

Management of Hard Red Spring Wheat Diseases with Foliar Fungicides

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Objective: To evaluate the efficacy of available foliar fungicides to manage foliar and head scab diseases in hard red spring wheat.

Methodology:

Location: NCREC, Minot, ND

GPS Coordinates: N: 48.18023 W: -101.30244

Previous Crop: Hard Red Spring Wheat

Tillage: Conventional Tillage

Design: Randomized Complete Block Design with 5 replications

Plot Dimensions: 10*30 sq. ft.

Cultivar: Elgin ND

Planting Date: May 22, 2014

Seed Rate: 90 lbs/ac

Diseases to Evaluate: Tan Spot, Septoria Leaf Spot, Rust and Fusarium Head Scab

Inoculation Methods: None

Diseases observed: Among foliar disease only Tan Spot incidence and severity were in significant amounts. Fusarium Head Scab was the major Head Disease in this trial.

Other Practices: All the agronomic practices such as fertilizers, weedicides were applied at recommended timings of the crop season as per the crop production recommended practices.

Fungicides Timing: First Spray at early tillering stage along with herbicides (due to excessive wet conditions application was delayed); second spray (Aproach Prima) at feeks 9.

Harvest Date: September 22, 2014

Results:

Table 1: Efficacy of various fungicides in managing tan spot and Fusarium head scab and their impact on yield of hard red spring wheat cultivar Elgin.

Treatments	Dosage@ Fl. oz/ac	Tan Spot Incidence*	Tan Spot Severity*	FHB Incidence*	FHB Severity*	Yield in (bu /ac)
Non-Treated	--	55.6	5.47	23	10.27	38.6
QuiltXcel	5	49.4	3.82	9	6.17	39.4
Aproach	3	53.2	4.68	10.6	5.09	40
Tilt	4	51.2	10.94	12.4	6.83	39
Folicur	4	51.6	4.15	11.2	8.23	38.6
Aproach Prima*	6.8	50.4	4.48	9.0	6.32	40.6
Aproach + Aproach Prima*	3 6.8	42.6	3.71	6.8	2.9	42.2
LSD (P=.05)	--	4.17	0.82	4.33	4.78	3.2
CV%	--	6.31	14.25	33.39	29.75	6.17

* Treatments applied at feeks 9 with Non-Ionic Surfactant @ 0.25% v/v added to them.