

Purdue University Weed Science

PRE AND PRE FB POST PROGRAMS IN CORN

Trial ID: 13S-SEP-CTC-04 Location: SEPAC Trial Year: 2013
 Protocol ID: 13S-SEP-CTC-04 Investigator: Dr. Bill Johnson
 Project ID: USHECOR028-2013 Study Director: JOE IKLEY
 Sponsor Contact: SYNGENTA - STEVE MROCZKIEWICZ

General Trial Information

Study Director: JOE IKLEY **Title:** RESEARCH ASSOCIATE
Investigator: DR. BILL JOHNSON **Title:** PROFESSOR

Discipline: H HERBICIDE
Trial Status: F one-year/final **Trial Reliability:** HIGH
Initiation Date: 5/30/2013 **Planned Completion Date:** 8/16/2013
Completion Date: 11/8/2013

Trial Location

City: BUTLERVILLE **Country:** USA UNITED STATES
State/Prov.: INDIANA
Postal Code: 47223

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
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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: DON BIEHLE **Role:** SUPERINTENDENT
Organization: SOUTHEAST PURDUE AGRICULTURE CENTER
Address 1: 4425 EAST COUNTY ROAD 350 NORTH
City: BUTLERVILLE **Phone No.:** 812-458-6977
State/Prov.: INDIANA **Fax No.:** 812-458-6979
Postal Code: 47223-0216 **Mobile No.:** 812-592-8426
Country: USA UNITED STATES **E-mail:** BIEHLED@PURDUE.EDU

Crop Description

Crop 1: ZEAMX ZEA MAYS
Variety: GOLDEN HARVEST G10D98-3102
Description: SYNGENTA RR

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: 76 F
Soil Moisture: SLIWET SLIGHTLY WET, MOIST
Seed Bed: MEDIUM MEDIUM

Planting Date: 5/30/2013
Planting Method: DIRDRI DIRECT DRILLED
Planting Equipment: JD7000
Emergence Date: 6/5/2013
Harvest Date: 11/8/2013
Harvested Width, Unit: 5 FT
Harvested Length, Unit: 25 FT
Harvest Equipment: Gleaner F3
% Standard Moisture: 15.5
Moisture Meter: Harvest Master
Weighing Equipment: Harvest Master

Pest Description

Pest 1 Type: W **Code:** BROSS BROMUS SP.
Common Name: BROMEGRASS

Pest 2 Type: W **Code:** AMBEL AMBROSIA ARTEMISIIFOLIA
Common Name: COMMON RAGWEED

Pest 3 Type: W **Code:** ERICA CONYZA CANADENSIS
Common Name: CANADA HORSEWEED

Pest 4 Type: W **Code:** PANDI PANICUM DICHOTOMIFLORUM
Common Name: FALL PANICUM

Pest 5 Type: W **Code:** XANST XANTHIUM STRUMARIUM
Common Name: HEART-LEAF COCKLEBUR

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Treated Plot Width: 10 FT		Treated Plot Length: 30 FT		Treated Plot Area: 300 FT ²		Replications: 4		Treatments: 10	
Site and Design				Site Type: FIELD FIELD					
				Experimental Unit: 1 PLOT PLOT					
				Tillage Type: NOTILL NO-TILL					
				Study Design: RACOBL Randomized Complete Block (RCB)					

Maintenance						
No.	Date	Maintenance Product Name	Description	Rate	Rate Unit	Tank Mix
1.	5/30/2013	22-11-0	STARTER	180	LB A/A	NO

Comment: APPLIED 22-11-0 @ 180 LB/A IN ROW

Description Name: SEPAC-FIELD U4		Soil Description	
% Sand: 20	% OM: 1.8	Texture: SIL SILT LOAM	
% Silt: 65	pH: 5.6	Soil Name: AVONBURG	
% Clay: 15	CEC: 6.7	Fert. Level: G GOOD	
		Soil Drainage: P POOR	

Application Description		
	A	B
Application Date:	5/30/2013	6/20/2013
Appl. Start Time:	8:45	12:00
Appl. Stop Time:	10:00 AM	12:30 PM
Application Method:	SPRAY	SPRAY
Application Timing:	PREPRE	ACCRST
Application Placement:	SOIL	BROADC
Applied By:	SPAUNHORST	DEVKOTA
Air Temperature, Unit:	77.5 F	80 F
% Relative Humidity:	71	47
Wind Velocity, Unit:	2 MPH	5 MPH
Wind Direction:	SW	SSE
Dew Presence (Y/N):	N NO	N NO
Soil Temperature, Unit:	76 F	78 F
Soil Moisture:	SLIWET	DRY
% Cloud Cover:	95	50
Next Moisture Occurred On:	5/31/2013	6/22/2013
Time to Next Moisture, Unit:	1 HR	2 DAY

Crop Stage At Each Application		
	A	B
Crop 1 Code, BBCH Scale:	ZEAMX BCOR	ZEAMX BCOR
Stage Scale Used:	BBCH	BBCH
Stage Majority, Percent:	00	34
Stage Minimum, Percent:		34
Stage Maximum, Percent:		35
Height, Unit:		10.5 IN
Height Minimum, Maximum:		9 12
Stage Scale Used:	BBCH	BBCH

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Pest Stage At Each Application

	A	B
Pest 1 Code, Type, Scale:	BROSS W	BROSS W
Stage Majority, Percent:	79	
Height, Unit:	35 IN	
Height Minimum, Maximum:	30 40	
Density, Unit:	25 YD2	
Pest 2 Code, Type, Scale:	AMBEL W	AMBEL W
Stage Majority, Percent:	34	
Stage Minimum, Percent:	33	
Stage Maximum, Percent:	35	
Height, Unit:	10 IN	
Height Minimum, Maximum:	7 12	
Density, Unit:	37 YD2	
Pest 3 Code, Type, Scale:	ERICA W	ERICA W
Stage Majority, Percent:	13	
Stage Minimum, Percent:	12	
Stage Maximum, Percent:	14	
Height, Unit:	1 IN	
Height Minimum, Maximum:	0.5 2	
Density, Unit:	75 YD2	
Pest 4 Code, Type, Scale:	PANDI W	PANDI W
Stage Majority, Percent:	14	22
Stage Minimum, Percent:	12	15
Stage Maximum, Percent:	14	23
Height, Unit:	1.5 IN	11 IN
Height Minimum, Maximum:	0.5 3	8 14
Density, Unit:	60 YD2	150 YD2
Pest 5 Code, Type, Scale:	XANST W	XANST W
Stage Majority, Percent:	34	
Stage Minimum, Percent:	32	
Stage Maximum, Percent:	35	
Height, Unit:	7 IN	
Height Minimum, Maximum:	5 8	
Density, Unit:	25 YD2	

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Application Equipment		
	A	B
Appl. Equipment:	CO2 BACKPACK	CO2 BACKPACK
Equipment Type:	SPRBAC	SPRBAC
Operation Pressure, Unit:	17 PSI	17 PSI
Nozzle Type:	FLAT FAN	FLAT FAN
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:	18 IN	18 IN
Ground Speed, Unit:	3 MPH	3 MPH
Carrier:	H2O	H2O
Water Hardness (ppm CaCO3):	150	150
Spray Volume, Unit:	15 GAL/AC	15 GAL/AC
Mix Size, Unit:	1.8 LITERS	1.8 LITERS
Propellant:	CO2	CO2
Tank Mix (Y/N):	N NO	N NO

Trial Comments

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Trial ID: 13S-SEP-CTC-04	Location: SEPAC	Trial Year: 2013
Protocol ID: 13S-SEP-CTC-04	Investigator: Dr. Bill Johnson	
Project ID: USHECOR028-2013	Study Director: JOE IKLEY	
Sponsor Contact: SYNGENTA - STEVE MROCKIEWICZ		

Reps: 4 Plots: 10 by 30 feet
 Spray vol: 15 gal/ac Mix size: 1.8 liters (min 1.5642)

Trt No.	Treatment Name	Form Conc	Form Unit	Form Type	Rate Rate Unit	Other Rate Unit	Other Rate Unit	Appl Code	Amt Product to Measure	Rep 1	2	3	4
1	UNTREATED CHECK									101	304	703	1004
2	LEXAR EZ	3.7	LBA/GAL	L	3630 g ai/ha	3.5 qt/a		A	104.9 ml/mx	102	504	802	904
	TOUCHDOWN TOTAL	4.17	LBAE/GAL	L	880 g ae/ha	24 fl oz/a		A	22.56 ml/mx				
	COC	100 %		SL	1 % v/v	1 gal/100 gal		A	18.0 ml/mx				
3	LEXAR EZ	3.7	LBA/GAL	L	2340 g ai/ha	2.25 qt/a		A	67.61 ml/mx	103	503	604	901
	WEEDAR	3.8	LBAE/GAL	L	533 g ae/ha	1 pt/a		A	14.99 ml/mx				
	COC	100 %		SL	1 % v/v	1 gal/100 gal		A	18.0 ml/mx				
	HALEX GT	4.38	LBA/GAL	L	2210 g ai/ha	3.6 pt/a		B	53.94 ml/mx				
4	LEXAR EZ	3.7	LBA/GAL	L	2340 g ai/ha	2.25 qt/a		A	67.61 ml/mx	104	303	702	1003
	WEEDAR	3.8	LBAE/GAL	L	533 g ae/ha	1 pt/a		A	14.99 ml/mx				
	GRAMOXONE SL	2	LBA/GAL	L	840 g ai/ha	3 pt/a		A	44.9 ml/mx				
	NIS	100 %		SL	0.25 % v/v	1 qt/100 gal		A	4.5 ml/mx				
	HALEX GT	4.38	LBA/GAL	L	2210 g ai/ha	3.6 pt/a		B	53.94 ml/mx				
5	ANTHEM ATZ	4.5	LB/GAL	SE	1260 g ai/ha	32 fl oz/a		A	29.93 ml/mx	201	501	601	1002
	TOUCHDOWN TOTAL	4.17	LBAE/GAL	L	880 g ae/ha	24 fl oz/a		A	22.56 ml/mx				
	N-PAK AMS	3.4	LBA/GAL	SL	2.5 % v/v	8.5 lb ai/100 gal		A	45.0 ml/mx				
6	CORVUS	2.63	LB/GAL	L	129 g ai/ha	5.6 fl oz/a		A	5.244 ml/mx	202	502	701	803
	AATREX	4	LB/GAL	F	1680 g ai/ha	3 pt/a		A	44.9 ml/mx				
	TOUCHDOWN TOTAL	4.17	LBAE/GAL	L	880 g ae/ha	24 fl oz/a		A	22.56 ml/mx				
	N-PAK AMS	3.4	LBA/GAL	SL	2.5 % v/v	8.5 lb ai/100 gal		A	45.0 ml/mx				
7	VERDICT	668.4	GA/L	EC	684 g ai/ha	14 fl oz/a		A	13.13 ml/mx	203	404	603	1001
	AATREX	4	LB/GAL	F	1680 g ai/ha	3 pt/a		A	44.9 ml/mx				
	TOUCHDOWN TOTAL	4.17	LBAE/GAL	L	880 g ae/ha	24 fl oz/a		A	22.56 ml/mx				
	N-PAK AMS	3.4	LBA/GAL	SL	2.5 % v/v	8.5 lb ai/100 gal		A	45.0 ml/mx				
8	ZIDUA	85 %		WG	179 g ai/ha	3 oz/a		A	2.702 g/mx	204	401	704	804
	SHARPEN	2.85	LB/GAL	L	75 g ai/ha	3 fl oz/a		A	2.813 ml/mx				
	AATREX	4	LB/GAL	F	1680 g ai/ha	3 pt/a		A	44.9 ml/mx				
	TOUCHDOWN TOTAL	4.17	LBAE/GAL	L	880 g ae/ha	24 fl oz/a		A	22.56 ml/mx				
	N-PAK AMS	3.4	LBA/GAL	SL	2.5 % v/v	8.5 lb ai/100 gal		A	45.0 ml/mx				
9	FIERCE	76 %		WG	213 g ai/ha	4 oz/a		A	3.595 g/mx	301	403	602	903
	AATREX	4	LB/GAL	F	1680 g ai/ha	3 pt/a		A	44.9 ml/mx				
	TOUCHDOWN TOTAL	4.17	LBAE/GAL	L	880 g ae/ha	24 fl oz/a		A	22.56 ml/mx				
	N-PAK AMS	3.4	LBA/GAL	SL	2.5 % v/v	8.5 lb ai/100 gal		A	45.0 ml/mx				
	TOUCHDOWN TOTAL	4.17	LBAE/GAL	L	880 g ae/ha	24 fl oz/a		B	22.56 ml/mx				
	N-PAK AMS	3.4	LBA/GAL	SL	2.5 % v/v	8.5 lb ai/100 gal		B	45.0 ml/mx				
10	UNTREATED CHECK									302	402	801	902

