FY02 USWBSI Project Abstract

0203-HA-085 Regional Diagnostic Clinic Providing DON Analytical services for regional FHB research projects.

PI: Hart, L. Patrick; E-mail: hartl@msu.edu

Michigan State University, Department of Botany & Plant Pathology, East Lansing, MI 48824

Grant #: 59-0790-9-041; \$79,540; 1 Year

Research Area: FSTU

PROJECT ABSTRACT (1 Page Limit)

The number of wheat samples analyzed for vomitoxin at Michigan State University increased from about 2,200 in 1999 to over 3,500 in 2000, and will be over 4,000 in 2001. The number of samples submitted for analysis is expected to increase again in 2002. The MSU Diagnostic Clinic provides DON analytical service for all research projects east of the Mississippi. States submitting samples include Michigan, New York, Maryland, Virginia, West Virginia, Kentucky, Arkansas, Indiana, Missouri, Ohio, and Illinois. Samples are submitted from both University and USDA/ARS research station projects. Sample submission begins in May and usually runs through October. However, in 2001 samples were submitted throughout the year, and this trend is expected to continue in 2002. 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. Individual samples vary in size from 10 g to 2 kg. For 2002, samples must be submitted as ground/milled wheat, and samples under 100 g must be pre-weighed. Samples over 100 g will be sub-sampled after thoroughly mixing the ground wheat. Most research reports in the Annual FHB Forum Symposium now include DON analytical data. This is in contrast to the first two years when reports generally included only incidence and severity data.