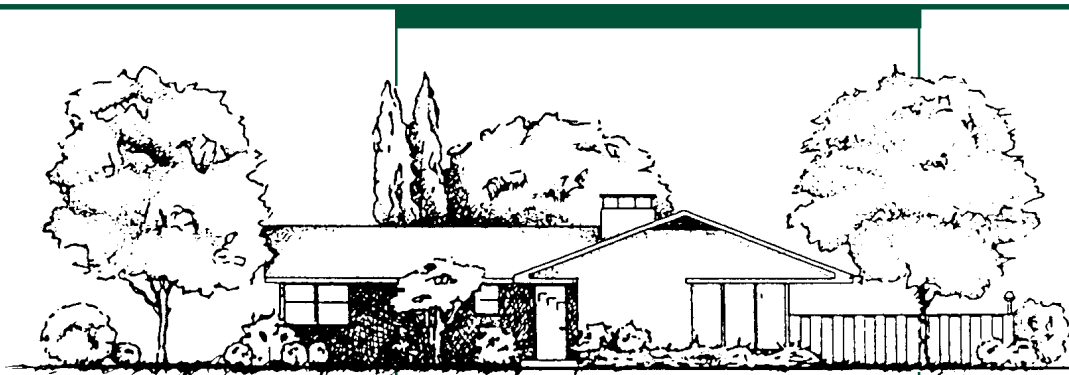


# FORCING BULBS



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The opportunity of having a whole glorious season of flowering daffodils, tulips, and hyacinths indoors during winter is a reality. A bright floral display and fragrant aroma is always welcome when snow is on the ground and bundling up to keep warm outside is a must.

Little (minor) bulbs, such as snowdrops, scilla, muscari, chionodoxa, and crocus force equally well as the large (major) bulbs, daffodils, tulips, and hyacinth. Both the major and minor bulbs are handled in the same way, although the forcing period may vary slightly. Some cultivars (early cultivars and those that do not grow too tall) are better suited for forcing than others. Catalogs will usually identify forcing varieties.

The term *forcing* refers to inducing a plant to produce its shoot, leaf, and flower ahead of its natural schedule and out of its natural environment. To force hardy bulbs you need to mimic and compress the process the plant would undergo outdoors in the garden.

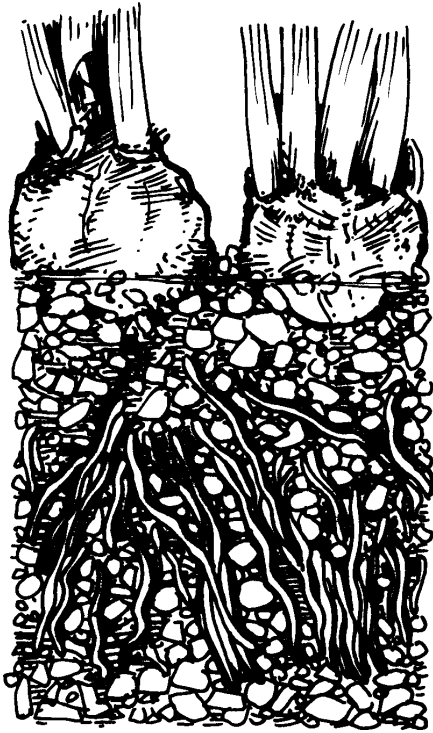
The type of pot (plastic versus clay) is a personal preference. Plastic pots do not dry out as rapidly as clay, are easier to clean and lighter in weight, as well as less expensive. Clay pots have aesthetic qualities in and of themselves and don't necessarily need a basket or covering to be attractive. Bulbs will grow equally well in either. The pots should be scrubbed clean before use and clay pots soaked for several hours to saturate pores.

When buying bulbs for forcing, always choose first-rate, top-size varieties. Mail-order bulbs by August

or earlier to ensure adequate time to receive the bulbs by the first part of October. If you buy from the local garden center, scrutinize them the way you would produce at the grocery store; don't buy bulbs that are soft or sprouting. High-quality bulbs are necessary because the bulb contains the food required to produce a flowering plant.

