AMS	2.5 % v/v	B 402	0	0	0	10	100	100
		Mean =	0	0	0	10	98	100
6 HALEX GT	3.6 pt/a	B 106	0	0	0	5	100	100
AATREX	1 pt/a	B 202	0	0	0	3	100	100
ACTIVATOR 90 - NIS	0.25 % v/v	B 303	0	0	0	2	100	100
N-PAK - AMS	2.5 % v/v	B 404	0	0	0	2	100	100
		Mean =	0	0	0	3	100	100

# Purdue Weed Science

Pest Type	W Weed		ZEAMX		W Weed		W Weed		W Weed	
Pest Code	AMARE		Corn		SETFA		CHEAL		AMARE	
Pest Name	Redroot pigweed				Giant foxtail		Common lambsqu>		Redroot pigweed	
Crop Code			PLOT C		PLOT P		PLOT P		PLOT P	
Crop Name	PLOT P		PHYGEN		CONTRO		CONTRO		CONTRO	
Part Rated	5/29/2015		6/9/2015		6/9/2015		6/9/2015		6/9/2015	
Rating Date	CONTRO		PHYGEN		CONTRO		CONTRO		CONTRO	
Rating Type	%		%		%		%		%	
Rating Unit	1		1		1		1		1	
Number of Subsamples	27 7		38 7		38 7		38 7		38 7	
Days After First/Last Applic.	7 DA-B		7 DA-C		7 DA-C		7 DA-C		7 DA-C	
Trt-Eval Interval	20 DE-1		31 DE-1		31 DE-1		31 DE-1		31 DE-1	
Days After Emergence	P		P		P		P		P	
ARM Action Codes	0		0		0		0		0	
Number of Decimals										
Trt Treatment	Rate	Appl								
No. Name	Rate Unit	Code Plot	7	8	9	10	11			
1 Untreated Check		101	0	0	0	0	0	0		
		203	0	0	0	0	0	0		
		301	0	0	0	0	0	0		
		406	0	0	0	0	0	0		
		Mean =	0	0	0	0	0	0		
2 HARNESS XTRA	3.2 pt/a	A 102	100	0	100	100	100	100		
IMPACT	0.75 fl oz/a	C 205	100	0	100	100	100	100		
AATREX	1 pt/a	C 304	100	0	100	100	100	100		
MSO ULTRA	1 % v/v	C 403	100	0	100	100	100	100		
N-PAK - AMS	2.5 % v/v	C								
		Mean =	100	0	100	100	100	100		
3 HARNESS XTRA	3.2 pt/a	A 103	100	5	100	100	100	100		
IMPACT	0.75 fl oz/a	C 204	100	5	100	100	100	100		
ROUNDUP POWERMAX	32 fl oz/a	C 302	100	0	100	100	100	100		
AATREX	1 pt/a	C 405	100	0	100	100	100	100		
MSO ULTRA	0.5 % v/v	C								
N-PAK - AMS	2.5 % v/v	C								
		Mean =	100	3	100	100	100	100		
4 HARNESS XTRA	3.2 pt/a	A 104	100	0	100	100	100	100		
IMPACT	0.75 fl oz/a	C 206	100	10	100	100	100	100		
STATUS	3 oz/a	C 305	100	0	100	100	100	100		
AATREX	1 pt/a	C 401	100	5	100	100	100	100		
MSO ULTRA	1 % v/v	C								
N-PAK - AMS	2.5 % v/v	C								
		Mean =	100	4	100	100	100	100		
5 HARNESS XTRA	3.2 pt/a	B 105	100	0	80	100	100	100		
IMPACT	1 fl oz/a	B 201	100	5	100	100	100	100		
MSO ULTRA	0.5 % v/v	B 306	100	0	90	100	100	100		
N-PAK - AMS	2.5 % v/v	B 402	100	0	100	100	100	100		
		Mean =	100	1	93	100	100	100		
6 HALEX GT	3.6 pt/a	B 106	100	0	100	100	100	100		
AATREX	1 pt/a	B 202	100	0	100	100	100	100		
ACTIVATOR 90 - NIS	0.25 % v/v	B 303	100	0	100	100	100	100		
N-PAK - AMS	2.5 % v/v	B 404	100	5	100	100	100	100		
		Mean =	100	1	100	100	100	100		

