

SUCCESS STORIES

Matanuska Experiment Farm and Extension Center

Grain variety trials, research on cultivation methods address food security in Mat-Su

Issue

During the COVID-19 pandemic, many Alaskans faced food security issues stemming from the state's dependence on out-of-state food suppliers. Shipments from Outside were limited and in-state suppliers could not meet public demand for agronomic crops.

Response

The Matanuska Experiment Farm and Extension Center conducts research on grains and other agronomic crops. Bob Van Veldhuizen is an agronomy research assistant whose work is centered around developing varieties and agricultural practices that will increase output and lower production costs for grains and oilseeds. He is working on three grant-funded agricultural research projects that revolve around distinct yet intertwining goals. Van Veldhuizen works with UAF agronomist Mingchu Zhang, who directs the research at the Matanuska and Fairbanks experiment farms and the Delta Junction research site.

The first project is focused on evaluating two-row barley and related crop management systems that are suitable for Alaska. Cultivation methods such as tillage and irrigation and organic matter content are considered when assessing varieties to ensure appropriate soil health is maintained. The second project is similar; however, its focus is on developing a more suitably adapted hard red spring wheat for Alaska that will allow for the reliable production of quality bread flour. A third project focuses on improving cultivation practices for peonies. This grant has the potential to increase the efficiency of fertilizers and nutrient cycling and to reduce costs for growers. These projects tie into one core goal — improving the quantity and quality of crops grown in Alaska to lower production costs and increase profits for farmers.



Bob Van Veldhuizen harvests barley at the Matanuska Experiment Farm in August.

Results

Ensuring the consistent production of a quality bread flour will benefit local growers, food industry workers and consumers. Improving soil conditions through cultural practices will result in better quality and quantity of local foods. Lowering production costs and increasing profits for grains and oilseeds in Alaska will increase the production and supply of quality grain already in the state. An increase in grain production will reduce Alaska's dependency on out-of-state shipments and improve food security.

FOR MORE INFORMATION

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