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Project Title: Uniform Fusarium Head Blight Fungicide and Biological Control Agent Testing in Ohio, 2004.

PROJECT 1 ABSTRACT

(1 Page Limit)

Epidemics of Fusarium head blight (FHB) have caused millions of dollars of losses in Ohio over the last decade. During the past two growing seasons losses have been low on a state-wide basis, but losses to individual growers has been significant in certain locations where disease severity has reached over 30%. Currently, no fungicides are labeled for use on wheat to control of FHB in Ohio. More information is needed on experimental and labeled products in order to identify effective materials and to provide data necessary for their registration. Our research plan for 2004-2005 is to participate in the Uniform Fungicide Testing program established by the U. S. Wheat and Barley Fusarium Scab Initiative (USWBFSI). Various fungicides and biological control agents will be evaluated in replicated trials in Ohio for efficacy against FHB according to protocols designated by the USWBFSI Chemical and Biological Control Research Committee. Research plots will be located at Wooster, Ohio where mist irrigation is available. Additionally, fungicides that have provided greater control in previous years testing will applied to large (10 ft by 70ft) plots at a second location in northwest Ohio under natural conditions to provide information on efficacy using farm-sized equipment. Appropriate disease and grain quality assessments will be made according to protocols designated by the Research Committee. Data obtained from Ohio will be sent to the coordinators of the Chemical and Biological Control Research Committee to be incorporated into the database for materials being tested for efficacy against FHB. Weather conditions during the critical period of pre- and post- flowering will be monitored at each location. Additionally, we will participate in a regional FHB risk prediction system that is currently under construction by Dr. E. De Wolf at Penn State University. Results of the scab risk predictions will be posted on the Ohio State University Extension Field Crop Disease web page (<http://www.oardc.ohio-state.edu/ohiofieldcropdisease>) on a regular basis for use by wheat growers. Additionally, information on fungicide rates and application procedures will be made available as products become labeled in Ohio. Information of performance and product efficacy will be available to Ohio wheat growers through the Ohio State University Extension Crop Observation and Recommendation Network (C.O.R.N.) electronic newsletter and web site, and on the Ohio State University Extension Field Crop Disease web site. This information will be used to reduce the threat of FHB to wheat growers and the milling and baking industry of Ohio.