

Purdue Weed Science

Bayer Corn Herbicide Demo

Trial ID: 17S-TPAC-CORN-21 Location: TPAC Trial Year: 2017
 Protocol ID: 17S-TPAC-CORN-21 Investigator: Dr. Bill Johnson
 Project ID: HP17USAWMUUEF1 Study Director: Dustin Johnson
 Sponsor Contact: A. Kurtz - Bayer

General Trial Information

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

Discipline: H herbicide
Trial Status: E established
Initiation Date: Apr-25-2017

Trial Location

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

Latitude of LL Corner °: 40.29175 N
Longitude of LL Corner °: 86.90997 W

Conducted Under GLP: No
Conducted Under GEP: No

Contacts

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

Investigator: Dr. Bill Johnson **Title:** Professor
Organization: Purdue University
Address: 915 W. State Street
City+State/Prov: West Lafayette, IN
Postal Code: 47907 **E-mail:** wgj@purdue.edu
Country: USA United States

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 Corn
Variety: DK62-08STXRIB
Description: RR/LL Stacked

Planting Rate, Unit: 32000 S/A **Planting Date:** Apr-25-2017
Depth, Unit: 1.5 IN **Planting Method:** PLANTD planted
Row Spacing, Unit: 30 IN **Planting Equipment:** PP Plot Planter
Soil Temperature, Unit: 70 F **Emergence Date:** May-12-2017
Soil Moisture: DRY dry

Pest Description

Pest 1 Type: W **Code:** AMBTR Ambrosia trifida
Common Name: Giant ragweed

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:** 10
Replications: 4 **Tillage Type:** CONTIL conventional-till
Study Design: RACOB Randomized Complete Block (RCB)

Field Prep./Maintenance:
 171 lbs of N as UAN on 4/18/17

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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
Application Date:	Apr-25-2017	May-31-2017
Appl. Start Time:	1:35 PM	10:25 AM
Appl. Stop Time:	2:00 PM	10:55 AM
Application Method:	SPRAY	SPRAY
Application Timing:	PREPLA	POSPOS
Application Placement:	BROADC	BROADC
Applied By:	M. ZIMMER	C. HAYDEN
Air Temperature, Unit:	76 F	70 F
% Relative Humidity:	47	50
Wind Velocity, Unit:	7 MPH	5 MPH
Wind Direction:	SSE	WNW
Dew Presence (Y/N):	N no	N no
Soil Temperature, Unit:	70 F	66 F
Soil Moisture:	DRY	DRY
% Cloud Cover:	30	5

Crop Stage At Each Application		
	A	B
Crop 1 Code, BBCH Scale:	ZEAMX BCOR	ZEAMX BCOR
Stage Scale Used:		BBCH
Stage Majority, Percent:		14
Stage Minimum, Percent:		13
Stage Maximum, Percent:		14

Pest Stage At Each Application		
	A	B
Pest 1 Code, Type, Scale:	AMBTR W	AMBTR W
Stage Majority, Percent:	00	14
Stage Minimum, Percent:	00	10
Stage Maximum, Percent:	00	16
Height, Unit:		2 IN
Height Minimum, Maximum:		0.5 4.5

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	Sponsor Contact: A. Kurtz - Bayer	

Application Equipment

	A	B
Appl. Equipment:	CO2 BACKPACK	CO2 BACKPACK
Equipment Type:	BACSPR	BACSPR
Operation Pressure, Unit:	29 PSI	18 PSI
Nozzle Type:	TTI	FLAFXR
Nozzle Size:	110015	XR11002
Nozzle Spacing, Unit:	15 IN	15 IN
Nozzles/Row:	8	8
Boom Length, Unit:	10 FT	10 FT
Boom Height, Unit:	17 IN	17 IN
Ground Speed, Unit:	3 MPH	3 MPH
Carrier:	WATER	WATER
Spray Volume, Unit:	15 GAL/AC	15 GAL/AC
Mix Size, Unit:	1.8 liters	1.8 liters
Propellant:	COMCO2	COMCO2

Trt No Treatment Application Comment

6	5/31/17-Misprayed plots 203 & 303 and therefore threw out both plots. Sprayed Application B a little early due to weather conditions and the possibility of not being able to spray until weeds grew larger than target size.
8	5/31/17-Misprayed plots 203 & 303 and therefore threw out both plots.