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
240.105	ml	LEXAR EZ	3.7	L	
157.923	ml	TOUCHDOWN TOTAL	4.17	L	
36.000	ml	COC	100	SL	
29.990	ml	WEEDAR	3.8	L	
107.882	ml	HALEX GT	4.38	L	
44.900	ml	GRAMOXONE SL	2	L	
4.500	ml	NIS	100	SL	
29.934	ml	ANTHEM ATZ	4.5	SE	
270.000	ml	N-PAK AMS	3.4	SL	

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

Amount*	Unit	Treatment Name	Form Conc	Form Type	Lot Code
5.244	ml	CORVUS	2.63	L	
179.602	ml	AATREX	4	F	
13.128	ml	VERDICT	668.4	EC	
2.702	g	ZIDUA	85	WG	
2.813	ml	SHARPEN	2.85	L	
3.595	g	FIERCE	76	WG	

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

* 'Per volume' calculations use spray volume= 15 gal/ac, mix size= 1.8 liters.

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Project ID: USHECOR028-2013	Study Director: JOE IKLEY	
	Sponsor Contact: SYNGENTA - STEVE MROCZKIEWICZ	

Pest Type	W WEED	W WEED	W WEED
Pest Code	PANDI	XANST	AMBEL
Pest Scientific Name	PANICUM DICHOT>	XANTHIUM STRUM>	AMBROSIA ARTEM>
Pest Name	FALL PANICUM	HEART-LEAF COC>	COMMON RAGWEED
Crop Code			
BBCH Scale			
Crop Scientific Name			
Crop Name			
Part Rated	PLOT P	PLOT P	PLOT P
Rating Date	6/6/2013	6/6/2013	6/6/2013
Rating Type	CONTRO	CONTRO	CONTRO
Rating Unit	%	%	%
Sample Size, Unit	1 PLOT	1 PLOT	1 PLOT
Days After First/Last Applic.	7 7	7 7	7 7
Trt-Eval Interval	7 DA-A	7 DA-A	7 DA-A
ARM Action Codes	P	AA P	AA P
Number of Decimals	0	0	0
Trt Treatment	Rate	Appl	
No. Name	Rate Unit	Code Plot	
			1 2 3
1 UNTREATED CHECK		101	0 0 0
		304	0 0 0
		703	0 0 0
		1004	0 0 0
		Mean =	0 0t 0t
2 LEXAR EZ	3630 g ai/ha A	102	10 20 30
TOUCHDOWN TOTAL	880 g ae/ha A	504	10 40 30
COC	1 % v/v A	802	30 60 41*
		904	30 80 50
		Mean =	20 50t 38t
3 LEXAR EZ	2340 g ai/ha A	103	0 40 40
WEEDAR	533 g ae/ha A	503	0 80 95
COC	1 % v/v A	604	0 80 90
HALEX GT	2210 g ai/ha B	901	0 85 95
		Mean =	0 72t 84t
4 LEXAR EZ	2340 g ai/ha A	104	95 95 90
WEEDAR	533 g ae/ha A	303	100 95 100
GRAMOXONE SL	840 g ai/ha A	702	100 95 100
NIS	0.25 % v/v A	1003	100* 95 95
HALEX GT	2210 g ai/ha B		
		Mean =	99 95t 98t
5 ANTHEM ATZ	1260 g ai/ha A	201	50 60 60
TOUCHDOWN TOTAL	880 g ae/ha A	501	50 80 80
N-PAK AMS	2.5 % v/v A	601	60 50 63*
		1002	56* 58* 80
		Mean =	54 66t 75t
6 CORVUS	129 g ai/ha A	202	20 50 80
AATREX	1680 g ai/ha A	502	20 60 50
TOUCHDOWN TOTAL	880 g ae/ha A	701	50 70 70
N-PAK AMS	2.5 % v/v A	803	50 95 100
		Mean =	35 71t 81t
7 VERDICT	684 g ai/ha A	203	30 100 100
AATREX	1680 g ai/ha A	404	30 100 100
TOUCHDOWN TOTAL	880 g ae/ha A	603	50 100 100
N-PAK AMS	2.5 % v/v A	1001	39* 95 95
		Mean =	37 100t 100t
8 ZIDUA	179 g ai/ha A	204	30 100 90
SHARPEN	75 g ai/ha A	401	70 100 95
AATREX	1680 g ai/ha A	704	60 95 95
TOUCHDOWN TOTAL	880 g ae/ha A	804	30 100 100
N-PAK AMS	2.5 % v/v A		
		Mean =	48 100t 96t

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Pest Type	W WEED	W WEED	W WEED	
Pest Code	PANDI	XANST	AMBEL	
Pest Scientific Name	PANICUM DICHOT>	XANTHIUM STRUM>	AMBROSIA ARTEM>	
Pest Name	FALL PANICUM	HEART-LEAF COC>	COMMON RAGWEED	
Crop Code				
BBCH Scale				
Crop Scientific Name				
Crop Name				
Part Rated	PLOT P	PLOT P	PLOT P	
Rating Date	6/6/2013	6/6/2013	6/6/2013	
Rating Type	CONTRO	CONTRO	CONTRO	
Rating Unit	%	%	%	
Sample Size, Unit	1 PLOT	1 PLOT	1 PLOT	
Days After First/Last Applic.	7 7	7 7	7 7	
Trt-Eval Interval	7 DA-A	7 DA-A	7 DA-A	
ARM Action Codes	P	AA P	AA P	
Number of Decimals	0	0	0	
Trt Treatment	Rate	Appl		
No. Name	Rate Unit	Code Plot	1	2
9 FIERCE	213 g ai/ha	A 301	70	80
AATREX	1680 g ai/ha	A 403	80	100
TOUCHDOWN TOTAL	880 g ae/ha	A 602	80	90
N-PAK AMS	2.5 % v/v	A 903	85	80
TOUCHDOWN TOTAL	880 g ae/ha	B		
N-PAK AMS	2.5 % v/v	B		
	Mean =		79	91t
10 UNTREATED CHECK		302	0	0
		402	0	0
		801	0	0
		902	0	0
	Mean =		0	0t

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Pest Type	W WEED	W WEED	W WEED	
Pest Code	PANDI	XANST	AMBEL	
Pest Scientific Name	PANICUM DICHOT>	XANTHIUM STRUM>	AMBROSIA ARTEM>	
Pest Name	FALL PANICUM	HEART-LEAF COC>	COMMON RAGWEED	
Crop Code				ZEAMX
BBCH Scale				BCOR
Crop Scientific Name				ZEA MAYS
Crop Name				CORN
Part Rated	PLOT P	PLOT P	PLOT P	PLOT C
Rating Date	6/13/2013	6/13/2013	6/13/2013	6/13/2013
Rating Type	CONTRO	CONTRO	CONTRO	PHYGEN
Rating Unit	%	%	%	%
Sample Size, Unit	1 PLOT	1 PLOT	1 PLOT	1 PLOT
Days After First/Last Applic.	14 14	14 14	14 14	14 14
Trt-Eval Interval	14 DA-A	14 DA-A	14 DA-A	14 DA-A
ARM Action Codes	P	P	AA P	P
Number of Decimals	0	0	0	0
Trt Treatment	Rate	Appl		
No. Name	Rate Unit	Code Plot	4	5
1 UNTREATED CHECK		101	0	0
		304	0	0
		703	0	0
		1004	0	0
		Mean =	0	0
2 LEXAR EZ	3630 g ai/ha A	102	70	90
TOUCHDOWN TOTAL	880 g ae/ha A	504	50	100
COC	1 % v/v A	802	60	100
		904	50	80
		Mean =	58	93
3 LEXAR EZ	2340 g ai/ha A	103	0	95
WEEDAR	533 g ae/ha A	503	0	100
COC	1 % v/v A	604	0	100
HALEX GT	2210 g ai/ha B	901	0	100
		Mean =	0	99
4 LEXAR EZ	2340 g ai/ha A	104	95	95
WEEDAR	533 g ae/ha A	303	95	100
GRAMOXONE SL	840 g ai/ha A	702	95	100
NIS	0.25 % v/v A	1003	93*	100
HALEX GT	2210 g ai/ha B			
		Mean =	94	99
5 ANTHEM ATZ	1260 g ai/ha A	201	90	100
TOUCHDOWN TOTAL	880 g ae/ha A	501	90	100
N-PAK AMS	2.5 % v/v A	601	80	90
		1002	84*	95*
		Mean =	86	96
6 CORVUS	129 g ai/ha A	202	90	100
AATREX	1680 g ai/ha A	502	97	100
TOUCHDOWN TOTAL	880 g ae/ha A	701	90	100
N-PAK AMS	2.5 % v/v A	803	90	100
		Mean =	92	100
7 VERDICT	684 g ai/ha A	203	70	100
AATREX	1680 g ai/ha A	404	70	100
TOUCHDOWN TOTAL	880 g ae/ha A	603	90	100
N-PAK AMS	2.5 % v/v A	1001	74*	100
		Mean =	76	100
8 ZIDUA	179 g ai/ha A	204	80	100
SHARPEN	75 g ai/ha A	401	85	100
AATREX	1680 g ai/ha A	704	95	100
TOUCHDOWN TOTAL	880 g ae/ha A	804	80	100
N-PAK AMS	2.5 % v/v A			
		Mean =	85	100

