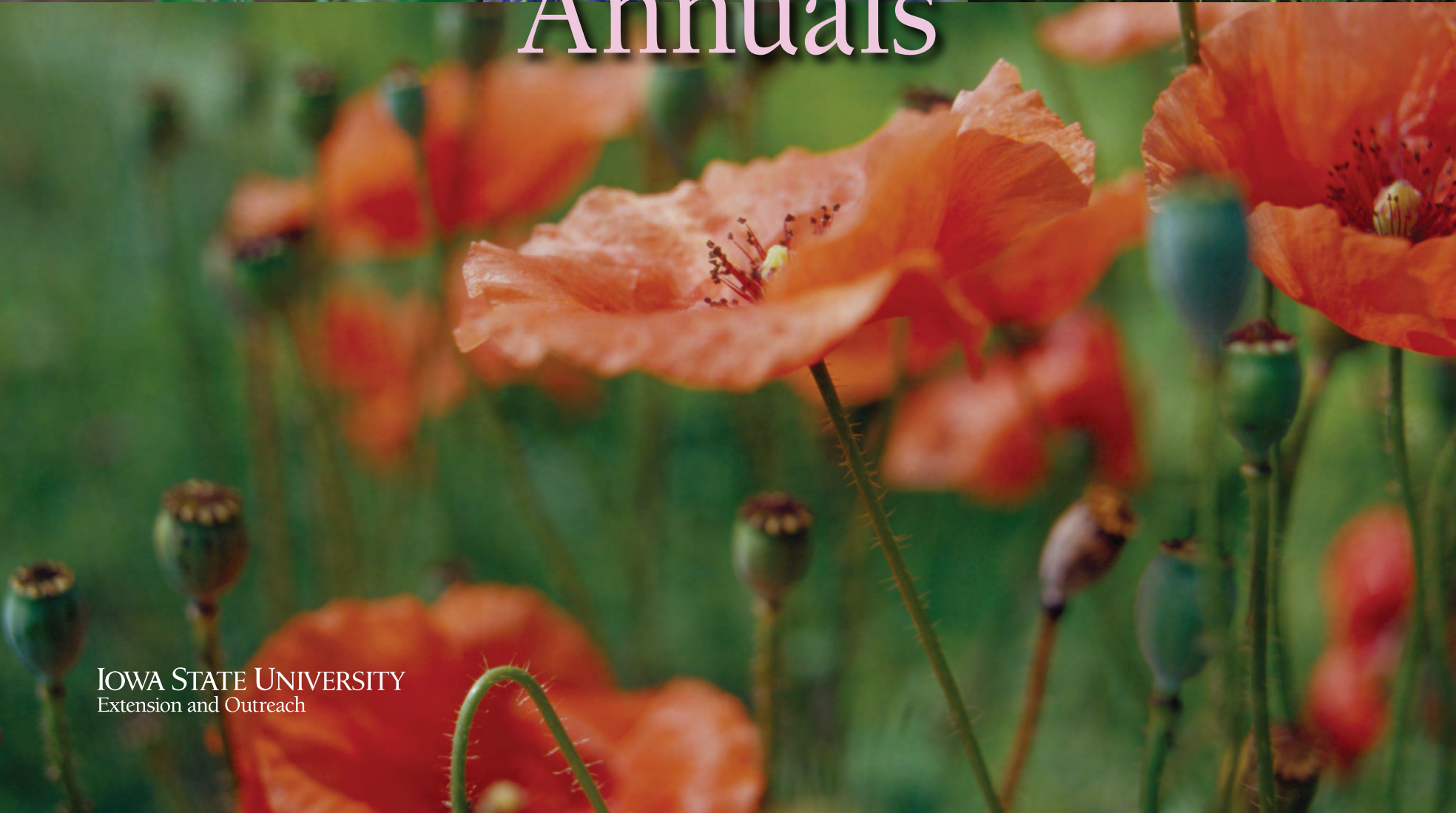




Annuals



Prepared by Cynthia Haynes and James Romer, extension horticulturists; Diane Nelson, communication specialist; and Jill Koch, CedarLeaf Design. Photographs by Cynthia Haynes, Jill Koch, and Peter Krumhardt.

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Front cover photos clockwise from top left: *Lathyrus odoratus*, *Nigella damascena*, *Cleome hassleriana* 'Sparkler White', *Papaver* species



The term “annual” means yearly. In a horticultural context, annuals are plants that complete their life cycle within one growing season. Although their transient nature means they need yearly planting, annuals provide the basis for spectacular season-long display gardens and are favored by many gardeners.

BENEFITS OF ANNUALS

Experienced gardeners have discovered the many advantages of including annuals in their gardening plans. Most annuals bloom consistently for three to four months. Few, if any, perennials bloom as long as petunias or impatiens, for example.

As a group, annuals also are incredibly versatile. Some are sun-loving; others thrive in the shade. Some prefer dry soils; others tolerate moist soils. No matter how difficult the site, it is usually possible to find an annual that will perform beautifully.

Annuals are available in a wide variety of flower colors and plant sizes. Zinnias, for example, bloom in nearly every color (except true blue, brown, and black) and range in height from 6 inches to almost 6 feet.

Several annuals are relatively easy to grow. Sunflowers, marigolds, and zinnias, for example, are so easy that they are common features in children's gardens.

Even their lack of permanence in the garden can be an advantage. Because annuals are temporary, they are changeable from year to year. If you want a red garden one year and a blue garden the next, you can do it with annuals.

For many gardeners, these benefits far outweigh the expense and time needed for replanting every spring.

USES OF ANNUALS

Flower beds—Planting dozens of annuals in a single area ensures maximum bloom and color impact in the garden. Specimen plantings of one or two specific annuals are effectively used for contrast or close inspection near doorways, benches, or other focal points. Annuals make good filler plants between new perennials that haven't yet reached full size. They also add color and definition in front of shrub borders or around vegetable gardens.

Carpet bedding—Annual plants are traditionally used to create elaborate patterns and designs for display in public areas. While such a “carpet” requires detailed planning, planting, and maintenance, it also makes an impressive and eye-catching visual display.

Containers—Annuals are excellent candidates for container plantings used on decks, patios, entrances, and gardens. Annuals can be grown in pots, hanging baskets, window boxes, whiskey barrels, and other containers.

RIGHT PLANT, RIGHT PLACE

Annuals, like other plants, perform most successfully when given their preferred amount of sunlight and soil drainage. Plant descriptions on the following pages refer to these light definitions:

Shade—1 to 2 hours of indirect light or less

Part shade—2 to 4 hours of direct light in early morning or late afternoon

Part sun—4 to 6 hours of direct light

Full sun—at least 6 hours of intense, direct light

Most annuals prefer well-drained, moist soils. Some, such as moss rose, prefer dry soils. Refer to plant labels or seed packet information to help choose plants that will do best in the existing light and soil conditions.

PLANTING TIPS

Start with good soil—Amending the soil with 2 to 3 inches of organic matter (compost, sphagnum peat, leaf mold) helps loosen the soil, increases the water holding capacity, and improves drainage. If possible, dig or till the organic matter into the soil to a depth of 8 to 12 inches. Do not dig, till, or place additional soil around the bases of large trees or shrubs. Any disturbance of the area around tree and shrub root systems could cause significant injury to the woody plants. For container plantings, lightweight, well-drained potting soil mixes are best. For more information, see “Soils for Houseplants” (PM 713f).

Planting depth—Annuals must be planted at the proper depth for best performance. Transplanted annuals should be planted at the same depth they were in their original containers. Planting too deeply can lead to root rot and, ultimately, death.

Plant spacing—To achieve success with annuals, proper plant spacing is also important. If annuals are planted too far apart, weeds will invade the area and require additional maintenance. If plants are spaced too closely, diseases can be a problem due to poor air circulation. The recommended spacing for each plant is listed on the back of seed packets, in catalogs, and on the plant labels.

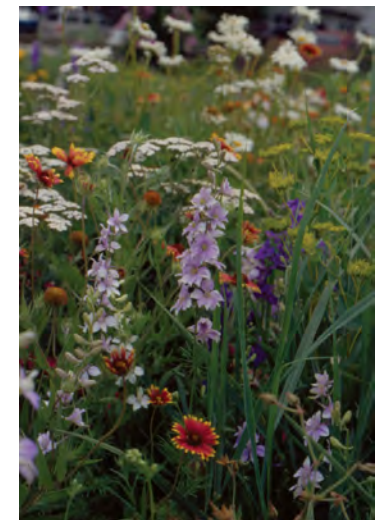
CARE AND MAINTENANCE

Water—Most flowers, including annuals, require one inch of water per week from natural rainfall or irrigation. When irrigation is needed, water deeply, but infrequently in order to promote deep root growth. Frequent, light applications of water encourage shallow roots that are more susceptible to drought stress. Irrigate plants in the morning, allowing the foliage to dry quickly. Foliage that remains wet overnight is more susceptible to disease problems.

Fertilizer—Many annuals benefit from an application of a complete fertilizer, such as 10-10-10. The type of fertilizer application (granular, liquid, slow release) is a decision made by the gardener. How often should you fertilize annual plantings? Generally, only one or two applications per growing season of granular fertilizer are sufficient. Dilute solutions of liquid fertilizers should be applied once or twice per month. Excessive fertilization promotes lush, spindly growth and may inhibit flowering.

Deadheading and pruning—Many annual flowers require regular removal of faded or spent blossoms. This practice—known as “deadheading”—improves plant appearance, prevents seed formation, slows spread of aggressive plants, and often encourages plants to produce more blooms. Some annuals also benefit from pruning when plants become leggy or spindly. Plants are normally cut back by half or more to encourage new, compact growth. Flowering is typically delayed for a couple of weeks after pruning.

Mulch—Mulching helps conserve moisture and control weeds. One to two inches of grass clippings, shredded bark, cocoa bean hulls, straw, or shredded leaves are acceptable mulch types to use around annual plants. Even container plantings will benefit from mulching.





Ageratum houstonianum 'Bavaria'

Ageratum houstonianum

Floss Flower

Height 6 to 36 inches

Width 6 to 8 inches

Full sun to part shade

Flowers come in shades of blue, lavender, white, or pink. Low growing cultivars are best used as edging plants, while taller cultivars make excellent cut flowers. *Ageratum* prefers moist, well-drained soils. Deadheading will promote more blooms.

'Bavaria'—10 to 12 inches in height;

blue and white bicolor flowers

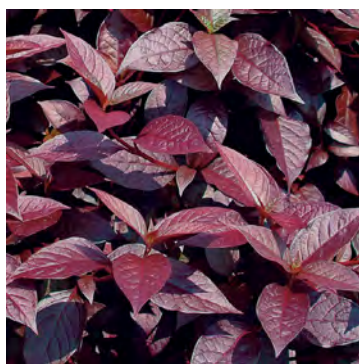
'Blue Horizon'—24 to 36 inches in height; lavender flowers

'Danube'—9 to 12 inches in height; blue or white flowers

'Hawaii' Series—6 to 8 inches in height; blue, lavender, or white flowers



Alternanthera 'Philly Burgundy'



Alternanthera 'Purple Knight'

Alternanthera

Joseph's Coat, Calico Plant

Height 6 to 36 inches

Width 12 inches

Full sun to part shade

Colorful foliage and a low-growing habit make this a popular choice for carpet bedding or other annual display gardens. Leaf colors include green, white, red, bronze, pink, and purple. Plants perform best in sunny sites with well-drained soils.

'Tricolor'—green, purple, and pink leaves



Amaranthus tricolor 'Aurora'



Amaranthus tricolor 'Perfecta'



Amaranthus tricolor 'Perfecta'



Amaranthus tricolor

Summer Poinsettia, Amaranth

Height 1 to 5 feet

Width 1 to 2 feet

Full sun

This foliage plant possesses leaves of red, purple, gold, and green. It is an excellent candidate for the back of border plantings. It performs best in sunny, well-drained, dry sites.

'Aurora'—3 to 5 feet in height; creamy yellow upper leaves

'Early Splendor'—3 feet in height;

bright crimson upper leaves

'Illumination'—3 feet in height; orange to scarlet upper leaves

'Perfecta' ('Splendens Tricolor')—red, gold, and green upper leaves



Angelonia angustifolia 'Angel Mist Pink'



Angelonia angustifolia

Angelonia, Summer Snapdragon

Height 2 to 3 feet

Width 1 to 2 feet

Full sun

Full, lush plants produce orchid-like blooms on upright stems and make good cut flowers. Plants are vigorous and tolerate heat and drought. They often sprawl but don't need staking. Plants prefer well-drained soil. Deadheading is seldom needed.



Antirrhinum majus 'Rocket'



Antirrhinum majus

Snapdragon

Height 6 to 35 inches

Width 6 to 12 inches

Full sun to part shade

Snapdragons are available in many colors and sizes. Plants bloom well during cool weather and make excellent cut flowers. Pinch plants when planting to encourage branching. Remove spent flowers to encourage additional flowering. Select plants that are resistant to rust.

'Black Prince'—18 to 30 inches in height; dark foliage and red flowers
'Chimes'—9 to 12 inches in height; many colors

'Floral Showers'—9 to 12 inches in height; many colors

'Madame Butterfly'—2 to 3 feet in height; flowers in many colors

'Rocket'—3 to 5 feet in height; many colors

'Tahiti'—6 to 8 inches in height; many colors

Antirrhinum pendula

'Cascadia'

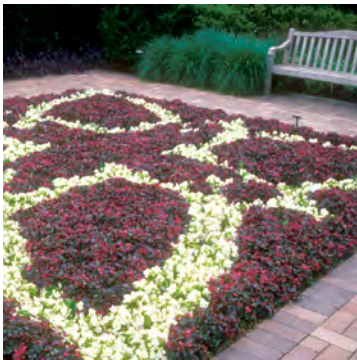
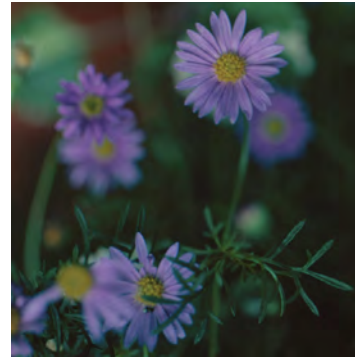
Trailing Snapdragon

Height 6 to 8 inches

Width 12 to 16 inches

Full sun

Pastel colored flowers on this trailing or spreading snapdragon make it a great addition for containers or hanging baskets.



