

# Purdue University

## Efficacy of Fall and Spring treatments on winter wheat

Trial ID: 06F-SEP-NTW-03  
Location: SEPAC

Study Dir.: Vince Davis  
Investigator: Dr. William G. Johnson

### GENERAL TRIAL INFORMATION

**Study Director:** Vince Davis **Title:** Research Associate  
**Affiliation:** Purdue University  
**Postal Code:** 47907  
**Investigator:** Dr. William G. Johnson **Title:** Associate Professor  
**Affiliation:** Purdue University  
**Postal Code:** 47097

### TRIAL LOCATION

**City:** Butlerville  
**State/Prov.:** IN  
**Postal Code:** 47223  
**Country:** USA  
**Directions:** Field U

### COOPERATOR/LANDOWNER

**Cooperator:** Southeast Purdue Ag Center **Country:** USA  
**Org:** Purdue University **Phone No:** 812-458-6977  
**Address 1:** 4425 E Co Rd 350 N **Fax No:** 812-458-6979  
**Address 2:** PO Box 216  
**City:** Butlerville  
**State/Prov:** IN  
**Postal Code:** 47223

**Conducted Under GLP (Y/N):** N **Conducted Under GEP (Y/N):** N

**Objective:** The objective of this experiment is to evaluate fall and spring applied herbicide treatments in winter wheat.

### CROP AND WEED DESCRIPTION

Weed	Code	Common Name	Scientific Name
1.	LAMPU	Purple deadnettle	Lamium purpureum
2.	POAAN	Annual bluegrass	Poa annua

**Crop 1:** TRZAW WHEAT, WINTER **Variety:** Pioneer 25R54  
**Planting Date:** 11/Oct/2006 **Planting Method:** Drilled  
**Rate:** 1.6 MillionS/A **Depth:** 1 IN  
**Row Spacing:** 7.5 IN

### SITE AND DESIGN

**Plot Width, Unit:** 7.5 FT **Plot Length, Unit:** 30 FT **Reps:** 4  
**Site Type:** FIELD  
**Tillage Type:** NO-TILL **Study Design:** RANDOMIZED COMPLETE BLOCK

No.	Date	Maintenance Treatment Name	Form Conc	Form Unit	Form Type	Rate	Rate Unit
1.	13/Mar/2007	UAN 28%	28	%	L	320	LB/A

### SOIL DESCRIPTION

**% OM:** 2.1 **Texture:** SILT LOAM  
**pH:** 7 **Soil Name:** Avonburg  
**CEC:** 6.2

### ADDITIONAL MEASURED ELEMENTS

Element	Quantity	Unit
K	90	ppm
Ca	900	ppm
P	53	ppm
Mg	180	ppm

**Closest Weather Station:** On Site

**Distance:** 0.5 **Unit:** MI

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## APPLICATION DESCRIPTION

	A	B	C
Application Date:	3/Nov/2006	26/Mar/2007	10/Apr/2007
Time of Day:	1-2PM	1:00PM	12:30
Application Method:	SPRAY	SPRAY	SPRAY
Application Timing:	FAL2LF	SPRBJ	SPRAJ
Applic. Placement:	BROFOL	BROFOL	BROFOL
Air Temp., Unit:	48 F	75 F	51 F
% Relative Humidity:	30	75	30
Wind Velocity, Unit:	4.5 MPH	4 MPH	1 MPH
Water Hardness:	Hard	Hard	Hard
Soil Temp., Unit:	46 F	60 F	50 F
Soil Moisture:	Moist	Wet	Moist
% Cloud Cover:	0	95	0

## CROP STAGE AT EACH APPLICATION

	A	B	C
Crop 1 Code, Stage:	TRZAW	TRZAW	TRZAW
Stage Scale:	2 leaf	2-3tiller	3-4tiller
Height, Unit:	3 Inch	7 Inch	9 IN

## WEED STAGE AT EACH APPLICATION

	A	B	C
Weed 1 Code, Stage:	LAMPU	LAMPU	LAMPU
Stage Scale:	0-1"	2-3"	2-6"
Density, Unit:	115 YD2	18 YD2	18 YD2
Weed 2 Code, Stage:	POAAN	POAAN	POAAN
Stage Scale:	0-1"	1-3"	2-4"
Density, Unit:	17 YD2	100 YD2	100 YD2

## APPLICATION EQUIPMENT

	A	B	C
Appl. Equipment:	Backpack	Backpack	Backpack
Operating Pressure:	17 PSI	17 PSI	17 PSI
Nozzle Type:	XR11002	XR11002	XR11002
Nozzle Spacing, Unit:	15 IN	15 IN	15 IN
Nozzles/Row:	6	6	6
Boom Length, Unit:	7.5 FT	7.5 FT	7.5 FT
Boom Height, Unit:	15 IN	15 IN	15 IN
Ground Speed, Unit:	3 MPH	3 MPH	3 MPH
Carrier:	TPAC H2O	TPAC H2O	TPAC H2O
Spray Volume, Unit:	15 GPA	15 GPA	15 GPA
Propellant:	CO2	CO2	CO2

Trial Comments

Discard plots 208 and 903 due to wetholes.

