

# Purdue University

## Corvus, Balance Flexx, Capreno, Laudis, Ignite, Two Pass system in Corn

Trial ID: 11S-SEP-NTC-07      Protocol ID: 11S-SEP-NTC-07  
 Location: SEPAC      Study Director: Paul Marquardt  
 Project ID: 11S-SEP-NTC-07      Investigator: Dr. Bill Johnson  
 Sponsor Contact: Dave Lamore

### General Trial Information

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

**Discipline:** H herbicide  
**Trial Status:** E established  
**Initiation Date:** 3-25-2011

### Trial Location

**City:** Butleville  
**State/Prov.:** IN  
**Postal Code:** 47223  
**Country:** USA

**Objectives:**  
 HP11NARBLJ

### Personnel

**Study Director:** Paul Marquardt      **Title:** Research Associate  
**Affiliation:** Purdue University  
**Address:** 915 W. State Street  
**Location:** West Lafayette, IN  
**Postal Code:** 47907      **E-mail:** pmarquar@purdue.edu  
**Phone No.:** 765-494-0891      **Mobile No.:** 765-409-6369  
**Investigator:** Dr. Bill Johnson      **Title:** Professor  
**Affiliation:** Purdue University  
**Address:** 915 W. State Street  
**Location:** West Lafayette, IN  
**Postal Code:** 47907      **E-mail:** wgj@purdue.edu  
**Phone No.:** 765-494-4656      **Mobile No.:** 765-404-9801

### Cooperator/Landowner

**Cooperator:** Don Biehle      **Role:** Director  
**Organization:** Southeast Purdue Agricultural Center      **Org. Type:** University  
**Address 1:** 4425 E. CR 350 N  
**City:** Butleville      **Phone No.:** 812-458-6977  
**State/Prov.:** IN      **Fax No.:** 812-458-6979  
**Postal Code:** 47223      **Mobile No.:** 812-592-8426  
**Country:** USA      United States      **E-mail:** biehled@purdue.edu

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Crop Description			
<b>Crop 1:</b> ZEAMX	Zea mays	Com	
	<b>Variety:</b> Pioneer 33W84		<b>Description:</b> Roundup Ready/Liberty Link
	<b>BBCH Scale:</b> BCOR		<b>Planting Date:</b> 6-3-2011
	<b>Planting Method:</b> DIRDRI	direct drilled	<b>Rate, Unit:</b> 32000 S/A
	<b>Depth, Unit:</b> 2	IN	
	<b>Row Spacing, Unit:</b> 30	IN	<b>Spacing Within Row, Unit:</b> 6 IN
	<b>Seed Bed:</b> MEDIUM	medium	<b>Soil Temperature, Unit:</b> 75 F
	<b>Soil Moisture:</b> MOIST		<b>Emergence Date:</b> 6-8-2011
	<b>Harvest Date:</b> 10-26-2011		<b>Harvest Equipment:</b> John Deere 3300
	<b>Harvested Width, Unit:</b> 7.5	FT	<b>Harvested Length, Unit:</b> 25 FT
			<b>Moisture Meter:</b> CART 3" BLADE
<b>Weighing Equipment:</b> Harvestmaster			

Pest Description	
<b>Pest 1 Type:</b> W	<b>Code:</b> XANST <i>Xanthium strumarium</i> <b>Common Name:</b> Common cocklebur
<b>Pest 2 Type:</b> W	<b>Code:</b> PLAVI <i>Plantago virginica</i> <b>Common Name:</b> Paleseed plantain
<b>Pest 3 Type:</b> W	<b>Code:</b> AMBEL <i>Ambrosia artemisiifolia</i> <b>Common Name:</b> Common ragweed
<b>Pest 4 Type:</b> W	<b>Code:</b> ERICA <i>Conyza canadensis</i> <b>Common Name:</b> Canada horseweed
<b>Pest 5 Type:</b> W	<b>Code:</b> ERIPH <i>Erigeron philadelphicus</i> <b>Common Name:</b> Daisy fleabane
<b>Pest 6 Type:</b> W	<b>Code:</b> ALLVI <i>Allium vineale</i> <b>Common Name:</b> Wild garlic
<b>Pest 7 Type:</b> W	<b>Code:</b> POAAN <i>Poa annua</i> <b>Common Name:</b> Annual bluegrass
<b>Pest 8 Type:</b> W	<b>Code:</b> TAROF <i>Taraxacum officinale</i> <b>Common Name:</b> Common dandelion
<b>Pest 9 Type:</b> W	<b>Code:</b> ECHCG <i>Echinochloa crus-galli</i> <b>Common Name:</b> Common barnyardgrass
<b>Pest10 Type:</b> W	<b>Code:</b> SETFA <i>Setaria faberi</i> <b>Common Name:</b> Giant foxtail

