



HYBRIDIZING DAFFODILS

What is a hybrid? Webster says, "The offspring of the union of a male of one race, variety, species, genus, etc., with the female of another; a cross-bred animal or plant." Thus, the seed gathered from the species *jonquilla* crossed with the familiar yellow trumpet, King Alfred, would produce hybrid plants which could have traits of either parent plant. Thus we could have a trumpet-type flower with a strong jonquil scent, or perhaps several flowers on a stem which would be midway in appearance between the two parents. Each seed from the cross may produce a plant different from any other. To increase the supply of the new plant, we would have to propagate it vegetatively—in daffodils, we would have to wait for the bulb to increase, or it would have to be increased by twin-scaling or chipping. All new bulbs would be the same as the plant grown from seed. Seeds sown from the hybrid plant will not produce the same hybrid. The seed contains many characteristics, and the new plant will show the most dominant ones. Often people will say a plant has "reverted" to a wild (or undesirable) state, when what likely has happened is that the hybrid has died, and seeds have grown up which are different from the hybrid plant. A species plant when pollinated by a flower of the same species will yield seed which should produce plants generally identical to the parent plant, although species are slightly variable.

Why hybridize? The reasons are as varied and as many as the people who engage in hybridizing. One reason is to get different cultivars. For instance, from the original 30–40 recorded narcissus species, there are well over 25,000 named cultivars. Hybridizers try to get flowers with increased vigor and health. Or they may concentrate their efforts towards achieving new colors, such as the pink daffodils. They may try to improve the form, or the strength of the stem so that the flower will stand up in heavy rains and wind. Many of the famous daffodil hybridizers of the past were amateurs who wanted flowers of better form to exhibit in shows. The fact that their flowers are now in commerce proves they were successful, as it takes from 15–20 years for a daffodil to find its way into a specialist's catalog, and even longer for the price to come down so that the gardening public is able to plant half a dozen bulbs in the home garden. So when you see a bulb listed in a catalog at a high price, remember that it is most likely new—perhaps better than the older cultivars, perhaps not—and as the supply increases the cost will come down.

The actual hybridizing can be very simple. Using tweezers, simply take the pollen-bearing anther from one flower and place the pollen on the stigma of another flower. Mark the pollinated bloom by attaching a small string tag with the name of the seed parent, the sign "x," and the name of the pollen parent. If conditions are right, seed will set, and in about six weeks will ripen. You will need to watch the pods as they ripen so that they do not burst open, or the seed will be lost. To prevent this, squares of nylon stocking (or cheesecloth) may be put over the ripening pod and fastened in place with a twistem. The ripe seed may either be planted in pots immediately (preferred) or held until fall. The important thing to remember is to keep the soil moist once the seed is planted, as the seed sends out an underground root way before it begins top growth. Plant the seeds about an inch deep, in a light, well-drained soil mixture. Sink the pots in a coldframe which can be covered during severe cold spells. The seed should germinate the following spring. A diluted liquid fertilizer may be given to keep the young shoots growing as long as possible. After two years of growing in pots, the tiny bulblets may be lined out in the garden. They should bloom in their fifth or sixth year of growth. If some seed is planted each year, after the first five-year wait, there should be something new to see each year.

The chances of an amateur developing something distinct enough to introduce to the commercial trade these days are slim, although many fine flowers may be developed. Amateurs may choose to work with the species and miniatures, and reasonably expect some delightfully distinct flowers.