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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 Rate Unit	Growth Stage	Appl Code	Amt to Measure	Rep 1	Rep 2	Rep 3	Rep 4
1	UNTREATED CHECK								101	304	604	805
2	CORVUS	2.63	LB/GAL	SC	4.5 fl oz/a	PREMWC	A	4.219 ml/mx	102	403	601	804
	AATREX	4	LB/GAL	L	1.5 qt/a	PREMWC	A	45.0 ml/mx				
	CAPRENO	3.45	LB/GAL	L	3 fl oz/a	POSPOS	B	2.812 ml/mx				
	LIBERTY 280 SL	2.34	LB/GAL	SL	22 fl oz/a	POSPOS	B	20.62 ml/mx				
	N-PAK AMS	3.4	LBA/GAL	L	2.5 % v/v	POSPOS	B	45.0 ml/mx				
3	CORVUS	2.63	LB/GAL	SC	4.5 fl oz/a	PREMWC	A	4.219 ml/mx	103	305	605	802
	AATREX	4	LB/GAL	L	1.5 qt/a	PREMWC	A	45.0 ml/mx				
	DIFLEXX DUO	1.53	LBAE/GAL	SC	24 fl oz/a	POSPOS	B	22.5 ml/mx				
	ROUNDUP POWERMAX	4.5	LBAE/GAL	SL	22 fl oz/a	POSPOS	B	20.62 ml/mx				
	COC	100 %		SL	1 % v/v	POSPOS	B	18.0 ml/mx				
	N-PAK AMS	3.4	LBA/GAL	L	2.5 % v/v	POSPOS	B	45.0 ml/mx				
4	BALANCE FLEXX	2	LB/GAL	L	4 fl oz/a	PREMWC	A	3.75 ml/mx	104	301	602	705
	AATREX	4	LB/GAL	L	1.5 qt/a	PREMWC	A	45.0 ml/mx				
	CAPRENO	3.45	LB/GAL	L	3 fl oz/a	POSPOS	B	2.812 ml/mx				
	COC	100 %		SL	1 % v/v	POSPOS	B	18.0 ml/mx				
	N-PAK AMS	3.4	LBA/GAL	L	2.5 % v/v	POSPOS	B	45.0 ml/mx				
5	BALANCE FLEXX	2	LB/GAL	L	4 fl oz/a	PREMWC	A	3.75 ml/mx	105	405	603	701
	AATREX	4	LB/GAL	L	1.5 qt/a	PREMWC	A	45.0 ml/mx				
	DIFLEXX DUO	1.53	LBAE/GAL	SC	32 fl oz/a	POSPOS	B	30.0 ml/mx				
	COC	100 %		SL	1 % v/v	POSPOS	B	18.0 ml/mx				
	N-PAK AMS	3.4	LBA/GAL	L	2.5 % v/v	POSPOS	B	45.0 ml/mx				
6	BALANCE FLEXX	2	LB/GAL	L	4 fl oz/a	PREMWC	A	3.75 ml/mx	201	303	502	801
	AATREX	4	LB/GAL	L	1.5 qt/a	PREMWC	A	45.0 ml/mx				
	DIFLEXX DUO	1.53	LBAE/GAL	SC	24 fl oz/a	POSPOS	B	22.5 ml/mx				
	ROUNDUP POWERMAX	4.5	LBAE/GAL	SL	22 fl oz/a	POSPOS	B	20.62 ml/mx				
	COC	100 %		SL	1 % v/v	POSPOS	B	18.0 ml/mx				
	N-PAK AMS	3.4	LBA/GAL	L	2.5 % v/v	POSPOS	B	45.0 ml/mx				
7	BALANCE FLEXX	2	LB/GAL	L	4 fl oz/a	PREMWC	A	3.75 ml/mx	202	402	505	803
	AATREX	4	LB/GAL	L	1 qt/a	PREMWC	A	30.0 ml/mx				
	LIBERTY 280 SL	2.34	LB/GAL	SL	22 fl oz/a	POSPOS	B	20.62 ml/mx				
	AATREX	4	LB/GAL	L	1 qt/a	POSPOS	B	30.0 ml/mx				
	N-PAK AMS	3.4	LBA/GAL	L	2.5 % v/v	POSPOS	B	45.0 ml/mx				
8	BALANCE FLEXX	2	LB/GAL	L	4 fl oz/a	PREMWC	A	3.75 ml/mx	203	302	501	704
	AATREX	4	LB/GAL	L	1 qt/a	PREMWC	A	30.0 ml/mx				
	LIBERTY 280 SL	2.34	LB/GAL	SL	22 fl oz/a	POSPOS	B	20.62 ml/mx				
	DIFLEXX DUO	1.53	LBAE/GAL	SC	8 fl oz/a	POSPOS	B	7.5 ml/mx				
	N-PAK AMS	3.4	LBA/GAL	L	2.5 % v/v	POSPOS	B	45.0 ml/mx				
9	LEXAR EZ	3.704	LB/GAL	L	3 qt/a	PREMWC	A	90.0 ml/mx	204	401	504	703
	HALEX GT	4.389	LBAE/GAL	L	3.6 pt/a	POSPOS	B	54.0 ml/mx				
	ACTIVATOR 90 NIS	100 %		SL	0.25 % v/v	POSPOS	B	4.5 ml/mx				
	N-PAK AMS	3.4	LBA/GAL	L	2.5 % v/v	POSPOS	B	45.0 ml/mx				
10	RESICORE	3.29	LB/GAL	L	2.5 pt/a	PREMWC	A	37.5 ml/mx	205	404	503	702
	DURANGO DMA	4	LBAE/GAL	SL	1.5 pt/a	POSPOS	B	22.5 ml/mx				
	N-PAK AMS	3.4	LBA/GAL	L	2.5 % v/v	POSPOS	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
10.547	ml	CORVUS	2.63	LB/GAL	SC	SP102000013459/2
393.749	ml	AATREX	4	LB/GAL	L	AEFDQM_970313066
7.031	ml	CAPRENO	3.45	LB/GAL	L	SP102000016695
77.344	ml	LIBERTY 280 SL	2.34	LB/GAL	SL	SP102000019730

