**PI: Eugene Milus** **PI's E-mail: gmilus@uark.edu**

**Project ID: 0405-MI-096** **FY03 ARS Agreement #: 59-0790-9-054**

**Research Area**: **CBC** **Duration of Award: 1 Year**

**Project Title: Chemical and Biological Control of FHB on Wheat in Arkansas.**

PROJECT 1 ABSTRACT
(1 Page Limit)

Fungicides and biocontrol agents will be evaluated under moderate FHB pressure to identify treatments that have potential for managing FHB on soft red winter wheat. Treatments will include those in the Uniform FHB Fungicide Test and the Standard Evaluation of Biologicals. Research will be conducted at the University Farm in Fayetteville, AR, on Agripro Patton soft red winter wheat that has some FHB resistance. The design will be a randomized complete block with six replications. Individual plots will be 5 ft x 15 ft. Plots will be inoculated at flag leaf emergence stage with corn kernels colonized with seven isolates of *Fusarium* graminearum and will be misted to provide a favorable environment for inoculum development and head infection. Fungicides and biologicals will be applied at flowering according to the protocols for for the Uniform FHB Fungicide Test and the Standard Evaluation of Biologicals. Incidence and severity of FHB will be evaluated on 50 randomly selected heads per plot at soft dough stage and used to calculate FHB index. Plots will be harvested with a plot combine, and yield and test weight will be determined. Grain will be visually evaluated for the percentage of scabby kernels, and a 50-g sample from each plot will be sent to Pat Hart's lab at Michigan State for DON analysis. Data will be analyzed and the results reported at the USWBSI Research Forum.