

Southern Illinois University

Anthem Preemergence and Postemergence in Corn - Site 2.

Trial ID: 12-T4-S120  
 Location: Belleville Res. Center  
 Investigator: Bryan Young

General Trial Information	
<b>Study Director:</b> Bryan Young	<b>Investigator:</b> Bryan Young <b>Title:</b> Professor
<b>Trial Status:</b> F - one-year/final	
<b>Initiation Date:</b> 5-16-12	
Trial Location	
<b>City:</b> Belleville	
<b>State/Prov.:</b> IL	
<b>Postal Code:</b> 62221	
<b>Country:</b> USA	

<b>Objectives:</b> Evaluate residual control of waterhemp from Anthem compared with competitive standards in corn.
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Personnel	
<b>Study Director:</b> Bryan Young	<b>Title:</b> Professor
<b>Investigator:</b> Bryan Young	
<b>Affiliation:</b> Southern Illinois University	
<b>Address:</b> 1205 Lincoln Drive - AG 176 - MC 4415	
<b>Location:</b> Carbondale IL	
<b>Postal Code:</b> 62901	<b>E-mail:</b> bgyoung@siu.edu
<b>Phone No.:</b> 618-453-7679	<b>Mobile No.:</b> 618-713-6471

Crop Description	
<b>Crop 1:</b> ZEAMD Zea mays indentata Dent corn	<b>Description:</b> RR2/LL
<b>Variety:</b> DKC 61-06	<b>Planting Date:</b> 5-16-12
<b>BBCH Scale:</b> BCOR	<b>Rate, Unit:</b> 28000 S/A
<b>Planting Method:</b> SEEDED Seeded	
<b>Depth, Unit:</b> 1.5 IN	
<b>Row Spacing, Unit:</b> 30 IN	

Pest Description	
<b>Pest 1 Type:</b> W <b>Code:</b> SETFA - Setaria faberi Herrm.	<b>Common Name:</b> foxtail, giant
<b>Pest 2 Type:</b> W <b>Code:</b> IPOHE - Ipomoea hederacea (L.) Jacq.	<b>Common Name:</b> morningglory, ivyleaf
<b>Pest 3 Type:</b> W <b>Code:</b> AMATA - Amaranthus rudis Sauer	<b>Common Name:</b> waterhemp, common

Site and Design	
<b>Plot Width, Unit:</b> 10 FT	<b>Site Type:</b> FIELD field
<b>Plot Length, Unit:</b> 27 FT	
<b>Plot Area, Unit:</b> 270 FT2	<b>Tillage Type:</b> REDTIL reduced-till
<b>Replications:</b> 4	<b>Study Design:</b> RACOB� Randomized Complete Block (RCB)

No.	Previous Crop	Year
1.	GLXMA	2011

Maintenance	
<b>No.</b>	<b>Maintenance Treatment Name</b>
1.	N 150 LB/A, P205 50 LB/A, K20 100 LB/A

Soil Description	
<b>% OM:</b> 1.9	<b>Texture:</b> SIL SILT LOAM
<b>pH:</b> 6.3	<b>Soil Name:</b> BETHALTO
<b>CEC:</b> 12	

Additional Measured Elements		
Element	Quantity	Unit
P1	50	LB/A
K	374	LB/A

Moisture and Weather Conditions	
<b>Overall Moisture Conditions:</b>	BELNOR below normal
<b>Closest Weather Station:</b> ICN - Belleville IL	<b>Distance, Unit:</b> 0.5 MI

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No.	Date	Amount	Unit	Type	Type Description	Interval	Unit	Min Temp	Max Temp	Temp Unit
1.	4-24-12					7	DAY	42.6	74.3	F
2.	4-29-12	3.06	IN	RAIN	rain					
3.	4-30-12	0.66	IN	RAIN	rain					
4.	5-1-12	0.13	IN	RAIN	rain					
5.	5-1-12					7	DAY	33.5	76	F
6.	5-4-12	0.25	IN	RAIN	rain					
7.	5-7-12	0.29	IN	RAIN	rain					
8.	5-8-12					7	DAY	47.5	87.8	F
9.	5-15-12					7	DAY	37.7	81.3	F
10.	5-21-12	0.18	IN	RAIN	rain					
11.	5-22-12					7	DAY	47.6	82.3	F
12.	5-29-12					7	DAY	48.1	90	F
13.	5-30-12	0.07	IN	RAIN	rain					
14.	5-31-12	0.21	IN	RAIN	rain					
15.	6-5-12					7	DAY	50.2	90.1	F
16.	6-11-12	0.75	IN	RAIN	rain					
17.	6-12-12					7	DAY	52.4	93.6	F
18.	6-17-12	0.36	IN	RAIN	rain					
19.	6-19-12					7	DAY	56.3	94	F
20.	6-26-12					7	DAY	51.8	105.4	F
21.	7-3-12					7	DAY	68.9	104.7	F
22.	7-8-12	0.28	IN	RAIN	rain					
23.	7-10-12					7	DAY	63.4	95	F
24.	7-17-12					7	DAY	61	102.2	F
25.	7-24-12					7	DAY	61	103	F
26.	7-29-12	0.15	IN	RAIN	rain					
27.	7-31-12					7	DAY	60.2	99.1	F
28.	8-5-12	0.18	IN	RAIN	rain					
29.	8-7-12					7	DAY	50.2	99.8	F
30.	8-13-12	0.88	IN	RAIN	rain					
31.	8-14-12					7	DAY	51	95.6	F
32.	8-17-12	1.19	IN	RAIN	rain					
33.	8-21-12					7	DAY	54.7	94.2	F
34.	8-26-12	0.04	IN	RAIN	rain					
35.	8-27-12	1.66	IN	RAIN	rain					
36.	8-31-12	0.11	IN	RAIN	rain					