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	Sponsor Contact: A. Kurtz - Bayer

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
506.195	ml	N-PAK AMS	3.4	LBA/GAL	L	AEFDQM_970313105
93.750	ml	DIFLEXX DUO	1.53	LBAE/GAL	SC	SP102000028521
51.562	ml	ROUNDUP POWERMAX	4.5	LBAE/GAL	SL	BCADDM_03120101
89.990	ml	COC	100	%	SL	AEFDQM_95081731
23.437	ml	BALANCE FLEXX	2	LB/GAL	L	SP102000014305
9.375	ml	DIFLEXX DUO	1.53	LBAE/GAL	SC	SP102000028522
112.500	ml	LEXAR EZ	3.704	LB/GAL	L	BCOWCL_LEXAR
67.500	ml	HALEX GT	4.389	LBAE/GAL	L	BCORKA_HALEX GT
5.624	ml	ACTIVATOR 90 NIS	100	%	SL	BCOWCL_NIS
46.875	ml	RESICORE	3.29	LB/GAL	L	BCMOSI_16032101
28.125	ml	DURANGO DMA	4	LBAE/GAL	SL	BCORKA_DURANGO DMA

* '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.

Trial Comments

5

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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-31-2017	May-31-2017	Jun-7-2017	Jun-7-2017	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.	36 36	36 36	43 7	43 7	49 13			
Days After Emergence	19 DE-1	19 DE-1	26 DE-1	26 DE-1	32 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							
			1	2	3			
			4	5	6			
1 UNTREATED CHECK			0 b	0 a	0 d	0 a	0 c	0 a
2 CORVUS	4.5 fl oz/a A		84 a	0 a	99 a	0 a	99 a	0 a
AATREX	1.5 qt/a A							
CAPRENO	3 fl oz/a B							
LIBERTY 280 SL	22 fl oz/a B							
N-PAK AMS	2.5 % v/v B							
3 CORVUS	4.5 fl oz/a A		81 a	0 a	99 a	0 a	100 a	0 a
AATREX	1.5 qt/a A							
DIFLEXX DUO	24 fl oz/a B							
ROUNDUP POWERMAX	22 fl oz/a B							
COC	1 % v/v B							
N-PAK AMS	2.5 % v/v B							
4 BALANCE FLEXX	4 fl oz/a A		74 a	0 a	95 b	0 a	100 a	0 a
AATREX	1.5 qt/a A							
CAPRENO	3 fl oz/a B							
COC	1 % v/v B							
N-PAK AMS	2.5 % v/v B							
5 BALANCE FLEXX	4 fl oz/a A		81 a	0 a	98 a	0 a	100 a	0 a
AATREX	1.5 qt/a A							
DIFLEXX DUO	32 fl oz/a B							
COC	1 % v/v B							
N-PAK AMS	2.5 % v/v B							
6 BALANCE FLEXX	4 fl oz/a A		81 a	0 a	99 a	0 a	100 a	0 a
AATREX	1.5 qt/a A							
DIFLEXX DUO	24 fl oz/a B							
ROUNDUP POWERMAX	22 fl oz/a B							
COC	1 % v/v B							
N-PAK AMS	2.5 % v/v B							
