

# Purdue University Weed Science

## Evaluation of KFD-194-01, Satellite, and TriCor for weed control in wheat

Trial ID: 14F-SEP-NTW-01      Location: SEPAC      Trial Year: 2015  
 Protocol ID: 14F-SEP-NTW-01      Investigator: Dr. Bill Johnson  
 Project ID: K194-15-US-IN-14-42TLE      Study Director: Joe Ikley/Joey Heneghan  
 Sponsor Contact: UPI - Tony Estes

### General Trial Information

**Study Director:** Joe Ikley/Joey Heneghan      **Title:** Research Associate  
**Investigator:** Dr. Bill Johnson      **Title:** Professor

**Initiation Date:** Apr-1-2015  
**Completion Date:** Jul-6-2015

### Trial Location

**City:** Butlerville      **Country:** USA United States  
**State/Prov.:** Indiana  
**Postal Code:** 47223

**Conducted Under GLP:** No  
**Conducted Under GEP:** No

### Contacts

**Study Director:** Joe Ikley/Joey Heneghan      **Title:** Research Associate  
**Organization:** Purdue University  
**Address:** 915 West State Street      **Phone No.:** 765-494-0891  
**City+State/Prov:** West Lafayette      **Mobile No.:** 410-596-9091  
**Postal Code:** 47907      **E-mail:** jikley@purdue.edu

**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

### Crop Description

**Crop 1:** TRZAW Triticum aestivum (winter)      Winter wheat  
**BBCH Scale:** BCER  
**Planting Date:** Oct-27-2014  
**Emergence Date:** Nov-19-2014  
**Harvest Date:** Jul-6-2015  
**Harvested Width, Unit:** 5 FT  
**Harvested Length, Unit:** 25 FT  
**Harvest Equipment:** Plot Combine

### Pest Description

**Pest 1 Type:** W      **Code:** ERICA Conyza canadensis  
**Common Name:** Canada horseweed

**Pest 2 Type:** W      **Code:** VERAR Veronica arvensis  
**Common Name:** Corn speedwell

**Pest 3 Type:** W      **Code:** POAAN Poa annua  
**Common Name:** Annual bluegrass

### Site and Design

**Treated Plot Width:** 10 FT  
**Treated Plot Length:** 30 FT  
**Treated Plot Area:** 300 FT<sup>2</sup>      **Treatments:** 10  
**Replications:** 4      **Study Design:** RACOB L Randomized Complete Block (RCB)

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## Application Description

	A
Application Date:	Apr-1-2015
Appl. Start Time:	2:00PM
Appl. Stop Time:	2:30 PM
Application Method:	SPRAY
Application Timing:	POST
Application Placement:	BROADC
Applied By:	lkley
Air Temperature, Unit:	62 F
% Relative Humidity:	28
Wind Velocity, Unit:	5 MPH
Wind Direction:	SSE
Dew Presence (Y/N):	N no
Soil Temperature, Unit:	54 F
Soil Moisture:	SLIWET
% Cloud Cover:	30

## Crop Stage At Each Application

	A
Crop 1 Code, BBCH Scale:	TRZAW BCER
Stage Scale Used:	BBCH
Stage Majority, Percent:	22
Stage Minimum, Percent:	21
Stage Maximum, Percent:	22
Height, Unit:	3 IN
Height Minimum, Maximum:	1 3.5

## Pest Stage At Each Application

	A
Pest 1 Code, Type, Scale:	ERICA W
Stage Majority, Percent:	16
Height, Unit:	0.25 IN
Height Minimum, Maximum:	0 0.5
Density, Unit:	9 YD2
Pest 2 Code, Type, Scale:	VERAR W
Stage Majority, Percent:	17
Stage Minimum, Percent:	14
Stage Maximum, Percent:	19
Height, Unit:	0.25 IN
Height Minimum, Maximum:	0 0.5
Density, Unit:	36 YD2
Pest 3 Code, Type, Scale:	POAAN W
Stage Majority, Percent:	45
Height, Unit:	1 IN
Height Minimum, Maximum:	0.5 1.5
Density, Unit:	36 YD2

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## Application Equipment

	A
<b>Appl. Equipment:</b>	CO2 BP
<b>Equipment Type:</b>	SPRBAC
<b>Operation Pressure, Unit:</b>	19 psi
<b>Nozzle Type:</b>	11002XR
<b>Nozzle Size:</b>	02
<b>Nozzle Spacing, Unit:</b>	15 in
<b>Boom Length, Unit:</b>	10 ft
<b>Boom Height, Unit:</b>	20 in
<b>Ground Speed, Unit:</b>	3 mph
<b>Spray Volume, Unit:</b>	15 GAL/AC
<b>Mix Size, Unit:</b>	1.8 liters
<b>Propellant:</b>	CO2

