

## Purdue Weed Science

ImpactZ Performance in Corn	
Trial ID: 17S-TPAC-CORN-19	Location: TPAC
Protocol ID: 17S-TPAC-CORN-19	Trial Year: 2017
Project ID: 17C04H060XIN530	Investigator: Dr. Bill Johnson
	Study Director: Dustin Johnson
	Sponsor Contact: J. Argentine - AMVAC

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

Trt No.	Treatment Name	Form Conc	Form Unit	Form Type	Rate	Appl Code	Amt Product to Measure	Rep 1	Rep 2	Rep 3	Rep 4
1	UNTREATED CHECK							101	402	602	701
2	HARNESS XTRA 5.6 L	5.6	LB/GAL	L	3.6 pt/a	A	54.0 ml/mx	102	403	604	803
	IMPACTZ	4.26	LB/GAL	SC	8.0 fl oz/a	C	7.5 ml/mx				
	MSO	100	%	SL	1.0 % v/v	C	18.0 ml/mx				
	N-PAK AMS	3.4	LBA/GAL	L	2.5 % v/v	C	45.0 ml/mx				
3	HARNESS XTRA 5.6 L	5.6	LB/GAL	L	3.6 pt/a	A	54.0 ml/mx	103	401	603	704
	IMPACTZ	4.26	LB/GAL	SC	8.0 fl oz/a	C	7.5 ml/mx				
	ROUNDUP POWERMAX	4.5	LBAE/GAL	SL	32.0 fl oz/a	C	30.0 ml/mx				
	MSO	100	%	SL	0.5 % v/v	C	8.999 ml/mx				
	N-PAK AMS	3.4	LBA/GAL	L	2.5 % v/v	C	45.0 ml/mx				
4	HARNESS XTRA 5.6 L	5.6	LB/GAL	L	3.6 pt/a	A	54.0 ml/mx	104	303	601	703
	IMPACTZ	4.26	LB/GAL	SC	8.0 fl oz/a	C	7.5 ml/mx				
	LIBERTY 280 SL	2.34	LB/GAL	SL	22.0 fl oz/a	C	20.62 ml/mx				
	N-PAK AMS	3.4	LBA/GAL	L	2.5 % v/v	C	45.0 ml/mx				
5	HARNESS XTRA 5.6 L	5.6	LB/GAL	L	3.6 pt/a	A	54.0 ml/mx	201	304	501	804
	IMPACTZ	4.26	LB/GAL	SC	8.0 fl oz/a	C	7.5 ml/mx				
	STATUS	56	%	WG	5.0 oz/a	C	4.493 g/mx				
	MSO	100	%	SL	1.0 % v/v	C	18.0 ml/mx				
	N-PAK AMS	3.4	LBA/GAL	L	2.5 % v/v	C	45.0 ml/mx				
6	HARNESS	7	LB/GAL	EC	1.75 pt/a	B	26.25 ml/mx	202	404	502	801
	IMPACTZ	4.26	LB/GAL	SC	8.0 fl oz/a	B	7.5 ml/mx				
	ROUNDUP POWERMAX	4.5	LBAE/GAL	SL	32.0 fl oz/a	B	30.0 ml/mx				
	ACTIVATOR 90 NIS	100	%	SL	0.25 % v/v	B	4.5 ml/mx				
	N-PAK AMS	3.4	LBA/GAL	L	2.5 % v/v	B	45.0 ml/mx				
7	ARMEZON PRO	5.35	LB/GAL	EC	20.0 fl oz/a	B	18.75 ml/mx	203	301	504	702
	ROUNDUP POWERMAX	4.5	LBAE/GAL	SL	32.0 fl oz/a	B	30.0 ml/mx				
	AATREX	4	LB/GAL	L	0.5 pt/a	B	7.5 ml/mx				
	ACTIVATOR 90 NIS	100	%	SL	0.25 % v/v	B	4.5 ml/mx				
	N-PAK AMS	3.4	LBA/GAL	L	2.5 % v/v	B	45.0 ml/mx				
8	HALEX GT	4.389	LBAE/GAL	L	3.6 pt/a	B	54.0 ml/mx	204	302	503	802
	AATREX	4	LB/GAL	L	1.0 pt/a	B	15.0 ml/mx				
	ACTIVATOR 90 NIS	100	%	SL	0.25 % v/v	B	4.5 ml/mx				
	N-PAK AMS	3.4	LBA/GAL	L	2.5 % v/v	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 Unit	Form Type	Lot Code
270.000	ml	HARNESS XTRA 5.6 L	5.6	LB/GAL	L	
46.875	ml	IMPACTZ	4.26	LB/GAL	SC	
56.244	ml	MSO	100	%	SL	
393.707	ml	N-PAK AMS	3.4	LBA/GAL	L	
112.500	ml	ROUNDUP POWERMAX	4.5	LBAE/GAL	SL	
25.781	ml	LIBERTY 280 SL	2.34	LB/GAL	SL	
5.617	g	STATUS	56	%	WG	
32.812	ml	HARNESS	7	LB/GAL	EC	
16.873	ml	ACTIVATOR 90 NIS	100	%	SL	
23.437	ml	ARMEZON PRO	5.35	LB/GAL	EC	
28.125	ml	AATREX	4	LB/GAL	L	
67.500	ml	HALEX GT	4.389	LBAE/GAL	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.