Application Description

	A	B	C
Application Date:	5-17-12	5-29-12	6-15-12
Time of Day:	17:30	15:15	10:00
Application Method:	Spray	Spray	Spray
Application Timing:	PRE	V2-V3	POST
Application Placement:	BROFOL	BROFOL	BROFOL
Applied By:	RJW	JRK	TAR
Air Temperature, Unit:	79 F	87 F	82 F
% Relative Humidity:	28	39	56
Wind Velocity, Unit:	6 MPH	2 MPH	3 MPH
Wind Direction:	E	S	N
Dew Presence (Y/N):	N no	N no	N no
Soil Temperature, Unit:	61 F	68 F	75 F
Soil Moisture:	BELNOR	BELNOR	NORMAL
% Cloud Cover:	10	0	50
Next Rain Occurred On:	5-21-12	6-11-12	6-17-12

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Crop Stage At Each Application			
	A	B	C
Crop 1 Code, BBCH Scale:	ZEAMD BCOR	ZEAMD BCOR	ZEAMD BCOR
Stage Scale Used:	DESC	DESC	DESC
Stage Majority, Percent:	NA	V3	V6
Stage Minimum, Percent:		V2	V6
Stage Maximum, Percent:		V3	V6
Height, Unit:		6 IN	20 IN
Height Minimum, Maximum:		4 6	18 20

Pest Stage At Each Application			
	A	B	C
Pest 1 Code, Type, Scale:	SETFA W DESC	SETFA W DESC	SETFA W DESC
Stage Majority, Percent:	NA	NA	6
Stage Minimum, Percent:			5
Stage Maximum, Percent:			6
Height, Unit:			3 IN
Height Minimum, Maximum:			2 5
Density, Unit:			0.001 FT2
Pest 2 Code, Type, Scale:	IPOHE W DESC	IPOHE W DESC	IPOHE W DESC
Stage Majority, Percent:	NA	NA	4
Stage Minimum, Percent:			2
Stage Maximum, Percent:			10+
Height, Unit:			3 IN
Height Minimum, Maximum:			2 4
Density, Unit:			0.1 FT2
Pest 3 Code, Type, Scale:	AMATA W DESC	AMATA W DESC	AMATA W DESC
Stage Majority, Percent:	NA	NA	5
Stage Minimum, Percent:			2
Stage Maximum, Percent:			7
Height, Unit:			2 IN
Height Minimum, Maximum:			0.5 4
Density, Unit:			0.01 FT2

Application Equipment			
	A	B	C
Appl. Equipment:	CO2 sprayer	CO2 sprayer	CO2 sprayer
Equipment Type:	BACSPR	BACSPR	BACSPR
Operation Pressure, Unit:	30 PSI	30 PSI	30 PSI
Nozzle Type:	XR	XR	XR
Nozzle Size:	8002	8002	8002
Boom Length, Unit:	7.5 FT	7.5 FT	7.5 FT
Spray Volume, Unit:	15 GPA	15 GPA	15 GPA

