

Purdue Weed Science

Status Diflexx Efficacy

Trial ID: 17S-TPAC-CORN-12 Location: TPAC Trial Year: 2017
 Protocol ID: 17S-TPAC-CORN-12 Investigator: Dr. Bill Johnson
 Project ID: H17C43S Study Director: Dustin Johnson
 Sponsor Contact: G. Welker - BASF

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 °: 40.29174 N
Longitude of LL Corner °: 86.91094 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
Depth, Unit: 1.5 IN
Row Spacing, Unit: 30 IN

Planting Date: Apr-25-2017
Planting Method: PLANTD planted
Planting Equipment: PP Plot Planter
Emergence Date: May-15-2017

Soil Temperature, Unit: 70 F
Soil Moisture: DRY dry

Harvested Width, Unit: 5 FT
Harvested Length, Unit: 25 FT
% Standard Moisture: 15.5

Pest Description

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

Pest 2 Type: W **Code:** ECHSS Echinochloa sp.
Common Name: Barnyardgrass

Pest 3 Type: W **Code:** CHEAL Chenopodium album
Common Name: common lambsquarters

Site and Design

Treated Plot Width: 10 FT
Treated Plot Length: 30 FT
Treated Plot Area: 300 FT² **Treatments:** 12
Replications: 4

Site Type: FIELD field
Experimental Unit: 1 PLOT plot
Tillage Type: CONTIL conventional-till
Study Design: RACOB� Randomized Complete Block (RCB)

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Field Prep./Maintenance:

171 lbs of N as UAN on 4/18/17

Blanket at Planting of Dual II Magnum @ 1 pt/a on 4/25/17

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:	May-22-2017	May-31-2017
Appl. Start Time:	12:30 PM	10:44 AM
Appl. Stop Time:	12:45 PM	10:56 AM
Application Method:	SPRAY	SPRAY
Application Timing:	POSPOS	POSPOS
Application Placement:	BROADC	BROADC
Applied By:	M. ZIMMER	J. IKLEY
Air Temperature, Unit:	66 F	71 F
% Relative Humidity:	50	47
Wind Velocity, Unit:	5 MPH	6 MPH
Wind Direction:	SW	WNW
Dew Presence (Y/N):	N no	N no
Soil Temperature, Unit:	66 F	66 F
Soil Moisture:	VERWET	SLIWET
% Cloud Cover:	70	5

Crop Stage At Each Application

	A	B
Crop 1 Code, BBCH Scale:	ZEAMX BCOR	ZEAMX BCOR
Stage Scale Used:	BBCH	BBCH
Stage Majority, Percent:	12	13
Stage Minimum, Percent:	11	13
Stage Maximum, Percent:	13	14

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Pest Stage At Each Application

	A	B
Pest 1 Code, Type, Scale:	AMBTR W	AMBTR W
Stage Majority, Percent:	32	15
Stage Minimum, Percent:	33	10
Stage Maximum, Percent:	34	19
Height, Unit:	1.25 IN	7 IN
Height Minimum, Maximum:	0.5 2	0.5 12
Density, Unit:	100 YD2	13 FT2
Pest 2 Code, Type, Scale:	ECHSS W	ECHSS W
Stage Majority, Percent:	11	
Stage Minimum, Percent:	11	
Stage Maximum, Percent:	12	
Height, Unit:	1.25 IN	
Height Minimum, Maximum:	0.5 2	
Density, Unit:	100 YD2	
Pest 3 Code, Type, Scale:	CHEAL W	CHEAL W
Stage Majority, Percent:	31	
Stage Minimum, Percent:	10	
Stage Maximum, Percent:	32	
Height, Unit:	1.25 IN	
Height Minimum, Maximum:	0.5 2	
Density, Unit:	75 YD2	

Application Equipment

	A	B
Appl. Equipment:	CO2 BACKPACK	CO2 BACKPACK
Equipment Type:	BACSPR	BACSPR
Operation Pressure, Unit:	18 PSI	18 PSI
Nozzle Type:	FLAFXR	FLAFXR
Nozzle Size:	XR11002	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

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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	Appl Unit	Appl Code	Amt Product to Measure	Rep			
									1	2	3	4
1	UNTREATED CHECK								101	403	506	805
2	STATUS	56 %		WG	5.0 oz/a	A		4.493 g/mx	102	304	604	706
	ACTIVATOR 90 NIS	100 %		SL	0.25 % v/v	A		4.5 ml/mx				
	N-PAK AMS	3.4 LBA/GAL	L		2.5 % v/v	A		45.0 ml/mx				
3	DIFLEXX	4 LBAE/GAL		SC	12.0 fl oz/a	A		11.25 ml/mx	103	406	504	702
	ACTIVATOR 90 NIS	100 %		SL	0.25 % v/v	A		4.5 ml/mx				
	N-PAK AMS	3.4 LBA/GAL	L		2.5 % v/v	A		45.0 ml/mx				
4	ARMEZON	2.8 LB/GAL		SC	0.75 fl oz/a	A		0.7031 ml/mx	104	302	503	806
	STATUS	56 %		WG	5.0 oz/a	A		4.493 g/mx				
	ACTIVATOR 90 NIS	100 %		SL	0.25 % v/v	A		4.5 ml/mx				
	N-PAK AMS	3.4 LBA/GAL	L		2.5 % v/v	A		45.0 ml/mx				
5	DIFLEXX DUO	1.53 LBAE/GAL		SC	32.0 fl oz/a	A		30.0 ml/mx	105	305	602	804
	ACTIVATOR 90 NIS	100 %		SL	0.25 % v/v	A		4.5 ml/mx				
	N-PAK AMS	3.4 LBA/GAL	L		2.5 % v/v	A		45.0 ml/mx				
6	ZIDUA SC	4.17 LB/GAL		SC	3.3 fl oz/a	A		3.094 ml/mx	106	401	601	802
	STATUS	56 %		WG	5.0 oz/a	A		4.493 g/mx				
	ACTIVATOR 90 NIS	100 %		SL	0.25 % v/v	A		4.5 ml/mx				
	N-PAK AMS	3.4 LBA/GAL	L		2.5 % v/v	A		45.0 ml/mx				
7	ZIDUA SC	4.17 LB/GAL		SC	2.13 fl oz/a	A		1.997 ml/mx	201	402	605	801
	ENGENIA	5 LB/GAL		SL	12.8 fl oz/a	A		12.0 ml/mx				
	ACTIVATOR 90 NIS	100 %		SL	0.25 % v/v	A		4.5 ml/mx				
	CLASS ACT RIDION	100 %		L	1 % v/v	A		18.0 ml/mx				
8	STATUS	56 %		WG	5.0 oz/a	B		4.493 g/mx	202	306	606	803
	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				
9	DIFLEXX	4 LBAE/GAL		SC	12.0 fl oz/a	B		11.25 ml/mx	203	404	505	701
	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				
10	ARMEZON	2.8 LB/GAL		SC	0.75 fl oz/a	B		0.7031 ml/mx	204	303	603	705
	STATUS	56 %		WG	5.0 oz/a	B		4.493 g/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				
11	DIFLEXX DUO	1.53 LBAE/GAL		SC	32.0 fl oz/a	B		30.0 ml/mx	205	405	501	704
	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				
12	UNTREATED CHECK 2								206	301	502	703