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## Efficacy of Fall and Spring treatments on winter wheat

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 Location: SEPAC

Study Dir.: Vince Davis  
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								LAMPU	POANN	LAMPU	POANN	LAMPU	POANN	
								TRZAW	TRZAW	TRZAW	TRZAW	TRZAW	TRZAW	
								PLAQUA P						
								CONTRO	CONTRO	CONTRO	CONTRO	CONTRO	CONTRO	
								%	%	%	%	%	%	
								18/Dec/2006	18/Dec/2006	26/Mar/2007	26/Mar/2007	10/Apr/2007	10/Apr/2007	
								3 leaf	3 leaf	3 leaf	3 leaf	3-4 till	3-4 till	
								3-4"	3-4"	6-8"	6-8"	6-10"	6-10"	
								1-2"	0-1"	2-3"	2-3"	2-6"	2-4"	
								17 YD2	100 YD2	17 YD2	100 YD2	17 YD2	100 YD2	
								KW EC GK	KW EC GK	VAM KW VMD	VAM KW VMD	GK VMD	GK VMD	
								45 DA-B	45 DA-B	143 DA-B	143 DA-B	158 DA-B	158 DA-B	
Trt	Treatment	Rate	Rate Unit	Product Rate	Product Rate Unit	Grow Stg	Appl Code	Plot	1	2	3	4	5	6
1	Untreated Check							101	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
								604	0.0	0.0	0.0	0.0	0.0	0.0
								1005	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	Everest (MKH 6562)	0.35	OZ A/A	0.5	OZ/A	FAL 2lf	A	102	100.0	90.0	100.0	90.0	100.0	75.0
	Glean	0.188	OZ A/A	0.25	OZ/A	FAL 2lf	A	505	100.0	30.0	100.0	65.0	100.0	50.0
	NIS	0.25	% V/V	0.25	% V/V	FAL 2lf	A	602	100.0	70.0	100.0	93.0	100.0	80.0
								1003	100.0	100.0	100.0	93.0	100.0	85.0
								Mean =	100.0	72.5	100.0	85.3	100.0	72.5
3	Everest (MKH 6562)	0.427	OZ A/A	0.61	OZ/A	FAL 2lf	A	103	100.0	100.0	100.0	93.0	100.0	75.0
	Glean	0.225	OZ A/A	0.3	OZ/A	FAL 2lf	A	404	80.0	65.0	100.0	85.0	100.0	83.0
	NIS	0.25	% V/V	0.25	% V/V	FAL 2lf	A	708	100.0	95.0	100.0	96.0	100.0	85.0
								905	100.0	100.0	100.0	94.0	100.0	50.0
								Mean =	95.0	90.0	100.0	92.0	100.0	73.3
4	Osprey	0.214	OZ A/A	4.75	OZ/A	FAL 2lf	A	104	100.0	90.0	100.0	98.0	100.0	85.0
	NIS	0.5	% V/V	0.5	% V/V	FAL 2lf	A	305	100.0	100.0	100.0	93.0	100.0	100.0
								705	100.0	100.0	100.0	98.0	100.0	95.0
								1007	90.0	100.0	98.0	98.0	75.0	100.0
								Mean =	97.5	97.5	99.5	96.8	93.8	95.0
5	Harmony Extra	0.375	OZ A/A	0.5	OZ/A	FAL 2lf	A	105	75.0	50.0	95.0	60.0	70.0	30.0
	NIS	0.25	% V/V	0.25	% V/V	FAL 2lf	A	506	90.0	50.0	98.0	75.0	100.0	70.0
								701	80.0	20.0	90.0	45.0	70.0	20.0
								1002	75.0	30.0	90.0	50.0	100.0	30.0
								Mean =	80.0	37.5	93.3	57.5	85.0	37.5
6	Harmony Extra	0.3	OZ A/A	0.4	OZ/A	FAL 2lf	A	106	90.0	65.0	100.0	65.0	99.0	35.0
	NIS	0.25	% V/V	0.25	% V/V	FAL 2lf	A	501	.	20.0	60.0	65.0	95.0	40.0
	Harmony Extra	0.3	OZ A/A	0.4	OZ/A	SPR BJ	B	605	90.0	35.0	98.0	70.0	100.0	50.0
	NIS	0.25	% V/V	0.25	% V/V	SPR BJ	B	1004	60.0	35.0	95.0	70.0	100.0	75.0
								Mean =	80.0	38.8	88.3	67.5	98.5	50.0
7	Harmony Extra	0.375	OZ A/A	0.5	OZ/A	SPR BJ	B	107	0.0	0.0	0.0	0.0	98.0	40.0
	NIS	0.25	% V/V	0.25	% V/V	SPR BJ	B	403	0.0	0.0	0.0	0.0	25.0	40.0
								802	0.0	0.0	0.0	0.0	35.0	20.0
								901	0.0	0.0	0.0	0.0	100.0	40.0
								Mean =	0.0	0.0	0.0	0.0	64.5	35.0
8	Everest (MKH 6562)	0.35	OZ A/A	0.5	OZ/A	SPR BJ	B	108	0.0	0.0	0.0	0.0	100.0	50.0
	Glean	0.188	OZ A/A	0.25	OZ/A	SPR BJ	B	308	0.0	0.0	0.0	0.0	65.0	50.0
	NIS	0.25	% V/V	0.25	% V/V	SPR BJ	B	803	0.0	0.0	0.0	0.0	70.0	40.0
								902	0.0	0.0	0.0	0.0	100.0	35.0
								Mean =	0.0	0.0	0.0	0.0	83.8	43.8
9	Everest (MKH 6562)	0.427	OZ A/A	0.61	OZ/A	SPR BJ	B	201	0.0	0.0	0.0	0.0	80.0	25.0
	Glean	0.225	OZ A/A	0.3	OZ/A	SPR BJ	B	408	0.0	0.0	0.0	0.0	65.0	50.0
	NIS	0.25	% V/V	0.25	% V/V	SPR BJ	B	706	0.0	0.0	0.0	0.0	100.0	50.0
								805	0.0	0.0	0.0	0.0	65.0	30.0
								Mean =	0.0	0.0	0.0	0.0	77.5	38.8

