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2011/CADET/CORN/EARLY POSTEMERGENCE/

Title No. 2: Cadet Early Post in Corn
 Trial ID: 11S-THP-CTC-21 Protocol ID: 11S-THP-CTC-121
 Location: Throckmorton Study Director: White/Marquardt
 Project ID: FLUT.COR.11.JPR.02 Investigator: Dr. Bill Johnson
 Sponsor Contact: FMC - Joe Reed

General Trial Information

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

Discipline: H herbicide
Trial Status: E established
Initiation Date: 4-9-2011

Trial Location

City: Lafayette
State/Prov.: IN
Postal Code: 47909
Country: USA

Personnel

Study Director: White/Marquardt **Title:** Research Associate

Affiliation: Purdue University
Address: 915 W State Street
Location: West Lafayette, IN, USA

Postal Code: 47907 **E-mail:** mdwhite@purdue.edu
Phone No.: 765-494-0891

Investigator: Dr. Bill Johnson **Title:** Professor

Affiliation: Purdue University
Address: 915 W State Street
Location: West Lafayette, IN, USA

Postal Code: 47907 **E-mail:** wji@purdue.edu
Phone No.: 765-494-4656 **Mobile No.:** 765-404-9801

Cooperator/Landowner

Cooperator: Throckmorton Purdue Ag Center **Role:** Purdue Ag Center

Organization: Purdue University
Address 1: 8343 US 231 S

Phone No.: 765-538-3422
Fax No.: 765-538-3423

City: Lafayette
State/Prov.: IN
Postal Code: 47909 **E-mail:** jayyoung@purdue.edu
Country: USA United States

Crop Description

Crop 1: ZEAMD Zea mays indentata Dent corn

Variety: Pioneer 33W84

Description: HXX, LL, RR2

BBCH Scale: BCOR
Planting Method: PLANTD planted

Planting Date: 5-12-2011
Rate, Unit: 34000 S/A

Depth, Unit: 1.5 IN
Row Spacing, Unit: 30 IN

Emergence Date: 5-22-2011

Pest Description

Pest 1 Type: W **Code:** SETFA *Setaria faberi*

Common Name: Giant foxtail

Pest 2 Type: W **Code:** IPOHE *Ipomoea hederacea*

Common Name: Ivyleaf morningglory

Pest 3 Type: W **Code:** ABUTH *Abutilon theophrasti*

Common Name: Velvetleaf

Pest 4 Type: W **Code:** AMBTR *Ambrosia trifida*

Common Name: Giant ragweed

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Site and Design

Plot Width, Unit: 10 FT
Plot Length, Unit: 30 FT
Plot Area, Unit: 300 FT²
Replications: 4

Site Type: FIELD field
Experimental Unit: 1 PLOT plot
Tillage Type: CONTIL conventional-till
Study Design: RACOB1 Randomized Complete Block (RCB)
Untreated Arrangement: INCLUDED single control randomized in each block

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:	5-12-2011	6-6-2011
Time of Day:		1:50-2:00
Application Method:	SPRAY	SPRAY
Application Timing:	ATPLAN	EAPOWE
Application Placement:	FOLIAR	FOLIAR
Applied By:	RT	MW
Air Temperature, Unit:	79.5 F	88 F
% Relative Humidity:	43	53
Wind Velocity, Unit:	8.5 MPH	4.5 MPH
Wind Direction:		SE
Dew Presence (Y/N):	N no	N no
Soil Temperature, Unit:	70.5 F	87 F
Soil Moisture:	SLIWET	SLIWET
% Cloud Cover:	40	10

Crop Stage At Each Application

	A	B
Crop 1 Code, BBCH Scale:	ZEAMD BCOR	ZEAMD BCOR

Pest Stage At Each Application

	A	B
Pest 1 Code, Type, Scale:	SETFA W	SETFA W
Pest 2 Code, Type, Scale:	IPOHE W	IPOHE W
Pest 3 Code, Type, Scale:	ABUTH W	ABUTH W
Pest 4 Code, Type, Scale:	AMBTR W	AMBTR W