Begonia ×
semperflorens cultorum

Wax Begonia

Height 6 to 12 inches

Width 9 to 12 inches

Shade to part sun

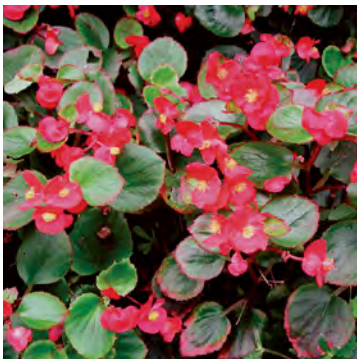
Wax begonias have succulent, lustrous bronze or dark green leaves and red, pink, salmon, or white flowers. Plants bloom consistently from spring until frost. They prefer moist, well-drained soils. Fertilize plants regularly after planting and allow the soil to dry between waterings.

'Cocktail' Series—bronze leaf; 6 to 9 inches in height

'Encore' Series—bronze or green leaf; 9 to 12 inches in height

'Rio'—bronze leaf; early-to-flower; 8 to 10 inches in height

'Super Olympia' Series—green leaf; 6 to 9 inches in height



Brachycome iberidifolia

Swan River Daisy

Height 9 to 24 inches

Width 12 inches

Full sun to part shade

The fine textures of the feathery foliage and the blue, white, mauve, or violet daisy-like flowers make these popular additions to containers. Plants decline with the onset of warmest temperatures and may need to be cut back in midsummer to initiate new growth. Some cultivars are propagated by seed while others are propagated by cuttings.

'Bravo'—9 inches in height; seed propagated

'New Amethyst'—12 inches in height

'Splendor' Series—seed propagated



Brassica oleracea 'White Feather'





Brassica oleracea 'Purple Pidgeon'

Brassica oleracea

Flowering Kale, Ornamental Cabbage

Height 10 to 24 inches

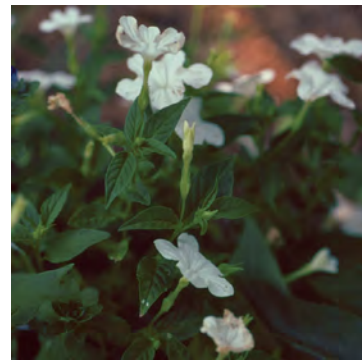
Width 12 inches

Full sun

Bright leaf colors of white, pink, magenta, red, and purple light up the fall landscape. Leaves are thick and sometimes finely dissected or ruffled. Plants perform best when planted in late summer. Cool fall temperatures help bring out the vibrant foliage colors. Plants remain attractive through late fall. Spring plantings often bolt (flower and decline) in hot weather.

'Coral Prince'—finely-serrated and deeply-notched leaves with white centers; 20-24 inches in height
'Coral Queen'—finely-serrated and deeply-notched leaves with red centers

'Nagoya Red'—10 inches in height



Browallia speciosa

Browallia

Height 6 to 12 inches

Width 8 inches

Shade

Blue or white flowers grace these shade-loving annuals. Use fertilizer in small amounts because too much will increase foliage production and decrease the number of flowers.

'Bells' hybrids—cascading habit

'Starlight' Series—6 to 9 inches tall

'Troll' hybrids—upright habit



Calendula officinalis

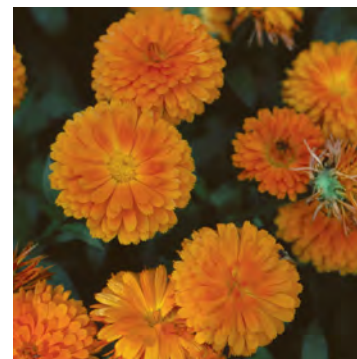
Pot Marigold, Calendula

Height 9 to 20 inches

Width 12 inches

Full sun

This native of the Mediterranean region has 3-inch diameter flowers in cream, yellow, or orange. Plants perform best in moist, well-drained soils and cool temperatures. Plantings can be made in spring and late summer.





Calibrachoa × hybrida

Trailing Petunia

Height 3 to 8 inches

Width 12 inches

Full sun

Plants are blanketed by hundreds of tiny petunia-like flowers in shades of peach, pink, blue, purple, or white all summer. Plants perform beautifully in containers and in well-drained soils. They tolerate high summer temperatures as well as cool fall temperatures. Plants are propagated primarily by cuttings.

'Lirica Showers' Series—several colors

Million Bells™—several colors



Callistephus chinensis

China Aster

Height 6 to 36 inches

Width 12 to 15 inches

Full sun to part shade

The flowers of China aster resemble mums in vivid colors of red, pink, peach, blue, purple, or white. They begin blooming in mid- to late summer and continue into fall. Flowers are commonly grown for cutting and will repeat bloom after harvest. Plants prefer well-drained, fertile soils in sunny sites. Plants are susceptible to aster wilt and aster yellows, which can destroy plantings.

'Bouquet' Series—24 to 30 inches in height; double flowers; mixed colors; good wilt resistance

'Dwarf Queen' Series—12 inches in height; mixed colors

'Matsumoto' Series—24 to 36 inches in height; mixed colors with yellow centers; good wilt resistance

'Pinocchio' Series—6 inches in height; mixed colors



Capsicum annuum 'Holiday Cheer'



Capsicum annuum 'Blast'



Capsicum annuum 'Pretty in Purple'



Capsicum annuum 'Medusa'

Capsicum annuum

Ornamental Pepper

Height 6 to 24 inches

Width 6 to 12 inches

Full sun

Colorful fruits offer texture and bright colors to landscape plantings. Fruits are edible but can be extremely hot or of poor quality. Water plants on a regular basis during dry weather and fertilize sparingly.

'Black Prince'—purple foliage and peppers

'Chilly Chili'—non-pungent fruit changes from yellow to orange to red; about 12 inches in height; 2002 AAS winner

'Jigsaw'—foliage is variegated with patches of white, purple, and light green; 1-inch fruits are dark purple and develop to cherry red, but they are less showy because they are under the leaves

'Medusa'—twisted peppers mature to red, orange, cream, and yellow; 6 inches in height

'Pretty in Purple'—dark purple and green leaves; orange to red fruit



Catharanthus roseus 'Stardust Orchid'



Catharanthus roseus 'Jaio Dark Red'



Catharanthus roseus 'Apricot Cooler'



Catharanthus roseus

Rose Periwinkle, Vinca, Madagascar Periwinkle

Height 6 to 12 inches

Width 10 inches

Full sun

This native of Madagascar has dark green glossy foliage. Flowers are 2 inches in diameter or larger and come in shades of lavender, red, pink, white, apricot, and rose—often with a contrasting eye or center. Plants perform best in moist, well-drained soils but also tolerate heat and drought. Avoid planting in wet soils.

'Blue Pearl'—light blue with white eye

'Cooler' Series—pastel flower mix with white and dark eyes; 12 to 14 inches in height; vigorous

'Jaio Dark Red'—dark red flowers with white eye; 12 to 15 inches in height; 2003 AAS winner

'Jaio Scarlet Eye'—deep rosy-red flowers with white eye; 10 to 12 inches in height; 2002 AAS winner

'Mediterranean' Series—spreading plants are suitable for hanging baskets and other containers

'Pacifica' Series—many colors with contrasting eye; 10 to 12 inches in height

'Stardust Orchid'—fuchsia flowers with white eye; 14 to 16 inches in height; 2000 AAS winner



Celosia argentea var. *cristata* 'Prestige Scarlet'

Celosia argentea var. *cristata*

Cockscomb

Height 6 to 36 inches

Width 6 to 12 inches

Full sun

The dense, convoluted flower heads resemble a rooster's comb, giving this type of celosia its common name.

Plants prefer well-drained soils and are drought tolerant once established.

Flowers can be large (up to 10 inches in diameter) and are available in shades of orange, yellow, pink, red, bicolor, and burgundy. Cockscomb will retain its shape and color if dried.

'Amigo Mahogany Red'—8 inches in height; purple leaves; red flowers

'Bombay' Series—many colors

'Prestige Scarlet'—12 inches in height; bronze leaves; red flowers; 1997 AAS winner

'Toreador'—18 inches in height; bright red "combs"



Celosia argentea var. *plumosa*

Plume Celosia

Height 6 to 24 inches

Width 6 to 12 inches

Full sun

Flowers resemble feathery plumes and are available in shades of yellow, orange, pink, red, and purple. They can be used as cut or dried flowers. Plants tolerate hot, dry conditions once established.

'Apricot Brandy'—orange flowers; 18 to 24 inches in height

'Castle Mix'—many colors; 12 inches in height

'Fresh Look' Series—numerous sideshoots; 12 to 18 inches in height; yellow and red flowers; 2004 AAS winner

'Geisha'—6 to 8 inches in height; many colors



Celosia argentea var. *spicata*

Wheat Celosia

Height 12 to 48 inches

Width 12 inches

Full sun

Erect feathery flowers are similar to plumed varieties, but are smaller and spire-like. Plants prefer well-drained, dry soils and tolerate drought once established. Wheat celosia provides a vertical line element to gardens and fresh or dried floral arrangements.

'Flamingo Feather'—pale pink/white flowers; 24 to 36 inches in height

'Flamingo Purple'—purple leaves; rosy-purple flowers; 36 to 48 inches in height

'Pink Candle'—rose-pink flowers; 24 to 36 inches in height



Centaurea cyanus

Bachelor's Button, Cornflower

Height 12 to 18 inches

Width 10 inches

Full sun to part shade

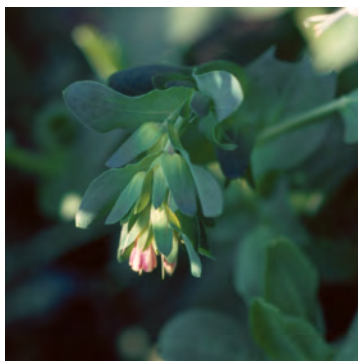
Cheery flowers in shades of pink, blue, purple, and white cover the tops of the plants. Deadheading encourages the plants to rebloom. Plants are short-lived but reseed freely. Plant 8 to 12 inches apart from midspring through early summer. Fresh and dried flowers are common in floral arrangements.

'Blue Diadem'—dark blue flowers

'Choice Mix'—tall erect variety for cutting; pink, red, purple, and white flowers

'Florence Mix'—18 inches in height; many colors

'Midget' Series—12 inches in height; many colors



Cerinthe major

Honeywort

Height 12 to 18 inches

Width 12 inches

Full sun to part shade

Nodding clusters of unique purplish flowers grace multiple stems.

Plentiful silvery-blue foliage also adds ornamental interest. Plant 9 to 12 inches apart after last frost. Plants prefer cool sites with well-drained soils.

'Purpurescens' (Kiwi Blue)—purple foliage and flowers



Clarkia amoena

Godetia, Clarkia, Satin Flower

Height 15 to 24 inches

Width 9 to 15 inches

Full sun to part shade

Showy flowers come in shades of white, salmon, pink, red, and mauve. Plants prefer cooler temperatures and bloom from spring through early summer. Plant 8 to 10 inches apart in well-drained, poor-to-average soil.

'Grace' Series—24 to 36 inches in height; many colors

'Royal Bouquet Mix'—double flowers of red, peach, purple, pink, and white; 24 inches in height; prefers cool location

'Satin' Series—12 inches in height; many colors



Cleome hassleriana 'Carhill Carmine'

Cleome hassleriana

Cleome, Spider Flower, Cat's Whiskers

Height 3 to 5 feet

Width 12 inches

Full sun to part shade

Clouds of violet, white, and rose top the long graceful stems of cleome. The stamens protrude beyond the petals giving the plant its common name. Leaves are palmate, bright green, and often spiny at the base. Because of their size, plants are suitable for background plantings or as an annual hedge. Established plants tolerate heat and drought. Sow seed after last frost or start indoors 4 to 6 weeks prior to planting outside. Cleome reseeds freely. Also shown on front cover.

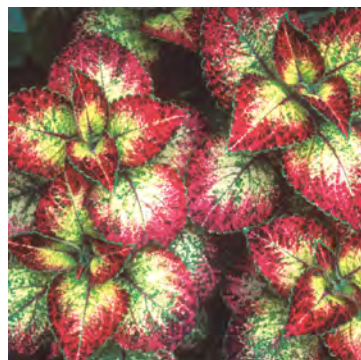
'Blush' Series—3 feet in height; pale pink, lavender, and white

'Helen Campbell'—4 feet in height; white

'Queen' Series—4 feet in height; many colors



Coleus x hybrids 'Amora'



Coleus x hybrids 'Solar Eclipse'

Coleus x hybrids (*Solenostemon*)

Coleus

Height 12 to 36 inches

Width 12 inches

Full sun to shade

Coleus is known for its vibrantly colored foliage. Lavender or white flower spikes will be produced but are usually removed. Seed-grown cultivars can be sown indoors 6 to 8 weeks before outdoor planting. Plant after the danger of frost is past in moist, fertile, well-drained soil. Also shown on page 43.