# Purdue Weed Science

Pest Type		W Weed	W Weed	W Weed	W Weed		
Pest Code		SETFA	CHEAL	AMARE	SETFA		
Pest Name		Giant foxtail	Common lambsqu>	Redroot pigweed	Giant foxtail		
Crop Code	ZEAMX						
Crop Name	Corn						
Part Rated	PLOT C	PLOT P	PLOT P	PLOT P	PLOT P		
Rating Date	6/19/2015	6/19/2015	6/19/2015	6/19/2015	7/1/2015		
Rating Type	PHYGEN	CONTRO	CONTRO	CONTRO	CONTRO		
Rating Unit	%	%	%	%	%		
Number of Subsamples	1	1	1	1	1		
Days After First/Last Applic.	48 17	48 17	48 17	48 17	60 29		
Trt-Eval Interval	28 DA-B	28 DA-B	28 DA-B	28 DA-B	29 DA-C		
Days After Emergence	41 DE-1	41 DE-1	41 DE-1	41 DE-1	53 DE-1		
ARM Action Codes	P	P	P	P	P		
Number of Decimals	0	0	0	0	0		
Trt Treatment	Rate	Appl					
No. Name	Rate Unit	Code Plot	12	13	14	15	16
1 Untreated Check		101	0	0	0	0	0
		203	0	0	0	0	0
		301	0	0	0	0	0
		406	0	0	0	0	0
		Mean =	0	0	0	0	0
2 HARNESS XTRA	3.2 pt/a	A 102	0	100	100	100	100
IMPACT	0.75 fl oz/a	C 205	0	100	100	100	100
AATREX	1 pt/a	C 304	0	100	100	100	100
MSO ULTRA	1 % v/v	C 403	0	100	100	100	100
N-PAK - AMS	2.5 % v/v	C					
		Mean =	0	100	100	100	100
3 HARNESS XTRA	3.2 pt/a	A 103	0	100	100	100	100
IMPACT	0.75 fl oz/a	C 204	0	100	100	100	100
ROUNDUP POWERMAX	32 fl oz/a	C 302	0	100	100	100	100
AATREX	1 pt/a	C 405	0	100	100	100	90
MSO ULTRA	0.5 % v/v	C					
N-PAK - AMS	2.5 % v/v	C					
		Mean =	0	100	100	100	98
4 HARNESS XTRA	3.2 pt/a	A 104	0	100	100	100	100
IMPACT	0.75 fl oz/a	C 206	0	95	100	100	90
STATUS	3 oz/a	C 305	0	100	100	100	100
AATREX	1 pt/a	C 401	0	100	100	100	95
MSO ULTRA	1 % v/v	C					
N-PAK - AMS	2.5 % v/v	C					
		Mean =	0	99	100	100	96
5 HARNESS XTRA	3.2 pt/a	B 105	0	70	100	100	80
IMPACT	1 fl oz/a	B 201	5	95	100	100	95
MSO ULTRA	0.5 % v/v	B 306	5	90	100	100	90
N-PAK - AMS	2.5 % v/v	B 402	5	100	100	100	100
		Mean =	4	89	100	100	91
6 HALEX GT	3.6 pt/a	B 106	0	95	100	100	95
AATREX	1 pt/a	B 202	0	100	100	100	100
ACTIVATOR 90 - NIS	0.25 % v/v	B 303	0	99	100	100	100
N-PAK - AMS	2.5 % v/v	B 404	0	100	100	100	100
		Mean =	0	99	100	100	99

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Pest Type		W Weed	W Weed	W Weed	W Weed	W Weed
Pest Code		CHEAL	AMARE	SETFA	CHEAL	AMARE
Pest Name		Common lambsqu>	Redroot pigweed	Giant foxtail	Common lambsqu>	Redroot pigweed
Crop Code						
Crop Name						
Part Rated		PLOT P	PLOT P	PLOT P	PLOT P	PLOT P
Rating Date		7/1/2015	7/1/2015	7/16/2015	7/16/2015	7/16/2015
Rating Type		CONTRO	CONTRO	CONTRO	CONTRO	CONTRO
Rating Unit		%	%	%	%	%
Number of Subsamples		1	1	1	1	1
Days After First/Last Applic.		60 29	60 29	75 44	75 44	75 44
Trt-Eval Interval		29 DA-C	29 DA-C	44 DA-C	44 DA-C	44 DA-C
Days After Emergence		53 DE-1	53 DE-1	68 DE-1	68 DE-1	68 DE-1
ARM Action Codes		P	P	P	P	P
Number of Decimals		0	0	0	0	0
Trt Treatment	Rate Appl					
No. Name	Rate Unit Code Plot	17	18	19	20	21
1 Untreated Check	101 203 301 406 Mean =	0 0 0 0 0	0 0 0 0 0	0 0 0 0 0	0 0 0 0 0	0 0 0 0 0
2 HARNESS XTRA IMPACT AATREX MSO ULTRA N-PAK - AMS Mean =	3.2 pt/a A 102 0.75 fl oz/a C 205 1 pt/a C 304 1 % v/v C 403 2.5 % v/v C 100	100 95 100 100 100 93	95 98 90 90 100	100 100 100 100 100	100 100 99 100 100	100 100 100 100 100
3 HARNESS XTRA IMPACT ROUNDUP POWERMAX AATREX MSO ULTRA N-PAK - AMS Mean =	3.2 pt/a A 103 0.75 fl oz/a C 204 32 fl oz/a C 302 1 pt/a C 405 0.5 % v/v C 2.5 % v/v C 100	100 100 100 100 100 94	90 95 90 100 100	100 100 100 90 100	100 100 100 100 100	100 100 100 100 100
4 HARNESS XTRA IMPACT STATUS AATREX MSO ULTRA N-PAK - AMS Mean =	3.2 pt/a A 104 0.75 fl oz/a C 206 3 oz/a C 305 1 pt/a C 401 1 % v/v C 2.5 % v/v C 100	100 100 100 100 100 95	95 90 100 95 100	100 95 100 100 100	100 100 100 100 100	100 100 100 100 100
5 HARNESS XTRA IMPACT MSO ULTRA N-PAK - AMS Mean =	3.2 pt/a B 105 1 fl oz/a B 201 0.5 % v/v B 306 2.5 % v/v B 402 100	100 100 100 100 95	95 95 90 100 95	85 100 85 100 93	100 100 99 100 100	100 100 100 100 100
6 HALEX GT AATREX ACTIVATOR 90 - NIS N-PAK - AMS Mean =	3.6 pt/a B 106 1 pt/a B 202 0.25 % v/v B 303 2.5 % v/v B 404 100	100 100 100 100 98	95 100 95 100 98	95 100 100 100 99	100 100 100 100 100	100 100 100 100 100