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
28.084	g	STATUS	56	%	WG	
56.244	ml	ACTIVATOR 90 NIS	100	%	SL	
506.195	ml	N-PAK AMS	3.4	LBA/GAL	L	
28.125	ml	DIFLEXX	4	LBAE/GAL	SC	
1.758	ml	ARMEZON	2.8	LB/GAL	SC	
75.000	ml	DIFLEXX DUO	1.53	LBAE/GAL	SC	
6.363	ml	ZIDUA SC	4.17	LB/GAL	SC	
15.000	ml	ENGENIA	5	LB/GAL	SL	
22.498	ml	CLASS ACT RIDION	100	%	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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Trial Comments

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Pest Type	W Weed	W Weed	W Weed	W Weed	W Weed
Pest Code	AMBTR	CHEAL		AMBTR	CHEAL
Pest Name	Giant ragweed	common lambsqu>		Giant ragweed	common lambsqu>
Crop Code	ZEAMX	ZEAMX	ZEAMX	ZEAMX	ZEAMX
Crop Name	Corn	Corn	Corn	Corn	Corn
Part Rated	PLOT -	PLOT -	PLOT -	PLOT -	PLOT -
Rating Date	May-29-2017	May-29-2017	May-29-2017	Jun-7-2017	Jun-7-2017
Rating Type	CONTROL	CONTROL	PHYGEN	CONTROL	CONTROL
Rating Unit	%	%	%	%	%
Number of Subsamples	1	1	1	1	1
Assessed By	D. JOHNSON	D. JOHNSON	D. JOHNSON	M. ZIMMER	M. ZIMMER
Rating Timing	A1	A1	A1	A2	A2
Days After First/Last Applic.	7 7	7 7	7 7	16 7	16 7
Days After Emergence	14 DE-1	14 DE-1	14 DE-1	23 DE-1	23 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
1 UNTREATED CHECK			0 c	0 b	0 b
2 STATUS	5.0 oz/a A		83 ab	100 a	11 a
ACTIVATOR 90 NIS	0.25 % v/v A				
N-PAK AMS	2.5 % v/v A				
3 DIFLEXX	12.0 fl oz/a A		81 b	100 a	10 ab
ACTIVATOR 90 NIS	0.25 % v/v A				
N-PAK AMS	2.5 % v/v A				
4 ARMEZON	0.75 fl oz/a A		85 a	100 a	10 ab
STATUS	5.0 oz/a A				
ACTIVATOR 90 NIS	0.25 % v/v A				
N-PAK AMS	2.5 % v/v A				
5 DIFLEXX DUO	32.0 fl oz/a A		85 a	100 a	10 ab
ACTIVATOR 90 NIS	0.25 % v/v A				
N-PAK AMS	2.5 % v/v A				
6 ZIDUA SC	3.3 fl oz/a A		80 b	100 a	10 ab
STATUS	5.0 oz/a A				
ACTIVATOR 90 NIS	0.25 % v/v A				
N-PAK AMS	2.5 % v/v A				
7 ZIDUA SC	2.13 fl oz/a A		81 b	100 a	13 a
ENGENIA	12.8 fl oz/a A				
ACTIVATOR 90 NIS	0.25 % v/v A				
CLASS ACT RIDION	1 % v/v A				
8 STATUS	5.0 oz/a B				70 e
ACTIVATOR 90 NIS	0.25 % v/v B				
N-PAK AMS	2.5 % v/v B				
9 DIFLEXX	12.0 fl oz/a B				70 e
ACTIVATOR 90 NIS	0.25 % v/v B				
N-PAK AMS	2.5 % v/v B				
10 ARMEZON	0.75 fl oz/a B				74 e
STATUS	5.0 oz/a B				
ACTIVATOR 90 NIS	0.25 % v/v B				
N-PAK AMS	2.5 % v/v B				
11 DIFLEXX DUO	32.0 fl oz/a B				74 e
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=5, 16, 17, 18
 Could not calculate LSD (% mean diff) for columns: 2, 6, 11, 12, 15 because error mean square = 0.

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Pest Type	W Weed	W Weed		W Weed	W Weed
Pest Code	AMBTR	CHEAL		AMBTR	CHEAL
Pest Name	Giant ragweed	common lambsqu>		Giant ragweed	common lambsqu>
Crop Code	ZEAMX	ZEAMX	ZEAMX	ZEAMX	ZEAMX
Crop Name	Corn	Corn	Corn	Corn	Corn
Part Rated	PLOT -	PLOT -	PLOT -	PLOT -	PLOT -
Rating Date	May-29-2017	May-29-2017	May-29-2017	Jun-7-2017	Jun-7-2017
Rating Type	CONTROL	CONTROL	PHYGEN	CONTROL	CONTROL
Rating Unit	%	%	%	%	%
Number of Subsamples	1	1	1	1	1
Assessed By	D. JOHNSON	D. JOHNSON	D. JOHNSON	M. ZIMMER	M. ZIMMER
Rating Timing	A1	A1	A1	A2	A2
Days After First/Last Applic.	7 7	7 7	7 7	16 7	16 7
Days After Emergence	14 DE-1	14 DE-1	14 DE-1	23 DE-1	23 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
12 UNTREATED CHECK 2	0 c	0 b	0 b	0 f	0 c
LSD P=.05	2.4	.	6.8	4.2	5.7
Standard Deviation	1.6	0.0	4.6	2.9	4.0
CV	2.65	0.0	58.34	4.28	4.89
Bartlett's X2	0.083	0.0	3.308	6.017	0.957
P(Bartlett's X2)	0.959	.	0.508	0.538	0.812
Skewness	-1.199*	-1.2123*	0.0955	-1.5197*	-1.752*
Kurtosis	-0.5816	-0.5701	-0.9096	0.8588	1.2131
Replicate F	0.778	0.000	0.614	5.230	2.396
Replicate Prob(F)	0.5195	1.0000	0.6132	0.0046	0.0864
Treatment F	2182.667	0.000	4.621	513.467	367.536
Treatment Prob(F)	0.0001	1.0000	0.0029	0.0001	0.0001