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Application Equipment

	A	B
Appl. Equipment:	CO2 BKPK	CO2 BKPK
Equipment Type:	SPRBAC	SPRBAC
Operation Pressure, Unit:	17 PSI	17 PSI
Nozzle Type:	FLAT FAN	FLAT FAN
Nozzle Size:	XR 110 02	XR 110 02
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

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2011/CADET/CORN/EARLY POSTEMERGENCE/

Title No. 2: Cadet Early Post in Corn
 Trial ID: 11S-THP-CTC-21
 Protocol ID: 11S-THP-CTC-121
 Location: Throckmorton
 Project ID: FLUT.COR.11.JPR.02
 Study Director: White/Marquardt
 Investigator: Dr. Bill Johnson
 Sponsor Contact: FMC - Joe Reed

Pest Type		W Weed SETFA	W Weed ABUTH		W Weed SETFA	W Weed AMBTR	W Weed ABUTH						
Pest Code		Setaria faberi	Abutilon theop>		Setaria faberi	Ambrosia trifid>	Abutilon theop>						
Pest Scientific Name		Giant foxtail	Velvetleaf		Giant foxtail	Giant ragweed	Velvetleaf						
Pest Name		ZEAMX	ZEAMX	ZEAMX	ZEAMX	ZEAMX	ZEAMX	ZEAMX	ZEAMX				
Crop Code		BCOR	BCOR	BCOR	BCOR	BCOR	BCOR	BCOR	BCOR				
BBCH Scale		Zea mays	Zea mays	Zea mays	Zea mays	Zea mays	Zea mays	Zea mays	Zea mays				
Crop Scientific Name		Corn	Corn	Corn	Corn	Corn	Corn	Corn	Corn				
Crop Name		5-24-2011	5-24-2011	5-24-2011	6-1-2011	6-1-2011	6-1-2011	6-1-2011	6-15-2011				
Description		PHYGEN	CONTRO	CONTRO	PHYGEN	CONTRO	CONTRO	CONTRO	PHYGEN				
Rating Date		% ₁	% ₁	% ₁	% ₁	% ₁	% ₁	% ₁	% ₁				
Rating Type		V1	V1	V1					V5				
Rating Unit						1-2 IN	1-4 IN	1-2 IN					
Number of Subsamples			37.5YD2	1.5 YD2	RT/JR	30 YD2 RT/JR	1.5 YD2 RT/JR	1.5 YD2 RT/JR	AR/RS				
Crop Stage Majority									CB				
Pest Stage Majority		12 12	12 12	12 12	20 20	20 20	20 20	20 20	34 9				
Pest Density, Unit		12 DP-1	12 DP-1	12 DP-1	20 DP-1	20 DP-1	20 DP-1	20 DP-1	34 DP-1				
Assessed By		2 DE-1	2 DE-1	2 DE-1	10 DE-1	10 DE-1	10 DE-1	10 DE-1	24 DE-1				
Days After First/Last Applic.													
Plant-Eval Interval													
Days After Emergence													
Trt No.	Treatment Name	Rate	Unit	Appl Code	1	2	3	4	5	6	7	8	9
1	Untreated Check				0.0 a	0.0 b	0.0 b	0.0 a	0.0 c	0.0 b	0.0 b	0.0 b	0.0 a
2	DUAL II MAGNUM ROUNDUP POWERMAX AMS - Liquid	0.478 lb ai/a 0.95 lb ae/a 2.5 lb ai/a	A B B		0.0 a	55.0 a	90.5 a	0.0 a	50.0 b	21.3 b	21.3 b	2.3 ab	0.0 a
3	DUAL II MAGNUM CADET ROUNDUP POWERMAX AMS - Liquid	0.478 lb ai/a 0.00427 lb ai/a 0.95 lb ae/a 2.5 lb ai/a	A B B B		0.0 a	48.0 a	80.8 a	0.0 a	51.3 b	10.0 b	10.0 b	4.8 a	0.5 a
4	BICEP LITE II MAGNUM CADET ROUNDUP POWERMAX AMS - Liquid	2.25 lb ai/a 0.00427 lb ai/a 0.95 lb ae/a 2.5 lb ai/a	A B B B		0.0 a	80.3 a	94.3 a	0.0 a	92.5 a	76.3 a	98.8 a	5.0 a	0.5 a
5	DUAL II MAGNUM CADET AATREX ROUNDUP POWERMAX AMS - Liquid	0.478 lb ai/a 0.00427 lb ai/a 1 lb ai/a 0.95 lb ae/a 2.5 lb ai/a	A B B B B		0.0 a	47.5 a	95.5 a	0.0 a	47.5 b	30.0 b	31.3 b	6.3 a	1.3 a
6	DUAL II MAGNUM CADET HORNET ROUNDUP POWERMAX AMS - Liquid	8 oz/a 0.00427 lb ai/a 0.147 lb ai/a 0.95 lb ae/a 2.5 lb ai/a	A B B B B		0.0 a	50.0 a	92.0 a	0.0 a	45.0 b	12.5 b	15.0 b	5.3 a	1.0 a

