



## 2018 Special Garden Project Delft Blue Nigella

### Nifty Nigella

- Nigella is also known as Love-in-a-mist or Persian Jewels because of its ferny foliage that forms a mist around the colorful flowers
- *Nigella sativa* is a related cousin whose seeds are used as a spice in Indian and Middle Eastern cuisine.
- *Nigella damascena* is the flowering plant and its seeds contain toxic alkaloids.

### A Touch of History

Many plants were found growing here when Columbus discovered North America. We call these native plants.



Nigella is native to southern Europe, north Africa, and southwest Asia.

Seeds from Nigella are easy to collect and pass down from generation to generation. This is often referred to as an heirloom plant. An heirloom will produce seeds that will grow into the exact plant they came from.

### Nigella's Family

Plants are grouped into families. Nigella and delphinium are related. They are in the same flower family called Ranunculaceae.



It's important to know which plants are related because they sometimes have the same disease and insect problems.

### Nigella Planting Basics

Nigella is a warm season crop. They are planted directly in the ground after the last frost date and when soils are warm, usually in late May or early June.

Warm soils allow the seeds to grow rapidly. Cold, wet soils will cause seeds to rot. Nigella need warm weather to grow quickly.

Nigella produce unique seed pods that look like spikey balloons. This also helped give it another common name of Devil-in-the-Bush.

The seed pods can be cut and dried and used in flower arrangements.



### Where to plant?

The Nigella plant will produce the most flowers in full sun. This is an area that will receive 6-8 hours or more of direct sunlight a day. It will tolerate partial sunlight conditions, but it won't flower as well.

Nigella will do best in fertile, well-drained soil. Make sure to leave enough room for the plants to grow. The more crowded the plants are, the more they will grow together and compete for sunlight.

To prepare the soil, spade 6 to 8 inches deep; then work in about a two inch layer of organic matter. Organic matter is good for all soil types. It helps sandy soils hold water better. In clay soils, it improves drainage so excess water drains away quicker and oxygen is then available to roots. Roots need oxygen to grow and function. Organic matter also adds nutrients to soil as it decomposes.

Compost and manure are examples of organic matter. Do not use fresh manure in spring. It can burn seedlings or cause some plants to grow lots of leaves or stems. Manure is best added in the fall.

## How to Plant Nigella

### Direct Seeding:

Once the threat of frost has passed and soils are about 60 degrees Fahrenheit, plant the seeds about 2-9" apart and cover lightly with soil. The spacing between the plants allows the plants to receive enough sunlight.

Another method, if seeding a large area, is to scatter the seeds on the soils surface and use a rake to work them into the soil.

Succession plantings, or planting again every 2-3 weeks, may be needed to ensure a continuous supply of Nigella flowers.

## Basics of Nigella Care

### Watering:

Nigella will need about 1 inch of water a week. Try to keep the soil just moist. At each watering, moisten the soil about 6-8" deep. Let the soil dry out slightly between waterings. Do not overwater. This decreases the soil oxygen, which roots need to grow steadily.



If you use a sprinkler to water the garden, try to water in the morning. This will allow the leaves to dry off throughout the day and decrease the possibility of disease. Also try to avoid working around the Nigella while they are wet, as this can spread disease.

### Mulching:

After the seeds begin to emerge, place a 2" layer of mulch around Nigella to conserve moisture, keep soil temperatures cooler, and reduce weeds. This will help roots to grow quickly and steadily.

Mulch should not touch plant stems. Use dried *brown* grass clippings or shredded wood. Do not use green grass clippings as they can "heat up" and damage plants. Too deep of mulch can make soils water logged and lack oxygen, or attract insects and slugs.

### Weeding:

Weeds steal water and nutrients from plants, causing them to grow slower. Control weeds when they're small by hoeing, hand-pulling or mulching. Do not hoe too close near Nigella stems or too deep near the roots, because this may cause damage to the plants.



### Fertilizing:

Nigella does not need a lot of fertilization. Additional fertilizer may not be needed if they were planted in soils that had added organic matter. If you do fertilize, use a well-rounded, water based fertilizer once the plants begin to bloom.

## Common Nigella Problems

Spindly Plants- If seeds are planted too close together, they compete for water and sunlight. This can cause the plants to become tall and spindly as they stretch for the sunlight. Provide supports for the plants so they don't flop over. Avoid excessive nitrogen fertilization and overwatering.

Aphids- are tiny insects that have piercing-sucking mouthparts. They come in a wide range of colors from green, to yellow, and even a reddish color. Some aphids have wings and/or a set of little 'tail pipes' called cornicles out their back end. They suck out the plant juices and leave a mottled, blotchy appearance to the leaves. If the infestation is large enough, they can also cause the leaves to look puckered or ruffled.



Self-Seeding- Because Nigella is an heirloom plant, it can seed itself in the garden. When the seeds are ripe, they can scatter on the soil surface and sprout on their own. To prevent this from happening, pick the seed heads before the seeds are completely mature or treat the new nigella seedlings as weeds and remove them once they sprout.

## Harvest & Exhibiting Tips

### Harvesting Nigella

Plan to cut your flowers in the evening or early morning. Always cut the stem several inches longer than necessary to allow for later trimming. Use a clean, sharp knife to make a smooth, even cut. Scissors tend to pinch the ends of the stems and close off the water-conducting vessels.

Remove any leaves on the stem that will be in water. Foliage below the water line will rot and cause discolored water and stem blockage. Blocked stems are unable to supply needed water to the living flower, decreasing the vase life of the flower.

