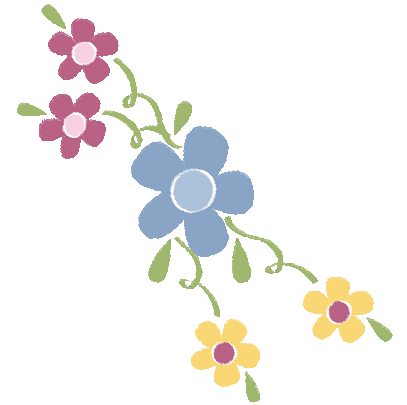
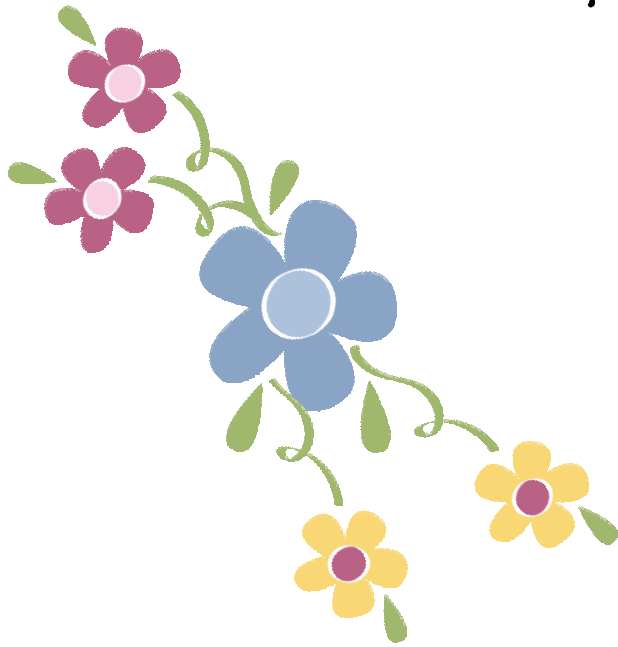


Quick Guide to Ornamental Annuals



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***Agastache mexicana*, Acapulco series**
Mexican hyssop

Sun: Full sun to part shade

Soil: moist, plants drought tolerant, low to average fertility

Size: Ht 14-20", space 6-8"

Flower color: orange, pink

Notes: May be perennial in some situations. May attract butterflies and hummingbirds. Heat tolerant
Agastache foeniculum (anise hyssop) has blue flowers, is more reliably perennial and reseeds. All species have foliage that smells of licorice.



Ageratum houstonianum
Floss flower

Sun: Full sun to part shade

Soil: Moist, well-drained, fertile. Plants do not like to dry out but will rot if too moist or mulch too thick.

Size: Ht 6-36", space 4-12"

Flower color: blues, purples, pinks, white

Notes: Deadhead for appearance and to encourage more flowers. Can be used for cut flowers. Spacing to improve air circulation will help prevent fungal diseases.



Alcea rosea
Hollyhock

Sun: Full sun

Soil: Moist, well-drained, fertile

Size: Ht 2-6', space 18-24"

Flower color: white, lavender, pink, red to nearly black, singles and doubles

Notes: Biennial or short-lived perennial to zone 5. Plants started in March will flower that summer. Reseeds. May need staking.

Hollyhock rust and Japanese beetles can be serious problems. Also susceptible to anthracnose.



Alternanthera
Calico plant, Joseph's coat

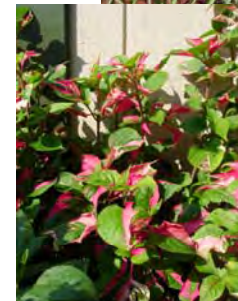
Sun: Red/purple foliage – sun to shade; others – part shade to shade

Soil: well-drained, not overly fertile

Size: Ht 6"-3', space 10-18", groundcover types 20-30"

Flower color: grown for foliage

Notes: Several new cultivars are very different in size, habit, and color. More sun will intensify non-green leaf colors. Heat tolerant.



Amaranthus caudatus
Love lies bleeding, tassel flower, velvet flower

Sun: full sun to part shade

Soil: well-drained, average to dry soils, drought tolerant, poor soil

Size: Ht 3-5', space 12-24"

Flower color: Red

Notes: Best in poorer soil which will reduce height and tendency to fall over. Fertilize if leaves begin to yellow. Cool nights below 50°F will cause leaf drop. Rust, leaf spot, root rot, and aphids can be problems. Reseeds.



Amaranthus tricolor
Joseph's coat

Sun: full sun to part shade

Soil: Average to dry soils

Size: Ht 3-5', space 12-24"

Flower color: Grown for upper foliage which is red, bronze, purple, yellow, orange, or mixed

Notes: Will get root rot if overwatered. Will drop leaves if nights fall below 50°F. Reseeds.

Images from Thompson & Morgan and Mississippi State University



Ammi majus
False Queen Anne's lace

Sun: Full sun to part shade

Soil: moist, fertile

Size: Ht 2-3', space 6-12"

Flower color: white

Notes: Good as cut flower. Sap can cause dermatitis.



Ammobium alatum
Winged everlasting

Sun: Full sun

Soil: well-drained, sandy

Size: Ht 2-3', space 12-15"

Flower color: white with yellow center

Notes: Good as cut or dried flower



**Anagallis monellii (blue) and
Anagallis arvensis (scarlet)**

**Blue pimpernel; Scarlet pimpernel,
poor man’s weather glass**

Sun: full sun

Soil: Moist and well-drained with consistent moisture, no clay, fertile

Size: Ht 6-18”, space 12-18”

Flower color: blue, red, orange, white

Notes: Blue pimpernel is upright and tolerates warm weather. Scarlet pimpernel is trailing and prefers cool weather, will stop flowering in summer. Leaves may cause skin rash.



Blue pimpernel image ©cambridge2000.com.



**Angelonia angustifolia
Summer snapdragon, angelonia**

Sun: Full sun, tolerates a bit of shade

Soil: moist, well-drained, fertile

Size: Ht 12-14”, space 8-12”

Flower color: blue, purple, pink, white, bicolors

Notes: Does not need deadheading or pinching. Drought and heat tolerant. Use as cut flowers, overwinter as cuttings. Deer resistant.

Mike Dana says some years this annual performs well, others it does not. MWK has not seen a bad year.



**Antirrhinum majus
Snapdragon**

Sun: full to part sun

Soil: well-drained, neutral to alkaline, doesn’t like acidic soil, fertile soil with organic matter

Size: Ht 6” – 4’, space 6-18”

Flower color: many, some bicolors, no blue

Notes: Deadhead to extend bloom. Good cut flowers. Very cold tolerant and may overwinter. Does not like heat and may suffer in hot summers. May reseed but does not come true from seed. Rust can be a problem – space widely for good airflow.



**Arctotis stoechadifolia
and hybrids**

**African daisy,
Monarch of the Veldt**

Sun: Full sun

Soil: Moist, well-drained soil, never wet, drought resistant, sandy soil OK; average fertility

Size: Ht 12-24”, space 12-16”

Flower color: Many plus bicolors, pale lavender but otherwise no blues

Notes: Flowers will close at night, on cloudy days, and in shade. Hybrids tend to stay open. Deadhead. *Arctotheca* and *Gazania* are closely related to *Arctotis*.



Argyranthemum
(formerly Chrysanthemum)
Marguerite daisy

Sun: full sun

Soil: well-drained, never wet but avoid water stress, average fertility soil

Size: Ht 1-3', space 12-18"

Flower color: white, pink, yellow, red, maroon

Notes: Fewer flowers may form in hot weather, deadhead to encourage flowering, may need pinching, may need extra fertilizer, good cut flower.



Asclepias curassavica
Blood flower, annual milkweed

Sun: full sun

Soil: well-drained, average fertility

Size: Ht 2-4', space 18-24"

Flower color: red, orange, yellow

Notes: extremely drought tolerant, reseeds, may get aphids. Attracts butterflies. Sap may cause dermatitis. Some milkweeds are poisonous.



Asteriscus maritimus
Sea aster, sea daisy

Sun: full sun

Soil: well-drained, sandy soil OK

Size: Ht 1', space 1'

Flower color: yellow

Notes: Won't tolerate clay soil. Heat and drought tolerant.



Begonia x argenteoguttata
and others

Angel-wing begonia,
dragon-wing begonia

Sun: sun to shade for bedding types; part to light shade for houseplant types

Soil: moist to well-drained, fertile soil.

Size: Ht 1' to 3-4', space depending on final size

Flower color: pink, white, red, foliage often attractive

Notes: Can be cut back to control height. Watch out for scorch in full sun. If soil too wet it may rot. If allowed to dry out may delay flowering. Fairly heat tolerant. Suppliers list these as drought tolerant.



***Begonia x
semperflorens-cultorum***
Wax begonia, bedding begonia

Sun: Sun to shade

Soil: well-drained with organic matter, fertile soil

Size: Ht 6-12", space 8-12"

Flower color: red, pink, white with green or red leaves

Notes: drought tolerant but keep soil moist if planted in full sun. Need warm soil. Heat tolerant. Will get stem rot and gray mold if overwatered.



