

Southern Illinois University

Fall-Applied Residual Herbicides in Winter Wheat followed by Soybean Double-Crop - Annual Bluegrass.

Trial ID: 12-ARC-13-W70  
 Location: Agronomy Res. Center

Investigator: Bryan Young

**General Trial Information**

**Study Director:** Bryan Young  
**Investigator:** Bryan Young **Title:** Professor

**Trial Status:** F - one-year/final  
**Initiation Date:** 10-26-11

**Trial Location**

**City:** Carbondale  
**State/Prov.:** IL  
**Postal Code:** 62901  
**Country:** USA

**Objectives:**

Determine the value of residual ALS herbicides for control of annual bluegrass and other weeds in winter wheat.

**Personnel**

**Study Director:** Bryan Young  
**Investigator:** Bryan Young **Title:** Professor  
**Affiliation:** Southern Illinois University  
**Address:** 1205 Lincoln Drive - AG 176 - MC 4415  
**Location:** Carbondale IL  
**Postal Code:** 62901 **E-mail:** bgyoung@siu.edu  
**Phone No.:** 618-453-7679 **Mobile No.:** 618-713-6471

**Crop Description**

**Crop 1:** TRZAW Triticum aestivum (winter) Winter wheat  
**Variety:** P25R62  
**BBCH Scale:** BCER **Planting Date:** 10-26-11  
**Planting Method:** SEEDED Seeded **Rate, Unit:** 1.4 millionS/A  
**Depth, Unit:** 1 IN  
**Row Spacing, Unit:** 7.5 IN

**Crop 2:** GLXMA Glycine max Soybean  
**Variety:** P94Y50 **Description:** RR  
**BBCH Scale:** BSOY **Planting Date:** 6-13-12  
**Planting Method:** SEEDED Seeded **Rate, Unit:** 175000 S/A  
**Depth, Unit:** 2 IN  
**Row Spacing, Unit:** 30 IN

**Pest Description**

**Pest 1 Type:** W **Code:** POAAN - Poa annua L.  
**Common Name:** bluegrass, annual

**Pest 2 Type:** W **Code:** ALLVI - Allium vineale L.  
**Common Name:** garlic, wild

**Pest 3 Type:** W **Code:** LAMAM - Lamium amplexicaule L.  
**Common Name:** henbit

**Pest 4 Type:** W **Code:** CERVU - Cerastium vulgatum L.  
**Common Name:** chickweed, mouseear

**Pest 5 Type:** W **Code:** ERICA - Conyza canadensis (L.) Crong.  
**Common Name:** horseweed

**Site and Design**

**Plot Width, Unit:** 10 FT **Site Type:** FIELD field  
**Plot Length, Unit:** 30 FT  
**Plot Area, Unit:** 300 FT<sup>2</sup> **Tillage Type:** NOTILL no-till  
**Replications:** 3 **Study Design:** RACOB L Randomized Complete Block (RCB)

No.	Previous Crop	Year
1.	GLXMA	2011

**Maintenance**

No.	Maintenance Treatment Name
1.	Fall: N 30 LB/A, P205 0 LB/A, K20 0 LB/A
2.	Spring: N 85 LB/A, P205 0 LB/A, K20 0 LB/A

**Soil Description**

**% OM:** 2.2 **Texture:** SIL SILT LOAM  
**pH:** 6.2 **Soil Name:** WEIR  
**CEC:** 7.3

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**Additional Measured Elements**

Element	Quantity	Unit
P1	63	LB/A
K	217	LB/A

**Moisture and Weather Conditions**

Overall Moisture Conditions: BELNOR below normal  
 Closest Weather Station: ICN - Carbondale IL Distance, Unit: 0.5 MI

**Application Description**

	A	B
Application Date:	10-29-11	12-2-11
Time of Day:	11:30	14:00
Application Method:	Spray	Spray
Application Timing:	PRE	FALL
Application Placement:	BROSOI	BROFOL
Applied By:	NRJ	NRJ
Air Temperature, Unit:	55 F	55 F
% Relative Humidity:	33	56
Wind Velocity, Unit:	3 MPH	1 MPH
Wind Direction:	W	NE
Dew Presence (Y/N):	N no	N no
Soil Temperature, Unit:	50 F	46 F
Soil Moisture:	NORMAL	ABONOR
% Cloud Cover:	0	5
Next Rain Occurred On:	11-3-11	12-4-11

