

Holloway, P. 1993. Horticultural Crop Production for Alaska. Cooperative States Research and Extension Service HATCH report Acc. 0190422.

Trials were conducted on the ornamental potential and hardiness of 66 herbaceous perennial, 22 grass, and 32 woody ornamentals including 12 Alaska native species. The native *Iris setosa*, *Arnica lessengii*, *Cerastium Beeringianum*, *Lupinus nootkatensis*, and *Hieracium umbellatum* were selected for further evaluation in home landscapes and wildflower meadows. Eleven direct-seeded annual flower mixes were evaluated for their usefulness in ornamental landscapes. All mixes began flowering by 15 July, but did not develop full color until August. Multi-colored flower mixes were the most acceptable. Mixes with a single flower color, those with uneven heights, and those with significant lodging were rated unacceptable in public opinion surveys.

The first year of a study to develop an indigenous Alaska wildflower seed mix was completed using 12 species of wildflowers and one native grass, *Poa glauca*. The experimental mix was compared to 3 commercial mixes with both native and nonnative wildflowers. Treatments include long-term effects of species interactions, irrigation, and planting date. Alaska species that grew well in the mixes included *Chenopodium capitatum*, *Tripleurospermum inodorum*, and *Arnica alpina*. *Polemonium acutiflorum* and *Hedysarum mackenzii* grew well only on irrigated plots.

Field plots were established to identify fertilizer requirements for the fruit crops, *Vaccinium vitis-idaea* and *V. uliginosum*. Combinations of N, P and K fertilizer were applied, but no data were taken during 1992. This data will support a fledgling native berry industry in Alaska.

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