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.

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Pest Type		W Weed SETFA	W Weed ABUTH		W Weed SETFA	W Weed AMBTR	W Weed ABUTH					
Pest Code												
Pest Scientific Name		Setaria faberi	Abutilon theop>		Setaria faberi	Ambrosia trifi>	Abutilon theop>					
Pest Name		Giant foxtail	Velvetleaf		Giant foxtail	Giant ragweed	Velvetleaf					
Crop Code BBCH Scale	ZEAMX BCOR	ZEAMX BCOR	ZEAMX BCOR	ZEAMX BCOR	ZEAMX BCOR	ZEAMX BCOR	ZEAMX BCOR	ZEAMX BCOR	ZEAMX BCOR			
Crop Scientific Name	Zea mays	Zea mays	Zea mays	Zea mays	Zea mays	Zea mays	Zea mays	Zea mays	Zea mays			
Crop Name	Corn	Corn	Corn	Corn	Corn	Corn	Corn	Corn	Corn			
Description								24 IN				
Rating Date	5-24-2011	5-24-2011	5-24-2011	6-1-2011	6-1-2011	6-1-2011	6-1-2011	6-15-2011	6-21-2011			
Rating Type	PHYGEN	CONTRO	CONTRO	PHYGEN	CONTRO	CONTRO	CONTRO	PHYGEN	PHYGEN			
Rating Unit	%	%	%	%	%	%	%	%	%			
Number of Subsamples	1	1	1	1	1	1	1	1	1			
Crop Stage Majority	V1	V1	V1					V5	40 IN			
Pest Stage Majority					1-2 IN	1-4 IN	1-2 IN					
Pest Density, Unit		37.5YD2	1.5 YD2		30 YD2	1.5 YD2	1.5 YD2					
Assessed By				RT/JR	RT/JR	RT/JR	RT/JR	AR/RS	CB			
Days After First/Last Applic.	12 12	12 12	12 12	20 20	20 20	20 20	20 20	34 9	40 15			
Plant-Eval Interval	12 DP-1	12 DP-1	12 DP-1	20 DP-1	20 DP-1	20 DP-1	20 DP-1	34 DP-1	40 DP-1			
Days After Emergence	2 DE-1	2 DE-1	2 DE-1	10 DE-1	10 DE-1	10 DE-1	10 DE-1	24 DE-1	30 DE-1			
Trt Treatment No. Name	Rate	Unit	Appl Code	1	2	3	4	5	6	7	8	9
7 DUAL II MAGNUM	0.478	lb ai/a	A	0.0 a	40.0 a	88.8 a	0.0 a	46.3 b	22.5 b	25.0 b	7.3 a	3.3 a
CADET	0.00427	lb ai/a	B									
IMPACT HERBICIDE	0.0109	lb ai/a	B									
AATREX	0.5	lb ai/a	B									
ROUNDUP POWERMAX	0.95	lb ae/a	B									
AMS - Liquid	2.5	lb ai/a	B									
LSD (P=.05)	0.00			0.00	32.16	16.42	0.00	22.57	33.16	38.56	3.58	3.01
Standard Deviation	0.00			0.00	21.65	11.06	0.00	15.19	22.32	25.95	2.41	2.03
CV	0.0			0.0	47.24	14.28	0.0	31.99	90.59	90.27	54.92	218.25
Bartlett's X2	0.0			0.0	9.009	13.74	0.0	7.67	4.182	15.644	14.5	7.3
P(Bartlett's X2)	.			.	0.109	0.017*	.	0.175	0.524	0.008*	0.006*	0.121
Replicate F	0.000			0.000	1.629	2.390	0.000	1.490	2.186	1.698	0.513	0.777
Replicate Prob(F)	1.0000			1.0000	0.2178	0.1025	1.0000	0.2509	0.1250	0.2031	0.6783	0.5221
Treatment F	0.000			0.000	4.877	38.878	0.000	12.445	4.920	6.278	4.207	1.232
Treatment Prob(F)	1.0000			1.0000	0.0040	0.0001	1.0000	0.0001	0.0038	0.0011	0.0081	0.3361