Site and Design	
<b>Plot Width, Unit:</b> 10 FT	<b>Site Type:</b> FIELD field
<b>Plot Length, Unit:</b> 30 FT	<b>Experimental Unit:</b> 1 PLOT plot
<b>Plot Area, Unit:</b> 300 FT <sup>2</sup>	<b>Tillage Type:</b> NOTILL no-till
<b>Replications:</b> 4	<b>Study Design:</b> RACOB L Randomized Complete Block (RCB)
	<b>Untreated Arrangement:</b> INCLUDED single control randomized in each block

Soil Description	
<b>Description Name:</b> SEPAC-Field U4	
<b>% OM:</b> 1.8	<b>Texture:</b> SIL silt loam
<b>pH:</b> 5.6	<b>Soil Name:</b> Avonburg
<b>CEC:</b> 6.7	<b>Fert. Level:</b> G good
	<b>Soil Drainage:</b> P poor

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## Application Description

	A	B
Application Date:	6-3-2011	6-24-2011
Time of Day:	10 AM	9 AM
Application Method:	SPRAY	SPRAY
Application Timing:	ATPLAN	MIPOCR
Application Placement:	FOLIAR	FOLIAR
Applied By:	RT	RT
Air Temperature, Unit:	75 F	66 F
% Relative Humidity:	62	65
Wind Velocity, Unit:	4 MPH	4.5 MPH
Wind Direction:	SE	W
Dew Presence (Y/N):	N no	Y yes
Soil Temperature, Unit:	75 F	
Soil Moisture:	MOIST	WET
% Cloud Cover:	90	100

## Crop Stage At Each Application

	A	B
Crop 1 Code, BBCH Scale:	ZEAMX BCOR	ZEAMX BCOR
Stage Scale Used:	BBCH	BBCH
Stage Majority, Percent:	00 100	34 90
Stage Minimum, Percent:		33 10
Stage Maximum, Percent:		34 90
Height, Unit:		10 IN
Height Minimum, Maximum:		8 12

## Pest Stage At Each Application

	A	B
Pest 1 Code, Type, Scale:	XANST W	XANST W
Stage Majority, Percent:	31 100	34 100
Height, Unit:	2 IN	7 IN
Height Minimum, Maximum:	1 3	2 12
Density, Unit:	15 YD2	7.5 YD2
Pest 2 Code, Type, Scale:	PLAVI W	PLAVI W
Stage Majority, Percent:	65 100	
Height, Unit:	3.5 IN	
Height Minimum, Maximum:	1 6	
Density, Unit:	2.5 YD2	
Pest 3 Code, Type, Scale:	AMBEL W	AMBEL W
Stage Majority, Percent:	32 100	34 100
Height, Unit:	7 IN	12 IN
Height Minimum, Maximum:	4 10	6 18