Begonia tuberhybrida-cultorum
Tuberous begonia

Sun: part shade to shade

Soil: moist and well-drained, fertile

Size: Ht 1-2', space 9-12"

Flower color: many colors, no blues, some doubles

Notes: Grown from a tuber which can be lifted and overwintered. Some types upright, others trailing. May need extra fertilizer to maintain double flowers. Non-Stop can be grown from seed to flower same year if started early. All prefer cooler weather.



Bellis perennis
English daisy

Sun: full sun to part shade

Soil: well-drained but moist, fertile

Size: Ht 1', space 6-12"

Flower color: white, pink, red

Notes: very cold hardy but declines in heat of summer, usually grown as a spring or fall annual



Beta vulgaris
Swiss chard

Sun: full

Soil: moist, well-drained

Size: Ht 18-24", space 12-18"

Flower color: Grown for colorful petioles

Notes: heat tolerant



Bidens
Beggar's tick, pitchforks

Sun: full

Soil: moist, well-drained, average fertility

Size: Ht 12-24", space 12-24"

Flower color: yellow

Notes: Needs consistent moisture for best flowering. Good in hanging basket. Doesn't like hot summers – can be sheared back mid-summer for rejuvenation.



Brachycome iberidifolia
(sometimes spelled *Brachyscome*)
Swan River daisy

Sun: Full sun, benefits from shade in afternoon

Soil: Must be well-drained, never waterlogged but plants need consistent moisture, fertile soil

Size: Ht 8-18", space 12"

Flower color: blue, white, pink, purple with yellow center, fragrant

Notes: Will fade in the heat of the summer. Cut back and it will revive as weather cools.



Brassica oleracea
Ornamental or Flowering kale and cabbage

Sun: full sun

Soil: moist, well-drained

Size: Ht 10-15", space 18-24"

Flower color: grown for foliage – lavender, white, pink on green

Notes: Usually available for fall planting. Needs cool (50°F) for best color.



Browallia speciosa
Bush violet, amethyst flower, browallia

Sun: part to full shade, more flowers with more sun

Soil: moist and well-drained, average fertility

Size: Ht 8-18", space 8-10"

Flower color: blue, purple, white, bicolors

Notes: Cascading forms good in hanging baskets. Too much nitrogen will decrease flowering. Doesn't like cold weather so don't plant out too early.



Caladium bicolor* or *x hortulanum
Caladium

Sun: part shade – shade, never full sun

Soil: well-drained but moist with organic matter

Size: Ht 1-2', space 1'

Flower color: none, grown for colorful foliage

Notes: cold intolerant, don't plant out until night temperatures over 65°F. Grows from tuber – lift tuber before frost and store at 55 - 70°F. Heat tolerant. Leaves irritating if eaten but probably not poisonous.



Calendula officinalis
Pot marigold

Sun: full

Soil: well-drained; average fertility

Size: Ht 10-24", space 8-18"

Flower color: yellow, orange, cream

Notes: good cut flowers. Frost tolerant, likes cool weather, cut to 4-6" when fades in summer heat. Flower closes at night. Deadhead to increase flowering. Reseeds. May be hard to find plants – grow from seed.



Calibrachoa x hybrida
Trailing petunia, calibrachoa

Sun: full sun, some varieties part sun

Soil: moist, well-drained, fertile

Size: Ht 6-12", space 6-15"

Flower color: many, petals often mottled

Notes: Pinch to keep compact. Trailing habit good in containers. Heat and drought tolerant. Closely related to petunias. Hybrids – Petchoa – are available.



Callistephus chinensis
China aster

Sun: full to partial sun

Soil: evenly moist, well-drained, slightly alkaline, fertile

Size: Ht 6-36", space 6-12"

Flower color: many

Notes: Bloom for only about 4 weeks but early, mid, and late season varieties available. Does not rebloom when flowers cut off (good cut flowers). Heavy feeders and may need fertilization. Shallow-rooted and appreciate mulch. Both aster yellows and aster wilt can be a problem.



Image from San Diego State University

Campanula medium
Canterbury bells, cup and saucer plant

Sun: full sun to part shade

Soil: moist, well-drained, average fertility

Size: Ht 18-36", space 6-12"

Flower color: purple, pink, blue, white

Notes: If flower is single, called Canterbury bells; if flowers double it is cup and saucer plant. Good cut flowers. This is a biennial grown as an annual. Start seeds mid-winter for flowers same season. Small purchased plants may not bloom first year. 'Champion' and 'Russian Pink' reputed to flower much sooner from seed and act like a true annual. Flowers in cooler weather.



Capsicum annuum
Ornamental pepper

Sun: full sun

Soil: moist, well-drained, fertile

Size: Ht 1-2', space 8-12"

Flower color: Grown for colorful fruit late in season and sometimes colorful foliage.

Notes: Most ornamental peppers are hot in taste. Likes hot weather. Drought tolerant.



Catharanthus roseus
Annual vinca, Madagascar periwinkle

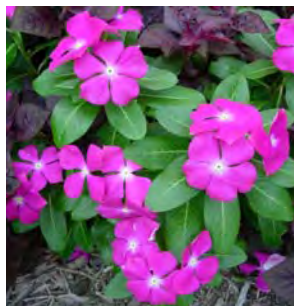
Sun: full to part sun

Soil: well-drained even sandy soil, fertile

Size: Ht 6-18", space 6-12" for most

Flower color: red, pink, lavender, apricot, white, often with contrasting center.

Notes: heavy feeder, fertilize if leaves yellow, needs warm soil, likes it hot. Cooler series more cool tolerant. Dry soil OK and almost required. Pollution tolerant.



***Celosia argentea* var. *cristata*,**
Cristata group
Cockscomb, celosia (colored brains)

Sun: full sun

Soil: well-drained with organic matter, fertile

Size: Ht 10-36", space at expected height

Flower color: pink, red, yellow, orange

Notes: Prefer consistent moisture and hot weather. Appreciates extra dose of fertilizer. Deadhead. Good cut or dried flower. Will reseed but does not become weedy.



***Celosia argentea* var. *cristata*,
Plumosa group
Plume celosia**

Sun: full sun

Soil: well-drained with organic matter, fertile

Size: Ht 10-36", space at expected height

Flower color: pink, red, yellow, orange

Notes: Prefer consistent moisture and hot weather. Appreciates extra dose of fertilizer. If plant is not branching, remove terminal flower at planting. New Look series has won awards and has almost fluorescent colors. I have seen it revert to cockscomb form. Deadhead, good cut or dried flower. Will reseed but does not become weedy.



***Celosia argentea* var. *cristata*
Spicata group
Spike celosia, wheat celosia**

Sun: full sun

Soil: well-drained with organic matter, fertile

Size: Ht 36", space 18-24"

Flower color: pink to purple, bicolor effect, some with purple foliage

Notes: Lower flowers on spike are dropping seeds while upper flowers just opening, so cannot be effectively deadheaded. Reseeds abundantly. Cut flowers.



***Centaurea cyanus*
Cornflower, bachelor's buttons**

Sun: full sun

Soil: moist to well-drained, fertile, drought tolerant once established

Size: Ht 12-40", space 12-18"

Flower color: blue, purple, red, pink, white, fragrant

Notes: tolerant of light frost, reseeds, deadhead to increase flowering, shear in mid-summer for fresh growth. OK as cut flower.



***Chrysocephalum apiculatum*
Nullarbor buttons,
golden buttons**

Sun: full to part sun

Soil: well-drained, plant drought tolerant, average fertility

Size: Ht 12-14", space 14-16", trailing plant

Flower color: yellow, orange

Notes: likes hot weather and good air circulation



Cleome hassleriana
Spider flower

Sun: full to part sun

Soil: any except exceptionally moist

Size: Ht 1-5', space 18-30"

Flower color: pink, rose, violet, white

Notes: Difficult to deadhead as fruit formed below opening flowers. Reseeds. Good for cut flowers but watch out for spines on stem. Drought tolerant but better with consistent moisture. New short forms available.



***Consolida ajacis* (also *Consolida ambigua* and *Delphinium ajacis*)**
Rocket larkspur, annual delphinium

Sun: full sun to part shade

Soil: rich in organic matter, well-drained but evenly moist

Size: Ht 1-4', space 8-12"

Flower color: blue, purple, pink, white

Notes: Mulch lightly to keep roots cool, prefers cool weather, may fade in hot summers, better if given some shade in hot summers, susceptible to powdery mildew and fusarium if stressed by wet soils and heat. Deadhead, cut flowers, reseeds.



Coreopsis tinctoria
Tickseed

Sun: full sun, stretches in part shade

Soil: well-drained to dry, average fertility

Size: Ht 8" – 3', space 8-12"

Flower color: yellow, red, orange, maroon, bicolors

Notes: Reseeds, deadhead to prolong flowering. Tolerant of heat and drought. Don't overfertilize. Native to eastern US, frequently found in wildflower mixes.



Cosmos bipinnatus
Cosmos

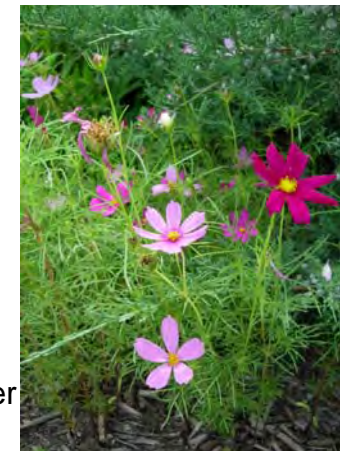
Sun: full sun

Soil: well-drained, poor to average fertility

Size: Ht 1-6', space 12-18"

Flower color: rose, pink, lilac, white, bicolors, some with semi-double or tubular petals

Notes: Reseeds. Do not fertilize. Deadhead to encourage flowering. Great variability in height depending on cultivar. For late summer flowers, put down new seed in July if plants start to fade. Tolerant of heat and drought. Attracts butterflies.



