



FOR IMMEDIATE RELEASE

AURI partners with Minnesota Wheat Research and Promotion Council on AGRI Crop Research Grant.

Grant funds wheat research and wheat product digestibility for gluten sensitive diets.

ST. PAUL, MN JULY XX, 2019 – The Minnesota Wheat Research and Promotion Council (MWRPC) was awarded an Agricultural Growth, Research, & Innovation (AGRI) Crop Research Grant from the Minnesota Department of Agriculture (MDA) to fund a two-year study that has the potential for meaningful long-term advances for an important Minnesota commodity. The AGRI Crop Research Grant was awarded through a competitive application process to provide funds for applied crop research that will improve agricultural product quality, quantity, or value.

The study, titled *Wheat Variety and Sourdough Product Analysis for Anti-Nutrient Levels Related to Digestibility*, will be done in cooperation with the Agricultural Utilization Research Institute (AURI), the University of Minnesota and its Regional Sustainable Development Partnership and Back When Foods, Inc. The ultimate goal of the research is to create new opportunities for wheat-based products, consumable by those with wheat digestion concerns. Additionally, the study has the potential to provide new market opportunities that could have a positive financial impact for the wheat industry growers and Minnesota.

MWRPC, along with project partners, will use the \$215,000 grant to support the study to reduce wheat digestibility concerns by identifying wheat varieties with naturally low “anti-nutrient” levels for breeding purposes and to explore fermentation as a processing technique to reduce FODMAPs in wheat food products. A 2018 review on “Use of Sourdough in Low FODMAP Baking” published by Dr. Jussi Loponen of Fazer Group in Finland and Dr. Michael G. Gaenzer of the Department of Agricultural, Food and Nutritional Science, University of Alberta, in Edmonton, Canada indicates the sourdough bread-making process offers a means to develop natural and fiber-rich low FODMAP bakery products for IBS individuals and thereby help them to increase their dietary fiber intake.

The focus areas of the study include characterizing and identifying variants of genetic markers for FODMAPs and ATI activity in ancient, heritage and modern wheat varieties; exploring fermentation as a technique to reduce FODMAPs and ATI quantities in finished products,

including bread; and establishing a pathway to implement research outcomes to industry, which is just as critical to the outcome as the research data. Researchers believe anti-nutrients, amylase-trypsin inhibitors (ATI) and fructans (FODMAPS) are triggers of non-celiac and Irritable Bowel Syndrome (IBS).

"This project has great potential to fill information gaps and positively impact consumers experiencing wheat sensitivity issues," said AURI Executive Director Shannon Schlecht. "Analyzing the FODMAP and amylase trypsin inhibitor (ATI) levels and the change in these levels in specific wheat varieties over the past 100 plus years along with exploring how different fermentation processes impact these two items will provide additional perspectives for industry to consider new alternatives for consumers that are turning away from wheat based foods."

The AGRI program awards grants, scholarships, and cost shares to advance Minnesota's agricultural and renewable energy industries. For more information about the AGRI program, visit <http://www.mda.state.mn.us/grants/agri>. To learn more about AGRI Crop Research Grants, visit www.mda.state.mn.us/cropresearch.

For more information about the grant funded research efforts or to speak with an AURI representative please contact Harold Stanislawski, AURI Project Development Director, at hstanislawski@auri.org.

About AURI

The Agricultural Utilization Research Institute's mission is to foster long-term economic benefit through value-added agricultural products. It accomplishes this by using science and technology to help develop new uses for agricultural products. It partners with businesses and entrepreneurs to generate economic impact in Minnesota communities by helping businesses take advantage of innovative opportunities in four focus areas: bio-based products, renewable energy, coproducts and food. AURI provides a broad range of services, including applied research and development, scientific assistance and a targeted network of resources to develop value-added uses for crops and coproducts.

To learn more about AURI's work and how it benefits the state, visit <https://www.auri.org/>