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	W WEED PANDI	W WEED XANST	W WEED AMBEL	
Pest Type				
Pest Code				
Pest Scientific Name	PANICUM DICHOT>	XANTHIUM STRUM>	AMBROSIA ARTEM>	
Pest Name	FALL PANICUM	HEART-LEAF COC>	COMMON RAGWEED	
Crop Code				
BBCH Scale				
Crop Scientific Name				ZEAMX
Crop Name				BCOR
Part Rated	PLOT P	PLOT P	PLOT P	PLOT C
Rating Date	6/13/2013	6/13/2013	6/13/2013	6/13/2013
Rating Type	CONTRO	CONTRO	CONTRO	PHYGEN
Rating Unit	%	%	%	%
Sample Size, Unit	1 PLOT	1 PLOT	1 PLOT	1 PLOT
Days After First/Last Applic.	14 14	14 14	14 14	14 14
Trt-Eval Interval	14 DA-A	14 DA-A	14 DA-A	14 DA-A
ARM Action Codes	P	P	AA P	P
Number of Decimals	0	0	0	0
Trt Treatment	Rate	Appl		
No. Name	Rate Unit	Code Plot	4	5
9 FIERCE	213 g ai/ha	A 301	80	100
AATREX	1680 g ai/ha	A 403	90	100
TOUCHDOWN TOTAL	880 g ae/ha	A 602	95	100
N-PAK AMS	2.5 % v/v	A 903	90	100
TOUCHDOWN TOTAL	880 g ae/ha	B		
N-PAK AMS	2.5 % v/v	B		
	Mean =		89	100
			100t	0
10 UNTREATED CHECK		302	0	0
		402	0	0
		801	0	0
		902	0	0
	Mean =		0	0t

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	W WEED XANST XANTHIUM STRUM> HEART-LEAF COC>	W WEED AMBEL AMBROSIA ARTEM> COMMON RAGWEED	W WEED PANDI PANICUM DICHOT> FALL PANICUM
Pest Type			
Pest Code			
Pest Scientific Name			
Pest Name			
Crop Code			
BBCH Scale			
Crop Scientific Name			
Crop Name			
Part Rated	PLOT P	PLOT P	PLOT P
Rating Date	6/20/2013	6/20/2013	6/20/2013
Rating Type	CONTRO	CONTRO	CONTRO
Rating Unit	%	%	%
Sample Size, Unit	1 PLOT	1 PLOT	1 PLOT
Days After First/Last Applic.	21 21	21 21	21 21
Trt-Eval Interval	0 DA-B	0 DA-B	0 DA-B
ARM Action Codes	P	P	AA P
Number of Decimals	0	0	0
Trt Treatment	Rate	Appl	
No. Name	Rate Unit	Code Plot	8
1 UNTREATED CHECK		101	0
		304	0
		703	0
		1004	0
		Mean =	0
2 LEXAR EZ	3630 g ai/ha A	102	100
TOUCHDOWN TOTAL	880 g ae/ha A	504	100
COC	1 % v/v A	802	100
		904	100
		Mean =	100
3 LEXAR EZ	2340 g ai/ha A	103	100
WEEDAR	533 g ae/ha A	503	100
COC	1 % v/v A	604	100
HALEX GT	2210 g ai/ha B	901	100
		Mean =	100
4 LEXAR EZ	2340 g ai/ha A	104	100
WEEDAR	533 g ae/ha A	303	100
GRAMOXONE SL	840 g ai/ha A	702	100
NIS	0.25 % v/v A	1003	100
HALEX GT	2210 g ai/ha B		
		Mean =	100
5 ANTHEM ATZ	1260 g ai/ha A	201	100
TOUCHDOWN TOTAL	880 g ae/ha A	501	100
N-PAK AMS	2.5 % v/v A	601	100
		1002	100
		Mean =	100
6 CORVUS	129 g ai/ha A	202	100
AATREX	1680 g ai/ha A	502	100
TOUCHDOWN TOTAL	880 g ae/ha A	701	100
N-PAK AMS	2.5 % v/v A	803	100
		Mean =	100
7 VERDICT	684 g ai/ha A	203	100
AATREX	1680 g ai/ha A	404	100
TOUCHDOWN TOTAL	880 g ae/ha A	603	100
N-PAK AMS	2.5 % v/v A	1001	100
		Mean =	100
8 ZIDUA	179 g ai/ha A	204	100
SHARPEN	75 g ai/ha A	401	90
AATREX	1680 g ai/ha A	704	100
TOUCHDOWN TOTAL	880 g ae/ha A	804	100
N-PAK AMS	2.5 % v/v A		
		Mean =	98

Purdue University Weed Science

	W WEED XANST HEART-LEAF COC>	W WEED AMBEL COMMON RAGWEED	W WEED PANDI FALL PANICUM
Pest Type			
Pest Code			
Pest Scientific Name	XANTHIUM STRUM>	AMBROSIA ARTEM>	PANICUM DICHOT>
Pest Name			
Crop Code			
BBCH Scale			
Crop Scientific Name			
Crop Name			
Part Rated	PLOT P	PLOT P	PLOT P
Rating Date	6/20/2013	6/20/2013	6/20/2013
Rating Type	CONTRO	CONTRO	CONTRO
Rating Unit	%	%	%
Sample Size, Unit	1 PLOT	1 PLOT	1 PLOT
Days After First/Last Applic.	21 21	21 21	21 21
Trt-Eval Interval	0 DA-B	0 DA-B	0 DA-B
ARM Action Codes	P	P	AA P
Number of Decimals	0	0	0
Trt Treatment	Rate	Appl	
No. Name	Rate Unit	Code Plot	
		8	9
9 FIERCE	213 g ai/ha A	301	100
AATREX	1680 g ai/ha A	403	100
TOUCHDOWN TOTAL	880 g ae/ha A	602	100
N-PAK AMS	2.5 % v/v A	903	100
TOUCHDOWN TOTAL	880 g ae/ha B		100
N-PAK AMS	2.5 % v/v B		100
	Mean =	100	99
10 UNTREATED CHECK		302	0
		402	0
		801	0
		902	0
	Mean =	0	0t

Purdue University Weed Science

Pest Type	W WEED	W WEED	W WEED	W WEED
Pest Code	XANST	AMBEL	PANDI	IPOSS
Pest Scientific Name	XANTHIUM STRUM>	AMBROSIA ARTEM>	PANICUM DICHOT>	IPOMOEA SP.
Pest Name	HEART-LEAF COC>	COMMON RAGWEED	FALL PANICUM	MORNING GLORY
Crop Code				
BBCH Scale				
Crop Scientific Name				
Crop Name				
Part Rated	PLOT P	PLOT P	PLOT P	PLOT P
Rating Date	7/5/2013	7/5/2013	7/5/2013	7/5/2013
Rating Type	CONTRO	CONTRO	CONTRO	CONTRO
Rating Unit	%	%	%	%
Sample Size, Unit	1 PLOT	1 PLOT	1 PLOT	1 PLOT
Days After First/Last Applic.	36 15	36 15	36 15	36 15
Trt-Eval Interval	15 DA-B	15 DA-B	15 DA-B	15 DA-B
ARM Action Codes	P	P	P	P
Number of Decimals	0	0	0	0
Trt Treatment	Rate	Appl		
No. Name	Rate Unit	Code Plot	11	12
1 UNTREATED CHECK		101	0	0
		304	0	0
		703	0	0
		1004	0	0
		Mean =	0	0
2 LEXAR EZ	3630 g ai/ha A	102	100	100
TOUCHDOWN TOTAL	880 g ae/ha A	504	100	100
COC	1 % v/v A	802	85	100
		904	85	100
		Mean =	93	100
3 LEXAR EZ	2340 g ai/ha A	103	100	100
WEEDAR	533 g ae/ha A	503	100	100
COC	1 % v/v A	604	100	100
HALEX GT	2210 g ai/ha B	901	100	100
		Mean =	100	100
4 LEXAR EZ	2340 g ai/ha A	104	90	100
WEEDAR	533 g ae/ha A	303	100	100
GRAMOXONE SL	840 g ai/ha A	702	100	100
NIS	0.25 % v/v A	1003	95	100
HALEX GT	2210 g ai/ha B			
		Mean =	96	100
5 ANTHEM ATZ	1260 g ai/ha A	201	90	100
TOUCHDOWN TOTAL	880 g ae/ha A	501	95	100
N-PAK AMS	2.5 % v/v A	601	90	100
		1002	95	100
		Mean =	93	100
6 CORVUS	129 g ai/ha A	202	100	100
AATREX	1680 g ai/ha A	502	100	100
TOUCHDOWN TOTAL	880 g ae/ha A	701	100	100
N-PAK AMS	2.5 % v/v A	803	95	100
		Mean =	99	100
7 VERDICT	684 g ai/ha A	203	90	100
AATREX	1680 g ai/ha A	404	100	100
TOUCHDOWN TOTAL	880 g ae/ha A	603	100	100
N-PAK AMS	2.5 % v/v A	1001	100	100
		Mean =	98	100
8 ZIDUA	179 g ai/ha A	204	90	100
SHARPEN	75 g ai/ha A	401	100	100
AATREX	1680 g ai/ha A	704	95	100
TOUCHDOWN TOTAL	880 g ae/ha A	804	95	100
N-PAK AMS	2.5 % v/v A			
		Mean =	95	100

