

Alaska Spinach

Savory, Succulent Salad Selection

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Spinach salad is a new, exciting choice for the table! There is an increasing use of a variety of greens in salads by U.S. consumers, spinach among them. The fresh quality demanded by Alaska consumers could be met by Alaska producers from June through August if a spinach cultivar that did not bolt early in the season could be identified. For the past 30 years, horticulturists at the Fairbanks Experiment Farm, now a part of the Agricultural and Forestry Experiment Station, University of Alaska Fairbanks, have tested spinach cultivars looking for a cultivar that will not bolt early in the growing season.

Methods

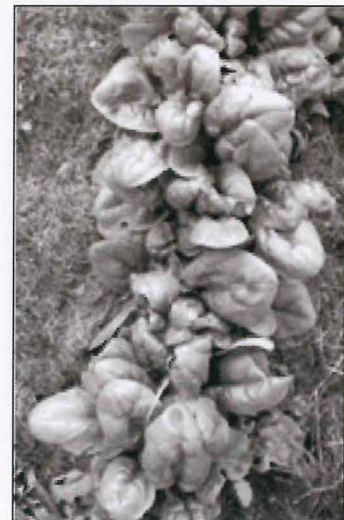
Denali Seed Company, Anchorage, Alaska, provided five spinach cultivars from their 1997 seed stock to the Georgeson Botanical Garden, University of Alaska Fairbanks, for testing in 1998. They were compared to Melody, the recommended cultivar for Fairbanks. All cultivars were direct seeding May 27, 1998. The objective was to test the cultivars during the 1998 growing season to determine the length of time between seeding and bolting. While it is advantageous to have a cultivar of spinach that does not bolt early in the growing season, it is also important that the cultivar is acceptable to the consumer. An untrained sensory panel evaluated appearance, texture when tasted, and flavor of the six spinach cultivars. They were also asked to indicate if they would purchase the cultivars.

Results

Tyee emerged on May 31, followed by Melody, Teton, Medania, and Grodane on June 1 and Hybrid 457 on June 2. Hybrid 457 had spotty germination but all the other cultivars grew well. Tyee began to bolt on June 27 followed by the remaining cultivars on June 29. All spinach was harvested on June 30.

Bolting did not provide a decision point for acceptance or rejection of the five varieties provided by Denali Seed Company. All bolted in approximately the same number of days. One cultivar that might have been rejected prior to the taste test was Hybrid 457. Germination for this cultivar was spotty.

The sensory panel provided the definitive consumer input for recommendations concerning the five cultivars. The recommended cultivar Melody was most preferred for its attractive appearance and its flavor. Our panelists liked the dark to bright green color of Melody. The cultivar was judged to have relatively balanced bitter and sweet flavor characteristics and was only somewhat grassy; a mild spinach with the least tendency for leaving an after taste. It was also the cultivar these panelists were most likely to purchase. When the panelists tasted the spinaches, they were indecisive about the texture of Melody and Tyee. A higher percentage preferred the texture of Tyee while the weighted average of their responses showed a slight preference for Melody. Melody appeared juicy and moist to these panelists, somewhat tender, with a tendency toward crispness. Melody remains the recommended spinach cultivar for Fairbanks.



Melody spinach

The authors thank Reg Yaple, owner of the Denali Seed Company, Anchorage, Alaska, for supplying the five spinach cultivars for the study.

For more detailed information about any of the products we have tested please contact:
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Taste Is Important

We are often asked, "What food products can be produced in Alaska?" More often we hear "How do Alaska food products taste and do consumers want to buy them?" Scientists at the Agricultural and Forestry Experiment Station have been answering that question since 1990. We test the appearance, texture, flavor, and consumer acceptance of Alaska food products.

Production of plants and domestication of animals were most important to the ancient world's first farmers. Flavor played a role in what was eaten, however. The search for spices opened trade routes and resulted in discovery of continents.

The entire food supply chain includes more than just production. It extends to manufacturing, packaging, home processing, and serving. Early food choices were limited to local products. Developing processing technology and increasing globalization of communication and food distribution systems changed the profile of food choices. Taste and appearance became more important to increasingly better-informed and discerning consumers worldwide.

Food production began in the early 1800s in Alaska. Russians in fur-trapping and trading colonies in the southcentral and southeastern regions were Alaska's first farmers. Farming continued in the territory and state with assistance from the agricultural experiment stations which celebrated 100 years of research in 1998. Food production was central to settlement and mining. A well-developed transportation system now allows Alaskans a wide variety of food choices, and an equally well-developed communication system informs them about food products. Therefore, local products must not only be priced competitively, they must have a pleasing appearance and distinctive taste.

Agricultural and Forestry Experiment Station

The federal Hatch Act of 1887 authorized establishment of agricultural experiment stations in the U.S. and its territories to provide science-based research information to farmers. There are agricultural experiment stations in each of the 50 states, Puerto Rico, and Guam. All are part of the land-grant college system. The Morrill Act established the land-grant colleges in 1862. While the experiment stations perform agricultural research, the land-grant colleges provide education in the science and economics of agriculture.

The first experiment station in Alaska was established in Sitka in 1898. Subsequent stations were opened at Kodiak, Kenai, Rampart, Copper Center, Fairbanks, and Matanuska. The latter two remain. None were originally part of the Alaska land-grant college system. The Alaska Agricultural College and School of Mines was established by the Morrill Act in 1922. It became the University of Alaska in 1935. The Fairbanks and Matanuska stations now form the Agricultural and Forestry Experiment Station of the University of Alaska Fairbanks, which also includes the Palmer Research Center.

Early experiment station researchers developed adapted cultivars of grains, grasses, potatoes, and berries and introduced many plant cultivars appropriate to Alaska. Animal and poultry management was also important. This work continues as does research in soils and revegetation, forest ecology and management, and rural and economic development. Change has been constant as the Agricultural and Forestry Experiment Station continues to bring state-of-the-art research information to its clientele.



Georgeson Botanical Garden

The Georgeson Botanical Garden (GBG) is a nationally recognized botanical garden. It is a member of a national network of educational and research institutions dedicated to plant culture and conservation. The GBG began at the University of Alaska Fairbanks as the Horticultural Demonstration Garden, an annual flower and vegetable garden. It was named after Dr. Charles Christian Georgeson in 1991 and is now a landscaped botanical garden. Dr. Georgeson established Alaska's system of agricultural experiment stations.

The garden is located at the Fairbanks Agricultural and Forestry Experimental Farm, a part of one of the two experiment stations in Alaska. The GBG continues a tradition that began during the gold rush era. In 1905, the citizens of Fairbanks petitioned the Secretary of Agriculture to establish an experiment station somewhere in the Tanana Valley. In 1906, their petition was granted. Early work at the experiment station emphasized grains, grasses, and potatoes, the mainstays of agricultural production in the area. However, there were always vegetables, flowers, fruits, and landscape ornamentals for the public to view and learn from.

Today visitors can do more than just view the Garden. There are tours, demonstrations, and classes. Visitors can see the diversity of plants that grow in Alaska, including the world famous giant vegetables. There are also opportunities to observe and experience wildlife, birds, plants, and insects that live in the interior of the state.

If you can't visit the gardens in person, visit their web site:
www.uaf.edu/salrm/gbg