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

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Pest Type	W Weed	W Weed	W Weed	W Weed	W Weed	W Weed	W Weed			
Pest Code	AMBTR	SETFA	ABUTH	SETFA	AMBTR	ABUTH	AMARE			
Pest Scientific Name	Ambrosia trifida	Setaria faberii	Abutilon theophrasti	Setaria faberii	Ambrosia trifida	Abutilon theophrasti	Amaranthus retrofractus			
Pest Name	Giant ragweed	Giant foxtail	Velvetleaf	Giant foxtail	Giant ragweed	Velvetleaf	Redroot pigweed			
Crop Code	ZEAMX	ZEAMX	ZEAMX	ZEAMX	ZEAMX	ZEAMX	ZEAMX			
BBCH Scale	BCOR	BCOR	BCOR	BCOR	BCOR	BCOR	BCOR			
Crop Scientific Name	Zea mays	Zea mays	Zea mays	Zea mays	Zea mays	Zea mays	Zea mays			
Crop Name Description	Corn	Corn	Corn	Corn	Corn	Corn	Corn			
Rating Date	6-21-2011	6-21-2011	6-21-2011	7-1-2011	7-1-2011	7-1-2011	7-1-2011			
Rating Type	CONTRO	CONTRO	CONTRO	CONTRO	CONTRO	CONTRO	CONTRO			
Rating Unit	%	%	%	%	%	%	%			
Number of Subsamples	1	1	1	1	1	1	1			
Crop Stage Majority	40 IN	40 IN	40 IN							
Pest Stage Majority	4-36 IN	4-30 IN	4-36 IN	22 IN	30 IN	18 IN	19 IN			
Pest Density, Unit Assessed By	3 YD2 CB	100 YD2 CB	2 YD2 CB	20 YD2 MW	2 YD2 MW	1 YD2 MW	3 YD2 MW			
Days After First/Last Applic.	40 15	40 15	40 15	50 25	50 25	50 25	50 25			
Plant-Eval Interval	40 DP-1	40 DP-1	40 DP-1	50 DP-1	50 DP-1	50 DP-1	50 DP-1			
Days After Emergence	30 DE-1	30 DE-1	30 DE-1	40 DE-1	40 DE-1	40 DE-1	40 DE-1			
Trt Treatment	Rate	Appl								
No. Name	Rate	Unit	Code	10	11	12	13	14	15	16
1 Untreated Check				0.0 b	0.0 c	0.0 b	0.0 c	0.0 b	0.0 d	0.0 b
2 DUAL II MAGNUM ROUNDUP POWERMAX AMS - Liquid	0.478 lb ai/a 0.95 lb ae/a 2.5 lb ai/a	A B B		91.3 a	98.3 ab	94.0 a	95.0 ab	90.0 a	92.3 bc	96.8 a
3 DUAL II MAGNUM CADET ROUNDUP POWERMAX AMS - Liquid	0.478 lb ai/a 0.00427 lb ai/a 0.95 lb ae/a 2.5 lb ai/a	A B B B		83.8 a	95.8 b	95.0 a	95.5 ab	90.0 a	91.0 c	98.0 a
4 BICEP LITE II MAGNUM CADET ROUNDUP POWERMAX AMS - Liquid	2.25 lb ai/a 0.00427 lb ai/a 0.95 lb ae/a 2.5 lb ai/a	A B B B		95.3 a	99.8 a	99.8 a	98.0 a	86.0 a	98.0 ab	99.0 a
5 DUAL II MAGNUM CADET AATREX ROUNDUP POWERMAX AMS - Liquid	0.478 lb ai/a 0.00427 lb ai/a 1 lb ai/a 0.95 lb ae/a 2.5 lb ai/a	A B B B B		96.5 a	99.3 a	99.5 a	97.5 a	92.8 a	99.0 a	99.0 a
6 DUAL II MAGNUM CADET HORNET ROUNDUP POWERMAX AMS - Liquid	8 oz/a 0.00427 lb ai/a 0.147 lb ai/a 0.95 lb ae/a 2.5 lb ai/a	A B B B B		91.8 a	98.0 ab	99.8 a	92.5 b	94.0 a	96.8 abc	99.0 a

