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PROJECT 1 ABSTRACT

(1 Page Limit)

Ohio wheat growers have the reputation of producing some of the highest quality soft red winter wheat for the milling and baking industry. Epidemics of Fusarium head blight (FHB) have caused millions of dollars of losses in Ohio over the last decade. Fungicides and biological agents may provide effective control of FHB. Currently, few fungicides are labeled for control of FHB. More information is needed on experimental and labeled products in order to use them effectively and to provide data necessary for their registration. Our research plan for 2003-2004 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 for efficacy against FHB according to protocols developed by the USWBFSI Chemical and Biological Control Research Committee in replicated trials in Ohio. The plots will be located at Wooster Ohio where mist irrigation is available. Select fungicides will be 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. Weather conditions during the critical period of pre- and post- flowering will be monitored at several locations in the state and data will be incorporated into FHB risk assessment models to help predict the risk of a scab epidemic. 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 the public. 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. Data obtained from Ohio will be sent to the coordinators of the Chemical and Biological Control to be incorporated into the database for materials being tested for efficacy against FHB. This information will be used to reduce the threat of FHB to wheat growers and the milling and baking industry of Ohio.