PI: **Schwarz, Paul**
PI's E-mail: **Paul_Schwarz@ndsu.nodak.edu**
Project ID: **0304-SC-001**
ARS Agreement #: **59-0790-9-063**
Research Area: **FSTU**
Duration of Award: **1 Year**

Project Title: **Malting Barley Deoxynivalenol Diagnostic Services.**

PROJECT 1 ABSTRACT
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The malting and brewing of Fusarium infected barley presents a number of processing, product quality and public health concerns. Fusarium infected barley also is unsuitable for human consumption and for some livestock. The ultimate solution to Fusarium-related problems is the development of FHB resistant barley cultivars. Testing for deoxynivalenol (DON) is an integral part of barley varietal development programs focusing on Fusarium resistance. DON testing, however, is a very expense part of these programs, and thus can limit the number of lines, which may be screened within a given year. The primary objective of this project is to provide barley breeders and pathologists, working on the development of Fusarium resistant barley, with affordable, accurate and timely DON analysis. Funds requested will support the analysis (DON) of 7,050 barley samples from seven researchers in four states. Analysis of regional barley crop samples will provide annual information on DON levels. An inter-laboratory check service is offered a means improving the reproducibility of DON analyses between laboratories.