Project Title: Fungicide Evaluation in Spring Wheat - 2013

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Objective: To evaluate the effects of fungicide and application timing on stripe rust control in spring wheat.

Results:

Seven fungicide treatments were evaluated for stripe rust control in spring wheat. The experimental design was a randomized complete block with three replications. The variety Hank was planted at a rate of 80 lb/A on April 16. Applications were made at the two tiller stage (2T) on May 31 and at the flag leaf stage (FL) on June 11.

Crop injury was minor with all treatments, ranging from 0.0% to 6.7% on June 7, and 0.0% to 5.0% on June 14 (Table 2). Significant differences were observed among fungicide treatments for the control of stripe rust. The flag leaf application timing provided the most complete control of stripe rust. Although percent stripe rust control differed between application timings, no significant differences were observed in yield, percent protein, test weight or falling numbers.

Summary:

These results confirm that early fungicide applications fail to provide effective disease control.

Table 1. Material and Methods - Fungicide evaluation in spring wheat - 2013

Seeding Date:	4/16/13	Fertilizer:	150-40-110-20
Julian Date:	106	Herbicide:	5/20/13
Seeding Rate:	80 lb/A		Affinity TankMix 0.6 OZ/A, MCPE
Previous Crop:	Barley		0.5 PT/A, Axial 16.4 FL OZ/A
Tillage:	Conventional	Insecticide:	6/27/13
Irrigation:	None		Warrior II 1.5 FL OZ/A
Soil Type:	Creston Sil	Harvest Date:	8/19/13
Soil Test:	151-10-278-58	Julian Date:	231

Table 2. Fungicide evalution for crop tolerance and stripe rust control in spring wheat - 2013.

Treatment		Rate		Timing	Crop injury 6/7 ———%———	Crop injury 6/14 ———%———	SR 7/15 %	YLD bu/A	PRO %	TWT lb/bu	FN sec
1	Check				3.3	0.0	93.0	82.6	13.5	56.3	293
2	Stratego	4	FL OZ/A	2T	3.3	0.0	85.3	86.5	13.3	56.9	291
3	Quilt	13.7	FL OZ/A	2T	6.7	3.3	72.0	82.8	13.2	56.8	302
4	Prosaro 421	6.5	FL OZ/A	2T	6.7	3.3	61.0	86.7	13.4	56.9	294
	Induce 90	0.125	% V/V								
5	Stratego YLD	4	FL OZ/A	2T	0.0	0.0	65.3	92.5	13.3	57.7	276
	Induce 90	0.125	% V/V								
6	Quilt	13.7	FL OZ/A	FL	3.3	1.7	6.7	98.9	13.8	58.1	294
7	Prosaro 421	6.5	FL OZ/A	FL	1.7	1.7	6.7	93.5	13.6	58.4	301
	Induce 90	0.125	% V/V								
8	Stratego YLD	4	FL OZ/A	FL	3.3	5.0	8.0	85.2	13.2	58.5	304
	Induce 90	0.125	% V/V								
	Mean				3.5	1.9	49.8	88.6	13.4	57.5	294.4
	CV				152.5	158.0	16.9	8.1	3.0	1.6	7.0
	LSD				9.5	5.2	14.7	12.6	0.7	1.6	36.3
	PR>F				0.8012	0.3623	0.0001	0.1367	0.6278	0.0706	0.7937

2T: two tiller, FL: flagleaf, SR: stripe rust, YLD: yield, PRO: protein, TWT: test weight, FN: falling number