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Density, Unit:	2 YD2	4 YD2
Pest 4 Code, Type, Scale:	ERICA W	ERICA W
Stage Majority, Percent:	33 100	33 100
Height, Unit:	3.5 IN	3.5 IN
Height Minimum, Maximum:	1 6	1 6
Density, Unit:	42.5 YD2	55 YD2
Pest 5 Code, Type, Scale:	ERIPH W	ERIPH W
Stage Majority, Percent:	12 100	
Height, Unit:	3 IN	
Height Minimum, Maximum:	1 5	
Density, Unit:	5 YD2	
Pest 6 Code, Type, Scale:	ALLVI W	ALLVI W
Stage Majority, Percent:	65 100	
Height, Unit:	27 IN	
Height Minimum, Maximum:	18 36	
Density, Unit:	5 YD2	
Pest 7 Code, Type, Scale:	POAAN W	POAAN W
Stage Majority, Percent:	67 100	
Height, Unit:	4 IN	
Height Minimum, Maximum:	2 6	
Density, Unit:	25 YD2	
Pest 8 Code, Type, Scale:	TAROF W	TAROF W
Stage Majority, Percent:	67 100	
Height, Unit:	6 IN	
Height Minimum, Maximum:	2 10	
Density, Unit:	1 YD2	
Pest 9 Code, Type, Scale:	ECHCG W	ECHCG W
Stage Majority, Percent:	12 100	
Height, Unit:	4 IN	
Height Minimum, Maximum:	2 6	
Density, Unit:	2.5 YD2	
Pest10 Code, Type, Scale:	SETFA W	SETFA W
Stage Majority, Percent:	12 100	13 100
Height, Unit:	4 IN	10.5 IN
Height Minimum, Maximum:	2 6	3 18
Density, Unit:	2.5 YD2	55 YD2

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### Application Equipment

	A	B
<b>Appl. Equipment:</b>	CO2 Backpack	CO2 Backpack
<b>Equipment Type:</b>	SPRBAC	SPRBAC
<b>Operation Pressure, Unit:</b>	17 PSI	17 PSI
<b>Nozzle Type:</b>	Flat Fan	Flat Fan
<b>Nozzle Size:</b>	XR11002	XR11002
<b>Nozzle Spacing, Unit:</b>	15 IN	15 IN
<b>Nozzles/Row:</b>	8	8
<b>Boom Length, Unit:</b>	10 FT	10 FT
<b>Boom Height, Unit:</b>	18 IN	18 IN
<b>Ground Speed, Unit:</b>	3 MPH	3 MPH
<b>Carrier:</b>	H2O	H2O
<b>Water Hardness (ppm CaCO3):</b>	150	150
<b>Spray Volume, Unit:</b>	15 GAL/AC	15 GAL/AC
<b>Mix Size, Unit:</b>	1.8 Liters	1.8 Liters
<b>Propellant:</b>	CO2	CO2
<b>Tank Mix (Y/N):</b>	N no	N no

**Trt No Treatment Application Comment**

11 MIPOCR application timing. Treatment was sprayed on plot 901 instead of 801.

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## Corvus, Balance Flexx, Capreno, Laudis, Ignite, Two Pass system in Corn

Trial ID: 11S-SEP-NTC-07      Protocol ID: 11S-SEP-NTC-07  
 Location: SEPAC                  Study Director: Paul Marquardt  
 Project ID: 11S-SEP-NTC-07      Investigator: Dr. Bill Johnson  
 Sponsor Contact: Dave Lamore