Cosmos sulphureus
Sulphur or yellow cosmos

Sun: full sun

Soil: poor to average fertility, well-drained

Size: Ht 1-6', space 12-18"

Flower color: orange, yellow, sometimes double

Notes: Heat tolerant, deadhead to encourage flowering, reseeds. For late summer flowers, put down new seed if plants fade midsummer. Tolerant of heat and drought. Cut flowers. Attracts butterflies



Cuphea hyssopifolia
Mexican heather

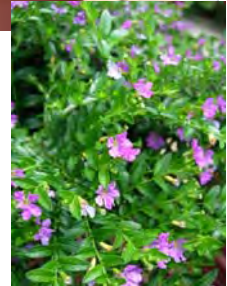
Sun: full sun

Soil: well-drained, drought tolerant

Size: Ht 1-3', space 3'; newer cultivars Ht 12", space 12-18"

Flower color: lavender, blue

Notes: Leaves small, dark green and shiny, sometimes grown as houseplant. Likes hot weather, deadheading not necessary.



***Cuphea* bright red flowers,
C. ignea, *C. llavea*, *C. x purpurea*
and hybrids
Cigar plant, red cuphea, batface cuphea**

Sun: full sun

Soil: well-drained

Size: Ht 1-2', space 1-2'

Flower color: red, deep purple

Notes: gets woody at base by end of summer. Likes it hot and dry. Deadheading not necessary.



***Cuphea*, pale colors,
C. varia and hybrids
Cuphea, cultivar shown is
'Susan's Little Gem'**

Sun: full to part sun

Soil: well-drained

Size: Ht 12-18", space 12-16"

Flower color: blue, lavender

Notes: heat and drought tolerant, deadheading not necessary.



Cynoglossum amabile
**Chinese forget-me-not,
hound's tongue**

Sun: full sun to part shade

Soil: well-drained, tolerates drought but blooms more with some water, poor-average soils, don't overfertilize

Size: Ht 18-24", space 9-12"

Flower color: blue, pink, white

Notes: Biennial grown as annual; reseeds; prefers cool weather. Deadheading will increase flowering and reduce reseeding.



Dahlia
Dahlia

Sun: full sun

Soil: moist and well-drained, fertile with organic matter, water in dry weather

Size: Ht 8" – 5', space 12" – 4'

Flower color: Many colors, no blues, some bicolors and several different flower forms, some with maroon foliage

Notes: Tuberos root that can be lifted and stored in winter. Start small varieties from seed for mixed colors, buy tubers for larger varieties and specific color. Deadhead to increase flowering. Aphids, powdery mildew, earwigs, and slugs can be problems. May need staking. Don't overfertilize with nitrogen. Deer resistant.



Datura
**Jimson weed, thorn apple,
horn of plenty**

Sun: full sun

Soil: moist, well-drained, fertilize in spring

Size: Ht 2-5', space 2' or more

Flower color: white, pink, lavender, some doubles and bicolors, fragrant

Notes: POISONOUS. Flowers very large and showy, each lasts only a day. *Datura metel*, Hindu datura, most common as ornamental. Flowers mid-summer to frost, needs warm summer. Deadhead for safety-seeds poisonous.



***Dianthus chinensis* and hybrids**
Pinks, sweet William, carnation

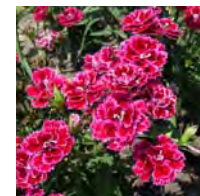
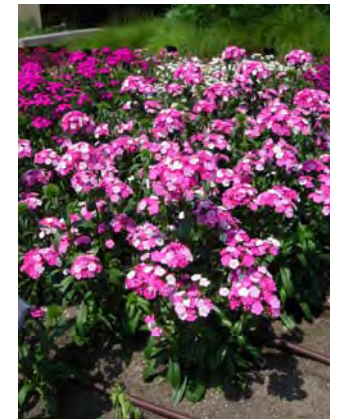
Sun: full to part sun

Soil: moist, well-drained, slightly alkaline

Size: Ht 12-20", some hybrids to 30", space 12", space some hybrids to 18"

Flower color: pink, lavender, red, maroon, white, bicolors and doubles, fragrant

Notes: *D. chinensis* prefers cool weather but hybrids bred for more heat tolerance. *Dianthus barbatus*, sweet William, is true biennial that reseeds.



Diascia
Twinflower

Sun: Full sun, appreciates some shade in hot weather

Soil: moist and well-drained, fertile

Size: Ht 8-12", space 8-12", 18" for sprawlers

Flower color: white, red, orange, pink, coral

Notes: Prefers cool weather. Flowering will stop mid-summer due to heat. Shear back if this happens. Flowering will resume when weather cools. Deadhead to prolong flowering. May have problems with slugs and snails.



Dichondra argentea 'Silver Falls' and 'Emerald Falls'
Kidneyweed

Sun: sun or shade

Soil: well-drained with average fertility

Size: Ht 2-3", hugs the ground or cascades over the edge, space 18-48"

Flower color: no flower, grown for silvery or green foliage

Notes: heat and drought tolerant, no pinching needed



Digitalis purpurea 'Foxy' series
Foxglove

Sun: part shade

Soil: moist, never dry, may need to water

Size: Ht 30-40", space 18-24"

Flower color: rose, pink, white, yellow

Notes: POISONOUS. Biennial, but Foxy series flowers first year from seed if started early. Will reseed.



Emilia coccinea
(*E. javanica*)
Tassel flower

Sun: full sun

Soil: dry, well-drained

Size: Ht 18-24", space 6-9"

Flower color: red-orange

Notes: Tolerates hot, dry conditions, can be used as cut flowers, reseeds.



***Erysimum cheiri* and hybrids**
English Wallflower

Sun: part shade, protect from heat of day

Soil: well-drained

Size: Ht 6-12", space 12"

Flower color: orange, yellow, some pink and lavender, fragrant

Notes: very variable, some flower first year from seed, others live 3-4 years. Reseeds. Citrona series flowers in 12 weeks from seed. Not common. Prefers cooler weather. Deer resistant



Image from Ballhort.com

Eschscholzia californica
California poppy

Sun: Full sun

Soil: well-drained, dry, sandy, poor-average fertility

Size: Ht 12-15", space 6-12"

Flower color: yellow-orange, white, rose, some doubles

Notes: Flower closes in cloudy weather, transplants poorly so place seeds where you want plants to grow. Drought tolerant, reseeds, best in cool weather. Cut flowers.



Euphorbia 'Diamond Frost'
Euphorbia

Sun: Sun to part shade

Soil: moist to dry

Size: Ht 12-18", space 10-12"

Flower color: white

Notes: Heat and drought tolerant, self-cleaning, sap can be a skin irritant. Assume poisonous, as many *Euphorbia* are. Deer resistant.



Euphorbia marginata
Snow on the mountain

Sun: Full sun to a bit of shade

Soil: well-drained

Size: Ht 2-3', space 12"

Flower color: White, grown mainly for white-marked bracts under flowers

Notes: Tolerates heat and humidity, sow seed outdoors, don't transplant. Sap irritating and plant poisonous. Lower stem may have no leaves, reseeds, drought tolerant once established. Deer resistant.



Eustoma grandiflorum
Lisianthus, prairie gentian

Sun: Full sun, perhaps afternoon shade

Soil: Well-drained, may not like clay, average fertility

Size: Ht 6" – 4', space 4-12"

Flower color: white, pink, purple, almost red

Notes: If grown from seed, start early indoors. Good cut flowers. Tolerates heat and drought once established.



Gaillardia pulchella
Blanket flower

Sun: full sun

Soil: Must have good drainage or will rot, doesn't like heavy soil, better in poor soil

Size: Ht 1-2', space 6-12"

Flower color: red, yellow, orange, bicolors

Notes: Likes hot weather, drought tolerant, deadhead to encourage flowering, cut flowers. This genus also has perennial species.



Gazania rigens
Treasure flower

Sun: Full sun

Soil: sandy and well-drained, poor to average fertility

Size: Ht 6-12(18)", space 6-10"

Flower color: red, orange, yellow, pink, cream, petals often marked

Notes: Flowers close on cloudy days and at night. 'Daybreak' series stays open. Be careful not to overwater or it will rot. Drought and heat tolerant. Deadhead to encourage rebloom.



***Gerbera jamesonii* and hybrids**
Gerbera daisy, transvaal daisy

Sun: Full to part sun

Soil: well-drained but moist

Size: Ht 10-18", space 12-15"

Flower color: many colors, no blues, some semi-double

Notes: Used for cut flowers. Prone to leaf spot and root rot in wet years. Difficult to start from seed. Deadhead to encourage flowering. Slugs and snails can be problems.



