



Forcing Bulbs

“Forcing” – coaxing, actually – is the term used to describe the process that stimulates bulbs to bloom out of season. Among the most commonly forced bulb flowers are **amaryllis, paper white narcissus, muscari, and hyacinths. Certainly they are the easiest!** When selecting bulbs for forcing, look for varieties that are specifically recommended. Spring flowering bulbs usually require a rooting period of about 12 to 15 weeks at temperatures between 41 to 48°F in order to produce a good root system; which is essential if they are to be “forced” into flowering.

Storing Bulbs

Bare bulbs can be stored for several weeks in your refrigerator prior to potting without damage if they are packed properly. The best way to store them is in a mesh bag or paper bag with holes that permit ventilation. You don’t have to worry about water, as the humidity inside a refrigerator is usually high enough. Check them periodically to make sure they are not molding or drying out.

Pot your bulbs right away if you have an appropriate location immediately available, such as an old (functioning) refrigerator, a root cellar or cool basement – or if outdoor temperatures are below 45°F. If, however, your area experiences an “Indian Summer”, your fridge can serve as a suitable rooting area. Vegetable or crisper drawers can be used, but don’t store bulbs in the same drawer you keep ripening fruit or vegetables – these give off ethylene gas which can harm the bulbs. (Also some bulbs are poisonous, so make sure to keep them out of reach of children).

Potting Bulbs for Cooling/Rooting

Use clean pots with drainage holes (the depth will depend on the bulbs being grown). Allow for 2” of soil below the bulb and select a pot large enough to allow the top of the bulb to be even with the rim when placed on the soil.

Plain potting soil is fine. You can add some bone meal or special fertilizer formulated for bulbs, just a “pinch” per bulb, to the soil mixture.

Place 2” of soil in the pot, then place (don’t push) bulbs into position. Add enough soil to fill the pot, firming the soil gently around the bulbs; being careful not to bruise them. Water well in order to settle the soil around the bulbs. Bulbs can be planted very close together, even touching, and make the best show in crowded arrangements.

Different types of bulbs require differing periods of time to root well. For this reason it is not advisable to combine different types of bulbs in the same pot. Label each pot with the name of the variety, planting date, and the date you intend to bring it out of storage for forcing.

Bulbs will flower some 3-4 weeks after they have been brought into warmer temperatures. Thus, from time of planting to flowering, allow a period of 15 weeks. The first 12 weeks are for rooting, then 3 weeks in warmer temperatures to flower. It is easier to hold bulbs back than to speed them up, so when you know the date you want them to be in flower, calculate accordingly the best planting time. (For Valentine's Day flowers, for example, plant bulbs in early-to-mid October).

The following timetable will help plan a forcing schedule in order to have bulbs in flower at a given date. Remember that these can vary, but in all cases, the bulbs must be well rooted before being forced. The exceptions to this guideline are **amaryllis** and **paperwhite narcissus**, which will be discussed later.

To flower in **January**, plant in **September or very early October**.

To flower in **February**, plant **early-to-mid October**.

To flower **later**, plant in **late October or early November**.

Forcing Blooms

The actual forcing begins at the stage when you remove the bulbs from the root growing environment into warmth and light, triggering the growth of leaves and flowers. Sunshine and temperature are the most important factors in promoting successful flowering. Most bulbs will require about 3 or 4 weeks from the time they are removed from cold storage before they bloom.

After the rooting period specified for your particular bulb variety (generally at least 12-14 weeks), transfer the pots to a place indoors with indirect sunlight and temperatures about 60°F for a week or two.

When the shoots are 4-6" tall, move the pots to a bright, sunny window to stimulate blooming. A temperature of about 68°F and direct sunlight will produce the best results. When the buds take on color, return the plants to indirect sunlight to make the blossoms last. Keep the soil moist at all times.

If blossoms begin to develop too quickly, you may be able to retard blooming a bit by moving the pots out of direct sunlight and into a cooler location. Re-acclimate them to sunlight and warmer temperatures when you want them to resume growing.