## Purdue Weed Science

### ImpactZ Performance in Corn

Trial ID: 17S-TPAC-CORN-19      Location: TPAC      Trial Year: 2017  
Protocol ID: 17S-TPAC-CORN-19      Investigator: Dr. Bill Johnson  
Project ID: 17C04H060XIN530      Study Director: Dustin Johnson  
Sponsor Contact: J. Argentine - AMVAC

#### Trial Comments

4/25/17 Possible that 304 was applied on 204. Meaning 304 was not sprayed and 204 was sprayed twice.

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<b>ImpactZ Performance in Corn</b>						
Trial ID: 17S-TPAC-CORN-19		Location: TPAC		Trial Year: 2017		
Protocol ID: 17S-TPAC-CORN-19		Investigator: Dr. Bill Johnson				
Project ID: 17C04H060XIN530		Study Director: Dustin Johnson				
Sponsor Contact: J. Argentine - AMVAC						

Pest Type	W Weed		W Weed		W Weed			
Pest Code	AMBTR		AMBTR		AMBTR			
Pest Name	Giant ragweed		Giant ragweed		Giant ragweed			
Crop Code	ZEAMX	ZEAMX	ZEAMX	ZEAMX	ZEAMX	ZEAMX		
Crop Name	Corn	Corn	Corn	Corn	Corn	Corn		
Part Rated	PLOT -	PLOT -	PLOT -	PLOT -	PLOT -	PLOT -		
Rating Date	May-30-2017	May-30-2017	Jun-5-2017	Jun-5-2017	Jun-13-2017	Jun-13-2017		
Rating Type	CONTROL	PHYGEN	CONTROL	PHYGEN	CONTROL	PHYGEN		
Rating Unit	%	%	%	%	%	%		
Number of Subsamples	1	1	1	1	1	1		
Assessed By	D. JOHNSON	D. JOHNSON	D. JOHNSON	D. JOHNSON	M. ZIMMER	M. ZIMMER		
Rating Timing	A1	A1	A2	A2	A3	A3		
Days After First/Last Applic.	35 8	35 8	41 5	41 5	49 13	49 13		
Days After Emergence	15 DE-1	15 DE-1	21 DE-1	21 DE-1	29 DE-1	29 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	1	2	3	4	5	6
1 UNTREATED CHECK			0 c	0 c	0 b	0 d	0 d	0 b
2 HARNESS XTRA 5.6 L	3.6 pt/a	A	68 ab	1 c	86 a	33 a	98 a	6 a
IMPACTZ	8.0 fl oz/a	C						
MSO	1.0 % v/v	C						
N-PAK AMS	2.5 % v/v	C						
3 HARNESS XTRA 5.6 L	3.6 pt/a	A	70 ab	0 c	84 a	8 c	99 a	0 b
IMPACTZ	8.0 fl oz/a	C						
ROUNDUP POWERMAX	32.0 fl oz/a	C						
MSO	0.5 % v/v	C						
N-PAK AMS	2.5 % v/v	C						
4 HARNESS XTRA 5.6 L	3.6 pt/a	A	61 ab	0 c	88 a	9 c	98 a	0 b
IMPACTZ	8.0 fl oz/a	C						
LIBERTY 280 SL	22.0 fl oz/a	C						
N-PAK AMS	2.5 % v/v	C						
5 HARNESS XTRA 5.6 L	3.6 pt/a	A	56 b	1 c	90 a	5 c	98 a	0 b
IMPACTZ	8.0 fl oz/a	C						
STATUS	5.0 oz/a	C						
MSO	1.0 % v/v	C						
N-PAK AMS	2.5 % v/v	C						
6 HARNESS	1.75 pt/a	B	88 a	18 b	90 a	10 c	80 c	0 b
IMPACTZ	8.0 fl oz/a	B						
ROUNDUP POWERMAX	32.0 fl oz/a	B						
ACTIVATOR 90 NIS	0.25 % v/v	B						
N-PAK AMS	2.5 % v/v	B						
7 ARMEZON PRO	20.0 fl oz/a	B	89 a	9 c	89 a	9 c	85 bc	0 b
ROUNDUP POWERMAX	32.0 fl oz/a	B						
AATREX	0.5 pt/a	B						
ACTIVATOR 90 NIS	0.25 % v/v	B						
N-PAK AMS	2.5 % v/v	B						
8 HALEX GT	3.6 pt/a	B	91 a	29 a	93 a	19 b	90 b	1 b
AATREX	1.0 pt/a	B						
ACTIVATOR 90 NIS	0.25 % v/v	B						
N-PAK AMS	2.5 % v/v	B						
LSD P=.05	21.2		6.0		6.1		5.8	
Standard Deviation	14.4		4.1		4.2		4.0	
CV	22.08		56.55		5.38		4.88	
Bartlett's X2	22.614		4.243		4.953		38.76	
P(Bartlett's X2)	0.001*		0.374		0.422		0.001*	
Skewness	-1.3107*		1.3464*		-2.2569*		-2.1265*	
Kurtosis	0.5087		0.6744		3.5538*		3.1481*	
Replicate F	0.897		0.063		3.585		1.850	
Replicate Prob(F)	0.4592		0.9788		0.0309		0.1691	
Treatment F	16.782		27.649		227.613		286.967	
Treatment Prob(F)	0.0001		0.0001		0.0001		0.0001	