'Black Dragon'—seed propagated; dark purple and pink leaves

'India Frills'—masses of small, serrate, rose red leaves with lime green margins

'Inky Fingers'—12 to 24 inches in height; leaves have lime green margins and nearly black centers

'Japanese Giant'—large lime green leaves have rose red margins

'Kingswood Kritter'—leaves are dappled green and yellow with purple undersides

'Solar' Series—propagated by cuttings; many colors; tolerates full sun

'Stained Glass'—foliage is dark red with candy apple red veins

'Sunlovers' Series—propagated by cuttings; many colors; tolerates full sun

'Wizard Mix'—seed propagated; many leaf colors



Consolida ambigua

Larkspur

Height 24 to 30 inches

Width 12 to 18 inches

Full sun to part shade

Elegant flower spikes are produced in shades of pink, blue, purple, and white. Plants perform best in cool temperatures and decline with the onset of hot summer conditions. Sow seeds indoors 6 to 8 weeks before planting or direct seed in late autumn or early spring.

'Dwarf Hyacinth Mix'—2 feet in height; many colors

'Early Bird Hybrids' (Earlibird)—2 feet in height; many colors

'Frosted Skies'—semi-double flowers; white with blue edge; 3 to 4 feet in height

'Giant Imperials'—double flowers; many colors; 3 to 4 feet in height



Convolvulus tricolor

Dwarf Morning Glory

Height 15 to 24 inches

Width 8 to 10 inches

Full sun

Flashy, trumpet-shaped flowers are produced in abundance in summer. Flowers are typically blue and white with yellow centers. Plants grow best in sandy, well-drained soils. Fertilization discourages flowering.

'Dwarf Rainbow Flash'—6 to 8 inches in height; mix of flower colors

'Ensign' Series—many colors

'Flash' Series—blue, lilac, red, pink, or white flowers with white and yellow throats; 12 to 24 inches in height



Cosmos bipinnatus 'Seashells Mix'

Cosmos bipinnatus

Cosmos

Height 3 to 4 feet

Width 2 feet

Full sun

This old-fashioned garden flower reseeds freely. Fine textured, threadlike foliage gives the plant an open, airy appearance. The daisy-like flowers come in magenta, pink, white, and lavender and have yellow centers. Staking may be required especially in areas with strong winds. Plants perform best in dry, infertile soils with good drainage. Seeds can be sown directly in the garden after last frost or can be started indoors 5 to 7 weeks earlier.

'Daydream'—pink and white bicolor flowers; 4 to 5 feet in height

'Pied Piper' Series—red or white flowers with rolled or tube-shaped petals; 2 to 3 feet in height

'Seashells Mix'—rolled or quilled petals; pastel colors

'Sensation'—large flowers in white, rose, or pink with yellow centers

'Sonata' Series—2-to 3-inch diameter flowers; many colors; 2 feet in height



Cosmos sulphureus

Yellow Cosmos

Height 12 to 36 inches

Width 15 inches

Full sun

Flowers of scarlet, orange, and yellow are produced from late spring to frost. Plants perform well in dry, well-drained, infertile soils. Fertilization encourages leafy growth and delays flowering. Plants may benefit from staking.

'Bright Lights'—semi-double flowers; lemon-yellow, gold, orange, and red flowers; 3 to 4 feet in height

'Cosmic Orange'—double flowers; 12 inches in height, 2000 AAS winner

'Diablo'—yellow or orange flowers

'Ladybird' Series—12 to 15 inches in height



Datura metel

Datura, Moonflower, Horn of Plenty

Height 2 to 4 feet

Width 2 to 3 feet

Full sun to part shade

Trumpet-shaped, single or double flowers open in the evening and are violet, cream, white, yellow, or orange. The oval leaves are large (8 inches) and bright green. Start seeds indoors 2 to 3 months before last frost. *Datura* freely reseeds itself. All plant parts are poisonous. Plants tolerate poor soil, but prefer fertile, moist soil.

'Belle Blanche'—double creamy-white flowers

'Double Blackcurrant Swirl'—double dark violet flowers

'Evening Fragrance'—white flowers; gray-green leaves

'Ruffles' Series—double ruffled flowers; many colors



Dianthus chinensis

Dianthus, Pinks

Height 6 to 15 inches

Width 6 to 12 inches

Full sun to part shade

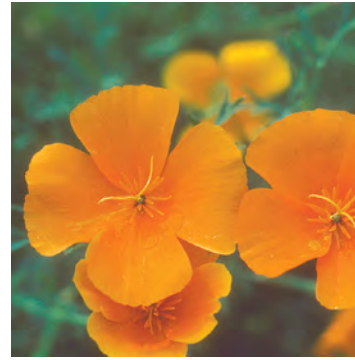
The eye-catching, toothed or fringed flowers come in shades of red, pink, and white. Many have differently colored eyes. Plants may overwinter. Start seeds indoors 6 to 8 weeks before last frost or purchase plants. *Dianthus* prefers well-drained alkaline soils. Plants are not heat tolerant and may decline in summer. Deadhead flowers to encourage additional blooms.

'Corona Cherry Magic'—2 inch flowers can be cherry red, lavender, or a bicolor blend; 2003 AAS winner
'Super Parfait' Series—compact; early to flower

'Ideal' hybrids—many colors; heat tolerant

'Melody Pink'—22 to 24 inches in height; single pink flowers; good cut flower; 2000 AAS winner

'Telstar' hybrids—many colors; heat tolerant



Eschscholzia californica

California Poppy

Height 6 to 18 inches

Width 6 to 8 inches

Full sun to part shade

The brightly colored orange and yellow poppy-like flowers are 1 to 3 inches in diameter and appear from spring through early summer. The gray-green foliage has a fine texture and is deeply divided. Plants prefer well-drained, infertile soils. California poppy prefers cool weather. Blooming may decline during periods of high temperatures. Sow seed directly in the garden in early spring.



Euphorbia marginata

Snow-on-the-mountain

Height 12 to 36 inches

Width 12 inches

Full sun

This plant is grown for its attractive upper leaves (bracts) which are edged in white. The white-margined leaves surround small white, inconspicuous flowers. Cut or crushed stems exude a milky sap that may irritate the skin. Plants prefer well-drained soils. Sow seeds directly in the garden in early spring. Plants reseed freely. Snow-on-the-mountain is native to Iowa.



Eustoma grandiflorum 'Mermaid Blue'

Eustoma grandiflorum

Lisianthus

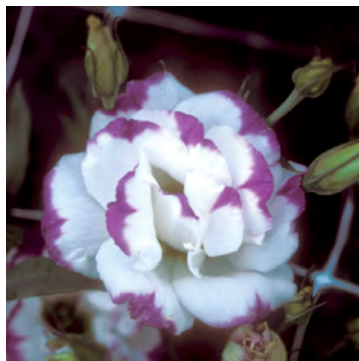
Height 6 to 24 inches

Width 6 to 12 inches

Full sun

A native of the American Southwest, the narrow, upright plants do well in containers or sunny gardens with well-drained soil. The rose-like flowers are favored for cut bouquets.

'Balboa Blue Rim'—3 to 3 ½ inch diameter white flowers rimmed with purple; silvery green foliage
'Echo' Series—double flowers; yellow, pink picotee, blue
'Heidi' Series—single flowers; pink, rose, yellow, deep blue
'Florida Blue Landscape'—10 inches in height
'Mermaid' Series—9 to 12 inches in height; blue, pink, and white flowers
'White Rose'—10 inches in height



Eustoma grandiflorum 'Echo'



Eustoma grandiflorum 'Heidi Rose Pink'



Gaillardia pulchella 'Sundance Bicolor'

Gaillardia pulchella

Blanket Flower

Height 12 to 24 inches

Width 12 inches

Full sun

Blanket flower is easily recognizable by its brightly colored 2- to 3-inch diameter yellow, orange, or red daisy-like flowers. Flower centers are often darker than the edges, adding to its ornamental appeal. Leaves are medium green and hairy. Plants prefer moist well-drained soils but are quite drought tolerant. Sow seeds indoors 6 weeks before the last frost.

'Sundance Bicolor'—double red and gold globe-shaped flowers; 2003 AAS winner



Gazania rigens 'Gazoo Clear Orange'



Gazania rigens 'Daybreak Red Stripe'

Gazania rigens

Gazania, Treasure Flower

Height 6 to 18 inches

Width 8 to 10 inches

Full sun

Eye-catching, daisy-like flowers are 1 to 3 inches in diameter in yellow, orange, red, or white with dark reddish-brown centers or markings on the petals. Leaves are dark green above and silvery-pubescent (hairy) beneath. Plants prefer well-drained to dry soils with low fertility. Sow seeds indoors 6 to 8 weeks before the last frost.

'Daybreak' Series—compact habit; 8 flower colors including bicolors



Gerbera jamesonii

Gerbera, Transvaal Daisy

Height 10 to 36 inches

Width 12 inches

Full sun to part shade

This South African native is commonly available as a cut flower from florists. New introductions of dwarf gerberas offer plants suitable for container growing. Flower colors are bright or pastel hues of pink, red, orange, yellow, lavender, and white. Flowers often have contrasting dark or yellow centers. Plants prefer well-drained soils and some protection from wind and heavy rains. Also shown on back cover.

'Festival' Series—10 to 12 inches in height;

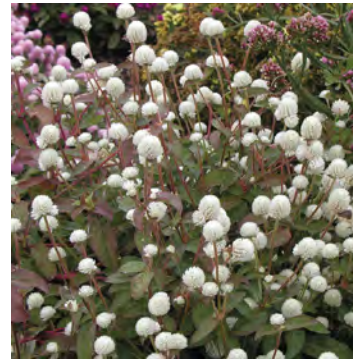
'Masquerade' Series—many colors; 12 to 24 inches in height



Gomphrena globosa 'Dwarf Pink'



Gomphrena globosa 'Woodcreek' Mix



Gomphrena globosa 'Woodcreek' Mix



Gomphrena globosa 'Gnome Pink'

Gomphrena globosa

Globe Amaranth, Straw Clover

Height 8 to 20 inches

Width 10 to 15 inches

Full sun

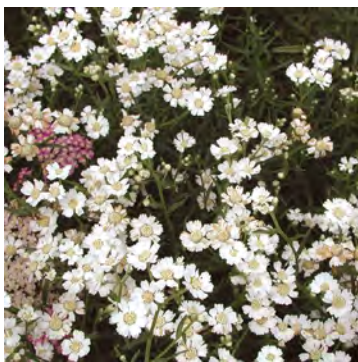
One-inch, clover-like flower heads are available in red, pink, lavender, and white and are excellent cut and dried flowers. Leaves are small, slightly hairy at the edges, and medium green. Plants prefer fertile, well-drained soils and tolerate hot, dry weather. Sow seeds indoors 6 to 8 weeks before the last frost.

'Buddy' Series—9 to 15 inches in height; several flower colors

'Gnome' Series—9 to 12 inches in height; several flower colors

'Strawberry Fields'—12 to 18 inches in height; red flowers

'Bicolor Rose'—24 inches in height; rose-pink flowers



Gypsophila elegans 'Gypsy Deep Rose'

Gypsophila elegans

Annual Baby's Breath

Height 12 to 24 inches

Width 12 inches

Full sun

Tiny white or pink flowers smother this sprawling annual and are favorites for drying. Leaves are linear, gray-green, and hardly noticeable beneath the mass of flowers. Plants prefer well-drained, dry, alkaline soils and bloom best in cooler weather. Sow seeds directly in the garden in early spring. Repeat sowing at monthly intervals for extended bloom.



Helianthus annuus

Sunflower

Height 3 to 10 feet

Width 15 to 36 inches

Full sun

This American native is noted for its large (6 to 12 inch diameter) flower heads in mid- to late summer. An outer ring of yellow, orange, maroon, or white petals surround the darker centers that eventually form the edible seeds cherished by birds and people. Sunflowers prefer full sun locations with well-drained soils. Plants possess excellent heat and drought tolerance. Pollen-free types are best for cut flowers. Sow seeds directly into the garden in spring.

'Claret'—maroon-red; 5 to 6 feet in height; pollen free

'Floristan'—bicolor burgundy and yellow flowers; 5 feet in height

'The Joker'—red and yellow bicolor; 6 to 7 feet in height; pollen free

'Mammoth Russian'—yellow flowers; 7 feet in height



Helianthus annuus 'Chianti'



Helianthus annuus 'Ring of Fire'

'Moonshine'—lemon-yellow flowers; 5 to 7 feet in height

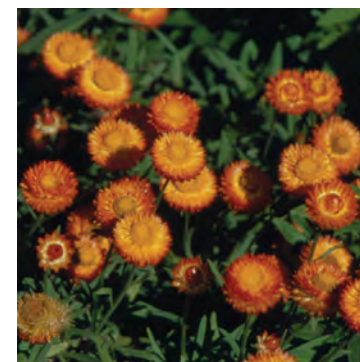
'Moulin Rouge'—burgundy-red flowers; 5 to 6 feet in height; pollen free

'Ring of Fire'—4 to 5 feet in height; bicolor flowers appear late in season (as late as 120 days after planting); 2001 AAS winner

'Sonya'—orange flowers; 3 to 4 feet in height

'Soraya'—golden-orange flowers; 5 to 6 feet in height; branching habit; 2000 AAS winner

'Teddy Bear'—double yellow flowers; 2 to 3 feet in height



Helichrysum bracteatum 'Dreamtime Copper'

Helichrysum bracteatum

Strawflower

Height 12 to 42 inches

Width 9 to 15 inches

Full sun

The papery flowers dry well and feel like straw, hence the common name. Flower colors include white, yellow, orange, and red. Leaves are linear, coarsely toothed, and nondescript. Plants prefer well-drained soils. Established plants are quite drought tolerant. Seeds can be sown directly in the garden after the last frost or started indoors 4 to 6 weeks earlier.

