2016 Special Garden Project
Jazzy Mix Zinnia

Zippy Zinnias
- This flower has two different ‘flowers’ in one, disk florets and ray florets.
- Zinnias got their name after a botanist Dr. Johann Gottfried Zinn
- Early varieties were introduced to the United States in 1796
- Zinnias come in different flower forms: single, semidouble, or double.

A Touch of History
Many plants are “immigrants.” They were not growing here when Columbus discovered North America, but were brought here by immigrants on their voyage to the New World. We call these introduced plants.

The domesticated zinnia that we know today originated from the wild zinnia which was native to the southwest United States, Mexico, and Central America.

Zinnia’s Family
Plants are grouped into families. Zinnias, sunflowers, and daisies are all related. They are in the same plant family called Asteraceae, or the Daisy family.

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

When planning your garden, it’s best not to plant crops from the same family in the same spot year after year. Use crop rotation to change the location where you put your plant families every year. Try not to put the same plant family in a location for 3 years.

Zinnia Planting Basics
Zinnias are a warm season crop. They can be started inside 4-5 weeks prior to the last frost date, usually in early to late May, or planted directly on the ground.

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

To have bushier zinnia plants, pinch off about an inch from the tips of the main stems when the plants are still young.

Regularly dead head, remove fading old flowers, to keep the plants attractive and to encourage more blooms.

Where to plant?
Zinnias can handle full sun to part shade, but they will do the best in full sun, an area that will receive 6-8 hours of direct sunlight.

Zinnias are not particular when it comes to growing conditions. They will do best in fertile, well-drained soil. What they are particular about is the proper spacing between plants. The more crowded the plants are, the longer the stems will be. If the stems get too long, they will become top heavy and begin to flop over.

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 Zinnias

Starting indoors:
These plants can be started indoors 4 weeks prior to the last frost date, then transplanted outdoors after the threat of frost has passed. Start in containers with growing media or seed starting media. Zinnias aren’t particularly fond of transplanting, so consider sowing seeds into peat pots that can be directly planted into the soil. Lightly cover seeds with ¼” of soil and lightly water and cover with clear plastic or other material to keep humidity high and to keep the seeds from drying out. After seedlings reach 1” in height, thin out zinnias so remaining seedlings are 2” apart. Maintain a temperature of about 70°F until they are ready to be planted.

Direct seeding:
Plant the seeds about 6 seeds per foot on top of the soil surface and completely cover the seeds with a thin layer of soil, about ¼” thick. Keep the soil surface from drying out until they emerge. If the soil is warm and moist, seedlings will emerge in 4-7 days. When the seedlings reach 2-3” tall, thin out the number of plants so there is 9-12” between plants. Use scissors to cut the plants off at the soil line. Pulling can disturb the root systems of other nearby plants.

If you don’t have room to plant in a traditional garden setting, zinnias can be grown in containers. Plant seeds in a 10 inch container or one of similar size. Garden soil is not recommended for containers. A good potting mix will work well for growing zinnias in containers.

Basics of Zinnia Care

Watering:
Zinnias 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 zinnias while they are wet, as this can spread disease.

Mulching:
After the tops begin to emerge, place a 2” layer of mulch around zinnias 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 zinnia stems or too deep near the roots, because this may cause damage to the plants.

Fertilizing:
Zinnias do not need a lot of fertilization. Additional fertilizer may not be needed if they were planted in soils that had added organic matter.
Zinnia Problems
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.

Flopping or Lodging- plants that are grown in the ground may grow so tall and top heavy that they will require some support or staking to keep the plants upright and not leaned over on the ground. Avoid excessive nitrogen fertilization and overwatering.

Powdery Mildew- a fungal disease on the upper side of the leaf that causes plants to have a powdery white appearance. Having the proper spacing between plants will allow enough air flow to decrease powdery mildew, but some plants are more susceptible than others. Fungicides can also be used to protect plants.

Harvest & Storage Tips
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.

Zinnia Storage
“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.

Exhibiting Zinnias
Place stems into a clean, clear glass container that is able to hold the flowers without tipping over. Be sure to remove any foliage below the water line. If the heads are under 3” diameter it will take 5 stems for an exhibit. If they are 3” or more in diameter it will take 3 stems. Choose uniform, insect-free flowers. Dirt and debris can be removed by running the flower under running water.

Fresh Cut Jazzy Mix Zinnias can be entered in the ‘Zinnia’ Class G-770-022.
Bring 5 blooms following the guidelines in the publication “Preparing Cut Flowers For Exhibit at County Fairs and the Nebraska State Fair” 4H 227. The desirable traits the judge is looking for are blooms that are the same size and maturity. Avoid selecting blooms with fading or damaged petals and those that are overly mature with yellow florets emerging from the center.

Jazzy Mix Zinnia
Unique range bicolor blooms are what make the Jazzy Mix Zinnia unique. This cultivar comes in shades of burgundy-red, red, yellow, and orange with cream, red, or yellow tips. The 1-2” blooms are fully-double and semi-double. These zinnias are a great cut flower that can get 20-26” tall. On average it will take about 75-85 days for the plants to bloom.
Careers
Horticulture is the science and art of growing and using fruits, vegetables, flowers, 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 or Grower
  - Vineyard Manager

Education and Training
Most floral designers have a high school diploma or the equivalent and learn their skills on the job over the course of a few months.

Education
There are postsecondary programs that are useful for florists who want to start their own businesses. Programs in design and caring techniques for flowers are available through private floral schools, vocational schools, and community colleges. Most offer a certificate or diploma. Classes in flower and plant identification, floral design concepts, advertising and other business courses, plus experience working in a greenhouse are part of many certificate and diploma programs.

Some community colleges and universities offer an associate’s or bachelor’s degree in floral design.

Want to find out more about careers like this in horticulture? Visit UNL Agonomy and Horticulture Department at [http://agronomy.unl.edu/](http://agronomy.unl.edu/)

Don’t forget to fill out the Special Garden Project Evaluation at: [http://go.unl.edu/wi4r](http://go.unl.edu/wi4r)

Floral Designer
Floral designers, also called florists, cut and arrange live, dried, and silk flowers and greenery to make decorative displays. They also help customers select flowers, containers, ribbons, and other accessories.

Floral designers typically do the following:
  - Grow or order flowers from wholesalers to ensure an adequate supply to meet customers' needs
  - Determine the type of arrangement desired, the occasion, and the date, time, and location that each arrangement is needed
  - Recommend flowers and greenery for each arrangement
  - Consider the customer's budget when making recommendations
  - Design floral displays that evoke a particular sentiment or style
  - Answer telephones, take orders, wrap arrangements

Filling out the evaluation will register you for a gardening prize as well as a certificate good toward the 2017 Nebraska Extension Special Garden Project.

Information compiled by Elizabeth Killinger, Extension Educator
[https://hort.uwex.edu/articles/zinnias/](https://hort.uwex.edu/articles/zinnias/)
[forums2.gardenweb.com](http://forums2.gardenweb.com)
[extension.missouri.edu](http://extension.missouri.edu)
Jazzy Zinnia photo courtesy of Johnny’s Select Seeds, Johnnyseeds.com, 1-877-564-6697.