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Pest Code Crop Code Rating Date Rating Type Rating Unit Rating Timing Trt-Eval Interval							ZEAMD 10-9-12 Moisture Percent	ZEAMD 10-9-12 Test wt. lb/bu	ZEAMD 10-9-12 Yield bu/A			
Trt No.	Treatment Name	Form Conc	Form Type	Rate	Rate Unit	Other Rate	Other Rate Unit	Growth Stage	Appl Code			
1	ANTHEM ROUNDUP POWERMAX N-PAK AMS	2.15 SE 4.5 SL 100 SL		0.168 lb ai/a 0.77 lb ae/a 2.5 % v/v	ai/a ae/a v/v	10 fl oz/a 22 fl oz/a 2.5 % v/v		PRE POST POST	A C C	17.9 a	56.6 a	152 abc
2	ANTHEM ATZ ROUNDUP POWERMAX N-PAK AMS	4.5 SE 4.5 SL 100 SL		1.13 lb ai/a 0.77 lb ae/a 2.5 % v/v	ai/a ae/a v/v	32 fl oz/a 22 fl oz/a 2.5 % v/v		PRE POST POST	A C C	18.2 a	56.5 a	157 ab
3	ANTHEM HORNET WDG COC (PRIME OIL)	2.15 SE 68.5 WG 100 SL		0.168 lb ai/a 0.128 lb ai/a 1 % v/v	ai/a ai/a v/v	10 fl oz/a 3 oz/a 1 % v/v		PRE POST POST	A C C	18.3 a	56.4 a	143 c-f
4	HARNESS HORNET WDG COC (PRIME OIL)	7 EC 68.5 WG 100 SL		2.36 lb ai/a 0.128 lb ai/a 1 % v/v	ai/a ai/a v/v	2.7 pt/a 3 oz/a 1 % v/v		PRE POST POST	A C C	18.5 a	56.4 a	136 f
5	DUAL II MAGNUM HORNET WDG COC (PRIME OIL)	7.64 EC 68.5 WG 100 SL		1.6 lb ai/a 0.128 lb ai/a 1 % v/v	ai/a ai/a v/v	1.67 pt/a 3 oz/a 1 % v/v		PRE POST POST	A C C	18.1 a	56.5 a	138 def
6	ANTHEM ATZ HORNET WDG COC (PRIME OIL)	4.5 SE 68.5 WG 100 SL		1.13 lb ai/a 0.128 lb ai/a 1 % v/v	ai/a ai/a v/v	32 fl oz/a 3 oz/a 1 % v/v		PRE POST POST	A C C	18.1 a	56.5 a	137 ef
7	BICEP LITE II MAGNUM HORNET WDG COC (PRIME OIL)	6 SC 68.5 WG 100 SL		2.25 lb ai/a 0.128 lb ai/a 1 % v/v	ai/a ai/a v/v	1.5 qt/a 3 oz/a 1 % v/v		PRE POST POST	A C C	18.1 a	56.5 a	135 f
8	HARNESS XTRA HORNET WDG COC (PRIME OIL)	6 EC 68.5 WG 100 SL		3.45 lb ai/a 0.128 lb ai/a 1 % v/v	ai/a ai/a v/v	2.3 qt/a 3 oz/a 1 % v/v		PRE POST POST	A C C	17.8 a	56.7 a	146 b-f
9	ZEMAX HORNET WDG COC (PRIME OIL)	3.67 SC 68.5 WG 100 SL		2.2 lb ai/a 0.128 lb ai/a 1 % v/v	ai/a ai/a v/v	2.4 qt/a 3 oz/a 1 % v/v		PRE POST POST	A C C	17.6 a	56.8 a	135 f
10	VERDICT HORNET WDG COC (PRIME OIL)	5.57 EC 68.5 WG 100 SL		0.696 lb ai/a 0.128 lb ai/a 1 % v/v	ai/a ai/a v/v	16 fl oz/a 3 oz/a 1 % v/v		PRE POST POST	A C C	17.9 a	56.6 a	144 b-f
11	ANTHEM ROUNDUP POWERMAX N-PAK AMS	2.15 SE 4.5 SL 100 SL		0.151 lb ai/a 0.77 lb ae/a 2.5 % v/v	ai/a ae/a v/v	9 fl oz/a 22 fl oz/a 2.5 % v/v		V2-V3 V2-V3 V2-V3	B B B	18.0 a	56.6 a	148 a-f
12	ANTHEM ATZ ROUNDUP POWERMAX N-PAK AMS	4.5 SE 4.5 SL 100 SL		0.98 lb ai/a 0.77 lb ae/a 2.5 % v/v	ai/a ae/a v/v	28 fl oz/a 22 fl oz/a 2.5 % v/v		V2-V3 V2-V3 V2-V3	B B B	18.1 a	56.5 a	150 a-e
13	HALEX GT NIS (ACTIVATOR 90) N-PAK AMS	4.38 CS 100 SL 100 SL		1.97 lb ai/a 0.25 % v/v 2.5 % v/v	ai/a v/v v/v	3.6 pt/a 0.25 % v/v 2.5 % v/v		V2-V3 V2-V3 V2-V3	B B B	18.3 a	56.5 a	160 a
14	LAUDIS ROUNDUP POWERMAX N-PAK AMS	3.5 SC 4.5 SL 100 SL		0.082 lb ai/a 0.77 lb ae/a 2.5 % v/v	ai/a ae/a v/v	3 fl oz/a 22 fl oz/a 2.5 % v/v		V2-V3 V2-V3 V2-V3	B B B	18.1 a	56.5 a	148 a-f
15	ROUNDUP POWERMAX N-PAK AMS	4.5 SL 100 SL		0.77 lb ae/a 2.5 % v/v	ae/a v/v	22 fl oz/a 2.5 % v/v		V2-V3 V2-V3	B B	18.4 a	56.4 a	150 a-e