# Purdue Weed Science

Pest Type						
Pest Code						
Pest Name						
Crop Code		ZEAMX	ZEAMX	ZEAMX		
Crop Name		Corn	Corn	Corn		
Part Rated		PLOT C	PLOT C	PLOT C		
Rating Date		9/24/2015	9/24/2015	9/24/2015		
Rating Type		YIELD	MOICON	YIELD		
Rating Unit		lb/plot	%	BU		
Number of Subsamples		1	1	1		
Days After First/Last Applic.		145 114	145 114	145 114		
Trt-Eval Interval						
Days After Emergence		138 DE-1	138 DE-1	138 DE-1		
ARM Action Codes				TY1		
Number of Decimals		2	2	1		
Trt Treatment	Rate	Appl				
No. Name	Rate Unit	Code Plot	22	23	24	
1 Untreated Check		101	30.63	19.65	181.2	
		203	32.78	19.68	193.9	
		301	26.38	20.12	155.2	
		406	16.65	20.21	97.9	
		Mean =	26.61	19.91	157.1	
2 HARNESS XTRA	3.2 pt/a	A 102	38.32	20.08	225.5	
IMPACT	0.75 fl oz/a	C 205	40.57	20.24	238.3	
AATREX	1 pt/a	C 304	40.84	20.55	239.0	
MSO ULTRA	1 % v/v	C 403	43.80	21.21	254.1	
N-PAK - AMS	2.5 % v/v	C				
		Mean =	40.88	20.52	239.2	
3 HARNESS XTRA	3.2 pt/a	A 103	33.32	19.68	197.1	
IMPACT	0.75 fl oz/a	C 204	40.36	19.88	238.1	
ROUNDUP POWERMAX	32 fl oz/a	C 302	39.34	20.30	230.9	
AATREX	1 pt/a	C 405	43.69	21.24	253.4	
MSO ULTRA	0.5 % v/v	C				
N-PAK - AMS	2.5 % v/v	C				
		Mean =	39.18	20.27	229.9	
4 HARNESS XTRA	3.2 pt/a	A 104	40.57	19.70	239.9	
IMPACT	0.75 fl oz/a	C 206	40.04	20.42	234.6	
STATUS	3 oz/a	C 305	40.20	19.98	236.9	
AATREX	1 pt/a	C 401	40.68	20.88	237.0	
MSO ULTRA	1 % v/v	C				
N-PAK - AMS	2.5 % v/v	C				
		Mean =	40.37	20.25	237.1	
5 HARNESS XTRA	3.2 pt/a	B 105	40.63	20.55	237.7	
IMPACT	1 fl oz/a	B 201	36.65	19.81	216.4	
MSO ULTRA	0.5 % v/v	B 306	45.41	21.28	263.3	
N-PAK - AMS	2.5 % v/v	B 402	44.12	22.06	253.3	
		Mean =	41.70	20.92	242.7	
6 HALEX GT	3.6 pt/a	B 106	38.42	20.05	226.2	
AATREX	1 pt/a	B 202	37.89	20.42	222.0	
ACTIVATOR 90 - NIS	0.25 % v/v	B 303	41.11	20.17	241.7	
N-PAK - AMS	2.5 % v/v	B 404	43.91	21.75	253.0	
		Mean =	40.33	20.60	235.8	

# Purdue Weed Science

## Showcase Impact Programs in corn university trials, including programs for glyphosate resistant weeds

Trial ID: 15S-THP-CTC-27      Location: TPAC      Trial Year: 2015  
 Protocol ID: 15S-THP-CTC-27      Investigator: Dr. Bill Johnson  
 Project ID: 15C04H028B      Study Director: Joe Ikley  
 Sponsor Contact: AMVAC - Joseph Argentine

Pest Type  
 W, Weed, G-BYRW7, G-WedStg = Weed or volunteer crop

Pest Code  
 SETFA, Setaria faberi, = US  
 CHEAL, Chenopodium album, = US  
 AMARE, Amaranthus retroflexus, = US