**Crop Stage At Each Application**

	A	B
Crop 1 Code, BBCH Scale:	TRZAW BCER	TRZAW BCER
Stage Scale Used:	DESC	DESC
Stage Majority, Percent:	NA	FK1
Height, Unit:		4 IN
Height Minimum, Maximum:		3 4
Crop 2 Code, BBCH Scale:	GLXMA BSOY	GLXMA BSOY
Stage Scale Used:	DESC	DESC
Stage Majority, Percent:	NA	NA

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## Pest Stage At Each Application

	A	B
<b>Pest 1 Code, Type, Scale:</b>	POAAN W DESC	POAAN W DESC
<b>Stage Majority, Percent:</b>	2	8
<b>Stage Minimum, Percent:</b>	1	3
<b>Stage Maximum, Percent:</b>	3	10
<b>Height, Unit:</b>	1 IN	1 IN
<b>Height Minimum, Maximum:</b>	0.5 1	0.5 1
<b>Density, Unit:</b>	10 FT2	10 FT2
<b>Pest 2 Code, Type, Scale:</b>	ALLVI W DESC	ALLVI W DESC
<b>Stage Majority, Percent:</b>	2	2
<b>Stage Minimum, Percent:</b>	1	1
<b>Stage Maximum, Percent:</b>	3	3
<b>Height, Unit:</b>	4 IN	4 IN
<b>Height Minimum, Maximum:</b>	2 6	2 6
<b>Density, Unit:</b>	5 FT2	5 FT2
<b>Pest 3 Code, Type, Scale:</b>	LAMAM W DESC	LAMAM W DESC
<b>Stage Majority, Percent:</b>	4	6
<b>Stage Minimum, Percent:</b>	4	4
<b>Stage Maximum, Percent:</b>	6	15
<b>Height, Unit:</b>	1 IN	1 IN
<b>Height Minimum, Maximum:</b>	0.5 1	0.5 1
<b>Density, Unit:</b>	4 FT2	4 FT2
<b>Pest 4 Code, Type, Scale:</b>	CERVU W DESC	CERVU W DESC
<b>Stage Majority, Percent:</b>	4	6
<b>Stage Minimum, Percent:</b>	2	4
<b>Stage Maximum, Percent:</b>	6	10
<b>Height, Unit:</b>	0.5 IN	1 IN
<b>Height Minimum, Maximum:</b>	0.5 1	1 1.5
<b>Density, Unit:</b>	1 FT2	1 FT2
<b>Pest 5 Code, Type, Scale:</b>	ERICA W DESC	ERICA W DESC
<b>Stage Majority, Percent:</b>	NA	NA

## Application Equipment

	A	B
<b>Appl. Equipment:</b>	CO2 sprayer	CO2 sprayer
<b>Equipment Type:</b>	BACSPR	BACSPR
<b>Operation Pressure, Unit:</b>	30 PSI	30 PSI
<b>Nozzle Type:</b>	XR	XR
<b>Nozzle Size:</b>	8002	8002
<b>Boom Length, Unit:</b>	6.67 FT	6.67 FT
<b>Spray Volume, Unit:</b>	15 GPA	15 GPA

