

Written Testimony for the Record

Jane DeMarchi
President, North American Millers' Association

United States House of Representatives
Committee on Appropriations
Subcommittee on Agriculture, Rural Development,
Food and Drug Administration, and Related Agencies

Subject: Support for USDA Agricultural Research Service Funding

June 1, 2020

Chairman Bishop, Ranking Member Fortenberry, and members of the subcommittee, we appreciate the opportunity to submit testimony today on the importance of the USDA Agricultural Research Service (ARS). The North American Millers' Association (NAMA) appreciates your commitment to agricultural research and the increase in funding provided in the FY2021 omnibus spending package. We encourage the subcommittee to increase or maintain the current funding levels for ARS in FY2022.

NAMA represents millers of wheat, corn, oats, and rye in the U.S. and Canada. Our members take raw grain and, through grinding and crushing, create flour and other products that are used to make such favorite foods as bread, pasta, cookies, cakes, and snack foods.

All of the grains milled by NAMA members benefit from the research supported across the country by ARS. From research on mycotoxins and wheat scab to efforts to understand oat rust, the work and support provided by ARS is critical to keeping the U.S. small grains supply chain on the cutting edge of a highly competitive global marketplace.

While NAMA and industry leaders also contribute to research initiatives and believe in strong public-private partnerships, the success of U.S. agriculture is due in large part to the sustained federal investment in agricultural research. Over time, these investments have assisted U.S. growers in being the most productive in the world and contributed to making the U.S. a global leader in the growing demand for food.

Wheat

Wheat is an important component of the diet as it contains significant amounts of protein, insoluble and soluble fibers, vitamins, and minerals. In fact, wheat is the world's largest crop used for direct human consumption. While global wheat consumption continues to expand, the U.S. wheat sector has faced many challenges over the past decade, including a weak domestic market for wheat products. According to the USDA Economic Research Service (ERS), U.S. wheat harvested area has dropped more than thirty million acres, or more than one-third, from its height in 1981. Further, the U.S. share of the global wheat market has also been declining over the past two decades as the European Union and Russia have become more competitive.¹

¹ "Wheat Overview." USDA ERS. <https://www.ers.usda.gov/topics/crops/wheat/>.

ARS resources that support activities, such as wheat genotyping, quality, genetics, breeding, pest and disease research are critical to improving the wheat breeds and technologies necessary to provide economical solutions to producers and quality food products to consumers. The U.S. Wheat & Barley Scab Initiative (USWBSI) continues to be a valuable effort as it focuses on the development of scab resistant wheat varieties, disease forecasting, and food safety.

Additionally, ARS contributions to the development of wheat varieties is critical to improving the end-use quality, uses, and marketability of soft winter (SW) wheat in the eastern U.S. To attain this goal, ARS works to develop reliable and efficient quality testing methods, performs fundamental research on grain characteristics and genetics associated with quality traits, explores the potential of eastern soft wheat for extended uses, and performs the comprehensive evaluation of breeding lines for end-use quality. ARS wheat projects also encompass the effective evaluation of pre-harvest sprouting (PHS) damage and cracker baking quality potential, extended use potential for tortillas and noodles, genetic factors controlling PHS, and milling and baking quality evaluation of SW wheat, which are crucial for the quality improvement and extended uses of eastern SW wheat. This kind of research will improve the end-use quality of eastern soft wheat varieties, help regional milling and baking industries identify quality grain, and increase the marketability and value of eastern soft wheat in domestic and overseas markets. The genetic complexity of wheat and overall limited research funds make this work being done by ARS all the more important.

Oats

While oat consumption in the U.S. has been increasing in recent years due to the unique nutritional benefits it provides in human food, U.S. oat production has been on a continual decline.² Because of this, over ninety percent of the oats being milled in the U.S. for staple foods, such as cereal, granola, and oatmeal, are being imported from Canada. As Americans continue to look to oats as a heart-healthy, safe, whole-grain addition to their diets, continued investment by the federal government is essential to keep the U.S. at the forefront of improving oat production and quality.

Basic genetic research, including new molecular techniques, plant breeding, research on disease resistance, germplasm enhancement, and research on new and value-added uses will enhance the value of oats and provide benefit to the producer, processor, end-user and consumer. In addition, oats play an important role in sustainable grain production in the U.S. and provide producers with another crop option. To remain a viable crop, progress in oat improvement must be sustained. The support provided by ARS for oat research is essential to this progress.

Specifically, the increases provided to ARS over the past few years have been instrumental in advancing our understanding of how to grow better, higher yield, more disease resistant oats. Among other important steps, congressional funding has allowed ARS to hire breeders, geneticists, and research agronomists; continue sequencing the oat genome to develop a

² "National Statistics for Oats." USDA National Agricultural Statistics Service.
https://www.nass.usda.gov/Statistics_by_Subject/result.php?57954247-DAF6-3583-9A97-083E07E6D866&Sor=CROPS&group=FIELD+CROPS&comm=OATS.

pangenome of oat; work towards determining protein, beta-glucan, and oil contents of oat varieties; and increase analysis of oat crown rust samples. Congressional funding is essential to ensuring that these great strides in oat research can continue to develop.

Corn

Milled corn is found in a wide variety of foods, including corn meal, grits, corn flour, corn flakes and breakfast cereals. In addition to being rich in antioxidants, milled corn foods are delicious, making it easy to get essential nutrients, such as carotenoids, into one's diet. Advances in corn genetics and technologies have been significant in recent decades. However, work remains to be done to limit mycotoxin contamination, control foodborne diseases, and improve crop production. ARS conducts a variety of innovative food and feed safety research to monitor, predict, and eliminate mycotoxin contamination in corn and is developing technologies to enhance climate resilience of cereal crops, including corn. Further, ARS facilities are developing commercially viable technologies that transform corn, its components, and processing waste into value-added food and non-food products, resulting in an even more sustainable product. The support of ARS facilities across the country ensures this important research continues.

Conclusion

While we appreciate the budgetary challenges faced by the subcommittee, we encourage you to increase or maintain funding levels for ARS in FY2022. The research supported by ARS is critical to the continued productivity and profitability of the entire small grains supply chain.