Means followed by same letter do not significantly differ (P= .05, Student-Newman-Keuls)
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Pest Type	W Weed	W Weed	W Weed	W Weed	W Weed	W Weed	W Weed
Pest Code	AMBTR	SETFA	ABUTH	SETFA	AMBTR	ABUTH	AMARE
Pest Scientific Name	Ambrosia trifi>	Setaria faberi	Abutilon theop>	Setaria faberi	Ambrosia trifi>	Abutilon theop>	Amaranthus ret>
Pest Name	Giant ragweed	Giant foxtail	Velvetleaf	Giant foxtail	Giant ragweed	Velvetleaf	Redroot pigweed
Crop Code	ZEAMX	ZEAMX	ZEAMX	ZEAMX	ZEAMX	ZEAMX	ZEAMX
BBCH Scale	BCOR	BCOR	BCOR	BCOR	BCOR	BCOR	BCOR
Crop Scientific Name	Zea mays	Zea mays	Zea mays	Zea mays	Zea mays	Zea mays	Zea mays
Crop Name	Corn	Corn	Corn	Corn	Corn	Corn	Corn
Description							
Rating Date	6-21-2011	6-21-2011	6-21-2011	7-1-2011	7-1-2011	7-1-2011	7-1-2011
Rating Type	CONTRO	CONTRO	CONTRO	CONTRO	CONTRO	CONTRO	CONTRO
Rating Unit	%	%	%	%	%	%	%
Number of Subsamples	1	1	1	1	1	1	1
Crop Stage Majority	40 IN	40 IN	40 IN				
Pest Stage Majority	4-36 IN	4-30 IN	4-36 IN	22 IN	30 IN	18 IN	19 IN
Pest Density, Unit	3 YD2	100 YD2	2 YD2	20 YD2	2 YD2	1 YD2	3 YD2
Assessed By	CB	CB	CB	MW	MW	MW	MW
Days After First/Last Applic.	40 15	40 15	40 15	50 25	50 25	50 25	50 25
Plant-Eval Interval	40 DP-1	40 DP-1	40 DP-1	50 DP-1	50 DP-1	50 DP-1	50 DP-1
Days After Emergence	30 DE-1	30 DE-1	30 DE-1	40 DE-1	40 DE-1	40 DE-1	40 DE-1
Trt Treatment							
No. Name	10	11	12	13	14	15	16
7 DUAL II MAGNUM	0.478 lb ai/a	A					
CADET	0.00427 lb ai/a	B					
IMPACT HERBICIDE	0.0109 lb ai/a	B					
AATREX	0.5 lb ai/a	B					
ROUNDUP POWERMAX	0.95 lb ae/a	B					
AMS - Liquid	2.5 lb ai/a	B					
LSD (P=.05)	11.05	2.22	6.88	2.91	8.84	4.59	2.82
Standard Deviation	7.44	1.49	4.63	1.96	5.95	3.09	1.90
CV	9.42	1.78	5.56	2.39	7.71	3.77	2.25
Bartlett's X2	6.787	10.018	30.631	7.695	4.007	2.728	1.747
P(Bartlett's X2)	0.237	0.075	0.001*	0.103	0.548	0.604	0.186
Replicate F	2.982	1.721	1.284	2.491	4.904	4.343	0.723
Replicate Prob(F)	0.0588	0.1984	0.3101	0.0931	0.0116	0.0181	0.5514
Treatment F	88.923	2465.611	252.818	1367.420	131.761	550.935	1536.485
Treatment Prob(F)	0.0001	0.0001	0.0001	0.0001	0.0001	0.0001	0.0001

