

Washington Grain Commission
Wheat and Barley Research Annual Progress Reports and Final Reports
Format

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Project #: 3184

Progress Report Year: 2 of 3 (maximum of 3 year funding cycle)

Title: Breeder Quality Trials

Cooperators: Kim Garland-Campbell, Arron Carter, Mike Pumphrey, Clark Neely

Executive summary: A new program commenced in FY 2019/20 to ‘pre-screen’ experimental breeding lines before they are entered into the WSU Wheat Variety Trials. This pre-screening was aimed at increasing the likelihood that newly released soft white wheat varieties meet industry standards before gaining substantial acreage and influencing the overall quality of the grain being exported from the Inland PNW. Quality data generated from this trial in 2020 and 2021 has been analyzed using the standard *t*-Score and the results (and interpretation) returned to the breeder. The data can also be included in the analysis used for the *Preferred Variety* brochure. The check variety has been drawn from the adjoining Variety Testing nursery.

Impact: Being a relatively new program, we are not able to evaluate the long-term impact of the project. However, we anticipate that the project will provide value to growers in two significant ways: First, it documents and highlights the quality of varieties so that breeders—public and private—are aware of the importance of quality and will hopefully include quality in their selection and variety release decisions.

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Outputs and Outcomes:

Following is a summary of experimental lines evaluated under this program (harvest 2021): There were 31 SWW lines submitted and they were evaluated at seven locations. The SWW lines were submitted by WSU (Dr. Arron Carter), AgriPro, Limagrain, and Westbred. There were four SWS lines submitted and were evaluated from five locations. The SWS lines were submitted by WSU (Mike Pumphrey), Westbred, and AgriPro. In total there were 203 samples evaluated.

WGC project number: 3184				
WGC project title: Breeder Quality Trials				
Project PI(s): Kiszonas & Neely				
Project initiation date:				
Project year (2 of 3-yr cycle):				
Objective	Deliverable	Progress	Timeline	Communication
Evaluate 10 advanced breeding lines from each of 4 programs at 5 locations	Complete end-use quality evaluation and t-Scores	Completed each year by early spring after prior year harvest	Completed by early spring after prior year harvest	End-use quality data, t-Score, and interpretation shared with originating breeder