

## FY21 USWBSI Project Abstract

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**Project ID:** FY20-SP-003

**ARS Agreement #:** 59-0206-0-128

**Research Category:** VDHR-SPR

**Duration of Award:** 1 Year

**Project Title:** Fusarium Head Blight Resistance for Montana Spring Wheat

### PROJECT 1 ABSTRACT

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The goal of this project is to introduce genes for Fusarium head blight (FHB) resistance into the Montana State University public spring wheat breeding program. Primary sources of resistant lines have been from the WheatCAP program and the Uniform Regional Nursery system. FHB-resistant lines that perform well in local nurseries have been used yearly in our crossing blocks. Initial selection in head rows is for agronomic characteristics of interest to Montana growers. Lines that advance to statewide nurseries are then entered into FHB screening nurseries conducted in Idaho and Montana. This approach will remain a key activity. Additionally, we are using markers for the Sumai3 3B QTL to introduce *Fhb1* into several of our most advanced lines and varieties. Several of these lines are advancing through the breeding pipeline. Our objective is to develop FHB-resistant varieties for dryland and irrigated spring wheat production in Montana.