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Reps: 4      Plots: 10 by 30 feet  
 Spray vol: 15 GAL/AC      Mix Size: 1.8 liters (calculated mix size 1.5642)

Trt No.	Treatment Name	Form Conc	Form Unit	Form Type	Rate	Appl Unit	Appl Code	Appl Description	Amt Product to Measure	Rep 1	Rep 2	Rep 3	Rep 4
1	Untreated Check									101	305	602	802
2	KFD-194-01	3.75 LBA/GAL	CS		1.5 pt/a	A		1-2 LEAF	22.5 ml/mx	102	303	604	702
3	KFD-194-01	3.75 LBA/GAL	CS		2 pt/a	A		1-2 LEAF	30.0 ml/mx	103	401	605	803
4	TRICOR	75 %		DF	2.2 oz/a	A		1-2 LEAF	1.977 g/mx	104	404	502	801
5	TRICOR	75 %		DF	3 oz/a	A		1-2 LEAF	2.696 g/mx	105	403	603	703
6	SATELLITE	3.8 LBA/GAL	CS		1.26 pt/a	A		1-2 LEAF	18.9 ml/mx	201	301	504	701
7	SATELLITE	3.8 LBA/GAL	CS		1.73 pt/a	A		1-2 LEAF	25.95 ml/mx	202	302	501	804
8	HARMONY EXTRA @ 0.6 OZ/A									203	304	505	705
	HARMONY SG	50 %		SG	0.4 oz/a	A		1-2 LEAF	0.3595 g/mx				
	EXPRESS	50 %		SG	0.2 oz/a	A		1-2 LEAF	0.1797 g/mx				
9	HARMONY EXTRA @ 0.75 OZ/A									204	402	503	805
	HARMONY SG	50 %		SG	0.5 oz/a	A		1-2 LEAF	0.4493 g/mx				
	EXPRESS	50 %		SG	0.25 oz/a	A		1-2 LEAF	0.2247 g/mx				
10	Untreated Check									205	405	601	704

Sort Order: Treatment

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

Amount*	Unit	Treatment Name	Form Conc	Form Type	Lot Code
65.625	ml	KFD-194-01	3.75	CS	
5.842	g	TRICOR	75	DF	
56.062	ml	SATELLITE	3.8	CS	
1.011	g	HARMONY SG	50	SG	
0.506	g	EXPRESS	50	SG	

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

\* Product amount calculations increased 25 % for overage adjustment.

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 Sponsor Contact: UPI - Tony Estes