Means followed by same letter or symbol do not significantly differ (P=.05, Student-Newman-Keuls)  
 Mean comparisons performed only when AOV Treatment P(F) is significant at mean comparison OSL.

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Protocol ID: 17S-TPAC-CORN-19		Investigator: Dr. Bill Johnson						
Project ID: 17C04H060XIN530		Study Director: Dustin Johnson						
Sponsor Contact: J. Argentine - AMVAC								
Pest Type	W Weed	W Weed	W Weed	W Weed	W Weed	W Weed		
Pest Code	AMBTR	AMBTR	AMBTR	AMBTR	AMBTR	AMBTR		
Pest Name	Giant ragweed	Giant ragweed	Giant ragweed	Giant ragweed	Giant ragweed	Giant ragweed		
Crop Code	ZEAMX	ZEAMX	ZEAMX	ZEAMX	ZEAMX	ZEAMX		
Crop Name	Corn	Corn	Corn	Corn	Corn	Corn		
Part Rated	PLOT -	PLOT -	PLOT -	PLOT -	PLOT -	PLOT -		
Rating Date	Jun-19-2017	Jun-19-2017	Jun-28-2017	Jul-3-2017	Jul-12-2017	Oct-20-2017		
Rating Type	CONTROL	PHYGEN	CONTROL	CONTROL	CONTROL	YIELD		
Rating Unit	%	%	%	%	%	LB		
Number of Subsamples	1	1	1	1	1	1		
Assessed By	M. ZIMMER	M. ZIMMER	M. ZIMMER	D. JOHNSON	D. JOHNSON	D. JOHNSON		
Rating Timing	A4	A4	A5	A6	A7			
Days After First/Last Applic.	55 19	55 19	64 28	69 33	78 42	178 142		
Days After Emergence	35 DE-1	35 DE-1	44 DE-1	49 DE-1	58 DE-1	158 DE-1		
ARM Action Codes	P	P	P	P	P			
Number of Decimals	0	0	0	0	0	1		
Trt Treatment	Rate	Appl						
No. Name	Rate Unit	Code	7	8	9	10	11	12
1 UNTREATED CHECK			0 d	0 b	0 c	0 d	0 c	17.5 a
2 HARNESS XTRA 5.6 L	3.6 pt/a	A	90 a	6 a	90 a	79 ab	66 ab	32.0 a
IMPACTZ	8.0 fl oz/a	C						
MSO	1.0 % v/v	C						
N-PAK AMS	2.5 % v/v	C						
3 HARNESS XTRA 5.6 L	3.6 pt/a	A	92 a	0 b	90 a	79 ab	66 ab	20.5 a
IMPACTZ	8.0 fl oz/a	C						
ROUNDUP POWERMAX	32.0 fl oz/a	C						
MSO	0.5 % v/v	C						
N-PAK AMS	2.5 % v/v	C						
4 HARNESS XTRA 5.6 L	3.6 pt/a	A	90 a	0 b	89 a	76 ab	65 ab	27.8 a
