PI: Erick DeWolf
PI's E-mail: dewolf1@ksu.edu
Project ID: FY20-IM-014
ARS Agreement #: *New*
Research Category: MGMT
Duration of Award: 1 Year
Project Title: Integrated Management of Fusarium Head Blight in Kansas

PROJECT 3 ABSTRACT
(1 Page Limit)

This project continues integrated management studies for Fusarium head blight (FHB) in Kansas. Previous research documents that combinations resistant wheat cultivars and the best available fungicides offer t hope for economic management of this disease. The objectives of this research are to 1) test whether a combination of resistance and best available fungicides is able to suppress the development of FHB development in Kansas; 2) contribute KS observations to the national efforts to validate strategies for FHB management that are more flexible and robust to changing field conditions; 3) This project will also contribute to the long-term efforts to enhance forecasting models for FHB and DON and the economic analysis for these management strategies. The proposed work includes field trials at two locations in the state with a history of problems with FHB and DON. At each location, the experiments will include three varieties planted in a replicated complete block design with a split-plot arrangement. Wheat variety will be the whole plot and 6 fungicide applications will be the sub-plots. Treatments include control plots and the fungicides Prosaro®, Miravis® Ace applied at rates recommended and timings recommended by the MGMT-CP. The trial will be replicated 5 times at each location and weather data collected on site. The plots will be rated for disease incidence and severity during the soft dough stage of development. Grain will be harvested to calculate yield and test weight. Sub samples of the grain will be collected to assess the percentage of Fusarium damaged kernels and DON. The data resulting from the field trials will be used in local reports for Kansas Stakeholders and shared with project cooperators at OSU for combined analysis.