

Forcing Bulbs



Forced bulbs are enjoyed by everyone in the middle of winter.

Plan now for beautiful blooms in the middle of winter! Forcing provides the proper temperature conditions to allow bulbs to flower indoors, usually much earlier than would happen naturally outdoors. Paperwhite narcissus and amaryllis are the easiest bulbs to force and don't require a long time for rooting. You can have blooms of paperwhites in 3-5 weeks, while amaryllis can bloom in 6-8 weeks. Other spring-flowering bulbs require a longer conditioning period to induce bloom. Plant batches in succession and you'll enjoy fresh flowers throughout the season.

Paperwhites

Paperwhites are often forced in a shallow pot or bowl (without drainage holes). A clear container lets you see the roots developing and makes it easier to gauge the water level. After filling the pot about two-thirds with pebbles, gravel or soil, place as many bulbs (flat



Paperwhites can be forced to bloom in just a few weeks.



Amaryllis provide a spectacular floral display.

end down) in the container as will fit without touching each other. Then fill in around the bulbs. Add water to the pot until it just reaches the bottoms of the bulbs. Place the container in a cool, dark spot (45-50°F) to encourage root growth. In about three weeks, after roots have developed, move the pot to a cool, sunny spot. Sprouts will quickly develop and soon thereafter blooms. Keep the water level just at the base of the bulbs. The fragrant flowers will last 10 days to several weeks in cool conditions (less if it's warm). You can adjust the bloom time a little, by adjusting temperature and watering. If the plants are developing too quickly, move them to a cooler spot and reduce watering, but if you need to speed them up, put them in a warmer place. You can stake the stems if they start to flop over.

Amaryllis

Plant amaryllis (*Hippeastrum* hybrids) bulbs in containers with a drainage hole (and saucer to catch water run-off). These large bulbs are often potted individually, in a pot an inch or two larger in diameter than the bulb, but several can be combined if you have a large enough container. Soak the bulbs and roots overnight in lukewarm water before potting. Place a layer of gravel in the pot and add a few inches of soilless potting mix. Place the bulb on top of the potting mix so that the top of the bulb is barely above the rim of the pot, and fill with more potting mix around the bulb, leaving the neck exposed. Water well, and place in a cool, sunny spot. Water sparingly until a sprout forms, then water more frequently to keep the soil moist. It will take six to eight weeks for the plant to bloom.

Spring-Flowering Bulbs

All other spring-flowering bulbs need a longer period of chilling to bloom. Crocus, daffodils and tulips are all suitable for forcing, but some varieties work better than others (and are often listed as suitable for forcing in catalogs). Shorter varieties tend to make a better indoor display and

won't flop over as easily. And regardless of the type or variety, use the largest bulbs you can get, since the flowers will be larger. Tulips tend to be more difficult to consistently force, with daffodils less so. 'Tete-a-Tete' is a very good variety of small daffodil for forcing. Hyacinths, crocus and grape hyacinths are easier to force.

Preparing the bulbs for forcing is simple. Choose pots with a drainage hole(s) and fill the containers partway with a light, well-drained soilless potting mix. (You may want to put a layer of gravel in the bottom of the pot



Crowd the bulbs in your container for a full flower display (L) and be sure the bulbs are sticking out of the soil about halfway.

before adding the potting mix.) Place as many bulbs as you can in the pots without them touching each other or the sides of the pot – crowding them in gives a better show of flowers. Add enough potting mix over the bulbs so they are sticking out of the soil about halfway. Water the pots well.



'Tete-a-tete' is a good variety of small daffodil for forcing.

The planted pots then need to be chilled for 12-17 weeks at 40-50°F. You can just place them in a refrigerator, but some people have good results keeping them in an unheated garage or a cold frame, as long as the temperature doesn't drop below 20°F. But too much freezing and thawing will cause the bulbs to rot, so the consistent temperatures in a refrigerator ensures success. Check the pots periodically and water as necessary to keep the soil moist, but not wet. If you're using a refrigerator, you can cover the pots with an open plastic bag, which reduces the need for frequent watering. I've also had good results with placing the well-watered pots in a closed plastic bag that



Place the sprouting bulbs in bright light once the shoots turn green.



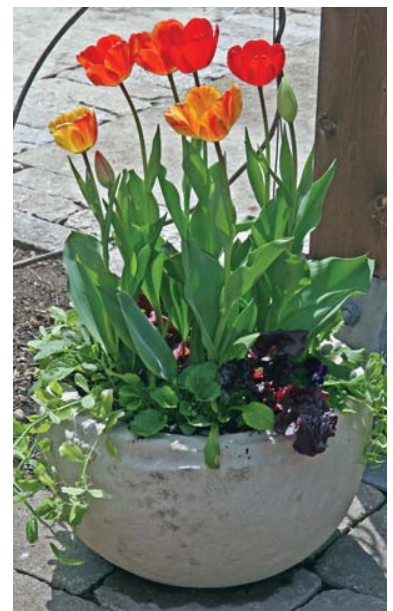
Give the blooming bulbs bright, cool conditions.

the soil surface and bulb tops were covered with ugly-looking, but harmless, mold that disappeared within days and the plants bloomed perfectly. If you're potting bulbs on more than one date, label the pots so you know when to take each out.

Two to four weeks before you want them to bloom, take the pots out of the refrigerator and move them to a warm spot in indirect light for a few days. Then when the sprouts have greened up, transfer the pots to the sunniest window you have, and continue to water as necessary. In early spring containers can be moved outdoors as long as the weather is not too cold, but the plants need to be acclimated to the change of conditions if they are near to or are already blooming. Forced bulbs can be combined with other cold tolerant plants such as lettuce or pansies.

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Forced bulbs can be combined with lettuce and other cool season plants.

If you want to plant your forced bulbs outside when they're done blooming, cut off the flower stalks but leave the foliage until it's completely dead. Then plant the bulbs outside at the appropriate time in the fall. It will probably take a year or two for the bulbs to bloom again.

If you don't have room in the refrigerator for a bunch of pots of soil, try forcing hyacinth bulbs. Simply put them in a paper bag in the refrigerator, for 4-6 weeks. Bring them out and put them in specially designed forcing vases filled with water just up to the base of the bulb. Place them in a bright window and in about 4 weeks you should have beautiful, scented hyacinth flowers!

– Susan Mahr, University of Wisconsin - Madison



Forced tulips contrast with blue pansies.

Additional Information:

- Forcing Bulbs – University of Wisconsin Garden Facts XHT1144 at hort.uwex.edu/sites/default/files/Forcing%20Bulbs_0.pdf
- Forcing Bulbs for Indoor Beauty in Winter – University of Minnesota Extension at www.extension.umn.edu/garden/yard-garden/houseplants/forcing-bulbs-for-indoor-beauty-in-winter/
- Forcing Bulbs for Indoor Bloom – University of Missouri at extension.missouri.edu/p/G6550
- Forcing Bulbs for indoor Bloom – Purdue University Cooperative Extension publication HO-19-W at www.hort.purdue.edu/ext/ho-19.pdf
- Forcing Hyacinths the Old Fashioned Way – by a commercial garden writer on GardenGuide.com at www.gardenguides.com/702-hyacinths-old-fashioned-way.html