'Chico' Series—12 to 15 inches in height; seed propagated

'Bright Bikini' Series—12 to 18 inches in height; seed propagated

'Lemon Blush'—light yellow flowers; 16 to 20 inches in height; vegetatively propagated

'Monstrosum' Series—36 to 42 inches in height; seed propagated

'Tom Thumb'—12 inches in height; seed propagated



Helichrysum petiolare

Licorice Plant

Height: 6 to 9 inches

Width: 36 inches

Full sun to part shade

Fuzzy chartreuse or gray-green leaves and a cascading habit make this a good addition to hanging baskets, containers, and window boxes. Plants prefer well-drained soils and are susceptible to root rots in poorly drained soils. Propagation is primarily by stem cuttings.

'Licorice' Series—cream/green, silver, and compact leaf types

'Limelight'—lime green leaves

'Variegatum'—gray and cream leaves



Heliotropium arborescens 'Mini-Marine'

Heliotropium arborescens

Heliotrope

Height 12 to 36 inches

Width 12 inches

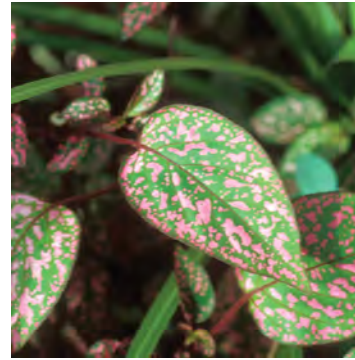
Full sun to part shade

The flat-topped purple or white flower clusters are highly prized for their beauty and fragrance. Leaves are dark green and distinctly veined. Plants prefer moist, fertile, well-drained soils. Start seeds indoors 10 to 12 weeks before the last frost or take cuttings from established plants in fall. Regular deadheading and pinching helps to keep plants blooming and compact.

'Iowa'—deep amethyst flowers

'Marine'—deep purple flowers; 24 inches in height

'Mini-Marine'—deep purple flowers; 12 inches in height



Hypoestes phyllostachya

Polka-dot Plant

Height 9 to 18 inches

Width 12 inches

Part shade to shade

Ornamental foliage is the main reason for growing this plant. Leaves are spotted with pink, red, or white dots. Plants prefer partial shade but will tolerate full sun or full shade. Well-drained, moist, fertile soils are best. Plants are propagated from cuttings or seeds. Seed should be sown indoors 6 to 8 weeks before the last frost.

'Confetti' Series—12 to 24 inches in height

'Splash' Series—12 inches in height



Impatiens balsamina

Garden Balsam, Touch-me-not, Rose Balsam

Height 12 to 30 inches

Width 12 inches

Part shade

This heirloom plant was popular 50 years ago but is seldom seen in today's gardens. The 1- to 2-inch diameter flowers resemble roses and are produced in the leaf axils (between the leaf and the stem). Flower colors include white, yellow, pink, rose, lavender, and bicolors. Plants prefer moist, well-drained soils and some afternoon shade for best performance. One common name reflects the tendency of the seedpods to burst when touched and reseed. Sow seeds directly in the garden in early spring.

'Ice' Series—purple, red, salmon, and bicolor flowers with variegated leaves
'Camellia Flowered' Series—double flowers

'Carambole'—double flowers; 12 to 15 inches in height; mixed colors

'Top Knot' Series—double flowers; 9 to 12 inches in height



Impatiens × *hawkeri* 'Celebration Salmon'

Impatiens × *hawkeri*

New Guinea Impatiens

Height 12 to 36 inches

Width 24 inches

Part shade to shade

Large (3-inch diameter) flowers and green, variegated, or bronze foliage make these a popular choice. Flower colors include pink, orange, red, rose, lavender, white, salmon, purple, and bicolors. Plants prefer moist, organic soils and some afternoon shade. Propagation is primarily from stem cuttings.

'Baby Bonita' Series—6 to 12 inches in height; many colors

'Celebration' Series—15 to 30 inches in height; many colors

'Lasting Impressions' Series—many flower colors and leaf colors

'Tango Improved'—seed grown; orange flowers

'Spectra' Series—seed grown; many flower colors



Impatiens walleriana

Impatiens, Sultana, Busy Lizzy

Height 8 to 24 inches

Width 10 to 15 inches

Part shade to shade

Impatiens are popular because they flower well in shady areas. Succulent stems and fleshy leaves support the brightly colored, single or double flowers until the first frost. Flowers are available in all colors except true blue, black, brown, and gold. Plants prefer moist, well-drained, organic soils. Sow seeds indoors 8 weeks before the last frost.

'Accent' Series—8 to 15 inches in height

'Dazzler' Series—8 to 15 inches in height

'Fiesta' Series—double flowers; 16 to 22 inches in height, propagated by stem cuttings

'Firefly' Series—tiny flowers; 8 inches in height

'Super Elfin' Series—8 to 15 inches in height

'Tempo' Series—15 to 20 inches in height



Ipomoea batatas 'Blackie'



Ipomoea batatas 'Margarita'

Ipomoea hybrids

Ornamental Sweet Potato

Height 6 to 8 inches

Width 4 to 6 feet

Full sun to part shade

The attractive arrow-shaped leaves make this a staple for many gardens. It is a vigorous groundcover in flower beds as well as a great accent for containers. Plants are easily propagated from stem cuttings and prefer moist, well-drained soil. They produce edible (but not tasty) tubers. Also shown on page 2.

'Blackie'—dark maroon leaves

'Margarita'—chartreuse leaves

'Tricolor' (Pink Frost)—pink, green, and white leaves; less vigorous



*Kochia scoparia
forma tricophylla*

Summer Cypress, Burning Bush

Height 2 to 4 feet

Width 1 to 2 feet

Full sun

This large annual is grown for its fine, narrow leaves that turn brilliant red in fall. Small inconspicuous flowers are hidden beneath the foliage. Plants prefer moist, well-drained soils, but tolerate dry sites. Seedlings are difficult to transplant; sow seeds indoors in peat pots or other biodegradable containers 6 to 8 weeks before the last frost.



Lantana camara

Lantana

Height 1 to 5 feet

Width 12 inches

Full sun

Lantana is actually a woody plant grown as an annual in Iowa gardens. Plants produce clusters of white, pink, yellow, orange, lavender, or red flowers throughout the summer. The flower clusters often appear to be bicolored because the individual flowers change colors as they mature. Lantana is extremely heat tolerant and continues to bloom even during the hottest summers. When crushed, leaves emit a strong lemon fragrance. Plants prefer well-drained to dry soils and are ideally suited to container culture. Plants are often trained into standard forms. Plants are propagated primarily from stem cuttings. Seeds are poisonous.

'Athens Rose'—red to rose to yellow flowers; vigorous plants

'Confetti'—yellow, orange, and pink flowers

'Greg Grant'—gold and cream leaves; yellow and pink flowers

'Lemon Drop'—yellow flowers; trailing habit

'Miss Huff'—orange and yellow flowers; vigorous plants

'Patriot' Series—many colorful flowers on plants with different habits

'Samantha'—yellow flowers; yellow and green variegated leaves



Lantana camara 'Athens Rose'



Lantana camara 'Creeping Cream'



Lathyrus odoratus

Sweet Pea

Height 4 to 6 feet

Width 12 inches

Full sun to part shade

An old-fashioned favorite that produces clusters of sweetly scented flowers in shades of pink, white, red, yellow, and lavender. The three-part leaves are light green. Best blooming occurs in cool temperatures. Plants prefer moist, well-drained soils with some afternoon shade. Vines require support and frequent deadheading to promote blooms. Sow seed directly in the garden in early spring. Also shown on front cover.



Laurentia axillaris

Star Flower

Height 6 to 12 inches

Width 12 inches

Part shade

The small blue-violet, white, or pink flowers perform well in containers or along rock walls. Flowers resemble 5-pointed stars and loosely cover the 2- to 3-inch long, deeply divided leaves. Plants prefer moist soils.

'Blue Stars'—blue-violet flowers

'Shooting Stars'—white flowers

Laurentia fluviatilis

Blue Star Creeper

Plants are more compact (2 to 6 inches in height) and bloom in spring.



Limonium sinuatum 'Excellent Mix'



Limonium sinuatum

Statice

Height 12 to 30 inches

Width 12 inches

Full sun

Frequently grown for cutting or drying, the papery "flowers" are available in white, yellow, blue, lavender, pink, and red. The dark green, basal leaves are wider at their tips than at their base. Plants prefer well-drained, dry soils. Root rots are common in wet, poorly-drained soils. Start seeds indoors 8 to 10 weeks before the last frost.



Lobelia erinus

Lobelia

Height 3 to 8 inches

Width 8 to 10 inches

Part shade to full sun

This cool season annual is noted for its sprawling habit and true blue flowers. Flowers also are available in lavender, white, and pink. Leaves are tiny, dark green, and usually covered by flowers. Plants are ideally suited for containers, garden edges, or other locations where the plants can cascade. Plants prefer moist, well-drained soils and some afternoon shade. Flowering usually declines during periods of hot weather. Sow seeds indoors 10 to 12 weeks before the last frost.

'Palace' Series—dark blue, lavender-blue, or white flowers; bronze foliage

'Riviera' Series—3 to 4 inches in height; several colors



Lobularia maritima 'Snow Crystal'

Lobularia maritima

Sweet Alyssum

Height 3 to 12 inches

Width 6 to 12 inches

Part shade to full sun

Sweet alyssum is known for its mounding habit and fragrant flowers. It makes a wonderful edging or container plant. The four-petaled white, pink, or lavender flowers grace the top of tiny, narrow green leaves. A well-drained, moist soil with some afternoon shade is best. Sweet alyssum does not tolerate wet soils. Plants flower best in the cool weather of spring and late summer/early fall. Midsummer shearing may encourage new blooms. Also shown on page 42.

'Easter Bonnet' Series—several flower colors

'New Carpet of Snow'—white flowers
'Snow Crystal'—6 to 9 inches in height; white flowers

'Violet Queen'—deep violet flowers

'Wonderland' Series—several flower colors



Lunaria annua

Money Plant, Honesty

Height 2 to 3 feet

Width 2 feet

Part shade

The reddish-purple flowers of this biennial are followed by silvery gray, round fruits that somewhat resemble silver dollars, hence the common name. Plants are easy to grow and freely reseed themselves once established. Plants prefer moist, well-drained soils. Sow seeds directly in the garden in fall or early spring. A white flowered variety is also available.



Matthiola incana

Stock

Height 12 to 30 inches

Width 3 to 6 inches

Full sun to part shade

Stock is a biennial often grown as an annual for cutting gardens. The fragrant flowers are available in a wide range of colors (white, pink, red, yellow, and lavender shades) and single or double flower forms. Plants prefer well-drained, fertile soils and cool weather. Sow seeds directly in the garden in early spring.



Melampodium paludosum

Medallion Flower

Height 12 to 24 inches

Width 12 inches

Full sun

One of the easiest annuals to grow, plants produce bright yellow daisy flowers that are about 1 inch in diameter. Leaves are bright green. Plants prefer moist, well-drained soils, but also possess excellent heat and drought tolerance once established.

'Derby'—12 to 15 inches in height

'Million Gold'—12 inches in height

'Show Star'—15 to 18 inches in height



Mimulus × hybridus

Monkey Flower

Height 12 to 15 inches

Width 5 to 8 inches

Full sun to part shade

The brightly colored yellow, orange, or red 2-inch diameter flowers are often spotted or marked. Leaves are medium green. Moist, fertile soils and cool temperatures are the best growing conditions. Sow seeds indoors 10 to 12 weeks before the last frost.



Mirabilis jalapa

Four-o'clock

Height 12 to 36 inches

Width 12 to 24 inches

Full sun

Trumpet-shaped flowers cover plants in midsummer. The white, pink, red, or yellow flowers are often marked or patterned with other colors and do not open until late afternoon, hence the common name. Start seeds indoors in peat pots 10 to 12 weeks before the last frost.

'Broken Colors'—pastel-colored flowers with red streaks



Moluccella laevis

Bells-of-Ireland

Height 24 to 36 inches

Width 9 to 12 inches

Full sun to part shade

Light green, bell-shaped structures (calyxes) are densely borne along the top of stems. Tiny white flowers are located inside the calyxes, like the clappers in a bell. Bells-of-Ireland are excellent for cut or dried arrangements. Leaves are bright green, extend beyond the bells, and hide tiny spines. Plants prefer moist, well-drained soils. Sow seed directly in the garden in early spring.





Myosotis sylvatica

Forget-me-not

Height 8 to 24 inches

Width 6 to 12 inches

Part shade

Forget-me-not is a biennial that is treated like an annual. The clusters of tiny flowers are clear blue, pink, or white. The medium green leaves are hairy and sticky. Plants grow best in cool weather in moist, well-drained soils. Sow seeds directly in the garden in early spring. Once established, plants freely reseed and may become invasive.



Nemesia 'Candy Girl'



Nemesia 'Hannah Rose'

Nemesia hybrids

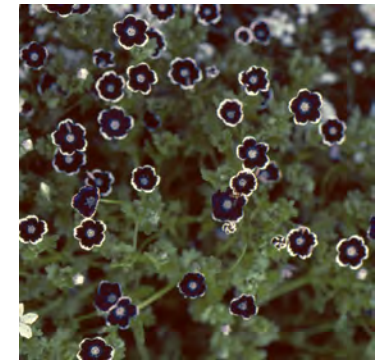
Nemesia

Height 9 to 24 inches

Width 6 to 12 inches

Part shade to full sun

The two-lipped flowers resemble small snapdragons and are red, burgundy, pink, peach, orange, yellow, lavender, and white. Most flowers have contrasting throats for a bicolor appearance. Although native to South Africa, plants prefer cool environments and perform poorly in hot, humid summers. Container plantings for spring or fall bloom may be best for Iowa. Fertile, well-drained soils in sites with afternoon shade are best.



Nemophila menziesii 'Pennie Black'

Nemophila menziesii

Baby Blue Eyes

Height 10 to 20 inches

Width 5 to 10 inches

Part shade to full sun

The eye-catching five-petaled flowers (1-inch diameter) are often bright or pale blue with contrasting white centers. Leaves are deeply divided, almost fern-like, and hairy. Plants prefer cool temperatures and moist soils. Sow seeds directly in the garden in early spring.