Pest Type	W Weed	W Weed	W Weed	W Weed	W Weed	W Weed
Pest Code	AMBEL	XANST	ERICA	SETFA	AMBEL	XANST
Pest Scientific Name	Ambrosia artem>	Xanthium strum>	Conyza canaden>	Setaria faberi	Ambrosia artem>	Xanthium strum>
Pest Name	Common ragweed	Common cockleb>	Canada horsewe>	Giant fox tail	Common ragweed	Common cockleb>
Crop Code	ZEAMX	ZEAMX	ZEAMX	ZEAMX	ZEAMX	ZEAMX
BBCH Scale	BCOR	BCOR	BCOR	BCOR	BCOR	BCOR
Crop Scientific Name	Zea mays	Zea mays	Zea mays	Zea mays	Zea mays	Zea mays
Crop Name	Corn	Corn	Corn	Corn	Corn	Corn
Crop Variety	P33W84	P33W84	P33W84	P33W84	P33W84	P33W84
Description	18-24 IN	18-24 IN	18-24 IN	18-24 IN	6 FT	6 FT
Rating Date	7-7-2011	7-7-2011	7-7-2011	7-7-2011	7-21-2011	7-21-2011
Rating Type	CONTRO	CONTRO	CONTRO	CONTRO	CONTRO	CONTRO
Rating Unit	%	%	%	%	%	%
Number of Subsamples	1	1	1	1	1	1
Crop Stage Majority	V6	V6	V6	V6	V14	V14
Pest Stage Majority	15 IN	6 IN	6 IN	18 IN	2-4 FT	2-3 FT
Pest Density, Unit	3.5 YD2	5 YD2	8 YD2	50 YD2	12 YD2	10 YD2
Assessed By	JR	JR	JR	JR	JR	JR
Days After First/Last Applic.	34 13	34 13	34 13	34 13	48 27	48 27
Plant-Eval Interval	34 DP-1	34 DP-1	34 DP-1	34 DP-1	48 DP-1	48 DP-1
Days After Emergence	29 DE-	29 DE-	29 DE-	29 DE-	43 DE-	43 DE-
ARM Action Codes						
Number of Decimals						
Trt Treatment	Rate	Appl				
No. Name	Rate Unit	Code	1	2	3	4
1 UNTREATED	0.0 b		0.0 b	0.0 b	0.0 c	0.0 b
2 Corvus	69 g ai/ha A		100.0 a	93.8 a	100.0 a	91.5 b
AAtrex	1120 g ai/ha A					100.0 a
COC	1 % v/v A					
Laudis	92 g ai/ha B					
AAtrex	1120 g ai/ha B					
MSO	1 % v/v B					
N-Pak AMS	5 % v/v B					
3 Corvus	69 g ai/ha A		100.0 a	100.0 a	100.0 a	100.0 a
AAtrex	1120 g ai/ha A					
COC	1 % v/v A					
Laudis	92 g ai/ha B					
Roundup PowerMAX	870 g ae/ha B					
N-Pak AMS	5 % v/v B					
4 Corvus	69 g ai/ha A		100.0 a	100.0 a	100.0 a	100.0 a
AAtrex	1120 g ai/ha A					
COC	1 % v/v A					
Ignite	450 g ai/ha B					
Laudis	92 g ai/ha B					
N-Pak AMS	5 % v/v B					

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

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Pest Type	W Weed	W Weed	W Weed	W Weed	W Weed	W Weed			
Pest Code	AMBEL	XANST	ERICA	SETFA	AMBEL	XANST			
Pest Scientific Name	Ambrosia artem>	Xanthium strum>	Conyza canaden>	Setaria faberi	Ambrosia artem>	Xanthium strum>			
Pest Name	Common ragweed	Common cockleb>	Canada horsewe>	Giant foxtail	Common ragweed	Common cockleb>			
Crop Code	ZEAMX	ZEAMX	ZEAMX	ZEAMX	ZEAMX	ZEAMX			
BBCH Scale	BCOR	BCOR	BCOR	BCOR	BCOR	BCOR			
Crop Scientific Name	Zea mays	Zea mays	Zea mays	Zea mays	Zea mays	Zea mays			
Crop Name	Corn	Corn	Corn	Corn	Corn	Corn			
Crop Variety	P33W84	P33W84	P33W84	P33W84	P33W84	P33W84			
Description	18-24 IN	18-24 IN	18-24 IN	18-24 IN	6 FT	6 FT			
Rating Date	7-7-2011	7-7-2011	7-7-2011	7-7-2011	7-21-2011	7-21-2011			
Rating Type	CONTRO	CONTRO	CONTRO	CONTRO	CONTRO	CONTRO			
Rating Unit	%	%	%	%	%	%			
Number of Subsamples	1	1	1	1	1	1			
Crop Stage Majority	V6	V6	V6	V6	V14	V14			
Pest Stage Majority	15 IN	6 IN	6 IN	18 IN	2-4 FT	2-3 FT			
Pest Density , Unit	3.5 YD2	5 YD2	8 YD2	50 YD2	12 YD2	10 YD2			
Assessed By	JR	JR	JR	JR	JR	JR			
Days After First/Last Applic.	34 13	34 13	34 13	34 13	48 27	48 27			
Plant-Eval Interval	34 DP-1	34 DP-1	34 DP-1	34 DP-1	48 DP-1	48 DP-1			
Days After Emergence	29 DE-	29 DE-	29 DE-	29 DE-	43 DE-	43 DE-			
ARM Action Codes									
Number of Decimals									
Trt No.	Treatment Name	Rate	Appl Code	1	2	3	4	5	6
5	Corvus	69 g ai/ha	A	100.0 a	100.0 a	100.0 a	93.5 ab	100.0 a	97.0 a
	AAtrex	1120 g ai/ha	A						
	COC	1 % v/v	A						
	Capreno	91 g ai/ha	B						
	COC	1 % v/v	B						
	N-Pak AMS	5 % v/v	B						
6	Balance Flexx	70 g ai/ha	A	100.0 a	97.0 a	100.0 a	100.0 a	100.0 a	92.5 a
	AAtrex	1120 g ai/ha	A						
	COC	1 % v/v	A						
	Laudis	92 g ai/ha	B						
	Roundup PowerMAX	870 g ae/ha	B						
	N-Pak AMS	5 % v/v	B						
7	Balance Flexx	70 g ai/ha	A	100.0 a	98.0 a	100.0 a	97.5 ab	100.0 a	95.8 a
	AAtrex	1120 g ai/ha	A						
	COC	1 % v/v	A						
	Ignite	450 g ai/ha	B						
	Laudis	92 g ai/ha	B						
	N-Pak AMS	5 % v/v	B						
8	Balance Flexx	70 g ai/ha	A	100.0 a	92.5 a	100.0 a	97.5 ab	100.0 a	80.0 a
	AAtrex	1120 g ai/ha	A						
	COC	1 % v/v	A						
	Capreno	91 g ai/ha	B						
	COC	1 % v/v	B						
	N-Pak AMS	5 % v/v	B						
9	Lexar	1560 g ai/ha	A	99.5 a	95.0 a	80.0 a	98.0 ab	100.0 a	86.8 a
	COC	1 % v/v	A						
	Touchdown Total	880 g ae/ha	B						
	N-Pak AMS	5 % v/v	B						