Purdue University Weed Science

	W WEED XANST	W WEED AMBEL	W WEED PANDI	W WEED IPOSS
Pest Type				
Pest Code				
Pest Scientific Name	XANTHIUM STRUM>	AMBROSIA ARTEM>	PANICUM DICHOT>	IPOMOEA SP.
Pest Name	HEART-LEAF COC>	COMMON RAGWEED	FALL PANICUM	MORNING GLORY
Crop Code				
BBCH Scale				
Crop Scientific Name				
Crop Name				
Part Rated	PLOT P	PLOT P	PLOT P	PLOT P
Rating Date	7/5/2013	7/5/2013	7/5/2013	7/5/2013
Rating Type	CONTRO	CONTRO	CONTRO	CONTRO
Rating Unit	%	%	%	%
Sample Size, Unit	1 PLOT	1 PLOT	1 PLOT	1 PLOT
Days After First/Last Applic.	36 15	36 15	36 15	36 15
Trt-Eval Interval	15 DA-B	15 DA-B	15 DA-B	15 DA-B
ARM Action Codes	P	P	P	P
Number of Decimals	0	0	0	0
Trt Treatment	Rate	Appl		
No. Name	Rate Unit	Code Plot	11	12
9 FIERCE	213 g ai/ha A	301	100	100
AATREX	1680 g ai/ha A	403	100	100
TOUCHDOWN TOTAL	880 g ae/ha A	602	100	100
N-PAK AMS	2.5 % v/v A	903	95	100
TOUCHDOWN TOTAL	880 g ae/ha B			
N-PAK AMS	2.5 % v/v B			
	Mean =		99	100
10 UNTREATED CHECK		302	0	0
		402	0	0
		801	0	0
		902	0	0
	Mean =		0	0

Purdue University Weed Science

Pest Type								
Pest Code								
Pest Scientific Name		W WEED	W WEED	W WEED	W WEED			
Pest Name		XANST	AMBEL	PANDI	IPOSS			
Crop Code		XANTHIUM STRUM>	AMBROSIA ARTEM>	PANICUM DICHOT>	IPOMOEA SP.			
BBCH Scale		HEART-LEAF COC>	COMMON RAGWEED	FALL PANICUM	MORNING GLORY			
Crop Scientific Name								
Crop Name								
Part Rated		PLOT P	PLOT P	PLOT P	PLOT P			
Rating Date		7/18/2013	7/18/2013	7/18/2013	7/18/2013			
Rating Type		CONTRO	CONTRO	CONTRO	CONTRO			
Rating Unit		%	%	%	%			
Sample Size, Unit		1 PLOT	1 PLOT	1 PLOT	1 PLOT			
Days After First/Last Applic.		49 28	49 28	49 28	49 28			
Trt-Eval Interval		28 DA-B	28 DA-B	28 DA-B	28 DA-B			
ARM Action Codes		P	P	AA P	P			
Number of Decimals		0	0	0	0			
Trt Treatment	Rate	Appl						
No. Name	Rate Unit	Code Plot	15	16	17	18		
1 UNTREATED CHECK		101	0	0	0	0		
		304	0	0	0	0		
		703	0	0	0	0		
		1004	0	0	0	0		
		Mean =	0	0	0t	0		
2 LEXAR EZ	3630 g ai/ha A	102	90	95	70	95		
TOUCHDOWN TOTAL	880 g ae/ha A	504	80	80	50	80		
COC	1 % v/v A	802	80	95	50	80		
		904	80	95	20	95		
		Mean =	83	91	47t	88		
3 LEXAR EZ	2340 g ai/ha A	103	80	95	95	95		
WEEDAR	533 g ae/ha A	503	90	100	90	80		
COC	1 % v/v A	604	90	100	80	95		
HALEX GT	2210 g ai/ha B	901	80	100	90	100		
		Mean =	85	99	89t	93		
4 LEXAR EZ	2340 g ai/ha A	104	70	100	100	100		
WEEDAR	533 g ae/ha A	303	90	100	100	95		
GRAMOXONE SL	840 g ai/ha A	702	95	100	100	100		
NIS	0.25 % v/v A	1003	80	100	100	90		
HALEX GT	2210 g ai/ha B							
		Mean =	84	100	100t	96		
5 ANTHEM ATZ	1260 g ai/ha A	201	90	100	90	90		
TOUCHDOWN TOTAL	880 g ae/ha A	501	85	100	90	95		
N-PAK AMS	2.5 % v/v A	601	80	95	100	90		
		1002	80	100	95	80		
		Mean =	84	99	95t	89		
6 CORVUS	129 g ai/ha A	202	95	100	100	90		
AATREX	1680 g ai/ha A	502	90	100	100	80		
TOUCHDOWN TOTAL	880 g ae/ha A	701	90	100	100	90		
N-PAK AMS	2.5 % v/v A	803	80	100	100	85		
		Mean =	89	100	100t	86		
7 VERDICT	684 g ai/ha A	203	90	100	50	80		
AATREX	1680 g ai/ha A	404	80	100	50	80		
TOUCHDOWN TOTAL	880 g ae/ha A	603	90	100	70	95		
N-PAK AMS	2.5 % v/v A	1001	85	100	95	80		
		Mean =	86	100	69t	84		
8 ZIDUA	179 g ai/ha A	204	80	100	80	100		
SHARPEN	75 g ai/ha A	401	90	100	90	95		
AATREX	1680 g ai/ha A	704	85	100	90	100		
TOUCHDOWN TOTAL	880 g ae/ha A	804	80	100	90	100		
N-PAK AMS	2.5 % v/v A							
		Mean =	84	100	88t	99		

Purdue University Weed Science

	W WEED XANST	W WEED AMBEL	W WEED PANDI	W WEED IPOSS
Pest Type	XANTHIUM STRUM>	AMBROSIA ARTEM>	PANICUM DICHOT>	IPOMOEA SP.
Pest Code	HEART-LEAF COC>	COMMON RAGWEED	FALL PANICUM	MORNING GLORY
Pest Scientific Name				
Pest Name				
Crop Code				
BBCH Scale				
Crop Scientific Name				
Crop Name				
Part Rated	PLOT P	PLOT P	PLOT P	PLOT P
Rating Date	7/18/2013	7/18/2013	7/18/2013	7/18/2013
Rating Type	CONTRO	CONTRO	CONTRO	CONTRO
Rating Unit	%	%	%	%
Sample Size, Unit	1 PLOT	1 PLOT	1 PLOT	1 PLOT
Days After First/Last Applic.	49 28	49 28	49 28	49 28
Trt-Eval Interval	28 DA-B	28 DA-B	28 DA-B	28 DA-B
ARM Action Codes	P	P	AA P	P
Number of Decimals	0	0	0	0
Trt Treatment	Rate	Appl		
No. Name	Rate Unit	Code Plot	15	16
9 FIERCE	213 g ai/ha A	301	95	100
AATREX	1680 g ai/ha A	403	95	100
TOUCHDOWN TOTAL	880 g ae/ha A	602	95	100
N-PAK AMS	2.5 % v/v A	903	85	100
TOUCHDOWN TOTAL	880 g ae/ha B			
N-PAK AMS	2.5 % v/v B			
	Mean =		93	100
				100t
				99
10 UNTREATED CHECK		302	0	0
		402	0	0
		801	0	0
		902	0	0
	Mean =		0	0
				0t
				0

Purdue University Weed Science

Trt No.	Treatment Name	Rate	Appl Code	Plot	19	20	21
	1 UNTREATED CHECK			101	1.4	8.8	551.0
				304	6.7	41.0	2576.1
				703	13.0	79.6	4993.8
				1004	3.8	23.3	1460.2
				Mean =	6.2	38.2	2395.3
	2 LEXAR EZ	3630 g ai/ha	A	102	18.7	114.1	7163.6
	TOUCHDOWN TOTAL	880 g ae/ha	A	504	24.8	151.7	9519.4
	COC	1 % v/v	A	802	19.9	121.7	7638.9
				904	22.0	134.2	8424.1
				Mean =	21.3	130.4	8186.5
	3 LEXAR EZ	2340 g ai/ha	A	103	23.7	144.7	9085.4
	WEEDAR	533 g ae/ha	A	503	28.7	175.7	11027.9
	COC	1 % v/v	A	604	27.2	166.1	10428.6
	HALEX GT	2210 g ai/ha	B	901	17.3	105.6	6626.3
				Mean =	24.2	148.0	9292.0
	4 LEXAR EZ	2340 g ai/ha	A	104	27.0	164.8	10345.9
	WEEDAR	533 g ae/ha	A	303	20.8	127.3	7990.2
	GRAMOXONE SL	840 g ai/ha	A	702	26.4*	161.5*	10138.7*
	NIS	0.25 % v/v	A	1003	26.1	159.2	9994.6
	HALEX GT	2210 g ai/ha	B				
				Mean =	25.1	153.2	9617.4
	5 ANTHEM ATZ	1260 g ai/ha	A	201	21.7	132.6	8320.8
	TOUCHDOWN TOTAL	880 g ae/ha	A	501	28.3	173.1	10862.5
	N-PAK AMS	2.5 % v/v	A	601	22.5	137.5	8630.8
				1002	26.2	160.2	10056.6
				Mean =	24.7	150.8	9467.7
	6 CORVUS	129 g ai/ha	A	202	22.3	136.5	8568.8
	AATREX	1680 g ai/ha	A	502	31.5	192.8	12102.4
	TOUCHDOWN TOTAL	880 g ae/ha	A	701	28.1*	171.6*	10772.4*
	N-PAK AMS	2.5 % v/v	A	803	24.9	152.3	9560.7
				Mean =	26.7	163.3	10251.1
	7 VERDICT	684 g ai/ha	A	203	21.0	128.3	8052.2
	AATREX	1680 g ai/ha	A	404	26.3	160.5	10077.3
	TOUCHDOWN TOTAL	880 g ae/ha	A	603	23.6	144.1	9044.1
	N-PAK AMS	2.5 % v/v	A	1001	25.7	156.9	9850.0
				Mean =	24.1	147.5	9255.9
	8 ZIDUA	179 g ai/ha	A	204	24.0	146.7	9209.4
	SHARPEN	75 g ai/ha	A	401	24.2	147.7	9271.4
	AATREX	1680 g ai/ha	A	704	28.0	171.4	10759.2
	TOUCHDOWN TOTAL	880 g ae/ha	A	804	26.5	161.9	10160.0
	N-PAK AMS	2.5 % v/v	A				
				Mean =	25.7	156.9	9850.0