'Pennie Black'—black petals edged in white



Nicotiana × sanderae

Flowering Tobacco

Height 9 to 24 inches

Width 8 to 10 inches

Full sun to part shade

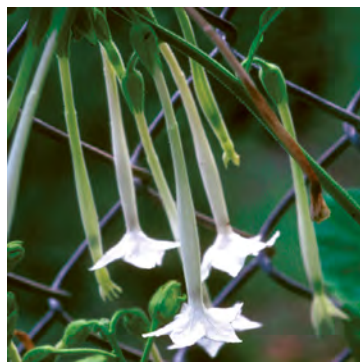
The fragrant, star-shaped flowers are available in red, white, pink, peach, and green. This relative of commercial tobacco has smaller, velvety, bright green leaves. Plants prefer moist, well-drained soils. Start seeds indoors 6 to 8 weeks before the last frost. Also shown on page 42.

'Avalon' Series—14 to 16 inches in height; several flower colors

'Domino' Series—12 to 14 inches in height; several flower colors

'Hummingbird' Series—9 to 12 inches in height; several flower colors

'Saratoga' Series—10 to 12 inches in height; several flower colors



Nicotiana sylvestris 'Only the Lonely'

Nicotiana sylvestris

Flowering Tobacco

Height 4 to 6 feet

Width 12 to 24 inches

Full sun to part shade

This flowering tobacco is noted for its large plant size and fragrant flowers that open at night. Each 3- to 5-inch tubular flower has five lobes and is pure white. Even the leaves are large, often more than 12 inches long. Plants prefer moist, well-drained soils. Sow seed directly in the garden or start seed indoors 6 to 8 weeks before the last frost.



Nierembergia hippomanica

Nierembergia, Cupflower

Height 4 to 8 inches

Width 6 to 8 inches

Full sun to part shade

This spreading annual is noted for its continuous bloom and durability. The five-lobed, cup-shaped, white or lavender blue flowers cover the narrow leaves. Plants prefer full sun but will tolerate part shade. Moist, well-drained soils are best for growth. Sow seeds indoors 10 to 12 weeks before the last frost.

'Mont Blanc'—4 to 6 inches in height; white flowers; 1993 AAS winner

Nierembergia frutescens

'Purple Robe'—Deep violet-blue flowers on 6-inch stems



Nigella damascena

Love-in-a-mist

Height 12 to 18 inches

Width 6 to 8 inches

Full sun

The pale blue, pink, lavender, or white flowers seem to float amid the lacy, thread-like leaves. The edges of each petal are notched. Both flowers and the spiny fruit are good as cut flowers. Plants prefer moist, well-drained soils. Sow seeds in the garden in early spring and again one month later for extended blooms. Plants will reseed. Also shown on front cover.





Osteospermum 'Passion Mix'

Osteospermum hybrids

Cape Daisy

Height 9 to 24 inches

Width 12 to 20 inches

Full sun

The daisy-like flowers make excellent additions to containers, baskets, and window boxes. Flower colors are diverse and include pale pink, purple, blue, peach, yellow, and white. Plants often bloom best in the cooler weather of spring and early summer. Well-drained, fertile soils in sunny sites are preferred.

'Passion Mix'—purple, lavender, or white flowers with bluish centers; 12 to 18 inches in height; 1993 AAS winner



Papaver species

Annual Poppy

Height 9 to 36 inches

Width 8 inches

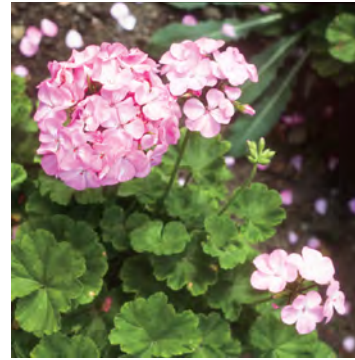
Full sun

Cup-shaped flowers with paper-thin petals in shades of white, pink, yellow, and red adorn plants from spring to early summer. Plant in a moist, well-drained soil for best results. Direct seed into the garden in early spring. Make successive plantings to extend the blooming period. Also shown on front cover.

'Angel Choir'—24 inches in height; double flowers

'Mother of Pearl'—24 to 36 inches in height; single flowers

'Oregon Rainbows'—delicate blooms in peach and pink with creamy yellow centers; 20 inches in height; prefers cool locations



Pelargonium × *hortorum*

Geranium

Height 12 to 24 inches

Width 12 to 15 inches

Full sun to part shade

The bright flowers of geraniums put spark into any planting bed or container. Geraniums have a long bloom period and are available in shades of red, pink, violet, salmon, orange, and white. Deadhead to encourage continuous bloom. Plant after last frost in fertile, moist, well-drained soils. Plants are propagated from stem cuttings or seed, depending on cultivar. Also shown on back cover. 'Americana' Series—propagated from cuttings 'Fox'—magenta flowers; propagated from cuttings 'Maverick' Series—many colors; seed propagated 'Orbit' Series—many colors; seed propagated 'Ringo 2000' Series—many colors; seed propagated 'Schone Helena'—lavender flowers; propagated from cuttings



Pelargonium × *hortorum* 'Pink Splash'



Pelargonium peltatum 'Colorcade Deep Pink'



Pelargonium peltatum

Ivy Geranium

A cascading growth habit and colorful flowers make these a favorite for hanging baskets and containers. Flowers also attract hummingbirds. Plants perform best when given midday shade. Feed monthly with a balanced liquid fertilizer. Allow the soil to dry to the touch between waterings.

'Colorcade'—burgundy, lavender, lilac and pink flowers

'Global' Series—double flowers in many colors

'Matador' Series—several colors; heat tolerant

'Sybil Holmes'—double pink and white flowers

'Tornado' Series—lilac and pink flowers; seed propagated



Pennisetum setaceum

Annual Fountain Grass

Height 3 to 4 feet

Width 2 feet

Full sun to part shade

Elegant seed heads (6 to 12 inches long) grace the tops of the plants. Plant 18 to 30 inches apart in well-drained, moist, fertile soils. Seeds may be started indoors or sown directly outside 6 to 8 weeks before last frost. Also shown on page 2.

'Rubrum'—dark purple/burgundy foliage



Pentas lanceolata

Egyptian Star Flower, Star Flower

Height 1 to 2 feet

Width 12 inches

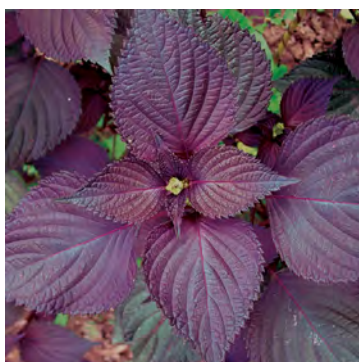
Full sun to part shade

Hummingbirds and butterflies are attracted to the 4-inch round clusters of red, pink, white, or violet star-shaped flowers of this East African native. Leaves are elliptical and dark green. During warm summer weather this container or bedding plant lights up the landscape. Plants prefer sunny sites in average, well-drained soil that is kept moderately moist. They do well in containers.



Petunia 'Double Cascade Pink'

Phlox drummondii 'Tapestry Mix'



Perilla frutescens

Perilla, Beefsteak Plant

Height 1 to 3 feet

Width 2 feet

Full sun to part shade

Commonly grown as a culinary and medicinal herb, perilla resembles basil and has green or purple leaves. Plants offer an excellent contrast to other landscape and container plantings. Flowers are small and inconspicuous. Deadheading helps prevent abundant self-sowing.

'Atropurpurea'—deep red-purple leaves

Petunia × *hybrida*

Petunia

Height 6 to 12 inches

Width 12 to 24 inches

Full sun to part shade

Grandiflora types have large flowers (up to 5 inches across), but fewer flowers per plant and poor tolerance to rainy weather.

Milliflora types are compact plants with large numbers of 1-inch diameter flowers and good weather tolerance.

Multiflora types are compact plants that are more floriferous than grandifloras and have better tolerance to wet weather.

Spreading or groundcover types possess excellent heat and drought tolerance, require little maintenance, and spread several feet.

Single or double forms are available in many types. Deadhead grandiflora types for repeat blooms. Prune plants back severely in midsummer if plants get open and leggy.



Petunia 'Prism Sunshine'

'Celebrity' Series—multiflora type; many cultivars with solid, veined, and blended flower colors;

'Daddy' Series—grandiflora type

'Fantasy' Series—milliflora type; several flower colors

'Limbo Violet'—violet-blue; 2004 AAS winner

'Merlin Blue Morn'—dark blue/purple flower fades to pure white center; 2003 AAS winner

'Prism Sunshine'—single yellow flowers; 1998 AAS winner

'Wave' Series—groundcover type; several AAS winners



Phlox drummondii

Annual phlox

Height 6 to 15 inches

Width 6 to 12 inches

Full sun to part shade

Clusters of brightly colored red, pink, salmon, purple, mauve, white and bicolored flowers are produced from late spring to summer. Plants often decline by midsummer because of extreme heat. Plant in moist, well-drained soils that are high in organic matter. Deadhead, or remove spent blooms from plants.

'Dolly'—8 inches in height

'Phlox of Sheep'—pastel colors

'Twinkle Mixed'—star-shaped flowers



Plectranthus argentatus

Plectranthus species

Plectranthus, Swedish Ivy

Height 1 to 6 feet

Width 3 to 4 feet

Full sun to part shade

A member of the mint family, *Plectranthus* is grown for its aromatic and colorful foliage. Leaves are typically green with gold or white variegation. Plants are started from stem cuttings. Plant in average, well-drained soil after last frost. Also shown on back cover.

'Aureo-marginatus'—yellow margins

'Variegatus' (Albomarginatus)—white margins



Portulaca grandiflora

Moss Rose

Height 4 to 8 inches

Width 12 inches

Full sun

Moss rose is one of the easiest annuals to grow. It tolerates poor soils and hot, dry sites. Flowers are usually semi-double or double and are available in red, yellow, pink, orange, lavender, and white. The flowers of some cultivars open in the morning and close at mid-afternoon or in cloudy, rainy weather. Good drainage is essential for best performance.

'Afternoon Delight'—2-inch double flowers; bright colors; open all day

'Margarita' Series—1½-inch semi-double flowers; many colors

'Sundial' Series—semi-double flowers; many colors

'Swan Lake'—2-inch double flowers; many colors



Ricinus communis

Castor Bean

Height 4 to 8 feet

Width 4 to 6 feet

Full sun

The large, palmately lobed leaves may be green, bronze, reddish purple, or variegated. The fuzzy, red flowers and spiny red fruit capsules appear in late summer. Plants grow best with regular watering and fertilization. Seeds are poisonous.

'Carmencita'—bronze leaves

'Sanguineus'—dark red/burgundy leaves

'Zanzibariensis'—large leaves, some with white veins



Rudbeckia hirta 'Garden Leader Gloriosa'



Rudbeckia hirta 'Prairie Sun'



Salpiglossis sinuate 'Whiskey'



Salvia coccinea 'Lady in Red'



Rudbeckia hirta 'Indian Sun'

Rudbeckia hirta var. *pulcherrima*

Gloriosa Daisy, Black-Eyed Susan

Height 2 to 4 feet

Width 1 to 2 feet

Full sun

The brightly colored yellow, gold, orange, bronze, or bicolored flowers bloom profusely throughout the summer months. The dark green foliage helps set off the daisy-like flowers. Plants prefer a fertile, well-drained soil, but tolerate poor, dry sites. Although often treated as annuals, plants are actually short-lived perennials. Start seed indoors 6 to 8 weeks before frost. Deadheading promotes new flowers.

'Cherokee Sunset'—double yellow and maroon flowers; 2002 AAS winner
'Indian Summer'—compact habit; clear yellow flowers; 1995 AAS winner
'Prairie Sun'—yellow flowers with green centers; 2003 AAS winner
'Toto'—dwarf; 8 to 10 inches in height



Rudbeckia hirta 'Cherokee Sunset'

Salpiglossis sinuate

Painted Tongue

Height 15 to 30 inches

Width 18 inches

Part shade

Rich and bold colors abound on this harder-to-grow relative of flowering tobacco and petunia. Plants perform best in a cool summer location. Pinch young plants to promote branching. Flowers bloom in colors of white and yellow as well as veined blues, reds, bronzes, pinks, and purples.

'Bolero' Series—24 inches in height; many flower colors

'Casino' hybrids—15 inches in height

'Royale' Series—24 inches in height; many flower colors



Salvia coccinea 'Coral nymph'

Salvia coccinea

Scarlet Salvia

Height 12 to 36 inches

Width 12 to 18 inches

Full sun

Bright red, tubular flowers complement the medium to dark green leaves. Plants tolerate heat and drought and are easy to grow in well-drained soils. Plants begin blooming in early to midsummer and continue until frost. Sow seeds indoors 6 to 8 weeks before the last frost.

'Lady in Red'—flowers appear earlier; 1992 AAS winner

'Nymph' Series—several flower colors



Salvia farinacea 'Mini-Victoria'



Salvia farinacea

Mealycup Sage

Height 12 to 24 inches

Width 10 to 15 inches

Full sun

Blue or white flower spikes are produced atop gray-green leaves. Plants prefer moist, well-drained soils but also possess excellent heat and drought tolerance. Flowers can be dried.

'Strata'—blue/white bicolor flowers; 1996 AAS winner

'Victoria'—blue violet flowers; 15 to 18 inches in height

'Victoria White'—white flowers



Salvia splendens

Red Salvia, Scarlet Sage

Height 6 to 24 inches

Width 6 to 12 inches

Full sun

The common name is misleading as flower choices include white, purple, pink, peach, burgundy, and bicolor as well as red. The leaves are glossy and dark green. Plants prefer moist, well-drained soils. Deadhead or remove spent flowers frequently to encourage new blooms.