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Pest Type		W Weed	W Weed	W Weed				
Pest Code		AMBTR	CHEAL	AMBTR				
Pest Name		Giant ragweed	common lambsqu	Giant ragweed				
Crop Code	ZEAMX	ZEAMX	ZEAMX	ZEAMX				
Crop Name	Corn	Corn	Corn	Corn				
Part Rated	PLOT -	PLOT -	PLOT -	PLOT -				
Rating Date	Jun-7-2017	Jun-12-2017	Jun-12-2017	Jun-21-2017				
Rating Type	PHYGEN	CONTROL	CONTROL	CONTROL				
Rating Unit	%	%	%	%				
Number of Subsamples Assessed By	1 M. ZIMMER	1 D. JOHNSON	1 D. JOHNSON	1 D. JOHNSON				
Rating Timing	A2	A3	A3	A3				
Days After First/Last Applic.	16 7	21 12	21 12	21 12				
Days After Emergence	23 DE-1	28 DE-1	28 DE-1	28 DE-1				
ARM Action Codes	P	P	P	P				
Number of Decimals	0	0	0	0				
Trt No.	Treatment Name	Rate	Appl Code	6	7	8	9	10
1	UNTREATED CHECK			0 a	0 e	0 b	0 a	0 e
2	STATUS ACTIVATOR 90 NIS N-PAK AMS	5.0 oz/a 0.25 % v/v 2.5 % v/v	A A A	0 a	84 bc	100 a	0 a	76 c
3	DIFLEXX ACTIVATOR 90 NIS N-PAK AMS	12.0 fl oz/a 0.25 % v/v 2.5 % v/v	A A A	0 a	88 ab	100 a	0 a	90 ab
4	ARMEZON STATUS ACTIVATOR 90 NIS N-PAK AMS	0.75 fl oz/a 5.0 oz/a 0.25 % v/v 2.5 % v/v	A A A A	0 a	76 d	100 a	0 a	58 d
5	DIFLEXX DUO ACTIVATOR 90 NIS N-PAK AMS	32.0 fl oz/a 0.25 % v/v 2.5 % v/v	A A A	0 a	89 ab	100 a	0 a	91 ab
6	ZIDUA SC STATUS ACTIVATOR 90 NIS N-PAK AMS	3.3 fl oz/a 5.0 oz/a 0.25 % v/v 2.5 % v/v	A A A A	0 a	83 bc	100 a	0 a	82 bc
7	ZIDUA SC ENGENIA ACTIVATOR 90 NIS CLASS ACT RIDION	2.13 fl oz/a 12.8 fl oz/a 0.25 % v/v 1 % v/v	A A A A	0 a	93 a	100 a	0 a	94 ab
8	STATUS ACTIVATOR 90 NIS N-PAK AMS	5.0 oz/a 0.25 % v/v 2.5 % v/v	B B B	0 a	71 d	94 a	3 a	91 ab
9	DIFLEXX ACTIVATOR 90 NIS N-PAK AMS	12.0 fl oz/a 0.25 % v/v 2.5 % v/v	B B B	0 a	73 d	94 a	0 a	97 ab
10	ARMEZON STATUS ACTIVATOR 90 NIS N-PAK AMS	0.75 fl oz/a 5.0 oz/a 0.25 % v/v 2.5 % v/v	B B B B	0 a	81 c	98 a	0 a	98 a
11	DIFLEXX DUO ACTIVATOR 90 NIS N-PAK AMS	32.0 fl oz/a 0.25 % v/v 2.5 % v/v	B B B	0 a	84 bc	99 a	0 a	99 a

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Pest Type	W Weed		W Weed		W Weed
Pest Code	AMBTR		CHEAL		AMBTR
Pest Name	Giant ragweed		common lambsqu		Giant ragweed
Crop Code	ZEAMX	ZEAMX	ZEAMX	ZEAMX	ZEAMX
Crop Name	Corn		Corn		Corn
Part Rated	PLOT -		PLOT -		PLOT -
Rating Date	Jun-7-2017	Jun-12-2017	Jun-12-2017	Jun-12-2017	Jun-21-2017
Rating Type	PHYGEN	CONTROL	CONTROL	PHYGEN	CONTROL
Rating Unit	%		%		%
Number of Subsamples Assessed By	1 M. ZIMMER	1 D. JOHNSON	1 D. JOHNSON	1 D. JOHNSON	1 M. ZIMMER
Rating Timing	A2	A3	A3	A3	A4
Days After First/Last Applic.	16 7	21 12	21 12	21 12	30 21
Days After Emergence	23 DE-1	28 DE-1	28 DE-1	28 DE-1	37 DE-1
ARM Action Codes	P		P		P
Number of Decimals	0		0		0
Trt Treatment	Rate	Appl			
No. Name	Rate Unit	Code	6	7	8
12 UNTREATED CHECK 2			0 a	0 e	0 b
LSD P=.05			4.2	4.9	2.1
Standard Deviation	0.0		2.9	3.4	1.4
CV	0.0		4.3	4.14	692.82
Bartlett's X2	0.0		5.451	3.526	0.0
P(Bartlett's X2)	.		0.793	0.317	.
Skewness	.		-1.6537*	-1.8073*	6.9282*
Kurtosis	.		1.0958	1.3851*	48.0*
Replicate F	0.000		6.053	1.494	1.000
Replicate Prob(F)	1.0000		0.0021	0.2343	0.4051
Treatment F	0.000		492.113	511.650	1.000
Treatment Prob(F)	1.0000		0.0001	0.0001	0.4671

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Project ID: H17C43S	Study Director: Dustin Johnson
Sponsor Contact: G. Welker - BASF	