IMPACTZ	8.0 fl oz/a	C						
LIBERTY 280 SL	22.0 fl oz/a	C						
N-PAK AMS	2.5 % v/v	C						
5 HARNESS XTRA 5.6 L	3.6 pt/a	A	94 a	0 b	92 a	84 a	75 a	26.0 a
IMPACTZ	8.0 fl oz/a	C						
STATUS	5.0 oz/a	C						
MSO	1.0 % v/v	C						
N-PAK AMS	2.5 % v/v	C						
6 HARNESS	1.75 pt/a	B	60 c	0 b	49 b	28 c	3 c	22.1 a
IMPACTZ	8.0 fl oz/a	B						
ROUNDUP POWERMAX	32.0 fl oz/a	B						
ACTIVATOR 90 NIS	0.25 % v/v	B						
N-PAK AMS	2.5 % v/v	B						
7 ARMEZON PRO	20.0 fl oz/a	B	60 c	0 b	50 b	28 c	3 c	27.6 a
ROUNDUP POWERMAX	32.0 fl oz/a	B						
AATREX	0.5 pt/a	B						
ACTIVATOR 90 NIS	0.25 % v/v	B						
N-PAK AMS	2.5 % v/v	B						
8 HALEX GT	3.6 pt/a	B	80 b	0 b	82 a	65 b	49 b	31.1 a
AATREX	1.0 pt/a	B						
ACTIVATOR 90 NIS	0.25 % v/v	B						
N-PAK AMS	2.5 % v/v	B						
LSD P=.05	6.8	0.5	12.6	12.5	16.3	19.05		
Standard Deviation	4.6	0.4	8.6	8.5	11.1	12.95		
CV	6.51	51.43	12.7	15.58	27.24	50.66		
Bartlett's X2	16.245	0.0	38.072	16.29	18.569	9.532		
P(Bartlett's X2)	0.012*	.	0.001*	0.012*	0.005*	0.217		
Skewness	-1.5611*	2.5253*	-1.2309*	-0.6543	-0.2985	-0.9054*		
Kurtosis	1.4165	5.0401*	0.1541	-1.1946	-1.836*	-0.5245		
Replicate F	1.420	1.000	1.160	0.991	1.391	0.612		
Replicate Prob(F)	0.2650	0.4123	0.3483	0.4164	0.2733	0.6147		
Treatment F	190.132	121.000	57.918	55.513	35.713	0.622		
Treatment Prob(F)	0.0001	0.0001	0.0001	0.0001	0.0001	0.7317		

Means followed by same letter or symbol do not significantly differ (P=.05, Student-Newman-Keuls)  
 Mean comparisons performed only when AOV Treatment P(F) is significant at mean comparison OSL.

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Protocol ID: 17S-TPAC-CORN-19	Investigator: Dr. Bill Johnson	
Project ID: 17C04H060XIN530	Study Director: Dustin Johnson	
	Sponsor Contact: J. Argentine - AMVAC	