7 BALANCE FLEXX	4 fl oz/a A		79 a	0 a	99 a	0 a	100 a	0 a
AATREX	1 qt/a A							
LIBERTY 280 SL	22 fl oz/a B							
AATREX	1 qt/a B							
N-PAK AMS	2.5 % v/v B							
8 BALANCE FLEXX	4 fl oz/a A		76 a	0 a	99 a	0 a	99 a	0 a
AATREX	1 qt/a A							
LIBERTY 280 SL	22 fl oz/a B							
DIFLEXX DUO	8 fl oz/a B							
N-PAK AMS	2.5 % v/v B							
9 LEXAR EZ	3 qt/a A		78 a	0 a	97 ab	0 a	100 a	0 a
HALEX GT	3.6 pt/a B							
ACTIVATOR 90 NIS	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, Student-Newman-Keuls)
 Mean comparisons performed only when AOV Treatment P(F) is significant at mean comparison OSL.
 Missing data estimates are included in columns: Yates=1,2,3,4,5,6,7,8
 Could not calculate LSD (% mean diff) for columns 2,4,6,8 because error mean square = 0.

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			W Weed		W Weed		W Weed			
			AMBTR		AMBTR		AMBTR			
			Giant ragweed		Giant ragweed		Giant ragweed			
			ZEAMX		ZEAMX		ZEAMX			
			Corn		Corn		Corn			
			PLOT -		PLOT -		PLOT -			
			May-31-2017		Jun-7-2017		Jun-13-2017			
			CONTROL		CONTROL		CONTROL			
			%		%		%			
			1		1		1			
Assessed By			D. JOHNSON		D. JOHNSON		M. ZIMMER			
Rating Timing			A1		A2		A3			
Days After First/Last Applic.			36 36		43 7		49 13			
Days After Emergence			19 DE-1		26 DE-1		32 DE-1			
ARM Action Codes			P		P		P			
Number of Decimals			0		0		0			
Trt	Treatment	Rate	Appl							
No.	Name	Rate	Unit	Code	1	2	3	4	5	6
10	RESICORE	2.5 pt/a	A		73 a	0 a	88 c	0 a	93 b	0 a
	DURANGO DMA	1.5 pt/a	B							
	N-PAK AMS	2.5 % v/v	B							
LSD P=.05					7.0	.	2.0	.	2.1	.
Standard Deviation					4.8	0.0	1.4	0.0	1.5	0.0
CV					6.83	0.0	1.58	0.0	1.64	0.0
Bartlett's X2					5.687	0.0	18.963	0.0	26.033	0.0
P(Bartlett's X2)					0.682	.	0.002*	.	0.001*	.
Skewness					-2.3661*	.	-2.6103*	.	-2.6465*	.
Kurtosis					4.463*	.	5.222*	.	5.3488*	.
Replicate F					7.657	0.000	2.008	0.000	1.355	0.000
Replicate Prob(F)					0.0009	1.0000	0.1385	1.0000	0.2794	1.0000
Treatment F					107.898	0.000	1992.672	0.000	1853.862	0.000
Treatment Prob(F)					0.0001	1.0000	0.0001	1.0000	0.0001	1.0000

