Cut Flowers For The Market and Home Garden - Zinnia

Fact Sheet FS1161



Oklahoma



Whirligig



Peppermint Stick

Cooperative Extension

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Zinnias *(Zinnia elegans)* are an old-time favorite as a garden cut flower. Zinnias are an annual in New Jersey, dying off after the first fall frost. Their ease of growth and amazing diversity in color, shape, and height makes them suitable for a wide variety of gardening styles, flower arranging, and design. Cultivation of the wild zinnia, native to Mexico, has resulted in over one hundred cultivars grown today.

Widely used as a single stem or in bouquets, zinnias are well suited for both the farm and the home garden as a cut flower crop since they do not ship well. There are a rainbow's worth of colors found in the zinnia family except for blue, brown, and black. Their flower form and size can vary from 1/2″ to 6″ in diameter in single, double or semi-double forms. Overall plant height can vary from 8″ short to 4′ tall, depending on the cultivar grown. Zinnias also can attract a wide variety of beneficial insects to the farm and garden, including butterflies, hummingbirds, and a multitude of pollinators. Flowers can last for one week or more and plants will flourish in the garden until the first fall frost.

How to Grow Zinnias

A full sun location is recommended for successfully growing zinnias at the farm or in the garden. Inadequate light will result in poor flowering and tall spindly plants. Well-drained soils will help control problematic root rots and reduce overall stress to the plant. Zinnias grow best in a soil pH range of 5.5 – 7.5. A general soil test is recommended to determine soil pH and macro- and micro-nutrients. If you are thinking of planting zinnias in a heavy soil type, you may need to consider the use of a raised bed for healthy plants producing abundant flowers. Seed or transplant zinnias when the soil has warmed (60°F minimum) in late spring. Transplanting zinnias is the preferred method of growing since it offers a quicker turn around in terms of planting and harvesting the cut flowers. The cutting of flowers actually encourages the plant to produce new flowers, offering your market or garden additional flowers throughout the summer and early fall. Zinnias should be spaced a minimum of 6″ apart to minimize the incidence of powdery mildew and other foliar diseases. A spacing of up to 12″ apart can be visually pleasing while also giving individual plants room to grow and mature. Zinnias are heat lovers and temperatures below 60°F can cause a yellowing or chlorotic appearance to the foliage and can also cause delayed flowering. Zinnias can tolerate some levels of drought, but avoid overhead watering, as prolonged wetting of the foliage encourages fungal and bacterial flower and leaf diseases.

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Zinnia Variety Evaluation

In 2006, five varieties of zinnias were evaluated as a cut flower crop during a Rutgers variety trial. The objective of this study was to identify varieties of zinnias for their value as a cut flower to market at road-side stands. This information is also relevant to the home gardener interested in using cut flower crops for their own enjoyment.



Benary's Giant

Evaluated Varieties

Benary's Giant – A standard zinnia widely used in cut flower production. A long stemmed double blooming zinnia available in white, yellow, red, orange, green, pink, and deep pink. Flower diameter average of 2.5″.

Oklahoma – An old standard variety with double blooms. Available in white, yellow, red, orange, pink, and deep pink. Flower diameter average of 1.6″.

Peppermint Stick – A double blooming bicolor zinnia. Available in red, cream, yellow, orange, and pink. Flower diameter average of 2″.

Whirligig – A semi-double blooming bi- or tricolor zinnia.
Available in yellow-crimson, red-white, pink-white, cream-rose, and bronze-red color combinations. Flower diameter average of 2″.

Zowie! Yellow Flame – A semi-double blooming zinnia. A 2006 and 2011 All America Selections winner. Bi- tricolor flower with magenta center petals. Tips are orange or yellow. Flower diameter average of 2″.



Zowie! Yellow Flame

These zinnias varieties were evaluated for their length of life once cut. Cut zinnias placed into water mixed with a floral preservative were found to have a much longer life span as a cut flower than those placed in a container with plain water.

Benary's Giant and *Oklahoma* had the highest average cut flower quality ratings within the group and are recommended for use as a cut flower crop in both the home and farm market garden.

Diseases and Pests

Prevention and planning are the best methods for controlling the disease pests of zinnias. A good seed catalog will alert you to the varieties that are tolerant or resistant of specific diseases. Planting location is also crucial in reducing the amount of stress placed on a plant. Ensuring that the plant receives adequate light, water, and is situated in well drained soil can mean the difference between a prolific harvest and a sad looking stand of plants. Zinnias can suffer damage from several diseases including grey mold *(Botrytis)*, leaf blight *(Alternaria)*, bacterial leaf blights *(Xanthomonas, Pseudomonas)*, powdery mildew, and root rot *(Rhizoctonia, Phytophthora)*. Several beetles will feed on the leaves and petals of zinnia, affecting the plant aesthetically. Japanese Beetles, earwigs, aphids, brown marmorated stinkbug and mites are the primary invertebrate pests affecting zinnias in NJ. These pests cause damage to zinnias which can diminish the market value of the crop, and are often attracted to stressed plants.

Harvesting and Handling Zinnias

Zinnias should be harvested when the bloom centers are just beginning to open. When possible, cutting during the early evening hours is advised. Light intensity is reduced as well as temperature during those hours. The lower leaves on the stem should be removed and the cut ends should be placed into water as quickly as possible. The typical growth rate of Zinnia plants usually allows for weekly harvests. Clean, sharp tools should be used as well as a clean container filled with clean, warm water and a floral preservative. Soiled tools and containers can promote bacteria growth and will lessen the life of the cut zinnia. Once cut, zinnias are susceptible to garden heat, and should not be left lying about, exposed to the sun and warm temperatures. Water in the vases or flower containers should be changed daily to promote a longer and healthier post-harvest life.

Cut zinnias are beautiful for arrangements on their own or combined with other flowers. There are thousands of flower and color combination possibilities for the market and home gardener to play with.

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