Pest Type	W Weed	W Weed				W Weed	W Weed	
Pest Code	VERSS	POAAN				VERSS	POAAN	
Pest Scientific Name	Veronica sp.	Poa annua				Veronica sp.	Poa annua	
Pest Name	Speedwell	Annual bluegra>				Speedwell	Annual bluegra>	
Crop Code	TRZAW	TRZAW	TRZAW	TRZAW	TRZAW	TRZAW	TRZAW	
BBCH Scale	BCER	BCER	BCER	BCER	BCER	BCER	BCER	
Crop Scientific Name	Triticum aesti>	Triticum aesti>	Triticum aesti>	Triticum aesti>	Triticum aesti>	Triticum aesti>	Triticum aesti>	
Crop Name	Winter wheat	Winter wheat	Winter wheat	Winter wheat	Winter wheat	Winter wheat	Winter wheat	
Part Rated	PLOT -	PLOT -	PLOT -	PLOT -	PLOT -	PLOT -	PLOT -	
Rating Date	Apr-15-2015	Apr-15-2015	Apr-15-2015	Apr-15-2015	Apr-15-2015	Apr-28-2015	Apr-28-2015	
Rating Type	CONTRO	CONTRO	PHYGEN	HEIGHT	COUNT	CONTRO	CONTRO	
Rating Unit	%	%	%	IN	ROW	%	%	
Sample Size, Unit					10 FT			
Number of Subsamples	1	1	1	1	1	1	1	
Assessed By	Ik/Hene	Ik/Hene	Ik/Hene	Ik/Hene	Ik/Hene	Heneghan	Heneghan	
Days After First/Last Appl.	14 14	14 14	14 14	14 14	14 14	27 27	27 27	
Trt-Eval Interval	14 DA-A	14 DA-A	14 DA-A	14 DA-A	14 DA-A	27 DA-A	27 DA-A	
Plant-Eval Interval	170 DP-1	170 DP-1	170 DP-1	170 DP-1	170 DP-1	183 DP-1	183 DP-1	
Days After Emergence	147 DE-1	147 DE-1	147 DE-1	147 DE-1	147 DE-1	160 DE-1	160 DE-1	
ARM Action Codes								
Number of Decimals								
Trt Treatment	Rate Appl							
No. Name	Rate Unit Code Plot	1	2	3	4	5	6	7
1 Untreated Check	101	0.0	0.0	0.0	7.00	130.0	0.0	0.0
	305	0.0	0.0	0.0	9.00	122.0	0.0	0.0
	602	0.0	0.0	0.0	7.50	0.0	0.0	0.0
	802	0.0	0.0	0.0	8.00	0.0	0.0	0.0
	Mean =	0.0	0.0	0.0	7.88	126.0	0.0	0.0
2 KFD-194-01	1.5 pt/a A 102	0.0	0.0	0.0	7.00	151.0	100.0*	0.0
	303	0.0*	0.0	0.0	7.50	110.0	100.0	0.0
	604	0.0*	0.0*	0.0	9.00	0.0	100.0*	50.0
	702	0.0	0.0	0.0	8.00	0.0	100.0	0.0
	Mean =	0.0	0.0	0.0	7.88	130.5	100.0	12.5
3 KFD-194-01	2 pt/a A 103	40.0	0.0	0.0	5.50	116.0	0.0	0.0
	401	0.0	0.0	0.0	7.00	120.0	100.0	50.0
	605	13.3*	0.0	0.0	9.00	0.0	50.0*	20.0
	803	0.0	0.0	0.0	8.00	0.0	50.0	0.0
	Mean =	13.3	0.0	0.0	7.38	118.0	50.0	17.5
4 TRICOR	2.2 oz/a A 104	100.0	0.0*	0.0	6.00	122.0	100.0	100.0
	404	100.0	0.0	0.0	7.50	109.0	100.0	100.0
	502	100.0	0.0	0.0	7.50	0.0	100.0	100.0*
	801	100.0*	0.0	0.0	7.50	0.0	100.0	80.0
	Mean =	100.0	0.0	0.0	7.13	115.5	100.0	95.0
5 TRICOR	3 oz/a A 105	0.0	0.0*	0.0	8.50	141.0	90.0	0.0*
	403	0.0*	0.0	0.0	7.00	117.0	100.0	0.0
	603	0.0	0.0	0.0	8.00	0.0	96.7*	0.0
	703	0.0*	0.0	0.0	8.00	0.0	100.0	0.0
	Mean =	0.0	0.0	0.0	7.88	129.0	96.7	0.0
6 SATELLITE	1.26 pt/a A 201	80.0	100.0	0.0	6.50	123.0	100.0	0.0
	301	90.0*	100.0*	0.0	7.00	116.0	40.0	50.0
	504	90.0*	100.0*	0.0	6.50	0.0	55.0*	100.0
	701	100.0	100.0	0.0	8.00	0.0	25.0	30.0
	Mean =	90.0	100.0	0.0	7.00	119.5	55.0	45.0
7 SATELLITE	1.73 pt/a A 202	0.0	0.0	0.0	7.50	177.0	0.0	0.0
	302	100.0	0.0	0.0	8.00	172.0	0.0	0.0
	501	100.0	0.0*	0.0	6.50	0.0	50.0	50.0
	804	0.0	0.0	0.0	8.50	0.0	70.0	50.0
	Mean =	50.0	0.0	0.0	7.63	174.5	30.0	25.0
8 HARMONY EXTRA @ 0.6 OZ/A	203	20.0	0.0	0.0	7.00	162.0	100.0	0.0
HARMONY SG	0.4 oz/a A 304	100.0	0.0*	0.0	7.00	120.0	100.0	75.0
EXPRESS	0.2 oz/a A 505	46.7*	0.0	0.0	8.00	0.0	100.0*	50.0
	705	20.0	0.0	0.0	8.00	0.0	100.0	0.0
	Mean =	46.7	0.0	0.0	7.50	141.0	100.0	31.3

