GEORGESON BOTANICAL GARDEN

UNIVERSITY OF ALASKA FAIRBANKS

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Update on Annual Flower Seed Mixes

by
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In 1993, we repeated an experiment that was one of the most popular projects ever initiated in the garden, the annual flower seed mix trials. Several of the mixes were repeated, but we added a few new experimental mixes, some of which were very successful. Mixes were direct-seeded using the same methods outlined in 1992 (see GBG Note 50). The mixes are listed below along with their planting bed number and source. Those appearing in bold type were repeats from 1992.

1. **Annuals for Sun. Applewood Seed Co.**
2. **Proven aAll-annual Wildflower Mix. Vermont Wildflower Farm**
3. **Rainbow Blend. Johnny's Selected Seeds**
4. **Golf Course Mix. Applewood Seed Company**
5. **Pinto Brand All-annual Wildflower Mix (CO)**
6. **Firecracker 234. Wildseed, Inc.**
7. Nasturtium Experimental Mix
8. Pat Wagner's Experimental Mix
9. Ginger Gauss' Experimental Red, White and Blue Mix
10. Grant Matheke's Low-growing Mix
11. **Wildflower Carpet Mixture No 12. Park Seed**
12. **Pat Wagner's Experimental Pastel Mix**
13. Jan Bradner's All-white Flower Mix

Some of the mixes still did not perform well. Jan Bradner re-formulated her white flower mix specifically to exclude the German camomile that completely inundated the flower bed in 1992. Jan's planting was once again invaded by German camomile, this time from the billions of seeds we tilled into the soil at the end of the season. The vigor of the seedlings was quite impressive, but they completely destroyed Jan's mix.

Other mixes suffered from moderate to severe lodging including Annuals for Sun, Proven All-annual Wildflower Mix, Golf Course Mix, Pinto Brand All-annual Wildflower Mix, and Firecracker 234. In the experimental mixes we learned the importance of plant height in developing a mix. The mallow (*Lavatera trimestris*) in Pat Wagner's experimental pastel mix was too tall in relation to the other flowers. The bed had a ratty, unkempt appearance as a result.

In 1992, the planting beds were fumigated to eliminate weed seeds. In 1993, we decided to see what would happen without a fumigant. Several problems emerged. The German chamomile grew with a vengence. Some beds had serious problems with chickweed and shepherd's purse, but in most instances the flower display was not significantly affected. In Bed 8 (Pat Wagner's Experimental Mix), a weedy spurge appeared and was quite dominant throughout the season. The source of this non-native weed is unknown. Finally, several of the beds showed damage from *Sclerotinia* rot. The severity of this disease is not necessarily related to a specific mix, but to the bed location and the quantities of sclerotia in the soil.

The favorite mix in 1992, according to our public opinion survey, was the Golf Course Mix followed late in the season by Pat Wagner's Experimental Mix. In 1993, the early-season favorite was the Wildflower Carpet Mix No 12. During the week of July 8, all respondents chose this mix probably because the other mixes had not yet matured. This short-statured mix was the first to bloom in both 1992 and 1993.

By July 16, public preferences were beginning to change, gravitating to the flower mixes that had the shirley (corn) poppies. By the end of the season, the most popular mixes were Pat Wagner's Experimental Mix and the Wildflower Carpet Mix. Last year's favorite, Golf Course Mix,was sixth in overall preference for 1993. Public comments did not give a clue why this mix did not fare as well as in 1992. The comments did reveal some of the attributes preferred by the public: medium height, variety of textures and colors, usefulness for cut flowers, evenness of the colors throughout the mix, and a nice, natural look.

In 1994, we will be evaluating two of these mixes: Pat Wagner's Experimental Mix and Golf Course Mix. The mixes will be direct seeded and sown as two- and four-week-old transplants. The same sowing method used for outdoor beds will be used to sow flats of containers in the greenhouse. Containers of flower seedlings will be transplanted at 12-inch (30 centimeter) spacings outdoors at the same time as other beds are direct seeded.

Volunteer and Master Gardener, Hope Lockwood, with assistance from Master Gardener, Julie Houghton, helped organize and implement this project for the GBG. Hope and Julie will be collecting data on bloom dates, lodging, etc., to share in a future newsletter. This information will be useful for home gardeners interested in getting an earlier seasonal bloom from the mixes or for commercial growers who are interested in selling flats of annual flower seed mixes along with their other bedding plants. In the meantime, visit the flower garden this summer and see for yourself how direct seeded plots compare with transplanted flower mixes. The experiment is located in the center beds surrounding the "Inflorescence" statue in the annual flower garden.

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