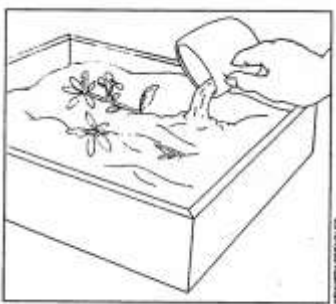
“Conditioning” or “hardening” reduces the chances of stem blockage and promotes the quick water uptake necessary for long flower life. Take a container of lukewarm water (100° to 110°F) along to the garden. Immediately after cutting, place the stems in the water.

When you return inside, place the container and flowers in a refrigerator set at 35° to 40°F for 3 to 12 hours. Cooling permits the plant to take up more water than it releases and helps hold flower freshness.

Never store flowers in a refrigerator with fresh fruits or vegetables; they release ethylene gas which will reduce the vase life of the flowers.

### Drying Nigella

To dry the pods, cut while the pods are still green and somewhat fresh. Tie the stems into a bundle then secure bundles to a wire hanger using twine or twist-ties, make sure the heads are facing the floor. Hang cut stems upside-down in a cool, dry, dark location for several weeks to allow the blooms to dry completely.



Drying can also be done using sand, silica gel, or a mixture of 2 parts cornmeal to 1 part borax with 1 tablespoon of salt for every quart of cornmeal/borax mix. Place 1" of the material into the bottom of a container with a tight

lid. Press the flowers into the material, facing upward. Cover the flowers with the material, making sure to get the mixture into the center.

Cover the container with the lid and leave flowers in the material for at least 2 days. After two days, carefully remove the material. Check to see if the center of the flower is dry. If it isn't, leave in the material for one more day. Once dry, carefully remove the flower from the material.

### Exhibiting Nigella

**State Fair Special Garden Project Educational Exhibit Class G-775-001.** Youth must be enrolled in the Delft Blue Nigella 2018 Special Garden Project to exhibit. The educational exhibit is based on what was learned from the project. Present information on a poster 14" X 22" or in a clear plastic report cover. The 4-H member's name, age, full address, and county must be on the back of the poster or report cover.

**State Fair Special Garden Project Fresh Cut Flowers or Harvested Vegetables Class G-775-002 (NEW).** Youth must be enrolled in the Delft Blue Nigella 2018 Special Garden Project to exhibit. The current years' Special Garden Project fresh cut flowers or harvested vegetables should be entered in this class.

Bring 5 cut flowers following the guidelines in the publication '4-H Preparing Cut Flowers for Exhibits' 4H227 (revised 2016) (<https://unl.box.com/s/2f3a785c67p7qhgasevp6gu6adf3ugon>). The desirable traits the judge is looking for are flowers that are at the same maturity and uniform in size. Avoid selecting flowers that are damaged by insects, misshapen, or fading.

### Delft Blue Nigella

Delft Blue Nigella is named for the famous Dutch Delft blue pottery. They have unique, 1½ - 2" flowers with blue

splashes on flower petals in varying shades of blue and gray, and intricate deep-purple centers. Unusual seed pods are also used in fresh or dried arrangements. On average it will take about 65-70 days from seeding date until the plant flowers and about 80-85 days for seed pods.



\*Photo courtesy of Johnny's Select Seeds

Fill out the Special Garden Project Evaluation at: <https://go.unl.edu/delftbluenigella>

## Careers

Horticulture is the science and art of growing and using fruits, flowers, vegetables, ornamental plants and grasses to enhance our living environment. A horticulturist is a person who works with plants. They can have many different jobs from plant breeding, to growing the crops, to even processing and moving of plants.

A degree in horticulture can offer the following career opportunities:

- Educator
- Field or Lab Researcher
- Floral Designer
- Greenhouse Manager
- Horticulture Entrepreneur
- Landscape Designer
- Landscape Contractor
- Nursery Manager
- Plant Breeder
- Plant Propagator
- Grower
- Vineyard Manager

## Horticulture Consultant

Horticulture Consultants work with plants, herbs, shrubs, trees, fruits, vegetables, soils, and pesticides. As a Horticulture Consultant you can specialize in just one area, or cover areas as varied as the plants in the garden. Your job is to educate, inform, and assist farmers, commercial growers, landscapers, and nursery owners on projects.

You could give advice to a golf course on a specific type of grass, recommend low-maintenance plants for the city park, or assist with plans for a public garden. You can also teach growers about crop selection, soils, or fertilizer options. Your goals are to beautify, to successfully propagate, and attain higher yields, while meeting a business's financial goals.

You will need knowledge about which plants will thrive in what conditions, how much water and light they require, what type of soil they need, but you also understand the technical, business side of things.

Want to find out more about careers like this in horticulture? Visit UNL Agronomy and Horticulture Department at <http://agronomy.unl.edu/>

Don't forget to fill out the  
Special Garden Project Evaluation at:  
<https://go.unl.edu/delftbluenigella>



**Filling out the evaluation will register you for a gardening prize as well as a certificate good toward the 2019 Nebraska Extension Special Garden Project.**

Information compiled by Elizabeth Killinger, Extension Educator  
Nigella Seed pod photo and white flower from:  
<https://plants.ces.ncsu.edu/plants/all/nigella-damascena/>  
Horticulture Consultant job information:  
<http://www.insidejobs.com/careers/horticultural-consultant>  
Delft Blue Nigella & Nigella seed photo courtesy of Johnny's Select Seeds,  
Johnnyseeds.com, 1-877-564-6697.

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