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								LAMPU	POANN	LAMPU	POANN	LAMPU	POANN	
								TRZAW	TRZAW	TRZAW	TRZAW	TRZAW	TRZAW	
								PLAQUA P						
								CONTRO	CONTRO	CONTRO	CONTRO	CONTRO	CONTRO	
								%	%	%	%	%	%	
								18/Dec/2006	18/Dec/2006	26/Mar/2007	26/Mar/2007	10/Apr/2007	10/Apr/2007	
								3 leaf	3 leaf	3 leaf	3 leaf	3-4 till	3-4 till	
								3-4"	3-4"	6-8"	6-8"	6-10"	6-10"	
								1-2"	0-1"	2-3"	2-3"	2-6"	2-4"	
								17 YD2	100 YD2	17 YD2	100 YD2	17 YD2	100 YD2	
								KW EC GK	KW EC GK	VAM KW VMD	VAM KW VMD	GK VMD	GK VMD	
								45 DA-B	45 DA-B	143 DA-B	143 DA-B	158 DA-B	158 DA-B	
Tri	Treatment	Rate	Rate Unit	Product Rate	Product Rate Unit	Grow Stg	Appl Code	Plot	1	2	3	4	5	6
10	Osprey NIS	0.144 0.5	OZ A/A % V/V	3.2 0.5	OZ/A % V/V	SPR BJ SPR BJ	B B	202	0.0	0.0	0.0	0.0	100.0	80.0
								401	0.0	0.0	0.0	0.0	20.0	80.0
								608	0.0	0.0	0.0	0.0	100.0	80.0
								908	0.0	0.0	0.0	0.0	100.0	50.0
								Mean =	0.0	0.0	0.0	0.0	80.0	72.5
11	V 10204 NIS	0.053 0.25	LB A/A % V/V	1.41 0.25	OZ/A % V/V	FAL 2lf FAL 2lf	A A	203	100.0	100.0	100.0	95.0	100.0	80.0
								406	0.0	100.0	80.0	97.0	50.0	90.0
								703	100.0	100.0	100.0	100.0	100.0	100.0
								1008	10.0	100.0	90.0	96.0	100.0	95.0
								Mean =	52.5	100.0	92.5	97.0	87.5	91.3
12	Express NIS	0.0155 0.5	LB A/A % V/V	0.33 0.5	OZ/A % V/V	SPR BJ SPR BJ	B B	204	0.0	0.0	0.0	0.0	100.0	50.0
								402	0.0	0.0	0.0	0.0	40.0	20.0
								707	0.0	0.0	0.0	0.0	100.0	35.0
								808	0.0	0.0	0.0	0.0	100.0	35.0
								Mean =	0.0	0.0	0.0	0.0	85.0	35.0
13	Osprey Harmony Extra NIS	0.144 0.375 0.25	OZ A/A OZ A/A % V/V	3.2 0.5 0.25	OZ/A OZ/A % V/V	SPR BJ SPR BJ SPR BJ	B B B	205	0.0	0.0	0.0	0.0	100.0	85.0
								307	0.0	0.0	0.0	0.0	50.0	70.0
								702	0.0	0.0	0.0	0.0	100.0	90.0
								903	0.0	0.0	0.0	0.0	.	.
								Mean =	0.0	0.0	0.0	0.0	83.3	81.7
14	Axial Adigor NIS	0.053 0.5 0.25	LB A/A % V/V % V/V	8.2 9.6 0.25	FL OZ/A FL OZ/A % V/V	SPR BJ SPR BJ SPR BJ	B B B	206	0.0	0.0	0.0	0.0	100.0	90.0
								502	0.0	0.0	0.0	0.0	65.0	70.0
								801	0.0	0.0	0.0	0.0	.	45.0
								904	0.0	0.0	0.0	0.0	25.0	80.0
								Mean =	0.0	0.0	0.0	0.0	63.3	71.3
15	Brash	0.484	LB A/A	1	PT/A	FAL 2lf	A	207	90.0	30.0	100.0	65.0	100.0	55.0
								504	50.0	20.0	100.0	63.0	90.0	25.0
								704	90.0	85.0	98.0	65.0	100.0	45.0
								1006	.	.	.	.	.	.
								Mean =	76.7	45.0	99.3	64.3	96.7	41.7
16	Brash	0.484	LB A/A	1	PT/A	SPR BJ	B	208	.	.	.	.	.	.
								508	0.0	0.0	0.0	0.0	100.0	55.0
								601	0.0	0.0	0.0	0.0	50.0	10.0
								907	0.0	0.0	0.0	0.0	100.0	30.0
								Mean =	0.0	0.0	0.0	0.0	83.3	31.7
17	Brash	0.484	LB A/A	1	PT/A	SPR AJ	C	301	0.0	0.0	0.0	0.0	0.0	0.0
								503	0.0	0.0	0.0	0.0	0.0	0.0
								606	0.0	0.0	0.0	0.0	0.0	0.0
								807	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
18	Huskie NIS UAN 28%	0.184 0.5 3.33	LB A/A % V/V % V/V	11 0.5 2	FL OZ/A % V/V QT/A	SPR BJ SPR BJ SPR BJ	B B B	302	0.0	0.0	0.0	0.0	95.0	25.0
								507	0.0	0.0	0.0	0.0	100.0	70.0
								804	0.0	0.0	0.0	0.0	75.0	0.0
								906	0.0	0.0	0.0	0.0	100.0	25.0
								Mean =	0.0	0.0	0.0	0.0	92.5	30.0

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								LAMPU	POANN	LAMPU	POANN	LAMPU	POANN	
								TRZAW	TRZAW	TRZAW	TRZAW	TRZAW	TRZAW	
								PLAQUA P						
								CONTRO	CONTRO	CONTRO	CONTRO	CONTRO	CONTRO	
								%	%	%	%	%	%	
								18/Dec/2006	18/Dec/2006	26/Mar/2007	26/Mar/2007	10/Apr/2007	10/Apr/2007	
								3 leaf	3 leaf	3 leaf	3 leaf	3-4 till	3-4 till	
								3-4"	3-4"	6-8"	6-8"	6-10"	6-10"	
								1-2"	0-1"	2-3"	2-3"	2-6"	2-4"	
								17 YD2	100 YD2	17 YD2	100 YD2	17 YD2	100 YD2	
								KW EC GK	KW EC GK	VAM KW VMD	VAM KW VMD	GK VMD	GK VMD	
								45 DA-B	45 DA-B	143 DA-B	143 DA-B	158 DA-B	158 DA-B	
Tri	Treatment	Rate	Unit	Product	Product	Grow	Appl	Plot	1	2	3	4	5	6
19	Huskie	0.25	LB A/A	15	FL OZ/A	SPR BJ	B	303	0.0	0.0	0.0	0.0	100.0	25.0
	NIS	0.5	% V/V	0.5	% V/V	SPR BJ	B	306	0.0	0.0	0.0	0.0	100.0	75.0
	UAN 28%	3.33	% V/V	2	QT/A	SPR BJ	B	607	0.0	0.0	0.0	0.0	100.0	30.0
								806	0.0	0.0	0.0	0.0	100.0	30.0
								Mean =	0.0	0.0	0.0	0.0	100.0	40.0
20	Untreated Check							304	0.0	0.0	0.0	0.0	0.0	0.0
								407	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
								1001	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

