HRS Wheat Response to Foliar Fungicides, Carrington, 2008

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The field study was conducted at the NDSU Carrington Research Extension Center on a Heimdahl-Emrich loam soil. Experimental design was a randomized complete block with four replications. 'Glenn' HRS wheat was seeded at 1.6 million seeds/A on April 29, 2008, with spring wheat as the previous crop. Early-season fungicides were applied using a CO_2-hand-boom plot sprayer delivering 14 gal/A at 35 psi through 8001 flat-fan nozzles on June 10 with 62° F, 60% RH, 14 mph wind to 4-leaf wheat. Late-season fungicides were applied using 8002 twin jet nozzles on July 4 with 74° F, 54% RH, and no wind to early-flowering (Feekes 10.5.1) wheat. Leaf spot disease was visually evaluated by examining 10 plants/stop with two stops/plot. The trial was harvested with a plot combine on August 19.

Leaf rust was not observed and very low levels of Fusarium head blight were present (evaluated July 31) in the trial. Leaf spot incidence and severity generally were similar among fungicide treatments (Table 1). Wheat seed yield and quality were similar among treatments, although yield tended to improve with fungicides compared to the untreated check.

Table. HRS wheat response to foliar fungicides. Carrington

	Fungicide		Leafspot disease (%)				Wheat seed		
Treatment[1]	Rate/A	Timing	incid-ence	sever-ity	incid-ence	Yield	Test Weight	Kernel Weight	Protein
	fl oz	wheat stage	20-Jun		28-Jul	bu/A	lb/bu	seeds/lb	%
untreated check	x	x	3	14	8	45.6	63.3	15121	15.7
Headline	3	4 leaf	1	12	4	51.8	63.6	15133	15.5
Quilt	7	4 leaf	3	7	5	47.2	63.4	15263	16.0
Headline/ Proline+Folicur	3/3+3	4 leaf/ early flower	2	13	5	51.9	63.6	14877	15.8
Folicur	4	early flower	x	x	9	52.9	63.3	15368	15.6
Proline	5	early flower	x	x	6	52.8	63.9	14957	15.4
Caramba	10	early flower	x	x	5	55.0	63.8	14719	15.4
Proline+Folicur	3+3	early flower	x	x	7	49.4	63.4	15140	15.8
mean			2.17	11.42	6	50.82	63.54	15072	15.7
C.V. (%)			108.79	102.9	27.4	11.26	0.65	3.05	2.6
LSD (0.05)			NS	NS	3	NS	NS	NS	NS

[1]Fungicide treatments include NIS (Induce) at 0.125% v/v.