Pest Type			
Pest Code			
Pest Name			
Crop Code	ZEAMX	ZEAMX	
Crop Name	Corn	Corn	
Part Rated	PLOT -	PLOT -	
Rating Date	Oct-20-2017	Oct-20-2017	
Rating Type	MOICON	YIELD	
Rating Unit	LB	BU	
Number of Subsamples	1	1	
Assessed By	D. JOHNSON	D. JOHNSON	
Rating Timing			
Days After First/Last Applic.	178 142	178 142	
Days After Emergence	158 DE-1	158 DE-1	
ARM Action Codes		TY1	
Number of Decimals	1	1	
Trt Treatment	Rate	Appl	
No. Name	Rate Unit	Code	
	13	14	
1 UNTREATED CHECK	11.7 a	105.5 a	
2 HARNESS XTRA 5.6 L	3.6 pt/a A	18.6 a	191.4 a
IMPACTZ	8.0 fl oz/a C		
MSO	1.0 % v/v C		
N-PAK AMS	2.5 % v/v C		
3 HARNESS XTRA 5.6 L	3.6 pt/a A	17.5 a	124.5 a
IMPACTZ	8.0 fl oz/a C		
ROUNDUP POWERMAX	32.0 fl oz/a C		
MSO	0.5 % v/v C		
N-PAK AMS	2.5 % v/v C		
4 HARNESS XTRA 5.6 L	3.6 pt/a A	18.7 a	166.2 a
IMPACTZ	8.0 fl oz/a C		
LIBERTY 280 SL	22.0 fl oz/a C		
N-PAK AMS	2.5 % v/v C		
5 HARNESS XTRA 5.6 L	3.6 pt/a A	17.9 a	156.5 a
IMPACTZ	8.0 fl oz/a C		
STATUS	5.0 oz/a C		
MSO	1.0 % v/v C		
N-PAK AMS	2.5 % v/v C		
6 HARNESS	1.75 pt/a B	18.5 a	132.0 a
IMPACTZ	8.0 fl oz/a B		
ROUNDUP POWERMAX	32.0 fl oz/a B		
ACTIVATOR 90 NIS	0.25 % v/v B		
N-PAK AMS	2.5 % v/v B		
7 ARMEZON PRO	20.0 fl oz/a B	16.4 a	165.2 a
ROUNDUP POWERMAX	32.0 fl oz/a B		
AATREX	0.5 pt/a B		
ACTIVATOR 90 NIS	0.25 % v/v B		
N-PAK AMS	2.5 % v/v B		
8 HALEX GT	3.6 pt/a B	18.2 a	187.1 a
AATREX	1.0 pt/a B		
ACTIVATOR 90 NIS	0.25 % v/v B		
N-PAK AMS	2.5 % v/v B		
LSD P=.05	4.88	113.05	
Standard Deviation	3.32	76.88	
CV	19.3	50.06	
Bartlett's X2	40.596	9.778	
P(Bartlett's X2)	0.001*	0.201	
Skewness	-2.8219*	-0.9226*	
Kurtosis	7.2253*	-0.5016	
Replicate F	1.464	0.607	
Replicate Prob(F)	0.2531	0.6178	
Treatment F	1.984	0.626	
Treatment Prob(F)	0.1062	0.7292	

Means followed by same letter or symbol do not significantly differ (P=.05, Student-Newman-Keuls)  
 Mean comparisons performed only when AOV Treatment P(F) is significant at mean comparison OSL.

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Project ID: 17C04H060XIN530	Study Director: Dustin Johnson	
	Sponsor Contact: J. Argentine - AMVAC	

#### Pest Type

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

#### Pest Code

AMBTR, Ambrosia trifida, Giant ragweed = US

#### Crop Code

ZEAMX, BCOR, Zea mays, Corn = US

#### Part Rated

PLOT = plot

#### Rating Type

PHYGEN = phytotoxicity - general / injury

YIELD = yield

MOICON = moisture content

#### Rating Unit

% = percent

LB = pound

BU = bushel

#### 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

A7 = 7th Assessment According to Trial Schedule

#### ARM Action Codes

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

TY1 =  $6.222857 * [12] * (100 - [13]) / 84.5$

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Project ID: 17C04H060XIN530	Study Director: Dustin Johnson
Sponsor Contact: J. Argentine - AMVAC	