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Pest Type	W Weed IPOHE	W Weed CHEAL		W Weed SETFA	W Weed AMBTR	W Weed ABUTH	W Weed IPOHE			
Pest Code										
Pest Scientific Name	Ipomoea heder>	Chenopodium al>		Setaria faberi	Ambrosia trifi>	Abutilon theop>	Ipomoea heder>			
Pest Name	Ivyleaf mornin>	Common lambsqu>		Giant foxtail	Giant ragweed	Velvetleaf	Ivyleaf mornin>			
Crop Code	ZEAMX	ZEAMX	ZEAMX	ZEAMX	ZEAMX	ZEAMX	ZEAMX			
BBCH Scale	BCOR	BCOR	BCOR	BCOR	BCOR	BCOR	BCOR			
Crop Scientific Name	Zea mays	Zea mays	Zea mays	Zea mays	Zea mays	Zea mays	Zea mays			
Crop Name Description	Corn	Corn	Corn	Corn	Corn	Corn	Corn			
Rating Date	7-1-2011	7-1-2011	7-1-2011	8-1-2011	8-1-2011	8-1-2011	8-1-2011			
Rating Type	CONTRO	CONTRO	PHYSTU	CONTRO	CONTRO	CONTRO	CONTRO			
Rating Unit	%	%	%	%	%	%	%			
Number of Subsamples	1	1	1	1	1	1	1			
Crop Stage Majority										
Pest Stage Majority	14 IN			24 IN	96 IN	36 IN	38 IN			
Pest Density, Unit Assessed By	1 YD2 MW	MW	MW	60 YD2 MW	3 YD2 MW	2 YD2 MW	4 YD2 MW			
Days After First/Last Applic.	50 25	50 25	50 25	81 56	81 56	81 56	81 56			
Plant-Eval Interval	50 DP-1	50 DP-1	50 DP-1	81 DP-1	81 DP-1	81 DP-1	81 DP-1			
Days After Emergence	40 DE-1	40 DE-1	40 DE-1	71 DE-1	71 DE-1	71 DE-1	71 DE-1			
Trt Treatment No. Name	Rate	Unit	Appl Code	17	18	19	20	21	22	23
1 Untreated Check				0.0 b	0.0 c	7.0 a	0.0 b	0.0 b	0.0 b	0.0 b
2 DUAL II MAGNUM ROUNDUP POWERMAX AMS - Liquid	0.478 lb ai/a 0.95 lb ae/a 2.5 lb ai/a	A B B		96.8 a	94.8 b	0.0 b	96.0 a	94.5 a	95.3 a	98.5 a
3 DUAL II MAGNUM CADET ROUNDUP POWERMAX AMS - Liquid	0.478 lb ai/a 0.00427 lb ai/a 0.95 lb ae/a 2.5 lb ai/a	A B B B		95.8 a	98.0 a	0.0 b	95.3 a	95.5 a	96.3 a	94.5 a
4 BICEP LITE II MAGNUM CADET ROUNDUP POWERMAX AMS - Liquid	2.25 lb ai/a 0.00427 lb ai/a 0.95 lb ae/a 2.5 lb ai/a	A B B B		99.0 a	98.5 a	0.0 b	95.8 a	94.0 a	98.5 a	99.0 a
5 DUAL II MAGNUM CADET AATREX ROUNDUP POWERMAX AMS - Liquid	0.478 lb ai/a 0.00427 lb ai/a 1 lb ai/a 0.95 lb ae/a 2.5 lb ai/a	A B B B B		98.0 a	99.0 a	0.0 b	97.0 a	97.0 a	98.5 a	99.0 a
6 DUAL II MAGNUM CADET HORNET ROUNDUP POWERMAX AMS - Liquid	8 oz/a 0.00427 lb ai/a 0.147 lb ai/a 0.95 lb ae/a 2.5 lb ai/a	A B B B B		98.0 a	99.0 a	0.0 b	93.0 a	96.8 a	99.0 a	98.5 a

