

FORCING AMARYLLIS



By Steven J. Krumm and J. Lee Taylor

Introduction



Amaryllis are tender bulbs (not hardy outdoors over winter) that can easily be forced to produce large showy flowers (up to ten inches across). There are usually two to four or more flowers attached to a twelve to twenty-four inch stalk or scape. The range of colors is remarkable: brilliant red, orange, salmon pink, white, striped or variegated.

Amaryllis bulbs can be purchased beginning in September from most garden centers, florists or mail order firms specializing in bulbs. Bulbs three inches or greater in diameter are the sizes recommended to produce the largest flowers. Many dealers will be sold out by the end of December, but bulbs may be available from mail order firms through March.

Amaryllis grown as house plants belong to the genus *Hippeastrum* and are hybrids between many species of *Hippeastrum* native to tropical South America and *Amaryllis belladonna*, a closely related plant native to South Africa. Amaryllis have been around for hundreds of years and are becoming

more popular. It is exciting to watch their spectacular blooms develop and many people are giving Amaryllis bulbs as gifts to friends, relatives, children and others to help brighten winter months. The giant flowered Amaryllis is easy to grow and can be left in the same container for three or four years before it needs to be repotted.

Culture

Amaryllis grow best in a porous growing medium which will allow air to reach the roots. Any decorative clay or ceramic container at least five inches deep with proper drainage holes in the bottom is recommended. The container should be two inches larger in diameter than the bulb. The final level of the growing medium should be about one inch below the top of the pot. Remove any dead roots but leave live ones attached and carefully spread them out while potting the bulb. Place the bulb so that one half to two thirds of it is above the growing medium.

After planting, water thoroughly. Rain water is excellent but if you use tap water, allow it to sit for a day before using to allow the chlorine to evaporate. Keep the potted bulb warm (70 degrees Fahrenheit is good). It does not have to be placed in a sunny window until sufficient root growth has developed.

Water carefully for the next five weeks since the bulb does not require much moisture at first. Water thoroughly either from above or below, and then let the growing medium dry out somewhat before watering again. Checking for moisture in the growing medium about one-half inch below the surface or lifting the pot to feel the weight are easy methods to determine if watering is needed.

If the purchased bulb was packaged in a pot that has no drainage holes, be careful not to over water it. Bulbs that are overwatered tend to shrivel up. To check, squeeze the bulb occasionally to find out if it is firm. You can sometimes tip the prepackaged container upside down (carefully holding on to the top) to see if excess water is present. If so, drain it and avoid overwatering in the future. In general, it is probably best to either add drainage holes or remove bulbs from prepackaged containers if they do not include drainage holes.

Amaryllis usually have no serious pest problems even though several diseases and insects have been reported. Mealybugs sometimes infest bulbs and leaf bases so be alert if this pest is found on nearby house plants. Overwatering newly purchased bulbs is usually the main cultural problem that indoor gardeners have in growing Amaryllis.

Flowering

The flower stem usually appears before the leaves, but many times the stem and leaves appear together or the leaves appear first. In any case, move the pot to a sunny window when either leaves or the flower stalk appear. Turn the container a bit each day to keep the flower growing straight. Occasionally, the flower stalk will need to be staked. While the flower stalk is elongating and the

leaves are growing, water frequently. Amaryllis are copious users of water at this stage. To enhance the quality of the bloom, apply a house plant fertilizer weekly and follow the manufacturer's recommended rate. Flowers will probably last longer if the anthers (pollen structures) are removed before they start shedding pollen. Placing the pot in a slightly cooler area will also prolong the life of the flowers.

Care After Flowering

When the last flower fades and the flower stalk has completely dried out, cut off the floral stalk 2 to 3 inches above the bulb, unless you plan to save seeds, taking care not to damage the strap-like leaves. The leaves will keep growing and may grow up to three feet in length and 4 inches wide. Continue watering, but only as the growing medium dries out. The bulb is susceptible to rot at this stage.

