



The Not-So-Pretty Side of Annual Flower Seed Mixes

by
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For the past four summers, we have planted a variety of annual flower seed mixes in the GBG flower garden. We marveled at the fantastic growth exhibited by nearly all of the mixes, even when they were direct-seeded. Usually by mid July, the flower beds were a rainbow of color that changed weekly until frost. We learned it was a real challenge to make up our own mix. Some of our attempts at creating a white flower mix, a red, white and blue mix, and a short-statured mix just didn't compare to the fantastic mixes we had purchased from "Lower 48" commercial sources.

Prior to planting our first experiment in 1992, we killed all weed seeds in the flower beds with a herbicide. The beds were spectacular, but we noticed something troubling in a few of the commercial mixes-foreign weeds. A tiny spurry (*Spergula* sp) practically took over one of the beds. In another bed, a "Lower 48" relative of the thistle appeared. Two other plots sprouted unknown grasses. Despite our best efforts to rogue out these heretofore unknown weeds, we noticed a few stray seedlings in other parts of the garden. We will declare war on these weeds next summer to eradicate them before they escape from the garden.

This weed problem is potentially a very serious threat to the use of these annual flower seed mixes in Alaska. We already deal with a variety of non-native weeds, i.e., chickweed, some species of dandelion, butter n' eggs, knotweed. They make gardening a continual challenge. We don't need any more weeds!

This weed problem is exacerbated in flower seed mixes, because it is nearly impossible to identify and remove the weed seeds prior to planting, and few of us can identify weeds as seedlings. Usually they flower and set seed before we notice them.

If you purchase a seed mix, whether it is annual or perennial, make sure it comes with a list of species in the mix. Familiarize yourself with each plant, what it looks like, flower color, height, etc., then inspect the flower mix throughout the summer. Remove (rogue out) any plants you suspect are weeds. Take samples of the weeds to Alaska Cooperative Extension for identification. If weeds are present, notify the seed company at once. We would also appreciate hearing of your experiences.

Another possible solution is to make your own mixes. Purchase bulk seeds of individual species, and mix your own. You can inspect individual seed packets for off-type seeds and remove them before planting.

Besides the foreign weed menace, we encountered a more significant weed problem with our ever-present chickweed (*Stellaria media*), the bane of nearly every northern gardener. As I mentioned earlier, we killed all the weed seeds in the garden during the first two years of testing. Because this wasn't a good representation of what would happen in most home gardens, we eliminated the herbicide during the third and subsequent seasons. In year three, we diligently hand-weeded all of our plots, but the task was made nearly impossible by the crowded seedlings in the direct seeded beds, and our unfamiliarity with identification of many flower and weed seedlings.



Calendula and bishop's flower in the Georgeson Botanical Garden Annual Flower Seed Mix.



Golf Course Mix.

Just like my home garden, a few chickweed seedlings survived the hoe, and we all know it just takes a few plants to start an

invasion. During the second growing season, the few chickweed seedlings grew, but the annual flowers got well established before the chickweed started to spread. The plots still looked nice. Unbeknownst to us, the few seedlings that grew, dumped thousands of seeds beneath the canopy of flowers. Consequently, in the fourth year, 1995, the chickweed seedlings took over. They germinated so early and got established so rapidly, that they crowded out the flower seedlings by forming an impenetrable blanket over the seedlings. Only the edges of the beds where we hand weeded had nice blooms. The centers of the plots were tangles of chickweed stems. When we finally pulled up the spent flower stalks at the end of the season, very few flowers survived in the centers of the beds. In their place were slimy mats of chickweed plants, and beneath them, a complex system of vole tunnels!

Some local visitors to the garden commented on how unkempt the garden looked this year. But not-so-pretty results are just as important as pretty ones in an experiment. We learned a lot about annual flower seed mixes in the past four years, and we can now share the positive as well as negative aspects with you.

Next year, you won't see annual flower seed mixes in the center of the flower garden. We have planted roses in the plots and will add a combination of perennials and annuals next summer. Look for more experiments with annual flower seed mixes in another location.

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