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PROJECT 3 ABSTRACT

(1 Page Limit)

FHB damage and DON contamination of grain in the Intermountain West has been sporadic and highly dependent on temperature prior to and during anthesis. Rainfall is less of a factor due to irrigation that supplies constant moisture and humidity at all times to some parts of the field. As current FHB prediction models are ineffective in this environment and resistance is limited in most of the varieties currently in production, participation in the Integrated Management trials have provided excellent guidance in the utilization of fungicides paired with host resistance classification to control and / or reduce the impact of FHB. We will participate in the FHB Management Coordinated Project (MGMT_CP) to evaluate the integrated effects of fungicide treatment and genetic resistance on FHB and DON in spring wheat grown in the Pacific Northwest and Intermountain West region, with emphasis on a new fungicide, Miravis Ace®. A part of the Uniform Fungicide Trials (UFT), we also will be comparing the efficacy of Miravis Ace when applied at early heading or at anthesis to that of standard anthesis application of Prosaro® or Caramba®. The objective is to generate data to further quantify the economic benefit of FHB/DON management strategies and to develop more robust "*best-management practices*" for FHB and DON. This will assist in the generation of data to validate and advance the development of FHB and DON risk prediction models**.** With the expansion of FHB into irrigated production areas of the PNW and Intermountain West, and the limits of currently available fungicides, testing of the newly available fungicide Miravis Ace may provide increased choices for the area producers. Data from this underrepresented region will add value to the Coordinated Project while developing tools to increase our ability to forecast disease occurrences in unique and problematic environments.