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								TRZAW	LAMPU	POANN	TRZAW	
								PLAQUA C	TRZAW	PLAQUA P	TRZAW	
								PHYGEN	PLAQUA P	PLAQUA P	PHYGEN	
								%	%	%	%	
								10/Apr/2007	30/Apr/2007	30/Apr/2007	30/Apr/2007	
								3-4 till	3-4 till	3-4 till	3-4 till	
								6-10"	18-24"	18-24"	18-24"	
									12-18"	4-8"		
									17 YD2	100 YD2		
								GK VMD	KW GK VMD	KW GK VMD	KW GK VMD	
								158 DA-B	178 DA-B	178 DA-B	178 DA-B	
Tri	Treatment	Rate	Rate	Product	Product	Grow	Appl	Plot	7	8	9	10
No.	Name		Unit	Rate	Rate	Unit	Code					
1	Untreated Check							101	0.0	0.0	0.0	0.0
								405	0.0	0.0	0.0	0.0
								604	0.0	0.0	0.0	0.0
								1005	0.0	0.0	0.0	0.0
								Mean =	0.0	0.0	0.0	0.0
2	Everest (MKH 6562)	0.35	OZ A/A	0.5	OZ/A	FAL 2lf	A	102	0.0	100.0	80.0	0.0
	Glean	0.188	OZ A/A	0.25	OZ/A	FAL 2lf	A	505	0.0	100.0	65.0	0.0
	NIS	0.25	% V/V	0.25	% V/V	FAL 2lf	A	602	0.0	100.0	40.0	0.0
								1003	0.0	100.0	80.0	0.0
								Mean =	0.0	100.0	66.3	0.0
3	Everest (MKH 6562)	0.427	OZ A/A	0.61	OZ/A	FAL 2lf	A	103	0.0	100.0	80.0	0.0
	Glean	0.225	OZ A/A	0.3	OZ/A	FAL 2lf	A	404	0.0	100.0	93.0	0.0
	NIS	0.25	% V/V	0.25	% V/V	FAL 2lf	A	708	0.0	100.0	85.0	0.0
								905	0.0	100.0	85.0	0.0
								Mean =	0.0	100.0	85.8	0.0
4	Osprey	0.214	OZ A/A	4.75	OZ/A	FAL 2lf	A	104	0.0	100.0	95.0	0.0
	NIS	0.5	% V/V	0.5	% V/V	FAL 2lf	A	305	0.0	100.0	100.0	0.0
								705	0.0	100.0	95.0	0.0
								1007	0.0	90.0	100.0	0.0
								Mean =	0.0	97.5	97.5	0.0
5	Harmony Extra	0.375	OZ A/A	0.5	OZ/A	FAL 2lf	A	105	0.0	78.0	60.0	0.0
	NIS	0.25	% V/V	0.25	% V/V	FAL 2lf	A	506	10.0	95.0	75.0	0.0
								701	0.0	85.0	40.0	0.0
								1002	0.0	90.0	50.0	0.0
								Mean =	2.5	87.0	56.3	0.0
6	Harmony Extra	0.3	OZ A/A	0.4	OZ/A	FAL 2lf	A	106	0.0	100.0	18.0	0.0
	NIS	0.25	% V/V	0.25	% V/V	FAL 2lf	A	501	0.0	88.0	40.0	0.0
	Harmony Extra	0.3	OZ A/A	0.4	OZ/A	SPR BJ	B	605	0.0	100.0	75.0	0.0
	NIS	0.25	% V/V	0.25	% V/V	SPR BJ	B	1004	0.0	100.0	60.0	0.0
								Mean =	0.0	97.0	48.3	0.0
7	Harmony Extra	0.375	OZ A/A	0.5	OZ/A	SPR BJ	B	107	0.0	80.0	0.0	0.0
	NIS	0.25	% V/V	0.25	% V/V	SPR BJ	B	403	0.0	50.0	65.0	0.0
								802	0.0	70.0	25.0	0.0
								901	0.0	90.0	60.0	0.0
								Mean =	0.0	72.5	37.5	0.0
8	Everest (MKH 6562)	0.35	OZ A/A	0.5	OZ/A	SPR BJ	B	108	15.0	100.0	25.0	0.0
	Glean	0.188	OZ A/A	0.25	OZ/A	SPR BJ	B	308	0.0	80.0	50.0	0.0
	NIS	0.25	% V/V	0.25	% V/V	SPR BJ	B	803	0.0	75.0	65.0	0.0
								902	0.0	100.0	50.0	0.0
								Mean =	3.8	88.8	47.5	0.0
9	Everest (MKH 6562)	0.427	OZ A/A	0.61	OZ/A	SPR BJ	B	201	0.0	100.0	30.0	0.0
	Glean	0.225	OZ A/A	0.3	OZ/A	SPR BJ	B	408	0.0	60.0	75.0	0.0
	NIS	0.25	% V/V	0.25	% V/V	SPR BJ	B	706	0.0	100.0	50.0	0.0
								805	0.0	95.0	60.0	0.0
								Mean =	0.0	88.8	53.8	0.0

