FY09 USWBSI Project Abstract

PI: Milus, Eugene PI's E-mail: gmilus@uark.edu

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Research Category: MGMT/FB-CP Duration of Award: 1 Year

Project Title: Efficacy of Fungicides against Nivalenol Chemotypes of Fusarium graminearum.

PROJECT 1 ABSTRACT

(1 Page Limit)
Isolates of <i>Fusarium graminearum</i> that produce nivalenol (NIV) rather than deoxynivalenol (DON) predominate on wheat in Louisiana and occur at moderate frequency in Arkansas and other states. Nivalenol is ten times more toxic to humans than DON, but currently there are no standards for the level of NIV in wheat grain. Fungicides have never been evaluated against NIV chemotypes, and the level of NIV in wheat grain from epidemics caused exclusively by NIV chemotypes is not well documented. This research will evaluate fungicides selected for the highest efficacy against DON chemotypes to determine if they are equally effective against NIV chemotypes and also determine the level of NIV that can be expected in epidemics caused by NIV chemotypes.