

Weed control options in winter wheat

Trial ID: WT02-17 Study Dir.: Sprague, Stiles, Powell
 Conducted: Campus T-11 Investigator: Christy Sprague

Planting Date: Oct-12-2016 **Row Spacing:** 7.5 IN
Variety: 'Sunburst' red soft wheat **No. of Reps:** 4
Population: 1800000 seeds/A **% OM:** 2.7
Soil Type: L loam **pH:** 7.2
Plot Size: 10 X 35 FT **Study Design:** Randomized Complete Block (RCB)

Tillage/Previous Crops: Conventional
Fertilizer: 200 lbs/A
 urea (90 lbs
 N/A)
 topdressed
 3/10/17

Crop and Weed Description

Weed	Code	Common Name	Scientific Name
1	POAAN	bluegrass, annual	Poa annua
2	STEME	chickweed, common	Stellaria media
3	LAMAM	henbit	Lamium amplexicaule
4	CAPBP	Shepherd's purse	Capsella bursa-pastoris
Crop	Code	Common Name	
1	TRZAW	Winter wheat	

Application Description

Application Timing: A
 POST
Date Treated: Apr-24-2017
Time Treated: 1:28 PM
% Cloud Cover: 5
Air Temp., Unit: 70 F
% Relative Humidity: 38
Wind Speed/Unit/Dir: 8 mph SE
Soil Temp, Unit: 53 F
Leaf Moist/Dew Presence (Y/N): 3
Soil Moist: 3

Crop Stage at Each Application

Crop 1 Name: A
 TRZAW
Height: 12 "
Stage: Feekes 6

Weed Stage at Each Application

Weed 1 Name: A
 POAAN
Height: 1-3 " (2)
Stage: 2L
Weed 2 Name: STEME
Height: 2-6 " (4)
Stage: many
Weed 3 Name: LAMAM
Height: 4-8 " (6)
Stage: 5L
Weed 4 Name: CAPBP
Height: 12 "
Stage: flower

Application Equipment

Appl	Sprayer Type	Ground Speed	Nozzle Type	Nozzle Size	Nozzle Height	Nozzle Spacing	Boom Width	Spray Volume	Carrier	Operation Pressure
A	Cub	3.8 MPH	AIXR	11003	30 "	20 "	100 "	19 GPA	WATER	30 PSI

Comments:

Wheat was very competitive with weeds later during the growing season by 28 DAT weed control was excellent in the untreated control. Also weed control after harvest was excellent, therefore later weed control evaluations are not included.

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Study Director: Sprague, Stiles, Powell

Pest Code	TRZAX	TRZAX	POAAN	STEME	LAMAM	CAPBP
Crop Code	May-1-2017	May-9-2017	May-9-2017	May-9-2017	May-9-2017	May-9-2017
Rating Date	injury	injury	control	control	control	control
Rating Type	percent	percent	percent	percent	percent	percent
Rating Unit	7 DA-A	15 DA-A	15 DA-A	15 DA-A	15 DA-A	15 DA-A
Trt-Eval Interval	0	0	0	0	0	0
Number of Decimals						