# Purdue University

									TRZAW	LAMPU	POANN	TRZAW
									PLAQUA C	TRZAW	PLAQUA P	TRZAW
									PHYGEN	PLAQUA P	PLAQUA P	PHYGEN
									%	%	%	%
									10/Apr/2007	30/Apr/2007	30/Apr/2007	30/Apr/2007
									3-4 till	3-4 till	3-4 till	3-4 till
									6-10"	18-24"	18-24"	18-24"
										12-18"	4-8"	
										17 YD2	100 YD2	
									GK VMD	KW GK VMD	KW GK VMD	KW GK VMD
									158 DA-B	178 DA-B	178 DA-B	178 DA-B
Tri	Treatment	Rate	Rate Unit	Product Rate	Product Rate Unit	Grow Stg	Appl Code	Plot	7	8	9	10
10	Osprey	0.144	OZ A/A	3.2	OZ/A	SPR BJ	B	202	10.0	100.0	100.0	0.0
	NIS	0.5	% V/V	0.5	% V/V	SPR BJ	B	401	0.0	0.0	95.0	0.0
								608	5.0	100.0	100.0	0.0
								908	0.0	90.0	70.0	0.0
								Mean =	3.8	72.5	91.3	0.0
11	V 10204	0.053	LB A/A	1.41	OZ/A	FAL 2lf	A	203	0.0	100.0	95.0	0.0
	NIS	0.25	% V/V	0.25	% V/V	FAL 2lf	A	406	0.0	90.0	100.0	0.0
								703	0.0	100.0	100.0	0.0
								1008	15.0	95.0	95.0	0.0
								Mean =	3.8	96.3	97.5	0.0
12	Express	0.0155	LB A/A	0.33	OZ/A	SPR BJ	B	204	0.0	100.0	70.0	0.0
	NIS	0.5	% V/V	0.5	% V/V	SPR BJ	B	402	0.0	30.0	10.0	0.0
								707	0.0	100.0	40.0	0.0
								808	0.0	100.0	50.0	0.0
								Mean =	0.0	82.5	42.5	0.0
13	Osprey	0.144	OZ A/A	3.2	OZ/A	SPR BJ	B	205	20.0	100.0	100.0	0.0
	Harmony Extra	0.375	OZ A/A	0.5	OZ/A	SPR BJ	B	307	0.0	50.0	90.0	0.0
	NIS	0.25	% V/V	0.25	% V/V	SPR BJ	B	702	20.0	100.0	100.0	0.0
								903	.	.	.	.
								Mean =	13.3	83.3	96.7	0.0
14	Axial	0.053	LB A/A	8.2	FL OZ/A	SPR BJ	B	206	0.0	100.0	100.0	0.0
	Adigor	0.5	% V/V	9.6	FL OZ/A	SPR BJ	B	502	0.0	90.0	90.0	0.0
	NIS	0.25	% V/V	0.25	% V/V	SPR BJ	B	801	0.0	0.0	80.0	0.0
								904	0.0	75.0	90.0	0.0
								Mean =	0.0	66.3	90.0	0.0
15	Brash	0.484	LB A/A	1	PT/A	FAL 2lf	A	207	0.0	100.0	25.0	0.0
								504	0.0	100.0	50.0	0.0
								704	0.0	100.0	35.0	0.0
								1006	.	.	.	.
								Mean =	0.0	100.0	36.7	0.0
16	Brash	0.484	LB A/A	1	PT/A	SPR BJ	B	208	.	.	.	.
								508	0.0	95.0	40.0	0.0
								601	20.0	75.0	0.0	0.0
								907	10.0	100.0	70.0	0.0
								Mean =	10.0	90.0	36.7	0.0
17	Brash	0.484	LB A/A	1	PT/A	SPR AJ	C	301	0.0	.	.	.
								503	0.0	.	.	.
								606	0.0	.	.	.
								807	0.0	.	.	.
								Mean =	0.0	.	.	.
18	Huskie	0.184	LB A/A	11	FL OZ/A	SPR BJ	B	302	5.0	100.0	10.0	0.0
	NIS	0.5	% V/V	0.5	% V/V	SPR BJ	B	507	0.0	100.0	70.0	0.0
	UAN 28%	3.33	% V/V	2	QT/A	SPR BJ	B	804	0.0	95.0	25.0	0.0
								906	0.0	100.0	70.0	0.0
								Mean =	1.3	98.8	43.8	0.0

# Purdue University

Weed Code								TRZAW	LAMPU	POANN	TRZAW	
Crop Code								TRZAW	TRZAW	TRZAW	TRZAW	
Part Rated								PLAQUA C	PLAQUA P	PLAQUA P	PLAQUA C	
Rating Data Type								PHYGEN	CONTRO	CONTRO	PHYGEN	
Rating Unit								%	%	%	%	
Rating Date								10/Apr/2007	30/Apr/2007	30/Apr/2007	30/Apr/2007	
Crop Stage								3-4 till	3-4 till	3-4 till	3-4 till	
Crop Stage Scale								6-10"	18-24"	18-24"	18-24"	
Weed Stage									12-18"	4-8"		
Weed Density, Unit									17 YD2	100 YD2		
Assessed By								GK VMD	KW GK VMD	KW GK VMD	KW GK VMD	
Tri-Eval Interval								158 DA-B	178 DA-B	178 DA-B	178 DA-B	
Tri	Treatment	Rate	Rate Unit	Product Rate	Product Rate Unit	Grow Stg	Appl Code	Plot	7	8	9	10
19	Huskie	0.25	LB A/A	15	FL OZ/A	SPR BJ B	B	303	0.0	100.0	25.0	0.0
	NIS	0.5	% V/V	0.5	% V/V	SPR BJ B	B	306	0.0	100.0	70.0	0.0
	UAN 28%	3.33	% V/V	2	QT/A	SPR BJ B	B	607	0.0	100.0	35.0	0.0
								806	0.0	100.0	0.0	0.0
								Mean =	0.0	100.0	32.5	0.0
20	Untreated Check							304	0.0	0.0	.	0.0
								407	0.0	0.0	0.0	0.0
								603	0.0	0.0	0.0	0.0
								1001	0.0	0.0	0.0	0.0
								Mean =	0.0	0.0	0.0	0.0