After blooming, hardy bulbs such as hyacinths and tulips cannot be forced again and should be discarded. Or they can be planted outdoors where they may rebloom within a year or two. The exception to this is the amaryllis:

Maintaining Amaryllis Plants for Re-forcing

Unlike most other bulbs, amaryllis bulbs will bloom again and again, provided they are properly cared for. After the bulb finishes blooming, cut off the flower stalk close to the base. Keep the plant moist and add house plant fertilizer regularly (a leafy amaryllis makes an attractive houseplant even without blooms). Stop watering and feeding in August/September, and allow the plant to dry out completely in the sun. In early fall, remove and clean the bulbs of old scales and dead foliage. Roots should be fleshy and not damaged.

Re-pot in a clean container with the neck of the bulb above the soil, water, and place in a cool, sunny spot. Water sparingly until the first sprout appears, and then keep moist. In about eight weeks the bulb will bloom again.

Easy Paperwhite Narcissus

Paperwhites (narcissus tazetta), 'Soleil d'Or', 'Chinese sacred lily', and colchicum are among the most popular forcing flowers that do not require the 12-week rooting period. They are easy to start and can give you indoor blooms from Thanksgiving until late March, if planted successively, batch after batch, in late fall. These heavy scented, white trumpeted flowers are a joy to grow!

Paperwhites are most often (and most easily) potted in shallow containers of gravel or decorative stones. Place bulbs on a layer of gravel and carefully fill in enough gravel to hold bulbs but not cover them, or place them onto the stones, pushing them down just far enough so the bulbs are supported in an upright position. Put several of them together, not worrying about crowding. A crowded grouping will be the most attractive.

Add water to the container. It should just reach the base of the bulbs, but not touch the bulbs. If the water covers too much of the bulb, it will rot. Now put them in a cool dark place for one to two weeks. When the roots have begun to take hold, and the plant has sprung from the bulb, take the pot out into a brightly lit room. 4 to 6 weeks later, your Paper Whites will be in bloom.

Tip: Plant them in succession so you have pots of Paper Whites blooming all winter!

After blooming, cut the flower and stem off. Do not cut back the leaves. Put them in a sunny window and transplant them outdoors when the weather permits. It will take 2 to 3 years before they will bloom again.

Easiest bulbs for Forcing

Paperwhite Narcissus: popular bulb, grows in soil or gravel

Amaryllis: popular Christmas plant – plant in November, no cooling necessary!

Large-flowering Crocus: Requires 12-14 week rooting period. Bulbs can be potted in gravel and water for differing effect.

Hyacinth: Fragrant springtime favorite. Requires about 12 weeks for rooting. Can be forced in special “hyacinth” vases using only water.

Colchicum: Excellent for forcing, can even grow on a window sill without soil or water. Begins blooming in about 2 weeks.

Muscari: Requires 16 week rooting time. Pot plenty, they’re small!

Iris: Especially iris reticulata are easy to force, but need careful attention to drainage. Require about 15 weeks for rooting. Don’t hold the bulb too long before potting. Tall-stemmed iris are less suited to forcing.

BULB	Weeks of Prechilling
Amaryllis	None
Crocus, Jeanne d'Arc	14-15
Crocus, Pickwick	14-15
Crocus, Remembrance	14-15
Hyacinth, Carnegie	10-12
Hyacinth, Delft Blue	10-12
Hyacinth, Pink Pearl	10-12
Iris reticulata	1-13
Muscari armeniacum	14-15
Narcissus, Dutch Maste	15-18
Narcissus, Golden Harvest	14-16
Narcissus, Little Gem	14-16
Narcissus tazetta, Paperwhites	None
Narcissus, Tête À Tête	12-14
Scilla tubergeniana	12-14
Tulip, Blenda	14-15
Tulip, Flair	13-14
Tulip, Merry Christmas	14-16
Tulip, Yellow Present	15-16
Tulip, Princess Irene	15-17