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Pest Type	W	Weed			
Pest Code		AMBTR			
Pest Name		Giant ragweed			
Crop Code		ZEAMX		ZEAMX	
Crop Name		Corn		Corn	
Part Rated		PLOT -		PLOT -	
Rating Date		Jun-28-2017		Jun-28-2017	
Rating Type		CONTROL		PHYGEN	
Rating Unit		%		%	
Number of Subsamples		1		1	
Assessed By		M. ZIMMER		M. ZIMMER	
Rating Timing		A4		A4	
Days After First/Last Applic.		64 28		64 28	
Days After Emergence		47 DE-1		47 DE-1	
ARM Action Codes		P		P	
Number of Decimals		0		0	
Trt Treatment	Rate	Appl			
No. Name	Rate Unit	Code	7	8	
1 UNTREATED CHECK			0 c	0 a	
2 CORVUS	4.5 fl oz/a	A	96 a	0 a	
AATREX	1.5 qt/a	A			
CAPRENO	3 fl oz/a	B			
LIBERTY 280 SL	22 fl oz/a	B			
N-PAK AMS	2.5 % v/v	B			
3 CORVUS	4.5 fl oz/a	A	97 a	0 a	
AATREX	1.5 qt/a	A			
DIFLEXX DUO	24 fl oz/a	B			
ROUNDUP POWERMAX	22 fl oz/a	B			
COC	1 % v/v	B			
N-PAK AMS	2.5 % v/v	B			
4 BALANCE FLEXX	4 fl oz/a	A	96 a	0 a	
AATREX	1.5 qt/a	A			
CAPRENO	3 fl oz/a	B			
COC	1 % v/v	B			
N-PAK AMS	2.5 % v/v	B			
5 BALANCE FLEXX	4 fl oz/a	A	97 a	0 a	
AATREX	1.5 qt/a	A			
DIFLEXX DUO	32 fl oz/a	B			
COC	1 % v/v	B			
N-PAK AMS	2.5 % v/v	B			
6 BALANCE FLEXX	4 fl oz/a	A	95 a	0 a	
AATREX	1.5 qt/a	A			
DIFLEXX DUO	24 fl oz/a	B			
ROUNDUP POWERMAX	22 fl oz/a	B			
COC	1 % v/v	B			
N-PAK AMS	2.5 % v/v	B			
7 BALANCE FLEXX	4 fl oz/a	A	95 a	0 a	
AATREX	1 qt/a	A			
LIBERTY 280 SL	22 fl oz/a	B			
AATREX	1 qt/a	B			
N-PAK AMS	2.5 % v/v	B			
8 BALANCE FLEXX	4 fl oz/a	A	94 a	0 a	
AATREX	1 qt/a	A			
LIBERTY 280 SL	22 fl oz/a	B			
DIFLEXX DUO	8 fl oz/a	B			
N-PAK AMS	2.5 % v/v	B			
9 LEXAR EZ	3 qt/a	A	95 a	0 a	
HALEX GT	3.6 pt/a	B			
ACTIVATOR 90 NIS	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, Student-Newman-Keuls)
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	Sponsor Contact: A. Kurtz - Bayer	

Pest Type	W Weed	
Pest Code	AMBTR	
Pest Name	Giant ragweed	
Crop Code	ZEAMX	ZEAMX
Crop Name	Corn	Corn
Part Rated	PLOT -	PLOT -
Rating Date	Jun-28-2017	Jun-28-2017
Rating Type	CONTROL	PHYGEN
Rating Unit	%	%
Number of Subsamples	1	1
Assessed By	M. ZIMMER	M. ZIMMER
Rating Timing	A4	A4
Days After First/Last Applic.	64 28	64 28
Days After Emergence	47 DE-1	47 DE-1
ARM Action Codes	P	P
Number of Decimals	0	0
Trt Treatment	Rate	Appl
No. Name	Rate Unit	Code
	7	8
10 RESICORE	2.5 pt/a A	90 b
DURANGO DMA	1.5 pt/a B	0 a
N-PAK AMS	2.5 % v/v B	
LSD P=.05	2.6	.
Standard Deviation	1.8	0.0
CV	2.08	0.0
Bartlett's X2	4.442	0.0
P(Bartlett's X2)	0.815	.
Skewness	-2.6424*	.
Kurtosis	5.3416*	.
Replicate F	3.853	0.000
Replicate Prob(F)	0.0215	1.0000
Treatment F	1145.679	0.000
Treatment Prob(F)	0.0001	1.0000

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.
Missing data estimates are included in columns: Yates=1,2,3,4,5,6,7,8
Could not calculate LSD (% mean diff) for columns 2,4,6,8 because error mean square = 0.

