

FY20 USWBSI Project Abstract

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Project ID: FY20-BA-018

ARS Agreement #: *New (NCE for FY20 for 59-0206-7-001)*

Research Category: BAR-CP

Duration of Award: 1 Year

Project Title: Genomics Selection for FHB Resistance and Malting Quality in Spring Malting Barley

PROJECT 3 ABSTRACT

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FHB has become an increasing problem in the Intermountain West, which was previously regarded as the top region for DON-free quality malting barley production. With this new threat, efforts are underway to breed for resistance to FHB and DON accumulation. This proposal aims to use genomic selection starting from a founder population of ~700 lines. Nearly 250 of these lines were to be selected as a training population (TP) and representative of the Aberdeen spring breeding program. Genomic selection is definitely the right protocol to employ in breeding for FHB resistance given the complex nature of the trait. It is also a good method for enhancing malting quality in the breeding program. It might be advantageous to combine the Hu proposal with this one. It is noted that all the requested funds are actually going toward cooperators who will do the phenotyping.