This project has created a multidisciplinary committee that has shared wheat quality information among growers, researchers, and industrial partners. Using standardized testing methods that they developed, WERA-1009 scientists have evaluated wheat quality and measured how it is affected by specific plant genes, environmental factors, and grower practices. Over the last five years, the group has developed and released a number of unique new varieties of spring and winter wheat that have been top-yielding and have demonstrated excellent pest resistance, extreme weather tolerance, and desirable traits, such as better coloration and softness. Many of these varieties have become the most planted wheat varieties in western states. For their accomplishments, WERA-1009 received the WAAESD Award of Excellence in Multistate Research in 2012.
Impact Statements

Engaged scientists and domestic and foreign industrial partners in research and development that led to improved wheat quality.

Reduced economic losses due to poor crop yield and/or quality and enhanced wheat production’s resilience to climate change by developing and releasing new wheat varieties that are high yielding, drought tolerant, disease resistant, and/or have desirable traits for diverse uses.

Improved farmers’ understanding of how their agricultural practices impact the ways their wheat crops can be used, thus helping them select higher quality varieties, use best management practices, and ultimately earn more for their crops.

Promoted domestic and international wheat trade by using knowledge about the quality and uses of different wheat varieties to predict how they will behave in markets and by increasing the overall acreage of valuable wheat varieties across the western region.

What research is needed?

Environmental conditions are constantly changing, as are customer needs. The median income level of Asian and Middle Eastern countries is increasing, which translates into increased demand for existing and new wheat products. Additional research on the genetics and environmental factors that affect wheat quality is needed so that the wheat industry can continue to adapt to climate change, new pests and changing customer needs. All western states are encouraged to participate in wheat breeding and testing programs. There is also need to begin investigating how different qualities of wheat affect human health.

Want to know more?

Administrative Advisors:
Russ Karow (russell.s.karow@oregonstate.edu)
Bill Boggess (bill.boggess@oregonstate.edu)

This project was supported by the Multistate Research Fund (MRF) established in 1998 by the Agricultural Research, Extension, and Education Reform Act (an amendment to the Hatch Act of 1888) to encourage and enhance multistate, multidisciplinary research on critical issues that have a national or regional priority. For more information, visit http://www.waaesd.org/.

Compiled and designed by Sara Delheimer