

**PI:** Paul Schwarz

**PI's E-mail:** Paul.Schwarz@ndsu.edu

**Project ID:** FY18-SC-017

**ARS Agreement #:** *New*

**Research Category:** FST

**Duration of Award:** 1 Year

**Project Title:** Evaluation of Barley and Malt for DON and Deoxynivalenol-3-Glucoside.

### PROJECT 1 ABSTRACT

(1 Page Limit)

The malting and brewing of *Fusarium* infected barley presents a number of processing, product quality and public health concerns. *Fusarium* infected barley can be 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) and other *Fusarium* mycotoxins is an integral part of barley varietal development programs focusing on *Fusarium* resistance. This testing, however, is a very expensive 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. Testing for other toxins, such as deoxynivalenol-3-glucoside, is also available when needed for specific projects.