Crop Code  
 ZEAMX, BCOR, Zea mays, = US

Part Rated  
 PLOT = plot  
 C = Crop is Part Rated  
 P = Pest is Part Rated

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

ARM Action Codes  
 P = Rating scale of 0 to 100 (e.g. % control or injury)  
 TY1 =  $6.222857 \cdot [22] \cdot (100 - [23]) / 84.5$

Pest Type	Pest Code	Pest Name	Crop Code	Crop Name	Part Rated	Rating Date	Rating Type	Rating Unit	Number of Subsamples	Days After First/Last Applic.	Trt-Eval Interval	Days After Emergence	ARM Action Codes	Number of Decimals	W Weed		W Weed		W Weed		W Weed	
															SETFA	CHEAL	SETFA	CHEAL	SETFA	CHEAL	SETFA	CHEAL
			ZEAMX	Corn											Giant foxtail	Common lambsqu>						
			PLOT C												PLOT P	PLOT P						
			5/17/2015												5/17/2015	5/17/2015	5/17/2015	5/17/2015	5/29/2015	5/29/2015	5/29/2015	5/29/2015
			PHYGEN												CONTRO	CONTRO	CONTRO	CONTRO	PHYGEN	CONTRO	CONTRO	CONTRO
			%												%	%	%	%	%	%	%	%
			1												1	1	1	1	1	1	1	1
			15 15												15 15	15 15	27 7	27 7	27 7	27 7	27 7	27 7
			15 DA-A												15 DA-A	15 DA-A	7 DA-B	7 DA-B	7 DA-B	7 DA-B	7 DA-B	7 DA-B
			8 DE-1												8 DE-1	8 DE-1	20 DE-1	20 DE-1	20 DE-1	20 DE-1	20 DE-1	20 DE-1
			P												P	P	P	P	P	P	P	P
			0												0	0	0	0	0	0	0	0
Trt No.	Treatment Name	Rate	Appl Unit	Code	1	2	3	4	5	6												
1	Untreated Check				0 a	0 b	0 b	0 c	0 c	0 b												
2	HARNESS XTRA	3.2 pt/a	A		0 a	100 a	100 a	0 c	100 a	100 a												
	IMPACT	0.75 fl oz/a	C																			
	AATREX	1 pt/a	C																			
	MSO ULTRA	1 % v/v	C																			
	N-PAK - AMS	2.5 % v/v	C																			
3	HARNESS XTRA	3.2 pt/a	A		0 a	100 a	100 a	0 c	100 a	100 a												
	IMPACT	0.75 fl oz/a	C																			
	ROUNDUP POWERMAX	32 fl oz/a	C																			
	AATREX	1 pt/a	C																			
	MSO ULTRA	0.5 % v/v	C																			
	N-PAK - AMS	2.5 % v/v	C																			
4	HARNESS XTRA	3.2 pt/a	A		0 a	100 a	100 a	0 c	100 a	100 a												
	IMPACT	0.75 fl oz/a	C																			
	STATUS	3 oz/a	C																			
	AATREX	1 pt/a	C																			
	MSO ULTRA	1 % v/v	C																			
	N-PAK - AMS	2.5 % v/v	C																			
5	HARNESS XTRA	3.2 pt/a	B		0 a	0 b	0 b	10 a	98 b	100 a												
	IMPACT	1 fl oz/a	B																			
	MSO ULTRA	0.5 % v/v	B																			
	N-PAK - AMS	2.5 % v/v	B																			

## Purdue Weed Science

Pest Type	W Weed		W Weed		W Weed		W Weed	
	SETFA	Giant foxtail	CHEAL	Common lambsqu>	SETFA	Giant foxtail	CHEAL	Common lambsqu>
Pest Code	ZEAMX		ZEAMX		ZEAMX		ZEAMX	
Pest Name	Corn		Corn		Corn		Corn	
Crop Code	PLOT C		PLOT P		PLOT C		PLOT P	
Crop Name	5/17/2015		5/17/2015		5/29/2015		5/29/2015	
Part Rated	PHYGEN		CONTRO		PHYGEN		CONTRO	
Rating Date	%		%		%		%	
Rating Type	1		1		1		1	
Rating Unit	1		1		1		1	
Number of Subsamples	15 15		15 15		27 7		27 7	
Days After First/Last Applic.	15 DA-A		15 DA-A		7 DA-B		7 DA-B	
Trt-Eval Interval	8 DE-1		8 DE-1		20 DE-1		20 DE-1	
Days After Emergence	P		P		P		P	
ARM Action Codes	0		0		0		0	
Number of Decimals	0		0		0		0	
Trt Treatment	Rate	Appl	1		3		5	
No. Name	Rate Unit	Code	2	4	6			
6 HALEX GT	3.6 pt/a	B	0 a	0 b	0 b	3 b	100 a	100 a
AATREX	1 pt/a	B						
ACTIVATOR 90 - NIS	0.25 % v/v	B						
N-PAK - AMS	2.5 % v/v	B						
LSD P=.05			.	.	.	0.9	1.8	.
Standard Deviation			0.0	0.0	0.0	0.6	1.2	0.0
CV			0.0	0.0	0.0	26.65	1.42	0.0
Bartlett's X2			0.0	0.0	0.0	0.0	0.0	0.0
P(Bartlett's X2)			.	.	.	.	.	.
Skewness			.	0.0	0.0	1.561*	-1.9047*	-1.9104*
Kurtosis			.	-2.1905*	-2.1905*	0.8277	1.7797	1.7922
Replicate F			0.000	0.000	0.000	1.000	1.000	0.000
Replicate Prob(F)			1.0000	1.0000	1.0000	0.4199	0.4199	1.0000
Treatment F			0.000	0.000	0.000	194.000	4755.000	0.000
Treatment Prob(F)			1.0000	1.0000	1.0000	0.0001	0.0001	1.0000