Purdue University Weed Science

Pest Type						
Pest Code						
Pest Scientific Name						
Pest Name						
Crop Code		ZEAMX	ZEAMX	ZEAMX		
BBCH Scale		BCOR	BCOR	BCOR		
Crop Scientific Name		Zea mays	Zea mays	Zea mays		
Crop Name		Corn	Corn	Corn		
Part Rated		YIELD C	YIELD C	YIELD C		
Rating Date		11/8/2013	11/8/2013	11/8/2013		
Rating Type		YIELD	YIELD	YIELD		
Rating Unit		lb/plot	bu/ac	kg/ha		
Sample Size, Unit		1 PLOT	1 PLOT	1 PLOT		
Days After First/Last Applic.		162 141	162 141	162 141		
Trt-Eval Interval						
ARM Action Codes			TY1	TY2		
Number of Decimals		1	1	1		
Trt Treatment	Rate	Appl				
No. Name	Rate Unit	Code Plot	19	20	21	
9 FIERCE	213 g ai/ha	A 301	24.0	146.7	9209.4	
AATREX	1680 g ai/ha	A 403	25.6	156.6	9829.3	
TOUCHDOWN TOTAL	880 g ae/ha	A 602	27.6	168.4	10573.2	
N-PAK AMS	2.5 % v/v	A 903	25.4*	155.5*	9761.5*	
TOUCHDOWN TOTAL	880 g ae/ha	B				
N-PAK AMS	2.5 % v/v	B				
		Mean =	25.7	156.8	9843.4	
10 UNTREATED CHECK		302	3.8	22.9	1439.5	
		402	3.1	18.7	1170.9	
		801	6.8	41.7	2617.4	
		902	9.6	58.5	3671.3	
		Mean =	5.8	35.4	2224.8	

Purdue University Weed Science

PRE AND PRE FB POST PROGRAMS IN CORN

Trial ID: 13S-SEP-CTC-04 Location: SEPAC Trial Year: 2013
 Protocol ID: 13S-SEP-CTC-04 Investigator: Dr. Bill Johnson
 Project ID: USHECOR028-2013 Study Director: JOE IKLEY
 Sponsor Contact: SYNGENTA - STEVE MROCZKIEWICZ

Pest Type

W, WEED, G-BYRW7, G-WEDSTG = Weed or volunteer crop

Pest Code

PANDI, PANICUM DICHOTOMIFLORUM, = US

XANST, XANTHIUM STRUMARIUM, = US

AMBEL, AMBROSIA ARTEMISIIFOLIA, = US

IPOSS, IPOMOEA SP., = US

Crop Code

ZEAMX, BCOR, ZEA MAYS, = US

Part Rated

PLOT = plot

YIELD = yield

P = Pest is Part Rated

C = Crop is Part Rated

Rating Type

CONTRO = control / burndown or knockdown

PHYGEN = phytotoxicity - general / injury

YIELD = yield

Rating Unit

% = percent

lb/plot = pounds per plot

bu/ac = bushels per acre

kg/ha = kilograms per hectare

PLOT = total plot

ARM Action Codes

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

TY1 = 6.112392*[19]

TY2 = 383.6631*[19]

Purdue University Weed Science

PRE AND PRE FB POST PROGRAMS IN CORN

Trial ID: 13S-SEP-CTC-04	Location: SEPAC	Trial Year: 2013
Protocol ID: 13S-SEP-CTC-04	Investigator: Dr. Bill Johnson	
Project ID: USHECOR028-2013	Study Director: JOE IKLEY	
Sponsor Contact: SYNGENTA - STEVE MROCKIEWICZ		

Pest Type Pest Code Pest Scientific Name Pest Name	W WEED PANDI PANICUM DICHOT>	W WEED XANST XANTHIUM STRUM>	W WEED AMBEL AMBROSIA ARTEM>	W WEED PANDI PANICUM DICHOT>
	FALL PANICUM	HEART-LEAF COC>	COMMON RAGWEED	FALL PANICUM
Crop Code				
BBCH Scale				
Crop Scientific Name				
Crop Name				
Part Rated	PLOT P	PLOT P	PLOT P	PLOT P
Rating Date	6/6/2013	6/6/2013	6/6/2013	6/13/2013
Rating Type	CONTRO	CONTRO	CONTRO	CONTRO
Rating Unit	%	%	%	%
Sample Size, Unit	1 PLOT	1 PLOT	1 PLOT	1 PLOT
Days After First/Last Applic.	7 7	7 7	7 7	14 14
Trt-Eval Interval	7 DA-A	7 DA-A	7 DA-A	14 DA-A
ARM Action Codes	P	AA P	AA P	P
Number of Decimals	0	0	0	0
Trt No.	1	2	3	4
Treatment Name				
Rate				
Rate Unit				
Appl Code				
1 UNTREATED CHECK	0 f	0 d	0 d	0 d
2 LEXAR EZ	20 e	50 c	38 c	58 c
TOUCHDOWN TOTAL				
COC	1 % v/v A			
3 LEXAR EZ	0 f	72 bc	84 ab	0 d
WEEDAR				
COC	1 % v/v A			
HALEX GT	2210 g ai/ha B			
4 LEXAR EZ	99 a	95 a	98 ab	94 a
WEEDAR				
GRAMOXONE SL				
NIS	0.25 % v/v A			
HALEX GT	2210 g ai/ha B			
5 ANTHEM ATZ	54 c	66 bc	75 b	86 ab
TOUCHDOWN TOTAL				
N-PAK AMS	2.5 % v/v A			
6 CORVUS	35 d	71 bc	81 b	92 a
AATREX				
TOUCHDOWN TOTAL				
N-PAK AMS	2.5 % v/v A			
7 VERDICT	37 cd	100 a	100 a	76 b
AATREX				
TOUCHDOWN TOTAL				
N-PAK AMS	2.5 % v/v A			
8 ZIDUA	48 cd	100 a	96 ab	85 ab
SHARPEN				
AATREX				
TOUCHDOWN TOTAL				
N-PAK AMS	2.5 % v/v A			
9 FIERCE	79 b	91 ab	95 ab	89 a
AATREX				
TOUCHDOWN TOTAL				
N-PAK AMS	2.5 % v/v A			
TOUCHDOWN TOTAL				
N-PAK AMS	2.5 % v/v B			

Means followed by same letter do not significantly differ (P=.05, Student-Newman-Keuls)
 t=Mean descriptions are reported in transformed data units, and are not de-transformed.
 Mean comparisons performed only when AOV Treatment P(F) is significant at mean comparison OSL.
 Missing data estimates are included in columns: Yates=1,2,3,4,5,6,10,13,19,20,21

Purdue University Weed Science

Pest Type	W WEED PANDI	W WEED XANST	W WEED AMBEL	W WEED PANDI
Pest Code	PANICUM DICHOT>	XANTHIUM STRUM>	AMBROSIA ARTEM>	PANICUM DICHOT>
Pest Scientific Name				
Pest Name	FALL PANICUM	HEART-LEAF COC>	COMMON RAGWEED	FALL PANICUM
Crop Code				
BBCH Scale				
Crop Scientific Name				
Crop Name				
Part Rated	PLOT P	PLOT P	PLOT P	PLOT P
Rating Date	6/6/2013	6/6/2013	6/6/2013	6/13/2013
Rating Type	CONTRO	CONTRO	CONTRO	CONTRO
Rating Unit	%	%	%	%
Sample Size, Unit	1 PLOT	1 PLOT	1 PLOT	1 PLOT
Days After First/Last Applic.	7 7	7 7	7 7	14 14
Trt-Eval Interval	7 DA-A	7 DA-A	7 DA-A	14 DA-A
ARM Action Codes	P	AA P	AA P	P
Number of Decimals	0	0	0	0
Trt Treatment				
No. Name	1	2	3	4
Rate				
Rate Unit				
Appl Code				
10 UNTREATED CHECK	0 f	0 d	0 d	0 d
LSD (P=.05)	14.0	13.5t	14.8t	8.6
Standard Deviation	9.6	9.3t	10.2t	5.9
CV	25.92	17.25	18.41	10.12
Bartlett's X2	9.453	3.769	6.884	3.793
P(Bartlett's X2)	0.15	0.708	0.441	0.58
Skewness	0.5312	-0.7084	-0.7206	-0.568
Kurtosis	-0.9674	-0.8093	-0.9338	-1.5588*

Purdue University Weed Science

Pest Type				W WEED	W WEED		W WEED
Pest Code				XANST	AMBEL		XANST
Pest Scientific Name				XANTHIUM STRUM>	AMBROSIA ARTEM>		XANTHIUM STRUM>
Pest Name				HEART-LEAF COC>	COMMON RAGWEED		HEART-LEAF COC>
Crop Code						ZEAMX	
BBCH Scale						BCOR	
Crop Scientific Name						ZEA MAYS	
Crop Name						CORN	
Part Rated				PLOT P	PLOT P	PLOT C	PLOT P
Rating Date				6/13/2013	6/13/2013	6/13/2013	6/20/2013
Rating Type				CONTRO	CONTRO	PHYGEN	CONTRO
Rating Unit				%	%	%	%
Sample Size, Unit				1 PLOT	1 PLOT	1 PLOT	1 PLOT
Days After First/Last Applic.				14 14	14 14	14 14	21 21
Trt-Eval Interval				14 DA-A	14 DA-A	14 DA-A	0 DA-B
ARM Action Codes				P	AA P	P	P
Number of Decimals				0	0	0	0
Trt No.	Treatment Name	Rate	Appl Code	5	6	7	8
		Rate Unit					
1	UNTREATED CHECK			0 b	0 c	0 a	0 b
2	LEXAR EZ	3630 g ai/ha A		93 a	89 b	0 a	100 a
	TOUCHDOWN TOTAL	880 g ae/ha A					
	COC	1 % v/v A					
3	LEXAR EZ	2340 g ai/ha A		99 a	100 a	0 a	100 a
	WEEDAR	533 g ae/ha A					
	COC	1 % v/v A					
	HALEX GT	2210 g ai/ha B					
4	LEXAR EZ	2340 g ai/ha A		99 a	100 a	0 a	100 a
	WEEDAR	533 g ae/ha A					
	GRAMOXONE SL	840 g ai/ha A					
	NIS	0.25 % v/v A					
	HALEX GT	2210 g ai/ha B					
5	ANTHEM ATZ	1260 g ai/ha A		96 a	98 a	0 a	100 a
	TOUCHDOWN TOTAL	880 g ae/ha A					
	N-PAK AMS	2.5 % v/v A					
6	CORVUS	129 g ai/ha A		100 a	100 a	0 a	100 a
	AATREX	1680 g ai/ha A					
	TOUCHDOWN TOTAL	880 g ae/ha A					
	N-PAK AMS	2.5 % v/v A					
7	VERDICT	684 g ai/ha A		100 a	100 a	0 a	100 a
	AATREX	1680 g ai/ha A					
	TOUCHDOWN TOTAL	880 g ae/ha A					
	N-PAK AMS	2.5 % v/v A					
8	ZIDUA	179 g ai/ha A		100 a	99 a	0 a	100 a
	SHARPEN	75 g ai/ha A					
	AATREX	1680 g ai/ha A					
	TOUCHDOWN TOTAL	880 g ae/ha A					
	N-PAK AMS	2.5 % v/v A					
9	FIERCE	213 g ai/ha A		100 a	100 a	0 a	100 a
	AATREX	1680 g ai/ha A					
	TOUCHDOWN TOTAL	880 g ae/ha A					
	N-PAK AMS	2.5 % v/v A					
	TOUCHDOWN TOTAL	880 g ae/ha B					
	N-PAK AMS	2.5 % v/v B					

