PI: Deven See

Project ID: FY14-SE-030

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Research Category: VDHR

Duration of Award: 1 Year

Project Title: Genotyping Breeding Lines for FHB Resistance.

PROJECT 1 ABSTRACT (1 Page Limit)

This project consists of two phases:

- 1. Discovery of new novel QTL for Fusarium Head Blight resistance in elite spring wheat's adapted to the pacific northwest. Dense molecular marker profiles have already been analyzed for this material, the work will be in phenotyping greenhouse inoculated materials and developing genomic predicative models for QTL discovery.
- 2. 2. Marker Assisted Selection for introgression of FHB resistance into southern Idaho irrigated wheat acreage. In collaboration with the Idaho wheat breeder the genotyping laboratory will generate marker profiles with known STS and SSR markers on all relevant breeding germplasm, as well as developing GBS tags for introgression and marker assisted selection.
- 3. Increased pressure has developed in both spring and winter wheat in the state of Washington. MAS will also be incorporated for selection of Fusarium Head Blight resistance in adapted regional cultivars