Means followed by same letter do not significantly differ (P=0.05, Student-Newman-Keuls)  
 Mean comparisons performed only when AOV Treatment P(F) is significant at mean comparison OSL.

## Purdue University

Pest Type	W Weed	W Weed	W Weed	W Weed	W Weed	W Weed			
Pest Code	AMBEL	XANST	ERICA	SETFA	AMBEL	XANST			
Pest Scientific Name	Ambrosia artem>	Xanthium strum>	Conyza canaden>	Setaria faberi	Ambrosia artem>	Xanthium strum>			
Pest Name	Common ragweed	Common cockleb>	Canada horsewe>	Giant foxtail	Common ragweed	Common cockleb>			
Crop Code	ZEAMX	ZEAMX	ZEAMX	ZEAMX	ZEAMX	ZEAMX			
BBCH Scale	BCOR	BCOR	BCOR	BCOR	BCOR	BCOR			
Crop Scientific Name	Zea mays	Zea mays	Zea mays	Zea mays	Zea mays	Zea mays			
Crop Name	Corn	Corn	Corn	Corn	Corn	Corn			
Crop Variety	P33W84	P33W84	P33W84	P33W84	P33W84	P33W84			
Description	18-24 IN	18-24 IN	18-24 IN	18-24 IN	6 FT	6 FT			
Rating Date	7-7-2011	7-7-2011	7-7-2011	7-7-2011	7-21-2011	7-21-2011			
Rating Type	CONTRO	CONTRO	CONTRO	CONTRO	CONTRO	CONTRO			
Rating Unit	%	%	%	%	%	%			
Number of Subsamples	1	1	1	1	1	1			
Crop Stage Majority	V6	V6	V6	V6	V14	V14			
Pest Stage Majority	15 IN	6 IN	6 IN	18 IN	2-4 FT	2-3 FT			
Pest Density, Unit	3.5 YD2	5 YD2	8 YD2	50 YD2	12 YD2	10 YD2			
Assessed By	JR	JR	JR	JR	JR	JR			
Days After First/Last Applic.	34 13	34 13	34 13	34 13	48 27	48 27			
Plant-Eval Interval	34 DP-1	34 DP-1	34 DP-1	34 DP-1	48 DP-1	48 DP-1			
Days After Emergence	29 DE-	29 DE-	29 DE-	29 DE-	43 DE-	43 DE-			
ARM Action Codes									
Number of Decimals									
Trt No.	Treatment Name	Rate	Appl Code	1	2	3	4	5	6
10	Lexar	1560 g ai/ha	A	100.0 a	96.8 a	100.0 a	98.8 a	100.0 a	95.8 a
	COC	1 % v/v	A						
	Halex GT	2210 g ai/ha	B						
	NIS	0.25 % v/v	B						
	N-Pak AMS	5 % v/v	B						
11	Verdict	730 g ai/ha	A	100.0 a	98.8 a	100.0 a	100.0 a	98.8 a	91.3 a
	COC	1 % v/v	A						
	Status	196 g ai/ha	B						
	Roundup PowerMAX	870 g ae/ha	B						
	N-Pak AMS	5 % v/v	B						
12	Surestart	1190 g ai/ha	A	98.0 a	100.0 a	95.0 a	98.0 ab	100.0 a	93.5 a
	COC	1 % v/v	A						
	Durango DMA	840 g ai/ha	B						
	N-Pak AMS	5 % v/v	B						
LSD (P=.05)				1.73	7.75	17.31	4.63	1.04	16.83
Standard Deviation				1.20	5.36	11.99	3.20	0.72	11.66
CV				1.31	6.01	13.38	3.58	0.79	14.01
Bartlett's X2				4.461	12.274	4.461	2.455	0.0	29.37
P(Bartlett's X2)				0.035*	0.056	0.035*	0.873	.	0.001*
Replicate F				0.831	2.013	0.831	0.391	1.000	6.387
Replicate Prob(F)				0.4863	0.1313	0.4863	0.7600	0.4051	0.0016
Treatment F				2310.259	110.895	23.088	312.578	6386.455	20.933
Treatment Prob(F)				0.0001	0.0001	0.0001	0.0001	0.0001	0.0001