Trt No.	Treatment Name	Form Conc	Form Type	Rate	Rate Unit	Appl Code	*	*	*	*	*	*
1	Affinity BroadSpec	50	WG	0.75 oz/a	A	A	0	0	0	100	90	93
1	Surfactant	L		0.25 % v/v	A	A						
1	AMS	WG		2 lb/a	A	A						
2	Huskie	2.06	L	13.5 fl oz/a	A	A	0	0	0	96	86	95
2	Surfactant	L		0.25 % v/v	A	A						
2	AMS	WG		1 lb/a	A	A						
3	Talinor	2.67	L	13.7 fl oz/a	A	A	0	0	0	94	23	85
3	CoAct+	L		2.74 fl oz/a	A	A						
3	Crop oil concentrate	L		1 % v/v	A	A						
4	Quelex	20	WG	0.75 oz/a	A	A	0	0	0	88	99	96
4	Crop oil concentrate	L		1 % v/v	A	A						
5	Untreated						0	0	0	0	0	0
6	2,4-D ester	4	L	1 pt/a	A	A	0	0	0	0	74	86
7	Clarity	4	L	0.25 pt/a	A	A	0	1	0	51	49	83
8	PowerFlex HL	13	WG	2 oz/a	A	A	0	1	85	91	91	66
8	Surfactant	L		0.25 % v/v	A	A						
8	AMS	WG		2 lb/a	A	A						
9	Osprey	4.5	WG	4.75 oz/a	A	A	5	1	89	0	0	0
9	Surfactant	L		0.25 % v/v	A	A						
9	AMS	WG		2 lb/a	A	A						
10	Affinity BroadSpec	50	WG	0.75 oz/a	A	A	0	0	91	95	89	94
10	Osprey	4.5	WG	4.75 oz/a	A	A						
10	Surfactant	L		0.25 % v/v	A	A						
10	AMS	WG		2 lb/a	A	A						
11	Huskie	2.06	L	13.5 fl oz/a	A	A	3	1	88	93	83	95
11	Osprey	4.5	WG	4.75 oz/a	A	A						
11	Surfactant	L		0.25 % v/v	A	A						
11	AMS	WG		1 lb/a	A	A						
12	Talinor	2.67	L	13.7 fl oz/a	A	A	0	0	91	89	62	88
12	Osprey	4.5	WG	4.75 oz/a	A	A						
12	CoAct+	L		2.74 fl oz/a	A	A						
12	Surfactant	L		0.25 % v/v	A	A						
12	AMS	WG		2 lb/a	A	A						
13	Quelex	20	WG	0.75 oz/a	A	A	0	0	86	76	98	93
13	Osprey	4.5	WG	4.75 oz/a	A	A						
13	Surfactant	L		0.25 % v/v	A	A						
13	AMS	WG		2 lb/a	A	A						

* Adjusted means

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Pest Code					POAAN	STEME	LAMAM	CAPBP				
Crop Code		TRZAX	TRZAX									
Rating Date		May-1-2017	May-9-2017		May-9-2017	May-9-2017	May-9-2017	May-9-2017				
Rating Type		injury	injury		control	control	control	control				
Rating Unit		percent	percent		percent	percent	percent	percent				
Trt-Eval Interval		7 DA-A	15 DA-A		15 DA-A	15 DA-A	15 DA-A	15 DA-A				
Number of Decimals		0	0		0	0	0	0				
Trt No.	Treatment Name	Form Conc	Form Type	Rate	Rate Unit	Appl Code	*	*	*	*	*	*
14	Affinity BroadSpec	50	WG	0.75	oz/a	A	0	0	91	94	89	89
14	PowerFlex HL	13	WG	2	oz/a	A						
14	Surfactant		L	0.25	% v/v	A						
14	AMS		WG	2	lb/a	A						
15	Huskie	2.06	L	13.5	fl oz/a	A	0	0	89	89	91	93
15	PowerFlex HL	13	WG	2	oz/a	A						
15	Surfactant		L	0.25	% v/v	A						
15	AMS		WG	1	lb/a	A						
16	Talinor	2.67	L	13.7	fl oz/a	A	0	0	88	91	95	91
16	PowerFlex HL	13	WG	2	oz/a	A						
16	CoAct+		L	2.74	fl oz/a	A						
16	Surfactant		L	0.25	% v/v	A						
16	AMS		WG	2	lb/a	A						
17	Quelex	20	WG	0.75	oz/a	A	3	0	88	86	98	94
17	PowerFlex HL	13	WG	2	oz/a	A						
17	Surfactant		L	0.25	% v/v	A						
17	AMS		WG	2	lb/a	A						
18	WideMatch	1.5	L	1.33	pt/a	A	0	0	0	33	90	85
LSD P=.05							1.0	1.1	10.3	15.0	11.9	15.1
Standard Deviation							0.7	0.8	7.3	10.6	8.3	10.6
CV							129.48	399.88	14.77	15.06	11.46	13.42

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Pest Code			
Crop Code		TRZAX	TRZAX
Rating Date		Jul-17-2017	Jul-17-2017
Rating Type		moisture	yield
Rating Unit		percent	bu/acrr
Trt-Eval Interval		84 DA-A	at 13% M
Number of Decimals		1	1