Purdue University Weed Science

Pest Type	W WEED	W WEED		W WEED
Pest Code	XANST	AMBEL		XANST
Pest Scientific Name	XANTHIUM STRUM>	AMBROSIA ARTEM>		XANTHIUM STRUM>
Pest Name	HEART-LEAF COC>	COMMON RAGWEED		HEART-LEAF COC>
Crop Code			ZEAMX	
BBCH Scale			BCOR	
Crop Scientific Name			ZEA MAYS	
Crop Name			CORN	
Part Rated	PLOT P	PLOT P	PLOT C	PLOT P
Rating Date	6/13/2013	6/13/2013	6/13/2013	6/20/2013
Rating Type	CONTRO	CONTRO	PHYGEN	CONTRO
Rating Unit	%	%	%	%
Sample Size, Unit	1 PLOT	1 PLOT	1 PLOT	1 PLOT
Days After First/Last Applic.	14 14	14 14	14 14	21 21
Trt-Eval Interval	14 DA-A	14 DA-A	14 DA-A	0 DA-B
ARM Action Codes	P	AA P	P	P
Number of Decimals	0	0	0	0
Trt Treatment	Rate	Appl		
No. Name	Rate Unit	Code		
	5		6	7
				8
10 UNTREATED CHECK	0 b	0 c	0 a	0 b
LSD (P=.05)	5.3	10.1t	0.0	0.0
Standard Deviation	3.6	7.0t	0.0	0.0
CV	4.63	10.33	0.0	0.0
Bartlett's X2	7.047	5.685	0.0	0.0
P(Bartlett's X2)	0.07	0.459	.	.
Skewness	-1.4874*	-1.3527*	.	-1.5591*
Kurtosis	0.2684	0.0345	.	0.4507

Purdue University Weed Science

Pest Type		W WEED	W WEED	W WEED	W WEED
Pest Code		AMBEL	PANDI	XANST	AMBEL
Pest Scientific Name		AMBROSIA ARTEM>	PANICUM DICHOT>	XANTHIUM STRUM>	AMBROSIA ARTEM>
Pest Name		COMMON RAGWEED	FALL PANICUM	HEART-LEAF COC>	COMMON RAGWEED
Crop Code					
BBCH Scale					
Crop Scientific Name					
Crop Name					
Part Rated		PLOT P	PLOT P	PLOT P	PLOT P
Rating Date		6/20/2013	6/20/2013	7/5/2013	7/5/2013
Rating Type		CONTRO	CONTRO	CONTRO	CONTRO
Rating Unit		%	%	%	%
Sample Size, Unit		1 PLOT	1 PLOT	1 PLOT	1 PLOT
Days After First/Last Applic.		21 21	21 21	36 15	36 15
Trt-Eval Interval		0 DA-B	0 DA-B	15 DA-B	15 DA-B
ARM Action Codes		P	AA P	P	P
Number of Decimals		0	0	0	0
Trt No.	Treatment Name	Rate	Appl Code		
		Rate Unit		9	10
				11	12
1	UNTREATED CHECK			0 b	0 b
2	LEXAR EZ	3630 g ai/ha A		99 a	51 c
	TOUCHDOWN TOTAL	880 g ae/ha A			93 a
	COC	1 % v/v A			100 a
3	LEXAR EZ	2340 g ai/ha A		100 a	1 d
	WEEDAR	533 g ae/ha A			100 a
	COC	1 % v/v A			100 a
	HALEX GT	2210 g ai/ha B			
4	LEXAR EZ	2340 g ai/ha A		100 a	94 a
	WEEDAR	533 g ae/ha A			96 a
	GRAMOXONE SL	840 g ai/ha A			
	NIS	0.25 % v/v A			
	HALEX GT	2210 g ai/ha B			
5	ANTHEM ATZ	1260 g ai/ha A		98 a	100 a
	TOUCHDOWN TOTAL	880 g ae/ha A			93 a
	N-PAK AMS	2.5 % v/v A			100 a
6	CORVUS	129 g ai/ha A		100 a	100 a
	AATREX	1680 g ai/ha A			99 a
	TOUCHDOWN TOTAL	880 g ae/ha A			
	N-PAK AMS	2.5 % v/v A			
7	VERDICT	684 g ai/ha A		100 a	79 b
	AATREX	1680 g ai/ha A			98 a
	TOUCHDOWN TOTAL	880 g ae/ha A			
	N-PAK AMS	2.5 % v/v A			
8	ZIDUA	179 g ai/ha A		98 a	97 a
	SHARPEN	75 g ai/ha A			95 a
	AATREX	1680 g ai/ha A			
	TOUCHDOWN TOTAL	880 g ae/ha A			
	N-PAK AMS	2.5 % v/v A			
9	FIERCE	213 g ai/ha A		99 a	99 a
	AATREX	1680 g ai/ha A			
	TOUCHDOWN TOTAL	880 g ae/ha A			
	N-PAK AMS	2.5 % v/v A			
	TOUCHDOWN TOTAL	880 g ae/ha B			
	N-PAK AMS	2.5 % v/v B			

Purdue University Weed Science

	W WEED AMBEL	W WEED PANDI	W WEED XANST	W WEED AMBEL
Pest Type	AMBROSIA ARTEM>	PANICUM DICHOT>	XANTHIUM STRUM>	AMBROSIA ARTEM>
Pest Code	COMMON RAGWEED	FALL PANICUM	HEART-LEAF COC>	COMMON RAGWEED
Pest Scientific Name				
Pest Name				
Crop Code				
BBCH Scale				
Crop Scientific Name				
Crop Name				
Part Rated	PLOT P	PLOT P	PLOT P	PLOT P
Rating Date	6/20/2013	6/20/2013	7/5/2013	7/5/2013
Rating Type	CONTRO	CONTRO	CONTRO	CONTRO
Rating Unit	%	%	%	%
Sample Size, Unit	1 PLOT	1 PLOT	1 PLOT	1 PLOT
Days After First/Last Applic.	21 21	21 21	36 15	36 15
Trt-Eval Interval	0 DA-B	0 DA-B	15 DA-B	15 DA-B
ARM Action Codes	P	AA P	P	P
Number of Decimals	0	0	0	0
Trt Treatment				
No. Name	9	10	11	12
	Rate Unit	Rate Unit	Rate Unit	Rate Unit
10 UNTREATED CHECK	0 b	0 d	0 b	0 b
LSD (P=.05)	3.0	10.8t	5.6	0.0
Standard Deviation	2.1	7.5t	3.8	0.0
CV	2.6	13.89	4.99	0.0
Bartlett's X2	2.162	1.631	7.404	0.0
P(Bartlett's X2)	0.54	0.897	0.285	.
Skewness	-1.5489*	-0.5165	-1.5147*	-1.5591*
Kurtosis	0.4344	-1.4605	0.381	0.4507

Purdue University Weed Science

Pest Type		W WEED	W WEED	W WEED	W WEED
Pest Code		PANDI	IPOSS	XANST	AMBEL
Pest Scientific Name		PANICUM DICHOT>	IPOMOEA SP.	XANTHIUM STRUM>	AMBROSIA ARTEM>
Pest Name		FALL PANICUM	MORNING GLORY	HEART-LEAF COC>	COMMON RAGWEED
Crop Code					
BBCH Scale					
Crop Scientific Name					
Crop Name					
Part Rated		PLOT P	PLOT P	PLOT P	PLOT P
Rating Date		7/5/2013	7/5/2013	7/18/2013	7/18/2013
Rating Type		CONTRO	CONTRO	CONTRO	CONTRO
Rating Unit		%	%	%	%
Sample Size, Unit		1 PLOT	1 PLOT	1 PLOT	1 PLOT
Days After First/Last Applic.		36 15	36 15	49 28	49 28
Trt-Eval Interval		15 DA-B	15 DA-B	28 DA-B	28 DA-B
ARM Action Codes		P	P	P	P
Number of Decimals		0	0	0	0
Trt No.	Treatment Name	Rate	Appl Code		
		Rate Unit		13	14
1	UNTREATED CHECK			0 d	0 c
2	LEXAR EZ	3630 g ai/ha A		44 c	90 ab
	TOUCHDOWN TOTAL	880 g ae/ha A			
	COC	1 % v/v A			
3	LEXAR EZ	2340 g ai/ha A		41 c	91 ab
	WEEDAR	533 g ae/ha A			
	COC	1 % v/v A			
	HALEX GT	2210 g ai/ha B			
4	LEXAR EZ	2340 g ai/ha A		100 a	98 a
	WEEDAR	533 g ae/ha A			
	GRAMOXONE SL	840 g ai/ha A			
	NIS	0.25 % v/v A			
	HALEX GT	2210 g ai/ha B			
5	ANTHEM ATZ	1260 g ai/ha A		100 a	89 ab
	TOUCHDOWN TOTAL	880 g ae/ha A			
	N-PAK AMS	2.5 % v/v A			
6	CORVUS	129 g ai/ha A		100 a	93 ab
	AATREX	1680 g ai/ha A			
	TOUCHDOWN TOTAL	880 g ae/ha A			
	N-PAK AMS	2.5 % v/v A			
7	VERDICT	684 g ai/ha A		68 b	85 b
	AATREX	1680 g ai/ha A			
	TOUCHDOWN TOTAL	880 g ae/ha A			
	N-PAK AMS	2.5 % v/v A			
8	ZIDUA	179 g ai/ha A		94 a	94 ab
	SHARPEN	75 g ai/ha A			
	AATREX	1680 g ai/ha A			
	TOUCHDOWN TOTAL	880 g ae/ha A			
	N-PAK AMS	2.5 % v/v A			
9	FIERCE	213 g ai/ha A		100 a	99 a
	AATREX	1680 g ai/ha A			
	TOUCHDOWN TOTAL	880 g ae/ha A			
	N-PAK AMS	2.5 % v/v A			
	TOUCHDOWN TOTAL	880 g ae/ha B			
	N-PAK AMS	2.5 % v/v B			