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Pest Type	W Weed	W Weed			
Pest Code	ERICA	SETFA			
Pest Scientific Name	Conyza canadensis	Setaria faberii			
Pest Name	Canada horseweed	Giant foxtail			
Crop Code	ZEAMX	ZEAMX	ZEAMX	ZEAMX	ZEAMX
BBCH Scale	BCOR	BCOR	BCOR	BCOR	BCOR
Crop Scientific Name	Zea mays	Zea mays	Zea mays	Zea mays	Zea mays
Crop Name	Corn	Corn	Corn	Corn	Corn
Crop Variety	P33W84	P33W84	P33W84	P33W84	P33W84
Description	6 FT	6 FT			
Rating Date	7-21-2011	7-21-2011	10-26-2011	10-26-2011	10-26-2011
Rating Type	CONTRO	CONTRO	YIELD	MOISTURE	YIELD
Rating Unit	%	%	LB	%	BU
Number of Subsamples	1	1	1	1	1
Crop Stage Majority	V14	V14			
Pest Stage Majority	3 FT	3-4 FT			
Pest Density, Unit	18 YD2	75 YD2			
Assessed By	JR	JR	LB		LB
Days After First/Last Applic.	48 27	48 27	145 124	145 124	145 124
Plant-Eval Interval	48 DP-1	48 DP-1	145 DP-1	145 DP-1	145 DP-1
Days After Emergence	43 DE-	43 DE-	140 DE	140 DE	140 DE
ARM Action Codes					TY1
Number of Decimals					1
Trt No.	Treatment	Rate	Appl		
	Name	Rate Unit	Code	7	8
				9	10
				11	
1	UNTREATED	0.0 b		0.0 b	5.4676300 b
2	Corvus	69 g ai/ha A		80.0 a	25.5975024 a
	AAtrex	1120 g ai/ha A			
	COC	1 % v/v A			
	Laudis	92 g ai/ha B			
	AAtrex	1120 g ai/ha B			
	MSO	1 % v/v B			
	N-Pak AMS	5 % v/v B			
3	Corvus	69 g ai/ha A		95.8 a	29.2000037 a
	AAtrex	1120 g ai/ha A			
	COC	1 % v/v A			
	Laudis	92 g ai/ha B			
	Roundup PowerMAX	870 g ae/ha B			
	N-Pak AMS	5 % v/v B			
4	Corvus	69 g ai/ha A		96.5 a	32.6850046 a
	AAtrex	1120 g ai/ha A			
	COC	1 % v/v A			
	Ignite	450 g ai/ha B			
	Laudis	92 g ai/ha B			
	N-Pak AMS	5 % v/v B			

