

ANNUAL REPORT

Grant Code: AA4741

Title: Access to Idaho Extension Variety Trial wheat data: Creating searchable database for producers and wheat breeders

Personnel:

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Accomplishments:

We have built a draft database (objective 1) and querying tools (objective 2) using agronomic data from soft white winter wheat trials conducted by Dr. Marshall between 2004 and 2018. This information has been made available online at <https://vartestdb.nkn.uidaho.edu>. The output from objective 4, a data visualization tool, has been drafted and added to the online data portal.

Objective 3, data assemblage, cleaning and preparation is underway. We have hired Dr. Jacqueline Tay, an experienced and skilled data manager, to curate the data sets. Wheat trial data from Dr. Walsh's program has been cleaned and prepared for inclusion in the database. We have begun to prepare Dr. Marshall's data not currently included in the database (all spring wheat trials, all wheat end-use quality data and winter wheat trial data from trials conducted after 2018). Data curation is the most time-consuming step in this process. We are currently behind in our original projected timeframe to complete the data curation steps, largely due to length of time it took to hire Dr. Tay. Nevertheless, we have made acceptable progress in data curation since Dr. Tay has begun. We anticipate being able to complete our data curation prior to end of the project. We have sufficient funds in our budget to complete the project.

Projections:

We applied for additional funds from the Federal granting agency the National Institute for Food and Agriculture to expand this data hub to Idaho, Washington and Oregon for wheat, barley, pulses, and Brassica oilseeds.

Publications:

Piaskowski JL, Marshall J, Hinds J, Schroeder K and O Walsh, 2020. A Public Database for Idaho Variety Testing Programs [Poster]. Annual Meeting of the ASA-CSSA-SSSA, November 9-13, 2020 (online).