# Purdue University

## Efficacy of Fall and Spring treatments on winter wheat

Trial ID: 06F-SEP-NTW-03  
Location: SEPAC

Study Dir.: Vince Davis  
Investigator: Dr. William G. Johnson

							LAMPU	POANN	LAMPU	POANN	LAMPU	POANN	TRZAW	
							TRZAW							
							PLAQUA P	PLAQUA C						
							CONTRO	CONTRO	CONTRO	CONTRO	CONTRO	CONTRO	PHYGEN	
							%	%	%	%	%	%	%	
							18/Dec/2006	18/Dec/2006	26/Mar/2007	26/Mar/2007	10/Apr/2007	10/Apr/2007	10/Apr/2007	
							3 leaf	3 leaf	3 leaf	3 leaf	3-4 till	3-4 till	3-4 till	
							3-4"	3-4"	6-8"	6-8"	6-10"	6-10"	6-10"	
							1-2"	0-1"	2-3"	2-3"	2-6"	2-4"		
							17 YD2	100 YD2	17 YD2	100 YD2	17 YD2	100 YD2		
							KW EC GK	KW EC GK	VAM KW VMD	VAM KW VMD	GK VMD	GK VMD	GK VMD	
							45 DA-B	45 DA-B	143 DA-B	143 DA-B	158 DA-B	158 DA-B	158 DA-B	
Trt No.	Treatment Name	Rate	Rate Unit	Product Rate	Product Rate Unit	Grow Stg	Appl Code	1	2	3	4	5	6	7
1	Untreated Check							0.0 e	0.0 d	0.0 d	0.0 e	0.0 c	0.0 e	0.0 b
2	Everest (MKH 6562)	0.35	OZ A/A	0.5	OZ/A	FAL 2lf	A	100.0 a	72.5 b	100.0 a	85.3 b	100.0 a	72.5 b	0.0 b
	Glean	0.188	OZ A/A	0.25	OZ/A	FAL 2lf	A							
	NIS	0.25	% V/V	0.25	% V/V	FAL 2lf	A							
3	Everest (MKH 6562)	0.427	OZ A/A	0.61	OZ/A	FAL 2lf	A	95.0 abc	90.0 a	100.0 a	92.0 a	100.0 a	73.3 b	0.0 b
	Glean	0.225	OZ A/A	0.3	OZ/A	FAL 2lf	A							
	NIS	0.25	% V/V	0.25	% V/V	FAL 2lf	A							
4	Osprey	0.214	OZ A/A	4.75	OZ/A	FAL 2lf	A	97.5 ab	97.5 a	99.5 a	96.8 a	93.8 a	95.0 a	0.0 b
	NIS	0.5	% V/V	0.5	% V/V	FAL 2lf	A							
5	Harmony Extra	0.375	OZ A/A	0.5	OZ/A	FAL 2lf	A	80.0 bc	37.5 c	93.3 abc	57.5 d	85.0 ab	37.5 d	2.5 b
	NIS	0.25	% V/V	0.25	% V/V	FAL 2lf	A							
6	Harmony Extra	0.3	OZ A/A	0.4	OZ/A	FAL 2lf	A	80.0 bc	38.8 c	88.3 c	67.5 c	98.5 a	50.0 cd	0.0 b
	NIS	0.25	% V/V	0.25	% V/V	FAL 2lf	A							
	Harmony Extra	0.3	OZ A/A	0.4	OZ/A	SPR BJ	B							
	NIS	0.25	% V/V	0.25	% V/V	SPR BJ	B							
7	Harmony Extra	0.375	OZ A/A	0.5	OZ/A	SPR BJ	B	0.0 e	0.0 d	0.0 d	0.0 e	64.5 b	35.0 d	0.0 b
	NIS	0.25	% V/V	0.25	% V/V	SPR BJ	B							
8	Everest (MKH 6562)	0.35	OZ A/A	0.5	OZ/A	SPR BJ	B	0.0 e	0.0 d	0.0 d	0.0 e	83.8 ab	43.8 d	3.8 b
	Glean	0.188	OZ A/A	0.25	OZ/A	SPR BJ	B							
	NIS	0.25	% V/V	0.25	% V/V	SPR BJ	B							
9	Everest (MKH 6562)	0.427	OZ A/A	0.61	OZ/A	SPR BJ	B	0.0 e	0.0 d	0.0 d	0.0 e	77.5 ab	38.8 d	0.0 b
	Glean	0.225	OZ A/A	0.3	OZ/A	SPR BJ	B							
	NIS	0.25	% V/V	0.25	% V/V	SPR BJ	B							
10	Osprey	0.144	OZ A/A	3.2	OZ/A	SPR BJ	B	0.0 e	0.0 d	0.0 d	0.0 e	80.0 ab	72.5 b	3.8 b
	NIS	0.5	% V/V	0.5	% V/V	SPR BJ	B							
11	V 10204	0.053	LB A/A	1.41	OZ/A	FAL 2lf	A	52.5 d	100.0 a	92.5 bc	97.0 a	87.5 ab	91.3 ab	3.8 b
	NIS	0.25	% V/V	0.25	% V/V	FAL 2lf	A							
12	Express	0.0155	LB A/A	0.33	OZ/A	SPR BJ	B	0.0 e	0.0 d	0.0 d	0.0 e	85.0 ab	35.0 d	0.0 b
	NIS	0.5	% V/V	0.5	% V/V	SPR BJ	B							
13	Osprey	0.144	OZ A/A	3.2	OZ/A	SPR BJ	B	0.0 e	0.0 d	0.0 d	0.0 e	83.3 ab	81.7 ab	13.3 a
	Harmony Extra	0.375	OZ A/A	0.5	OZ/A	SPR BJ	B							
	NIS	0.25	% V/V	0.25	% V/V	SPR BJ	B							
14	Axial	0.053	LB A/A	8.2	FL OZ/A	SPR BJ	B	0.0 e	0.0 d	0.0 d	0.0 e	63.3 b	71.3 bc	0.0 b
	Adigor	0.5	% V/V	9.6	FL OZ/A	SPR BJ	B							
	NIS	0.25	% V/V	0.25	% V/V	SPR BJ	B							
15	Brash	0.484	LB A/A	1	PT/A	FAL 2lf	A	76.7 c	45.0 c	99.3 ab	64.3 c	96.7 a	41.7 d	0.0 b
16	Brash	0.484	LB A/A	1	PT/A	SPR BJ	B	0.0 e	0.0 d	0.0 d	0.0 e	83.3 ab	31.7 d	10.0 a

