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Georgeson Botanical Garden
W Tanana Dr
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UAF Experiment Farm
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Research Plots
Main road
Railroad
Farm road
13
Presentation or tour
P
Parking
UAF
UNIVERSITY OF ALASKA FAIRBANKS
AGRICULTURE AND FORESTRY EXPERIMENT STATION

## SCHEDULE

**2:00**
1. Registration and welcome from Jodie Anderson, director of the Institute of Agriculture, Natural Resources and Extension
3. Greenhouse Plant Production (throughout the afternoon)

**2:30**
4. Vegetable Varietal Trials
5. Small Grain Trials and Cover Crop Efficacy
11. Oilseed Trial

**3:00**
4. Vegetable Varietal Trials
5. Small Grain Trials and Cover Crop Efficacy
11. Oilseed Trial
2. Garden Tour (1 hour)

**3:30**
6. Small Grain Breeding and Research
7. Legume, Grass and Winter Pea Study
8. Revegetating After Bird Vetch Management

**4:00**
6. Small Grain Breeding and Research
7. Legume, Grass and Winter Pea Study
8. Revegetating After Bird Vetch Management
2. Garden Tour (1 hour)

**4:30**
9. Herbicide Persistence in Soils
10. Cover Crop Study

**5:00**
1. Juice and cookies in the garden: visit with the researchers

1. **Registration + Refreshments**

2. **Botanical Garden Tours** Lacey Higham & Volunteers
Go on a guided tour of the botanical gardens. Visit the research garden, food garden, native plant garden, children's garden, perennial display gardens and hedge maze.

3. **Greenhouse Plant Production** Meriam Karlsson & Eric Cook
The AFES greenhouse studies possibilites to extend the growing season. One focus is using LEDs as supplemental lighting. Timing, amount and the quality, or type, of light are evaluated for efficient production of leafy greens, tomatoes, bell peppers and other food crops throughout the year.

4. **Vegetable Variety Trials** Glenna Gannon
The varietal trials program determines which vegetable and edible perennial cultivars grow best in various regions of Alaska. Researchers evaluate crops known to do well in Alaska and crops formerly considered marginal for a colder climate, such as hot peppers, artichokes and corn.

5. **Small Grain Trials and Cover Crop Efficacy** Nathan Simms & Mingchu Zhang
Small grain trials work to select a spring wheat variety for Alaska's climate, choose a feed barley cultivar for malting purposes, and finalize a Polish canola variety to be used as an oilseed crop and a rotational crop. The cover crop project evaluates two cover crop mixtures (alfalfa and slender wheatgrass, and clover and perennial ryegrass) for their rotational schedule, biomass production, hay quality, and impact on soil health indicators.

6. **Small Grain Breeding and Research** Jakir Hasan
Researchers are breeding high-yielding barley, wheat, oats, and canola varieties for Alaska farms. The nursery consists of approximately 2100 10-foot plots of barley. The variety trials compare varieties of barley, wheat, oats and canola. The top-performing lines from the variety trials will be distributed to Alaska farmers for cultivation on their farms.

7. **Legume and Grass Forage Study and Winter Pea Study** Nathan Simms & Mingchu Zhang
To determine the optimal species used as forage and cover crops for Alaska's Interior and Coastal areas, researchers planted four grass species, two legume species and combinations of the two. Plants are seeded in the fall and the spring and evaluated for insect damage. The winter pea studies test four winter peas with and without companion crops for their suitability in Alaska. This study is part of a national network of cover crops.

8. **Revegetating After Bird Vetch Management** Gino Graziano
Herbicides vary in soil persistence, and this project studies how three different herbicides used to manage bird vetch impact the plants planted afterward. To simulate restoring roadsides or other often disturbed areas, yarrow, goldenrod and wild potato were planted to see how they grew and inform on long-term impacts of herbicide use on bird vetch.

9. **Herbicide Persistence in Soils** Gino Graziano
This project assesses three different herbicides with varying persistence in soils with the goal of certifying a weed-free straw product and identifying crop species used in rotation that are sensitive to herbicides.

10. **Cover Crop Study** Caley Gasch
This project aims to evaluate which species and mixes of cover crops will grow in Alaska's climate while providing benefits to soil health and crop production. To do so, we monitor growth during the season and measure a long list of soil properties in the fall.

11. **Oilseed Trial** Caley Gasch
This project evaluates different varieties of camelina, canola, flax, and sunflower for their potential for crop production as oilseeds in Alaska.