Purdue Weed Science

Bayer Corn Herbicide Demo

Trial ID: 17S-TPAC-CORN-21 Location: TPAC Trial Year: 2017
Protocol ID: 17S-TPAC-CORN-21 Investigator: Dr. Bill Johnson
Project ID: HP17USAWMUUEF1 Study Director: Dustin Johnson
Sponsor Contact: A. Kurtz - Bayer

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

Rating Unit

% = percent

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

ARM Action Codes

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

Purdue Weed Science

Bayer Corn Herbicide Demo										
Trial ID: 17S-TPAC-CORN-21			Location: TPAC			Trial Year: 2017				
Protocol ID: 17S-TPAC-CORN-21			Investigator: Dr. Bill Johnson							
Project ID: HP17USAWMUUEF1			Study Director: Dustin Johnson							
			Sponsor Contact: A. Kurtz - Bayer							
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	
Crop Name			Corn			Corn			Corn	
Part Rated			PLOT -			PLOT -			PLOT -	
Rating Date			May-31-2017			Jun-7-2017			Jun-13-2017	
Rating Type			CONTROL			CONTROL			CONTROL	
Rating Unit			%			%			%	
Number of Subsamples			1			1			1	
Assessed By			D. JOHNSON			D. JOHNSON			M. ZIMMER	
Rating Timing			A1			A2			A3	
Days After First/Last Applic.			36 36			43 7			49 13	
Days After Emergence			19 DE-1			26 DE-1			32 DE-1	
ARM Action Codes			P			P			P	
Number of Decimals			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	0	
		304	0	0	0	0	0	0	0	
		604	0	0	0	0	0	0	0	
		805	0	0	0	0	0	0	0	
		Mean =	0	0	0	0	0	0	0	
2 CORVUS	4.5 fl oz/a A	102	70	0	99	0	100	0	0	
AATREX	1.5 qt/a A	403	85	0	100	0	100	0	0	
CAPRENO	3 fl oz/a B	601	90	0	99	0	98	0	0	
LIBERTY 280 SL	22 fl oz/a B	804	90	0	99	0	99	0	0	
N-PAK AMS	2.5 % v/v B									
		Mean =	84	0	99	0	99	0	0	
3 CORVUS	4.5 fl oz/a A	103	70	0	98	0	100	0	0	
AATREX	1.5 qt/a A	305	85	0	98	0	100	0	0	
DIFLEXX DUO	24 fl oz/a B	605	85	0	99	0	99	0	0	
ROUNDUP POWERMAX	22 fl oz/a B	802	85	0	99	0	99	0	0	
COC	1 % v/v B									
N-PAK AMS	2.5 % v/v B									
		Mean =	81	0	99	0	100	0	0	
4 BALANCE FLEXX	4 fl oz/a A	104	70	0	96	0	100	0	0	
AATREX	1.5 qt/a A	301	80	0	96	0	100	0	0	
CAPRENO	3 fl oz/a B	602	70	0	95	0	99	0	0	
COC	1 % v/v B	705	75	0	93	0	99	0	0	
N-PAK AMS	2.5 % v/v B									
		Mean =	74	0	95	0	100	0	0	
5 BALANCE FLEXX	4 fl oz/a A	105	75	0	96	0	100	0	0	
AATREX	1.5 qt/a A	405	85	0	99	0	100	0	0	
DIFLEXX DUO	32 fl oz/a B	603	75	0	99	0	100	0	0	
COC	1 % v/v B	701	90	0	99	0	100	0	0	
N-PAK AMS	2.5 % v/v B									
		Mean =	81	0	98	0	100	0	0	
6 BALANCE FLEXX	4 fl oz/a A	201	75	0	99	0	100	0	0	
AATREX	1.5 qt/a A	303	83*	0*	100*	0*	100*	0*	0	
DIFLEXX DUO	24 fl oz/a B	502	80	0	99	0	100	0	0	
ROUNDUP POWERMAX	22 fl oz/a B	801	85	0	99	0	100	0	0	
COC	1 % v/v B									
N-PAK AMS	2.5 % v/v B									
		Mean =	81	0	99	0	100	0	0	
7 BALANCE FLEXX	4 fl oz/a A	202	70	0	99	0	100	0	0	
AATREX	1 qt/a A	402	75	0	99	0	99	0	0	
LIBERTY 280 SL	22 fl oz/a B	505	85	0	99	0	99	0	0	
AATREX	1 qt/a B	803	85	0	99	0	100	0	0	
N-PAK AMS	2.5 % v/v B									
		Mean =	79	0	99	0	100	0	0	
8 BALANCE FLEXX	4 fl oz/a A	203	70*	0*	98*	0*	99*	0*	0	
AATREX	1 qt/a A	302	75	0	99	0	100	0	0	
LIBERTY 280 SL	22 fl oz/a B	501	80	0	99	0	99	0	0	
DIFLEXX DUO	8 fl oz/a B	704	80	0	99	0	98	0	0	
N-PAK AMS	2.5 % v/v B									
		Mean =	76	0	99	0	99	0	0	

