

Title: Effect of Nexicor on stripe rust control in winter wheat, Kalispell MT - 2017

Objective: Evaluate fungicides for crop tolerance and stripe rust control in winter wheat.

Materials and Methods:

Colter winter wheat was planted with a SeedMaster no-till air-drill on September 30, 2016 along with a fertilizer drill-blend of N-P-K at 0-30-70 lb/A, respectively. A supplemental fertilizer application of 75-0-40 was broadcast to the winter wheat crop on May 1, 2017. Huskie Complete was applied at 13.7 oz/A on May 9, 2017 to control weeds. Fungicide treatments were applied at the flag leaf stage on May 31 using a CO2 backpack sprayer equipped with TeeJet XR11002 nozzles in a volume of 20 GPA. Less than two percent of the crop showed signs of infection at this time.

Results:

All treatments afforded excellent crop tolerance. Similarly, all treatments provided excellent control of stripe rust. However, Priaxor plus Tilt afforded the least control of all the treatments evaluated. Drought and heat stress depressed winter wheat yields, which were about half of the long term average for the area. As such, there were no yield differences detected among the treatment. Similarly, there were no treatment effects detected for protein and test weight.

Summary:

All fungicide treatments evaluated provided excellent control of stripe rust.

Table 1. Materials and Methods.

Seeding Date:	9/30/2016	Harvest Date:	8/1/2017
Julian Date:	274	Julian Date:	213
Seeding Rate:	125 lb/A	Soil Type:	Creston SiL
Previous Crop:	100-12-172	Soil Test:	61-46-354
Tillage:	Conventional	Fertilizer:	D:0-30-70 BC: 75-0-40

Table 2. Effect of Nexicor on control of stripe rust in winter wheat. Kalispell, MT 2017.

Treatment	Rate		6/8	6/2	6/12	6/26	8/1	8/1	8/1
			CI	SR	SR	SR	YLD	PRO	TWT
			%	%	%	%	bu/A	%	lb/bu
Check			0.0	1.7	3.2	78.3	55.6	10.1	59.3
Nexicor	7	oz/a	0.0	1.3	0.5	1.7	58.0	10.7	59.7
Induce	0.125	% v/v							
Nexicor	13	oz/a	0.0	1.7	0.2	4.0	55.4	10.7	59.6
Induce	0.125	% v/v							
Quilt Xcel	10.5	oz/a	0.0	2.0	0.0	3.3	56.0	10.4	59.8
Induce	0.125	% v/v							
Tilt	4	oz/a	0.0	1.3	0.2	0.7	57.9	10.6	59.8
Induce	0.125	% v/v							
Priaxor +	3	oz/a	0.0	2.0	0.5	15.0	53.2	10.6	59.2
Tilt	3	oz/a							
Induce	0.125	% v/v							
Mean			0	1.7	0.8	17.2	56.0	10.5	59.6
LSD P=.05			.	1.66	1.46	10.12	6.07	0.45	0.53
CV			0	54.77	106.81	32.4	5.95	2.36	0.48
Pr>F			1	0.8898	0.0054	0.0001	0.5364	0.0984	0.0867

CI: Crop injury, SR: Stripe rust, YLD: Yield, PRO: Protein, TWT: Test weight.