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Project Title: Uniform Fungicide Trial for Scab on Wheat in Illinois.

PROJECT 1 ABSTRACT

(1 Page Limit)

The following study is proposed to compare the efficacy of fungicides and possibly biological control agents in controlling the severity of scab and reducing yield loss and grain quality of wheat in Illinois. Wheat production has been increasing in Illinois, and scab has been a serious problem faced by wheat producers. Conducting uniform fungicide trials will give Illinois' farmers valuable information for management of scab as well as contributing to data applicable across all the Midwestern wheat growing regions. We have data from Illinois for one year, but additional results from other years are needed to develop solid data for Illinois.

A soft red wheat variety that has been very susceptible to scab infection will be planted into fields with high amounts of corn residue on the soil surface at three locations in Illinois. One field location is at the University of Illinois' Northwestern Illinois Agricultural Research and Demonstration Research Center (NWRC) near Monmouth, the second location is at the Crop Sciences Research and Education Center (REC) near Urbana, and the third at the Southern Illinois University Agronomy Research Center (SIU) at Carbondale. All locations have a history of significant scab infection that varies in incidence and severity from year to year. Irrigation is not available at the Monmouth and Carbondale locations, and mist irrigation is available at the Urbana location.

Application of treatments will be at early anthesis (Feekes 10.51), and plots will be rated for disease incidence and severity. Yield and test weight data will be collected, and level of DON will be quantified from grain samples collected from each plot.

Fungicide trials for control of scab on wheat are a goal of the U.S. Wheat and Barley Scab Initiative. In addition to contributing to data from uniform fungicide trials already being conducted in other states, this data will be disseminated throughout Illinois via Extension meetings, publications, web pages and newsletters.