Purdue Weed Science

Bayer Corn Herbicide Demo

Trial ID: 17S-TPAC-CORN-21 Location: TPAC Trial Year: 2017
 Protocol ID: 17S-TPAC-CORN-21 Investigator: Dr. Bill Johnson
 Project ID: HP17USAWMUUEF1 Study Director: Dustin Johnson
 Sponsor Contact: A. Kurtz - Bayer

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-31-2017	May-31-2017	Jun-7-2017	Jun-7-2017	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.	36 36	36 36	43 7	43 7	49 13
Days After Emergence	19 DE-1	19 DE-1	26 DE-1	26 DE-1	32 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
9 LEXAR EZ	3 qt/a	A 204	80	0	96
HALEX GT	3.6 pt/a	B 401	80	0	97
ACTIVATOR 90 NIS	0.25 % v/v	B 504	75	0	97
N-PAK AMS	2.5 % v/v	B 703	75	0	97
	Mean =		78	0	97
10 RESICORE	2.5 pt/a	A 205	65	0	85
DURANGO DMA	1.5 pt/a	B 404	80	0	93
N-PAK AMS	2.5 % v/v	B 503	70	0	85
		702	75	0	88
	Mean =		73	0	88
					0
					90
					97
					88
					95
					93

Purdue Weed Science

Bayer Corn Herbicide Demo

Trial ID: 17S-TPAC-CORN-21 Location: TPAC Trial Year: 2017
 Protocol ID: 17S-TPAC-CORN-21 Investigator: Dr. Bill Johnson
 Project ID: HP17USAWMUUEF1 Study Director: Dustin Johnson
 Sponsor Contact: A. Kurtz - Bayer

