Project Title: Fungicide Evaluations in Spring Wheat

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Objective: To evaluate fungicides for stripe rust control in spring wheat

Results:

Registered and experimental fungicides were evaluated for stripe rust control in McNeal spring wheat. The commercially available fungicides included Headline, Quilt, and Stratego, while BAS 556 represented new chemistry.

Spring wheat was seeded to a depth of two inches on April 29, at a rate of 50 lb/A. The fungicide treatments were applied on June 23 when spring wheat was in the flag leaf stage of development. Treatments were applied using a CO_2 backpack sprayer with Teejet XR11002 nozzles in 20 GPA of water.

Spring wheat vigor ratings were taken at the time of application as were initial stripe rust disease ratings. Thereafter, plots were evaluated for stripe rust control every two weeks until leaf senescence was complete. Spring wheat yield and test weight were determined at crop maturity.

Abnormally cool temperatures prevented stripe rust from developing in 2008. As a result treatment differences were not observed for any of the response variables. None of the fungicides appear to have resulted in crop injury.

Summary:

Stripe rust failed to develop which prevented an assessment of fungicide efficacy. However, all materials tested appear to have good crop tolerance.

Future plan:

Continued to evaluate fungicides for major cereal diseases in district 1.

Table 1. Effect of fungicides on disease control and yield in spring wheat at Kalispell, MT.

Treatment	Rate	Vigor	Stripe rust		Heading	Yield	Test weight
	lb ai/A	(%)	(%)		Julian	bu/A	lb/bu
			6/23/08	8/4/08			
Headline	0.098	95	0	0	185	69.60	60.83
BAS 556	0.096	93	0	0	185	66.50	60.80
BAS 556	0.123	90	0	0	185	61.80	60.77
Quilt	0.136	92	0	0	185	74.70	61.07
Quilt	0.182	96	0	0	185	74.50	61.03
Stratego	0.114	90	0	0	185	66.00	60.53
Stratego	0.162	93	0	0	185	72.00	61.30
Check	0.000	96	0	0	185	71.00	60.93
Treatment Prob (F)		0.89	1	1	1	0.81	0.46
LSD (P=0.05)		12.67	0	0	0	19.16	0.69
CV		7.74	0	0	0	15.74	0.65