# Purdue Weed Science

Pest Type	W Weed		W Weed	W Weed	W Weed			
Pest Code	AMARE		SETFA	CHEAL	AMARE			
Pest Name	Redroot pigweed		Giant foxtail	Common lambsqu>	Redroot pigweed			
Crop Code		ZEAMX				ZEAMX		
Crop Name		Corn				Corn		
Part Rated	PLOT P	PLOT C	PLOT P	PLOT P	PLOT P	PLOT C		
Rating Date	5/29/2015	6/9/2015	6/9/2015	6/9/2015	6/9/2015	6/19/2015		
Rating Type	CONTRO	PHYGEN	CONTRO	CONTRO	CONTRO	PHYGEN		
Rating Unit	%	%	%	%	%	%		
Number of Subsamples	1	1	1	1	1	1		
Days After First/Last Applic.	27 7	38 7	38 7	38 7	38 7	48 17		
Trt-Eval Interval	7 DA-B	7 DA-C	7 DA-C	7 DA-C	7 DA-C	28 DA-B		
Days After Emergence	20 DE-1	31 DE-1	31 DE-1	31 DE-1	31 DE-1	41 DE-1		
ARM Action Codes	P	P	P	P	P	P		
Number of Decimals	0	0	0	0	0	0		
Trt Treatment	Rate	Appl						
No. Name	Rate Unit	Code	7	8	9	10	11	12
1 Untreated Check			0 b	0 a	0 c	0 b	0 b	0 b
2 HARNESS XTRA	3.2 pt/a	A	100 a	0 a	100 a	100 a	100 a	0 b
IMPACT	0.75 fl oz/a	C						
AATREX	1 pt/a	C						
MSO ULTRA	1 % v/v	C						
N-PAK - AMS	2.5 % v/v	C						
3 HARNESS XTRA	3.2 pt/a	A	100 a	3 a	100 a	100 a	100 a	0 b
IMPACT	0.75 fl oz/a	C						
ROUNDUP POWERMAX	32 fl oz/a	C						
AATREX	1 pt/a	C						
MSO ULTRA	0.5 % v/v	C						
N-PAK - AMS	2.5 % v/v	C						
4 HARNESS XTRA	3.2 pt/a	A	100 a	4 a	100 a	100 a	100 a	0 b
IMPACT	0.75 fl oz/a	C						
STATUS	3 oz/a	C						
AATREX	1 pt/a	C						
MSO ULTRA	1 % v/v	C						
N-PAK - AMS	2.5 % v/v	C						
5 HARNESS XTRA	3.2 pt/a	B	100 a	1 a	93 b	100 a	100 a	4 a
IMPACT	1 fl oz/a	B						
MSO ULTRA	0.5 % v/v	B						
N-PAK - AMS	2.5 % v/v	B						

# Purdue Weed Science

Pest Type	W Weed	W Weed	W Weed	W Weed
Pest Code	AMARE	SETFA	CHEAL	AMARE
Pest Name	Redroot pigweed	Giant foxtail	Common lambsqu>	Redroot pigweed
Crop Code	ZEAMX	ZEAMX	ZEAMX	ZEAMX
Crop Name	Corn	Corn	Corn	Corn
Part Rated	PLOT P	PLOT C	PLOT P	PLOT P
Rating Date	5/29/2015	6/9/2015	6/9/2015	6/9/2015
Rating Type	CONTRO	PHYGEN	CONTRO	CONTRO
Rating Unit	%	%	%	%
Number of Subsamples	1	1	1	1
Days After First/Last Applic.	27 7	38 7	38 7	38 7
Tri-Eval Interval	7 DA-B	7 DA-C	7 DA-C	7 DA-C
Days After Emergence	20 DE-1	31 DE-1	31 DE-1	31 DE-1
ARM Action Codes	P	P	P	P
Number of Decimals	0	0	0	0
<b>Tri Treatment</b>				
No. Name	Rate	Appl		
	Rate Unit	Code	7	8
6 HALEX GT	3.6 pt/a	B	100 a	1 a
AATREX	1 pt/a	B		100 a
ACTIVATOR 90 - NIS	0.25 % v/v	B		100 a
N-PAK - AMS	2.5 % v/v	B		100 a
LSD P=.05				
Standard Deviation	0.0	3.8	5.9	0.0
CV	0.0	2.5	3.9	0.0
Bartlett's X2	0.0	172.38	4.76	0.0
P(Bartlett's X2)	0.0	1.828	0.0	0.0
Skewness	-1.9104*	0.609	0.0	0.0
Kurtosis	1.7922	1.8003*	-1.8571*	-1.9104*
Replicate F	0.000	1.7922	1.6594	1.7922
Replicate Prob(F)	1.0000	0.0001	0.0001	0.0000
Treatment F	0.000	1.923	1.000	0.000
Treatment Prob(F)	1.0000	0.1692	0.4199	1.0000
		1.352	425.727	0.000
		0.2966	0.0001	1.0000
				1.0000
				1.0000
				0.0004

