



Horticulture in Alaska – an Emerging Market in Specialty Cut Flowers

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History: Most Alaskans and visitors know that this northern climate produces stunning flowers. The huge blooms and vibrant colors are certainly the talk of summer visitors, gardeners and landscapers. In 1998, the UAF Cooperative Extension Service held a greenhouse conference in Fairbanks, Alaska. One of the invited speakers was a cut flower grower from Oregon who shipped flowers worldwide. This grower learned from research at UAF that the popular cut flower, the peony, blooms in July and August in Alaska, and he mentioned that this late season was unique in the world of cut flowers. Peonies as cut flowers are available from New Zealand and Australia in Oct/Nov; Chile and Argentina in Dec/Feb; the Middle East, China and central Europe in Mar/May; and the “lower 48” and coastal Europe in May/June. Fresh cut peonies have not been available anywhere in the world in July/Sept – until now. Our season is so late because of our northern latitude, they bloom during the time when no one else has them. Combine this unique opportunity with access to world markets through the third largest air cargo system in the world (Anchorage and Fairbanks airports combined), and we speculated that Alaska might be in a good position to enter the multi-billion dollar world of cut flowers.

In 2001, the University of Alaska Fairbanks Agricultural and Forestry Experiment Station (AFES), received a grant from the US Department of Agriculture (federal grant) to study the potential for developing an export industry in specialty cut flowers. We planted peony roots, enlisted the help of undergraduate senior thesis and graduate master’s students in analyzing the feasibility of growing peonies as cut flowers in Alaska. At the same time, we contacted growers, flower distributors, florists, marketing specialists in the “lower 48” and New Zealand to learn the potential of this fledgling idea. In a nutshell, every single person we contacted, said in one manner or another, “You’re sitting on a gold mine!”

We were encouraged even further when, in 2004 we were contacted by the largest cut flower distributor in London who insisted on purchasing at least 1 million stems to be transported (at his expense) on jets loaded with fresh Alaska salmon headed for London restaurants. Through efforts of the UAF Experiment Station and Cooperative Extension, a small group of Alaskans began growing peonies, and in 2007 the first ever commercial export of peonies from Homer was sent to florists in the “lower 48”. The first delivery was fewer than 1,000 stems, but it was highly successful.

Today, there are 90 peony growers; 17 growers have commercial quantities (>500 plants) of peonies in the ground; the rest are starting small, entering this market with a healthy dose of caution. The largest grower in Soldotna has more than 10,000 plants in the ground. There are peony growers in Fairbanks, North Pole, Delta Junction, Nenana, Central, Trapper Creek, Palmer, Wasilla, Kenai, Soldotna, Homer and a few places in between. Through a combined effort of

researchers, extension personnel and growers, the world is waking up to the fact that Alaska has high quality peonies for sale. In 2011, Alaska peonies were shipped to Japan, many locations in the Lower 48, and even Hawaii with demand far exceeding supply. Every grower with peonies to sell was inundated with phone calls from all over the world this past summer. This business also has attracted outside investors; two Alaska farms are now custom growing peonies for the largest Midwest flower distributor in Chicago.

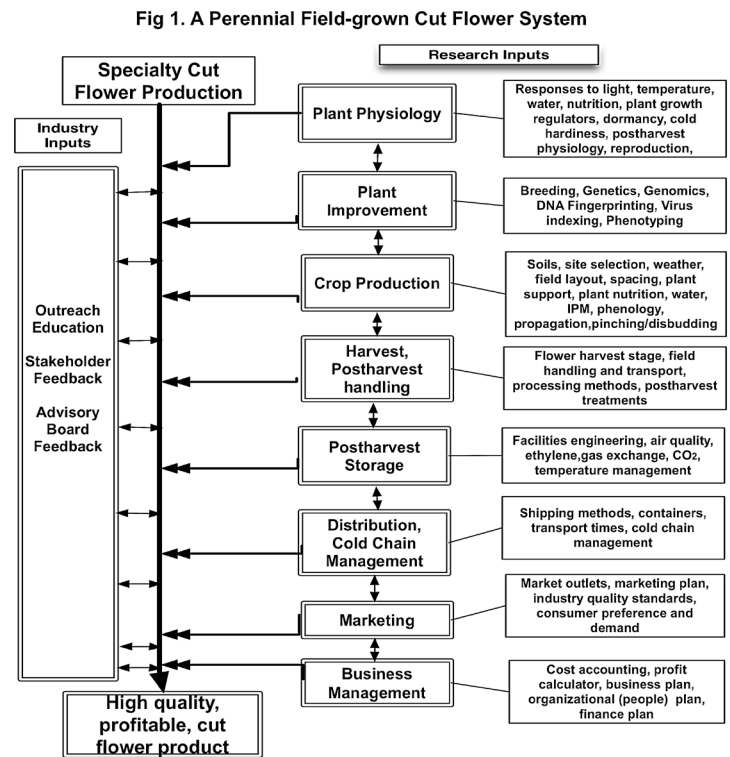
A new industry has begun in Alaska, and all indications are, it will grow just as fast as Alaskans plant peonies. Growers have formed the Alaska Peony Growers Association with a website of cut flower availability (<http://alaskapeonies.org/>). Growers projected they would not meet world demand for at least 10 years, and the dollar return is 10 times or more greater than sales during the glut season in May. Growers routinely receive from \$3.00 to \$9.00 per stem with up to 100,000 stems per acre. The question from distributors is, “What else do you have for sale?” Everything from yellow-stemmed wild willow branches to cut lilies has been requested.