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Pest Type	W Weed	W Weed				W Weed	W Weed
Pest Code	VERSS	POAAN				VERSS	POAAN
Pest Scientific Name	Veronica sp.	Poa annua				Veronica sp.	Poa annua
Pest Name	Speedwell	Annual bluegra>				Speedwell	Annual bluegra>
Crop Code	TRZAW	TRZAW	TRZAW	TRZAW	TRZAW	TRZAW	TRZAW
BBCH Scale	BCER	BCER	BCER	BCER	BCER	BCER	BCER
Crop Scientific Name	Triticum aesti>	Triticum aesti>	Triticum aesti>	Triticum aesti>	Triticum aesti>	Triticum aesti>	Triticum aesti>
Crop Name	Winter wheat	Winter wheat	Winter wheat	Winter wheat	Winter wheat	Winter wheat	Winter wheat
Part Rated	PLOT -	PLOT -	PLOT -	PLOT -	PLOT -	PLOT -	PLOT -
Rating Date	Apr-15-2015	Apr-15-2015	Apr-15-2015	Apr-15-2015	Apr-15-2015	Apr-28-2015	Apr-28-2015
Rating Type	CONTRO	CONTRO	PHYGEN	HEIGHT	COUNT	CONTRO	CONTRO
Rating Unit	%	%	%	IN	ROW	%	%
Sample Size, Unit					10 FT		
Number of Subsamples	1	1	1	1	1	1	1
Assessed By	lkl/Hene	lkl/Hene	lkl/Hene	lkl/Hene	lkl/Hene	Heneghan	Heneghan
Days After First/Last Applic.	14 14	14 14	14 14	14 14	14 14	27 27	27 27
Trt-Eval Interval	14 DA-A	14 DA-A	14 DA-A	14 DA-A	14 DA-A	27 DA-A	27 DA-A
Plant-Eval Interval	170 DP-1	170 DP-1	170 DP-1	170 DP-1	170 DP-1	183 DP-1	183 DP-1
Days After Emergence	147 DE-1	147 DE-1	147 DE-1	147 DE-1	147 DE-1	160 DE-1	160 DE-1
ARM Action Codes							
Number of Decimals							
Trt Treatment	Rate Appl						
No. Name	Rate Unit Code Plot	1	2	3	4	5	6
9 HARMONY EXTRA @ 0.75 OZ/A	204	100.0	0.0	0.0	7.50	159.0	90.0
HARMONY SG	0.5 oz/a A 402	50.0	15.0	0.0	7.00	145.0	100.0
EXPRESS	0.25 oz/a A 503	75.0*	0.0	0.0	8.00		96.7*
	805	75.0*	0.0	0.0	8.00		100.0
	Mean =	75.0	3.8	0.0	7.63	152.0	96.7
10 Untreated Check	205	0.0	0.0	0.0	8.00	155.0	0.0
	405	0.0	0.0	0.0	8.00	120.0	0.0
	601	0.0	0.0	0.0	8.00		0.0
	704	0.0	0.0	0.0	8.50		0.0
	Mean =	0.0	0.0	0.0	8.13	137.5	0.0