# Purdue Weed Science

Pest Type	W Weed	W Weed	W Weed	W Weed	W Weed		
Pest Code	SETFA	CHEAL	AMARE	SETFA	CHEAL		
Pest Name	Giant foxtail	Common lambsqu>	Redroot pigweed	Giant foxtail	Common lambsqu>		
Crop Code							
Crop Name							
Part Rated	PLOT P	PLOT P	PLOT P	PLOT P	PLOT P		
Rating Date	6/19/2015	6/19/2015	6/19/2015	7/1/2015	7/1/2015		
Rating Type	CONTRO	CONTRO	CONTRO	CONTRO	CONTRO		
Rating Unit	%	%	%	%	%		
Number of Subsamples	1	1	1	1	1		
Days After First/Last Applic.	48 17	48 17	48 17	60 29	60 29		
Trt-Eval Interval	28 DA-B	28 DA-B	28 DA-B	29 DA-C	29 DA-C		
Days After Emergence	41 DE-1	41 DE-1	41 DE-1	53 DE-1	53 DE-1		
ARM Action Codes	P	P	P	P	P		
Number of Decimals	0	0	0	0	0		
Trt Treatment	Rate	Appl	13	14	15	16	17
No. Name	Rate Unit	Code					
1 Untreated Check			0 c	0 b	0 b	0 c	0 b
2 HARNESS XTRA	3.2 pt/a	A	100 a	100 a	100 a	100 a	100 a
IMPACT	0.75 fl oz/a	C					
AATREX	1 pt/a	C					
MSO ULTRA	1 % v/v	C					
N-PAK - AMS	2.5 % v/v	C					
3 HARNESS XTRA	3.2 pt/a	A	100 a	100 a	100 a	98 ab	100 a
IMPACT	0.75 fl oz/a	C					
ROUNDUP POWERMAX	32 fl oz/a	C					
AATREX	1 pt/a	C					
MSO ULTRA	0.5 % v/v	C					
N-PAK - AMS	2.5 % v/v	C					
4 HARNESS XTRA	3.2 pt/a	A	99 a	100 a	100 a	96 ab	100 a
IMPACT	0.75 fl oz/a	C					
STATUS	3 oz/a	C					
AATREX	1 pt/a	C					
MSO ULTRA	1 % v/v	C					
N-PAK - AMS	2.5 % v/v	C					
5 HARNESS XTRA	3.2 pt/a	B	89 b	100 a	100 a	91 b	100 a
IMPACT	1 fl oz/a	B					
MSO ULTRA	0.5 % v/v	B					
N-PAK - AMS	2.5 % v/v	B					

## Purdue Weed Science

	W Weed SETFA Giant foxtail	W Weed CHEAL Common lambsqu>	W Weed AMARE Redroot pigweed	W Weed SETFA Giant foxtail	W Weed CHEAL Common lambsqu>
Pest Type					
Pest Code					
Pest Name					
Crop Code					
Crop Name					
Part Rated	PLOT P	PLOT P	PLOT P	PLOT P	PLOT P
Rating Date	6/19/2015	6/19/2015	6/19/2015	7/1/2015	7/1/2015
Rating Type	CONTRO	CONTRO	CONTRO	CONTRO	CONTRO
Rating Unit	%	%	%	%	%
Number of Subsamples	1	1	1	1	1
Days After First/Last Applic.	48 17	48 17	48 17	60 29	60 29
Trt-Eval Interval	28 DA-B	28 DA-B	28 DA-B	29 DA-C	29 DA-C
Days After Emergence	41 DE-1	41 DE-1	41 DE-1	53 DE-1	53 DE-1
ARM Action Codes	P	P	P	P	P
Number of Decimals	0	0	0	0	0
Trt Treatment					
No. Name	13	14	15	16	17
6 HALEX GT	3.6 pt/a B				
AATREX	1 pt/a B				
ACTIVATOR 90 - NIS	0.25 % v/v B				
N-PAK - AMS	2.5 % v/v B				
LSD P=.05	8.2	.	.	7.4	.
Standard Deviation	5.4	0.0	0.0	4.9	0.0
CV	6.72	0.0	0.0	6.09	0.0
Bartlett's X2	10.413	0.0	0.0	3.819	0.0
P(Bartlett's X2)	0.005*	.	.	0.282	.
Skewness	-1.8078*	-1.9104*	-1.9104*	-1.8394*	-1.9104*
Kurtosis	1.5195	1.7922	1.7922	1.627	1.7922
Replicate F	1.242	0.000	0.000	0.274	0.000
Replicate Prob(F)	0.3294	1.0000	1.0000	0.8434	1.0000
Treatment F	215.173	0.000	0.000	260.481	0.000
Treatment Prob(F)	0.0001	1.0000	1.0000	0.0001	1.0000