Gomphrena globosa
Globe amaranth

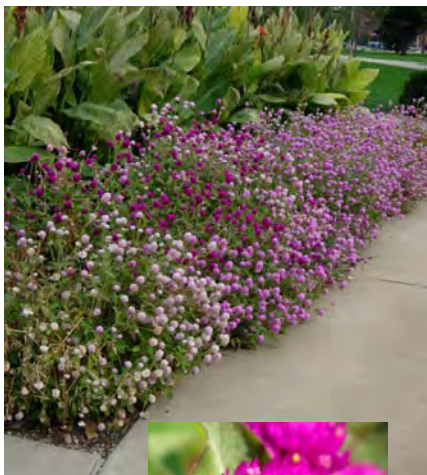
Sun: Full sun

Soil: well-drained with average fertility

Size: Ht 1-3', space 8-15"

Flower color: white, pink, magenta, orange, red, purple

Notes: Heat tolerant, deadhead to remove flowers when color fades or use as cut flowers, can be dried.



Gypsophila elegans
Annual baby's breath

Sun: full to part sun

Soil: light, sandy, and alkaline; poor fertility

Size: Ht 12-24", space 8-18"

Flower color: white, pink

Notes: Good for cut flowers, does not like hot summers, plants short-lived, resow every few weeks for longer display, drought tolerant, susceptible to aster yellows, to fungal diseases if overwatered.



Helenium amarum
Sneezeweed, helenium

Sun: Full sun

Soil: average to dry

Size: Ht 12-15", space 24-30"

Flower color: yellow

Notes: Likes it hot, heat and drought tolerant but water if extended dry spell. Do not overwater.



Helianthus annuus
Annual sunflower

Sun: full sun

Soil: fertile, moist and well-drained, appreciates organic matter

Size: Ht 2-10'+, 12-24"

Flower color: yellow, maroon, red, mahogany, bicolors, some doubles

Notes: Sow seeds in place. Tall forms may need staking. Good cut flower, especially new pollen-less hybrids. Good wildlife plant. May get powdery mildew. Leaves can be a skin irritant to some. Heat and drought tolerant.



Helichrysum bracteatum
(*Bracteantha bracteata*)
Strawflower, paper daisy

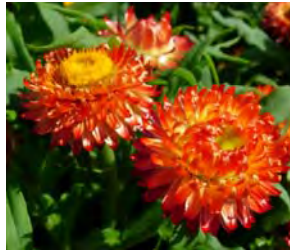
Sun: full sun

Soil: well-drained, dry soils, average to poor fertility

Size: Ht 1-3', space 10-18"

Flower color: many – yellow, orange, red, pink, white

Notes: Genus sometimes given as *Xerochrysum*. Good as cut or dried flowers, close when wet. May reseed. Drought and heat tolerant. Excess water leads to root rot and yellow leaves. Too much shade or fertilizer makes tall, weak plants.



Helichrysum italicum
Curry plant

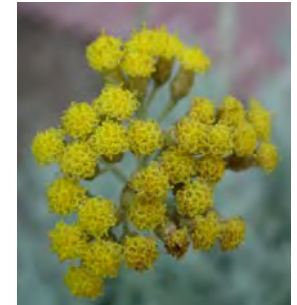
Sun: full sun

Soil: Well-drained, dry soils, average to poor fertility

Size: Ht 15-24", space 24"

Flower color: yellow, but plant grown mainly for grey foliage

Notes: Crushed leaves smell of curry but this is NOT an herb. Drought and heat tolerant



Helichrysum petiolare
Licorice plant

Sun: full to part sun; yellow-leaved varieties have better color with some shade

Soil: well-drained, poor to average fertility

Size: Ht 6-9", spreads to 20-30"

Flower color: grown for foliage, silvery, yellow, or variegated

Notes: Good in hanging baskets or as groundcover. Don't overfertilize. Needs good drainage or will rot. May wilt if soil dries but recovers if watered. Heat tolerant.



Heliotropium arborescens
Heliotrope, cherry pie plant

Sun: full to part sun

Soil: fertile, well-drained with organic matter. Better flower fragrance if a little dry but don't let plant wilt as it is slow to recover from drought stress

Size: Ht 1-2'+, space 12-18"

Flower color: blue to purple, white

Notes: Flowers turn toward sun, fragrant (like cherry pie?), lacking in some selections. Prefers cool climates, may fade at end of hot, humid summer. Frost sensitive, don't plant too early. Good butterfly plant. Poisonous if eaten. Deer resistant.



Hypoestes phyllostachya
Polka dot plant

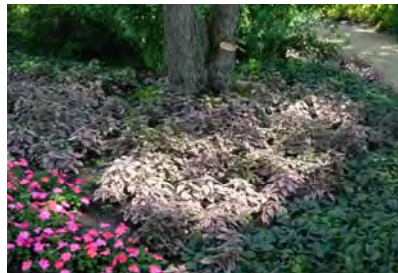
Sun: sun to shade, best in part sun

Soil: average, prefers consistent moisture

Size: Ht 12-18" for most selections, space 12-16"

Flower color: Grown for variegated foliage in red, pink, white, green

Notes: in containers or as groundcover



Iberis umbellata
Candytuft

Sun: full to part sun, needs part sun in hot climates

Soil: well-drained, alkaline soil OK, poor to average fertility

Size: Ht 9-12", space 6-9"

Flower color: varied – white, rose, purple, red

Notes: Best in cooler climates. Deadhead to encourage rebloom and cut back in heat of summer. Reseeds. Flowers fragrant, good as edging. Poor drainage leads to fungal problems. Slugs and caterpillars can be problems. *Iberis semperflorens* is a perennial.



Image from Thompson & Morgan

Impatiens balsamina
Rose balsam

Sun: part sun, sun with plenty of moisture

Soil: well-drained

Size: Ht 1-2', space 12-18"

Flower color: many, some doubles, no blues

Notes: “---better known by your grandparents than your friends.” (Armitage). Will probably need to be watered. Reseeds. Attracts hummingbirds.

Images from Thompson & Morgan and MissouriPlants.com



Impatiens hawkeri
New Guinea impatiens

Sun: Part shade to shade, sun if sufficient moisture

Soil: Not wet but with ample moisture and good drainage, fertile

Size: Ht 1-2', space 12"

Flower color: many, no blues, but lavender available, some deep colors

Notes: Large, dark-green leaves, some variegated. Heat tolerant. Attracts hummingbirds.



Impatiens walleriana
Impatiens, busy Lizzie

Sun: part to full shade

Soil: moist and well-drained with organic matter, fertile

Size: Ht 6-18", space 9-18" – will grow taller than expected if spaced too closely

Flower color: many, no blues, some bicolors, new varieties with unusual flower shapes

Notes: Reseeds. Needs ample moisture but will get root rot if soil wet. Also susceptible to fungal leaf spot and verticillium. Some varieties listed as full sun. Attracts hummingbirds. Heat tolerant.



Ipomoea batatas
Sweet potato

Sun: full sun

Soil: moist but with good drainage, may need watering, poor to average fertility

Size: Ht ~12", space 18-24", spreads as groundcover

Flower color: grown for foliage. 'Margarita' (Marguerita, Marguerite) lime green; 'Blackie' and 'Ace of Spades' purple-black.

Notes: This is trailing plant-it doesn't climb. Golden scarab beetle, sweet potato weevil, and flea beetle can eat holes in leaves. Tubers edible but not selected for flavor, can be stored over winter and replanted. Heat tolerant.



Ipomoea quamoclit* (finely cut leaves) and *Ipomoea x sloteri
Cypress vine and Cardinal climber

Sun: full sun

Soil: moist, average to poor fertility

Size: twining vine, 10'+, space 9-12"

Flower color: red, attracts hummingbirds

Notes: Not well known. Heat tolerant.

Foliage finely cut and attractive.

Clients may ask for ID.



Ipomoea tricolor
Morning glory

Sun: full sun

Soil: moist, average to poor fertility. Foliage encouraged over flowers if overfertilized or overwatered.

Size: twining vine 10'+, space 9-12"

Flower color: purple, blue, pink, white, often bicolor, open in AM, closes midday

Notes: Reseeds, sow in place, nick seeds or soak overnight before planting, may resent transplanting. Heat tolerant.

Ipomoea alba (moonflower) – 6" fragrant white flowers open in late afternoon, no flowers until late summer.



***Iresine herbstii* and hybrids**
Bloodleaf, iresine

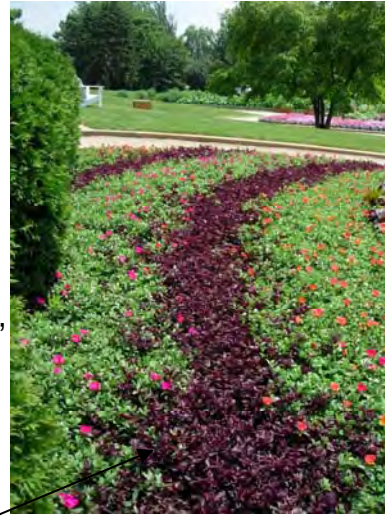
Sun: sun to shade

Soil: moist and well-drained, average fertility

Size: groundcover types: Ht 6-8", space 36-48"; tall types-Ht 18-30", space 12-18"

Flower color: grown for foliage – red, purple, pink, green

Notes: Heat tolerant. Foliage has more green tones in heavier shade. 'Purple Lady' (to upper right) becomes less purple, more red when underfertilized. 'Blazing Rose' to right.