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Pest Code Crop Code Rating Date							TRZAW 6-4-12	TRZAW 6-4-12	TRZAW 6-4-12	TRZAW 12-9-11	TRZAW 12-16-11	TRZAW 12-30-11	
Rating Type Rating Unit Rating Timing Trt-Eval Interval							Moisture Percent	Test wt. lb/bu	Yield bu/A	Injury Percent 7 DA-B	Injury Percent 14 DA-B	Injury Percent 28 DA-B	
Trt No.	Treatment Name	Form Conc	Form Type	Rate Rate	Other Rate	Other Rate	Growth Unit	Appl Code					
1	HARMONY EXTRA SG NIS (ACTIVATOR 90)	50 SG 100 SL		0.0234 lb ai/a 0.25 % v/v	0.75 oz/a 0.25 % v/v		FALL FALL	B B	13.0 a	56.7 a	62 d	0 a 0 a 0 a	
2	FINESSE NIS (ACTIVATOR 90)	75 WG 100 SL		0.0094 lb ai/a 0.25 % v/v	0.2 oz/a 0.25 % v/v		FALL FALL	B B	12.8 a	55.8 a	62 d	0 a 0 a 0 a	
3	FINESSE NIS (ACTIVATOR 90)	75 WG 100 SL		0.0188 lb ai/a 0.25 % v/v	0.4 oz/a 0.25 % v/v		FALL FALL	B B	12.6 a	53.7 a	70 d	0 a 0 a 0 a	
4	ALLY EXTRA SG NIS (ACTIVATOR 90)	52 SG 100 SL		0.0065 lb ai/a 0.25 % v/v	0.2 oz/a 0.25 % v/v		FALL FALL	B B	12.7 a	54.6 a	61 d	0 a 0 a 0 a	
5	ALLY EXTRA SG NIS (ACTIVATOR 90)	52 SG 100 SL		0.013 lb ai/a 0.25 % v/v	0.4 oz/a 0.25 % v/v		FALL FALL	B B	12.7 a	55.4 a	77 bcd	0 a 0 a 0 a	
6	HARMONY EXTRA SG SCNCOR NIS (ACTIVATOR 90)	50 SG 75 WG 100 SL		0.0234 lb ai/a 0.188 lb ai/a 0.25 % v/v	0.75 oz/a 4.0 oz/a 0.25 % v/v		FALL FALL FALL	B B B	12.5 a	54.8 a	73 cd	0 a 0 a 0 a	
7	FINESSE SCNCOR NIS (ACTIVATOR 90)	75 WG 75 WG 100 SL		0.0094 lb ai/a 0.188 lb ai/a 0.25 % v/v	0.2 oz/a 4.0 oz/a 0.25 % v/v		FALL FALL FALL	B B B	12.0 a	51.8 a	72 cd	0 a 0 a 0 a	
8	ALLY EXTRA SG SCNCOR NIS (ACTIVATOR 90)	52 SG 75 WG 100 SL		0.0065 lb ai/a 0.188 lb ai/a 0.25 % v/v	0.2 oz/a 4.0 oz/a 0.25 % v/v		FALL FALL FALL	B B B	12.7 a	53.8 a	64 d	0 a 0 a 0 a	
9	POWERFLEX NIS (ACTIVATOR 90)	7.5 WG 100 SL		0.0164 lb ai/a 0.25 % v/v	3.5 oz/a 0.25 % v/v		FALL FALL	B B	12.9 a	54.8 a	62 d	0 a 0 a 0 a	
10	FINESSE NIS (ACTIVATOR 90)	75 WG 100 SL		0.0117 lb ai/a 0.25 % v/v	0.25 oz/a 0.25 % v/v		PRE PRE	A A	12.6 a	54.7 a	88 abc	0 a 0 a 0 a	
11	FINESSE SCNCOR NIS (ACTIVATOR 90)	75 WG 75 WG 100 SL		0.0117 lb ai/a 0.188 lb ai/a 0.25 % v/v	0.25 oz/a 4.0 oz/a 0.25 % v/v		PRE PRE PRE	A A A	12.5 a	55.7 a	94 a	0 a 0 a 0 a	
12	FINESSE NIS (ACTIVATOR 90)	75 WG 100 SL		0.0234 lb ai/a 0.25 % v/v	0.5 oz/a 0.25 % v/v		PRE PRE	A A	12.6 a	54.6 a	87 abc	0 a 0 a 0 a	
13	NONTREATED							13.0 a	54.7 a	46 e	0 a	0 a	0 a
14	ROUNDUP POWERMAX N-PAK AMS	4.5 SL 100 SL		0.77 lb ae/a 5 % v/v	22 fl oz/a 5 % v/v		PRE PRE	A A	12.4 a	53.6 a	89 ab	0 a 0 a 0 a	
LSD (P=.05)							0.88	3.24	15.6	0.0	0.0	0.0	
Standard Deviation							0.52	1.93	9.3	0.0	0.0	0.0	
CV							4.15	3.54	12.96	0.0	0.0	0.0	
Replicate F							2.523	1.155	6.162	0.000	0.000	0.000	
Replicate Prob(F)							0.0997	0.3308	0.0064	1.0000	1.0000	1.0000	
Treatment F							0.718	1.092	6.494	0.000	0.000	0.000	
Treatment Prob(F)							0.7301	0.4066	0.0001	1.0000	1.0000	1.0000	