Pest Type Pest Code Pest Name	W Weed CHEAL common lambsqu>	W Weed AMBTR Giant ragweed	W Weed AMBTR Giant ragweed	W Weed AMBTR Giant ragweed	W Weed AMBTR Giant ragweed	W Weed AMBTR 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-21-2017	Jun-21-2017	Jul-3-2017	Jul-3-2017	Jul-3-2017	Oct-21-2017
Rating Type	CONTROL	PHYGEN	CONTROL	CONTROL	PHYLMA-ROOT	YIELD
Rating Unit	%	%	%	%	%	LB
Number of Subsamples Assessed By	1 M. ZIMMER	1 M. ZIMMER	1 D. JOHNSON	1 D. JOHNSON	1 D. JOHNSON	1 T. CAMPBELL
Rating Timing	A4	A4	A5	A6	A6	
Days After First/Last Applic.	30 21	30 21	42 33	42 33	42 33	152 143
Days After Emergence	37 DE-1	37 DE-1	49 DE-1	49 DE-1	49 DE-1	159 DE-1
ARM Action Codes	P	P	P	P	P	P
Number of Decimals	0	0	0	0	0	1
Trt No.	11	12	13	14	15	16
Treatment Name						
Rate						
Unit						
Appl Code						
1 UNTREATED CHECK	0 b	0 a	0 d	0 d	0 a	3.8 e
2 STATUS	100 a	0 a	54 b	24 bc	0 a	21.2 bc
ACTIVATOR 90 NIS	5.0 oz/a A					
N-PAK AMS	0.25 % v/v A					
	2.5 % v/v A					
3 DIFLEXX	100 a	0 a	76 a	54 a	0 a	27.4 ab
ACTIVATOR 90 NIS	12.0 fl oz/a A					
N-PAK AMS	0.25 % v/v A					
	2.5 % v/v A					
4 ARMEZON	100 a	0 a	23 c	10 cd	0 a	15.3 cd
STATUS	0.75 fl oz/a A					
ACTIVATOR 90 NIS	5.0 oz/a A					
N-PAK AMS	0.25 % v/v A					
	2.5 % v/v A					
5 DIFLEXX DUO	100 a	0 a	77 a	60 a	0 a	31.2 a
ACTIVATOR 90 NIS	32.0 fl oz/a A					
N-PAK AMS	0.25 % v/v A					
	2.5 % v/v A					
6 ZIDUA SC	100 a	0 a	56 b	38 b	0 a	13.4 d
STATUS	3.3 fl oz/a A					
ACTIVATOR 90 NIS	5.0 oz/a A					
N-PAK AMS	0.25 % v/v A					
	2.5 % v/v A					
7 ZIDUA SC	100 a	0 a	81 a	64 a	0 a	25.3 ab
ENGENIA	2.13 fl oz/a A					
ACTIVATOR 90 NIS	12.8 fl oz/a A					
CLASS ACT RIDION	0.25 % v/v A					
	1 % v/v A					
8 STATUS	100 a	0 a	83 a	70 a	0 a	25.9 ab
ACTIVATOR 90 NIS	5.0 oz/a B					
N-PAK AMS	0.25 % v/v B					
	2.5 % v/v B					
9 DIFLEXX	100 a	0 a	88 a	75 a	0 a	28.9 ab
ACTIVATOR 90 NIS	12.0 fl oz/a B					
N-PAK AMS	0.25 % v/v B					
	2.5 % v/v B					
10 ARMEZON	100 a	0 a	87 a	70 a	0 a	31.9 a
STATUS	0.75 fl oz/a B					
ACTIVATOR 90 NIS	5.0 oz/a B					
N-PAK AMS	0.25 % v/v B					
	2.5 % v/v B					
11 DIFLEXX DUO	100 a	0 a	88 a	74 a	0 a	34.5 a
ACTIVATOR 90 NIS	32.0 fl oz/a B					
N-PAK AMS	0.25 % v/v B					
	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=5, 16, 17, 18
 Could not calculate LSD (% mean diff) for columns 2,6,11,12,15 because error mean square = 0.

Purdue Weed Science

Status Diflexx Efficacy						
Trial ID: 17S-TPAC-CORN-12		Location: TPAC		Trial Year: 2017		
Protocol ID: 17S-TPAC-CORN-12		Investigator: Dr. Bill Johnson		Study Director: Dustin Johnson		
Project ID: H17C43S		Sponsor Contact: G. Welker - BASF				
Pest Type	W Weed	W Weed	W Weed	W Weed		
Pest Code	CHEAL	AMBTR	AMBTR	AMBTR		
Pest Name	common lambsqu>	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-21-2017	Jun-21-2017	Jul-3-2017	Jul-3-2017	Jul-3-2017	Oct-21-2017
Rating Type	CONTROL	PHYGEN	CONTROL	CONTROL	PHYLMA-ROOT	YIELD
Rating Unit	%	%	%	%	%	LB
Number of Subsamples	1	1	1	1	1	1
Assessed By	M. ZIMMER	M. ZIMMER	D. JOHNSON	D. JOHNSON	D. JOHNSON	T. CAMPBELL
Rating Timing	A4	A4	A5	A6	A6	
Days After First/Last Applic.	30 21	30 21	42 33	42 33	42 33	152 143
Days After Emergence	37 DE-1	37 DE-1	49 DE-1	49 DE-1	49 DE-1	159 DE-1
ARM Action Codes	P	P	P	P	P	P
Number of Decimals	0	0	0	0	0	1
Trt Treatment	Rate	Appl				
No. Name	Rate Unit	Code	11	12	13	14
12 UNTREATED CHECK 2			0 b	0 a	0 d	0 d
LSD P=.05					13.2	14.1
Standard Deviation	0.0	0.0			9.2	9.8
CV	0.0	0.0			15.5	21.96
Bartlett's X2	0.0	0.0			26.64	23.121
P(Bartlett's X2)	.	.			0.001*	0.003*
Skewness	-1.8471*	.			-0.9158*	-0.4536
Kurtosis	1.4713*	.			-0.7877	-1.3732*
Replicate F	0.000	0.000			2.321	1.949
Replicate Prob(F)	1.0000	1.0000			0.0933	0.1409
Treatment F	0.000	0.000			53.435	35.332
Treatment Prob(F)	1.0000	1.0000			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.
 Missing data estimates are included in columns: Yates=5, 16, 17, 18
 Could not calculate LSD (% mean diff) for columns 2,6,11,12,15 because error mean square = 0.

Purdue Weed Science

Status Diflexx Efficacy

Trial ID: 17S-TPAC-CORN-12	Location: TPAC	Trial Year: 2017
Protocol ID: 17S-TPAC-CORN-12	Investigator: Dr. Bill Johnson	
Project ID: H17C43S	Study Director: Dustin Johnson	
	Sponsor Contact: G. Welker - BASF	

Pest Type			
Pest Code			
Pest Name			
Crop Code	ZEAMX	ZEAMX	
Crop Name	Corn	Corn	
Part Rated	PLOT -	PLOT -	
Rating Date	Oct-21-2017	Oct-21-2017	
Rating Type	MOICON	YIELD	
Rating Unit	%	bu/ac	
Number of Subsamples	1	1	
Assessed By	T. CAMPBELL	T. CAMPBELL	
Rating Timing			
Days After First/Last Applic.	152 143	152 143	
Days After Emergence	159 DE-1	159 DE-1	
ARM Action Codes		TY2	
Number of Decimals	1	1	
Trt Treatment	Rate	Appl	
No. Name	Rate Unit	Code	
			17
			18
1 UNTREATED CHECK			16.2 a
2 STATUS	5.0 oz/a A		16.0 a
ACTIVATOR 90 NIS	0.25 % v/v A		
N-PAK AMS	2.5 % v/v A		130.7 bc
3 DIFLEXX	12.0 fl oz/a A		14.6 a
ACTIVATOR 90 NIS	0.25 % v/v A		
N-PAK AMS	2.5 % v/v A		172.3 ab
4 ARMEZON	0.75 fl oz/a A		15.7 a
STATUS	5.0 oz/a A		
ACTIVATOR 90 NIS	0.25 % v/v A		
N-PAK AMS	2.5 % v/v A		95.1 cd
5 DIFLEXX DUO	32.0 fl oz/a A		16.0 a
ACTIVATOR 90 NIS	0.25 % v/v A		
N-PAK AMS	2.5 % v/v A		192.8 a
6 ZIDUA SC	3.3 fl oz/a A		15.0 a
STATUS	5.0 oz/a A		
ACTIVATOR 90 NIS	0.25 % v/v A		
N-PAK AMS	2.5 % v/v A		84.1 d
7 ZIDUA SC	2.13 fl oz/a A		15.7 a
ENGENIA	12.8 fl oz/a A		
ACTIVATOR 90 NIS	0.25 % v/v A		
CLASS ACT RIDION	1 % v/v A		156.9 ab
8 STATUS	5.0 oz/a B		16.5 a
ACTIVATOR 90 NIS	0.25 % v/v B		
N-PAK AMS	2.5 % v/v B		159.1 ab
9 DIFLEXX	12.0 fl oz/a B		15.8 a
ACTIVATOR 90 NIS	0.25 % v/v B		
N-PAK AMS	2.5 % v/v B		179.0 ab
10 ARMEZON	0.75 fl oz/a B		16.1 a
STATUS	5.0 oz/a B		
ACTIVATOR 90 NIS	0.25 % v/v B		
N-PAK AMS	2.5 % v/v B		196.9 a
11 DIFLEXX DUO	32.0 fl oz/a B		16.0 a
ACTIVATOR 90 NIS	0.25 % v/v B		
N-PAK AMS	2.5 % v/v B		213.2 a

