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Research Category: MGMT

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Project Title: Efficacy of Fungicides/Biocontrol Products for FHB Management in Indiana.

PROJECT 2 ABSTRACT

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FHB on wheat has reduced yields in Indiana, and reduced grain quality and dockage have occurred due to high levels of DON in 2009 and 2010. There is a need for effective FHB and DON management programs, within Indiana, especially since varieties with moderate resistance to FHB do not always provide desirable levels of disease control in certain environments. Because of this, fungicides have become an important component in FHB and DON management plans in the region. Understanding which fungicides provide most efficacy against FHB in Indiana, and also across other states will improve FHB management recommendations. Additionally, information on the timing and impact of fungicide applications on DON accumulation in grain will aid in early season fungicide applications, and preserve grain quality.

The proposed research will be conducted at the Purdue Agricultural Center for Research and Education in West Lafayette, Indiana. Fungicide efficacy of several fungicide modes of action will be examined to determine their effects on FHB development and DON accumulation in grain. Fungicide timing studies will also be conducted to determine the optimal timing of fungicides to prevent DON accumulation in grain. This information will improve recommendations for FHB and DON management for growers in Indiana. Information obtained from this research will also contribute to knowledge on integrated management of FHB across differential environmental locations in the Midwest.