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

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Pest Code										ZEAMD	ZEAMD	ZEAMD
Crop Code										10-9-12	10-9-12	10-9-12
Rating Date										Moisture	Test wt.	Yield
Rating Type										Percent	lb/bu	bu/A
Rating Unit												
Rating Timing												
Trt-Eval Interval												
Trt No.	Treatment Name	Form Conc	Form Type	Rate	Unit	Other Rate	Other Rate	Unit	Growth Stage	Appl Code		
16	ANTHEM	2.15	SE	0.151	lb ai/a	9	fl oz/a		V2-V3	B	18.8 a	56.2 a
	ROUNDUP POWERMAX	4.5	SL	0.77	lb ae/a	22	fl oz/a		V2-V3	B		
	CORVUS	2.62	SC	0.0614	lb ai/a	3	fl oz/a		V2-V3	B		
	N-PAK AMS	100	SL	2.5	% v/v	2.5	% v/v		V2-V3	B		151 a-d
LSD (P=.05)										0.73	0.31	13.7
Standard Deviation										0.51	0.22	9.6
CV										2.81	0.39	6.57
Replicate F										0.939	0.761	4.399
Replicate Prob(F)										0.4298	0.5221	0.0085
Treatment F										1.188	1.314	2.689
Treatment Prob(F)										0.3151	0.2341	0.0053

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Pest Code Crop Code Rating Date Rating Type Rating Unit Rating Timing Trt-Eval Interval							ZEAMD 6-5-12 Injury Percent 14 DAE 19 DA-A	ZEAMD 6-12-12 Injury Percent 14 DA-B	ZEAMD 6-21-12 Injury Percent 30 DAE 18 DA-B	ZEAMD 6-28-12 Injury Percent 30 DA-B 13 DA-C		
Trt No.	Treatment Name	Form Conc	Form Type	Rate Unit	Other Rate	Other Rate Unit	Growth Stage	Appl Code				
1	ANTHEM ROUNDUP POWERMAX N-PAK AMS	2.15 SE 4.5 SL 100 SL		0.168 lb ai/a 0.77 lb ae/a 2.5 % v/v	10 fl oz/a 22 fl oz/a 2.5 % v/v		PRE POST POST	A C C	0 d	0 c	0 c	0 d
2	ANTHEM ATZ ROUNDUP POWERMAX N-PAK AMS	4.5 SE 4.5 SL 100 SL		1.13 lb ai/a 0.77 lb ae/a 2.5 % v/v	32 fl oz/a 22 fl oz/a 2.5 % v/v		PRE POST POST	A C C	0 d	0 c	0 c	0 d
3	ANTHEM HORNET WDG COC (PRIME OIL)	2.15 SE 68.5 WG 100 SL		0.168 lb ai/a 0.128 lb ai/a 1 % v/v	10 fl oz/a 3 oz/a 1 % v/v		PRE POST POST	A C C	0 d	0 c	8 a	1 cd
4	HARNESS HORNET WDG COC (PRIME OIL)	7 EC 68.5 WG 100 SL		2.36 lb ai/a 0.128 lb ai/a 1 % v/v	2.7 pt/a 3 oz/a 1 % v/v		PRE POST POST	A C C	0 d	0 c	10 a	0 d
5	DUAL II MAGNUM HORNET WDG COC (PRIME OIL)	7.64 EC 68.5 WG 100 SL		1.6 lb ai/a 0.128 lb ai/a 1 % v/v	1.67 pt/a 3 oz/a 1 % v/v		PRE POST POST	A C C	0 d	0 c	8 a	2 bcd
6	ANTHEM ATZ HORNET WDG COC (PRIME OIL)	4.5 SE 68.5 WG 100 SL		1.13 lb ai/a 0.128 lb ai/a 1 % v/v	32 fl oz/a 3 oz/a 1 % v/v		PRE POST POST	A C C	0 d	0 c	8 a	0 d
7	BICEP LITE II MAGNUM HORNET WDG COC (PRIME OIL)	6 SC 68.5 WG 100 SL		2.25 lb ai/a 0.128 lb ai/a 1 % v/v	1.5 qt/a 3 oz/a 1 % v/v		PRE POST POST	A C C	0 d	0 c	10 a	5 a
8	HARNESS XTRA HORNET WDG COC (PRIME OIL)	6 EC 68.5 WG 100 SL		3.45 lb ai/a 0.128 lb ai/a 1 % v/v	2.3 qt/a 3 oz/a 1 % v/v		PRE POST POST	A C C	0 d	0 c	8 a	0 d
9	ZEMAX HORNET WDG COC (PRIME OIL)	3.67 SC 68.5 WG 100 SL		2.2 lb ai/a 0.128 lb ai/a 1 % v/v	2.4 qt/a 3 oz/a 1 % v/v		PRE POST POST	A C C	0 d	0 c	8 a	3 abc
10	VERDICT HORNET WDG COC (PRIME OIL)	5.57 EC 68.5 WG 100 SL		0.696 lb ai/a 0.128 lb ai/a 1 % v/v	16 fl oz/a 3 oz/a 1 % v/v		PRE POST POST	A C C	0 d	0 c	10 a	4 ab
11	ANTHEM ROUNDUP POWERMAX N-PAK AMS	2.15 SE 4.5 SL 100 SL		0.151 lb ai/a 0.77 lb ae/a 2.5 % v/v	9 fl oz/a 22 fl oz/a 2.5 % v/v		V2-V3 V2-V3 V2-V3	B B B	5 b	2 b	1 bc	0 d
12	ANTHEM ATZ ROUNDUP POWERMAX N-PAK AMS	4.5 SE 4.5 SL 100 SL		0.98 lb ai/a 0.77 lb ae/a 2.5 % v/v	28 fl oz/a 22 fl oz/a 2.5 % v/v		V2-V3 V2-V3 V2-V3	B B B	3 c	1 bc	0 c	0 d
13	HALEX GT NIS (ACTIVATOR 90) N-PAK AMS	4.38 CS 100 SL 100 SL		1.97 lb ai/a 0.25 % v/v 2.5 % v/v	3.6 pt/a 0.25 % v/v 2.5 % v/v		V2-V3 V2-V3 V2-V3	B B B	0 d	0 c	0 c	0 d
14	LAUDIS ROUNDUP POWERMAX N-PAK AMS	3.5 SC 4.5 SL 100 SL		0.082 lb ai/a 0.77 lb ae/a 2.5 % v/v	3 fl oz/a 22 fl oz/a 2.5 % v/v		V2-V3 V2-V3 V2-V3	B B B	0 d	0 c	0 c	0 d
15	ROUNDUP POWERMAX N-PAK AMS	4.5 SL 100 SL		0.77 lb ae/a 2.5 % v/v	22 fl oz/a 2.5 % v/v		V2-V3 V2-V3	B B	0 d	0 c	0 c	0 d

