FY22 USDA-ARS/USWBSI Project ID: FY22-DU-001

Project Abstract

Project Title:	The value of genetic resistance and fungicides on the control of FHB in durum in	
	ND	
	Enter name(s) below	Enter Institution(s) below
Principal Investigator:	Clair Keene	North Dakota State University
Co-Investigator:	Venkata Chapara	NDSU, Langdon REC

FHB has become more problematic in durum in North Dakota because of changing environmental conditions that favor its development occurring more frequently. Controlling FHB is challenging and requires an integrated approach. Some of the new durum varieties like ND Stanley have improved FHB resistance, though not to the same degree as that currently available in some spring wheat varieties. In the last few years, DON has frequently been reported as a problem in durum in North Dakota. Furthermore, though fungicides have been registered that provide some level of control of FHB in durum, many growers have limited experience with their use. The integration of resistant varieties such as ND Stanley and fungicides such as Prosaro (tebuconazole + prothioconazole) may provide desired levels of FHB control, particularly in years of high disease pressure. The overall goal of this project is to provide farmers the data they need to adopt improved FHB management practices in durum. High-quality data is needed to quantify the importance of varietal resistance, fungicides, and their combination on FHB control in durum. Varieties of durum tested will be more resistant varieties ND Stanley, ND Riveland, Joppa, Carpio, and Divide; susceptible variety ND Grano; and very susceptible variety Mountrail. New experimental lines will be incorporated as available from the NDSU durum-breeding program to screen for level of FHB resistance.