'Bonfire'—24 to 36 inches in height; scarlet flowers

'Dress Parade' Series—14 to 18 inches in height; several flower colors

'Hotline' Series—6 to 12 inches in height; several flower colors

'Red Hot Sally'—red flowers; 6 to 12 inches in height

'Salsa' Series—6 to 12 inches in height; several flower colors

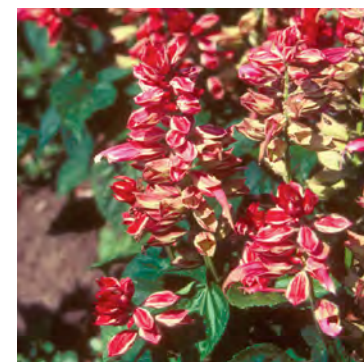
'Vista' Series—6 to 12 inches in height; several flower colors



Salvia splendens 'Hotline'



Salvia splendens 'Vista Purple'



Salvia splendens 'Vista Red and White'



Sanvitalia procumbens 'Sunbini'



Sanvitalia procumbens 'Yellow Carpet'

Sanvitalia procumbens

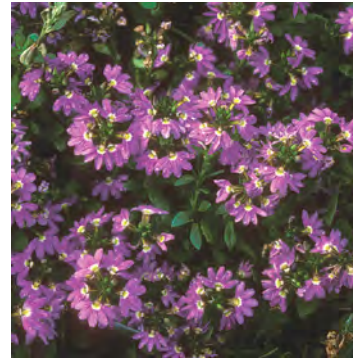
Creeping Zinnia

Height 5 to 6 inches

Width 6 to 12 inches

Full sun to part shade

This low growing annual is covered with small (1-inch diameter) zinnia-like flowers with dark brown or black centers. Leaves are medium green. Plants perform well in rock gardens, as edging, or in containers. They prefer well-drained, dry soils and are tolerant of the heat, drought, and high humidity often associated with summer. Sow seeds indoor 6 to 8 weeks before the average last frost in spring. They also can be sown directly outside after the danger of frost has passed.



Scaevola aemula

Fan Flower

Height 4 to 9 inches

Width 18 inches

Full sun

The flowers resemble a fan as all of the petals emerge from one side. The flowers are borne at the stem tips and leaf axils. The thickened leaves are serrated and dark green. Plants prefer well-drained soils and are tolerant of high heat and humidity. Fan flower is commonly grown in containers and hanging baskets to allow the blooming stems to cascade. Plants are normally propagated from cuttings.

'Blue Shamrock'—dark blue flowers
'Sapphire Blue'—lavender-blue flowers
'Wonder' Series—blue flowers; vigorous



Senecio cineraria 'Cirrus'



Senecio cineraria 'Silver Lace'



Senecio cineraria 'New Look'



Senecio cineraria 'Vera Vera'

Senecio cineraria

Dusty Miller

Height 8 to 24 inches

Width 12 inches

Full sun

Dusty miller is one of the few annuals grown exclusively for its foliage. The woolly silver leaves can be entire or deeply divided, depending on cultivar. Plants prefer well-drained soils and are drought tolerant once established.

'Cirrus'—8 to 10 inches in height; shallowly lobed leaves

'New Look'—10 inches in height; oak-like leaves

'Silver Dust'—15 inches in height; deeply dissected leaves



Sutera cordata

Bacopa

Height 4 to 8 inches

Width 2 to 4 feet

Part shade

The cascading habit and tiny, star-shaped, white flowers make bacopa a useful addition to containers, hanging baskets, and window boxes. Plants are propagated primarily from cuttings. Sites with some afternoon shade and moist soils are best.



Tagetes erecta

African Marigold, American Marigold

Height 10 to 36 inches

Width 10 to 18 inches

Full sun

African marigold has the largest flowers (up to 5 inches in diameter) of the marigolds commonly grown in Iowa gardens. Flowers are typically yellow, orange, or creamy-white and strongly scented. Double flowers appear in midsummer and continue until frost. Leaves are dark green and deeply divided. Plants prefer well-drained to dry soils. Regular deadheading encourages new blooms. Large plants may require staking. Start seeds indoors 4 to 6 weeks before the last frost or scatter seeds directly in the garden after the danger of frost has passed.

'Antiqua' Series—24 inches in height; double flowers are 3 inches in diameter
'French Vanilla'—creamy white double flowers

'Inca II' Series—flowers are 4 inches in diameter; 12 inches in height

'Perfection' Series—24 to 36 inches in height



Tagetes patula

French Marigold

Height 6 to 18 inches

Width 6 to 10 inches

Full sun

These durable garden performers begin to bloom much earlier than African marigolds. Flowers are 2 inches in diameter in yellow, orange, and mahogany-red with single or double forms. Plants prefer moist, well-drained soils, but tolerate dry soils once established. Plants are ideally suited to sunny borders and containers. Deadhead occasionally for repeat blooms.

'Aurora' Series—12 inches in height; double flowers

'Bonanza' Series—10 to 12 inches in height; double flowers

'Boy' Series—6 to 12 inches in height; double flowers

'Disco' Series—12 inches in height; single flowers

'Hero' Series—8 to 10 inches in height; double flowers

'Safari' Series—12 inches in height; double flowers



Tagetes tenuifolia

Signet Marigold

Height 8 to 18 inches

Width 12 inches

Full to part sun

Signet marigold hardly resembles the French or African types. The yellow or orange flowers are smaller (1 inch in diameter), single, and edible. The foliage is lacy, medium green, and lemon scented. Plants prefer moist, well-drained soils and work well as edging or in containers.

‘Gem’ Series—6 to 12 inches in height; single flowers

‘Starfire’ Series—15 to 18 inches in height; single flowers



Thymophylla tenuiloba

Dahlberg Daisy

Height 4 to 8 inches

Width 8 inches

Full sun

The small, golden daisy-like flowers are borne profusely throughout the summer. The fine, thread-like foliage is medium green and aromatic. Plants require well-drained soils and tolerate heat and drought. Seed can be planted directly in the garden after the last frost in spring. Plants reseed freely.



Tithonia rotundifolia

Mexican Sunflower

Height 2 to 5 feet

Width 2 feet

Full sun

The 2- to 3-inch-diameter, daisy-like flowers may be yellow, orange, or reddish orange and are a magnet for butterflies. Plants bloom profusely from mid- to late summer. Leaves are bright green, large, and somewhat rounded. Plants prefer full sun and well-drained soils. They perform best in hot, dry locations. Sow seed indoors 6 to 8 weeks before the last frost or directly in the garden after the danger of frost has passed.

‘Aztec Sun’—golden yellow flowers; 4 feet in height

‘Fiesta Del Sol’—orange flowers; 2 to 3 feet in height; 2000 AAS winner

‘Goldfinger’—orange-scarlet flowers; 4 to 5 feet in height



Torenia fournieri

Wishbone Flower

Height 6 to 12 inches

Width 6 to 8 inches

Shade to part shade

The common name arises from the “wishbone” shaped fused stamens in the throat of each flower. The tubular flowers are often bluish-purple, lavender, white, or pink with contrasting throats or centers. Leaves are coarsely toothed and bright green. Plants prefer moist, well drained soils. Sow seeds indoors 10 to 12 weeks before the last frost. Also shown on back cover.

‘Clown’ Series—6 to 10 inches in height; several flower colors

Torenia flava

‘Suzie Wong’—Orange-yellow flowers with black throats



Tropaeolum majus

Nasturtium

Height 12 inches to 12 feet

Width 12 to 18 inches

Part shade to full sun

Both bushy and vining types have yellow, orange, red, or dark pink five-petaled flowers with distinctive spurs. Flowers are edible. The rounded leaves are dark gray-green or variegated and attach to stems at their centers. Plants perform best in cool weather in moist, well-drained soils. Soak seeds overnight and sow directly in the garden. Avoid fertilization. Plants in highly fertile soils produce lush foliage but few flowers.

‘Alaska’—trailing plants reach 12 to 15 inches; variegated leaves

‘Dwarf Cherry Rose’—compact habit; double dark pink flowers

‘Jewel of Africa’—climbing habit; variegated leaves

‘Peach Melba’—salmon peach flowers; trailing plants reach 12 inches

‘Whirlybird’ Series—compact habit; several flower colors

Verbena × hybrida

Garden Verbena, Vervain

Height 12 inches

Width 6 to 8 inches

Full sun to part shade

Clusters of tiny, tubular, five-petaled flowers cover this sprawling annual all summer. Flower colors include white, pink, lavender, purple, yellow, peach, red, and bicolors. Flowering declines in hot weather. Plants are used frequently as edging and in hanging baskets or other containers. Plants prefer moist, well-drained, fertile soils. Sow seeds indoors 10 to 12 weeks before the last frost.

‘Peaches and Cream’—peachy-pink and creamy white flowers; 1992 AAS winner

‘Quartz’ Series—8 to 10 inches in height; several flower colors

Verbena bonariensis

Plants are 3 to 4 feet in height and have bright lavender pompon flowers on sturdy, branched stems. Plants reseed freely.

Verbena canadensis

This tender perennial is often sold as an annual in Iowa. ‘Homestead Purple’ and ‘Twilight’ Series are popular cultivars.

Verbena tenuisecta

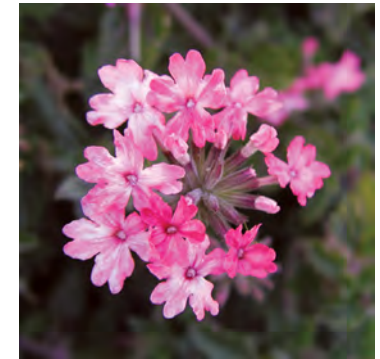
‘Imagination’—Low-growing plants have purple flowers and finely cut foliage; 1993 AAS winner



Verbena × hybrida ‘Quartz Burgundy’



Verbena bonariensis



Verbena × hybrida ‘Pink’



Verbena canadensis ‘Homestead Purple’



Vinca major

Annual Periwinkle

Height 4 to 8 inches

Width 6 to 12 inches

Part shade to shade

Vinca is commonly used as an annual groundcover or as a trailing plant in containers. It is grown primarily for its green or variegated green and cream colored leaves. The light blue or white five-petaled flowers are most abundant in spring and sporadic thereafter. Moist, well-drained soils are best. Plants are propagated primarily from cuttings.



Viola x wittrockiana 'Sorbet Orange Duet'



Viola x wittrockiana 'Ultima Morpho'

Viola x wittrockiana

Pansy

Height 5 to 9 inches

Width 6 to 8 inches

Shade to full sun

A favorite in the spring garden, pansy is noted for its “facelike” flowers. The edible flowers are available in a wide range of colors including blue, lavender, purple, burgundy, red, orange, pink, peach, yellow, white, rust, and black. Many cultivars have contrasting colors or markings on the center of three of the five petals. Deadhead to prolong blooming. Plants often decline and die with arrival of hot weather. Plants prefer moist, well-drained, fertile soils. Start seeds indoors 8 to 10 weeks before the last frost. Seedlings can be transplanted outside one month before the final frost; they grow and bloom best in cool weather.

‘Accord’ Series—3-inch diameter flowers; many flower colors with or without blotch

‘Imperial’ Series—3-inch diameter flowers; several colors with or without blotch

‘Joker’ Series—2-inch diameter flowers; several unusual colors

‘Ultima’ Series—2-inch diameter flowers; pastel colors; heat tolerant; ‘Ultima Morpho’ is 2002 AAS winner



Zinnia angustifolia

Narrowleaf Zinnia, Mexican Zinnia

Height 12 to 15 inches

Width 12 inches

Full sun

Flowers are smaller (1 to 2 inches in diameter) but plants often outperform other zinnias in the garden. Plants are very heat tolerant, require little deadheading, and are highly resistant to powdery mildew and other diseases. They prefer well-drained, moist to dry soils. Sow seeds directly in the garden in early spring. Several AAS winners.

'Crystal' Series—white, yellow, or orange flowers; 8 to 10 inches in height
'Profusion' Series—orange, white, and cherry flowers; three AAS winners
'Star' Series—orange, white, and gold flowers



Zinnia elegans

Zinnia

Height 12 to 48 inches

Width 6 to 15 inches

Full sun

This is the traditionally known zinnia with flowers that range in size from 1 to 5 inches in diameter and in every color but blue, brown, and black. Flower forms may be single, double, cactus, or dahlia. For peak performance, plants must be deadheaded regularly, planted in a sunny location with good air circulation, and receive consistent moisture. Shady sites or sites with poor air circulation often lead to powdery mildew and fewer blooms. Sow seeds directly in the garden after danger of frost.

'Candy Stripe'—double 4-inch diameter flowers; red, pink, rose, and white striped

'Envy'—green, semi-double, 2-inch diameter flowers; 30 inches in height

'Giant Cactus'—double, 4- to 5-inch diameter flowers; quilled petals; many colors



Zinnia elegans 'Giant Mix'



'Liliput'—double pompon 1- to 2-inch diameter flowers; many colors; 12 to 15 inches in height

'Peter Pan' Series—semi-double 3-inch diameter flowers; purple, pink, yellow, scarlet, and white; 12 inches in height

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

'Small World'—double 2-inch diameter flowers; pink and red; 12 to 14 inches in height



Zinnia tenuifolia

Zinnia haageana

'Persian Carpet' (Haage's Zinnia)—Flowers are 2 inches in diameter in red, gold, and mahogany bicolors. Foliage is highly mildew resistant. Plants are 16 inches in height.

Zinnia tenuifolia

Red Spider Zinnia

The scarlet flowers are 1 inch wide and have dark centers. Petals are widely spaced and curve like a spider's legs. Plants are durable, long-blooming, and 18 to 24 inches in height.

SEED SOURCES FOR ANNUALS

Local garden centers are often the best places to purchase annuals. However, they also are available from mail-order sources such as those listed below.

