

0203-HE-014 Identification of Safe and Effective Foliar Fungicides for Managing Fusarium Head Blight in Wheat.

PI: Hershman, Donald; E-mail: dhershma@ca.uky.edu

University of Kentucky, Department of Plant Pathology, Princeton, KY 42445

Grant #: 59-0790-9-042; \$6,000; 1 Year

Research Area: CBC

PROJECT ABSTRACT

(1 Page Limit)

Fusarium head blight (FHB) of wheat and barley frequently reduces crop yields in all wheat/barley-producing regions of the United States. Serious statewide epidemics are rare in Kentucky, but each year some fields are severely damaged by the disease. Preliminary data indicate that foliar fungicides (including certain biocontrol agents) may be capable of providing safe, effective and economical management of FHB. Nonetheless, specific data are lacking regarding which products and rates may be most suitable for use in FHB management programs. The National FHB Fungicide Uniform Testing Program was established as a means of addressing this deficiency in efficacy and economic data. Kentucky proposes to participate in the Uniform Test during 2002. As part of this program, we propose to establish an irrigated, inoculated experiment at the University of Kentucky Research and Education in Princeton, Caldwell County, Kentucky. The objective of the test will be to evaluate certain fungicidal and biological treatments against FHB. The data will be directly applicable in developing FHB management recommendations in Kentucky. In addition, the data will add to the national data base for managing FHB with chemicals and biological pesticides. The treatments evaluated will be determined by collective agreement of the scientists involved in the Uniform Test, nationally. Data generated will include FHB incidence, severity, and field severity; and grain yield, test weight and vomitoxin (DON) levels. Data will be integrated into the overall annual project summary for the National Uniform Test. In addition, a report will be generated and included in the 2002 University of Kentucky Wheat Science Research Report. Results will be communicated to farmers, crop consultants, and agricultural dealers via newsletter articles and during commodity meetings and field days. Data generated will be used to develop effective, safe, and economical FHB management recommendations. Fusarium head blight (FHB) of wheat frequently reduces crop yield, test weight and seed and grain quality in all regions of the United States.