Fertilize regularly using a complete house plant fertilizer high in phosphorous (e.g. 5-10-5, 15-30-15) or bone meal and follow the manufacturer's recommendations. It is essential to keep the foliage growing vigorously because it produces the food for the next year's bloom. At this time, there are 2 possible ways to handle the bulb. One is to keep it growing and allow it to flower at a specific time. The procedure for scheduling a bulb is illustrated on page 4.

Scheduling A Bulb to Flower

After growing the bulbs for five to six months after the flowering has ended, stop fertilizing, reduce watering gradually over a three-week period and then completely stop watering. The plant will have finished its growth cycle and begun its resting period. Keep the pot in a cool (50-60 degrees Fahrenheit), dry, well ventilated place for about two to three months. Lay the pot on its side to ensure

that no water moistens the bulb during this resting period.

In November, or later move the potted plant back into a warm bright area and start the growth cycle again. The bulb should flower within 8 to weeks from the time you start watering.

Repotting

The bulb should be repotted every 3 to 4 years. Amaryllis roots are sensitive and should not be disturbed more frequently. Delicate repotting should be done just before the bulbs dormancy is broken.

Take the bulb out of its old container and remove as much growing medium as possible from the roots by pouring water over them. Place the bulb and mass of roots in the center of a pot two inches larger in diameter than the bulb. Carefully fill the empty space with a food porous growing medium, taking care not to damage the roots. After the medium has firmed around the roots, immerse the base of the pot in a bucket of water for about one half hour to make certain the medium is thoroughly moistened.

Propagation

Amaryllis are readily increased both from offsets and by seeds.

-Offsets

Upon lifting the bulb for repotting just before breaking dormancy, small offsets known as bulbils can usually be found clustered around the base of the mother bulb. These can be detached with your fingers or a sharp knife and grown in a plastic tray or a large pot containing a porous growing medium. After twelve months, they will be large enough to plant into individual small pots.

Grow the bulbils for one year and then move them to another pot about twice

their size. The bulbs will bloom in three or four years from the time of removal from the mother bulb. Follow the same cultural conditions for these bulbs as you would for the flowering bulbs.

-Seeds

Plants can be easily raised from seeds collected from the ripe pods that form after the flowers have faded and the seeds have matured, provided the flower was pollinated. To pollinate a flower, transfer pollen from the stamens to the stigma (the sticky, three parted central portion of the flower) with your finger or a small brush, etc. Seedlings will not be identical to the parent and flower color may be different. If you have access to other flower colors, you may want to transfer pollen from one plant to another and end up with flowers that are different in color from the parents. Collect the seeds as the pods open. Allow the seeds to dry for a few days before sowing. Each pod will produce numerous seeds depending on how well the stigma was pollinated.

Sow one or two mature seeds to a three inch pot filled with a sandy loam or regular potting soil or growing medium, and if the greenhouse (or room) temperature does not fall below 60 degrees F, the seeds will germinate in about ten days. Within a month the seedlings will have formed tiny bulbs which with careful watering will begin to swell. If both seeds germinated in a pot, remove the weaker one or transplant one to another container.

During winter, provide only sufficient moisture to keep them alive, and in spring they will be ready to move to larger pots. They will bloom in two to four years from time of sowing.

Typical Schedule for Forcing Amaryllis

Sequence and Length	Early Forcing	Late Forcing
Start Growing or Forcing (4-8 wks.)	Early Nov.	Late Dec.
Flowering period (4-8 wks)	Mid Dec. through Jan.	Mid Feb through Mar.
After Flowering Period (5-6 mos.)	Feb through late July	April to late Aug.
Withholding Water (3 wks)	Late July to mid Aug.	Late Aug. to mid Sept.
Resting (2-3 mos.)	Mid Aug. to mid Oct or mid Nov	Mid Sep. to mid Nov.
Start Growing Again	Mid Oct to mid Nov	Mid Nov.

Would you like additional information?

Additional information is available on-line. Please see [MSU Extension-Oakland County's publications](#) as well s [MSU Extension's Bulletin Office](#) on campus.

Contact our [Plant & Pest Hotline](#) (248/858-0902) for assistance with plant identification, pests and diseases, weeds, trees and shrubs, lawn, flowers, fruits, vegetables, grasses and groundcovers, native plants, plant propagation, and many other gardening topics.