



Amaryllis

Amaryllis belladonna (*Brunsvigia rosea*) and *Hippeastrum* hybrids



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Introduction:

Plants of the genera *Amaryllis belladonna*, commonly called belladonna lily or naked lady, and *Hippeastrum*, commonly called amaryllis, are similar in appearance except that *Amaryllis belladonna* has a solid flower stem while the genus *Hippeastrum* has a hollow one. Plants known commonly as “amaryllis”, “Dutch amaryllis”, or “giant amaryllis” belong to the genus *Hippeastrum*, and those grown today are mostly hybrids of several species from South America and South Africa. Most of the so-called amaryllis bulbs sold as 'ready to bloom for the holidays' belong to the allied genus *Hippeastrum*, despite being labeled as 'Amaryllis' by sellers and nurseries. Adding to the name confusion, some bulbs of other species with a similar growth and flowering pattern are also sometimes called "naked ladies", even though those species have their own more widely used and accepted common names, such as the Resurrection Lily (*Lycoris squamigera*).

There is one species of true *Amaryllis* occasionally seen in gardens, *A. belladonna*, commonly known as the belladonna lily or naked lady. This is a handsome bulbous plant with funnel-shaped flowers. Each bulb is 5-10 cm in diameter. It has several strap-shaped, green leaves, 30-50 cm long and 2-3 cm broad, arranged in two rows.

***Amaryllis belladonna* and *Hippeastrum* (cont.)**

The leaves are produced in the autumn or early spring in cold climates and eventually die down by late spring. The bulbs perform best in areas with warm dry summers. When properly cared for, bulbs of *A. belladonna* may produce flowers for up to 75 years. This is a great landscape investment. In spring each *Amaryllis belladonna* bulb produces one or two naked stems 30-60 cm tall, each of which bear a cluster of 2 to 12 funnel-shaped flowers at their tops. Each flower is 6-10 cm diameter with six sepals (three outer sepals, three inner petals, with similar appearance to each other). The usual color is white with crimson veins, but pink or purple also occur naturally. This flowering pattern is the basis of its common name "naked lady".

At one time the genus *Hippeastrum* contained a number of plants now distributed among a dozen genera. The garden hybrids have been developed over a long period of years and probably cannot be placed under any one species.

Varieties:

There are many named varieties of *Hippeastrum* hybrids offering an array of flower colors and flower forms. The St. Joseph's lily is an old hybrid amaryllis, *Hippeastrum* x *Johnsonii*, introduced in 1799. There are many named forms of *Amaryllis belladonna* among which are *A. b. elata* having rose-red flowers, and *A. b. purpurea major* with pink flowers.

History:

The scientific name *Amaryllis* is taken from a shepherdess in Virgil's (a roman poet's) pastoral "Eclogues," from the Greek *αμαρυσσω* (Latin *amarysso*) meaning "to sparkle." *Amaryllis* is a monotypic (only one species) genus of plant commonly known as the belladonna lily or naked ladies. The single species, *Amaryllis belladonna*, is a native of South Africa, particularly the rocky southwest region near the Cape. The Belladonna Lily was introduced into cultivation at the beginning of the eighteenth century.

"*Hippeastrum*" is Greek for "horseman's star" (also known today as "knight's star") and was chosen in 1837 by the Honorable Reverend William Herbert, Dean of Manchester. No one is entirely sure why he picked this name although buds on the verge of opening do look something like a horse's ear and clearly the blossoms do resemble six-pointed stars.

Landscape Use:

Good quality bulbs in the *Hippeastrum* genus may produce up to six flowers on a single stalk. Few flowering bulbs can surpass the stately beauty of the amaryllis. Blooming typically in April, this popular bulb is a star performer in the spring garden. Dormant bulbs are readily available in fall and winter, and with proper care, they can become a long-lasting part of your landscape.

The large, bell-shaped or lily-like flowers of the *Hippeastrum* amaryllis and its hybrids make excellent garden subjects and potted plants. When used as individual specimens, in mass plantings, as part of perennial borders or as low plantings in front of shrub borders, *Hippeastrum* provide spectacular flower effects. They have a wide range of flower colors from red, pink and white to combinations of these. Their large, robust flowers of beautiful textures add to their appeal.

March through April is the time to plant your bulbs into the garden. *Amaryllis belladonna* planted in the spring will get into their natural cycle and bloom in April the following years. Sometime after the flower spike has emerged, leaves will grow from the top of the bulb. After the flowers have faded, cut the stalk at the point where it emerges from the bulb, but do not cut any foliage. This popular bulb is a star performer in the spring garden.

Hippeastrum can be grown in containers as well. Ideally, late September or early October is the time for planting *Hippeastrum* outdoors.



Amaryllis *belladonna* and *Hippeastrum* (cont.)