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Pest Type		W Weed	W Weed		W Weed	W Weed	
Pest Code		VERSS	POAAN		VERSS	POAAN	
Pest Scientific Name		Veronica sp.	Poa annua		Veronica sp.	Poa annua	
Pest Name		Speedwell	Annual bluegra>		Speedwell	Annual bluegra>	
Crop Code	TRZAW	TRZAW	TRZAW	TRZAW	TRZAW	TRZAW	TRZAW
BBCH Scale	BCER	BCER	BCER	BCER	BCER	BCER	BCER
Crop Scientific Name	Triticum aesti>	Triticum aesti>	Triticum aesti>	Triticum aesti>	Triticum aesti>	Triticum aesti>	Triticum aesti>
Crop Name	Winter wheat	Winter wheat	Winter wheat	Winter wheat	Winter wheat	Winter wheat	Winter wheat
Part Rated	PLOT -	PLOT -	PLOT -	PLOT -	PLOT -	PLOT -	PLOT -
Rating Date	Apr-28-2015	May-13-2015	May-13-2015	May-13-2015	Jun-3-2015	Jun-3-2015	Jul-6-2015
Rating Type	PHYGEN	CONTRO	CONTRO	PHYGEN	CONTRO	CONTRO	YIELD
Rating Unit	%	%	%	%	%	%	kg/plot
Sample Size, Unit							125 FT3
Number of Subsamples	1	1	1	1	1	1	1
Assessed By	Heneghan	Heneghan	Heneghan	Heneghan	Heneghan	Heneghan	HENEGHAN
Days After First/Last Applic.	27 27	42 42	42 42	42 42	63 63	63 63	96 96
Trt-Eval Interval	27 DA-A	42 DA-A	42 DA-A	42 DA-A	63 DA-A	63 DA-A	96 DA-A
Plant-Eval Interval	183 DP-1	198 DP-1	198 DP-1	198 DP-1	219 DP-1	219 DP-1	252 DP-1
Days After Emergence	160 DE-1	175 DE-1	175 DE-1	175 DE-1	196 DE-1	196 DE-1	229 DE-1
ARM Action Codes							
Number of Decimals							
Trt Treatment	Rate Appl						
No. Name	Rate Unit Code Plot	8	9	10	11	12	13
1 Untreated Check	101	0.0	0.0	0.0	0.0	0.0	0.0
	305	0.0	0.0	0.0	0.0	0.0	0.0
	602	0.0	0.0	0.0	0.0	0.0	0.0
	802	0.0	0.0	0.0	0.0	0.0	0.0
	Mean =	0.0	0.0	0.0	0.0	0.0	0.0
2 KFD-194-01	1.5 pt/a A 102	0.0	0.0	0.0	0.0	0.0	0.0
	303	0.0	0.0	0.0	0.0	0.0	0.0
	604	0.0	0.0	0.0	0.0	0.0	0.0
	702	0.0	0.0	0.0	0.0	0.0	0.0
	Mean =	0.0	0.0	0.0	0.0	0.0	0.0
3 KFD-194-01	2 pt/a A 103	0.0	0.0	0.0	0.0	0.0	0.0
	401	0.0	0.0*	0.0	0.0	0.0	0.0
	605	0.0	0.0*	0.0	0.0	0.0	0.0
	803	0.0	0.0*	0.0	0.0	0.0	0.0
	Mean =	0.0	0.0	0.0	0.0	0.0	0.0
4 TRICOR	2.2 oz/a A 104	0.0	0.0*	0.0*	0.0	0.0	0.0
	404	0.0	0.0*	0.0	0.0	0.0	0.0
	502	0.0	0.0	0.0	0.0	0.0	0.0
	801	0.0	0.0*	0.0	0.0	0.0	0.0
	Mean =	0.0	0.0	0.0	0.0	0.0	0.0
5 TRICOR	3 oz/a A 105	0.0	0.0*	0.0*	0.0	0.0	0.0
	403	0.0	0.0	0.0	0.0	0.0	0.0
	603	0.0	0.0*	0.0	0.0	0.0	0.0
	703	0.0	0.0*	0.0	0.0	0.0	0.0
	Mean =	0.0	0.0	0.0	0.0	0.0	0.0
6 SATELLITE	1.26 pt/a A 201	0.0	0.0	0.0*	0.0	0.0	0.0
	301	0.0	0.0*	0.0	0.0	0.0	0.0
	504	0.0	0.0*	0.0	0.0	0.0	0.0
	701	0.0	0.0	0.0	0.0	0.0	0.0
	Mean =	0.0	0.0	0.0	0.0	0.0	0.0
7 SATELLITE	1.73 pt/a A 202	0.0	0.0	0.0	0.0	0.0	0.0
	302	0.0	0.0	0.0	0.0	0.0	0.0
	501	0.0	0.0	0.0	0.0	0.0	0.0
	804	0.0	0.0*	0.0	0.0	0.0	0.0
	Mean =	0.0	0.0	0.0	0.0	0.0	0.0
8 HARMONY EXTRA @ 0.6 OZ/A	203	0.0	.	0.0	0.0	0.0	0.0
HARMONY SG	0.4 oz/a A 304	0.0	.	0.0	0.0	0.0	0.0
EXPRESS	0.2 oz/a A 505	0.0	.	0.0	0.0	0.0	0.0
	705	0.0	.	0.0	0.0	0.0	0.0
	Mean =	0.0	.	0.0	0.0	0.0	0.0

