FY13 USWBSI Project Abstract

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Project ID: FY12-NW-012 ARS Agreement #: 59-0206-9-086

Research Category: VDHR-NWW Duration of Award: 1 Year

Project Title: Coordinated Evaluation of FHB Resistance of Advanced Soft Winter Wheat Lines

and Cultivars.

PROJECT 3 ABSTRACT

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Accurate phenotyping is the foundation of controlling FHB through plant breeding and genetics. This project coordinates the phenotyping of approximately 540 advanced breeding lines and cultivars in multi-location trials. The specific objectives ate:

Objectives: 1) Phenotype advanced breeding lines that are candidates for release: 2) place FHB and other agronomic, disease resistance, and quality data in database: 3) report on purification and seed increase of the best lines.

The project involves seven states (MO,IL,IN,MI,NY,OH,KY) and the cultivars in each state's Official Variety Trial are evaluated for FHB resistance. This information is disseminated to growers through University extension efforts and the USWBSI Scab Smart website. The lines and cultivars are evaluated in misted and inoculated FHB nurseries to insure good disease pressure and accurate data. The multi-location data is summarized and distributed to all public and private breeders in the region. Data is also placed in a data base that can be queried by breeders.