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Pest Type	W Weed	W Weed		W Weed	W Weed	W Weed	W Weed
Pest Code	IPOHE	CHEAL		SETFA	AMBTR	ABUTH	IPOHE
Pest Scientific Name	Ipomoea hederata>	Chenopodium al>		Setaria faberi	Ambrosia trifi>	Abutilon theop>	Ipomoea hederata>
Pest Name	Ivyleaf mornin>	Common lambsqu>		Giant foxtail	Giant ragweed	Velvetleaf	Ivyleaf mornin>
Crop Code	ZEAMX	ZEAMX	ZEAMX	ZEAMX	ZEAMX	ZEAMX	ZEAMX
BBCH Scale	BCOR	BCOR	BCOR	BCOR	BCOR	BCOR	BCOR
Crop Scientific Name	Zea mays	Zea mays	Zea mays	Zea mays	Zea mays	Zea mays	Zea mays
Crop Name	Corn	Corn	Corn	Corn	Corn	Corn	Corn
Description							
Rating Date	7-1-2011	7-1-2011	7-1-2011	8-1-2011	8-1-2011	8-1-2011	8-1-2011
Rating Type	CONTRO	CONTRO	PHYSTU	CONTRO	CONTRO	CONTRO	CONTRO
Rating Unit	%	%	%	%	%	%	%
Number of Subsamples	1	1	1	1	1	1	1
Crop Stage Majority							
Pest Stage Majority	14 IN			24 IN	96 IN	36 IN	38 IN
Pest Density, Unit	1 YD2			60 YD2	3 YD2	2 YD2	4 YD2
Assessed By	MW	MW	MW	MW	MW	MW	MW
Days After First/Last Applic.	50 25	50 25	50 25	81 56	81 56	81 56	81 56
Plant-Eval Interval	50 DP-1	50 DP-1	50 DP-1	81 DP-1	81 DP-1	81 DP-1	81 DP-1
Days After Emergence	40 DE-1	40 DE-1	40 DE-1	71 DE-1	71 DE-1	71 DE-1	71 DE-1
Trt Treatment							
No. Name	17	18	19	20	21	22	23
7 DUAL II MAGNUM	0.478 lb ai/a A						
CADET	0.00427 lb ai/a B						
IMPACT HERBICIDE	0.0109 lb ai/a B						
AATREX	0.5 lb ai/a B						
ROUNDUP POWERMAX	0.95 lb ae/a B						
AMS - Liquid	2.5 lb ai/a B						
LSD (P=.05)	4.10	2.30	3.04	3.65	5.02	3.93	3.03
Standard Deviation	2.76	1.55	2.05	2.45	3.38	2.65	2.04
CV	3.29	1.84	204.71	3.0	4.14	3.17	2.43
Bartlett's X2	3.193	4.248	0.0	3.847	11.469	9.512	10.643
P(Bartlett's X2)	0.363	0.12	.	0.427	0.043*	0.049*	0.014*
Replicate F	0.106	1.766	1.000	3.532	3.367	1.908	1.935
Replicate Prob(F)	0.9553	0.1896	0.4155	0.0359	0.0415	0.1645	0.1601
Treatment F	717.725	2299.289	6.682	865.395	453.724	774.235	1319.748
Treatment Prob(F)	0.0001	0.0001	0.0008	0.0001	0.0001	0.0001	0.0001