General Care:

Either species of bulbs grow in almost any well-drained soil, although both *Amaryllis* species prefer a sandy-loam soil mix. You can mix your own by combining one part leaf mold or composted manure, one part loamy soil, and one part coarse sand. Some garden centers also sell soil mixes especially for bulbs. The mixture should be slightly acid, with a pH of 6.0 to 6.8. *Amaryllis* and *Hippeastrum* will grow in almost any good garden soil as long as it is well-drained. An elevated bed (6 to 12 inches above the existing grade) may be necessary to assure good drainage. A soil rich in organic matter will provide best growth.

If needed, divide your amaryllis bulbs when they get over-crowded in the fall, by lifting the clumps of bulbs carefully so as not to damage the bulbs in the process. Try to get most of the roots attached to the bulbs. Try using a garden fork because it will not cut through the roots. Separate the smaller bulbs from the larger bulbs and put them in two piles. Trim off any yellow or unhealthy foliage but leave healthy, green foliage attached. While the bulbs are out of the bed, take the opportunity to turn the soil and then incorporate some compost, rotted manure or peat moss to enrich it.

Replant the largest bulbs immediately back into their area until it is filled. *Hippeastrum* bulbs are planted with the narrow top of the bulb, or "neck," exposed above the soil surface. Do not plant the bulbs too deeply or flowering will decrease. Bulbs are generally spaced about 8 inches apart and show best in the garden when planted in clumps of three or more. Mulch the bed to provide cold protection for the bulbs this winter. In colder regions, both species of amaryllis must be grown in containers because they would freeze during the winter if planted in the ground.

After flowering, *Amaryllis belladonna* may produce seed pods at the end of the stalks if the flowers were pollinated. Unless you are breeding amaryllis or just want to try your hand at growing them from seed, I generally recommend promptly cutting the stalks back after the flowers fade. The seed pods are unattractive and waste the plants energy otherwise.

Potting can be done anytime after the plants have gone through a dormant or rest period, which is late summer or early fall. Late October is thought to be an ideal time. Make certain bulb and soil are dry before repotting. Off-shoots can be removed and repotted separately at this time.

Use a small pot in relation to the bulb size. Many gardeners prefer a four inch pot or a shallow azalea-type pot. A pot is generally considered large enough if there is room for an inch of soil between the inside edge of the pot and the bulb. Place two or three pieces of broken clay flower pot or 1/2 inch of gravel in the bottom. *Amaryllis* like to be slightly rootbound. When potting, add enough soil so that one-half to two-thirds of the bulb neck is above the soil surface. Leave 1/2 to one inch of space between the soil surface and the rim of the pot to facilitate watering. A thorough watering is essential immediately after potting. Maintain the bulb in a slightly moist soil condition until flowering. When flowering starts, increase the frequency of waterings to prolong flowering. Container-grown amaryllis can be transplanted outside in the spring.

When grown in the landscape, *Amaryllis* bulbs usually get all the moisture they need from winter rains. Supplemental irrigation may be needed if normal rainfall does not occur. *Hippeastrum* growing in the landscape require irrigation until the foliage yellows and dies back.

Propagation:

Dormant bulbs of *Hippeastrum* species are readily available in fall and winter in catalogues and garden centers, and, with proper care, they can become a long-lasting part of your landscape. If you are transplanting bulbs from older crowded beds, transplant them in fall when the foliage turns yellow and begins drooping (a natural process at the end of the growing season).

Plant bulbs about a foot apart leaving the tops barely covered with soil. Mulch the planting to conserve moisture and to help control weeds.

Amaryllis prefers a warm temperature (70 degrees to 75 degrees F) for best growth. However, once the plant flowers, cooler temperatures (65 degrees F) will extend the length of bloom.



***Amaryllis belladonna* and *Hippeastrum* (cont.)**

Insects and Pests:

Insects directly damage amaryllis plants and allow disease organisms into plant tissue. Chewing insects, such as caterpillars and grasshoppers, should be carefully monitored and controlled by handpicking. Aphids may spread virus diseases. Spider mites cause injury similar to that of sucking insects as they feed on the leaves of amaryllis during warm, dry periods. Bulb mites attack rotting bulbs and tunnel into healthy bulbs, transmitting organisms that produce bulb rot. Bulb mites are particularly damaging to bulbs of amaryllis. Mealybugs damage plant foliage by sucking plant fluids and may invade stored bulbs. Some control can be obtained by frequent spraying with a hose. Amaryllis can be damaged by microscopic, transparent, wormlike animals called nematodes. Nematodes feed on the roots and may cause disintegration of the basal plate when present in sufficient numbers. Animals such as pocket gophers, rabbits and squirrels can damage amaryllis bulbs. See [UC IPM](#) site for information on control of these.

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