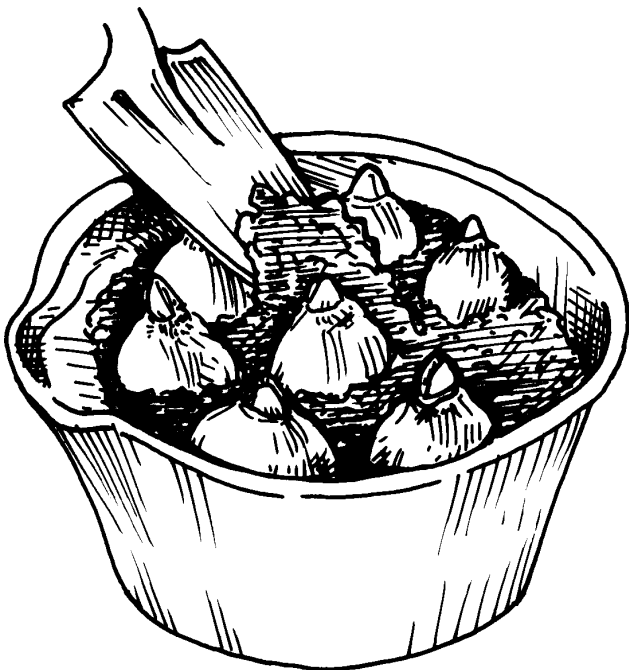
Since bulbs need moisture and perfect drainage, a mixture of equal parts peat moss, potting soil, sand and vermiculite or perlite is best. Mix thoroughly and moisten with enough water to a damp consistency. If you anticipate planting bulbs outdoors after forcing, add 1 teaspoon of 5-10-5 dry fertilizer to every quart of soil mix to give the bulbs an extra boost after flowering. Hyacinths, crocus, and narcissi can be grown in pebbles and water—with no additional nutrients, however, they are usually completely exhausted and should be disposed of after blooming.

The next step in planting is to place a few pieces of broken crockery over the drainage holes, to prevent the soil from running out initially and clogging later. Fill your pot half-full of soil mix, then adjust the soil level until the tops of the bulbs reach the rim of the container. Plant bulbs with the pointed ends up, as close together as possible, without letting them touch. Tulip and other bulbs with a flat side should be planted with the flat side facing the edge of the container. This will allow the first leaves to form a border around the edge of the pot. Add enough soil mix to fill the pot, and water the bulbs thoroughly from the top or immerse in a tub of water—



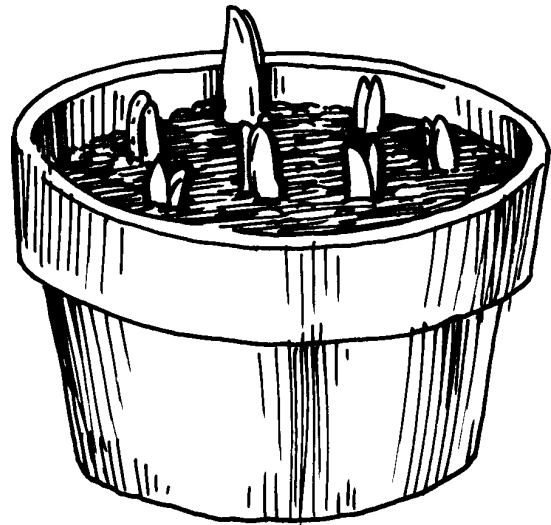
this will settle the soil around the bulbs. Label each pot with the name of the cultivar, date of planting and date to bring out of cold storage.

Daffodils, narcissi, crocus, muscari and other bulbs look great in groups of three, five, or more. Hyacinths look quite handsome when planted singly, or in groups. Dense plantings are recommended for minor bulbs.



After planting, place the pots in a cool, dark place, such as a cellar or refrigerator to initiate root and shoot growth. Other suitable environments include an insulated cold frame, under a porch, or an unheated garage. Cold storage is a critical step in the forcing process. Ideally, temperatures should be 35° to 48°F. If necessary, set boxes, pots or black garbage bags over your potted bulbs to keep them dark during the cooling period.

The medium should be kept moist through the rooting and cooling period. After five or six weeks, the roots should emerge out of the bottom of the containers of the large hardy bulbs.



Forcing will take about 12 weeks for the early blooming bulbs (snowdrop, crocus, daffodil) and about 16 weeks for the tulips. Longer cold storage will result in taller flowers, while storage time shorter than 13 weeks will result in smaller plants and sometimes aborted flowers. A good rule of thumb: when you see the shoots 2 to 3 inches above the soil and fine white roots emerging from the drainage holes, it's time to bring the pots out of cold storage. At this stage of development, move the bulbs to a cool location, such as an unheated entryway or closed off back bedroom, where the temperatures are in the '50s. Bulbs should be placed in indirect lighting and should not be allowed to dry out. Feed weekly with a half-strength solution of houseplant fertilizer. Turning the pots every day or so keeps the flower stems straight and strong. In a week or two, the stems will elongate and the buds will become plump.

