

## Project Abstract

<b>Project Title:</b>	Database and Analysis Tools to Improve Data Management	
<b>USWBSI Project ID:</b>	FY24-EC-001	
<b>Principal Investigator:</b>	Jean-Luc Jannink	USDA-ARS

By checking this box, I confirm this can be used as my project abstract for public reference.

## Project Summary

Public sector wheat breeders cooperate on many nurseries and invest extensive resources in phenotyping new experimental breeding lines. Often, after the data from these experiments has been used for selection, it remains locked in spreadsheets on local computers. But there is value in the data beyond immediate selection events to understand the genetics of the traits that have been studied. That value increases as more data is aggregated, creating larger datasets that enable more powerful analyses. Not all of these lines are characterized for FHB-related traits, but they all contribute to the release of higher performing, more FHB-resistant varieties to farmers.

It is the mission of The Triticeae Toolbox to facilitate managing and aggregating plant breeding data as described to accelerate gains from selection in public sector breeding programs. This data management tool effectively enables small programs to leverage each other's efforts and resources so that all programs benefit from analyses on datasets of a scale that none of them can reach individually. The T3 curator, David Waring, will ensure that all of the data is properly formatted and uploaded. Particular attention will be paid to nurseries that collect FHB-related data, but all nurseries will be targeted, uploaded and made available in a well-organized manner on the web.