Lantana camara
Lantana, shrub verbena

Sun: full sun, tolerates part shade

Soil: moist and well-drained, fertile, drought tolerant

Size: Ht 18-24", space 2-4'

Flower color: yellow, red, orange, purple, white, bicolors common

Notes: Deadhead to encourage flowers and remove poisonous fruit. Attracts butterflies. Does not tolerate temperatures below freezing. Heat tolerant. Deer resistant. Foliage of some varieties scented.



Laurentia axillaris
(*Isotoma axillaris*)
Star flower, isotoma, blue stars

Sun: full to part sun

Soil: moist and well-drained

Size: Ht 6-15", space 12"

Flower color: blues and pinks

Notes: Some references say doesn't need deadheading, others suggest it is useful. Heat tolerant. Sap irritating to some people.



Lavandula stoechas
Lavender

Sun: Sun to part shade

Soil: Dry to normal, plant is drought tolerant, needs good drainage, low fertility probably OK

Size: 18-26" space 30-38"

Flower color: pink to purple

Notes: Fragrant flowers for cutting or drying. 'Lavender Lady' (*Lavandula angustifolia*) is a more typical lavender and flowers first year from seed. Heat tolerant.



Image from Provenwinners.com

Limonium sinuatum
Statice, sea lavender

Sun: full sun

Soil: well-drained, sandy, poor to average fertility

Size: Ht 10-14", space 6-12"

Flower color: pink, blue, lavender, yellow, white

Notes: Good as cut and dried flower. Tolerates drought and salt but not wet soils. Deadhead to encourage more flowers. Too much fertilizer makes tall and floppy.



Linaria maroccana
Toadflax, linaria, bunny rabbits

Sun: full to part sun

Soil: moist and well-drained

Size: Ht 9-24", space 6-15"

Flower color: red, pink, yellow, purple, blue, white, bicolors

Notes: Prefers cool weather but will tolerate some heat if sufficient moisture. Deadhead to prolong flowering into summer.



Linum grandiflorum
Red flax, flowering flax

Sun: full to part sun (especially in hot climates)

Soil: well-drained with organic matter, average fertility

Size: Ht 15-30", space 4-6"

Flower color: shades of red, lasting a day

Notes: Best in cool weather, summer heat will reduce flowering. Sow seeds in place. Reseeds. Wet soils will cause stem rot. Slugs, snails, aphids can be problems.



Lobelia erinus
Bedding lobelia, edging lobelia

Sun: full sun, part shade in hot climates, including Indiana

Soil: moist and well-drained, fertile

Size: Ht 4-9", space 6", trails

Flower color: blue, purple, pink, white

Notes: Pinch to promote bushiness, prefers cool weather, cut back after first flush of flowers fades, water when weather is dry, use as edging or in baskets. Leaf spot, rust, slugs can be a problem. Deer resistant.



Lobularia maritima
Sweet alyssum

Sun: Full sun to part shade
Soil: well-drained, average fertility
Size: Ht 6-12". Space 8-12"
Flower color: pink, rose, purple, salmon, white

Notes: good as edging, flowers scented. Prefers cool weather, does poorly when nights are warm, trim back when growth slows in summer. Wonderland series more heat tolerant. Reseeds. Deer resistant.



Lotus
Parrot's beak, lotus vine

Sun: full sun, part shade in hot climates
Soil: must be well-drained
Size: Ht 12-18", space 18", trails
Flower color: grown mainly for foliage which is silvery grey and finely divided. Flowers red but come and go quickly.

Notes: Cool weather (40°F) needed for good flowering. Proven Winners says 'Amazon Sunset' needs cool only down to 55-60°F for flowering. In Indiana, expect it to flower only early and late in the season.



Lunaria annua (Linaria biennis)
Money plant, honesty, dollar plant

Sun: full to part sun
Soil: well-drained
Size: Ht 2-3', space 8-12"

Flower color: flower purple or white but flower period short. Grown for round, thin fruit.

Notes: A biennial that reseeds. Many people will have the impression it is an annual.



Matthiola
Stock, Gillyflower

Sun: full sun
Soil: well-drained but with ample moisture, fertile
Size: Ht 1-2.5', space 6-12"

Flower color: purple, pink, red, white, yellow, bicolors, some doubles

Notes: Fragrant cut flowers. Prefers cool weather, plant as early as possible after threat of hard frost has passed. Flowering ceases when temperatures over 75°F. Shorter forms may be more heat tolerant. Not common.



Photo take end of May



Melampodium paludosum
Medallion flower, melampodium

Sun: full sun

Soil: poor to average, well-drained, drought tolerant once established

Size: Ht 8-15", space 10-14"

Flower color: yellow

Notes: Tolerant of heat, humidity, and poor soils. Deadheading not needed. Reseeds.



Mimulus x hybridus
Monkey flower

Sun: part –full shade, protected from afternoon sun

Soil: well-drained soils with organic matter that never dry out, fertile

Size: Ht 12-18", space 6"

Flower color: shades of red, yellow, orange; white; bicolors

Notes: Plants require plenty of water, best in cool, moist climates, preferring warm days and cool nights. Mystic series more heat tolerant.



Image from Thompson & Morgan

Mirabilis jalapa
Four o'clocks, Marvel of Peru

Sun: full sun, but tolerant of a bit of shade

Soil: well-drained, fertile, grows well in moist soils but heat and drought tolerant

Size: Ht 18-36", space 16-24"

Flower color: red, pink, yellow, white, bicolor, opens in late afternoon, fragrant

Notes: all parts poisonous, may reseed, deer resistant.



Nemesia strumosa
Nemesia

Sun: full sun, part shade in hot climates

Soil: moist and well-drained, water regularly to keep blooming in summer

Size: Ht 6-24", space 6"

Flower color: red, blue, purple, pink, white, yellow, orange, bicolors

Notes: Flowering will slow in heat of summer, keep moist, flowering will resume as temperatures cool. Pinch to encourage branching. Cut back by half after first bloom.



Nicotiana x sanderae
Flowering tobacco

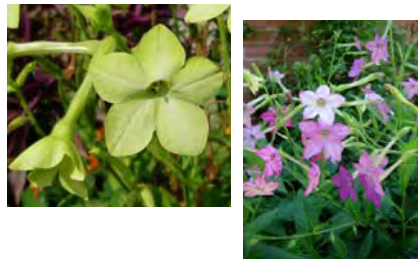
Sun: full to part sun

Soil: Moist and well-drained, appreciates organic matter, average fertility

Size: Ht 12-36", space 8-12"

Flower color: white, lime green, purple, pink, red, yellow

Notes: POISONOUS. Flowers of some varieties fragrant, deadhead to prolong flowering, flowers may close on hot, humid days, attracts hummingbirds, prone to aphids, supports tomato and tobacco hornworm.



Nicotiana sylvestris
White shooting stars

Sun: full to part sun

Soil: Moist and well-drained, appreciates organic matter, average fertility

Size: Ht 3-5', space 3'

Flower color: white, mid-late summer

Notes: POISONOUS. Reseeds, fragrant, flowers open at night. Prone to aphids and other insects.



Nierembergia
Cupflower

Sun: full sun to part shade, protect from afternoon sun

Soil: moist, well-drained, average fertility

Size: Ht ~12", space 6-12"+

Flower color: white, blue, lavender, some with yellow eye

Notes: almost a groundcover, usually needs no extra fertilizer, grows best in cool summers, may wilt in heat even with sufficient soil moisture. Cut back after first flush of flowers to prolong bloom.



Nigella damascena
Love-in-a-mist, wild fennel

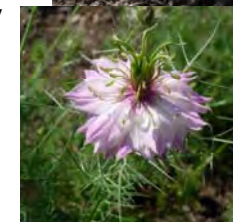
Sun: full sun to part shade

Soil: well-drained, light soil, average fertility

Size: Ht 18-24", space 6-15"

Flower color: blue, white, pink, purple, fruit considered ornamental

Notes: Reseeds, sow in place every few weeks to prolong flowering period, bloom slows as fruit forms and summer becomes hot.



Ocimum basilicum
Basil (the culinary herb)

Sun: full sun

Soil: moist, well-drained

Size: Ht 1-3', space 12-20"

Flower color: grown for foliage which has been selected for small leaves, for stature, and leaf color.

'Magic Mountain' has large showy pink flowers. On others, flowers pink or white and not showy. Foliage is aromatic.

Notes: Pinch to encourage branching and to remove flower buds.



Opismenus hirtellus 'Dragonfly'
Basketgrass

Sun: sun or shade

Soil: average

Size: Ht 6-10", space 18-24"

Flower color: grown for foliage that is green/white variegated with pink blush

Notes: Trails over edges of containers, heat tolerant, drought tolerant in shade. This is a grass but is included here because most people won't recognize it is grass.



Origanum e.g. 'Barbara Tingey', 'Kent Beauty'
Oregano

Sun: full sun

Soil: average, well-drained, often drought tolerant

Size: Ht 3-10", space 8-18"

Flower color: pink, mid-summer into fall

Notes: trails over edge of container, heat tolerant. Other varieties of oregano may be perennial.