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	Crop Code	Rating Date	Rating Type	Rating Unit	Rating Timing	Trt-Eval Interval	POAAN	POAAN	POAAN	POAAN			
							12-30-11	3-1-12	4-1-12	5-1-12			
							Control Percent	Control Percent	Control Percent	Control Percent			
							28 DA-B	90 DA-B	121 DA-B	151 DA-B			
Trt No.	Treatment Name	Form Conc	Form Type	Rate	Form Rate	Other Rate	Other Rate	Growth Stage	Appl Code				
1	HARMONY EXTRA NIS (ACTIVATOR 90)	50 SG 100 SL		0.0234 lb ai/a 0.25 % v/v	0.75 oz/a 0.25 % v/v			FALL FALL	B B	0 d	0 b	0 b	0 b
2	FINESSE NIS (ACTIVATOR 90)	75 WG 100 SL		0.0094 lb ai/a 0.25 % v/v	0.2 oz/a 0.25 % v/v			FALL FALL	B B	0 d	20 b	23 b	23 b
3	FINESSE NIS (ACTIVATOR 90)	75 WG 100 SL		0.0188 lb ai/a 0.25 % v/v	0.4 oz/a 0.25 % v/v			FALL FALL	B B	0 d	13 b	17 b	17 b
4	ALLY EXTRA NIS (ACTIVATOR 90)	52 SG 100 SL		0.0065 lb ai/a 0.25 % v/v	0.2 oz/a 0.25 % v/v			FALL FALL	B B	0 d	0 b	0 b	0 b
5	ALLY EXTRA NIS (ACTIVATOR 90)	52 SG 100 SL		0.013 lb ai/a 0.25 % v/v	0.4 oz/a 0.25 % v/v			FALL FALL	B B	0 d	0 b	0 b	0 b
6	HARMONY EXTRA SENCOR NIS (ACTIVATOR 90)	50 SG 75 WG 100 SL		0.0234 lb ai/a 0.188 lb ai/a 0.25 % v/v	0.75 oz/a 4.0 oz/a 0.25 % v/v			FALL FALL FALL	B B B	20 c	17 b	17 b	17 b
7	FINESSE SENCOR NIS (ACTIVATOR 90)	75 WG 75 WG 100 SL		0.0094 lb ai/a 0.188 lb ai/a 0.25 % v/v	0.2 oz/a 4.0 oz/a 0.25 % v/v			FALL FALL FALL	B B B	20 c	13 b	23 b	23 b
8	ALLY EXTRA SENCOR NIS (ACTIVATOR 90)	52 SG 75 WG 100 SL		0.0065 lb ai/a 0.188 lb ai/a 0.25 % v/v	0.2 oz/a 4.0 oz/a 0.25 % v/v			FALL FALL FALL	B B B	22 c	3 b	0 b	0 b
9	POWERFLEX NIS (ACTIVATOR 90)	7.5 WG 100 SL		0.0164 lb ai/a 0.25 % v/v	3.5 oz/a 0.25 % v/v			FALL FALL	B B	0 d	0 b	0 b	0 b
10	FINESSE NIS (ACTIVATOR 90)	75 WG 100 SL		0.0117 lb ai/a 0.25 % v/v	0.25 oz/a 0.25 % v/v			PRE PRE	A A	63 b	80 a	84 a	86 a
11	FINESSE SENCOR NIS (ACTIVATOR 90)	75 WG 75 WG 100 SL		0.0117 lb ai/a 0.188 lb ai/a 0.25 % v/v	0.25 oz/a 4.0 oz/a 0.25 % v/v			PRE PRE PRE	A A A	93 a	90 a	94 a	96 a
12	FINESSE NIS (ACTIVATOR 90)	75 WG 100 SL		0.0234 lb ai/a 0.25 % v/v	0.5 oz/a 0.25 % v/v			PRE PRE	A A	72 b	84 a	87 a	90 a
13	NONTREATED									0 d	0 b	0 b	0 b
14	ROUNDUP POWERMAX N-PAK AMS	4.5 SL 100 SL		0.77 lb ae/a 5 % v/v	22 fl oz/a 5 % v/v			PRE PRE	A A	97 a	90 a	90 a	90 a
LSD (P=.05)							13.4	24.7	26.3	26.8			
Standard Deviation							8.0	14.7	15.7	15.9			
CV							28.97	50.12	50.42	50.54			
Replicate F							2.159	0.148	0.625	0.501			
Replicate Prob(F)							0.1357	0.8636	0.5429	0.6118			
Treatment F							64.182	19.919	18.510	18.573			
Treatment Prob(F)							0.0001	0.0001	0.0001	0.0001			