# Purdue University

Weed Code	LAMPU	POANN	LAMPU	POANN	LAMPU	POANN	TRZAW
Crop Code	TRZAW	TRZAW	TRZAW	TRZAW	TRZAW	TRZAW	TRZAW
Part Rated	PLAQUA P	PLAQUA P	PLAQUA P	PLAQUA P	PLAQUA P	PLAQUA P	PLAQUA C
Rating Data Type	CONTRO	CONTRO	CONTRO	CONTRO	CONTRO	CONTRO	PHYGEN
Rating Unit	%	%	%	%	%	%	%
Rating Date	18/Dec/2006	18/Dec/2006	26/Mar/2007	26/Mar/2007	10/Apr/2007	10/Apr/2007	10/Apr/2007
Crop Stage	3 leaf	3 leaf	3 leaf	3 leaf	3-4 till	3-4 till	3-4 till
Crop Stage Scale	3-4"	3-4"	6-8"	6-8"	6-10"	6-10"	6-10"
Weed Stage	1-2"	0-1"	2-3"	2-3"	2-6"	2-4"	
Weed Density, Unit	17 YD2	100 YD2	17 YD2	100 YD2	17 YD2	100 YD2	
Assessed By	KW EC GK	KW EC GK	VAM KW VMD	VAM KW VMD	GK VMD	GK VMD	GK VMD
Tri-Eval Interval	45 DA-B	45 DA-B	143 DA-B	143 DA-B	158 DA-B	158 DA-B	158 DA-B
Tri Treatment	Rate	Product	Product	Grow	Appl		
No. Name	Rate Unit	Rate Unit	Rate Unit	Stg	Code	1	2
17 Brash	0.484 LB A/A	1 PT/A	SPR AJ	C		0.0 e	0.0 d
18 Huskie	0.184 LB A/A	11 FL OZ/A	SPR BJ	B		0.0 e	0.0 d
NIS	0.5 % V/V	0.5 % V/V	SPR BJ	B		0.0 e	0.0 d
UAN 28%	3.33 % V/V	2 QT/A	SPR BJ	B		0.0 e	0.0 d
19 Huskie	0.25 LB A/A	15 FL OZ/A	SPR BJ	B		0.0 e	0.0 d
NIS	0.5 % V/V	0.5 % V/V	SPR BJ	B		0.0 e	0.0 d
UAN 28%	3.33 % V/V	2 QT/A	SPR BJ	B		0.0 e	0.0 d
20 Untreated Check						0.0 e	0.0 d
LSD (P=.05)	19.35	16.37	6.90	6.57	27.83	21.69	5.78
Standard Deviation	13.68	11.57	4.88	4.65	19.68	15.34	4.08
CV	47.05	48.09	14.51	16.59	26.69	32.6	213.1
Grand Mean	29.08	24.06	33.64	28.02	73.73	47.04	1.92
Bartlett's X2	20.903	9.0	23.797	23.418	23.876	13.161	6.645
P(Bartlett's X2)	0.001*	0.109	0.001*	0.001*	0.032*	0.661	0.355
Replicate F	2.054	1.564	1.314	0.310	3.088	1.031	1.315
Replicate Prob(F)	0.1171	0.2084	0.2791	0.8179	0.0349	0.3862	0.2789
Treatment F	37.153	41.213	372.684	300.216	11.552	14.087	3.209
Treatment Prob(F)	0.0001	0.0001	0.0001	0.0001	0.0001	0.0001	0.0004

Means followed by same letter do not significantly differ (P=.05, LSD)

