

FY05 USWBSI Project Abstract

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Project ID: 0506-HA-057

FY04 ARS Agreement #: 59-0790-3-079

Research Area: CBC

Duration of Award: 1 Year

Project Title: Aerial Spray Application Technology for Enhanced Fungicide Efficacy for Control of FHB on Barley.

PROJECT 1 ABSTRACT
(1 Page Limit)

An interdisciplinary effort is planned between the Langdon Research Extension Center (Plant Pathology) and Ag and Biosystems Engineering (Ag Engineering) to evaluate aerial application parameters in conjunction with fungicide application for FHB control and correlate these parameters with disease reduction on barley. This project will evaluate spray application parameters drop size (fine and medium) and spray volume (3 and 7.5 gpa) in a farmer's field, conduct disease evaluation, and measure yield and quality factors including test weight, plump, and DON. Spray application technology parameters will be categorized qualitatively by drop size and spray coverage with WRK computer technology and quantitatively by including a dye with the spray solution, washing a given number of heads, and quantifying with the use of a photospectrometer.