# Purdue Weed Science

Pest Type	W Weed	W Weed	W Weed	W Weed				
Pest Code	AMARE	SETFA	CHEAL	AMARE				
Pest Name	Redroot pigweed	Giant foxtail	Common lambsqu>	Redroot pigweed				
Crop Code					ZEAMX	ZEAMX		
Crop Name					Corn	Corn		
Part Rated	PLOT P	PLOT P	PLOT P	PLOT P	PLOT C	PLOT C		
Rating Date	7/1/2015	7/16/2015	7/16/2015	7/16/2015	9/24/2015	9/24/2015		
Rating Type	CONTRO	CONTRO	CONTRO	CONTRO	YIELD	MOICON		
Rating Unit	%	%	%	%	lb/plot	%		
Number of Subsamples	1	1	1	1	1	1		
Days After First/Last Applic.	60 29	75 44	75 44	75 44	145 114	145 114		
Trt-Eval Interval	29 DA-C	44 DA-C	44 DA-C	44 DA-C	138 DE-1	138 DE-1		
Days After Emergence	53 DE-1	68 DE-1	68 DE-1	68 DE-1				
ARM Action Codes	P	P	P	P				
Number of Decimals	0	0	0	0	2	2		
Trt Treatment	Rate	Appl						
No. Name	Rate Unit	Code	18	19	20	21	22	23
1 Untreated Check			0 b	0 c	0 b	0 b	26.61 b	19.91 c
2 HARNESS XTRA	3.2 pt/a	A	93 a	100 a	100 a	100 a	40.88 a	20.52 ab
IMPACT	0.75 fl oz/a	C						
AATREX	1 pt/a	C						
MSO ULTRA	1 % v/v	C						
N-PAK - AMS	2.5 % v/v	C						
3 HARNESS XTRA	3.2 pt/a	A	94 a	98 ab	100 a	100 a	39.18 a	20.27 bc
IMPACT	0.75 fl oz/a	C						
ROUNDUP POWERMAX	32 fl oz/a	C						
AATREX	1 pt/a	C						
MSO ULTRA	0.5 % v/v	C						
N-PAK - AMS	2.5 % v/v	C						
4 HARNESS XTRA	3.2 pt/a	A	95 a	99 ab	100 a	100 a	40.37 a	20.25 bc
IMPACT	0.75 fl oz/a	C						
STATUS	3 oz/a	C						
AATREX	1 pt/a	C						
MSO ULTRA	1 % v/v	C						
N-PAK - AMS	2.5 % v/v	C						
5 HARNESS XTRA	3.2 pt/a	B	95 a	93 b	100 a	100 a	41.70 a	20.92 a
IMPACT	1 fl oz/a	B						
MSO ULTRA	0.5 % v/v	B						
N-PAK - AMS	2.5 % v/v	B						

# Purdue Weed Science

Pest Type	W Weed AMARE	W Weed SETFA	W Weed CHEAL	W Weed AMARE				
Pest Code	Redroot pigweed	Giant foxtail	Common lambsqu>	Redroot pigweed				
Pest Name								
Crop Code					ZEAMX	ZEAMX		
Crop Name					Corn	Corn		
Part Rated	PLOT P	PLOT P	PLOT P	PLOT P	PLOT C	PLOT C		
Rating Date	7/1/2015	7/16/2015	7/16/2015	7/16/2015	9/24/2015	9/24/2015		
Rating Type	CONTRO	CONTRO	CONTRO	CONTRO	YIELD	MOICON		
Rating Unit	%	%	%	%	lb/plot	%		
Number of Subsamples	1	1	1	1	1	1		
Days After First/Last Applic.	60 29	75 44	75 44	75 44	145 114	145 114		
Trt-Eval Interval	29 DA-C	44 DA-C	44 DA-C	44 DA-C				
Days After Emergence	53 DE-1	68 DE-1	68 DE-1	68 DE-1	138 DE-1	138 DE-1		
ARM Action Codes	P	P	P	P				
Number of Decimals	0	0	0	0	2	2		
Trt Treatment								
No. Name	18	19	20	21	22	23		
6 HALEX GT	3.6 pt/a	B	98 a	99 ab	100 a	100 a	40.33 a	20.60 ab
AATREX	1 pt/a	B						
ACTIVATOR 90 - NIS	0.25 % v/v	B						
N-PAK - AMS	2.5 % v/v	B						
LSD P=.05	5.5	6.9	0.4	.	6.515	0.546		
Standard Deviation	3.7	4.6	0.3	0.0	4.322	0.362		
CV	4.64	5.65	0.31	0.0	11.32	1.78		
Bartlett's X2	0.684	6.017	0.0	0.0	15.919	4.079		
P(Bartlett's X2)	0.953	0.111	.	.	0.007*	0.538		
Skewness	-1.8703*	-1.851*	-1.9102*	-1.9104*	-1.9778*	1.0244*		
Kurtosis	1.7088	1.6545	1.7917	1.7922	4.7042*	0.348		
Replicate F	0.963	0.329	2.500	0.000	0.251	15.068		
Replicate Prob(F)	0.4358	0.8045	0.0991	1.0000	0.8597	0.0001		
Treatment F	447.223	301.500	99801.010	0.000	7.021	3.649		
Treatment Prob(F)	0.0001	0.0001	0.0001	1.0000	0.0014	0.0233		