Purdue University Weed Science

Pest Type	W WEED	W WEED	W WEED	W WEED
Pest Code	PANDI	IPOSS	XANST	AMBEL
Pest Scientific Name	PANICUM DICHOT>	IPOMOEA SP.	XANTHIUM STRUM>	AMBROSIA ARTEM>
Pest Name	FALL PANICUM	MORNING GLORY	HEART-LEAF COC>	COMMON RAGWEED
Crop Code				
BBCH Scale				
Crop Scientific Name				
Crop Name				
Part Rated	PLOT P	PLOT P	PLOT P	PLOT P
Rating Date	7/5/2013	7/5/2013	7/18/2013	7/18/2013
Rating Type	CONTRO	CONTRO	CONTRO	CONTRO
Rating Unit	%	%	%	%
Sample Size, Unit	1 PLOT	1 PLOT	1 PLOT	1 PLOT
Days After First/Last Applic.	36 15	36 15	49 28	49 28
Trt-Eval Interval	15 DA-B	15 DA-B	28 DA-B	28 DA-B
ARM Action Codes	P	P	P	P
Number of Decimals	0	0	0	0
Trt Treatment	Rate	Appl		
No. Name	Rate Unit	Code		
	13	14	15	16
10 UNTREATED CHECK	0 d	0 c	0 b	0 c
LSD (P=.05)	13.4	6.6	7.7	3.9
Standard Deviation	9.2	4.5	5.3	2.7
CV	14.22	6.13	7.72	3.4
Bartlett's X2	1.938	8.643	4.261	4.955
P(Bartlett's X2)	0.585	0.279	0.749	0.084
Skewness	-0.6275	-1.4715*	-1.4598*	-1.5332*
Kurtosis	-1.2794	0.316	0.3046	0.4043

Purdue University Weed Science

Pest Type	W WEED	W WEED			
Pest Code	PANDI	IPOSS			
Pest Scientific Name	PANICUM DICHOT>	IPOMOEA SP.			
Pest Name	FALL PANICUM	MORNING GLORY			
Crop Code			ZEAMX	ZEAMX	ZEAMX
BBCH Scale			BCOR	BCOR	BCOR
Crop Scientific Name			Zea mays	Zea mays	Zea mays
Crop Name			Corn	Corn	Corn
Part Rated	PLOT P	PLOT P	YIELD C	YIELD C	YIELD C
Rating Date	7/18/2013	7/18/2013	11/8/2013	11/8/2013	11/8/2013
Rating Type	CONTRO	CONTRO	YIELD	YIELD	YIELD
Rating Unit	%	%	lb/plot	bu/ac	kg/ha
Sample Size, Unit	1 PLOT	1 PLOT	1 PLOT	1 PLOT	1 PLOT
Days After First/Last Applic.	49 28	49 28	162 141	162 141	162 141
Trt-Eval Interval	28 DA-B	28 DA-B			
ARM Action Codes	AA P	P		TY1	TY2
Number of Decimals	0	0	1	1	1
Trt Treatment	Rate	Appl			
No. Name	Rate Unit	Code	17	18	19
1 UNTREATED CHECK			0 e	0 d	6.2 b
2 LEXAR EZ	3630 g ai/ha A		47 d	88 abc	21.3 a
TOUCHDOWN TOTAL	880 g ae/ha A				130.4 a
COC	1 % v/v A				8186.5 a
3 LEXAR EZ	2340 g ai/ha A		89 b	93 abc	24.2 a
WEEDAR	533 g ae/ha A				148.0 a
COC	1 % v/v A				9292.0 a
HALEX GT	2210 g ai/ha B				
4 LEXAR EZ	2340 g ai/ha A		100 a	96 ab	25.1 a
WEEDAR	533 g ae/ha A				153.2 a
GRAMOXONE SL	840 g ai/ha A				9617.4 a
NIS	0.25 % v/v A				
HALEX GT	2210 g ai/ha B				
5 ANTHEM ATZ	1260 g ai/ha A		95 ab	89 abc	24.7 a
TOUCHDOWN TOTAL	880 g ae/ha A				150.8 a
N-PAK AMS	2.5 % v/v A				9467.7 a
6 CORVUS	129 g ai/ha A		100 a	86 bc	26.7 a
AATREX	1680 g ai/ha A				163.3 a
TOUCHDOWN TOTAL	880 g ae/ha A				10251.1 a
N-PAK AMS	2.5 % v/v A				
7 VERDICT	684 g ai/ha A		69 c	84 c	24.1 a
AATREX	1680 g ai/ha A				147.5 a
TOUCHDOWN TOTAL	880 g ae/ha A				9255.9 a
N-PAK AMS	2.5 % v/v A				
8 ZIDUA	179 g ai/ha A		88 b	99 a	25.7 a
SHARPEN	75 g ai/ha A				156.9 a
AATREX	1680 g ai/ha A				9850.0 a
TOUCHDOWN TOTAL	880 g ae/ha A				
N-PAK AMS	2.5 % v/v A				
9 FIERCE	213 g ai/ha A		100 a	99 a	25.7 a
AATREX	1680 g ai/ha A				156.8 a
TOUCHDOWN TOTAL	880 g ae/ha A				9843.4 a
N-PAK AMS	2.5 % v/v A				
TOUCHDOWN TOTAL	880 g ae/ha B				
N-PAK AMS	2.5 % v/v B				

Purdue University Weed Science

Pest Type	W WEED	W WEED			
Pest Code	PANDI	IPOSS			
Pest Scientific Name	PANICUM DICHOT>	IPOMOEA SP.			
Pest Name	FALL PANICUM	MORNING GLORY			
Crop Code			ZEAMX	ZEAMX	ZEAMX
BBCH Scale			BCOR	BCOR	BCOR
Crop Scientific Name			Zea mays	Zea mays	Zea mays
Crop Name			Corn	Corn	Corn
Part Rated	PLOT P	PLOT P	YIELD C	YIELD C	YIELD C
Rating Date	7/18/2013	7/18/2013	11/8/2013	11/8/2013	11/8/2013
Rating Type	CONTRO	CONTRO	YIELD	YIELD	YIELD
Rating Unit	%	%	lb/plot	bu/ac	kg/ha
Sample Size, Unit	1 PLOT	1 PLOT	1 PLOT	1 PLOT	1 PLOT
Days After First/Last Applic.	49 28	49 28	162 141	162 141	162 141
Trt-Eval Interval	28 DA-B	28 DA-B			
ARM Action Codes	AA P	P		TY1	TY2
Number of Decimals	0	0	1	1	1
Trt Treatment	Rate	Appl			
No. Name	Rate Unit	Code	17	18	19
10 UNTREATED CHECK	0 e	0 d	5.8 b	35.4 b	2224.8 b
LSD (P=.05)	10.8t	7.6	4.80	29.32	1840.46
Standard Deviation	7.4t	5.3	3.29	20.09	1261.05
CV	12.67	7.17	15.69	15.69	15.69
Bartlett's X2	5.824	7.815	5.759	5.759	5.759
P(Bartlett's X2)	0.213	0.349	0.764	0.764	0.764
Skewness	-0.8692*	-1.4327*	-1.1614*	-1.1614*	-1.1614*
Kurtosis	-0.7116	0.2567	0.1126	0.1126	0.1126

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PRE AND PRE FB POST PROGRAMS IN CORN

Trial ID: 13S-SEP-CTC-04 Location: SEPAC Trial Year: 2013
 Protocol ID: 13S-SEP-CTC-04 Investigator: Dr. Bill Johnson
 Project ID: USHECOR028-2013 Study Director: JOE IKLEY
 Sponsor Contact: SYNGENTA - STEVE MROCKIEWICZ

Randomized Complete Block (RCB) AOV For W WEED PANDI PANICUM DICHOTOMIFLORUM FALL PANICUM PLOT P 6/6/2013 CONTRO % 1 PLOT 7 7 7 DA-A P 0 (Data Column 1)

Source	DF	Sum of Squares	Mean Square	F	Prob(F)
Total	36	44475.527791			
Replicate	3	832.744924	277.581641	2.996	0.0506
Treatment	9	41419.433534	4602.159282	49.678	0.0001
Error	24	2223.349333	92.639556		

Randomized Complete Block (RCB) AOV For W WEED XANST XANTHIUM STRUMARIUM HEART-LEAF COCKLEBUR PLOT P 6/6/2013 CONTRO % 1 PLOT 7 7 7 DA-A AA P 0 (Data Column 2)

Source	DF	Sum of Squares	Mean Square	F	Prob(F)
Total	38	38547.979373			
Replicate	3	507.220979	169.073660	1.966	0.1439
Treatment	9	35804.723065	3978.302563	46.259	0.0001
Error	26	2236.035328	86.001359		

Randomized Complete Block (RCB) AOV For W WEED AMBEL AMBROSIA ARTEMISIIFOLIA COMMON RAGWEED PLOT P 6/6/2013 CONTRO % 1 PLOT 7 7 7 DA-A AA P 0 (Data Column 3)

Source	DF	Sum of Squares	Mean Square	F	Prob(F)
Total	36	40690.131216			
Replicate	3	788.271287	262.757096	2.539	0.0804
Treatment	9	37418.550126	4157.616681	40.181	0.0001
Error	24	2483.309803	103.471242		