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

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Pest Type	W Weed		
Pest Code	CHEAL		
Pest Scientific Name	Chenopodium al		
Pest Name	Common lambsqu		
Crop Code	ZEAMX	ZEAMX	ZEAMX
BBCH Scale	BCOR	BCOR	BCOR
Crop Scientific Name	Zea mays	Zea mays	Zea mays
Crop Name	Corn	Corn	Corn
Description			
Rating Date	8-1-2011	10-5-2011	10-5-2011
Rating Type	CONTRO	MOICON	YIELD
Rating Unit	%	%	bu/ac
Number of Subsamples	1	1	1
Crop Stage Majority			
Pest Stage Majority			
Pest Density, Unit	MW		
Assessed By			
Days After First/Last Applic.	81 56	146 121	146 121
Plant-Eval Interval	81 DP-1	146 DP-1	146 DP-1
Days After Emergence	71 DE-1	136 DE-1	136 DE-1
Trt No.	Treatment Name	Rate	Appl Unit Code
			24 25 26
1	Untreated Check		0.0 c 19.735 a 89.03 b
2	DUAL II MAGNUM ROUNDUP POWERMAX AMS - Liquid	0.478 lb ai/a A 0.95 lb ae/a B 2.5 lb ai/a B	98.5 a 19.558 a 160.10 a
3	DUAL II MAGNUM CADET ROUNDUP POWERMAX AMS - Liquid	0.478 lb ai/a A 0.00427 lb ai/a B 0.95 lb ae/a B 2.5 lb ai/a B	96.5 b 19.585 a 177.65 a
4	BICEP LITE II MAGNUM CADET ROUNDUP POWERMAX AMS - Liquid	2.25 lb ai/a A 0.00427 lb ai/a B 0.95 lb ae/a B 2.5 lb ai/a B	99.0 a 19.430 a 160.78 a
5	DUAL II MAGNUM CADET AATREX ROUNDUP POWERMAX AMS - Liquid	0.478 lb ai/a A 0.00427 lb ai/a B 1 lb ai/a B 0.95 lb ae/a B 2.5 lb ai/a B	99.0 a 20.118 a 161.70 a
6	DUAL II MAGNUM CADET HORNET ROUNDUP POWERMAX AMS - Liquid	8 oz/a A 0.00427 lb ai/a B 0.147 lb ai/a B 0.95 lb ae/a B 2.5 lb ai/a B	99.0 a 19.680 a 164.75 a

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

Purdue University

2011/CADET/CORN/EARLY POSTEMERGENCE/

Title No. 2: Cadet Early Post in Corn
 Trial ID: 11S-THP-CTC-21 Protocol ID: 11S-THP-CTC-121
 Location: Throckmorton Study Director: White/Marquardt
 Project ID: FLUT.COR.11.JPR.02 Investigator: Dr. Bill Johnson
 Sponsor Contact: FMC - Joe Reed

Pest Type

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

Pest Code

SETFA, Setaria faberi, = US
 ABUTH, Abutilon theophrasti, = US
 AMBTR, Ambrosia trifida, = US
 AMARE, Amaranthus retroflexus, = US
 IPOHE, Ipomoea hederacea, = US
 CHEAL, Chenopodium album, = US

Crop Code

ZEAMX, BCOR, Zea mays, = US

Rating Type

PHYGEN = phytotoxicity - general / injury
 CONTRO = control / burndown or knockdown
 PHYSTU = phytotoxicity - stunting
 MOICON = moisture content
 YIELD = yield

Rating Unit

% = percent
 bu/ac = bushels per acre

YD2 = per square yard

Plant-Eval Interval

12 DP-1 = 1 ZEAMD 5-12-2011
 20 DP-1 = 1 ZEAMD 5-12-2011
 34 DP-1 = 1 ZEAMD 5-12-2011
 40 DP-1 = 1 ZEAMD 5-12-2011
 50 DP-1 = 1 ZEAMD 5-12-2011
 81 DP-1 = 1 ZEAMD 5-12-2011
 146 DP-1 = 1 ZEAMD 5-12-2011