# Purdue Weed Science

Pest Type			
Pest Code			
Pest Name			
Crop Code			ZEAMX
Crop Name			Corn
Part Rated			PLOT C
Rating Date			9/24/2015
Rating Type			YIELD
Rating Unit			BU
Number of Subsamples			1
Days After First/Last Applic.			145 114
Trt-Eval Interval			
Days After Emergence			138 DE-1
ARM Action Codes			TY1
Number of Decimals			1
Trt No.	Treatment Name	Rate	Appl Code
		Rate Unit	
			24
1	Untreated Check		157.1 b
2	HARNESS XTRA	3.2 pt/a	A
	IMPACT	0.75 fl oz/a	C
	AATREX	1 pt/a	C
	MSO ULTRA	1 % v/v	C
	N-PAK - AMS	2.5 % v/v	C
			239.2 a
3	HARNESS XTRA	3.2 pt/a	A
	IMPACT	0.75 fl oz/a	C
	ROUNDUP POWERMAX	32 fl oz/a	C
	AATREX	1 pt/a	C
	MSO ULTRA	0.5 % v/v	C
	N-PAK - AMS	2.5 % v/v	C
			229.9 a
4	HARNESS XTRA	3.2 pt/a	A
	IMPACT	0.75 fl oz/a	C
	STATUS	3 oz/a	C
	AATREX	1 pt/a	C
	MSO ULTRA	1 % v/v	C
	N-PAK - AMS	2.5 % v/v	C
			237.1 a
5	HARNESS XTRA	3.2 pt/a	B
	IMPACT	1 fl oz/a	B
	MSO ULTRA	0.5 % v/v	B
	N-PAK - AMS	2.5 % v/v	B
			242.7 a

# Purdue Weed Science

Pest Type				
Pest Code				
Pest Name				
Crop Code			ZEAMX	
Crop Name			Corn	
Part Rated			PLOT C	
Rating Date			9/24/2015	
Rating Type			YIELD	
Rating Unit			BU	
Number of Subsamples			1	
Days After First/Last Applic.			145 114	
Trt-Eval Interval				
Days After Emergence			138 DE-1	
ARM Action Codes			TY1	
Number of Decimals			1	
Trt Treatment		Rate	Appl	
No. Name		Rate Unit	Code	24
6 HALEX GT		3.6 pt/a	B	235.8 a
AATREX		1 pt/a	B	
ACTIVATOR 90 - NIS		0.25 % v/v	B	
N-PAK - AMS		2.5 % v/v	B	
LSD P=.05				37.18
Standard Deviation				24.67
CV				11.03
Bartlett's X2				15.969
P(Bartlett's X2)				0.007*
Skewness				-2.1334*
Kurtosis				5.3142*
Replicate F				0.168
Replicate Prob(F)				0.9162
Treatment F				7.107
Treatment Prob(F)				0.0014

# Purdue Weed Science

## Showcase Impact Programs in corn university trials, including programs for glyphosate resistant weeds

Trial ID: 15S-THP-CTC-27      Location: TPAC      Trial Year: 2015  
 Protocol ID: 15S-THP-CTC-27      Investigator: Dr. Bill Johnson  
 Project ID: 15C04H028B      Study Director: Joe Ikley  
 Sponsor Contact: AMVAC - Joseph Argentine

### Pest Type

W, Weed, G-BYRW7, G-WedStg = Weed or volunteer crop

### Pest Code

SETFA, Setaria faberi, = US

CHEAL, Chenopodium album, = US

AMARE, Amaranthus retroflexus, = US

### Crop Code

ZEAMX, BCOR, Zea mays, = US

### Part Rated

PLOT = plot

C = Crop is Part Rated

P = Pest is Part Rated

### 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

### ARM Action Codes

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

TY1 =  $6.222857 * [22] * (100 - [23]) / 84.5$