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Pest Code	Crop Code	Rating Date	ALLVI	ALLVI	ALLVI	ALLVI	ALLVI							
			12-30-11	3-1-12	4-1-12	5-1-12	6-1-12							
Rating Type	Rating Unit	Rating Timing	Control Percent	Control Percent	Control Percent	Control Percent	Control Percent							
Trt-Eval Interval			28 DA-B	90 DA-B	121 DA-B	151 DA-B	182 DA-B							
Trt No.	Treatment Name	Form Conc	Form Type	Rate	Rate Unit	Other Rate	Other Rate Unit	Growth Stage	Appl Code					
1	HARMONY EXTRA NIS (ACTIVATOR 90)	50 SG 100 SL		0.0234 lb ai/a 0.25 % v/v	0.75 oz/a 0.25 % v/v			FALL FALL	B B	0 c	99 a	96 a	97 a	97 ab
2	FINESSE NIS (ACTIVATOR 90)	75 WG 100 SL		0.0094 lb ai/a 0.25 % v/v	0.2 oz/a 0.25 % v/v			FALL FALL	B B	0 c	76 b	93 a	95 a	99 a
3	FINESSE NIS (ACTIVATOR 90)	75 WG 100 SL		0.0188 lb ai/a 0.25 % v/v	0.4 oz/a 0.25 % v/v			FALL FALL	B B	0 c	99 a	96 a	98 a	99 a
4	ALLY EXTRA NIS (ACTIVATOR 90)	52 SG 100 SL		0.0065 lb ai/a 0.25 % v/v	0.2 oz/a 0.25 % v/v			FALL FALL	B B	0 c	93 ab	90 a	93 a	98 ab
5	ALLY EXTRA NIS (ACTIVATOR 90)	52 SG 100 SL		0.013 lb ai/a 0.25 % v/v	0.4 oz/a 0.25 % v/v			FALL FALL	B B	0 c	99 a	99 a	98 a	98 ab
6	HARMONY EXTRA SENCOR NIS (ACTIVATOR 90)	50 SG 75 WG 100 SL		0.0234 lb ai/a 0.188 lb ai/a 0.25 % v/v	0.75 oz/a 4.0 oz/a 0.25 % v/v			FALL FALL FALL	B B B	0 c	83 ab	85 a	98 a	98 ab
7	FINESSE SENCOR NIS (ACTIVATOR 90)	75 WG 75 WG 100 SL		0.0094 lb ai/a 0.188 lb ai/a 0.25 % v/v	0.2 oz/a 4.0 oz/a 0.25 % v/v			FALL FALL FALL	B B B	0 c	38 c	40 b	96 a	98 ab
8	ALLY EXTRA SENCOR NIS (ACTIVATOR 90)	52 SG 75 WG 100 SL		0.0065 lb ai/a 0.188 lb ai/a 0.25 % v/v	0.2 oz/a 4.0 oz/a 0.25 % v/v			FALL FALL FALL	B B B	0 c	93 ab	93 a	95 a	96 ab
9	POWERFLEX NIS (ACTIVATOR 90)	7.5 WG 100 SL		0.0164 lb ai/a 0.25 % v/v	3.5 oz/a 0.25 % v/v			FALL FALL	B B	0 c	17 cd	20 bc	58 b	94 b
10	FINESSE NIS (ACTIVATOR 90)	75 WG 100 SL		0.0117 lb ai/a 0.25 % v/v	0.25 oz/a 0.25 % v/v			PRE PRE	A A	75 b	83 ab	92 a	99 a	99 a
11	FINESSE SENCOR NIS (ACTIVATOR 90)	75 WG 75 WG 100 SL		0.0117 lb ai/a 0.188 lb ai/a 0.25 % v/v	0.25 oz/a 4.0 oz/a 0.25 % v/v			PRE PRE PRE	A A A	82 a	88 ab	90 a	95 a	98 ab
12	FINESSE NIS (ACTIVATOR 90)	75 WG 100 SL		0.0234 lb ai/a 0.25 % v/v	0.5 oz/a 0.25 % v/v			PRE PRE	A A	83 a	95 ab	95 a	98 a	99 a
13	NONTREATED									0 c	0 d	0 c	0 c	0 c
14	ROUNDUP POWERMAX N-PAK AMS	4.5 SL 100 SL		0.77 lb ae/a 5 % v/v	22 fl oz/a 5 % v/v			PRE PRE	A A	85 a	85 ab	83 a	92 a	97 ab
LSD (P=.05)	Standard Deviation									5.6	22.6	23.8	23.0	4.6
	CV									3.4	13.5	14.2	13.7	2.7
										14.49	17.99	18.54	15.83	3.02
Replicate F										3.947	1.871	1.500	1.363	0.468
Replicate Prob(F)										0.0318	0.1741	0.2418	0.2736	0.6312
Treatment F										386.045	17.219	15.163	11.595	272.328
Treatment Prob(F)										0.0001	0.0001	0.0001	0.0001	0.0001