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Pest Code							ZEAMD	ZEAMD	ZEAMD	ZEAMD
Crop Code							6-5-12	6-12-12	6-21-12	6-28-12
Rating Date							Injury	Injury	Injury	Injury
Rating Type							Percent	Percent	Percent	Percent
Rating Unit							14 DAE	14 DAE	30 DAE	30 DAE
Rating Timing							19 DA-A	14 DA-B	18 DA-B	13 DA-C
Trt-Eval Interval										
Trt No.	Treatment Name	Form Conc	Form Type	Rate	Unit	Other Rate	Other Rate	Growth Stage	Appl Code	
16	ANTHEM	2.15	SE	0.151	lb ai/a	9	fl oz/a	V2-V3	B	
	ROUNDUP POWERMAX	4.5	SL	0.77	lb ae/a	22	fl oz/a	V2-V3	B	
	CORVUS	2.62	SC	0.0614	lb ai/a	3	fl oz/a	V2-V3	B	
	N-PAK AMS	100	SL	2.5	% v/v	2.5	% v/v	V2-V3	B	
LSD (P=.05)							0.5	0.8	2.5	2.3
Standard Deviation							0.3	0.6	1.8	1.6
CV							43.03	171.22	38.5	166.41
Replicate F							1.364	1.634	4.388	3.716
Replicate Prob(F)							0.2660	0.1949	0.0086	0.0180
Treatment F							106.773	8.525	24.632	4.230
Treatment Prob(F)							0.0001	0.0001	0.0001	0.0001

