0203-HA-086 Chemical Management of FHB in Wheat.

PI: Hart, L. Patrick; E-mail: hartl@msu.edu Michigan State University, Department of Botany & Plant Pathology, East Lansing, MI 48824 Grant #: 59-0790-9-041; \$5,750; 1 Year Research Area: CBC

PROJECT ABSTRACT

(1 Page Limit)

The severity and frequency of FHB epidemics in Michigan suggests that fungicides with efficacy against FHB may have a role in disease management when applied at flowering and/or other heading growth stages. Fungicide trials across wheat classes and environments are a valuable tool to evaluate products under different conditions. This proposal continues the Michigan commitment to the regional fungicide trials. The research objective is to test products that may be registered in the future, and further evaluate application methods to improve application coverage. Test results will be provided to producers nationwide on what products are providing the greatest disease control and improvement in yield and quality, plus this information is used in applications for federal or special registrations of new materials. A set of core fungicide treatments will be established and compared to the untreated check. Treatments are applied at the time of flowering. Fungicides are applied with a nozzle arrangement allowing angled spraying of the heads and are applied with a backpack type sprayer at 40 psi, 18-20 gpa. In addition, new application technologies using low volume sprayers with reduced fungicide rates will be evaluated in collaboration with Dr. Gary VanEE at Michigan State University. Disease ratings are taken at the soft dough stage of kernel development (Feekes 11.2) and include FHB incidence, FHB head severity, flag leaf disease severity, and other head disease incidence and severity, if present. Plots are harvested for vield and quality, and DON concentrations determined at Michigan State University. Data will be analyzed by ANOVA. Results will be presented at the 2002 FHB Initiative Forum, and disseminated via extension channels as is deemed appropriate.