

Headline and Apogee in Wheat.

Project Code: 06-8B-S60 Location: Belleville Research Center
Investigator: Bryan Young

Investigator: Bryan Young, Associate Professor, Southern Illinois University

City State Zip Country: Belleville IL 62221 USA
Trial Status: Final Updated: 7-5-06

Objective:

Evaluate Headline and Apogee for use in intensive wheat management.

Weed Code	Common Name	Scientific Name
1.	STEME chickweed, common	Stellaria media (L.) Vill.
2.	LAMAM henbit	Lamium amplexicaule L.

Crop 1:	TRZAW wheat, winter	Variety:	P25R78
Planting Method:	Seeded	Planting Date:	10-7-05
Rate:	1.3 mil. S/A	Depth:	1.0 IN
Row Spacing:	7.5 IN		

Plot Width, Unit:	10 FT	Plot Length, Unit:	28 FT	Reps:	3
Tillage Type:	Reduced-Till	Study Design:	Randomized complete block		
Previous Crop, Year:	GLXMA, 2005				
Field Prep./Maintenance:	N 30 LB/A applied on 10-6-05 and N 85 LB/A applied on 2-6-06.				

Soil Name:	Weir	% OM:	1.8	pH:	6	CEC:	10
Texture:	Silt loam	Fert. Level:	P1: 79 LB/A, K: 418 LB/A				

APPLICATION DESCRIPTION

	A	B	C
Application Date:	4-1-06	4-1-06	4-19-06
Time of Day:	9:00	9:00	10:00
Application Method:	Hand spread	Spray	Spray
Application Timing:	FK5	FK5	FK9
Applic. Placement:	BROFOL	BROFOL	BROFOL
Air Temp., Unit:	55 F	55 F	70 F
% Relative Humidity:	70	70	65
Wind Velocity, Unit:	3 MPH	3 MPH	0 MPH
Soil Moisture:	ABONOR	ABONOR	NORMAL

CROP STAGE AT EACH APPLICATION

	A	B	C
Crop 1 Code, Stage:	TRZAW F5	TRZAW F5	TRZAW F9
Height, Unit:	6-8 IN	6-8 IN	24-26 IN

WEED STAGE AT EACH APPLICATION

	A	B	C
Weed 1 Code:		STEME	
Stage (leaves):		10+	
Height (inches):		1-3	
Density:		Low	
Weed 2 Code:		LAMAM	
Stage (leaves):		10+	
Height (inches):		3-5	
Density:		Low	

APPLICATION EQUIPMENT

	A	B	C
Appl. Equipment:	Hand spread	CO2 sprayer	CO2 sprayer
Operating Pressure:	NA	40 PSI	40 PSI
Nozzle Type:	NA	Flat fan	Flat fan
Nozzle Size:	NA	8002	8002
Boom Length, Unit:	10 FT	7.5 FT	7.5 FT
Spray Volume, Unit:	NA NA	20 GPA	20 GPA

NOTES:

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Weed Code
Crop Code
Rating Data Type
Rating Unit
Rating Date
Trt-Eval Interval
STEME
TRZAW TRZAW TRZAW TRZAW TRZAW TRZAW TRZAW TRZAW
Moisture Test wt. Yield Disease Disease Disease Disease HEIRED Control
Percent lb/bu bu/A % Incid % Sever % Incid % Sever Percent Percent
6-14-06 6-14-06 6-14-06 4-22-06 4-22-06 5-10-06 5-10-06 4-29-06 4-29-06
21 DA-B 21 DA-B 21 DA-C 21 DA-C 28 DA-B 28 DA-B

Table with columns: Trt No., Treatment Name, Form Conc, Form Type, Rate, Rate Unit, Prod Rate, Prod Unit, Grow Stg, Appl Code, TRZAW Moisture Percent, TRZAW Test wt. lb/bu, TRZAW Yield bu/A, TRZAW Disease % Incid, TRZAW Disease % Sever, TRZAW Disease % Incid, TRZAW Disease % Sever, HEIRED Percent, Control Percent. Rows include treatments 1-10 and LSD, Replicate F, Treatment F statistics.

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Table with columns: Weed Code, Crop Code, Rating Data Type, Rating Unit, Rating Date, Trt-Eval Interval, LAMAM, Control Percent, TRZAW HeadScab, TRZAW HeadScab, TRZAW GlumeBch, TRZAW GlumeBch, TRZAW LeafBch, TRZAW LeafBch, TRZAW TanSpot. Includes treatment details like HARMONY EXTRA, HEADLINE, and ACTIVATOR 90.

Main table with 17 columns: Trt No., Treatment Name, Form Conc, Form Type, Rate, Rate Unit, Prod Rate, Prod Unit, Grow Stg, Appl Code, and 8 TRZAW metrics (Incidence, % Sever, % Incid, % Sever, % Incid, % Sever, % Incid, % Sever). Lists treatments 1-10 and their associated data.

LSD (P=.05)

Summary table for LSD (P=.05) with 8 columns corresponding to the TRZAW metrics in the main table, showing values for LSD and various F-values (Replicate F, Replicate Prob(F), Treatment F, Treatment Prob(F)).