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							LAMAM	LAMAM	LAMAM		
Pest Code							12-30-11	3-1-12	4-1-12		
Crop Code											
Rating Date											
Rating Type							Control	Control	Control		
Rating Unit							Percent	Percent	Percent		
Rating Timing											
Trt-Eval Interval							28 DA-B	90 DA-B	121 DA-B		
Trt No.	Treatment Name	Form Conc	Form Type	Rate Rate	Other Rate	Other Rate	Growth Unit	Appl Code			
1	HARMONY EXTRA NIS (ACTIVATOR 90)	50 SG 100 SL		0.0234 lb ai/a 0.25 % v/v	0.75 oz/a 0.25 % v/v		FALL FALL	B B	0 b	85 d	97 a
2	FINESSE NIS (ACTIVATOR 90)	75 WG 100 SL		0.0094 lb ai/a 0.25 % v/v	0.2 oz/a 0.25 % v/v		FALL FALL	B B	0 b	99 a	99 a
3	FINESSE NIS (ACTIVATOR 90)	75 WG 100 SL		0.0188 lb ai/a 0.25 % v/v	0.4 oz/a 0.25 % v/v		FALL FALL	B B	0 b	99 a	99 a
4	ALLY EXTRA NIS (ACTIVATOR 90)	52 SG 100 SL		0.0065 lb ai/a 0.25 % v/v	0.2 oz/a 0.25 % v/v		FALL FALL	B B	0 b	92 bc	98 a
5	ALLY EXTRA NIS (ACTIVATOR 90)	52 SG 100 SL		0.013 lb ai/a 0.25 % v/v	0.4 oz/a 0.25 % v/v		FALL FALL	B B	0 b	99 a	99 a
6	HARMONY EXTRA SENCOR NIS (ACTIVATOR 90)	50 SG 75 WG 100 SL		0.0234 lb ai/a 0.188 lb ai/a 0.25 % v/v	0.75 oz/a 4.0 oz/a 0.25 % v/v		FALL FALL FALL	B B B	0 b	88 cd	91 b
7	FINESSE SENCOR NIS (ACTIVATOR 90)	75 WG 75 WG 100 SL		0.0094 lb ai/a 0.188 lb ai/a 0.25 % v/v	0.2 oz/a 4.0 oz/a 0.25 % v/v		FALL FALL FALL	B B B	0 b	99 a	99 a
8	ALLY EXTRA SENCOR NIS (ACTIVATOR 90)	52 SG 75 WG 100 SL		0.0065 lb ai/a 0.188 lb ai/a 0.25 % v/v	0.2 oz/a 4.0 oz/a 0.25 % v/v		FALL FALL FALL	B B B	0 b	97 a	98 a
9	POWERFLEX NIS (ACTIVATOR 90)	7.5 WG 100 SL		0.0164 lb ai/a 0.25 % v/v	3.5 oz/a 0.25 % v/v		FALL FALL	B B	0 b	17 e	25 c
10	FINESSE NIS (ACTIVATOR 90)	75 WG 100 SL		0.0117 lb ai/a 0.25 % v/v	0.25 oz/a 0.25 % v/v		PRE PRE	A A	99 a	99 a	99 a
11	FINESSE SENCOR NIS (ACTIVATOR 90)	75 WG 75 WG 100 SL		0.0117 lb ai/a 0.188 lb ai/a 0.25 % v/v	0.25 oz/a 4.0 oz/a 0.25 % v/v		PRE PRE PRE	A A A	98 a	99 a	99 a
12	FINESSE NIS (ACTIVATOR 90)	75 WG 100 SL		0.0234 lb ai/a 0.25 % v/v	0.5 oz/a 0.25 % v/v		PRE PRE	A A	99 a	99 a	99 a
13	NONTREATED							0 b	0 f	0 d	
14	ROUNDUP POWERMAX N-PAK AMS	4.5 SL 100 SL		0.77 lb ae/a 5 % v/v	22 fl oz/a 5 % v/v		PRE PRE	A A	98 a	96 ab	97 a
LSD (P=.05)							0.7	5.2	3.3		
Standard Deviation							0.4	3.1	2.0		
CV							1.58	3.7	2.31		
Replicate F							0.481	0.754	0.554		
Replicate Prob(F)							0.6233	0.4803	0.5812		
Treatment F							32450.892	329.140	758.044		
Treatment Prob(F)							0.0001	0.0001	0.0001		