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Pest Code	SETFA	SETFA	SETFA	IPHOE	IPHOE	IPHOE								
Crop Code	6-16-12	7-16-12	8-15-12	6-16-12	7-16-12	8-15-12								
Rating Date	Control	Control	Control	Control	Control	Control								
Rating Type	Percent	Percent	Percent	Percent	Percent	Percent								
Rating Unit	30 DA-A	60 DA-A	90 DA-A	30 DA-A	60 DA-A	90 DA-A								
Rating Timing	18 DA-B	31 DA-C	61 DA-C	18 DA-B	31 DA-C	61 DA-C								
Trt-Eval Interval														
Trt No.	Treatment Name	Form Conc	Form Type	Rate Unit	Other Rate	Other Rate Unit	Growth Stage	Appl Code						
1	ANTHEM ROUNDUP POWERMAX N-PAK AMS	2.15 SE 4.5 SL 100 SL		0.168 lb ai/a 0.77 lb ae/a 2.5 % v/v	10 fl oz/a 22 fl oz/a 2.5 % v/v		PRE A POST C POST C		75 bc	97 abc	97 a	30 fg	94 ab	92 ab
2	ANTHEM ATZ ROUNDUP POWERMAX N-PAK AMS	4.5 SE 4.5 SL 100 SL		1.13 lb ai/a 0.77 lb ae/a 2.5 % v/v	32 fl oz/a 22 fl oz/a 2.5 % v/v		PRE A POST C POST C		54 cd	98 a	97 a	53 def	97 a	96 a
3	ANTHEM HORNET WDG COC (PRIME OIL)	2.15 SE 68.5 WG 100 SL		0.168 lb ai/a 0.128 lb ai/a 1 % v/v	10 fl oz/a 3 oz/a 1 % v/v		PRE A POST C POST C		60 bcd	94 a-d	94 a	36 efg	91 abc	91 ab
4	HARNESS HORNET WDG COC (PRIME OIL)	7 EC 68.5 WG 100 SL		2.36 lb ai/a 0.128 lb ai/a 1 % v/v	2.7 pt/a 3 oz/a 1 % v/v		PRE A POST C POST C		50 d	87 de	90 a	30 fg	93 abc	90 ab
5	DUAL II MAGNUM HORNET WDG COC (PRIME OIL)	7.64 EC 68.5 WG 100 SL		1.6 lb ai/a 0.128 lb ai/a 1 % v/v	1.67 pt/a 3 oz/a 1 % v/v		PRE A POST C POST C		63 bcd	93 a-d	90 a	68 a-d	89 bcd	88 b
6	ANTHEM ATZ HORNET WDG COC (PRIME OIL)	4.5 SE 68.5 WG 100 SL		1.13 lb ai/a 0.128 lb ai/a 1 % v/v	32 fl oz/a 3 oz/a 1 % v/v		PRE A POST C POST C		67 bcd	89 cd	88 a	50 d-g	89 bcd	86 bc
7	BICEP LITE II MAGNUM HORNET WDG COC (PRIME OIL)	6 SC 68.5 WG 100 SL		2.25 lb ai/a 0.128 lb ai/a 1 % v/v	1.5 qt/a 3 oz/a 1 % v/v		PRE A POST C POST C		73 bcd	89 cd	88 a	25 g	90 bc	90 ab
8	HARNESS XTRA HORNET WDG COC (PRIME OIL)	6 EC 68.5 WG 100 SL		3.45 lb ai/a 0.128 lb ai/a 1 % v/v	2.3 qt/a 3 oz/a 1 % v/v		PRE A POST C POST C		80 ab	93 a-d	93 a	43 d-g	90 bc	89 ab
9	ZEMAX HORNET WDG COC (PRIME OIL)	3.67 SC 68.5 WG 100 SL		2.2 lb ai/a 0.128 lb ai/a 1 % v/v	2.4 qt/a 3 oz/a 1 % v/v		PRE A POST C POST C		60 bcd	90 bcd	91 a	60 cde	90 bc	87 b
10	VERDICT HORNET WDG COC (PRIME OIL)	5.57 EC 68.5 WG 100 SL		0.696 lb ai/a 0.128 lb ai/a 1 % v/v	16 fl oz/a 3 oz/a 1 % v/v		PRE A POST C POST C		67 bcd	91 a-d	90 a	63 b-e	91 abc	90 ab
11	ANTHEM ROUNDUP POWERMAX N-PAK AMS	2.15 SE 4.5 SL 100 SL		0.151 lb ai/a 0.77 lb ae/a 2.5 % v/v	9 fl oz/a 22 fl oz/a 2.5 % v/v		V2-V3 B V2-V3 B V2-V3 B		99 a	94 a-d	96 a	91 a	81 e	78 d
12	ANTHEM ATZ ROUNDUP POWERMAX N-PAK AMS	4.5 SE 4.5 SL 100 SL		0.98 lb ai/a 0.77 lb ae/a 2.5 % v/v	28 fl oz/a 22 fl oz/a 2.5 % v/v		V2-V3 B V2-V3 B V2-V3 B		99 a	92 a-d	91 a	90 ab	83 de	76 d
13	HALEX GT NIS (ACTIVATOR 90) N-PAK AMS	4.38 CS 100 SL 100 SL		1.97 lb ai/a 0.25 % v/v 2.5 % v/v	3.6 pt/a 0.25 % v/v 2.5 % v/v		V2-V3 B V2-V3 B V2-V3 B		99 a	97 ab	97 a	90 ab	86 cde	80 cd
14	LAUDIS ROUNDUP POWERMAX N-PAK AMS	3.5 SC 4.5 SL 100 SL		0.082 lb ai/a 0.77 lb ae/a 2.5 % v/v	3 fl oz/a 22 fl oz/a 2.5 % v/v		V2-V3 B V2-V3 B V2-V3 B		99 a	75 f	68 b	91 a	70 f	61 e
15	ROUNDUP POWERMAX N-PAK AMS	4.5 SL 100 SL		0.77 lb ae/a 2.5 % v/v	22 fl oz/a 2.5 % v/v		V2-V3 B V2-V3 B		99 a	80 ef	74 b	91 a	73 f	64 e



Southern Illinois University

Anthem Preemergence and Postemergence in Corn - Site 2.

