

Bayer and DuPont Foliar Fungicides in Wheat.

Project Code: 07-23M-W70 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: 1-23-08

Objective:

Evalauate Bayer and DuPont foliar fungicides for control of wheat foliar and head diseases.

Crop 1: TRZAW wheat, winter Variety: P25R78
 Planting Method: Seeded Planting Date: 10-12-06
 Rate: 1.3 mil. S/A Depth: 1.0 IN
 Row Spacing: 7.5 IN

Plot Width, Unit: 10 FT Plot Length, Unit: 30 FT Reps: 4
 Tillage Type: Reduced-Till Study Design: Randomized complete block
 Previous Crop, Year: GLXMA, 2006
 Field Prep./Maintenance: N 30 LB/A applied on 10-10-06 and N 85 LB/A applied on 1-30-07.

Soil Name: Rushville % OM: 1.9 pH: 6.6 CEC: 8
 Texture: Silt loam Fert. Level: P1: 98 LB/A, K: 362 LB/A

APPLICATION DESCRIPTION

	A	B
Application Date:	4-24-07	5-7-07
Time of Day:	13:00	8:00
Application Method:	Spray	Spray
Application Timing:	FK9	FK10.5
Applic. Placement:	BROFOL	BROFOL
Air Temp., Unit:	82 F	54 F
% Relative Humidity:	48	91
Wind Velocity, Unit:	5 MPH	0 MPH
Soil Moisture:	NORMAL	ABONOR

CROP STAGE AT EACH APPLICATION

	A	B
Crop 1 Code, Stage:	TRZAW F9	TRZAW F10.5
Height, Unit:	18-20 IN	28-30 IN

APPLICATION EQUIPMENT

	A	B
Appl. Equipment:	CO2 sprayer	CO2 sprayer
Operating Pressure:	40 PSI	40 PSI
Nozzle Type:	See note	See note
Nozzle Size:	XR 8001 Twin	XR 8001 Twin
Boom Length, Unit:	7.5 FT	7.5 FT
Spray Volume, Unit:	15 GPA	15 GPA

NOTES:

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

TRZAW TRZAW TRZAW TRZAW TRZAW TRZAW TRZAW TRZAW
 Moisture Test wt. Yield DON TanSpot TanSpot LeafBch LeafBch
 Percent lb/bu bu/A ppm Percent Percent Percent Percent
 6-20-07 6-20-07 6-20-07 6-20-07 5-15-07 5-25-07 5-15-07 5-25-07
 21 DA-A 31 DA-A 21 DA-A 31 DA-A

Trt No.	Treatment Name	Form Conc	Form Type	Rate	Rate Unit	Prod Rate	Prod Unit	Grow Stg	Appl Code	Moisture Percent	Test wt. lb/bu	Yield bu/A	DON ppm	TanSpot Percent	TanSpot Percent	LeafBch Percent	LeafBch Percent
1	NONTREATED									11.7 ab	56.6 bc	74 d	2.30 b	0 a	2 a	8 ab	7 ab
2	STRATEGO	2.08	EC	0.162	lb ai/a	10	fl oz/a	FK9	A	11.7 ab	57.8 a	76 cd	2.20 b	0 a	1 bc	5 c	3 c
3	ABSOLUTE	4	L	0.156	lb ai/a	5	fl oz/a	FK9	A	11.7 ab	57.5 ab	76 cd	2.25 b	0 a	1 ab	5 c	3 c
4	PROSARO	3.5	SC	0.178	lb ai/a	6.5	fl oz/a	FK9	A	11.6 b	57.0 abc	76 cd	2.13 b	0 a	1 bc	6 abc	2 c
4	ACTIVATOR 90	100	LIQ	0.125	% v/v	0.125	% v/v	FK9	A								
5	PROSARO	3.5	SC	0.178	lb ai/a	6.5	fl oz/a	FK10.5	B	11.9 a	57.8 a	83 a	0.58 c	0 a	0 c	5 c	3 c
5	ACTIVATOR 90	100	LIQ	0.125	% v/v	0.125	% v/v	FK10.5	B								
6	HEADLINE	2.09	EC	0.098	lb ai/a	6.0	fl oz/a	FK9	A	11.8 ab	57.1 abc	81 ab	2.88 a	0 a	0 c	6 bc	2 c
6	ACTIVATOR 90	100	LIQ	0.125	% v/v	0.125	% v/v	FK9	A								
7	QUILT	1.67	F	0.183	lb ai/a	14.0	fl oz/a	FK9	A	11.7 ab	57.8 a	78 bcd	2.25 b	0 a	0 c	8 ab	2 c
8	PUNCH	3.06	EC	0.096	lb ai/a	4.0	fl oz/a	FK9	A	11.8 ab	57.2 abc	78 bc	2.35 b	0 a	0 bc	5 c	2 c
9	PUNCH	3.06	EC	0.072	lb ai/a	3.0	fl oz/a	FK9	A	11.8 ab	57.1 abc	76 cd	2.25 b	0 a	1 bc	6 abc	4 bc
9	DPX-YT669	8	L			4.0	fl oz/a	FK9	A								
10	NONTREATED									11.6 b	56.4 c	76 cd	2.08 b	0 a	2 a	8 a	8 a
LSD (P=.05)										0.24	0.92	3.8	0.363	0.0	0.8	2.3	3.1
Replicate F										0.957	3.941	4.319	0.648	0.000	1.707	8.882	0.624
Replicate Prob(F)										0.4271	0.0188	0.0130	0.5910	1.0000	0.1891	0.0003	0.6055
Treatment F										1.089	2.416	4.018	21.889	0.000	6.222	2.832	4.561
Treatment Prob(F)										0.4025	0.0369	0.0024	0.0001	1.0000	0.0001	0.0175	0.0010