Southern Illinois University

Fall-Applied Residual Herbicides in Winter Wheat followed by Soybean Double-Crop - Annual Bluegrass.

Trial ID: 12-ARC-13-W70

Location: Agronomy Res. Center

Investigator: Bryan Young

Pest Code	CERVU	CERVU	CERVU	ERICA	ERICA	GLXMA	GLXMA								
Crop Code	12-30-11	3-1-12	4-1-12	5-1-12	6-1-12	6-26-12	7-17-12								
Rating Date	Control	Control	Control	Control	Control	Injury	Injury								
Rating Type	Percent	Percent	Percent	Percent	Percent	Percent	Percent								
Rating Unit	28 DA-B	90 DA-B	121 DA-B	151 DA-B	182 DA-B	7 DAE	28 DAE								
Rating Timing															
Trt-Eval Interval															
Trt No.	Treatment Name	Form Conc	Form Type	Rate	Other Rate	Other Rate	Growth Stage	Appl Code							
1	HARMONY EXTRA NIS (ACTIVATOR 90)	50 SG 100 SL		0.0234 lb ai/a 0.25 % v/v	0.75 oz/a 0.25 % v/v		FALL FALL	B B	0 d	99 a	99 a	85 b	84 b	0 a	0 a
2	FINESSE NIS (ACTIVATOR 90)	75 WG 100 SL		0.0094 lb ai/a 0.25 % v/v	0.2 oz/a 0.25 % v/v		FALL FALL	B B	0 d	99 a	99 a	99 a	99 a	0 a	0 a
3	FINESSE NIS (ACTIVATOR 90)	75 WG 100 SL		0.0188 lb ai/a 0.25 % v/v	0.4 oz/a 0.25 % v/v		FALL FALL	B B	0 d	99 a	99 a	99 a	99 a	0 a	0 a
4	ALLY EXTRA NIS (ACTIVATOR 90)	52 SG 100 SL		0.0065 lb ai/a 0.25 % v/v	0.2 oz/a 0.25 % v/v		FALL FALL	B B	0 d	99 a	99 a	98 a	98 a	0 a	0 a
5	ALLY EXTRA NIS (ACTIVATOR 90)	52 SG 100 SL		0.013 lb ai/a 0.25 % v/v	0.4 oz/a 0.25 % v/v		FALL FALL	B B	0 d	99 a	99 a	93 ab	93 ab	0 a	0 a
6	HARMONY EXTRA SENCOR NIS (ACTIVATOR 90)	50 SG 75 WG 100 SL		0.0234 lb ai/a 0.188 lb ai/a 0.25 % v/v	0.75 oz/a 4.0 oz/a 0.25 % v/v		FALL FALL FALL	B B B	50 c	99 a	99 a	93 ab	94 ab	0 a	0 a
7	FINESSE SENCOR NIS (ACTIVATOR 90)	75 WG 75 WG 100 SL		0.0094 lb ai/a 0.188 lb ai/a 0.25 % v/v	0.2 oz/a 4.0 oz/a 0.25 % v/v		FALL FALL FALL	B B B	53 c	99 a	99 a	99 a	99 a	0 a	0 a
8	ALLY EXTRA SENCOR NIS (ACTIVATOR 90)	52 SG 75 WG 100 SL		0.0065 lb ai/a 0.188 lb ai/a 0.25 % v/v	0.2 oz/a 4.0 oz/a 0.25 % v/v		FALL FALL FALL	B B B	60 b	99 a	99 a	99 a	99 a	0 a	0 a
