

PI: Richard W. Ward

PI's E-mail: wardri@msu.edu

Project ID: 0405-WA-131

FY03 ARS Agreement #: 59-0790-9-074

Research Area: VDUN

Duration of Award: 1 Year

Project Title: Development of FHB Resistant Soft White Wheat Varieties for Michigan and Similar Environments.

PROJECT 3 ABSTRACT
(1 Page Limit)

This project focuses on conventional plant breeding. The general goal is to accelerate development of commercially viable varieties and advanced generation lines of soft white winter wheat which are both adapted to Michigan and exhibit resistance to damage by Fusarium Head Blight (FHB). The primary breeding strategy is hybridization followed by successive generations of single plant progeny evaluation in the field (pedigree breeding) followed by extensive replicated multi-location trials. Supporting objectives are as follows: 1) elimination of highly susceptible (to FHB) lines in the yield test phase of development; 2) creation and generational advancement of breeding populations derived from crosses involving parents which collectively contribute genes for FHB resistance and superior performance in Michigan; and 3) identification and selection through managed disease pressure of families and lines carrying FHB resistance genes.