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Weed Code
 Crop Code
 Rating Data Type
 Rating Unit
 Rating Date
 Trt-Eval Interval

TRZAW TRZAW TRZAW
 TanSpot BYD BYD
 % Sever % Incid % Sever
 5-22-06 5-22-06 5-22-06

Trt No.	Treatment Name	Form Conc	Form Type	Rate	Rate Unit	Prod Rate	Prod Unit	Grow Stg	Appl Code			
1	HARMONY EXTRA	75	WG	0.0234	lb ai/a	0.5	oz/a	FK5	B	17	27	17
1	ACTIVATOR 90	100	LIQ	0.25	% v/v	0.25	% v/v	FK5	B			
2	HARMONY EXTRA	75	WG	0.0234	lb ai/a	0.5	oz/a	FK5	B	6	17	17
2	HEADLINE	2.09	EC	0.049	lb ai/a	3.0	fl oz/a	FK5	B			
2	ACTIVATOR 90	100	LIQ	0.25	% v/v	0.25	% v/v	FK5	B			
3	HARMONY EXTRA	75	WG	0.0234	lb ai/a	0.5	oz/a	FK5	B	3	12	15
3	HEADLINE	2.09	EC	0.098	lb ai/a	6.0	fl oz/a	FK5	B			
3	ACTIVATOR 90	100	LIQ	0.25	% v/v	0.25	% v/v	FK5	B			
4	HARMONY EXTRA	75	WG	0.0234	lb ai/a	0.5	oz/a	FK5	B	2	10	18
4	HEADLINE	2.09	EC	0.049	lb ai/a	3.0	fl oz/a	FK5	B			
4	ACTIVATOR 90	100	LIQ	0.25	% v/v	0.25	% v/v	FK5	B			
4	HEADLINE	2.09	EC	0.098	lb ai/a	6.0	fl oz/a	FK9	C			
4	ACTIVATOR 90	100	LIQ	0.125	% v/v	0.125	% v/v	FK9	C			
5	HARMONY EXTRA	75	WG	0.0234	lb ai/a	0.5	oz/a	FK5	B	1	30	22
5	ACTIVATOR 90	100	LIQ	0.25	% v/v	0.25	% v/v	FK5	B			
5	HEADLINE	2.09	EC	0.098	lb ai/a	6.0	fl oz/a	FK9	C			
5	ACTIVATOR 90	100	LIQ	0.125	% v/v	0.125	% v/v	FK9	C			
6	FERTILIZER 46-0-0	46	DRY	25	lb ai/a	54.3	lb/a	FK5	A	22	15	12
6	HARMONY EXTRA	75	WG	0.0234	lb ai/a	0.5	oz/a	FK5	B			
6	ACTIVATOR 90	100	LIQ	0.25	% v/v	0.25	% v/v	FK5	B			
7	FERTILIZER 46-0-0	46	DRY	25	lb ai/a	54.3	lb/a	FK5	A	3	8	12
7	HARMONY EXTRA	75	WG	0.0234	lb ai/a	0.5	oz/a	FK5	B			
7	APOGEE	27.5	WG	0.0344	lb ai/a	2.0	oz/a	FK5	B			
7	ACTIVATOR 90	100	LIQ	0.25	% v/v	0.25	% v/v	FK5	B			
7	HEADLINE	2.09	EC	0.098	lb ai/a	6.0	fl oz/a	FK9	C			
7	ACTIVATOR 90	100	LIQ	0.125	% v/v	0.125	% v/v	FK9	C			
8	FERTILIZER 46-0-0	46	DRY	25	lb ai/a	54.3	lb/a	FK5	A	2	6	10
8	HARMONY EXTRA	75	WG	0.0234	lb ai/a	0.5	oz/a	FK5	B			
8	APOGEE	27.5	WG	0.069	lb ai/a	4.0	oz/a	FK5	B			
8	ACTIVATOR 90	100	LIQ	0.25	% v/v	0.25	% v/v	FK5	B			
8	HEADLINE	2.09	EC	0.098	lb ai/a	6.0	fl oz/a	FK9	C			
8	ACTIVATOR 90	100	LIQ	0.125	% v/v	0.125	% v/v	FK9	C			
9	NONTREATED									17	27	23
10	FERTILIZER 46-0-0	46	DRY	25	lb ai/a	54.3	lb/a	FK5	A	3	7	15
10	HARMONY EXTRA	75	WG	0.0234	lb ai/a	0.5	oz/a	FK5	B			
10	ACTIVATOR 90	100	LIQ	0.25	% v/v	0.25	% v/v	FK5	B			
10	HEADLINE	2.09	EC	0.098	lb ai/a	6.0	fl oz/a	FK9	C			
10	ACTIVATOR 90	100	LIQ	0.125	% v/v	0.125	% v/v	FK9	C			
LSD (P=.05)										8.8	14.9	7.8
Replicate F										0.061	4.365	2.300
Replicate Prob(F)										0.9413	0.0285	0.1289
Treatment F										6.754	3.192	2.709
Treatment Prob(F)										0.0003	0.0173	0.0344

Trial Comments

1. Protocol: BASF.
2. Ratings: WC 28 DA FK5; disease incidence and severity 21 DA fungicide treatments;
3. Yield.
4. Application codes: FK5 and FK9 are wheat Feekes stage 5 and 9, respectively.
5. Fertilizer application is 10 FT wide.
6. % Incid = Percent incidence. % Sever = Percent severity. HeadScab = Head scab.
 GlumeBch = Glume blotch. LeafBch = Leaf Blotch. TanSpot = Tan spot. BYD = Barley yellow dwarf.
 DA-B = Days after FK5 application. DA-C = Days after FK9 application.
7. There was no rust detected in any plots on 5-22-06.
8. Harvested 6-14-06, (7) 7.5 inch rows by 25 ft.