

SUCCESS STORIES

Agricultural and Forestry Experiment Station

Vegetable trials: testing for the best varieties as the climate and growing season change

Issues

Alaska's climate is changing and growing seasons have lengthened in many areas of Alaska. It may be possible to grow different vegetable varieties than have grown here previously. Plant breeders also develop new varieties and update older varieties. Continued trials in different locations are important to determine what will grow best where, so the information can be shared with gardeners and farmers, strengthening Alaska's food security.

Response

Alaska's experiment stations have conducted vegetable variety trials since the early 1900s. After an eight-year break, trials resumed at the Fairbanks Experiment Farm in 2017 and have expanded to the Matanuska Experiment Farm and Extension Center. Sixty-six varieties of vegetables were planted in 2020 in Fairbanks, including corn, carrots, beets, beans, fennel, winter squash and spinach. All trials except the corn were replicated in Mat-Su.

The vegetables are weighed to determine yield, and also rated for plant vigor, bolting sensitivity, uniformity, pest and disease resistance and taste. The trials usually continue over several years because of the variability in weather.

Results

Annual results from the variety trials have been shared with the public during presentations and outreach events and may be viewed online on the Agricultural and Forestry Experiment Station (AFES) website at <https://bit.ly/Varietytrials>. A YouTube series on specific vegetables is also getting the word out through the AFES playlist, at www.youtube.com/user/UAFExtension. Once vegetables have been trialed sufficiently, Extension publications on



Research technicians Nicole Carter and Anja Mijala plant spinach in Fairbanks vegetable variety trials.

recommended varieties for Interior and Southcentral will be updated.

Megan Schulze of Frontieress Farm in Fairbanks, says "As a beginning small farm, I view the vegetable variety trials as a way to make more informed crop decisions without sacrificing space and time ... as well as justification to explore new production avenues."

Produce raised in the variety trials is donated to food distribution centers for those in need. In 2020, nearly 4,500 pounds of produce from both farms was donated to local food banks and other community hunger-relief organizations.

FOR MORE INFORMATION

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