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Pest Type		W Weed	W Weed		W Weed	W Weed	
Pest Code		VERSS	POAAN		VERSS	POAAN	
Pest Scientific Name		Veronica sp.	Poa annua		Veronica sp.	Poa annua	
Pest Name		Speedwell	Annual bluegra>		Speedwell	Annual bluegra>	
Crop Code	TRZAW	TRZAW	TRZAW	TRZAW	TRZAW	TRZAW	TRZAW
BBCH Scale	BCER	BCER	BCER	BCER	BCER	BCER	BCER
Crop Scientific Name	Triticum aesti>	Triticum aesti>	Triticum aesti>	Triticum aesti>	Triticum aesti>	Triticum aesti>	Triticum aesti>
Crop Name	Winter wheat	Winter wheat	Winter wheat	Winter wheat	Winter wheat	Winter wheat	Winter wheat
Part Rated	PLOT -	PLOT -	PLOT -	PLOT -	PLOT -	PLOT -	PLOT -
Rating Date	Apr-28-2015	May-13-2015	May-13-2015	May-13-2015	Jun-3-2015	Jun-3-2015	Jul-6-2015
Rating Type	PHYGEN	CONTRO	CONTRO	PHYGEN	CONTRO	CONTRO	YIELD
Rating Unit	%	%	%	%	%	%	kg/plot
Sample Size, Unit							125 FT3
Number of Subsamples	1	1	1	1	1	1	1
Assessed By	Heneghan	Heneghan	Heneghan	Heneghan	Heneghan	Heneghan	HENEGHAN
Days After First/Last Applic.	27 27	42 42	42 42	42 42	63 63	63 63	96 96
Trt-Eval Interval	27 DA-A	42 DA-A	42 DA-A	42 DA-A	63 DA-A	63 DA-A	96 DA-A
Plant-Eval Interval	183 DP-1	198 DP-1	198 DP-1	198 DP-1	219 DP-1	219 DP-1	252 DP-1
Days After Emergence	160 DE-1	175 DE-1	175 DE-1	175 DE-1	196 DE-1	196 DE-1	229 DE-1
ARM Action Codes							
Number of Decimals							
Trt Treatment	Rate Appl						
No. Name	Rate Unit Code Plot	8	9	10	11	12	13
9 HARMONY EXTRA @ 0.75 OZ/A	204	0.0	0.0*	0.0	0.0	0.0	0.0
HARMONY SG	0.5 oz/a A 402	0.0	0.0	0.0	0.0	0.0	0.0
EXPRESS	0.25 oz/a A 503	0.0	0.0	0.0	0.0	0.0	0.0
	805	0.0	0.0	0.0	0.0	0.0	0.0
	Mean =	0.0	0.0	0.0	0.0	0.0	0.0
10 Untreated Check	205	0.0	0.0	0.0	0.0	0.0	0.0
	405	0.0	0.0	0.0	0.0	0.0	0.0
	601	0.0	0.0	0.0	0.0	0.0	0.0
	704	0.0	0.0	0.0	0.0	0.0	0.0
	Mean =	0.0	0.0	0.0	0.0	0.0	0.0



# Purdue University Weed Science

Pest Type			
Pest Code			
Pest Scientific Name			
Pest Name			
Crop Code		TRZAW	
BBCH Scale		BCER	
Crop Scientific Name		Triticum aesti>	
Crop Name		Winter wheat	
Part Rated		PLOT -	
Rating Date		Jul-6-2015	
Rating Type		YIELD	
Rating Unit		BU	
Sample Size, Unit		125 FT3	
Number of Subsamples		1	
Assessed By		HENEGHAN	
Days After First/Last Applic.		96 96	
Trt-Eval Interval		96 DA-A	
Plant-Eval Interval		252 DP-1	
Days After Emergence		229 DE-1	
ARM Action Codes		TY1	
Number of Decimals		1	
Trt Treatment	Rate Appl		
No. Name	Rate Unit Code Plot		15
1 Untreated Check	101		63.1
	305		73.4
	602		55.9
	802		57.9
	Mean =		62.6
2 KFD-194-01	1.5 pt/a A 102		61.8
	303		54.1
	604		65.8
	702		59.7
	Mean =		60.4
3 KFD-194-01	2 pt/a A 103		54.5
	401		60.1
	605		69.6
	803		59.5
	Mean =		60.9
4 TRICOR	2.2 oz/a A 104		56.3
	404		71.8
	502		57.8
	801		58.3
	Mean =		61.0
5 TRICOR	3 oz/a A 105		70.3
	403		59.7
	603		64.5
	703		63.1
	Mean =		64.4
6 SATELLITE	1.26 pt/a A 201		59.0
	301		69.3
	504		78.1
	701		60.1
	Mean =		66.6
7 SATELLITE	1.73 pt/a A 202		62.9
	302		68.7
	501		64.7
	804		74.2
	Mean =		67.7
8 HARMONY EXTRA @ 0.6 OZ/A	203		58.7
HARMONY SG	0.4 oz/a A 304		63.0
EXPRESS	0.2 oz/a A 505		72.5
	705		71.9
	Mean =		66.5