## Purdue University

Weed Code							LAMPU	POANN	TRZAW	
Crop Code							TRZAW	TRZAW	TRZAW	
Part Rated							PLAQUA P	PLAQUA P	PLAQUA C	
Rating Data Type							CONTRO	CONTRO	PHYGEN	
Rating Unit							%	%	%	
Rating Date							30/Apr/2007	30/Apr/2007	30/Apr/2007	
Crop Stage							3-4 till	3-4 till	3-4 till	
Crop Stage Scale							18-24"	18-24"	18-24"	
Weed Stage							12-18"	4-8"		
Weed Density, Unit							17 YD2	100 YD2		
Assessed By							KW GK VMD	KW GK VMD	KW GK VMD	
Tri-Eval Interval							178 DA-B	178 DA-B	178 DA-B	
Tri No.	Treatment Name	Rate	Rate Unit	Product Rate	Product Rate Unit	Grow Stg	Appl Code	8	9	10
1	Untreated Check							0.0 d	0.0 e	0.0 a
2	Everest (MKH 6562)	0.35	OZ A/A	0.5	OZ/A	FAL 2lf	A	100.0 a	66.3 bc	0.0 a
	Glean	0.188	OZ A/A	0.25	OZ/A	FAL 2lf	A			
	NIS	0.25	% V/V	0.25	% V/V	FAL 2lf	A			
3	Everest (MKH 6562)	0.427	OZ A/A	0.61	OZ/A	FAL 2lf	A	100.0 a	85.8 ab	0.0 a
	Glean	0.225	OZ A/A	0.3	OZ/A	FAL 2lf	A			
	NIS	0.25	% V/V	0.25	% V/V	FAL 2lf	A			
4	Osprey	0.214	OZ A/A	4.75	OZ/A	FAL 2lf	A	97.5 ab	97.5 a	0.0 a
	NIS	0.5	% V/V	0.5	% V/V	FAL 2lf	A			
5	Harmony Extra	0.375	OZ A/A	0.5	OZ/A	FAL 2lf	A	87.0 abc	56.3 cd	0.0 a
	NIS	0.25	% V/V	0.25	% V/V	FAL 2lf	A			
6	Harmony Extra	0.3	OZ A/A	0.4	OZ/A	FAL 2lf	A	97.0 ab	48.3 cd	0.0 a
	NIS	0.25	% V/V	0.25	% V/V	FAL 2lf	A			
	Harmony Extra	0.3	OZ A/A	0.4	OZ/A	SPR BJ	B			
	NIS	0.25	% V/V	0.25	% V/V	SPR BJ	B			
7	Harmony Extra	0.375	OZ A/A	0.5	OZ/A	SPR BJ	B	72.5 bc	37.5 d	0.0 a
	NIS	0.25	% V/V	0.25	% V/V	SPR BJ	B			
8	Everest (MKH 6562)	0.35	OZ A/A	0.5	OZ/A	SPR BJ	B	88.8 abc	47.5 cd	0.0 a
	Glean	0.188	OZ A/A	0.25	OZ/A	SPR BJ	B			
	NIS	0.25	% V/V	0.25	% V/V	SPR BJ	B			
9	Everest (MKH 6562)	0.427	OZ A/A	0.61	OZ/A	SPR BJ	B	88.8 abc	53.8 cd	0.0 a
	Glean	0.225	OZ A/A	0.3	OZ/A	SPR BJ	B			
	NIS	0.25	% V/V	0.25	% V/V	SPR BJ	B			
10	Osprey	0.144	OZ A/A	3.2	OZ/A	SPR BJ	B	72.5 bc	91.3 ab	0.0 a
	NIS	0.5	% V/V	0.5	% V/V	SPR BJ	B			
11	V 10204	0.053	LB A/A	1.41	OZ/A	FAL 2lf	A	96.3 ab	97.5 a	0.0 a
	NIS	0.25	% V/V	0.25	% V/V	FAL 2lf	A			
12	Express	0.0155	LB A/A	0.33	OZ/A	SPR BJ	B	82.5 abc	42.5 cd	0.0 a
	NIS	0.5	% V/V	0.5	% V/V	SPR BJ	B			
13	Osprey	0.144	OZ A/A	3.2	OZ/A	SPR BJ	B	83.3 abc	96.7 a	0.0 a
	Harmony Extra	0.375	OZ A/A	0.5	OZ/A	SPR BJ	B			
	NIS	0.25	% V/V	0.25	% V/V	SPR BJ	B			
14	Axial	0.053	LB A/A	8.2	FL OZ/A	SPR BJ	B	66.3 c	90.0 ab	0.0 a
	Adigor	0.5	% V/V	9.6	FL OZ/A	SPR BJ	B			
	NIS	0.25	% V/V	0.25	% V/V	SPR BJ	B			
15	Brash	0.484	LB A/A	1	PT/A	FAL 2lf	A	100.0 a	36.7 d	0.0 a
16	Brash	0.484	LB A/A	1	PT/A	SPR BJ	B	90.0 abc	36.7 d	0.0 a
17	Brash	0.484	LB A/A	1	PT/A	SPR AJ	C			

# Purdue University

Weed Code								LAMPU	POANN	
Crop Code								TRZAW	TRZAW	TRZAW
Part Rated								PLAQUA P	PLAQUA P	PLAQUA C
Rating Data Type								CONTRO	CONTRO	PHYGEN
Rating Unit								%	%	%
Rating Date								30/Apr/2007	30/Apr/2007	30/Apr/2007
Crop Stage								3-4 till	3-4 till	3-4 till
Crop Stage Scale								18-24"	18-24"	18-24"
Weed Stage								12-18"	4-8"	
Weed Density, Unit								17 YD2	100 YD2	
Assessed By								KW GK VMD	KW GK VMD	KW GK VMD
Tri-Eval Interval								178 DA-B	178 DA-B	178 DA-B
Tri	Treatment	Rate	Rate Unit	Product Rate	Product Rate Unit	Grow Stg	Appl Code	8	9	10
18	Huskie	0.184	LB A/A	11 FL OZ/A	11 FL OZ/A	SPR BJ B	B	98.8 ab	43.8 cd	0.0 a
	NIS	0.5	% V/V	0.5 % V/V	0.5 % V/V	SPR BJ B	B			
	UAN 28%	3.33	% V/V	2 QT/A	2 QT/A	SPR BJ B	B			
19	Huskie	0.25	LB A/A	15 FL OZ/A	15 FL OZ/A	SPR BJ B	B	100.0 a	32.5 d	0.0 a
	NIS	0.5	% V/V	0.5 % V/V	0.5 % V/V	SPR BJ B	B			
	UAN 28%	3.33	% V/V	2 QT/A	2 QT/A	SPR BJ B	B			
20	Untreated Check							0.0 d	0.0 e	0.0 a
LSD (P=.05)								27.04	26.75	0.00
Standard Deviation								19.12	18.72	0.00
CV								23.88	33.55	0.0
Grand Mean								80.06	55.8	0.0
Bartlett's X2								44.003	33.563	0.0
P(Bartlett's X2)								0.001*	0.006*	.
Replicate F								2.949	1.752	0.000
Replicate Prob(F)								0.0414	0.1683	1.0000
Treatment F								9.868	10.696	0.000
Treatment Prob(F)								0.0001	0.0001	1.0000

Means followed by same letter do not significantly differ (P=.05, LSD)