Pest Type	W Weed	W Weed	W Weed	W Weed	W Weed
Pest Code	AMBTR	AMBTR	AMBTR	AMBTR	AMBTR
Pest Name	Giant ragweed	Giant ragweed	Giant ragweed	Giant ragweed	Giant ragweed
Crop Code	ZEAMX	ZEAMX	ZEAMX	ZEAMX	ZEAMX
Crop Name	Corn	Corn	Corn	Corn	Corn
Part Rated	PLOT -	PLOT -	PLOT -	PLOT -	PLOT -
Rating Date	May-30-2017	May-30-2017	Jun-5-2017	Jun-5-2017	Jun-13-2017
Rating Type	CONTROL	PHYGEN	CONTROL	PHYGEN	CONTROL
Rating Unit	%	%	%	%	%
Number of Subsamples	1	1	1	1	1
Assessed By	D. JOHNSON	D. JOHNSON	D. JOHNSON	D. JOHNSON	M. ZIMMER
Rating Timing	A1	A1	A2	A2	A3
Days After First/Last Applic.	35 8	35 8	41 5	41 5	49 13
Days After Emergence	15 DE-1	15 DE-1	21 DE-1	21 DE-1	29 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	1	2	3
1 UNTREATED CHECK		101	0	0	0
		402	0	0	0
		602	0	0	0
		701	0	0	0
		Mean =	0	0	0
2 HARNESS XTRA 5.6 L	3.6 pt/a A	102	65	0	80
IMPACTZ	8.0 fl oz/a C	403	80	5	95
MSO	1.0 % v/v C	604	75	0	88
N-PAK AMS	2.5 % v/v C	803	50	0	80
		Mean =	68	1	86
3 HARNESS XTRA 5.6 L	3.6 pt/a A	103	65	0	85
IMPACTZ	8.0 fl oz/a C	401	80	0	90
ROUNDUP POWERMAX	32.0 fl oz/a C	603	70	0	80
MSO	0.5 % v/v C	704	65	0	80
N-PAK AMS	2.5 % v/v C				
		Mean =	70	0	84
4 HARNESS XTRA 5.6 L	3.6 pt/a A	104	40	0	80
IMPACTZ	8.0 fl oz/a C	303	80	0	95
LIBERTY 280 SL	22.0 fl oz/a C	601	70	0	90
N-PAK AMS	2.5 % v/v C	703	55	0	85
		Mean =	61	0	88
5 HARNESS XTRA 5.6 L	3.6 pt/a A	201	85	0	95
IMPACTZ	8.0 fl oz/a C	304	70	5	95
STATUS	5.0 oz/a C	501	10	0	80
MSO	1.0 % v/v C	804	60	0	88
N-PAK AMS	2.5 % v/v C				
		Mean =	56	1	90
6 HARNESS	1.75 pt/a B	202	85	15	90
IMPACTZ	8.0 fl oz/a B	404	85	15	90
ROUNDUP POWERMAX	32.0 fl oz/a B	502	85	25	90
ACTIVATOR 90 NIS	0.25 % v/v B	801	95	15	90
N-PAK AMS	2.5 % v/v B				
		Mean =	88	18	90
7 ARMEZON PRO	20.0 fl oz/a B	203	90	15	90
ROUNDUP POWERMAX	32.0 fl oz/a B	301	85	0	90
AATREX	0.5 pt/a B	504	90	10	85
ACTIVATOR 90 NIS	0.25 % v/v B	702	90	10	90
N-PAK AMS	2.5 % v/v B				
		Mean =	89	9	89
8 HALEX GT	3.6 pt/a B	204	95	30	95
AATREX	1.0 pt/a B	302	95	35	95
ACTIVATOR 90 NIS	0.25 % v/v B	503	85	20	90
N-PAK AMS	2.5 % v/v B	802	90	30	90
		Mean =	91	29	93

# Purdue Weed Science

<b>ImpactZ Performance in Corn</b>	
Trial ID: 17S-TPAC-CORN-19	Location: TPAC Trial Year: 2017
Protocol ID: 17S-TPAC-CORN-19	Investigator: Dr. Bill Johnson
Project ID: 17C04H060XIN530	Study Director: Dustin Johnson
Sponsor Contact: J. Argentine - AMVAC	

