

PI: Eugene Milus

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

Project ID: 0405-MI-095

FY03 ARS Agreement #: 59-0790-9-054

Research Area: VDUN

Duration of Award: 1 Year

Project Title: Developing FHB-Resistant Wheat Cultivars for the Midsouth.

PROJECT 2 ABSTRACT

(1 Page Limit)

The unique combination of biotic and abiotic stresses on wheat in the Midsouth, the potential for devastating FHB epidemics, and the more than two million acres of wheat grown annually in this region, justifies the development of FHB-resistant cultivars adapted to this region. Arkansas has had an active program for developing FHB-resistant varieties since 1991, and Arkansas lines that performed well in the Southern Scab Nursery during the past two seasons originated from crosses made before the first funding from the Scab Initiative in 1999. Currently, advanced lines with FHB resistance are being increased and evaluated for yield and quality, intermediate lines are being evaluated for resistance to FHB and other diseases, and new crosses are being made every year. Populations are being developed for a genetic study of selected resistant lines from the program. The Arkansas program also supports all of the eastern winter wheat breeding programs by evaluating the Northern and Southern Scab Nurseries for type 2 resistance in the greenhouse and field resistance in inoculated, irrigated nurseries at two locations.