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Pest Type	W Weed	W Weed						
Pest Code	ERICA	SETFA						
Pest Scientific Name	Conyza canadensis	Setaria faberi						
Pest Name	Canada horseweed	Giant foxtail						
Crop Code	ZEAMX	ZEAMX	ZEAMX	ZEAMX	ZEAMX			
BBCH Scale	BCOR	BCOR	BCOR	BCOR	BCOR			
Crop Scientific Name	Zea mays	Zea mays	Zea mays	Zea mays	Zea mays			
Crop Name	Corn	Corn	Corn	Corn	Corn			
Crop Variety	P33W84	P33W84	P33W84	P33W84	P33W84			
Description	6 FT	6 FT						
Rating Date	7-21-2011	7-21-2011	10-26-2011	10-26-2011	10-26-2011			
Rating Type	CONTRO	CONTRO	YIELD	MOISTURE	YIELD			
Rating Unit	%	%	LB	%	BU			
Number of Subsamples	1	1	1	1	1			
Crop Stage Majority	V14	V14						
Pest Stage Majority	3 FT	3-4 FT						
Pest Density, Unit	18 YD2	75 YD2						
Assessed By	JR	JR	LB		LB			
Days After First/Last Applic.	48 27	48 27	145 124	145 124	145 124			
Plant-Eval Interval	48 DP-1	48 DP-1	145 DP-1	145 DP-1	145 DP-1			
Days After Emergence	43 DE-	43 DE-	140 DE	140 DE	140 DE			
ARM Action Codes					TY1			
Number of Decimals					1			
Trt No.	Treatment Name	Rate	Appl Code	7	8	9	10	11
5	Corvus	69 g ai/ha	A	100.0 a	89.5 a	43.1825033 a	18.23 a	173.1 a
	AAtrex	1120 g ai/ha	A					
	COC	1 % v/v	A					
	Capreno	91 g ai/ha	B					
	COC	1 % v/v	B					
	N-Pak AMS	5 % v/v	B					
6	Balance Flexx	70 g ai/ha	A	100.0 a	96.3 a	37.8237419 a	17.51 a	153.0 a
	AAtrex	1120 g ai/ha	A					
	COC	1 % v/v	A					
	Laudis	92 g ai/ha	B					
	Roundup PowerMAX	870 g ae/ha	B					
	N-Pak AMS	5 % v/v	B					
7	Balance Flexx	70 g ai/ha	A	100.0 a	93.5 a	33.6050029 a	18.38 a	134.7 a
	AAtrex	1120 g ai/ha	A					
	COC	1 % v/v	A					
	Ignite	450 g ai/ha	B					
	Laudis	92 g ai/ha	B					
	N-Pak AMS	5 % v/v	B					
8	Balance Flexx	70 g ai/ha	A	100.0 a	92.5 a	31.3192952 a	18.89 a	124.7 a
	AAtrex	1120 g ai/ha	A					
	COC	1 % v/v	A					
	Capreno	91 g ai/ha	B					
	COC	1 % v/v	B					
	N-Pak AMS	5 % v/v	B					
9	Lexar	1560 g ai/ha	A	100.0 a	96.5 a	37.7300033 a	20.13 a	148.1 a
	COC	1 % v/v	A					
	Touchdown Total	880 g ae/ha	B					
	N-Pak AMS	5 % v/v	B					

Means followed by same letter do not significantly differ (P=0.05, Student-Newman-Keuls)  
 Mean comparisons performed only when AOV Treatment P(F) is significant at mean comparison OSL.