Photos are 'Barbara Tingey'

Osteospermum
Osteospermum, Cape daisy, South African daisy

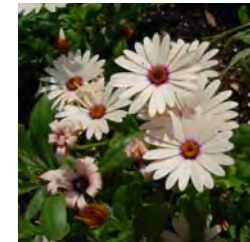
Sun: full to part sun

Soil: well-drained, drought tolerant

Size: Ht 10-15", space 12-15"

Flower color: white, purple, pink, rose, yellow, peach, some with spoon petals, often with an iridescent blue "glow"

Notes: Flowers best in spring and fall. Plant survives summer heat but flowering diminished (see photo). New varieties may flower better in heat. Does not need deadheading to encourage flowering. *Dimorphotheca* related and similar. Deer resistant.



**Oxalis
Shamrock**

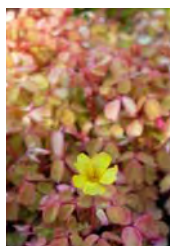
Sun: Part shade to shade, some varieties may take more sun, less tolerant of shade

Soil: average, listed as somewhat drought tolerant

Size: Ht 12-16", space 12-14"

Flower color: yellow, white, pink, also grown for foliage in purple, yellow, and pink

Notes: Also good as a houseplant. Does not need to be deadheaded.



**Pelargonium x hortorum
Zonal or bedding geranium,
cranesbill**

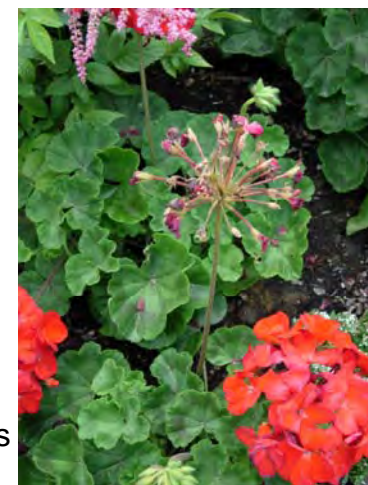
Sun: full sun, will take a bit of shade but may flower less

Soil: needs good drainage, extra fertilizer, let soil dry slightly between waterings

Size: Ht 6"-3', space ~12"

Flower color: all colors except blue and yellow, some bicolors, some semi-doubles

Notes: Must deadhead to encourage flowers and for appearance. "Zone" on leaf more visible in cool weather, somewhat frost tolerant. Susceptible to botrytis (especially spent flower heads) and aphids. Heat tolerant, deer resistant.



**Pelargonium peltatum
Ivy geranium, ivy-leaved
geranium**

Sun: full sun to part shade, protection from afternoon sun needed in hot summer areas

Soil: needs good drainage and extra fertilizer, let soil dry slightly between waterings

Size: Ht 12", cascades over container edge, space 15-20"

Flower color: red, pink, orange, white, lavender

Notes: Leaves more lobed than zonal geranium, deadhead, deer resistant



**Penstemon hartwegii (Ball),
Penstemon hybrids (PW)
Beardstongue, penstemon**

Sun: full sun

Soil: well-drained, often drought tolerant

Size: Ht 10-24", space 12-15"

Flower color: rose, pink, purple, white

Notes: Usually perennial species of Penstemon are grown but some new selections are annuals. Flowering may wait until summer becomes hot. Self-cleaning and needs no deadheading. Heat tolerant, attracts hummingbirds.



This is 'Liliput Rose' from PW (Proven Winners)

Pentas lanceolata
Egyptian star flower or cluster,
pentas

Sun: full sun, tolerates part shade but produces fewer flowers.

Soil: average

Size: Ht 1-3', space 2'

Flower color: pink, white, red, purple

Notes: heat tolerant. Attracts butterflies and hummingbirds



***Perilla frutescens* and hybrids**
Shiso, beefsteak plant, perilla

Sun: sun to shade

Soil: well-drained, average fertility

Size: Ht 2-3', space 12-15"

Flower color: Grown for foliage

Notes: Magilla™ Perilla to right, few flowers, seed sterile, deer resistant, *Perilla frutescens* var *nankinensis* (also called *Perilla crispa*) below (this is edible form and reseeds with great enthusiasm). Drought and heat tolerant.



Petunia
Petunia

Sun: full sun

Soil: well-drained, fertile

Size: Ht 4-22", space 12-24"

Flower color: every color, some bicolors, some doubles, fragrant

Notes: Form varies between cascading to mounding. Can be cut back mid-summer to rejuvenate. Fertilize for best performance. Avoid wet foliage at night. Susceptible to stem and root rot, leaf blight, botrytis. Heat tolerant. Petchoa are petunia-calibrachoa hybrids. Deer resistant.



***Phlox drummondii*,**
***Phlox* hybrids**
Annual phlox, Texas pride

Sun: full sun, afternoon shade in South

Soil: good drainage required but prefers evenly moist soils, fertile

Size: Ht 6-15", space 8-12"

Flower color: most, some with fringed petals, bicolors, fragrant

Notes: Sow seed in place. A Texas native that needs good drainage. Don't let foliage stay wet overnight. Deadhead to encourage flowering. Good cut flowers. May need extra fertilizer. Does not do well in heat.



Phormium
New Zealand flax

Sun: sun or part shade

Soil: average

Size: Ht 1-5', space 12-18"

Flower color: none, grown for sword-like foliage of various colors

Notes: Prefers cool, moist conditions but fairly tolerant. Apply slow release fertilizer at planting. Spider mites can be a problem in hot, dry weather.



Plectranthus
Plectranthus, Cuban or Puerto Rican oregano, Swedish ivy

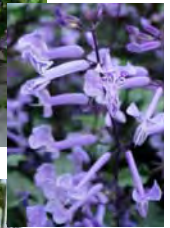
Sun: full to part sun

Soil: average

Size: Ht 2'+, space 1-2"

Flower color: grown for foliage early in season – silver, variegated . 'Mona Lavender' and 'Zulu Wonder' produce purple flowers late in season.

Notes: Drought and heat tolerant. Deer resistant



Portulaca grandiflora
Moss rose, portulaca

Sun: full sun

Soil: good drainage, likes dry, sandy soil, poor fertility

Size: Ht 4-8", space 12"

Flower color: many, semi and full doubles

Notes: Root rot if soils too wet. Reseeds. Flowers stay closed on cloudy days, doubles more open. 'Cloudbeater" less likely to close. Heat tolerant



Portulaca oleracea
Purslane

Sun: full sun

Soil: good drainage, likes dry, sandy soil, poor fertility

Size: Ht 4-8", space 12"

Flower color: many, some unusual double bicolors

Notes: Flowers close under stress or cloudy weather. Reseeds. Double flowers, such as this 'Fairytale Cinderella' are new. Heat tolerant.



Ptilotus
Mulla mulla

Sun: full sun

Soil: well-drained, cannot tolerate wet soil

Size: Ht 12-18", space 12-18"

Flower color: pink

Notes: Cut flower. Drought and heat tolerant. Cultivar names 'Joey' and 'Wallaby' are reflective of Australian origins. New to the market.



Ricinus communis
Castor bean

Sun: full sun

Soil: average, drought tolerant once established

Size: Ht to 8', space 2-3'

Flower color: red, grown mainly for tropical-looking foliage. Green, red, variegated leaves available

Notes: Seeds are especially TOXIC and all parts of plant are poisonous. Do not let set seed – deadhead. Will reseed if fruit allowed to form. Seeds are source of ricin. Heat tolerant.



Rudbeckia hirta
Black-eyed Susan,
Gloriosa daisy is a hybrid

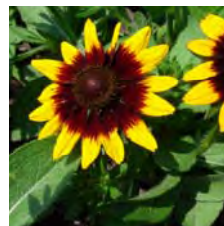
Sun: full sun to part shade

Soil: well-drained, average fertility, drought tolerant

Size: Ht 1-3', space 15-24"

Flower color: gold, yellow, mahogany, orange, bicolors, some semi-doubles

Notes: May be sold as perennial but is best treated as annual. Deadhead to reduce disease and increase flowering. Cut flowers. Reseeds. Tolerant of clay soil and hot weather. Good air circulation helps reduce fungal diseases. Powdery mildew can be a problem.



Salpiglossis hybrids
Painted tongue

Sun: part shade, full sun in cool climates only

Soil: excellent drainage, fertile

Size: Ht 15-24", space 12"

Flower color: red, orange, yellow, purple, white, often striped

Notes: Does not do well in hot weather, cut flowers, uncommon



Image from Thompson & Morgan

Salvia coccinea
Bloody sage, Texas sage

Sun: full sun, some shade OK

Soil: well-drained, average-rich fertility

Size: Ht 1-2(3)', space 2'

Flower color: red, pink, white

Notes: Heat tolerant, drought tolerant but flowers more if watered when dry.

Reseeds, attracts hummingbirds, Deadhead. Deer resistant.



Salvia farinacea
Mealy-cup sage

Sun: full sun, part shade in hot climates

Soil: well-drained, average-rich fertility

Size: Ht 1-2', space 1'

Flower color: purple, white, blue

Notes: Cut flowers, heat tolerant, somewhat drought tolerant. New hybrid 'Mystic Spires Blue' is drought and heat tolerant, Ht 12-24", space 12-18", deer resistant.