When the foliage and buds are well developed, move the pots to a bright, sunny window in the house, where temperatures are near 65°F. Once the flowers begin to open, take the plants out of direct sunlight to prolong the bloom.

You will be pleased at how quickly the bloom unfolds compared to weeks, or possibly months, before they would outside. Hyacinths will bloom for nearly two wonderfully fragrant weeks if the room is between 65° to 68°F. Iris reticulata and crocus may fail to bloom or last only a day if temperatures get over 65°F.

After flowering, cut the flower stems and place the pots in direct sunlight, keeping the foliage growing until it begins to die back. As it withers, don't pull the leaves off, store the bulbs in the pots in a cool, dry place until late summer or early fall, at which time they can be planted into the garden. Attempts to force the same bulbs indoors will be unsuccessful, as forcing weakens the bulb and the bloom will be small and unsatisfactory the following year. Once the bulbs are back in the garden setting, they will return to a natural schedule, and in several years will again produce a wonderful show of flowers.

Some suggested varieties for forcing are:

### **Tulips**

Apricot Beauty, Bing Crosby, Edith Eddy, Mirjorma, Yokohama, Jingle Bells, Attila, White Dream, Princess Victoria, White Swallow, Estella Rijnveld

### **Crocus**

Pickwick, Remembrance, Flower Record, Peter Pan, Purpurea Grandiflora

### **Hyacinths**

Amethyst, Blue Jacket, Jan Bros, L'Innocence, Pink Pearl, Delft Blue, Hollyhock, Anna Marie, Violet Pearl, Gypsy Queen, Carnegie

### **Muscari**

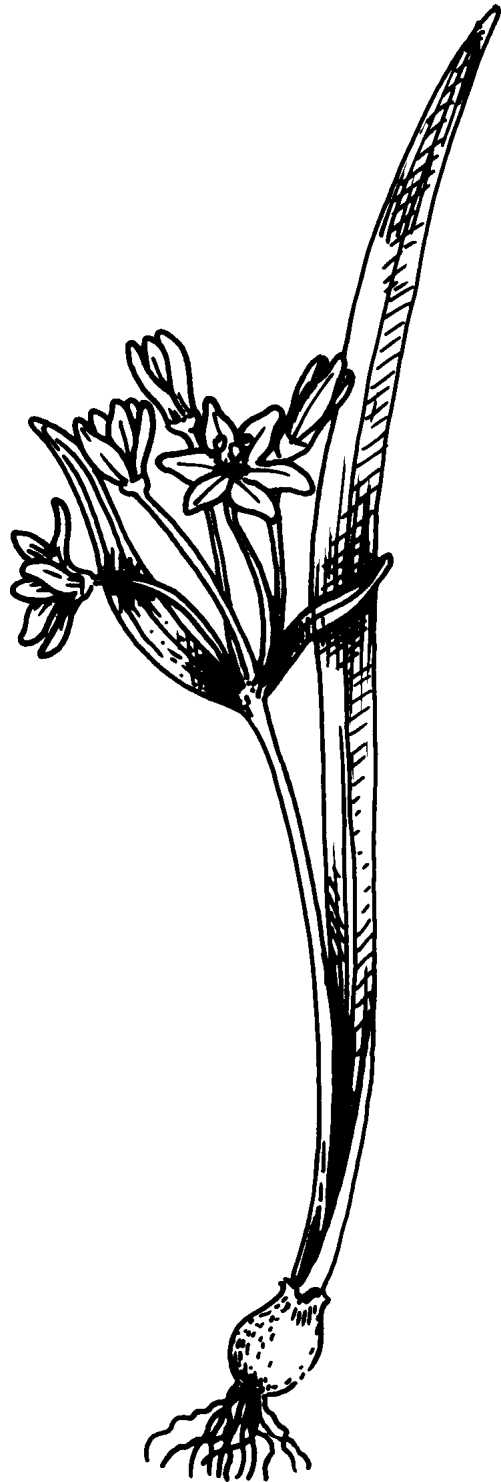
Blue Spike, Early Giant

### **Daffodils and Narcissi**

Barrett Browning, Bridal Crown, Dutch Master, Ice Follies, Paperwhites, Golden Harvest, Spell Binder, Salome, Pink Charm, Flower Record, Louis Armstrong, Unsurpassable, Tete-a-Tete, Jenny, Barrett Browning, Cheerfulness

### **Others**

Snowdrops, Dutch Irises, Blue Squill, and Glory-of-the-snow



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