Trial ID: 12-T4-S120

Location: Belleville Res. Center

Investigator: Bryan Young

Pest Code	SETFA	SETFA	SETFA	IPOHE	IPOHE	IPOHE						
Crop Code	6-16-12	7-16-12	8-15-12	6-16-12	7-16-12	8-15-12						
Rating Date	Control	Control	Control	Control	Control	Control						
Rating Type	Percent	Percent	Percent	Percent	Percent	Percent						
Rating Unit	30 DA-A	60 DA-A	90 DA-A	30 DA-A	60 DA-A	90 DA-A						
Rating Timing	18 DA-B	31 DA-C	61 DA-C	18 DA-B	31 DA-C	61 DA-C						
Trt-Eval Interval												
Trt No.	Treatment Name	Form Conc	Form Type	Rate	Unit	Other Rate	Other Unit	Growth Stage	Appl Code			
16	ANTHEM	2.15	SE	0.151	lb ai/a	9	fl oz/a	V2-V3	B	99	a	
	ROUNDUP POWERMAX	4.5	SL	0.77	lb ae/a	22	fl oz/a	V2-V3	B			
	CORVUS	2.62	SC	0.0614	lb ai/a	3	fl oz/a	V2-V3	B			
	N-PAK AMS	100	SL	2.5	% v/v	2.5	% v/v	V2-V3	B			
	LSD (P=.05)	22.7		7.9		9.9		27.7		6.3		6.9
	Standard Deviation	15.9		5.6		6.9		19.4		4.4		4.8
	CV	20.48		6.13		7.69		31.07		5.03		5.73
	Replicate F	2.085		1.409		1.520		1.474		2.814		6.285
	Replicate Prob(F)	0.1159		0.2526		0.2221		0.2346		0.0499		0.0012
	Treatment F	5.463		4.763		5.612		6.738		10.969		16.748
	Treatment Prob(F)	0.0001		0.0001		0.0001		0.0001		0.0001		0.0001

Southern Illinois University

Anthem Preemergence and Postemergence in Corn - Site 2.

Trial ID: 12-T4-S120

Location: Belleville Res. Center

Investigator: Bryan Young

Pest Code Crop Code Rating Date Rating Type Rating Unit Rating Timing Trt-Eval Interval									AMATA	AMATA	AMATA	
									6-16-12 Control Percent 30 DA-A 18 DA-B	7-16-12 Control Percent 60 DA-A 31 DA-C	8-15-12 Control Percent 90 DA-A 61 DA-C	
Trt No.	Treatment Name	Form Conc	Form Type	Rate	Rate Unit	Other Rate	Other Rate Unit	Growth Stage	Appl Code			
1	ANTHEM ROUNDUP POWERMAX N-PAK AMS	2.15 SE 4.5 SL 100 SL		0.168 lb ai/a 0.77 lb ae/a 2.5 % v/v		10 fl oz/a 22 fl oz/a 2.5 % v/v		PRE POST POST	A C C	92 a	99 a	99 a
2	ANTHEM ATZ ROUNDUP POWERMAX N-PAK AMS	4.5 SE 4.5 SL 100 SL		1.13 lb ai/a 0.77 lb ae/a 2.5 % v/v		32 fl oz/a 22 fl oz/a 2.5 % v/v		PRE POST POST	A C C	91 a	99 a	99 a
3	ANTHEM HORNET WDG COC (PRIME OIL)	2.15 SE 68.5 WG 100 SL		0.168 lb ai/a 0.128 lb ai/a 1 % v/v		10 fl oz/a 3 oz/a 1 % v/v		PRE POST POST	A C C	99 a	98 a	99 a
4	HARNESS HORNET WDG COC (PRIME OIL)	7 EC 68.5 WG 100 SL		2.36 lb ai/a 0.128 lb ai/a 1 % v/v		2.7 pt/a 3 oz/a 1 % v/v		PRE POST POST	A C C	99 a	99 a	94 a
5	DUAL II MAGNUM HORNET WDG COC (PRIME OIL)	7.64 EC 68.5 WG 100 SL		1.6 lb ai/a 0.128 lb ai/a 1 % v/v		1.67 pt/a 3 oz/a 1 % v/v		PRE POST POST	A C C	87 a	97 a	95 a
6	ANTHEM ATZ HORNET WDG COC (PRIME OIL)	4.5 SE 68.5 WG 100 SL		1.13 lb ai/a 0.128 lb ai/a 1 % v/v		32 fl oz/a 3 oz/a 1 % v/v		PRE POST POST	A C C	87 a	94 b	92 a
7	BICEP LITE II MAGNUM HORNET WDG COC (PRIME OIL)	6 SC 68.5 WG 100 SL		2.25 lb ai/a 0.128 lb ai/a 1 % v/v		1.5 qt/a 3 oz/a 1 % v/v		PRE POST POST	A C C	97 a	99 a	98 a
8	HARNESS XTRA HORNET WDG COC (PRIME OIL)	6 EC 68.5 WG 100 SL		3.45 lb ai/a 0.128 lb ai/a 1 % v/v		2.3 qt/a 3 oz/a 1 % v/v		PRE POST POST	A C C	87 a	99 a	97 a
9	ZEMAX HORNET WDG COC (PRIME OIL)	3.67 SC 68.5 WG 100 SL		2.2 lb ai/a 0.128 lb ai/a 1 % v/v		2.4 qt/a 3 oz/a 1 % v/v		PRE POST POST	A C C	99 a	99 a	96 a
10	VERDICT HORNET WDG COC (PRIME OIL)	5.57 EC 68.5 WG 100 SL		0.696 lb ai/a 0.128 lb ai/a 1 % v/v		16 fl oz/a 3 oz/a 1 % v/v		PRE POST POST	A C C	97 a	99 a	98 a
11	ANTHEM ROUNDUP POWERMAX N-PAK AMS	2.15 SE 4.5 SL 100 SL		0.151 lb ai/a 0.77 lb ae/a 2.5 % v/v		9 fl oz/a 22 fl oz/a 2.5 % v/v		V2-V3 V2-V3 V2-V3	B B B	99 a	99 a	99 a
12	ANTHEM ATZ ROUNDUP POWERMAX N-PAK AMS	4.5 SE 4.5 SL 100 SL		0.98 lb ai/a 0.77 lb ae/a 2.5 % v/v		28 fl oz/a 22 fl oz/a 2.5 % v/v		V2-V3 V2-V3 V2-V3	B B B	99 a	99 a	99 a
13	HALEX GT NIS (ACTIVATOR 90) N-PAK AMS	4.38 CS 100 SL 100 SL		1.97 lb ai/a 0.25 % v/v 2.5 % v/v		3.6 pt/a 0.25 % v/v 2.5 % v/v		V2-V3 V2-V3 V2-V3	B B B	99 a	99 a	99 a
14	LAUDIS ROUNDUP POWERMAX N-PAK AMS	3.5 SC 4.5 SL 100 SL		0.082 lb ai/a 0.77 lb ae/a 2.5 % v/v		3 fl oz/a 22 fl oz/a 2.5 % v/v		V2-V3 V2-V3 V2-V3	B B B	99 a	99 a	99 a
15	ROUNDUP POWERMAX N-PAK AMS	4.5 SL 100 SL		0.77 lb ae/a 2.5 % v/v		22 fl oz/a 2.5 % v/v		V2-V3 V2-V3	B B	99 a	97 a	88 a

