Project Abstract

Project Title:	Coordinated IPM for FHB and DON in SRWW - Wisconsin	
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Soft red winter wheat (SRWW) fits well with rotations of corn and soybean, which are the major field crops in Wisconsin. This is especially true where silage corn is grown in the state, as the timing of corn harvest coordinates well with planting of winter wheat. However, Fusarium head blight (FHB) and deoxynivalenol (DON) accumulation in harvested grain continues to be a perennial problem in Wisconsin. Newer products such as Prosaro Pro® and Sphaerex® have hit the market and require testing for efficacy in IPM programs in our unique climate of Wisconsin. Wisconsin farmers have also complained that the FHB Prediction Center models are not accurate in many locations of Wisconsin. To address these issues in Wisconsin, I plan to focus on the following objectives of the FHB Management Coordinated Project (MGMT_CP):

1) Evaluate the integrated effects of fungicide treatment and genetic resistance on FHB and DON in all major grain classes, with emphasis on new combination fungicides, Prosaro Pro and Sphaerex.
   Expected outcome: New, modern integrated management strategies will be generated for Wisconsin's unique climate. Data will be provided to the larger group for inclusion in coordinated analysis.
2) Compare the efficacy of Prosaro Pro and Sphaerex to that of Prosaro®, Caramba®, and Miravis Ace®.
3) Expected outcome: Local product efficacy testing data will be made available to local farmers for unbiased decision-making. Data will be provided to the larger group for inclusion in coordinated analysis.
4) Generate data to further quantify the economic benefit of FHB and DON management programs.
   Expected outcome: Local data will be available for economic decision-making. Data will be provided to the larger group for inclusion in coordinated analysis.
5) Generate data to validate and advance the development of FHB risk prediction models.
   Expected outcome: Data will be provided to the larger group for inclusion in coordinated analysis from our unique climate.

The following research projects will be conducted: 1) Conduct the standard multi-state MGMT-CP Integrated management protocol involving new chemistries applied to two wheat varieties (susceptible and resistant); 2) Conduct a uniform fungicide trial in Wisconsin with a focus on latest fungicide technologies that include Prosaro Pro and Sphaerex; 3) Provide data to validate the FHB Prediction Center tools, for Wisconsin's unique climate.