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=5, 16, 17, 18
Could not calculate LSD (% mean diff) for columns: 2, 6, 11, 12, 15 because error mean square = 0.

Purdue Weed Science

Status Diflexx Efficacy

Trial ID: 17S-TPAC-CORN-12	Location: TPAC	Trial Year: 2017
Protocol ID: 17S-TPAC-CORN-12	Investigator: Dr. Bill Johnson	
Project ID: H17C43S	Study Director: Dustin Johnson	
	Sponsor Contact: G. Welker - BASF	

Pest Type		
Pest Code		
Pest Name		
Crop Code	ZEAMX	ZEAMX
Crop Name	Corn	Corn
Part Rated	PLOT -	PLOT -
Rating Date	Oct-21-2017	Oct-21-2017
Rating Type	MOICON	YIELD
Rating Unit	%	bu/ac
Number of Subsamples	1	1
Assessed By	T. CAMPBELL	T. CAMPBELL
Rating Timing		
Days After First/Last Applic.	152 143	152 143
Days After Emergence	159 DE-1	159 DE-1
ARM Action Codes		TY2
Number of Decimals	1	1
Trt Treatment	Rate	Appl
No. Name	Rate Unit	Code
	17	18
12 UNTREATED CHECK 2	15.1 a	30.0 e
LSD P=.05	1.62	36.73
Standard Deviation	1.12	25.36
CV	7.13	18.63
Bartlett's X2	10.571	17.102
P(Bartlett's X2)	0.48	0.105
Skewness	-0.2396	-0.4837
Kurtosis	0.8158	-1.1498
Replicate F	2.901	3.862
Replicate Prob(F)	0.0524	0.0198
Treatment F	0.910	25.650
Treatment Prob(F)	0.5434	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.
 Missing data estimates are included in columns: Yates=5, 16, 17, 18
 Could not calculate LSD (% mean diff) for columns 2,6,11,12,15 because error mean square = 0.

Purdue Weed Science

Status Diflexx Efficacy

Trial ID: 17S-TPAC-CORN-12	Location: TPAC	Trial Year: 2017
Protocol ID: 17S-TPAC-CORN-12	Investigator: Dr. Bill Johnson	
Project ID: H17C43S	Study Director: Dustin Johnson	
	Sponsor Contact: G. Welker - BASF	

Pest Type

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

Pest Code

AMBTR, Ambrosia trifida, Giant ragweed = US

CHEAL, Chenopodium album, common lambsquarters = 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/ac = bushels per 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

ARM Action Codes

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

TY2 = $6.222857 * [C16] * (100 - @MVAVGREP([C17])) / 84.5$

Purdue Weed Science

Status Diflexx Efficacy

Trial ID: 17S-TPAC-CORN-12 Location: TPAC Trial Year: 2017
 Protocol ID: 17S-TPAC-CORN-12 Investigator: Dr. Bill Johnson
 Project ID: H17C43S Study Director: Dustin Johnson
 Sponsor Contact: G. Welker - BASF

			W Weed	W Weed		W Weed	W Weed
			AMBTR	CHEAL		AMBTR	CHEAL
			Giant ragweed	common lambsqu>		Giant ragweed	common lambsqu>
			ZEAMX	ZEAMX	ZEAMX	ZEAMX	ZEAMX
			Corn	Corn	Corn	Corn	Corn
			PLOT -	PLOT -	PLOT -	PLOT -	PLOT -
			May-29-2017	May-29-2017	May-29-2017	Jun-7-2017	Jun-7-2017
			CONTROL	CONTROL	PHYGEN	CONTROL	CONTROL
			%	%	%	%	%
			1	1	1	1	1
			D. JOHNSON	D. JOHNSON	D. JOHNSON	M. ZIMMER	M. ZIMMER
			A1	A1	A1	A2	A2
			7 7	7 7	7 7	16 7	16 7
			14 DE-1	14 DE-1	14 DE-1	23 DE-1	23 DE-1
			P	P	P	P	P
			0	0	0	0	0
Trt Treatment	Rate	Appl					
No. Name	Rate Unit	Code Plot	1	2	3	4	5
1 UNTREATED CHECK		101	0	0	0	0	0
		403	0	0	0	0	0
		506	0	0	0	0	0
		805	0	0	0	0	0
		Mean =	0	0	0	0	0
2 STATUS	5.0 oz/a A	102	80	100	10	80	100
ACTIVATOR 90 NIS	0.25 % v/v A	304	80	100	5	90	100
N-PAK AMS	2.5 % v/v A	604	85	100	20	90	100
		706	85	100	10	88	100
		Mean =	83	100	11	87	100
3 DIFLEXX	12.0 fl oz/a A	103	80	100	10	85	100
ACTIVATOR 90 NIS	0.25 % v/v A	406	80	100	10	93	100
N-PAK AMS	2.5 % v/v A	504	80	100	10	85	100
		702	85	100	10	97	100
		Mean =	81	100	10	90	100
4 ARMEZON	0.75 fl oz/a A	104	85	100	15	80	100
STATUS	5.0 oz/a A	302	85	100	5	85	100
ACTIVATOR 90 NIS	0.25 % v/v A	503	85	100	5	80	100
N-PAK AMS	2.5 % v/v A	806	85	100	15	85	100
		Mean =	85	100	10	83	100
5 DIFLEXX DUO	32.0 fl oz/a A	105	85	100	5	90	100
ACTIVATOR 90 NIS	0.25 % v/v A	305	85	100	10	95	100
N-PAK AMS	2.5 % v/v A	602	85	100	15	95	100
		804	85	100	10	93	100
		Mean =	85	100	10	93	100
6 ZIDUA SC	3.3 fl oz/a A	106	80	100	0	85	100
STATUS	5.0 oz/a A	401	80	100	20	95	100
ACTIVATOR 90 NIS	0.25 % v/v A	601	80	100	10	95	100
N-PAK AMS	2.5 % v/v A	802	80	100	10	85	100
		Mean =	80	100	10	90	100
7 ZIDUA SC	2.13 fl oz/a A	201	80	100	10	93	100
ENGENIA	12.8 fl oz/a A	402	85	100	15	98	100
ACTIVATOR 90 NIS	0.25 % v/v A	605	80	100	15	98	100
CLASS ACT RIDION	1 % v/v A	801	80	100	10	95	100
		Mean =	81	100	13	96	100
8 STATUS	5.0 oz/a B	202				70	85
ACTIVATOR 90 NIS	0.25 % v/v B	306				70	85
N-PAK AMS	2.5 % v/v B	606				70	100
		803				70	92*
		Mean =	.	.	.	70	90
9 DIFLEXX	12.0 fl oz/a B	203				70	85
ACTIVATOR 90 NIS	0.25 % v/v B	404				70	100
N-PAK AMS	2.5 % v/v B	505				70	85
		701				70	100
		Mean =	.	.	.	70	93
10 ARMEZON	0.75 fl oz/a B	204				70	85
STATUS	5.0 oz/a B	303				75	100
ACTIVATOR 90 NIS	0.25 % v/v B	603				80	100
N-PAK AMS	2.5 % v/v B	705				70	100
		Mean =	.	.	.	74	96