Salvia patens
Gentian sage

Sun: full to part sun

Soil: well-drained, average-rich fertility

Size: Ht 2-3', space 18-24"

Flower color: blue

Notes: Large flowers may induce people to buy but overall flower display may be disappointing. Photo to right from British Columbia, better show than I have seen in IN. Heat tolerant. Forms a tuber that can be lifted and overwintered. Deer resistant.



Salvia splendens
Scarlet sage

Sun: full to part sun

Soil: well-drained, average-rich fertility

Size: Ht to 3', modern varieties 12-15", space 12"

Flower color: many, some with sepals of different colors

Notes: deadhead to encourage branching and flowering and maintain attractiveness, needs to be fertilized after planting. Heat tolerant, deer resistant.



Sanvitalia procumbens
Creeping zinnia

Sun: full to part sun (especially in South), protect from afternoon sun

Soil: must have good drainage, average fertility, drought tolerant

Size: Ht 4-8", space 12"

Flower color: yellow, orange

Notes: Best in spring and early summer, fewer flowers in hot summers, rebounds in fall, never spectacular. May have fungal problems with overhead watering.



Scabiosa atropurpurea
Pincushion flower, mournful widow, sweet scabious

Sun: full to part sun

Soil: well-drained with organic matter, average-rich fertility

Size: Ht 2-3', space 6-8"

Flower color: purple, maroon, pink, blue

Notes: Flowers fragrant, deadhead to encourage flowering, good cut flowers, plants may be sparsely branched and tend to flop. Sow seed in place.



Scaevola aemula
Fan flower

Sun: full sun

Soil: well-drained but moist, do not let dry out completely, average fertility

Size: Ht 4-9", space 12-24"

Flower color: blue, purple, pink, white, bicolors

Notes: Will cascade over edges, does not need deadheading. Heat tolerant. Does not tolerate wet soil. White flies a problem if drought stressed.



Schizanthus pinnatus
Poor man's orchid, butterfly flower

Sun: part sun with afternoon shade to shade

Soil: average but never dry

Size: Ht 1-2', space 1'

Flower color: many, often bicolors

Notes: Strong preference for cool weather, cannot tolerate heat and drought. Plant as you would pansies. Not common.



Senecio cineraria
Dusty miller

Sun: full to part sun

Soil: well-drained, average fertility

Size: Ht 12-24", space 12"

Flower color: grown for silvery foliage, remove yellow flowers as they form.

Notes: *Centaurea cineraria* is also called dusty miller and is similar. *Tanacetum parthenium* may also get this common name.



Solenostemon scutellarioides
Coleus (may also be listed as scientific name)

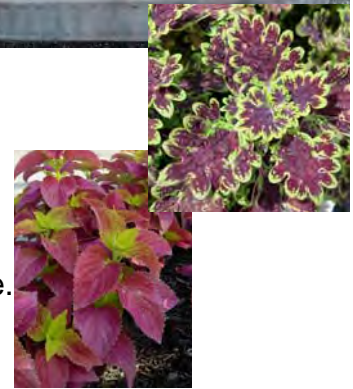
Sun: sun (many) - shade

Soil: moist and well-drained, may need watering if in full sun, rich to average fertility

Size: Ht 12-48", width about equal to height

Flower color: cut them off, coleus is grown for foliage

Notes: Many colors and leaf shapes. Green colors more prominent when grown in shade. Pinch to encourage branching. Easily grown from cuttings. Heat tolerant, deer resistant.



Spilanthes oleracea
Eyeball plant, peek-a-boo plant

Sun: full to part sun

Soil: well-drained, moist, fertile

Size: Ht 12-15", space 24-32"

Flower color: yellow with red center

Notes: Heat and frost tolerant. Foliage bronzes in sun. Supply ample water, do not allow to wilt.



Strobilanthes dyerianus
Persian shield

Sun: full to part sun

Soil: well-drained, average to fertile soil

Size: Ht 18-36", space 18-24"

Flower color: grown for silver-purple foliage with an iridescent sheen

Notes: Pinch to encourage branching. Drought and heat tolerant. Roots rot in wet soils.



Sutera grandiflora
Bacopa

Sun: afternoon shade

Soil: moist, well-drained soil with organic matter, do not let dry out-will probably need to be watered, average fertility

Size: Ht 3-6", space 12"

Flower color: white, pink, purple, red

Notes: trailing, can grow to 6'. Not as vigorous in hot climates, tends to fizzle out mid-summer. Needs constantly moist soils.



Tagetes erecta
Aztec marigold, American marigold, African marigold

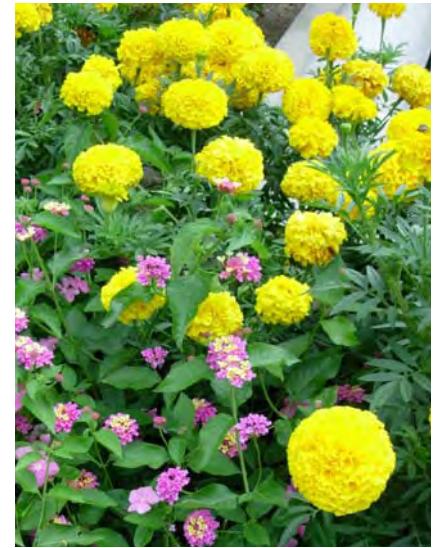
Sun: full sun

Soil: well-drained, average fertility, excess nitrogen decreases flowering

Size: Ht 1-4', space 12-18"

Flower color: yellow, gold, orange

Notes: Drought tolerant, don't overwater. Deadhead to prolong flowering, Botrytis a problem if not deadheaded. Thrips, spider mites, Japanese beetles, slugs, snails may be problems. Deer resistant.



Tagetes patula
French marigold

Sun: full sun

Soil: well-drained, average fertility, excess nitrogen decreases flowering

Size: Ht 6-12", space 6-12"

Flower color: yellow, orange, red, semi-doubles and bicolor

Notes: Drought tolerant, deadhead to prolong flowering. Same pest problems as other marigolds. Deer resistant.



Talinum paniculatum
Jewels of Opar

Sun: full sun

Soil: average

Size: Ht 24-30", space 12-16"

Flower color: pink, grown for red-pink fruit that forms haze over leaves

Notes: Cut flowers, some selections have yellowish leaves. Heat and drought tolerant.



Tithonia rotundifolia
Mexican sunflower

Sun: full sun

Soil: well-drained, average-poor fertility

Size: Ht 18"-6', space 12-24" (all orange-flowered plants in photo are *Tithonia*)

Flower color: orange

Notes: Flowers mid-late summer, deadhead to encourage flowering, cut flowers. Attracts butterflies. Heat and drought tolerant. Aphids and thrips can be problems.



Torenia fournieri
Wishbone flower

Sun: part shade, tolerates shade. Tolerates sun only in cool climates

Soil: moist, needs regular watering, fertile

Size: Ht 6-12", space 6-8"

Flower color: many, often bicolors

Notes: Better in cool summers. Pinch to encourage bushiness. Can have disease problems in wet soils. *T. flava* has yellow flowers. Some varieties may be hybrids. Deer resistant.



Trachelium caeruleum
Blue throatwort

Sun: full to part sun

Soil: needs excellent drainage

Size: Ht 1-3', space 12-18"

Flower color: purple, white, pink

Notes: cut flowers. Not common. Deer resistant.



Tropaeolum majus
Nasturtium

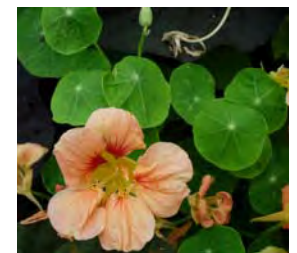
Sun: full sun

Soil: moist, well-drained, let dry out a bit, average to poor fertility, excess nitrogen decreases flowering

Size: Ht 12-18", space 12", will spread

Flower color: yellow, orange, pink, some fragrant

Notes: Most will climb if given support. Sow seeds in place. May flower better in cooler weather. Earwigs, aphids, and whiteflies can be problems.



Verbena bonariensis
Brazilian verbena, tall verbena

Sun: full sun

Soil: well-drained, average fertility

Size: Ht 4-5', space 18-24, smaller varieties may be available

Flower color: purple

Notes: Sparse foliage, attracts butterflies, drought and heat tolerant. Reseeds. Has been known to overwinter if winter mild. Susceptible to powdery mildew. Deer resistant.



***Verbena canadensis* and
*Verbena x hybrida***
**Clump verbena, rose vervain,
bedding verbena**

Sun: full sun

Soil: Needs excellent drainage, fertile

Size: Ht 8-18", space 12-18"

Flower color: red, pink, purple, white, some with eyes

Notes: Some varieties upright, some trailing, some heat tolerant. Attracts butterflies, deadhead to prolong bloom. Declines rapidly if drainage poor. Susceptible to powdery mildew and spider mites. Armitage lists Homestead and Aztec series as *V. canadensis*; Quartz and Romance series as *V. x hybrida*.



Verbena tenuisecta
Moss verbena

Sun: full sun

Soil: needs excellent drainage, fertile

Size: Ht 8-12", spreads 18"+

Flower color: purple, pink, white, often with eyes

Notes: Deadhead, attracts butterflies, susceptible to powdery mildew. Heat tolerant.