Trt	Treatment	Rate	Appl		
No.	Name	Rate Unit	Code Plot	7	8
	Pest Type			W Weed	
	Pest Code			AMBTR	
	Pest Name			Giant ragweed	
	Crop Code			ZEAMX	ZEAMX
	Crop Name			Corn	Corn
	Part Rated			PLOT -	PLOT -
	Rating Date			Jun-28-2017	Jun-28-2017
	Rating Type			CONTROL	PHYGEN
	Rating Unit			%	%
	Number of Subsamples			1	1
	Assessed By			M. ZIMMER	M. ZIMMER
	Rating Timing			A4	A4
	Days After First/Last Applic.			64 28	64 28
	Days After Emergence			47 DE-1	47 DE-1
	ARM Action Codes			P	P
	Number of Decimals			0	0
1	UNTREATED CHECK		101	0	0
			304	0	0
			604	0	0
			805	0	0
			Mean =	0	0
2	CORVUS	4.5 fl oz/a	A 102	99	0
	AATREX	1.5 qt/a	A 403	95	0
	CAPRENO	3 fl oz/a	B 601	93	0
	LIBERTY 280 SL	22 fl oz/a	B 804	98	0
	N-PAK AMS	2.5 % v/v	B		
			Mean =	96	0
3	CORVUS	4.5 fl oz/a	A 103	97	0
	AATREX	1.5 qt/a	A 305	97	0
	DIFLEXX DUO	24 fl oz/a	B 605	95	0
	ROUNDUP POWERMAX	22 fl oz/a	B 802	97	0
	COC	1 % v/v	B		
	N-PAK AMS	2.5 % v/v	B		
			Mean =	97	0
4	BALANCE FLEXX	4 fl oz/a	A 104	98	0
	AATREX	1.5 qt/a	A 301	96	0
	CAPRENO	3 fl oz/a	B 602	95	0
	COC	1 % v/v	B 705	93	0
	N-PAK AMS	2.5 % v/v	B		
			Mean =	96	0
5	BALANCE FLEXX	4 fl oz/a	A 105	99	0
	AATREX	1.5 qt/a	A 405	95	0
	DIFLEXX DUO	32 fl oz/a	B 603	95	0
	COC	1 % v/v	B 701	98	0
	N-PAK AMS	2.5 % v/v	B		
			Mean =	97	0
6	BALANCE FLEXX	4 fl oz/a	A 201	95	0
	AATREX	1.5 qt/a	A 303	95*	0*
	DIFLEXX DUO	24 fl oz/a	B 502	93	0
	ROUNDUP POWERMAX	22 fl oz/a	B 801	98	0
	COC	1 % v/v	B		
	N-PAK AMS	2.5 % v/v	B		
			Mean =	95	0
7	BALANCE FLEXX	4 fl oz/a	A 202	93	0
	AATREX	1 qt/a	A 402	95	0
	LIBERTY 280 SL	22 fl oz/a	B 505	95	0
	AATREX	1 qt/a	B 803	96	0
	N-PAK AMS	2.5 % v/v	B		
			Mean =	95	0
8	BALANCE FLEXX	4 fl oz/a	A 203	94*	0*
	AATREX	1 qt/a	A 302	95	0
	LIBERTY 280 SL	22 fl oz/a	B 501	90	0
	DIFLEXX DUO	8 fl oz/a	B 704	96	0
	N-PAK AMS	2.5 % v/v	B		
			Mean =	94	0

Purdue Weed Science

Bayer Corn Herbicide Demo

Trial ID: 17S-TPAC-CORN-21	Location: TPAC	Trial Year: 2017
Protocol ID: 17S-TPAC-CORN-21	Investigator: Dr. Bill Johnson	
Project ID: HP17USAWMUUEF1	Study Director: Dustin Johnson	
	Sponsor Contact: A. Kurtz - Bayer	

Pest Type	W Weed	
Pest Code	AMBTR	
Pest Name	Giant ragweed	
Crop Code	ZEAMX	ZEAMX
Crop Name	Corn	Corn
Part Rated	PLOT -	PLOT -
Rating Date	Jun-28-2017	Jun-28-2017
Rating Type	CONTROL	PHYGEN
Rating Unit	%	%
Number of Subsamples	1	1
Assessed By	M. ZIMMER	M. ZIMMER
Rating Timing	A4	A4
Days After First/Last Applic.	64 28	64 28
Days After Emergence	47 DE-1	47 DE-1
ARM Action Codes	P	P
Number of Decimals	0	0
Trt Treatment	Rate	Appl
No. Name	Rate Unit	Code Plot
		7
9 LEXAR EZ	3 qt/a A	204
HALEX GT	3.6 pt/a B	401
ACTIVATOR 90 NIS	0.25 % v/v B	504
N-PAK AMS	2.5 % v/v B	703
	Mean =	
		95
10 RESICORE	2.5 pt/a A	205
DURANGO DMA	1.5 pt/a B	404
N-PAK AMS	2.5 % v/v B	503
		702
	Mean =	
		90

Purdue Weed Science

Bayer Corn Herbicide Demo

Trial ID: 17S-TPAC-CORN-21 Location: TPAC Trial Year: 2017
Protocol ID: 17S-TPAC-CORN-21 Investigator: Dr. Bill Johnson
Project ID: HP17USAWMUUEF1 Study Director: Dustin Johnson
Sponsor Contact: A. Kurtz - Bayer

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

Rating Unit

% = percent

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

ARM Action Codes

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