Purdue Weed Science

Status Diflexx Efficacy

Trial ID: 17S-TPAC-CORN-12 Location: TPAC Trial Year: 2017
 Protocol ID: 17S-TPAC-CORN-12 Investigator: Dr. Bill Johnson
 Project ID: H17C43S Study Director: Dustin Johnson
 Sponsor Contact: G. Welker - BASF

Pest Type	W Weed	W Weed	W Weed	W Weed
Pest Code	AMBTR	CHEAL		AMBTR
Pest Name	Giant ragweed	common lambsqu>		Giant ragweed
Crop Code	ZEAMX	ZEAMX	ZEAMX	ZEAMX
Crop Name	Corn	Corn	Corn	Corn
Part Rated	PLOT -	PLOT -	PLOT -	PLOT -
Rating Date	May-29-2017	May-29-2017	May-29-2017	Jun-7-2017
Rating Type	CONTROL	CONTROL	PHYGEN	CONTROL
Rating Unit	%	%	%	%
Number of Subsamples	1	1	1	1
Assessed By	D. JOHNSON	D. JOHNSON	D. JOHNSON	M. ZIMMER
Rating Timing	A1	A1	A1	A2
Days After First/Last Applic.	7 7	7 7	7 7	16 7
Days After Emergence	14 DE-1	14 DE-1	14 DE-1	23 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	1	2
11 DIFLEXX DUO	32.0 fl oz/a B	205		
ACTIVATOR 90 NIS	0.25 % v/v B	405		
N-PAK AMS	2.5 % v/v B	501		
		704		
	Mean =	.	.	.
12 UNTREATED CHECK 2		206	0	0
		301	0	0
		502	0	0
		703	0	0
	Mean =	0	0	0

Purdue Weed Science

Status Diflexx Efficacy

Trial ID: 17S-TPAC-CORN-12 Location: TPAC Trial Year: 2017
 Protocol ID: 17S-TPAC-CORN-12 Investigator: Dr. Bill Johnson
 Project ID: H17C43S Study Director: Dustin Johnson
 Sponsor Contact: G. Welker - BASF

Pest Type		W Weed	W Weed	W Weed
Pest Code		AMBTR	CHEAL	AMBTR
Pest Name		Giant ragweed	common lambsqu>	Giant ragweed
Crop Code	ZEAMX	ZEAMX	ZEAMX	ZEAMX
Crop Name	Corn	Corn	Corn	Corn
Part Rated	PLOT -	PLOT -	PLOT -	PLOT -
Rating Date	Jun-7-2017	Jun-12-2017	Jun-12-2017	Jun-12-2017
Rating Type	PHYGEN	CONTROL	CONTROL	PHYGEN
Rating Unit	%	%	%	%
Number of Subsamples	1	1	1	1
Assessed By	M. ZIMMER	D. JOHNSON	D. JOHNSON	D. JOHNSON
Rating Timing	A2	A3	A3	A3
Days After First/Last Applic.	16 7	21 12	21 12	21 12
Days After Emergence	23 DE-1	28 DE-1	28 DE-1	28 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	6	7
1 UNTREATED CHECK		101	0	0
		403	0	0
		506	0	0
		805	0	0
		Mean =	0	0
2 STATUS	5.0 oz/a A	102	0	75
ACTIVATOR 90 NIS	0.25 % v/v A	304	0	88
N-PAK AMS	2.5 % v/v A	604	0	88
		706	0	85
		Mean =	0	84
3 DIFLEXX	12.0 fl oz/a A	103	0	85
ACTIVATOR 90 NIS	0.25 % v/v A	406	0	90
N-PAK AMS	2.5 % v/v A	504	0	85
		702	0	92
		Mean =	0	88
4 ARMEZON	0.75 fl oz/a A	104	0	75
STATUS	5.0 oz/a A	302	0	80
ACTIVATOR 90 NIS	0.25 % v/v A	503	0	70
N-PAK AMS	2.5 % v/v A	806	0	80
		Mean =	0	76
5 DIFLEXX DUO	32.0 fl oz/a A	105	0	85
ACTIVATOR 90 NIS	0.25 % v/v A	305	0	90
N-PAK AMS	2.5 % v/v A	602	0	92
		804	0	90
		Mean =	0	89
6 ZIDUA SC	3.3 fl oz/a A	106	0	80
STATUS	5.0 oz/a A	401	0	88
ACTIVATOR 90 NIS	0.25 % v/v A	601	0	85
N-PAK AMS	2.5 % v/v A	802	0	80
		Mean =	0	83
7 ZIDUA SC	2.13 fl oz/a A	201	0	90
ENGENIA	12.8 fl oz/a A	402	0	95
ACTIVATOR 90 NIS	0.25 % v/v A	605	0	92
CLASS ACT RIDION	1 % v/v A	801	0	95
		Mean =	0	93
8 STATUS	5.0 oz/a B	202	0	70
ACTIVATOR 90 NIS	0.25 % v/v B	306	0	75
N-PAK AMS	2.5 % v/v B	606	0	70
		803	0	70
		Mean =	0	71
9 DIFLEXX	12.0 fl oz/a B	203	0	75
ACTIVATOR 90 NIS	0.25 % v/v B	404	0	75
N-PAK AMS	2.5 % v/v B	505	0	70
		701	0	70
		Mean =	0	73
10 ARMEZON	0.75 fl oz/a B	204	0	75
STATUS	5.0 oz/a B	303	0	85
ACTIVATOR 90 NIS	0.25 % v/v B	603	0	85
N-PAK AMS	2.5 % v/v B	705	0	80
		Mean =	0	81

