The severity and frequency of FHB epidemics in Michigan and the midwest suggests that fungicides and/or biological with efficacy against FHB may have a role in disease management when applied at anthesis. Disease management trials across wheat classes and environments are a valuable tool to evaluate products under different environmental conditions. This proposal continues the Michigan commitment to the regional trials. The research objective is the testing of products that may be registered in the future. 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 treatments will be established and compared to the untreated check. Treatments are applied at anthesis with a backpack type sprayer at 40 psi, 18-20 gpa, and with a nozzle arrangement allowing angled spraying of the heads. 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 yield and quality, and DON concentrations determined at Michigan State University. Data is analyzed by ANOVA. Results are presented at the 2003 FHB Initiative Forum, and disseminated via extension channels as is deemed appropriate.