

Community Horticulture Fact Sheet # 67 Forcing Bulbs

Planting spring-blooming bulbs out in the landscape requires no particular preparation or timing other than getting them into the ground. Gardeners plant hyacinths, tulips, crocus and daffodils outdoors in western Washington from October through mid-December for bloom in March and April. Spring bulbs begin growing roots in the cool, damp soil of fall. All require at least 4 months underground at temperature in the 40s and below. By the time a tulip pops into bloom about April, it's had 6 months of growing time.

Most spring flowering bulbs can be fooled into bloom early, bringing a hint of the spring to come. Dormant bulbs, purchased in fall, already contain perfectly formed flower buds within them and will flower in containers indoors as long as a few basic conditions are met. To inspire spring bulbs into bloom before their normal season, gardeners have to manipulate time and temperature.

Select "top-size" bulbs because the better the bulb quality, the better the effect when they are forced. Purchase ones that are firm and in perfect condition.

All kinds of containers can be used to force bulbs just as long as excess water can drain out. Any good, packaged houseplant soil can be used. Combining equal parts of a non-clay garden soil, humus or peat moss and coarse sand, perlite or pumice can make an excellent mix.

A 4-5 inch diameter pot will hold one hyacinth, two daffodils, two or three tulips or four to eight crocuses, grape hyacinths, or small daffodil species. A basic rule of thumb

is to allow about a half-inch between bulbs. Put the bulbs in the medium with their necks at or near the soil surface.

Fill the pot 2/3 with potting soil, settle the bulbs on top of the soil, and cover the bulbs

with the remaining 1/3 soil. Make a label indicating the flower name and date of planting. Water the pots thoroughly. Spring bulbs need both dark and cold to root once they are planted. Store them somewhere dark with temperatures between 32° and 50° F. to allow root development for the proper number of weeks.

An unheated attic, a basement, a garage and a crawlspace are all good places to put the pots. They also can be placed outdoors and covered with sawdust, ground bark or sand. Some gardeners recommend digging a trench. You may have trouble with hungry rodents. They seem to enjoy most bulbs except narcissus.

The simplest, most reliable way to get fast cooling is to use a household refrigerator where temperatures will remain at about 40 degrees Fahrenheit. (Our outdoor autumn air temperatures in western Washington may not be steadily cold enough for proper chilling of the bulbs, causing the project to take longer.)

To guarantee darkness, the pots can be covered with an opaque bag, like a brown paper bag. The soil in the pots must be constantly moist, since drying will kill the new roots. But don't let the bulbs sit in water or they'll rot.

After about 12 weeks, roots will show out the bottom of the pot and shoots will begin to emerge from the top, even in a dark refrigerator. After sufficient chilling time, remove the pots from cold storage and place in a home greenhouse, or a cool, light area where temperatures stay moderate, about 60 degrees. The green shoots will lead to bloom in about another 4 weeks. If the pots are placed in warmer areas, such as a normal household temperature, they will grow faster and taller but be less sturdy.

I like to organize the projects by the time required for the plants to mature, starting with the lengthiest project.

Allow four months or 15 weeks at least, to prepare tulips, daffodils and hyacinths for bloom. Commercial producers allow 14 weeks for hyacinths and daffodils and up to 15 weeks for tulips. If you plant in early October, placing the pots in a refrigerator, they can be given as holiday gifts in "shoot" stage and will bloom in late January.

All hyacinths take well to this regime. Some types of tulips do better under these conditions than others. A few reliable ones for this are: Christmas Marvel (red), Bellona and Makassar (yellows), Attila (soft purple), Princess Irene (orange). Check when you buy the tulips for those that handle pot culture and forcing well.

Smaller narcissus, such as 'Tete a Tete' grow faster and more reliably when forced than some of the very tall varieties like 'Unsurpassable.'

If you want quicker results, ask your nursery or garden center for "pre-chilled" bulbs. This means that the bulb has been refrigerated before shipment and will require fewer weeks of cold, dark time. The most common bulbs sold in this pre-chilled condition are hyacinths but it is also possible to find tulips.

Pre-chilled hyacinths will require at least 6 weeks of cool, dark storage to grow roots and then about 4 more weeks to be in full bud. It's possible to start these on October 15 for holiday bloom. Hyacinths are, in general, easier to work with under home-forcing conditions than tulips.

Paperwhite narcissus is adapted to warm-winter climates and doesn't require cold storage before blooming. They can be grown rapidly at room temperatures indoors. Ask for either "paperwhite narcissus" (white) or "soleil d'or" (yellow) types. These are fragrant relatives of the ordinary daffodil, but they come from Israel and grow without chilling. (Don't try this with any other type of narcissus.)

To grow paperwhite narcissus for holiday gifts, plant them about November 15. Water well and place in a cool, dark spot (not a refrigerator) for a week to get roots started. After that first week, move the pots to a cool, light area such as a window. Shoots will grow fast and buds will appear after about 3 weeks. Good light is necessary to keep them from getting lanky and falling over. (They may need to be staked.)

Compared to standard spring bulbs, these grow very quickly. Paperwhite narcissus are great bulbs to plant with children because the results happen gratifyingly fast.

When the blossoms fade on any of your forced bulbs, cut them off and keep the plants cool, but not freezing, until moderate weather allows them to be planted outdoors in the garden. They will probably not bloom the next year, but they will during subsequent springs. (Paperwhite narcissi are not reliably hardy in western Washington, but since you have nothing to lose, try planting them in a very protected spot.)

(Most of this fact sheet adapted from an article by Mary Robson, WSU Area Extension Agent.)