# Purdue University Weed Science

Pest Type			
Pest Code			
Pest Scientific Name			
Pest Name			
Crop Code		TRZAW	
BBCH Scale		BCER	
Crop Scientific Name		Triticum aestiv	
Crop Name		Winter wheat	
Part Rated		PLOT -	
Rating Date		Jul-6-2015	
Rating Type		YIELD	
Rating Unit		BU	
Sample Size, Unit		125 FT3	
Number of Subsamples		1	
Assessed By		HENEZHAN	
Days After First/Last Applic.		96 96	
Trt-Eval Interval		96 DA-A	
Plant-Eval Interval		252 DP-1	
Days After Emergence		229 DE-1	
ARM Action Codes		TY1	
Number of Decimals		1	
<b>Trt Treatment</b>			
		<b>Rate Appl</b>	
No. Name		Rate Unit Code Plot	15
9 HARMONY EXTRA @ 0.75 OZ/A		204	69.9
HARMONY SG	0.5 oz/a A	402	57.7
EXPRESS	0.25 oz/a A	503	67.5
		805	66.6
		Mean =	65.4
10 Untreated Check		205	71.1
		405	65.1
		601	66.7
		704	78.9
		Mean =	70.5



# Purdue University Weed Science

## Evaluation of KFD-194-01, Satellite, and TriCor for weed control in wheat

Trial ID: 14F-SEP-NTW-01      Location: SEPAC      Trial Year: 2015  
 Protocol ID: 14F-SEP-NTW-01      Investigator: Dr. Bill Johnson  
 Project ID: K194-15-US-IN-14-42TLE      Study Director: Joe Ikley/Joey Heneghan  
 Sponsor Contact: UPI - Tony Estes

Pest Type	W Weed	W Weed				W Weed	W Weed	
Pest Code	VERSS	POAAN				VERSS	POAAN	
Pest Scientific Name	Veronica sp.	Poa annua				Veronica sp.	Poa annua	
Pest Name	Speedwell	Annual bluegra>				Speedwell	Annual bluegra>	
Crop Code	TRZAW	TRZAW	TRZAW	TRZAW	TRZAW	TRZAW	TRZAW	
BBCH Scale	BCER	BCER	BCER	BCER	BCER	BCER	BCER	
Crop Scientific Name	Triticum aesti>	Triticum aesti>	Triticum aesti>	Triticum aesti>	Triticum aesti>	Triticum aesti>	Triticum aesti>	
Crop Name	Winter wheat	Winter wheat	Winter wheat	Winter wheat	Winter wheat	Winter wheat	Winter wheat	
Part Rated	PLOT -	PLOT -	PLOT -	PLOT -	PLOT -	PLOT -	PLOT -	
Rating Date	Apr-15-2015	Apr-15-2015	Apr-15-2015	Apr-15-2015	Apr-15-2015	Apr-28-2015	Apr-28-2015	
Rating Type	CONTRO	CONTRO	PHYGEN	HEIGHT	COUNT	CONTRO	CONTRO	
Rating Unit	%	%	%	IN	ROW	%	%	
Sample Size, Unit					10 FT			
Number of Subsamples	1	1	1	1	1	1	1	
Assessed By	Ik/Hene	Ik/Hene	Ik/Hene	Ik/Hene	Ik/Hene	Heneghan	Heneghan	
Days After First/Last Applic.	14 14	14 14	14 14	14 14	14 14	27 27	27 27	
Trt-Eval Interval	14 DA-A	14 DA-A	14 DA-A	14 DA-A	14 DA-A	27 DA-A	27 DA-A	
Plant-Eval Interval	170 DP-1	170 DP-1	170 DP-1	170 DP-1	170 DP-1	183 DP-1	183 DP-1	
Days After Emergence	147 DE-1	147 DE-1	147 DE-1	147 DE-1	147 DE-1	160 DE-1	160 DE-1	
ARM Action Codes								
Number of Decimals								
Trt Treatment	Rate Appl							
No. Name	Rate Unit Code	1	2	3	4	5	6	
1 Untreated Check		0.0 b	0.0 b	0.0 a	7.88 a	126.0 b	0.0 c	0.0 b
2 KFD-194-01	1.5 pt/a A	0.0 b	0.0 b	0.0 a	7.88 a	130.5 b	100.0 a	12.5 b
3 KFD-194-01	2 pt/a A	13.3 b	0.0 b	0.0 a	7.38 a	118.0 b	50.0 ab	17.5 b
4 TRICOR	2.2 oz/a A	100.0 a	0.0 b	0.0 a	7.13 a	115.5 b	100.0 a	95.0 a
5 TRICOR	3 oz/a A	0.0 b	0.0 b	0.0 a	7.88 a	129.0 b	96.7 a	0.0 b
6 SATELLITE	1.26 pt/a A	90.0 a	100.0 a	0.0 a	7.00 a	119.5 b	55.0 ab	45.0 b
7 SATELLITE	1.73 pt/a A	50.0 ab	0.0 b	0.0 a	7.63 a	174.5 a	30.0 bc	25.0 b
8 HARMONY EXTRA @ 0.6 OZ/A		46.7 ab	0.0 b	0.0 a	7.50 a	141.0 b	100.0 a	31.3 b
HARMONY SG	0.4 oz/a A							
EXPRESS	0.2 oz/a A							
9 HARMONY EXTRA @ 0.75 OZ/A		75.0 ab	3.8 b	0.0 a	7.63 a	152.0 ab	96.7 a	26.3 b
HARMONY SG	0.5 oz/a A							
EXPRESS	0.25 oz/a A							
10 Untreated Check		0.0 b	0.0 b	0.0 a	8.13 a	137.5 b	0.0 c	0.0 b
LSD P=.05		46.43	4.06	0.00	1.043	25.80	35.78	39.81
Standard Deviation		30.97	2.76	0.00	0.719	11.41	24.26	27.33
CV		82.59	26.56	0.0	9.46	8.49	38.61	108.23
Bartlett's X2		2.822	0.0	0.0	9.129	8.083	10.41	4.166
P(Bartlett's X2)		0.588	.	.	0.425	0.526	0.034*	0.654
Skewness		0.6959	3.7919*	.	-0.4317	0.7071	-0.3514	1.1534*
Kurtosis		-1.4536	13.3458*	.	0.3013	-0.8766	-1.8096*	-0.0933
Replicate F		0.499	0.741	0.000	3.581	13.149	0.178	1.235
Replicate Prob(F)		0.6884	0.5402	1.0000	0.0267	0.0055	0.9097	0.3178
Treatment F		6.726	523.100	0.000	0.989	5.010	11.808	4.420
Treatment Prob(F)		0.0005	0.0001	1.0000	0.4713	0.0125	0.0001	0.0015