## Purdue University

Pest Type	W Weed	W Weed			
Pest Code	ERICA	SETFA			
Pest Scientific Name	Conyza canadensis	Setaria faberi			
Pest Name	Canada horseweed	Giant foxtail			
Crop Code	ZEAMX	ZEAMX	ZEAMX	ZEAMX	ZEAMX
BBCH Scale	BCOR	BCOR	BCOR	BCOR	BCOR
Crop Scientific Name	Zea mays	Zea mays	Zea mays	Zea mays	Zea mays
Crop Name	Corn	Corn	Corn	Corn	Corn
Crop Variety	P33W84	P33W84	P33W84	P33W84	P33W84
Description	6 FT	6 FT			
Rating Date	7-21-2011	7-21-2011	10-26-2011	10-26-2011	10-26-2011
Rating Type	CONTRO	CONTRO	YIELD	MOISTURE	YIELD
Rating Unit	%	%	LB	%	BU
Number of Subsamples	1	1	1	1	1
Crop Stage Majority	V14	V14			
Pest Stage Majority	3 FT	3-4 FT			
Pest Density, Unit	18 YD2	75 YD2			
Assessed By	JR	JR	LB		LB
Days After First/Last Applic.	48 27	48 27	145 124	145 124	145 124
Plant-Eval Interval	48 DP-1	48 DP-1	145 DP-1	145 DP-1	145 DP-1
Days After Emergence	43 DE-	43 DE-	140 DE	140 DE	140 DE
ARM Action Codes					TY1
Number of Decimals					1
Trt No.	Treatment Name	Rate	Appl		
		Rate Unit	Code	7	8
				9	10
				11	
10	Lexar	1560 g ai/ha	A	100.0 a	95.3 a
	COC	1 % v/v	A		22.1075023 a
	Halex GT	2210 g ai/ha	B		19.93 a
	NIS	0.25 % v/v	B		87.0 a
	N-Pak AMS	5 % v/v	B		
11	Verdict	730 g ai/ha	A	98.8 a	71.3 a
	COC	1 % v/v	A		32.6060328 a
	Status	196 g ai/ha	B		19.79 a
	Roundup PowerMAX	870 g ae/ha	B		128.6 a
	N-Pak AMS	5 % v/v	B		
12	Surestart	1190 g ai/ha	A	90.0 a	93.5 a
	COC	1 % v/v	A		31.9800027 a
	Durango DMA	840 g ai/ha	B		20.30 a
	N-Pak AMS	5 % v/v	B		125.9 a
LSD (P=.05)		6.12		21.83	14.15977238
Standard Deviation		4.24		15.12	9.79214766
CV		4.67		18.14	32.34
Bartlett's X2		6.335		55.293	19.088
P(Bartlett's X2)		0.012*		0.001*	0.06
Replicate F		0.801		1.285	5.408
Replicate Prob(F)		0.5024		0.2956	0.0044
Treatment F		183.389		13.105	3.833
Treatment Prob(F)		0.0001		0.0001	0.0018
					0.120
					0.9476
					1.758
					3.813
					0.0019

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

# Purdue University

## Corvus, Balance Flexx, Capreno, Laudis, Ignite, Two Pass system in Corn

Trial ID: 11S-SEP-NTC-07      Protocol ID: 11S-SEP-NTC-07  
 Location: SEPAC      Study Director: Paul Marquardt  
 Project ID: 11S-SEP-NTC-07      Investigator: Dr. Bill Johnson  
 Sponsor Contact: Dave Lamore

### Pest Type

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

### Pest Code

AMBEL, Ambrosia artemisiifolia, = US

XANST, Xanthium strumarium, = US

ERICA, Conyza canadensis, = US

SETFA, Setaria faberii, = US

### Crop Code

ZEAMX, BCOR, Zea mays, = US

### Rating Type

CONTRO = control / burndown or knockdown

YIELD = yield

### Rating Unit

% = percent

LB = pound

BU = bushel

YD2 = per square yard

### Plant-Eval Interval

34 DP-1 = 1 ZEAMX 6-3-2011

48 DP-1 = 1 ZEAMX 6-3-2011

145 DP-1 = 1 ZEAMX 6-3-2011

### ARM Action Codes

TY1 =  $4.148571 * [9] * (100 - [10]) / 84.5$