Purdue Weed Science

Status Diflexx Efficacy

Trial ID: 17S-TPAC-CORN-12 Location: TPAC Trial Year: 2017
 Protocol ID: 17S-TPAC-CORN-12 Investigator: Dr. Bill Johnson
 Project ID: H17C43S Study Director: Dustin Johnson
 Sponsor Contact: G. Welker - BASF

Pest Type		W Weed	W Weed	W Weed	W Weed
Pest Code		AMBTR	CHEAL		AMBTR
Pest Name		Giant ragweed	common lambsqu>		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	Jun-7-2017	Jun-12-2017	Jun-12-2017	Jun-12-2017	Jun-21-2017
Rating Type	PHYGEN	CONTROL	CONTROL	PHYGEN	CONTROL
Rating Unit	%	%	%	%	%
Number of Subsamples	1	1	1	1	1
Assessed By	M. ZIMMER	D. JOHNSON	D. JOHNSON	D. JOHNSON	M. ZIMMER
Rating Timing	A2	A3	A3	A3	A4
Days After First/Last Applic.	16 7	21 12	21 12	21 12	30 21
Days After Emergence	23 DE-1	28 DE-1	28 DE-1	28 DE-1	37 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	6	7	8	9
11 DIFLEXX DUO	32.0 fl oz/a B 205	0	80	95	0
ACTIVATOR 90 NIS	0.25 % v/v B 405	0	85	100	0
N-PAK AMS	2.5 % v/v B 501	0	85	100	0
	704	0	85	100	0
	Mean =	0	84	99	0
12 UNTREATED CHECK 2	206	0	0	0	0
	301	0	0	0	0
	502	0	0	0	0
	703	0	0	0	0
	Mean =	0	0	0	0

Purdue Weed Science

Status Diflexx Efficacy	
Trial ID: 17S-TPAC-CORN-12	Location: TPAC Trial Year: 2017
Protocol ID: 17S-TPAC-CORN-12	Investigator: Dr. Bill Johnson
Project ID: H17C43S	Study Director: Dustin Johnson
Sponsor Contact: G. Welker - BASF	

Pest Type	W Weed	W Weed	W Weed	W Weed	W Weed
Pest Code	CHEAL		AMBTR	AMBTR	
Pest Name	common lambsqu>		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	Jun-21-2017	Jun-21-2017	Jul-3-2017	Jul-3-2017	Jul-3-2017
Rating Type	CONTROL	PHYGEN	CONTROL	CONTROL	PHYLMA-ROOT
Rating Unit	%	%	%	%	%
Number of Subsamples	1	1	1	1	1
Assessed By	M. ZIMMER	M. ZIMMER	D. JOHNSON	D. JOHNSON	D. JOHNSON
Rating Timing	A4	A4	A5	A6	A6
Days After First/Last Applic.	30 21	30 21	42 33	42 33	42 33
Days After Emergence	37 DE-1	37 DE-1	49 DE-1	49 DE-1	49 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	11	12	13
1 UNTREATED CHECK		101	0	0	0
		403	0	0	0
		506	0	0	0
		805	0	0	0
		Mean =	0	0	0
2 STATUS	5.0 oz/a A	102	100	0	25
ACTIVATOR 90 NIS	0.25 % v/v A	304	100	0	70
N-PAK AMS	2.5 % v/v A	604	100	0	55
		706	100	0	65
		Mean =	100	0	54
3 DIFLEXX	12.0 fl oz/a A	103	100	0	65
ACTIVATOR 90 NIS	0.25 % v/v A	406	100	0	80
N-PAK AMS	2.5 % v/v A	504	100	0	70
		702	100	0	88
		Mean =	100	0	76
4 ARMEZON	0.75 fl oz/a A	104	100	0	35
STATUS	5.0 oz/a A	302	100	0	30
ACTIVATOR 90 NIS	0.25 % v/v A	503	100	0	0
N-PAK AMS	2.5 % v/v A	806	100	0	25
		Mean =	100	0	23
5 DIFLEXX DUO	32.0 fl oz/a A	105	100	0	70
ACTIVATOR 90 NIS	0.25 % v/v A	305	100	0	85
N-PAK AMS	2.5 % v/v A	602	100	0	78
		804	100	0	75
		Mean =	100	0	77
6 ZIDUA SC	3.3 fl oz/a A	106	100	0	45
STATUS	5.0 oz/a A	401	100	0	70
ACTIVATOR 90 NIS	0.25 % v/v A	601	100	0	70
N-PAK AMS	2.5 % v/v A	802	100	0	40
		Mean =	100	0	56
7 ZIDUA SC	2.13 fl oz/a A	201	100	0	80
ENGENIA	12.8 fl oz/a A	402	100	0	88
ACTIVATOR 90 NIS	0.25 % v/v A	605	100	0	70
CLASS ACT RIDION	1 % v/v A	801	100	0	85
		Mean =	100	0	81
8 STATUS	5.0 oz/a B	202	100	0	80
ACTIVATOR 90 NIS	0.25 % v/v B	306	100	0	85
N-PAK AMS	2.5 % v/v B	606	100	0	82
		803	100	0	85
		Mean =	100	0	83
9 DIFLEXX	12.0 fl oz/a B	203	100	0	88
ACTIVATOR 90 NIS	0.25 % v/v B	404	100	0	88
N-PAK AMS	2.5 % v/v B	505	100	0	88
		701	100	0	88
		Mean =	100	0	88
10 ARMEZON	0.75 fl oz/a B	204	100	0	85
STATUS	5.0 oz/a B	303	100	0	88
ACTIVATOR 90 NIS	0.25 % v/v B	603	100	0	88
N-PAK AMS	2.5 % v/v B	705	100	0	85
		Mean =	100	0	87

Purdue Weed Science

Status Diflexx Efficacy

Trial ID: 17S-TPAC-CORN-12 Location: TPAC Trial Year: 2017
 Protocol ID: 17S-TPAC-CORN-12 Investigator: Dr. Bill Johnson
 Project ID: H17C43S Study Director: Dustin Johnson
 Sponsor Contact: G. Welker - BASF

Pest Type	W Weed		W Weed	W Weed	
Pest Code	CHEAL		AMBTR	AMBTR	
Pest Name	common lambsqu>		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	Jun-21-2017	Jun-21-2017	Jul-3-2017	Jul-3-2017	Jul-3-2017
Rating Type	CONTROL	PHYGEN	CONTROL	CONTROL	PHYLMA-ROOT
Rating Unit	%	%	%	%	%
Number of Subsamples	1	1	1	1	1
Assessed By	M. ZIMMER	M. ZIMMER	D. JOHNSON	D. JOHNSON	D. JOHNSON
Rating Timing	A4	A4	A5	A6	A6
Days After First/Last Applic.	30 21	30 21	42 33	42 33	42 33
Days After Emergence	37 DE-1	37 DE-1	49 DE-1	49 DE-1	49 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	11	12	13
11 DIFLEXX DUO	32.0 fl oz/a B	205	100	0	88
ACTIVATOR 90 NIS	0.25 % v/v B	405	100	0	90
N-PAK AMS	2.5 % v/v B	501	100	0	88
		704	100	0	85
		Mean =	100	0	88
12 UNTREATED CHECK 2		206	0	0	0
		301	0	0	0
		502	0	0	0
		703	0	0	0
		Mean =	0	0	0