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.  
 Missing data estimates are included in columns: Yates=7,10; Average=1,2,6,9



# Purdue University Weed Science

Pest Type			
Pest Code			
Pest Scientific Name			
Pest Name			
Crop Code		TRZAW	
BBCH Scale		BCER	
Crop Scientific Name		Triticum aesti>	
Crop Name		Winter wheat	
Part Rated		PLOT -	
Rating Date		Jul-6-2015	
Rating Type		YIELD	
Rating Unit		BU	
Sample Size, Unit		125 FT3	
Number of Subsamples		1	
Assessed By		HENEGHAN	
Days After First/Last Applic.		96 96	
Trt-Eval Interval		96 DA-A	
Plant-Eval Interval		252 DP-1	
Days After Emergence		229 DE-1	
ARM Action Codes		TY1	
Number of Decimals		1	
Trt No.	Treatment Name	Rate Appl Rate Unit Code	15
1	Untreated Check		62.6 a
2	KFD-194-01	1.5 pt/a A	60.4 a
3	KFD-194-01	2 pt/a A	60.9 a
4	TRICOR	2.2 oz/a A	61.0 a
5	TRICOR	3 oz/a A	64.4 a
6	SATELLITE	1.26 pt/a A	66.6 a
7	SATELLITE	1.73 pt/a A	67.7 a
8	HARMONY EXTRA @ 0.6 OZ/A		66.5 a
	HARMONY SG	0.4 oz/a A	
	EXPRESS	0.2 oz/a A	
9	HARMONY EXTRA @ 0.75 OZ/A		65.4 a
	HARMONY SG	0.5 oz/a A	
	EXPRESS	0.25 oz/a A	
10	Untreated Check		70.5 a
LSD P=.05			9.58
Standard Deviation			6.61
CV			10.23
Bartlett's X2			2.486
P(Bartlett's X2)			0.981
Skewness			0.3538
Kurtosis			-0.7134
Replicate F			0.508
Replicate Prob(F)			0.6804
Treatment F			1.027
Treatment Prob(F)			0.4442