Pest Type	W Weed	W Weed	W Weed	W Weed
Pest Code	AMBTR	AMBTR	AMBTR	AMBTR
Pest Name	Giant ragweed	Giant ragweed	Giant ragweed	Giant ragweed
Crop Code	ZEAMX	ZEAMX	ZEAMX	ZEAMX
Crop Name	Corn	Corn	Corn	Corn
Part Rated	PLOT -	PLOT -	PLOT -	PLOT -
Rating Date	Jun-19-2017	Jun-19-2017	Jun-28-2017	Jul-3-2017
Rating Type	CONTROL	PHYGEN	CONTROL	CONTROL
Rating Unit	%	%	%	%
Number of Subsamples	1	1	1	1
Assessed By	M. ZIMMER	M. ZIMMER	M. ZIMMER	D. JOHNSON
Rating Timing	A4	A4	A5	A6
Days After First/Last Applic.	55 19	55 19	64 28	69 33
Days After Emergence	35 DE-1	35 DE-1	44 DE-1	49 DE-1
ARM Action Codes	P	P	P	P
Number of Decimals	0	0	0	0
Trt Treatment	Rate	Appl		
No. Name	Rate Unit	Code Plot	7	8
1 UNTREATED CHECK		101	0	0
		402	0	0
		602	0	0
		701	0	0
		Mean =	0	0
2 HARNESS XTRA 5.6 L	3.6 pt/a	A 102	92	5
IMPACTZ	8.0 fl oz/a	C 403	90	5
MSO	1.0 % v/v	C 604	88	5
N-PAK AMS	2.5 % v/v	C 803	90	7
		Mean =	90	6
3 HARNESS XTRA 5.6 L	3.6 pt/a	A 103	92	0
IMPACTZ	8.0 fl oz/a	C 401	92	0
ROUNDUP POWERMAX	32.0 fl oz/a	C 603	95	0
MSO	0.5 % v/v	C 704	90	0
N-PAK AMS	2.5 % v/v	C		
		Mean =	92	0
4 HARNESS XTRA 5.6 L	3.6 pt/a	A 104	90	0
IMPACTZ	8.0 fl oz/a	C 303	90	0
LIBERTY 280 SL	22.0 fl oz/a	C 601	92	0
N-PAK AMS	2.5 % v/v	C 703	88	0
		Mean =	90	0
5 HARNESS XTRA 5.6 L	3.6 pt/a	A 201	98	0
IMPACTZ	8.0 fl oz/a	C 304	88	0
STATUS	5.0 oz/a	C 501	95	0
MSO	1.0 % v/v	C 804	95	0
N-PAK AMS	2.5 % v/v	C		
		Mean =	94	0
6 HARNESS	1.75 pt/a	B 202	65	0
IMPACTZ	8.0 fl oz/a	B 404	60	0
ROUNDUP POWERMAX	32.0 fl oz/a	B 502	55	0
ACTIVATOR 90 NIS	0.25 % v/v	B 801	60	0
N-PAK AMS	2.5 % v/v	B		
		Mean =	60	0
7 ARMEZON PRO	20.0 fl oz/a	B 203	65	0
ROUNDUP POWERMAX	32.0 fl oz/a	B 301	60	0
AATREX	0.5 pt/a	B 504	45	0
ACTIVATOR 90 NIS	0.25 % v/v	B 702	70	0
N-PAK AMS	2.5 % v/v	B		
		Mean =	60	0
8 HALEX GT	3.6 pt/a	B 204	80	0
AATREX	1.0 pt/a	B 302	85	0
ACTIVATOR 90 NIS	0.25 % v/v	B 503	75	0
N-PAK AMS	2.5 % v/v	B 802	78	0
		Mean =	80	0



# Purdue Weed Science

## ImpactZ Performance in Corn

Trial ID: 17S-TPAC-CORN-19	Location: TPAC	Trial Year: 2017
Protocol ID: 17S-TPAC-CORN-19	Investigator: Dr. Bill Johnson	
Project ID: 17C04H060XIN530	Study Director: Dustin Johnson	
	Sponsor Contact: J. Argentine - AMVAC	

