

The North American Millers' Association represents millers of wheat, corn and oats. The milling industry relies on high quality grains to supply ingredients for favorite foods such as bread, cereals, pasta, cookies, cakes, and snack foods.

PROBLEM STATEMENT 1.A:

Define, measure, and preserve/enhance/reduce attributes that impact quality and marketability.

We encourage close collaboration between NP306 and NP108 (Food Safety) to develop a wholistic approach to address the complex issues around fungal toxins which directly impact millers ability to source and process quality grain. The U.S. Wheat and Barley Scab Initiative is a model of close collaboration between ARS and public universities and could be replicated in corn and other crops. Activities that will assist farmers to predict, prevent and detect the development of toxins in the fungal infected grain while it is in the field will reduce the risk of rejection at delivery.

USDA ARS has four wheat quality labs that are an important part of the U.S. system to enhance germplasm and cultivar development for commercial food production in the wheat milling and baking industries. It is important that funding for the quality labs is maintained and that new methods for collaboration between researchers, breeders and industry are explored.

Oat research at the ARS lab in Fargo, North Dakota (NP301) is identifying regions of the oat genome that influence yield and end-use quality traits and developing molecular markers to improve breeding efforts. Ensuring these markers are able to be used by breeders will enhance the quality of oats and their numerous health benefits.

Cropping systems that are evolving due to changing climate, consumer demands for regenerative agriculture, or other reasons should be evaluated for their impact on disease and pest pressure, quality and yield.

PROBLEM STATEMENT 1.B:

New bioactive ingredients and health-promoting foods.

We encourage USDA to support additional research on the health benefits associated with milled corn products. Whole grain corn provides unique nutritional benefits and is a plentiful and cost-effective source of high quality fiber which has been under-researched to date.

PROBLEM STATEMENT 1.C:

New and improved food processing and packaging technologies.

Additional research is needed to support new pathogen reduction technologies for low moisture foods. Specifically, research is needed to improve the efficacy and cost effectiveness of these technologies to expand their use.