

0203-XI-046 Diagnostic Services for DON.

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Research Area: FSTU

PROJECT ABSTRACT

(1 Page Limit)

The Diagnostic Services for DON at University of Minnesota provides mycotoxin analyses, especially for deoxynivalenol (DON), for any U.S. Wheat & Barley Scab Initiative projects but mainly for research projects conducted in Minnesota. A total of about 10,000 samples will be analyzed for DON and other mycotoxins by the project in the 2002/2003 crop year (from 07/01/2002 to 6/30/2003). FHB researchers will not be charged for the analysis.

The project will use gas chromatography/mass spectrometry (GC/MS) to provide quick and accurate measurement of DON and related mycotoxins in samples of harvested grains as well as individual kernels, spikelets, heads, small leaf and stem fragments at different disease development stages. The single kernel analysis is being used to determine toxin development in the early stages of infection and in the understanding of resistance mechanisms in barley. All sample preparation work including sample grinding will be carried out by the project.

