



Delphiniums

Mentioning certain plants immediately brings to mind a vision of the perfect specimen. A commonly shared vision of many gardeners is tall spikes of blue-flowering delphiniums in the background of a perennial border.

Delphiniums grown in gardens today are usually hybrids involving *Delphinium elatum*, *Delphinium grandiflorum*, *Delphinium exaltatum*, and *Delphinium formosum*. The development of these hybrids began in the late 1800s and gardeners have been enjoying them ever since.

Delphinium flowers may be single or double. Blue is the most common color. However, red, pink, white, violet, and yellow-flowering species and varieties also are available. Many flowers have white or black centers or “bees.” Flowers occur in attractive spikes with numerous flowers on each spike. The spikes of most delphiniums make attractive, long-lasting cut flowers. Foliage is palmately lobed and divided into 3 to 7 parts depending upon the location on the stem.

Since plants range in height from 2 to 6 feet, they can be used in a variety of ways. Placing them in the background of a perennial bed is one popular choice. Other gardeners have successfully used delphiniums as a specimen plant or as a small grouping in the garden.

Delphinium care

Delphiniums perform best in full sun and moist, well-drained soils. The pH of the soil should be neutral to slightly alkaline.

Delphiniums are heavy feeders and require regular fertilization during the growing season. Well-rotted manure or an all-purpose garden fertilizer, such as 10-10-10, can be placed around each plant as growth begins in spring and again after the first flowering.

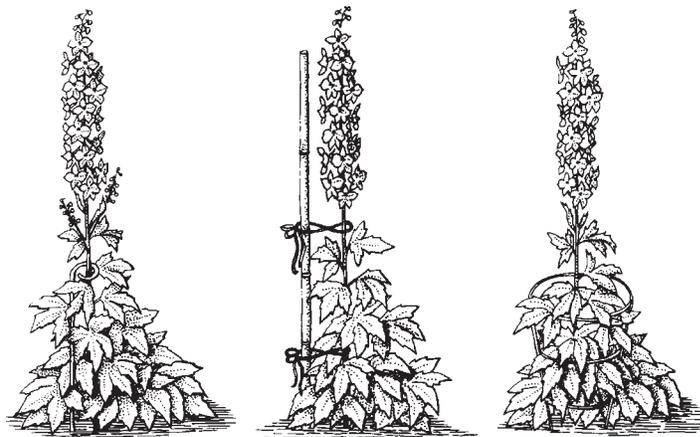
Delphiniums prefer an evenly moist soil throughout the growing season. Water plants on a regular basis (about every 7 to 10 days) during dry weather.

Most delphinium hybrids flower from early to midsummer. Immediately after flowering, remove the flower stalk. Removal of the spent flowers encourages additional flower spikes in late summer or early fall.

Delphiniums are short-lived perennials. They often need to be replaced every 2 to 3 years, especially when planted in heavy soils.

Staking

Staking is necessary for the tall hybrids. Delphinium stems are hollow and break easily when exposed to wind and rain. Stakes should be installed early in the growing season to prevent damage to the plant's root system and provide early support.



Ring stake

Stake

Cage support

Propagation

Delphiniums are propagated by seeds or basal cuttings. Plants started from seeds sown indoors in mid-winter will flower the first year. Flowering will occur the following year when seeds are sown outdoors in spring. Most hybrids come true from seed with a minimum of variability. Germination is most successful with fresh seed. Seeds germinate in 2 to 4 weeks at temperatures of 65 to 75°F.



Commonly available delphiniums

Cultivar	Color
(Height: 4 to 6 feet)	
'Astolat'	Lavender pink with dark bee
'Black Knight'	Deep midnight blue
'Blue Bird'	Medium blue with white bee
'Blue Jay'	Medium blue with dark bee
'Galahad'	White
'Guinevere'	Pinkish lavender with white bee
'King Arthur'	Royal violet with white bee
'Lancelot'	Lavender with white bee
'Percival'	White with dark bee
'Summer Skies'	Sky blue with white bee

(Height: 3 to 4 feet)

<i>D. × belladonna</i> 'Bellamosum'	Dark gentian blue
<i>D. × belladonna</i> 'Casablanca'	White
<i>D. × belladonna</i> 'Cliveden Beauty'	Pale blue

(Height: 2 to 3 feet)

'Snow White'	White
'Magic Fountains Hybrids'	Dark blue, lavender, white, sky blue
'Connecticut Yankee'	Light blue, lavender, white
<i>D. semibarbatum</i>	Yellow
'Blue Springs'	Sky blue, blue, lavender

(Height: 1 to 2 feet)

<i>D. grandiflorum</i> 'Blue Mirror'	Gentian blue
<i>D. nudicaule</i> 'Laurin'	Orange-red

For more information

Horticultural information on selection, planting, cultural practices, and environmental quality is available from your local Iowa State University Extension office and from these websites:

<https://store.extension.iastate.edu/>
www.yardandgarden.extension.iastate.edu
www.reimangardens.iastate.edu

Basal cuttings should be taken in early spring when the new shoots are 3 to 4 inches long. Dip the cut ends of the cuttings in a rooting hormone, then place the cuttings in perlite, coarse sand, or a peat/sand mix. Moisten the rooting medium and place 4 or 5 small stakes around the edge of the pot or flat. Cover the container with a clear plastic bag and place in bright light. Rooting should occur within 3 to 4 weeks.

Problems

In our mind's eye, plants never have disease or insect problems. Unfortunately in real life, delphiniums are not pest free.

Powdery mildew, black leaf spot, Botrytis blight, crown rot, and other fungal leaf spots are the most common diseases.

Aphids, leaf miners, and mites are common insect pests. Slugs also can be a problem in moist to wet areas.

A common condition known as "blacks" results in stunted and deformed plants and buds that turn black. This condition is commonly confused with bacterial black spot but is actually caused by cyclamen mites. The bacterial disease produces black tar spots on the foliage but does not cause distorting or stunting of the whole plant.

The best way to avoid problems is prevention. Choose well-drained sites and practice good sanitation by destroying infested plant debris. If problems occur with crown or root rot, plant healthy plants into another garden location avoiding the diseased area. Do not propagate new plants from infested stock.

Revised by Richard Jauron, extension horticulturist. Originally written by Sherry Rindels, former extension horticulturist. Illustrations by Susan Aldworth.

...and justice for all

The U.S. Department of Agriculture (USDA) prohibits discrimination in all its programs and activities on the basis of race, color, national origin, age, disability, and where applicable, sex, marital status, familial status, parental status, religion, sexual orientation, genetic information, political beliefs, reprisal, or because all or part of an individual's income is derived from any public assistance program. (Not all prohibited bases apply to all programs.) Persons with disabilities who require alternative means for communication of program information (Braille, large print, audiotape, etc.) should contact USDA's TARGET Center at 202-720-2600 (voice and TDD). To file a complaint of discrimination, write to USDA, Director, Office of Civil Rights, 1400 Independence Avenue SW, Washington, DC 20250-9410, or call 800-795-3272 (voice) or 202-720-6382 (TDD). USDA is an equal opportunity provider and employer. Issued in furtherance of Cooperative Extension work, Acts of May 8 and June 30, 1914, in cooperation with the U.S. Department of Agriculture. Cathann A. Kress, director, Cooperative Extension Service, Iowa State University of Science and Technology, Ames, Iowa.