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FY03 ARS Agreement #: 59-0790-3-080

Research Area: CBC

Duration of Award: 1 Year

Project Title: FHB Uniform Fungicide Trials on Wheat and Barley in Minnesota.

PROJECT 1 ABSTRACT
(1 Page Limit)

Fungicide trials will be conducted at the Northwest Research and Outreach Center in Crookston, Minnesota on spring barley and hard red spring wheat cultivars. This research is part of an organized, multi-state cooperative effort to determine Fusarium head blight (FHB) control efficacy for select products during exposure to field conditions. Each trial location across the U.S. represents a unique environment, thereby exposing chemical control agents to a variety of disease control challenges. Performance parameters of experimental fungicidal products must be well documented prior to public release. These trials provide timely, non-biased evaluations of products. Effective FHB control strategies minimize disease-related losses for growers, bolster economies of agriculturally-dependent communities, and provide a dependable source of small grains for consumers in the State of Minnesota, the United States and beyond.

The Minnesota Trials will include a wheat cultivar that is moderately susceptible and malting barley cultivar that is susceptible to FHB. Trials will be artificially inoculated with corn grain colonized by *F. graminearum* species and will be mist-irrigated at night to promote fungal infection and FHB disease development. The trials will consist of a nontreated control and six fungicide treatments. Crop disease responses to FHB, as well as yield and quality parameter data, will be recorded at appropriate plant growth stages.