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PROJECT 2 ABSTRACT

(1 Page Limit)

FHB damage in spring grain continues to increase in southern and eastern Idaho. In 2015, fields of both wheat and barley showed signs of the disease and many spring wheat fields tested at >5 ppm DON, even after appropriate treatments with fungicides. The majority of the grain varieties that are available to growers in the area are susceptible to FHB, especially the hard white spring wheat and durum varieties. A few varieties of hard red spring wheat have some level of resistance associated with the presence of the Fhb1 gene. Soft white spring wheat and barley have shown the lowest vulnerability to FHB infection in the field, but high levels of DON are being reported even in soft white spring wheat. Growers regularly plant susceptible varieties behind corn, but even in fields planted behind non-grain crops and treated with fungicides, susceptible varieties such as Klasic hard white spring wheat regularly test at >5 ppm DON.

Since the majority of the wheat varieties in production are susceptible to FHB, they remain vulnerable under the highly conducive environment that occurs under irrigated production conditions. Integrated management practices are a must, and fungicide application in combination with resistant varieties must be demonstrated as the most effective practices in reducing FHB and DON. Participation in the coordinated management project will provide a framework to educate local producers and industry personnel as well as provide data from a completely different, irrigated, high-desert production environment for the meta-analysis.