9	POWERFLEX NIS (ACTIVATOR 90)	7.5 WG 100 SL		0.0164 lb ai/a 0.25 % v/v	3.5 oz/a 0.25 % v/v		FALL FALL	B B	0 d	99 a	99 a	90 ab	94 ab	0 a	0 a
10	FINESSE NIS (ACTIVATOR 90)	75 WG 100 SL		0.0117 lb ai/a 0.25 % v/v	0.25 oz/a 0.25 % v/v		PRE PRE	A A	99 a	99 a	99 a	99 a	99 a	0 a	0 a
11	FINESSE SENCOR NIS (ACTIVATOR 90)	75 WG 75 WG 100 SL		0.0117 lb ai/a 0.188 lb ai/a 0.25 % v/v	0.25 oz/a 4.0 oz/a 0.25 % v/v		PRE PRE PRE	A A A	98 a	99 a	99 a	99 a	99 a	0 a	0 a
12	FINESSE NIS (ACTIVATOR 90)	75 WG 100 SL		0.0234 lb ai/a 0.25 % v/v	0.5 oz/a 0.25 % v/v		PRE PRE	A A	99 a	99 a	99 a	99 a	99 a	0 a	0 a
13	NONTREATED								0 d	0 c	0 c	0 c	0 c	0 a	0 a
14	ROUNDUP POWERMAX N-PAK AMS	4.5 SL 100 SL		0.77 lb ae/a 5 % v/v	22 fl oz/a 5 % v/v		PRE PRE	A A	98 a	96 b	96 b	96 ab	98 a	0 a	0 a
LSD (P=.05)	5.1	1.0	1.0	12.6	11.9	0.0	0.0								
Standard Deviation	3.0	0.6	0.6	7.5	7.1	0.0	0.0								
CV	7.61	0.67	0.67	8.41	7.9	0.0	0.0								
Replicate F	1.768	1.000	1.000	1.189	0.893	0.000	0.000								
Replicate Prob(F)	0.1905	0.3816	0.3816	0.3205	0.4215	1.0000	1.0000								
Treatment F	642.656	5494.217	5494.217	36.224	40.903	0.000	0.000								
Treatment Prob(F)	0.0001	0.0001	0.0001	0.0001	0.0001	1.0000	1.0000								



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Trial ID: 12-ARC-13-W70

Location: Agronomy Res. Center

Investigator: Bryan Young

Trial Comments

1. Protocol: DuPont (USA-12-210).
2. Ratings: CI 7, 14 + 28 DA-B, plant double crop soybean CI 7 + 28 DAE.  
WC 28 DA-B, March 1, April 1, May 1, and June 1.
3. Yield - double crop soybean (if possible).
4. Target weed annual bluegrass (POAAN).
5. Blanket POST in spring if needed Axial XL (16.4 fl oz/A) plus Harmony Extra SG (0.75 oz/A) for BL/grass control.
6. Harvested wheat 6-4-12, 5 ft by 27.5 ft.
7. Planted double-crop soybean (P94Y50) on 6-13-12.
8. Soybean crop was not harvested due to dry conditions.