Randomized Complete Block (RCB) AOV For W WEED PANDI PANICUM DICHOTOMIFLORUM FALL PANICUM PLOT P 6/13/2013 CONTRO % 1 PLOT 14 14 14 DA-A P 0 (Data Column 4)

Source	DF	Sum of Squares	Mean Square	F	Prob(F)
Total	36	62292.847610			
Replicate	3	102.375252	34.125084	0.992	0.4132
Treatment	9	61365.095855	6818.343984	198.261	0.0001
Error	24	825.376503	34.390688		

Randomized Complete Block (RCB) AOV For W WEED XANST XANTHIUM STRUMARIUM HEART-LEAF COCKLEBUR PLOT P 6/13/2013 CONTRO % 1 PLOT 14 14 14 DA-A P 0 (Data Column 5)

Source	DF	Sum of Squares	Mean Square	F	Prob(F)
Total	38	62405.473251			
Replicate	3	36.460905	12.153635	0.918	0.4461
Treatment	9	62024.660494	6891.628944	520.347	0.0001
Error	26	344.351852	13.244302		

Randomized Complete Block (RCB) AOV For W WEED AMBEL AMBROSIA ARTEMISIIFOLIA COMMON RAGWEED PLOT P 6/13/2013 CONTRO % 1 PLOT 14 14 14 DA-A AA P 0 (Data Column 6)

Source	DF	Sum of Squares	Mean Square	F	Prob(F)
Total	38	47978.618631			
Replicate	3	243.703209	81.234403	1.671	0.1976
Treatment	9	46471.255775	5163.472864	106.239	0.0001
Error	26	1263.659647	48.602294		

Randomized Complete Block (RCB) AOV For ZAMX BCOR ZEA MAYS CORN PLOT C 6/13/2013 PHYGEN % 1 PLOT 14 14 14 DA-A P 0 (Data Column 7)

Source	DF	Sum of Squares	Mean Square	F	Prob(F)
Total	39	0.000000000000			
Replicate	3	0.000000000000	0.000000000000	0.000	1.0000
Treatment	9	0.000000000000	0.000000000000	0.000	1.0000
Error	27	0.000000000000	0.000000000000		

Randomized Complete Block (RCB) AOV For W WEED XANST XANTHIUM STRUMARIUM HEART-LEAF COCKLEBUR PLOT P 6/20/2013 CONTRO % 1 PLOT 21 21 0 DA-B P 0 (Data Column 8)

Source	DF	Sum of Squares	Mean Square	F	Prob(F)
Total	39	64000.000000			
Replicate	3	0.000000	0.000000	0.000	1.0000
Treatment	9	64000.000000	7111.111111	0.000	1.0000
Error	27	0.000000	0.000000		

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Randomized Complete Block (RCB) AOV For W WEED AMBEL AMBROSIA ARTEMISIIFOLIA COMMON RAGWEED PLOT P 6/20/2013

CONTR0 % 1 PLOT 21 21 0 DA-B P 0 (Data Column 9)

Source	DF	Sum of Squares	Mean Square	F	Prob(F)
Total	39	62977.500000			
Replicate	3	22.500000	7.500000	1.761	0.1784
Treatment	9	62840.000000	6982.222222	1639.305	0.0001
Error	27	115.000000	4.259259		

Randomized Complete Block (RCB) AOV For W WEED PANDI PANICUM DICHOTOMIFLORUM FALL PANICUM PLOT P 6/20/2013 CONTR0 % 1 PLOT 21 21 0 DA-B AA P 0 (Data Column 10)

Source	DF	Sum of Squares	Mean Square	F	Prob(F)
Total	38	53540.221934			
Replicate	3	282.373367	94.124456	1.694	0.1928
Treatment	9	51813.167655	5757.018628	103.609	0.0001
Error	26	1444.680911	55.564650		

Randomized Complete Block (RCB) AOV For W WEED XANST XANTHIUM STRUMARIUM HEART-LEAF COCKLEBUR PLOT P 7/5/2013

CONTR0 % 1 PLOT 36 15 15 DA-B P 0 (Data Column 11)

Source	DF	Sum of Squares	Mean Square	F	Prob(F)
Total	39	60194.375000			
Replicate	3	81.875000	27.291667	1.845	0.1628
Treatment	9	59713.125000	6634.791667	448.549	0.0001
Error	27	399.375000	14.791667		

Randomized Complete Block (RCB) AOV For W WEED AMBEL AMBROSIA ARTEMISIIFOLIA COMMON RAGWEED PLOT P 7/5/2013

CONTR0 % 1 PLOT 36 15 15 DA-B P 0 (Data Column 12)

Source	DF	Sum of Squares	Mean Square	F	Prob(F)
Total	39	64000.000000			
Replicate	3	0.000000	0.000000	0.000	1.0000
Treatment	9	64000.000000	7111.111111	0.000	1.0000
Error	27	0.000000	0.000000		

Randomized Complete Block (RCB) AOV For W WEED PANDI PANICUM DICHOTOMIFLORUM FALL PANICUM PLOT P 7/5/2013 CONTR0 % 1 PLOT 36 15 15 DA-B P 0 (Data Column 13)

Source	DF	Sum of Squares	Mean Square	F	Prob(F)
Total	38	63078.981481			
Replicate	3	73.981481	24.660494	0.292	0.8311
Treatment	9	60805.833333	6756.203704	79.876	0.0001
Error	26	2199.166667	84.583333		

Randomized Complete Block (RCB) AOV For W WEED IPOSS IPOMOEAE SP. MORNING GLORY PLOT P 7/5/2013 CONTR0 % 1 PLOT 36 15 15 DA-B P 0 (Data Column 14)

Source	DF	Sum of Squares	Mean Square	F	Prob(F)
Total	39	55687.500000			
Replicate	3	172.500000	57.500000	2.810	0.0584
Treatment	9	54962.500000	6106.944444	298.439	0.0001
Error	27	552.500000	20.462963		

Randomized Complete Block (RCB) AOV For W WEED XANST XANTHIUM STRUMARIUM HEART-LEAF COCKLEBUR PLOT P 7/18/2013

CONTR0 % 1 PLOT 49 28 28 DA-B P 0 (Data Column 15)

Source	DF	Sum of Squares	Mean Square	F	Prob(F)
Total	39	48349.375000			
Replicate	3	186.875000	62.291667	2.222	0.1085
Treatment	9	47405.625000	5267.291667	187.900	0.0001
Error	27	756.875000	28.032407		

Randomized Complete Block (RCB) AOV For W WEED AMBEL AMBROSIA ARTEMISIIFOLIA COMMON RAGWEED PLOT P 7/18/2013

CONTR0 % 1 PLOT 49 28 28 DA-B P 0 (Data Column 16)

Source	DF	Sum of Squares	Mean Square	F	Prob(F)
Total	39	62674.375000			
Replicate	3	11.875000	3.958333	0.550	0.6526
Treatment	9	62468.125000	6940.902778	964.138	0.0001
Error	27	194.375000	7.199074		

Randomized Complete Block (RCB) AOV For W WEED PANDI PANICUM DICHOTOMIFLORUM FALL PANICUM PLOT P 7/18/2013 CONTR0 % 1 PLOT 49 28 28 DA-B AA P 0 (Data Column 17)

Source	DF	Sum of Squares	Mean Square	F	Prob(F)
Total	39	44308.944795			
Replicate	3	30.364744	10.121581	0.183	0.9072
Treatment	9	42782.983732	4753.664859	85.818	0.0001
Error	27	1495.596319	55.392456		

Purdue University Weed Science

Randomized Complete Block (RCB) AOV For W WEED IPOSS IPOMOEA SP. MORNING GLORY PLOT P 7/18/2013 CONTRO % 1 PLOT 49 28 28 DA-B P 0 (Data Column 18)

Source	DF	Sum of Squares	Mean Square	F	Prob(F)
Total	39	55527.500000			
Replicate	3	167.500000	55.833333	2.023	0.1343
Treatment	9	54615.000000	6068.333333	219.926	0.0001
Error	27	745.000000	27.592593		

Randomized Complete Block (RCB) AOV For ZEAMX BCOR Zea mays Corn YIELD C 11/8/2013 YIELD lb/plot 1 PLOT 162 141 1 (Data Column 19)

Source	DF	Sum of Squares	Mean Square	F	Prob(F)
Total	36	2639.090421			
Replicate	3	78.394615	26.131538	2.419	0.0910
Treatment	9	2301.412248	255.712472	23.669	0.0001
Error	24	259.283558	10.803482		

Randomized Complete Block (RCB) AOV For ZEAMX BCOR Zea mays Corn YIELD C 11/8/2013 YIELD bu/ac 1 PLOT 162 141 TY1 1 (Data Column 20)

Source	DF	Sum of Squares	Mean Square	F	Prob(F)
Total	36	98599.943848			
Replicate	3	2928.927532	976.309177	2.419	0.0910
Treatment	9	85983.836181	9553.759576	23.669	0.0001
Error	24	9687.180136	403.632506		

Randomized Complete Block (RCB) AOV For ZEAMX BCOR Zea mays Corn YIELD C 11/8/2013 YIELD kg/ha 1 PLOT 162 141 TY2 1 (Data Column 21)

Source	DF	Sum of Squares	Mean Square	F	Prob(F)
Total	36	388467180.500773			
Replicate	3	11539481.420910	3846493.806970	2.419	0.0910
Treatment	9	338761840.080236	37640204.453360	23.669	0.0001
Error	24	38165858.999626	1590244.124984		

Pest Type

W, WEED, G-BYRW7, G-WEDSTG = Weed or volunteer crop

Pest Code

PANDI, PANICUM DICHOTOMIFLORUM, = US

XANST, XANTHIUM STRUMARIUM, = US

AMBEL, AMBROSIA ARTEMISIIFOLIA, = US

IPOSS, IPOMOEA SP., = US

Crop Code

ZEAMX, BCOR, ZEA MAYS, = US

Part Rated

PLOT = plot

YIELD = yield

P = Pest is Part Rated

C = Crop is Part Rated

Rating Type

CONTRO = control / burndown or knockdown

PHYGEN = phytotoxicity - general / injury

YIELD = yield

Rating Unit

% = percent

lb/plot = pounds per plot

bu/ac = bushels per acre

kg/ha = kilograms per hectare

PLOT = total plot

ARM Action Codes

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

TY1 = 6.112392*[19]

TY2 = 383.6631*[19]