W. Atlee Burpee
300 Park Avenue
Warminster, PA 18991
(800) 333-5808
www.burpee.com

Cook's Garden Seed
P.O. Box 535
Londonderry, VT 05148
(800) 547-9703
www.cooksgarden.com

Harris Seeds
355 Paul Road
P.O. Box 24966
Rochester, NY 14624-0966
(800) 514-4441
www.harrisseed.com

Henry Field's Seed and Nursery
P.O. Box 397
Aurora, IN 47001-0397
(513) 354-1494
www.henryfields.com

Johnny's Selected Seeds
955 Benton Avenue
Winslow, ME 04910
(207) 861-3900
www.johnnyseeds.com

J.W. Jung Seed Co.
335 South High Street
Randolph, WI 53957
(800) 297-3123
www.jungseed.com

CHARACTERISTICS OF SELECTED ANNUALS

Plant Name	Height			Color			Propagation
	S (under 12 inches)	M (1 to 3 feet)	T (over 3 feet)	Flower	Leaf	Fruit	
<i>Ageratum houstonianum</i> (Floss Flower)	x	x		blue, lavender, pink, white			ES, DS
<i>Alternanthera</i> (Joseph's Coat)	x	x		bronze, green, pink, purple, red, white			C
<i>Amaranthus tricolor</i> (Summer Poinsettia)		x	x	gold, green, purple, red			DS
<i>Angelonia angustifolia</i> (Angelonia, Summer Snapdragon)		x		blue, pink, purple, white			C
<i>Antirrhinum majus</i> (Snapdragon)	x	x		many colors			ES, DS
<i>Antirrhinum pendula</i> 'Cascadia' (Trailing Snapdragon)	x			pastel colors			ES
<i>Begonia</i> × <i>semperflorens cultorum</i> (Wax Begonia)	x			pink, red, salmon, white; bronze, dk. green			WS, C
<i>Brachycome iberidifolia</i> (Swan River Daisy)	x	x		blue, mauve, violet, white			ES, C
<i>Brassica oleracea</i> (Flowering Kale, Ornamental Cabbage)		x		magenta, pink, purple, red, white			ES
<i>Browallia speciosa</i> (Browallia)	x			blue, white			ES
<i>Calendula officinalis</i> (Pot Marigold, Calendula)	x	x		cream, orange, yellow			ES, DS
<i>Calibrachoa</i> × <i>hybrida</i> (Trailing Petunia)	x			blue, pink, purple, white			C
<i>Callistephus chinensis</i> (China Aster)	x	x		blue, peach, pink, purple, red, white			ES, DS
<i>Capsicum annuum</i> (Ornamental Pepper)	x	x		cream, orange, purple, red, yellow			WS
<i>Catharanthus roseus</i> (Rose/Madagascar Periwinkle, Vinca)	x			apricot, lavender, pink, red, rose, white			WS
<i>Celosia argentea</i> var. <i>cristata</i> (Cockscomb)	x	x		bicolor, burgundy, orange, pink, red, yellow			ES
<i>Celosia argentea</i> var. <i>plumosa</i> (Plume Celosia)	x	x		orange, pink, purple, red, yellow			ES
<i>Celosia argentea</i> var. <i>spicata</i> (Wheat Celosia)		x	x	lt. pink, rose-pink, rosy-purple			ES
<i>Centaurea cyanus</i> (Bachelor's Button, Cornflower)		x		blue, pink, purple, white			ES, DS
<i>Cerinthe major</i> (Honeywort)		x		purple			ES, DS
<i>Clarkia amoena</i> (Godetia, Clarkia, Satin Flower)		x		mauve, pink, red, salmon, white			DS
<i>Cleome hassleriana</i> (Cleome, Spider Flower, Cat's Whiskers)		x	x	rose, violet, white			ES, DS
<i>Coleus</i> × hybrids (<i>Solenostemon</i>) (Coleus)		x		lavender, white; many vibrant colors			ES, C
<i>Consolida ambigua</i> (Larkspur)		x		blue, pink, purple, white			ES, DS
<i>Convolvulus tricolor</i> (Dwarf Morning Glory)		x		blue, white			ES, DS
<i>Cosmos bipinnatus</i> (Cosmos)		x	x	lavender, magenta, pink, white			ES, DS

WS: Winter seed (indoors 8–16 weeks before last frost) ES: Early spring seed (indoors 2–8 weeks before last frost) DS: Direct seed in garden C: Take cuttings

CHARACTERISTICS OF SELECTED ANNUALS

Plant Name	Height			Color			Propagation (see key below)
	S (under 12 inches)	M (1 to 3 feet)	T (over 3 feet)	Flower	Leaf	Fruit	
<i>Cosmos sulphureus</i> (Yellow Cosmos)		x		orange, scarlet, yellow			ES, DS
<i>Datura metel</i> (Datura, Moonflower, Horn of Plenty)		x	x	cream, orange, violet, white, yellow			WS
<i>Dianthus chinensis</i> (Dianthus, Pinks)	x	x		pink, red, white			ES
<i>Eschscholzia californica</i> (California Poppy)	x	x		orange, yellow			ES, DS
<i>Euphorbia marginata</i> (Snow-on-the-mountain)		x		white; green—white margined			ES, DS
<i>Eustoma grandiflorum</i> (Lisianthus)	x	x		blue, pink, rose, white, yellow			WS
<i>Gaillardia pulchella</i> (Blanket Flower)		x		orange, red, yellow			ES, DS
<i>Gazania rigens</i> (Gazania, Treasure Flower)	x	x		orange, red, white, yellow			ES
<i>Gerbera jamesonii</i> (Gerbera, Transvaal Daisy)	x	x		lavender, orange, pink, red, white, yellow			WS*
<i>Gomphrena globosa</i> (Globe Amaranth, Straw Clover)	x	x		lavender, pink, red, white			ES, DS
<i>Gypsophila elegans</i> (Annual Baby's Breath)		x		pink, white			ES, DS
<i>Helianthus annuus</i> (Sunflower)		x	x	burgundy, orange, yellow, white			DS
<i>Helichrysum bracteatum</i> (Strawflower)		x	x	orange, red, white, yellow			ES, DS
<i>Helichrysum petiolare</i> (Licorice Plant)	x			gray-green, chartreuse			C
<i>Heliotropium arborescens</i> (Heliotrope)		x		purple, white			WS, C
<i>Hypoestes phyllostachya</i> (Polka-dot Plant)	x	x		green—pink, red, white spotted			WS, C
<i>Impatiens balsamina</i> (Garden/Rose Balsam, Touch-me-not)		x		bicolor, lavender, pink, rose, white, yellow			ES, DS, C
<i>Impatiens</i> × <i>hawkeri</i> (New Guinea Impatiens)		x		many colors			C
<i>Impatiens walleriana</i> (Impatiens, Sultana, Busy Lizzy)	x	x		many colors			ES
<i>Ipomoea hybrids</i> (Ornamental Sweet Potato)	x			chartreuse, dk. maroon, pink/green/white			C
<i>Kochia scoparia</i> f. <i>tricophylla</i> (Summer Cypress)		x	x	inconspicuous			ES, DS
<i>Lantana camara</i> (Lantana)		x	x	lavender, orange, pink, red, white, yellow			C
<i>Lathyrus odoratus</i> (Sweet Pea)			x	lavender, pink, red, white, yellow			DS
<i>Laurentia axillaris</i> (Star Flower)	x			blue-violet, pink, white			WS
<i>Laurentia fluvialis</i> (Blue Star Creeper)	x			blue-violet, pink, white			WS
<i>Limonium sinuatum</i> (Statice)		x		blue, lavender, pink, red, white, yellow			ES
<i>Lobelia erinus</i> (Lobelia)	x			blue, lavender, pink, white			WS

* 17–19 weeks

Nichols Garden Nursery
1190 Old Salem Road NE
Albany, OR 97321

(541) 928-9280

www.nicholsgarden.com

George W. Park Seed Company

1 Parkton Avenue

Greenwood, SC 29647

(800) 213-0076

www.parkseed.com

Pinetree Garden Seeds

P.O. Box 300

New Gloucester, ME 04260

(207) 926-3400

www.superseeds.com

Seed Saver's Exchange

3076 North Winn Road

Decorah, IA 52101

(563) 382-5990

www.seedsavers.org

Select Seeds

180 Stickney Hill Road

Union, CT 06076

(800) 653-3304

www.selectseeds.com

Stokes Seeds

Box 548

Buffalo, NY 14240

(716) 695-6980

www.stokeseeds.com

Territorial Seed Company

P.O. Box 158

Cottage Grove, OR 97424

(888) 657-3131

www.territorialseed.com

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Thompson and Morgan
P.O. Box 1308
Jackson, NJ 08527
(800) 274-7333
www.thompson-morgan.com

Otis S. Twilley Seed Co.
121 Gary Road
Hodges, SC 29653
(800) 622-7333
www.twilleyseed.com

Vesey's Seeds
P.O. Box 9000
Calais, ME 04619
(800) 363-7333
www.veseys.com

Wayside Gardens
1 Garden Lane
Hodges, SC 29695
(800) 213-0379
www.waysidegardens.com

White Flower Farm
Route 63
P.O. Box 50
Litchfield, CT 06759
(800) 503-9624
www.whiteflowerfarm.com

Wildseed Farms
425 Wildflower Hills
P. O. Box 3000
Fredricksburg, TX 78624
(800) 848-0078
www.wildseedfarms.com

No endorsement of companies or their products is intended in this listing, nor is criticism implied of similar companies or their products that are not included.

CHARACTERISTICS OF SELECTED ANNUALS

Plant Name	Height			Color			Propagation (see key below)
	S (under 12 inches)	M (1 to 3 feet)	T (over 3 feet)	Flower	Leaf	Fruit	
<i>Lobularia maritima</i> (Sweet Alyssum)	x			lavender, pink, white			ES
<i>Lunaria annua</i> (Money Plant, Honesty)		x		purple, white; silver			DS
<i>Matthiola incana</i> (Stock)		x		lavender, pink, red, white, yellow			ES, DS
<i>Melampodium paludosum</i> (Medallion Flower)		x		yellow			ES
<i>Mimulus</i> × <i>hybridus</i> (Monkey Flower)		x		orange, red, yellow			WS
<i>Mirabilis jalapa</i> (Four-o'clock)		x		pink, red, white, yellow			WS, DS
<i>Moluccella laevis</i> (Bells-of-Ireland)		x		white			DS
<i>Myosotis sylvatica</i> (Forget-me-not)	x	x		blue, pink, white			ES, DS
<i>Nemesia hybrids</i> (Nemesia)	x	x		lavender, peach, pink, red, white, yellow			ES
<i>Nemophila menziesii</i> (Baby Blue Eyes)	x	x		blue			ES, DS
<i>Nicotiana</i> × <i>sanderæ</i> (Flowering Tobacco)	x	x		green, peach, pink, red, white			ES
<i>Nicotiana sylvestris</i> (Flowering Tobacco)			x	white			ES, DS
<i>Nierembergia frutescens</i> 'Purple Robe'	x			violet-blue			WS
<i>Nierembergia hippomanica</i> (Nierembergia, Cupflower)	x			blue, white			WS
<i>Nigella damascena</i> (Love-in-a-mist)		x		blue, lavender, pink, white			DS
<i>Osteospermum hybrids</i> (Cape Daisy)	x	x		blue, peach, pink, purple, white, yellow			WS
<i>Papaver</i> species (Annual poppy)	x	x		pink, red, white, yellow			DS
<i>Pelargonium</i> × <i>hortorum</i> (Geranium)		x		orange, pink, red, salmon, violet, white			WS, C
<i>Pelargonium peltatum</i> (Ivy Geranium)		x		pink, red, salmon, violet, white			ES, DS
<i>Pennisetum setaceum</i> (Annual Fountain Grass)			x	purple, burgundy			ES
<i>Pentas lanceolata</i> (Egyptian Star Flower, Star Flower)		x		lavender, pink, red, white			ES
<i>Perilla frutescens</i> (Perilla, Beefsteak Plant)		x		green, purple			DS
<i>Petunia</i> × <i>hybrida</i> (Petunia)	x			many colors			WS
<i>Phlox drummondii</i> (Annual Phlox)	x	x		many colors			ES, DS
<i>Plectranthus species</i> (Plectranthus, Swedish Ivy)		x	x	green— gold or white variegated			C
<i>Portulaca grandiflora</i> (Moss Rose)	x			lavender, orange, pink, red, white, yellow			ES

WS: Winter seed (indoors 8–16 weeks before last frost) ES: Early seed (indoors 2–8 weeks before last frost) DS: Direct seed in garden C: Take cuttings

CHARACTERISTICS OF SELECTED ANNUALS

Plant Name	Height			Color			Propagation (see key below)
	S (under 12 inches)	M (1 to 3 feet)	T (over 3 feet)	Flower	Leaf	Fruit	
<i>Ricinus communis</i> (Castor Bean)			x	red; green, bronze, purple, variegated; red			ES, DS
<i>Rudbeckia hirta</i> (Gloriosa Daisy, Black-Eyed Susan)		x	x	bicolors, bronze, gold, orange, yellow			ES
<i>Salpiglossis sinuate</i> (Painted Tongue)		x		blue, bronze, pink, purple, red, white, yellow			WS
<i>Salvia coccinea</i> (Scarlet Salvia)		x		coral, pink, red, white			ES, DS
<i>Salvia farinacea</i> (Mealycup Sage)		x		blue, white			WS
<i>Salvia splendens</i> (Red Salvia, Scarlet Sage)	x	x		bicolor, burgundy, pink, peach, purple, red, white			ES
<i>Sanvitalia procumbens</i> (Creeping Zinnia)	x			yellow			ES, DS
<i>Scaevola aemula</i> (Fan Flower)	x			blue			C
<i>Senecio cineraria</i> (Dusty Miller)	x	x		silver			WS, C
<i>Sutera cordata</i> (Bacopa)	x			white			C
<i>Tagetes erecta</i> (African Marigold, American Marigold)	x	x		creamy-white, orange, yellow			ES
<i>Tagetes patula</i> (French Marigold)	x	x		mahogany-red, orange, yellow			ES
<i>Tagetes tenuifolia</i> (Signet Marigold)	x	x		orange, yellow			ES
<i>Thymophylla tenuiloba</i> (Dahlberg Daisy)	x			gold			ES, DS
<i>Tithonia rotundifolia</i> (Mexican Sunflower)		x	x	orange, red-orange, yellow			ES
<i>Torenia flava</i> 'Suzie Wong'	x			orange-yellow			WS
<i>Torenia fournieri</i> (Wishbone Flower)	x			blue-purple, lavender, pink, white			WS
<i>Tropaeolum majus</i> (Nasturtium)		x	x	dark pink, orange, red, yellow			DS
<i>Verbena x hybrida</i> (Garden Verbena, Vervain)	x			many colors, bicolors			WS
<i>Verbena bonariensis</i>			x	bright purple			C
<i>Verbena tenuisecta</i> 'Imagination'	x			purple			C
<i>Vinca major</i> (Annual Periwinkle)	x			blue, white			C
<i>Viola x wittrockiana</i> (Pansy)	x			many colors, bicolors			WS
<i>Zinnia angustifolia</i> (Narrowleaf Zinnia, Mexican Zinnia)		x		gold, orange, red, white, yellow			ES, DS
<i>Zinnia elegans</i> (Zinnia)		x	x	many colors			ES, DS
<i>Zinnia haageana</i> 'Persian Carpet' (Haage's Zinnia)		x		red, gold, mahogany bicolors			ES
<i>Zinnia tenuifolia</i> (Red Spider Zinnia)		x		scarlet			ES, DS

FOR MORE INFORMATION

Contact your local Iowa State University Extension office for additional information or copies of the following publications.

