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**Project ID: FY08-MC-020**

**FY07 ARS Agreement #: 59-0790-4-114**

**Research Category: MGMT**

**Duration of Award: 1 Year**

**Project Title: Uniform Fungicide Trials to Evaluate FHB and DON Reduction in Multiple Grain Classes, ND.**

### **PROJECT 3 ABSTRACT**

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The uniform fungicide project will evaluate six fungicide treatments against the untreated check, for their ability to reduce Fusarium head blight and DON, and increase yield and quality. The fungicide treatments will be decided in the spring of 2008, and procurement of chemicals will be coordinated by Dr. Carl Bradley, Univ. of Illinois. Several new experimental products were tested in Fargo and other locations in 2007.

Uniform fungicide trials began regionally in 1997 and became a national effort soon after. Uniform fungicide trials, conducted across states and grain classes, gather further information on efficacy of fungicides as new chemistries became available. This collaborative effort has been very important in providing a data base for requests for emergency exemptions of fungicide or for full registration. The ND effort is a collaborative one, with the Carrington Research Extension Center in the center of ND and with the Langdon Research Extension Center in the northeast. Three environments and multiple grain classes allow a good chance of success in getting meaningful data that can be collated.

Objectives:

- 1) To evaluate fungicides close to registration and new chemistries and compare them to registered standards for reducing FHB and DON in harvested grain.
- 2) To evaluate these fungicides over several grain classes (spring wheat, durum wheat, and barley) and across several environments (East Central ND, Central ND, and Northeast ND) to help guarantee return of useful data, considering environmental vagaries, and to see how different grain classes respond to the different fungicides.
- 3) To determine if any additional products are efficacious and if so, provide data to assist in their registration.