The foundation: This industry was started as a direct research project at the University of Alaska Fairbanks Agricultural and Forestry Experiment Station (AFES), and only because the UAF Cooperative Extension Service (CES) held a conference, invited people to attend and exchange ideas. This project is the perfect example of how the system should work – public dollars being used to explore opportunities that promote economic development and well being of Alaskans. Our goal since Gold Rush days at AFES has been to explore new crops, new opportunities, conduct appropriate research both from the plant growing end as well as the business end, and then present our findings to the public so they can act on it (georgesonbg.org/research/peonies/index.html).

Most industries rely on research and development to maintain a competitive edge and ultimately increase profitability. They often have their own research programs, and information is proprietary. Historically, agriculture does not fit this mold. A country founded on small family farms recognized early on that agricultural research was lagging far behind other industries because farmers could not afford to fund their own research. In 1887, the federal government passed the Hatch Act that provided dollars to each land grant university to form an agricultural experiment station. Funds must be matched by each state. On average, Hatch Act funds constitute about 10 percent of total funding for each experiment station, the remainder coming from additional state funds and grants.

In addition, in 1914 the federal government established the Cooperative Extension Service in each state using the similar matching funding formula. The purpose of CES is to be the “person on the ground” visiting farm fields, working one-on-one with growers to transfer research information to where it is needed most. The third leg of the agriculture research stool is the USDA Agricultural Research Service whose scientists conduct broad-based research with national interests. Alaska currently hosts five federal scientists who have worked primarily on pest management – insects, plant viruses, weeds as well as testing new plants (especially blueberries) for Alaska.

Many people have gardens in Alaska, and it is often believed that anybody can make money at farming. Palmer grower Arthur Keys stated it well, however: “Farming is rocket science. It really is!” It is one thing to grow plants for home use, but to make money at it requires a greater level of knowledge. To further compete on world markets requires precision agriculture; attention to every single detail of production from knowing how plants grow to marketing and business management. With a crop such as peonies, there are so many unknowns, it requires an enormous amount of research and education to develop a competitive, profitable crop as illustrated in the attached diagram (Fig 1). No peony grower in Alaska can afford to fund this kind of research alone. It requires a concentrated, long term effort from a variety of specialists – plant and soil researchers, disease and insect specialists, engineers, marketing specialists and extension educators to put it all together.



The problem: agricultural research in Alaska is not sustainable. The peony project at the University was funded by federal dollars, and that funding ended August 31, 2011. Despite the best efforts of researchers in Alaska, they have been rejected twice for additional federal funding in part because agriculture in Alaska is pretty much a non entity on the national scene. Additionally, during the past two years, the UAF Agricultural Experiment Station experienced a \$1 million shortfall directly impacting all agricultural research programs. There are few opportunities to submit grants to the State for additional funding especially ones that would cover salaries and large scale research projects. What little money that has been available through the Division of Agriculture is pass through federal funds for market research.

The Cooperative Extension Service personnel experienced similar cuts as a result of flat funding, thus hobbling their efforts to work with and educate growers. Additionally, the entire US Department of Agriculture in Alaska is scheduled to close some time this winter. Alaska’s only plant virologist, weed specialists, insect pest specialists, and geneticist will be gone. Four of these scientists worked directly with Alaska peony growers. The USDA was successful in getting funding for the national gene bank for peonies in Palmer, Alaska, but it is scheduled to close before it gets off the ground. Alaska has no state researchers who can take up the slack. Growers will have no one to answer questions about pests, diseases or genetics once USDA leaves the state.

The need: This new peony industry is at a critical phase in its development. Not a day passes when scientists and extension personnel don't get queries from a grower or potential grower on varieties to grow, fertilizers, diseases, weed problems, markets, methods of shipping, and cold storage issues. We helped create this industry, and there is no more support. This industry urgently needs and deserves State support so it can leap into this exciting multi billion dollar world industry. Besides peonies, we need to address the other industry crop demands that could be filled by Alaska growers. This industry diversifies Alaska's economy, brings much needed income to rural and urban areas, and breaks through the barriers that have stifled expansion in the past: small population, local markets, limited expansion possibilities. Peonies have brought the agricultural world to Alaska.

Actions: Please consider the following actions to support this emerging export industry.

1. Act quickly to try and reverse the closure of USDA Agricultural Research Service in Alaska. It may be too late, but a critical knowledge base will be lost.
2. Increase state dollars for the Agricultural and Forestry Experiment Station and Cooperative Extension Service so scientists can perform their responsibilities of supporting Alaska's diverse agricultural industry.
3. Fund a grant to the Alaska Peony Growers Association for grower-driven research to make this new industry competitive on world markets.
4. Fund a program through the Alaska Division of Agriculture to support competitive scientific research on agricultural issues in Alaska.