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**Project ID: 0405-HA-050**

**FY03 ARS Agreement #: 59-0790-9-041**

**Research Area: FSTU**

**Duration of Award: 1 Year**

**Project Title: Regional Diagnostic Laboratory Providing DON Analytical Services for Regional FHB Research Projects.**

PROJECT 2 ABSTRACT

(1 Page Limit)

The goal of this project is to provide a regional DON diagnostic service for scab researcher. The MSU Diagnostic Clinic provides DON analyses for research projects east of the Mississippi. Four laboratories provided DON analyses in three states during in 2000, 2001 and 2002. Three laboratories, two in North Dakota and one in Minnesota, analyze DON for samples submitted by states west of the Mississippi, with most of the samples coming from within those two states. States submitting samples to the MSU DON Diagnostic Laboratory include Michigan, New York, Maryland, Virginia, West Virginia, Kentucky, Arkansas, Indiana, Missouri, Ohio, and Illinois, with the majority of samples coming from outside of Michigan. Samples are submitted from both University and USDA/ARS research station projects. The number of samples analyzed at Michigan State has increased yearly from about 2,200 in 1999, over 4,000 in 2001, and about that number so far in 2002. The number of samples submitted for analysis could increase again in 2003. Between all of the laboratories providing DON diagnosis, more than 24,000 samples were analyzed in 2001. Samples are submitted throughout the year with the largest number coming in August through January. The Michigan State laboratory uses an ELISA test to evaluate the samples, and collaborates with the other three laboratories in a check sample program to insure that the different methods used to analyze wheat and barley for DON provide comparable results. The check sample program is run by Michigan State University.