Pest Type				ZEAMX	ZEAMX	ZEAMX
Pest Code						
Pest Name						
Crop Code				Corn	Corn	Corn
Crop Name						
Part Rated				PLOT -	PLOT -	PLOT -
Rating Date				Oct-20-2017	Oct-20-2017	Oct-20-2017
Rating Type				YIELD	MOICON	YIELD
Rating Unit				LB	LB	BU
Number of Subsamples				1	1	1
Assessed By				D. JOHNSON	D. JOHNSON	D. JOHNSON
Rating Timing						
Days After First/Last Applic.				178 142	178 142	178 142
Days After Emergence				158 DE-1	158 DE-1	158 DE-1
ARM Action Codes						TY1
Number of Decimals				1	1	1
Trt Treatment	Rate	Appl				
No. Name	Rate Unit	Code Plot		12	13	14
1 UNTREATED CHECK		101		1.5	4.9	10.5
		402		1.4	4.6	9.8
		602		35.1	18.3	211.2
		701		32.0	19.1	190.6
		Mean =		17.5	11.7	105.5
2 HARNESS XTRA 5.6 L	3.6 pt/a	A 102		35.9	18.7	214.9
IMPACTZ	8.0 fl oz/a	C 403		21.1	18.1	127.3
MSO	1.0 % v/v	C 604		38.8	19.0	231.4
N-PAK AMS	2.5 % v/v	C 803		32.0	18.6	191.8
		Mean =		32.0	18.6	191.4
3 HARNESS XTRA 5.6 L	3.6 pt/a	A 103		21.4	17.0	130.5
IMPACTZ	8.0 fl oz/a	C 401		14.5	17.2	88.4
ROUNDUP POWERMAX	32.0 fl oz/a	C 603		30.4	18.8	181.8
MSO	0.5 % v/v	C 704		15.9	16.9	97.3
N-PAK AMS	2.5 % v/v	C				
		Mean =		20.5	17.5	124.5
4 HARNESS XTRA 5.6 L	3.6 pt/a	A 104		33.9	19.4	201.2
IMPACTZ	8.0 fl oz/a	C 303		38.8	19.4	230.3
LIBERTY 280 SL	22.0 fl oz/a	C 601		20.6	17.3	125.5
N-PAK AMS	2.5 % v/v	C 703		18.0	18.6	107.9
		Mean =		27.8	18.7	166.2
5 HARNESS XTRA 5.6 L	3.6 pt/a	A 201		31.4	17.8	190.1
IMPACTZ	8.0 fl oz/a	C 304		3.7	16.7	22.7
STATUS	5.0 oz/a	C 501		34.5	18.2	207.8
MSO	1.0 % v/v	C 804		34.4	18.9	205.5
N-PAK AMS	2.5 % v/v	C				
		Mean =		26.0	17.9	156.5
6 HARNESS	1.75 pt/a	B 202		35.0	19.5	207.5
IMPACTZ	8.0 fl oz/a	B 404		32.6	18.7	195.2
ROUNDUP POWERMAX	32.0 fl oz/a	B 502		13.0	18.4	78.1
ACTIVATOR 90 NIS	0.25 % v/v	B 801		7.8	17.5	47.4
N-PAK AMS	2.5 % v/v	B				
		Mean =		22.1	18.5	132.0
7 ARMEZON PRO	20.0 fl oz/a	B 203		1.8	9.1	12.0
ROUNDUP POWERMAX	32.0 fl oz/a	B 301		37.4	18.6	224.2
AATREX	0.5 pt/a	B 504		37.3	19.5	221.1
ACTIVATOR 90 NIS	0.25 % v/v	B 702		33.8	18.2	203.6
N-PAK AMS	2.5 % v/v	B				
		Mean =		27.6	16.4	165.2
8 HALEX GT	3.6 pt/a	B 204		27.5	18.3	165.5
AATREX	1.0 pt/a	B 302		30.0	18.1	180.9
ACTIVATOR 90 NIS	0.25 % v/v	B 503		34.5	19.5	204.5
N-PAK AMS	2.5 % v/v	B 802		32.3	17.0	197.4
		Mean =		31.1	18.2	187.1

## Purdue Weed Science

### ImpactZ Performance in Corn

Trial ID: 17S-TPAC-CORN-19	Location: TPAC	Trial Year: 2017
Protocol ID: 17S-TPAC-CORN-19	Investigator: Dr. Bill Johnson	
Project ID: 17C04H060XIN530	Study Director: Dustin Johnson	
	Sponsor Contact: J. Argentine - AMVAC	

#### Pest Type

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

#### Pest Code

AMBTR, Ambrosia trifida, Giant ragweed = US

#### Crop Code

ZEAMX, BCOR, Zea mays, Corn = US

#### Part Rated

PLOT = plot

#### Rating Type

PHYGEN = phytotoxicity - general / injury

YIELD = yield

MOICON = moisture content

#### Rating Unit

% = percent

LB = pound

BU = bushel

#### 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

A7 = 7th Assessment According to Trial Schedule

#### ARM Action Codes

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

TY1 =  $6.222857 * [12] * (100 - [13]) / 84.5$