

PI: PaulEsker

PI's E-mail: pde@plantpath.wisc.edu

Project ID: FY11-IM-005

FY10 ARS Agreement #: 59-0206-9-088

Research Category: MGMT

Duration of Award: 1 Year

Project Title: Integrated Disease Management of Fusarium Head Blight in Wisconsin.

PROJECT 1 ABSTRACT

(1 Page Limit)

Integrated management trials will be conducted in Wisconsin to improve our understanding of risk factors associated with Fusarium head blight (FHB) of wheat. Trials will be conducted at the Arlington Agricultural Research Station, Arlington, WI to examine the effect of cultivar resistance (Cooper, Hopewell, Truman, and Malabar), inoculation (plots receive spores of *Fusariumgraminearum* or do not), and foliar fungicide (Prosaro at flowering or no fungicide) on FHB development. It is expected that results from this trial will show how a combination of factors may be beneficial to reduce the risk of FHB and DON, in particular, under high inoculum environments. Data collected will include measures of FHB (incidence, severity, and index) at soft dough, yield, test weight, and grain moisture. Samples will also be submitted for DON to one of the USWBSI-affiliated laboratories. Additional trials will be conducted to examine the effect of cultivar and fungicide on FHB and DON development at our Lancaster Agricultural Research Station and the effect of crop rotation on *Fusarium* spp. diversity, in particular, *F. graminearum*. We expect to complete studies for publication in refereed journals in 2011 as well as develop extension materials that published in several sources, including three web-based delivery systems (Field Crops Plant Pathology, Soybean and Small Grains Agronomy, and The Soy Report blog), as well as through our Wisconsin Crop Manager news article and during winter meetings. For this latter aspect, we have developed and conducted a winter wheat workshop for the past three years and will integrate new information from these trials into that program.