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

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Weed Code	TRZAW	TRZAW	TRZAW	TRZAW	TRZAW	TRZAW
Crop Code	GlumeBch	GlumeBch	Scab	Scab	BYD	Rust
Rating Data Type	Percent	Percent	Percent	Percent	Percent	Percent
Rating Unit	5-15-07	5-25-07	5-15-07	5-25-07	5-25-07	5-25-07
Rating Date	21 DA-A	31 DA-A	21 DA-A	31 DA-A	31 DA-A	31 DA-A
Trt-Eval Interval						

Trt No.	Treatment Name	Form Conc	Form Type	Rate	Rate Unit	Prod Rate	Prod Unit	Grow Stg	Appl Code	GlumeBch	GlumeBch	Scab	Scab	BYD	Rust
1	NONTREATED									4 ab	10 abc	2 abc	8 ab	6 ab	1 a
2	STRATEGO	2.08	EC	0.162	lb ai/a	10	fl oz/a	FK9	A	5 a	8 abc	2 ab	11 ab	8 ab	0 bc
3	ABSOLUTE	4	L	0.156	lb ai/a	5	fl oz/a	FK9	A	3 ab	10 ab	3 a	13 a	5 ab	0 bc
4	PROSARO	3.5	SC	0.178	lb ai/a	6.5	fl oz/a	FK9	A	4 ab	5 cd	1 abc	11 ab	10 ab	0 c
4	ACTIVATOR 90	100	LIQ	0.125	% v/v	0.125	% v/v	FK9	A						
5	PROSARO	3.5	SC	0.178	lb ai/a	6.5	fl oz/a	FK10.5	B	2 b	4 d	0 c	2 c	5 ab	0 bc
5	ACTIVATOR 90	100	LIQ	0.125	% v/v	0.125	% v/v	FK10.5	B						
6	HEADLINE	2.09	EC	0.098	lb ai/a	6.0	fl oz/a	FK9	A	3 ab	5 cd	1 abc	7 b	7 ab	0 bc
6	ACTIVATOR 90	100	LIQ	0.125	% v/v	0.125	% v/v	FK9	A						
7	QUILT	1.67	F	0.183	lb ai/a	14.0	fl oz/a	FK9	A	5 a	6 cd	2 abc	9 ab	10 a	0 bc
8	PUNCH	3.06	EC	0.096	lb ai/a	4.0	fl oz/a	FK9	A	5 a	6 bcd	1 bc	11 ab	4 b	0 c
9	PUNCH	3.06	EC	0.072	lb ai/a	3.0	fl oz/a	FK9	A	4 ab	6 bcd	1 bc	7 bc	8 ab	1 abc
9	DPX-YT669	8	L			4.0	fl oz/a	FK9	A						
10	NONTREATED									5 a	12 a	2 abc	8 ab	6 ab	1 ab
LSD (P=.05)										2.5	4.3	1.7	5.2	6.3	0.7
Replicate F										1.074	2.735	0.424	4.662	3.692	1.887
Replicate Prob(F)										0.3766	0.0631	0.7373	0.0094	0.0239	0.1556
Treatment F										1.636	2.968	1.539	3.066	0.989	1.742
Treatment Prob(F)										0.1548	0.0137	0.1846	0.0116	0.4718	0.1276

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

Trial Comments

1. Protocol: Bayer (B4B), DuPont.
2. Ratings: C/DI/DS 7 + 21 DA"B"; Rate for cereal head separately.
3. Yield - save grain samples for DON level testing and % kernel infection.
4. Treatments 8 + 9 are crop destruct.
5. Blanket Harmony Extra (0.5 oz) plus Warrior (2.6 oz) plus NIS (0.25%) was applied on 3-28-2007.
6. HeadScab = Head scab. GlumeBch = Glume blotch. LeafBch = Leaf Blotch. TanSpot = Tan spot. BYD = Barley yellow dwarf.
 DA-A = Days after FK9 application.
 Ratings at 21 and 31days after FK9 application were also 8 and 18 days after the FK10.5 application.
7. Harvested 6-20-07, (7) 7.5 inch rows by 27 ft.