

Zinnia haageana—Haage's zinnia is gaining in popularity. It is smaller, like *Z. angustifolia*, and is equal in its resistance to disease. However, some deadheading is required to keep plants blooming profusely all summer. While there is only one cultivar common in the trade, it is more than worthy of consideration for home gardens.

'Persian Carpet'—2-inch, single flower in red, gold, and mahogany bicolors; 16 inches in height

Zinnia tenuifolia—Red spider zinnia has small 1-inch wide, single scarlet flowers with dark centers. The petals are thin, widely spaced, and curve like a spider's legs. Plants are durable, long-blooming, and 18 to 24 inches in height.

Diseases and pests

Zinnias are susceptible to several diseases, especially in sites with poor air circulation or too much moisture. Powdery mildew attacks plants stressed by overcrowding, drought, dampness, or cool weather. Gray mold (*Botrytis*), leaf blight (*Alternaria*), and root rots (*Rhizotonia* and *Phytophthora*) attack zinnias as well. In most cases, proper cultivar selection and prevention through proper cultural practices are better than attempted cures.

Zinnias as cut and dried flowers

Zinnias are cheery cut flowers that can last a week or more indoors in vases. Cut the blooms when the centers are beginning to fully open. Remove the lower leaves and plunge the cut ends into vases of water. Change the water frequently to avoid algae growth.

Double flowers are best for drying because they tend to hold their shape better than single forms. All colors change slightly after drying. Cut stems when flowers are at their peak, remove leaves, and hang upside down in bundles out of direct light.

Sources

Zinnia seeds and transplants are widely available at garden centers and in catalogs.

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 Web sites.

ISU Extension Publications—
www.extension.iastate.edu/store

ISU Horticulture—
www.yardandgarden.extension.iastate.edu

Reiman Gardens—
www.reimangardens.iastate.edu

If you want to learn more about horticulture through training and volunteer work, ask your ISU Extension office for information about the ISU Extension Master Gardener program or visit www.mastergardener.iastate.edu

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File: Hort and LA 2-5

Issued in furtherance of Cooperative Extension work, Acts of May 8 and June 30, 1914, in cooperation with the U.S. Department of Agriculture. Jack M. Payne, director, Cooperative Extension Service, Iowa State University of Science and Technology, Ames, Iowa.

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RG 324 Revised June 2008

Zinnias



Zinnias prompt memories of grandmothers' gardens and cheerful bouquets. With their dependability and dizzying array of flower colors and heights, zinnias easily earn their excellent reputation.

How to grow zinnias

All zinnias prefer at least 6 hours of direct sun and well-drained soils. If properly planted and maintained, even the most difficult cultivars will remain attractive.

Zinnias are one of the easiest annuals to grow from seed and should bloom 8 to 12 weeks after sowing. They may be seeded directly into ordinary garden soil after the danger of frost has passed. For earlier blooms, they also may be started indoors 4 to 6 weeks before the frost-free date. Because they resent transplanting, seeds are best sown in peat pots (or other biodegradable pots) to limit root disturbance and transplant shock.

When planting or seeding outdoors, space plants according to their mature size and seed packet instructions. Plants are usually spaced 6 to 18 inches apart, depending on cultivar. Overcrowding zinnias can lead to problems with disease and should be avoided.

Water plants as needed, especially when they are young. Zinnias are quite drought tolerant once established. Avoid overhead watering because wet foliage can lead to disease.

Regular applications of a complete fertilizer will aid in growth and flower development.



Types of zinnias

About 20 species are recognized today, but only three or four are commonly grown: *Zinnia elegans*, *Zinnia angustifolia*, *Zinnia haageana*, and *Zinnia tenuifolia*.

Zinnia elegans—The common zinnia is the most widely known species and has the widest range of flower size ($\frac{1}{2}$ inch to 5 inch diameter), flower color (every color except true blue, brown, or black), flower form (single, double, cactus, etc.), and height (8 to 48 inches). The common zinnia requires regular deadheading and consistent moisture to bloom continuously throughout the summer. If not planted in a sunny location with good air circulation, plants are often affected by powdery mildew. Even though it is native to Mexico, *Z. elegans* is not the most heat-tolerant zinnia species available. A small sampling of available cultivars are described below.

'Dreamland'—Double 4-inch flower in apricot, white, orange, pink, yellow, and red; 10 to 12 inches in height

'Envy'—Semi-double 2-inch flower in green; 30 inches in height

'Giant Cactus'—Double 4- to 5-inch quilled flower in red, orange, pink, yellow, rose, salmon, and white; 30 inches in height

'Magellan'—Double 4- to 5-inch flowers in pink, coral, orange, gold, ivory, and scarlet; 12 inches in height

'Oklahoma'—Semi-double 1- to 2-inch flower in yellow, pink, salmon, scarlet, and white; 30 to 40 inches in height

'Peter Pan'—Semi-double 3-inch flower in purple, pink, yellow, scarlet, and white; 12 inches in height

'Ruffles'—Double 3-inch ball-shaped flower in red, pink, yellow, white, and orange; 24 to 28 inches in height

'Small World'—Double 2-inch flower in pink and red; 12 to 14 inches in height

'Sun'—Double 4- to 5-inch flower in yellow, red, white, and scarlet; 20 to 24 inches in height

'Whirligig'—Double, semi-patterned, 3- to 4-inch flower in pink, red, orange, scarlet, and white; 20 inches in height

'Zowie! Yellow Flame'—3- to 5-inch pinkish, red, and yellow flowers; 24 to 28 inches in height; AAS winner

Zinnia angustifolia—Narrowleaf zinnia is a smaller species with narrow leaves and is known for its durability in the garden. It is native to the southeastern United States and Mexico. It requires little deadheading and also is highly resistant to powdery mildew and other diseases. Its legendary heat tolerance more than makes up for the limited palette of flower colors and plant heights. Two cultivars have received the distinction of All-American Selection (AAS) winners. Examples include

'Crystal' Series—Single 2-inch flower in white, yellow, or orange; 8 to 10 inches in height; 'Crystal White' was an AAS winner

'Profusion' Series—Single and double 2-inch flower in orange, white, cherry, and coral; 12 to 15 inches in height; AAS winner

'Star' Series—1- to 2-inch flower in orange, gold, and white; 12 inches in height

'Swizzle' Series—3- to 4-inch flowers in red and white or red and gold; 10 to 12 inches in height