Trt No.	Treatment Name	Form Conc	Form Type	Rate	Rate Unit	Appl Code	*	*
1	Affinity BroadSpec	50	WG	0.75 oz/a	A		16.1	96.7
1	Surfactant	L		0.25 % v/v	A			
1	AMS	WG		2 lb/a	A			
2	Huskie	2.06	L	13.5 fl oz/a	A		16.0	103.8
2	Surfactant	L		0.25 % v/v	A			
2	AMS	WG		1 lb/a	A			
3	Talinor	2.67	L	13.7 fl oz/a	A		16.2	102.8
3	CoAct+	L		2.74 fl oz/a	A			
3	Crop oil concentrate	L		1 % v/v	A			
4	Quelex	20	WG	0.75 oz/a	A		16.1	100.6
4	Crop oil concentrate	L		1 % v/v	A			
5	Untreated						16.0	105.1
6	2,4-D ester	4	L	1 pt/a	A		15.9	100.1
7	Clarity	4	L	0.25 pt/a	A		16.3	99.8
8	PowerFlex HL	13	WG	2 oz/a	A		15.9	99.1
8	Surfactant	L		0.25 % v/v	A			
8	AMS	WG		2 lb/a	A			
9	Osprey	4.5	WG	4.75 oz/a	A		15.9	96.9
9	Surfactant	L		0.25 % v/v	A			
9	AMS	WG		2 lb/a	A			
10	Affinity BroadSpec	50	WG	0.75 oz/a	A		15.8	101.1
10	Osprey	4.5	WG	4.75 oz/a	A			
10	Surfactant	L		0.25 % v/v	A			
10	AMS	WG		2 lb/a	A			
11	Huskie	2.06	L	13.5 fl oz/a	A		15.4	95.3
11	Osprey	4.5	WG	4.75 oz/a	A			
11	Surfactant	L		0.25 % v/v	A			
11	AMS	WG		1 lb/a	A			
12	Talinor	2.67	L	13.7 fl oz/a	A		16.2	109.1
12	Osprey	4.5	WG	4.75 oz/a	A			
12	CoAct+	L		2.74 fl oz/a	A			
12	Surfactant	L		0.25 % v/v	A			
12	AMS	WG		2 lb/a	A			
13	Quelex	20	WG	0.75 oz/a	A		16.0	99.8
13	Osprey	4.5	WG	4.75 oz/a	A			
13	Surfactant	L		0.25 % v/v	A			
13	AMS	WG		2 lb/a	A			

* Adjusted means

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Rating Date	Jul-17-2017	Jul-17-2017
Rating Type	moisture	yield
Rating Unit	percent	bu/acrr
Trt-Eval Interval	84 DA-A	at 13% M
Number of Decimals	1	1

Trt No.	Treatment Name	Form Conc	Form Type	Rate	Rate Unit	Appl Code	*	*
14	Affinity BroadSpec	50	WG	0.75	oz/a	A	15.9	101.1
14	PowerFlex HL	13	WG	2	oz/a	A		
14	Surfactant	L		0.25	% v/v	A		
14	AMS	WG		2	lb/a	A		
15	Huskie	2.06	L	13.5	fl oz/a	A	15.3	97.8
15	PowerFlex HL	13	WG	2	oz/a	A		
15	Surfactant	L		0.25	% v/v	A		
15	AMS	WG		1	lb/a	A		
16	Talinor	2.67	L	13.7	fl oz/a	A	16.1	102.1
16	PowerFlex HL	13	WG	2	oz/a	A		
16	CoAct+	L		2.74	fl oz/a	A		
16	Surfactant	L		0.25	% v/v	A		
16	AMS	WG		2	lb/a	A		
17	Quelex	20	WG	0.75	oz/a	A	15.7	99.5
17	PowerFlex HL	13	WG	2	oz/a	A		
17	Surfactant	L		0.25	% v/v	A		
17	AMS	WG		2	lb/a	A		
18	WideMatch	1.5	L	1.33	pt/a	A	15.9	97.9
	LSD P=.05						0.57	9.66
	Standard Deviation						0.40	6.81
	CV						2.5	6.77

* Adjusted means