Purdue Weed Science

Status Diflexx Efficacy

Trial ID: 17S-TPAC-CORN-12 Location: TPAC Trial Year: 2017
 Protocol ID: 17S-TPAC-CORN-12 Investigator: Dr. Bill Johnson
 Project ID: H17C43S Study Director: Dustin Johnson
 Sponsor Contact: G. Welker - BASF

Trt No.	Treatment Name	Rate	Appl Unit	Code	Plot	16	17	18
1	UNTREATED CHECK				101 403 506 805 Mean =	1.7 2.8 5.1 5.5 3.8	15.7 15.7 15.5 17.7 16.2	10.6 17.4 32.0 33.3 23.3
2	STATUS ACTIVATOR 90 NIS N-PAK AMS	5.0 oz/a 0.25 % v/v 2.5 % v/v	A		102 304 604 706 Mean =	17.4 26.6 14.3 26.4 21.2	14.1 17.9 15.8 16.3 16.0	109.9 161.0 88.8 163.1 130.7
3	DIFLEXX ACTIVATOR 90 NIS N-PAK AMS	12.0 fl oz/a 0.25 % v/v 2.5 % v/v	A		103 406 504 702 Mean =	27.4 23.7 26.9 31.6 27.4	13.8 14.7 15.7 14.3 14.6	174.1 148.8 166.6 199.5 172.3
4	ARMEZON STATUS ACTIVATOR 90 NIS N-PAK AMS	0.75 fl oz/a 5.0 oz/a 0.25 % v/v 2.5 % v/v	A		104 302 503 806 Mean =	25.4 19.1 9.8 6.9 15.3	14.8 16.5 15.5 16.0 15.7	159.4 117.7 60.7 42.4 95.1
5	DIFLEXX DUO ACTIVATOR 90 NIS N-PAK AMS	32.0 fl oz/a 0.25 % v/v 2.5 % v/v	A		105 305 602 804 Mean =	30.7 33.2 28.6* 32.3 31.2	14.2 16.3 15.8* 17.5 16.0	194.3 204.4 176.1* 196.2 192.8
6	ZIDUA SC STATUS ACTIVATOR 90 NIS N-PAK AMS	3.3 fl oz/a 5.0 oz/a 0.25 % v/v 2.5 % v/v	A		106 401 601 802 Mean =	15.2* 10.4 10.3 17.9 13.4	14.3* 14.1 15.6 16.1 15.0	96.2* 65.6 64.1 110.5 84.1
7	ZIDUA SC ENGENIA ACTIVATOR 90 NIS CLASS ACT RIDION	2.13 fl oz/a 12.8 fl oz/a 0.25 % v/v 1 % v/v	A		201 402 605 801 Mean =	28.5 21.1 21.3 30.2 25.3	14.9 15.2 16.0 16.5 15.7	178.7 131.5 131.8 185.5 156.9
8	STATUS ACTIVATOR 90 NIS N-PAK AMS	5.0 oz/a 0.25 % v/v 2.5 % v/v	B		202 306 606 803 Mean =	25.8 25.0 23.3* 29.6 25.9	15.4 15.9 16.3* 18.2 16.5	160.5 155.1 142.6* 178.3 159.1
9	DIFLEXX ACTIVATOR 90 NIS N-PAK AMS	12.0 fl oz/a 0.25 % v/v 2.5 % v/v	B		203 404 505 701 Mean =	35.1 22.4 28.1 29.8 28.9	16.2 15.5 16.7 14.7 15.8	216.9 139.4 172.4 187.3 179.0
10	ARMEZON STATUS ACTIVATOR 90 NIS N-PAK AMS	0.75 fl oz/a 5.0 oz/a 0.25 % v/v 2.5 % v/v	B		204 303 603 705 Mean =	33.4 29.7 29.3* 35.3 31.9	16.4 16.5 16.0* 15.6 16.1	205.9 182.2 180.4* 219.1 196.9

Purdue Weed Science

Status Diflexx Efficacy

Trial ID: 17S-TPAC-CORN-12	Location: TPAC	Trial Year: 2017
Protocol ID: 17S-TPAC-CORN-12	Investigator: Dr. Bill Johnson	
Project ID: H17C43S	Study Director: Dustin Johnson	
	Sponsor Contact: G. Welker - BASF	

Pest Type				
Pest Code				
Pest Name				
Crop Code	ZEAMX	ZEAMX	ZEAMX	
Crop Name	Corn	Corn	Corn	
Part Rated	PLOT -	PLOT -	PLOT -	
Rating Date	Oct-21-2017	Oct-21-2017	Oct-21-2017	
Rating Type	YIELD	MOICON	YIELD	
Rating Unit	LB	%	bu/ac	
Number of Subsamples	1	1	1	
Assessed By	T. CAMPBELL	T. CAMPBELL	T. CAMPBELL	
Rating Timing				
Days After First/Last Applic.	152 143	152 143	152 143	
Days After Emergence	159 DE-1	159 DE-1	159 DE-1	
ARM Action Codes			TY2	
Number of Decimals	1	1	1	
Trt Treatment	Rate	Appl		
No. Name	Rate Unit	Code Plot	16	17
11 DIFLEXX DUO	32.0 fl oz/a B	205	36.8	15.8
ACTIVATOR 90 NIS	0.25 % v/v B	405	31.5	16.6
N-PAK AMS	2.5 % v/v B	501	31.9*	15.9*
		704	37.8	15.8
		Mean =	34.5	16.0
12 UNTREATED CHECK 2		206	6.9	14.8
		301	4.1	15.8
		502	3.6	12.4
		703	4.7	17.5
		Mean =	4.8	15.1
				43.3
				25.1
				23.1
				28.4
				30.0

Purdue Weed Science

Status Diflexx Efficacy

Trial ID: 17S-TPAC-CORN-12	Location: TPAC	Trial Year: 2017
Protocol ID: 17S-TPAC-CORN-12	Investigator: Dr. Bill Johnson	
Project ID: H17C43S	Study Director: Dustin Johnson	
	Sponsor Contact: G. Welker - BASF	

Pest Type

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

Pest Code

AMBTR, Ambrosia trifida, Giant ragweed = US

CHEAL, Chenopodium album, common lambsquarters = 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/ac = bushels per 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

ARM Action Codes

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

TY2 = $6.222857 * [C16] * (100 - @MVAVGREP([C17])) / 84.5$