Annual Vines (RG 317)

Growing Annual Flowers in Containers (RG 301)

Growing Dahlias (PM 1925)

Growing Petunias (RG 314)

Organic Mulches for Gardens and Landscape Plantings (RG 209)

Starting Garden Transplants at Home (PM 874)

Soils for Houseplants (PM 713f)
Zinnias (RG 324)

Additional information also is available from these Web sites:

All-America Selections (AAS)—
www.all-americaselections.org

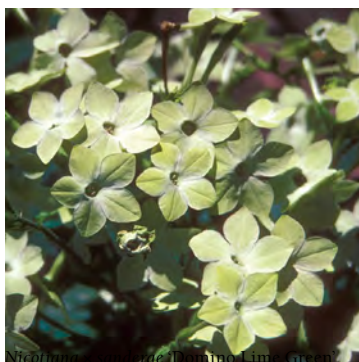
ISU Extension publications—
store.extension.iastate.edu

ISU Horticulture—
www.yardandgarden.extension.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.

CUT FLOWER GARDEN

Ageratum houstonianum (Floss Flower)
Antirrhinum majus (Snapdragon)
Calendula officinalis (Pot Marigold)
Callistephus chinensis (China Aster)
Celosia argentea (All types)
Centaurea cyanus (Bachelor's Button)
Clarkia amoena (Godetia)
Cleome hassleriana (Spider Flower)
Consolida ambigua (Larkspur)
Cosmos (Cosmos)
Dianthus chinensis (Pinks)
Eustoma grandiflorum (Lisianthus)
Gerbera jamesonii (Gerbera)
Gypsophila elegans (Annual Baby's Breath)
Helianthus annuus (Sunflower)
Lathyrus odoratus (Sweet Pea)
Limonium sinuatum (Statice)
Matthiola incana (Stock)
Moluccella laevis (Bells-of-Ireland)
Nigella damascena (Love-in-a-mist)
Rudbeckia hirta (Gloriosa Daisy)
Salpiglossis sinuate (Painted Tongue)
Salvia farinacea (Mealycup Sage)
Tagetes (Marigold)
Viola × wittrockiana (Pansy)
Zinnia (Zinnia)



DRIED FLOWER GARDEN

Celosia argentea (All types)
Consolida ambigua (Larkspur)
Gomphrena globosa (Globe Amaranth)
Gypsophila elegans (Annual Baby's Breath)
Helianthus annuus (Sunflower)
Helichrysum bracteatum (Strawflower)
Limonium sinuatum (Statice)
Lunaria annua (Money Plant)
Moluccella laevis (Bells-of-Ireland)
Nigella damascena (Love-in-a-mist)
Salvia farinacea (Mealycup Sage)
Zinnia (Zinnia)

FRAGRANT GARDEN

Datura metel (Moonflower)
Dianthus chinensis (Pinks)
Heliotropium arborescens (Heliotrope)
Lathyrus odoratus (Sweet Pea)
Lobularia maritima (Sweet Alyssum)
Matthiola incana (Stock)
Mirabilis jalapa (Four-o'clock)
Nicotiana (Flowering Tobacco)

FOLIAGE GARDEN

Alternanthera (Joseph's Coat)
Amaranthus tricolor (Summer Poinsettia)
Brassica oleracea (Flowering Kale)
Coleus × hybrids (Coleus)
Euphorbia marginata
 (Snow-on-the-mountain)
Helichrysum petiolare (Licorice Plant)
Hypoestes phyllostachya (Polka-dot Plant)
Ipomoea hybrids (Ornamental Sweet Potato)
Kochia scoparia f. *tricophylla*
 (Summer Cypress, Burning Bush)
Moluccella laevis (Bells-of-Ireland)
Perilla frutescens (Perilla)
Plectranthus species (Plectranthus)
Senecio cineraria (Dusty Miller)



Lobularia maritima 'Aphrodite Lavender'

SHADE GARDEN

Begonia × semperflorens (Wax Begonia)
Browallia speciosa (Browallia)
Clarkia amoena (Godetia)
Coleus × hybrids (Coleus)
Hypoestes phyllostachya (Polka-dot Plant)
Impatiens balsamina (Garden Balsam)
Impatiens × hawkeri
 (New Guinea Impatiens)
Impatiens walleriana (Impatiens)
Lobelia erinus (Lobelia)
Mimulus × hybridus (Monkey Flower)
Myosotis sylvatica (Forget-me-not)
Nierembergia hippomanica (Nierembergia)
Plectranthus species (Plectranthus)
Torenia fournieri (Wishbone Flower)
Vinca major (Annual Periwinkle)
Viola × wittrockiana (Pansy)

RESEEDING GARDEN

Calendula officinalis (Pot Marigold)
Centaurea cyanus (Bachelor's Button)
Cleome hassleriana (Spider Flower)
Consolida ambigua (Larkspur)
Cosmos bipinnatus (Cosmos)
Eschscholzia californica (California Poppy)
Euphorbia marginata
 (Snow-on-the-mountain)
Impatiens balsamina (Garden Balsam)
Lobularia maritima (Sweet Alyssum)
Lunaria annua (Money Plant)
Moluccella laevis (Bells-of-Ireland)
Myosotis sylvatica (Forget-me-not)
Portulaca grandiflora (Moss Rose)
Rudbeckia hirta (Gloriosa Daisy)
Tagetes (Marigold)
Thymophylla tenuiloba (Dahlberg Daisy)
Verbena bonariensis (Verbena)

DROUGHT TOLERANT GARDEN

Calendula officinalis (Pot Marigold)
Catharanthus roseus (Rose Periwinkle)
Celosia argentea (All types)
Centaurea cyanus (Bachelor's Button)
Cleome hassleriana (Spider Flower)
Convolvulus tricolor (Dwarf Morning Glory)
Cosmos (Cosmos)
Eschscholzia californica (California Poppy)
Euphorbia marginata
 (Snow-on-the-mountain)
Gaillardia pulchella (Blanket Flower)
Gazania rigens (Gazania)
Gomphrena globosa (Globe Amaranth)
Helianthus annuus (Sunflower)
Helichrysum bracteatum (Strawflower)
Lantana camara (Lantana)
Lobularia maritima (Sweet Alyssum)
Mirabilis jalapa (Four-o'clock)
Portulaca grandiflora (Moss Rose)
Rudbeckia hirta (Gloriosa Daisy)
Salvia farinacea (Mealycup Sage)
Sanvitalia procumbens (Creeping Zinnia)
Scaevola aemula (Fan Flower)
Senecio cineraria (Dusty Miller)
Tagetes erecta (Marigold)
Thymophylla tenuiloba (Dahlberg Daisy)
Tithonia rotundifolia (Mexican Sunflower)



Coleus x hybrids

MOIST/WET GARDEN

Begonia x semperflorens (Wax Begonia)
Brassica oleracea (Flowering Kale)
Cleome hassleriana (Spider Flower)
Coleus x hybrids (Coleus)
Impatiens balsamina (Garden Balsam)
Laurentia axillaris (Star Flower)
Mimulus x hybridus (Monkey Flower)
Myosotis sylvatica (Forget-me-not)
Nemophila menziesii (Baby Blue Eyes)
Torenia fournieri (Wishbone Flower)
Tropaeolum majus (Nasturtium)
Viola x wittrockiana (Pansy)

TRAILING/CASCADING GARDEN

Antirrhinum pendula 'Cascadia'
 (Trailing Snapdragon)
Brachycome iberidifolia
 (Swan River Daisy)
Browallia speciosa (Browallia)
Calibrachoa x hybrida (Trailing Petunia)
Convolvulus tricolor (Dwarf Morning Glory)
Helichrysum petiolare (Licorice Plant)
Ipomoea (Ornamental Sweet Potato)
Lathyrus odoratus (Sweet Pea)
Lobelia erinus (Lobelia)
Lobularia maritima (Sweet Alyssum)
Myosotis sylvatica (Forget-me-not)
Nierembergia hippomanica (Nierembergia)
Pelargonium peltatum (Ivy Geranium)
Petunia x hybrida (Petunia)
Plectranthus (Plectranthus)
Portulaca grandiflora (Moss Rose)
Sanvitalia procumbens (Creeping Zinnia)
Scaevola aemula (Fan Flower)
Sutera cordata (Bacopa)
Tropaeolum majus (Nasturtium)
Verbena x hybrida (Garden Verbena)
Verbena tenuisecta 'Imagination'
Zinnia angustifolia (Narrowleaf Zinnia)

ALL AMERICA SELECTIONS WINNERS 1990-2004

Begonia x semperflorens (Wax Begonia)
 Pin Up Flame (1999)
Capsicum annuum (Ornamental Pepper)
 Chilly Chili (2002)
Catharanthus roseus (Rose Periwinkle)
 Parasol (1991)
 Pretty in Rose (1991)
 Stardust Orchid (2000)
 Jaio Scarlet Eye (2002)
 Jaio Dark Red (2003)
Celosia argentea (Cockscomb, Plume Celosia)
 Castle Pink (1990)
 Prestige Scarlet (1997)
 Fresh Look Red (2004)
 Fresh Look Yellow (2004)
Cleome hassleriana (Spider Flower)
 Sparkler Blush (2002)
Cosmos sulphureus (Cosmos)
 Cosmic Orange (2000)
Dianthus chinensis (Pinks)
 Ideal Violet (1992)
 Melody Pink (2000)
 Corona Cherry Magic (2003)
Eustoma grandiflorum (Lisianthus)
 Forever Blue (2001)
 Forever White (2003)
Gaillardia pulchella (Blanket Flower)
 Red Plume (1991)
 Sundance Bicolor (2003)
Gypsophila elegans (Annual Baby's Breath)
 Gypsy (1997)
 Gypsy Deep Rose (2004)
Helianthus annuus (Sunflower)
 Soraya (2000)
 Ring of Fire (2001)
Impatiens balsamina (Garden Balsam)
 Victorian Rose (1998)
Nicotiana x sanderae (Flowering Tobacco)
 Avalon Bright Pink (2001)
Nierembergia hippomanica (Nierembergia)
 Mont Blanc (1993)
Osteospermum (Cape Daisy)
 Passion Mix (1999)
Pelargonium x hortorum (Geranium)
 Freckles (1991)
 Black Velvet Rose (2002)
Petunia x hybrida (Petunia)
 Polo Burgundy Star (1990)
 Polo Salmon (1990)
 Celebrity Chiffon Morn (1995)
 Purple Wave (1995)
 Fantasy Pink Morn (1997)
 Prism Sunshine (1998)
 Lavender Wave (2002)
 Tidal Wave Silver (2002)
 Merlin Blue Morn (2003)
 Blue Wave (2003)
 Limbo Violet (2004)
Portulaca grandiflora (Moss Rose)
 Sundial Peach (1999)
 Margarita Rosita (2001)
Rudbeckia hirta (Gloriosa Daisy)
 Indian Summer (1995)
 Cherokee Sunset (2002)
 Prairie Sun (2003)
Salvia (Salvia)
 Lady In Red (*S. coccinea*) (1992)
 Strata (*S. farinacea*) (1996)
Tithonia rotundifolia (Mexican Sunflower)
 Fiesta Del Sol (2000)
Verbena x hybrida (Verbena)
 Peaches and Cream (1992)
 Imagination (*V. tenuisecta*) (1993)
 Quartz Burgundy (1999)
Viola x wittrockiana (Pansy)
 Jolly Joker (1990)
 Maxim Marina (1991)
 Padparadja (1991)
 Ultima Morpho (2002)
Zinnia (Zinnia)
 Scarlet Splendor (1990)
 Crystal White (*Z. angustifolia*) (1997)
 Profusion Cherry (*Z. angustifolia*) (1999)
 Profusion Orange (*Z. angustifolia*) (1999)
 Profusion White (*Z. angustifolia*) (2001)

Back cover photos clockwise from top left: *Pelargonium x hortorum*, *Plectranthus*, *Torenia fournieri*, *Gerbera*

