

## FY16 USWBSI PROJECT ABSTRACT

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**Project ID: FY16-IM-010**

**ARS Agreement #: 59-0206-4-017**

**Research Category: MGMT**

**Duration of Award: 1 Year**

**Project Title: Improving Integrated Management Strategies for FHB of Wheat in Indiana.**

### **PROJECT 1 ABSTRACT**

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Fusarium head blight (FHB) levels on wheat vary each year in Indiana but the disease is consistently present, and has been problematic in recent years. Wheat producers across Indiana consistently experience moderate to severe damage due to FHB and even producers who used disease management tactics, such as fungicides, experience moderate losses from the disease. Currently, farmers struggle to apply effective fungicides at optimum timings due to weather events, and more information on the interactions between fungicide timing and variety susceptibility are needed. Farmers are increasingly asking questions about the impact of multiple fungicide applications to wheat, and efficacy data on this practice is currently limited. The proposed research will be conducted on soft red winter wheat in Indiana to improve integrated management strategies for FHB and DON, specifically looking at cultivar and fungicide interactions, along with the impact of fungicide timing. The trial will be inoculated to examine management strategies under high disease pressure conditions. A specific component of this research is to better understand the window of fungicide timing at which a farmer can apply fungicide for FHB, and explore how multiple applications of fungicides may improve disease management and reduce deoxynivalenol. Additionally, this research will contribute information to the national disease forecasting model and improve knowledge of FHB disease dynamics in a northern winter-wheat growing region.