NDSU Carrington Research Extension Center
2009
Evaluation of Fungicide Application Strategies for Disease Control in Barley

Trmt. ID	Fungicide Treatment	Product Rate	Application Timing	Flag Leaf Disease[1]	Plump >6/64	Thin <5/64	Grain Protein	Test Weight	Grain Yield
		(unit/acre)		%	%	%	%	lb/bu	bu/ac
1	Untreated Check	NA	NA	34.8	97.8	1.6	11.9	48.6	82.2
2	Headline	3.0 fl oz	4 to 5 Leaf	21.5	97.8	1.6	12.0	48.2	87.6
3	Stratego	4.0 fl oz	4 to 5 Leaf	21.3	97.6	1.6	12.0	48.1	81.9
4	Quilt	7.0 fl oz	4 to 5 Leaf	14.0	98.0	1.3	11.9	48.2	90.2
5	Tilt	4.0 fl oz	Flag Leaf	13.0	98.0	1.4	12.1	48.4	85.9
6	Stratego / Prosaro + NIS	4.0 fl oz / 6.5 fl oz + 0.125% v/v	4 to 5 Leaf / Feekes 10.5	3.0	97.9	1.4	12.1	48.1	95.4
7	Headline / Caramba	3.0 fl oz / 13.5 fl oz	4 to 5 Leaf / Feekes 10.5	6.0	98.0	1.3	11.8	48.0	97.2
8	Prosaro + NIS	6.5 fl oz + 0.125% v/v	Feekes 10.50	3.0	98.1	1.3	12.2	48.8	94.6
9	Caramba	13.5 fl oz	Feekes 10.50	5.5	97.8	1.5	12.0	48.3	92.9
10	Polyversum / Prosaro + NIS	3.0 oz / 6.5 fl oz + 0.125% v/v	Flag Leaf / Feekes 10.5	2.5	98.3	1.2	12.4	48.8	97.2
			MEAN	12.5	97.9	1.4	12	48.3	90.5
			C.V. %	29.9	0.3	15.8	2.4	1.1	8.4
			LSD .05	5.4	NS	NS	NS	NS	11.1
			LSD .01	7.3	NS	NS	NS	NS	NS
			#REPS	4	4	4	4	4	4

Objective: Evaluate a series of potential fungicide application strategies for disease management in barley.

Planting Date = May 6; Harvest Date = August 24; Previous Crop = Spring Wheat

** Stellar-ND was the barley variety planted within fungicide trial.

** The 2009 growing season was below average in both temperature and rainfall, plant disease pressure was minimal.

[1] Flag leaf disease ratings were taken when barley was at the medium dough stage.