Southern Illinois University

Anthem Preemergence and Postemergence in Corn - Site 2.

Trial ID: 12-T4-S120

Location: Belleville Res. Center

Investigator: Bryan Young

Pest Code									AMATA	AMATA	AMATA
Crop Code									6-16-12	7-16-12	8-15-12
Rating Date									Control	Control	Control
Rating Type									Percent	Percent	Percent
Rating Unit									30 DA-A	60 DA-A	90 DA-A
Rating Timing									18 DA-B	31 DA-C	61 DA-C
Trt-Eval Interval											
Trt No.	Treatment Name	Form Conc	Form Type	Rate	Unit	Other Rate	Other Rate	Growth Unit	Stage	Appl Code	
16	ANTHEM	2.15	SE	0.151	lb ai/a	9	fl oz/a	V2-V3	B	99 a	
	ROUNDUP POWERMAX	4.5	SL	0.77	lb ae/a	22	fl oz/a	V2-V3	B	99 a	
	CORVUS	2.62	SC	0.0614	lb ai/a	3	fl oz/a	V2-V3	B		
	N-PAK AMS	100	SL	2.5	% v/v	2.5	% v/v	V2-V3	B		
	LSD (P=.05)									17.4	2.9
	Standard Deviation									12.2	2.0
	CV									12.77	2.06
	Replicate F									0.125	0.540
	Replicate Prob(F)									0.9449	0.6571
	Treatment F									0.682	2.207
	Treatment Prob(F)									0.7882	0.0208

Anthem Preemergence and Postemergence in Corn - Site 2.

Trial ID: 12-T4-S120

Location: Belleville Res. Center

Investigator: Bryan Young

Trial Comments

1. Protocol: FMC.
2. Ratings: CI at 14 and 30 DAE, 14 and 30 DA-B. 30 DA-B rating should include all plots.  
WC at 30, 60, and 90 DA-A, WC 30 DA-A is before POST application C.  
WC 60-80 DA-C.
3. POST application C timing is 30 DA-A.
4. Yield.
5. On 5-29-12 at the V2-V3 application timing, there were no weeds emerged due to dry soil.  
On 6-16-12 at 30 DA-A weeds were light and variable.  
On 8-15-12 at 61 DA-C decreasing weed control was due to new emergence.
6. Rainfall following the PRE application was 0.18 inch 4 days later and 0.28 inch 14 days later.
7. Harvested 10-9-12, (2) 30 inch rows by 24 ft.