***Viola tricolor, cornuta,
x wittrockiana* (probably others)**
Pansy, viola, johnny-jump-up

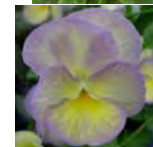
Sun: full sun, tolerates part shade

Soil: moist and well-drained, fertile

Size: Ht 4-15", space 6"

Flower color: many, often bi- or tri-color or with black blotch, often fragrant

Notes: Many varieties and hybrids. None like hot weather but can withstand a freeze and some snow. Plant in early spring. Fall plantings may overwinter, depending on location and winter weather. Deadheading or picking for cut flowers encourages more flowers. Some varieties reseed.



Zinnia angustifolia
Narrow-leaved zinnia

Sun: full sun

Soil: moist, well-drained, fertile

Size: Ht 12-15", space 12-15"

Flower color: orange, gold, yellow, white

Notes: Drought and heat tolerant, doesn't need deadheading. Disease resistant. *Zinnia maritima* similar. *Zinnia marylandica* (e.g. Zahara series from Ball) is a hybrid of *Z. angustifolia*. Reported to be disease resistant, looks more like *Z. elegans*



Zinnia elegans
Zinnia, bedding zinnia, youth and old age

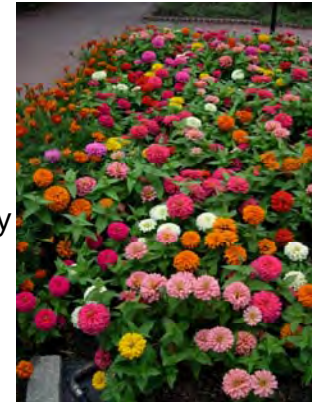
Sun: full sun

Soil: moist, well-drained, fertile, fertilize monthly

Size: Ht 1-4', space 6-12"

Flower color: many, no blues, some double, wide variety of sizes.

Notes: Deadhead to promote flowering. Old flowers susceptible to botrytis. Flowering may decrease in hot summers. Drought tolerant but better if watered. Plants susceptible to Alternaria, powdery mildew, root rots, Japanese beetles. Profusion series is a hybrid and reported to be disease resistant.



Zinnia haageana
Haage's zinnia

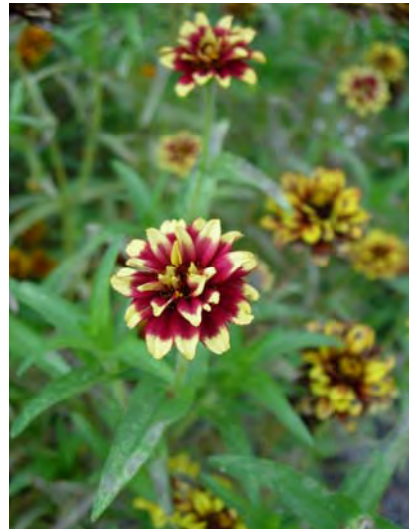
Sun: full sun

Soil: moist, well-drained, fertile

Size: Ht 12-24", space 12"

Flower color: available varieties usually bicolor gold and maroon, also gold and yellow

Notes: Disease resistant. Deadhead for more flowers. Drought and heat tolerant. Not common. Some hybrids may be listed under this name.



Large, Tropical Plants Used as Annuals

Other tropical plants in this Quick Guide:

Lantana camara, page 21

Pentas lanceolata, page 28

Strobilanthes dyerianus, page 33

Abutilon x hybrida Flowering maple

Sun: full sun, variegated forms better with some shade in hot areas

Soil: fertile, moist, well-drained with lots of organic matter. Do not let dry out.

Size: Ht: 2-5', space ~2'

Flower color: yellow, orange, rose, white, often grown just for foliage which is often variegated

Notes: Fertilize monthly, better in containers. Prefers cool temperatures.



Acalypha hispida Chenille plant

Sun: full to part sun

Soil: moist, well-drained, do not let dry out

Size: Ht up to 4-5', larger in warmer climates, space 1-2' at least

Flower color: red

Notes: Will decline if not given sufficient water, often used in containers. Heat tolerant. Sap is a skin irritant. Eating leaves may cause mild distress.



Acalypha wilkesiana Copperleaf, Jacob's coat

Sun: full sun

Soil: moist soil

Size: Ht 3-6', space ~2'

Flower color: grown for foliage which is red-bronze or variegated

Notes: Foliage color better in cooler climates but plant does not tolerate temperatures near freezing. Sap is a skin irritant. Eating leaves may cause mild distress.



Alpinia zerumbet
Ginger, ginger lily

Sun: full to part sun

Soil: rich, moist, must have ample water

Size: Ht 3', space~2'

Flower color: Grown for foliage, most often 'Variegata' with green and yellow leaves. Will not flower outside in IN. Photos-shown with *Setcreasea* and *Alternanthera*.

Notes: Fertilize regularly. Can tolerate cool temperatures. This is not the edible ginger.



Asparagus densiflorus
Asparagus fern, foxtail fern

Sun: full sun

Soil: moist, fertile

Size: Ht 1-3', space 1-2'

Flower color: Grown for green, finely dissected foliage

Notes: 'Myersii' is form shown. 'Sprengeri' is more loose and open. Both appreciate extra liquid fertilizer.



***Brugmansia* (formerly *Datura*)**
Angel's trumpet, brugmansia

Sun: full sun

Soil: moist and fertile

Size: Ht 4-5', best singly as focal point

Flower color: white, yellow, peach

Notes: Poisonous. Flowers fragrant. Benefit from ample water and fertilizer.



Canna
Canna lily, cannons

Sun: full sun

Soil: moist and fertile, some varieties can be grown as water plants, most can tolerate wet soils.

Size: Ht 3-5', space ~2'

Flower color: red, orange, yellow, pink. Many new varieties have reddish, purple-black or variegated foliage.

Notes: Dig and store fleshy rhizome over winter.



Colocasia and Alocasia
Elephant ears, taro

Sun: full sun or a bit of shade

Soil: wet, or moist that never dries out. *Alocasia* prefers more average soils.

Size: Ht 3-5', space ~2'

Flower color: Grown for large arrowhead shaped leaves, often with black coloration.

Notes: *Alocasia* similar but leaves may not be arrowhead shaped. Leaves of both contain oxalate which is irritating if eaten.



Fuchsia
Fuchsia

Sun: part sun, away from afternoon sun

Soil: always moist, never wet

Size: typically grown in hanging baskets, 1.5-3'

Flower color: white, purple, red, pink, blue, bicolors

Notes: Difficult to grow – insists on cool temperatures, flowering stops when average day temperature over 76°F. Select one with largest root ball for better success. Attracts hummingbirds.



Hibiscus acetosella
Red hibiscus

Sun: full sun

Soil: average moisture, fertile. Added fertilizer will encourage growth of already large plant.

Size: Ht typically 3-4', space 3'

Flower color: Grown for red-leaved varieties, small purplish flowers



Hibiscus rosa-sinensis
Chinese hibiscus

Sun: full sun

Soil: well-drained and fertile

Size: Ht 1-3', space 3'

Flower color: many colors, large; leaves a shiny green

Notes: Best in containers, easily grown as houseplant. Needs heat to flower, foliage yellows if <60°F. Attracts Japanese beetles.

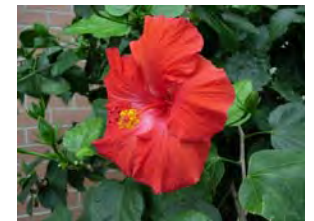


Image from Missouri Botanical Garden

Musa and Ensete
Banana, false banana

Sun: full sun

Soil: plenty of moisture

Size: from 4-5' to 10'+, usually several feet wide but narrow at base

Flower color: grown for large foliage, often reddish. Fruit usually formed only if grown in greenhouse over winter.

Notes: grow in containers or soil in site protected from wind. Heat tolerant.



Plumbago auriculata
Cape leadwort, plumbago

Sun: Full sun

Soil: good drainage, somewhat drought tolerant, leaves may turn yellow if soil too alkaline

Size: Ht 1-3', space 2-3', cut back if it gets lanky

Flower color: blues

Notes: Good in containers, flowers all season. Can be grown as houseplant. Can tolerate cool weather at end of season.



Setcreasea purpurea
(*Tradescantia pallida*)
Purple heart

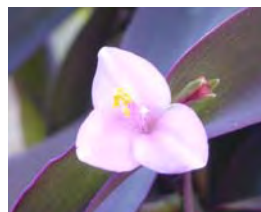
Sun: full sun

Soil: tolerates dry or wet soil, may need water in full sun, fertile soil

Size: Ht 12-15", space – trails and spreads

Flower color: 'Purpurea' has strongly purple foliage. Flowers are pale pink and usually not produced in summer.

Notes: can be used as groundcover



Vinca major
Vinca vine

Sun: Full sun

Soil: well-drained, fertile

Size: Ht 6", space – trails, was once the most common vine to use in hanging baskets, newer varieties (e.g. *Dichondra* and *Helichrysum* (licorice plant)) now more common.

Flower color: blue but may not flower. Usually grown for variegated leaves.

Notes: Hardy to about 45°F. It has become an invasive plant in warmer climates.



Grasses and Grass-like Plants

Other Grasses and grass-like plants in this
Quick Guide:

Oplismenus hirtellus, page 26

Phormium, page 29

Briza maxima **Quaking grass**

Sun: Full to part sun

Soil: average

Size: Ht 2', space 2'

Flower color: seed heads dangle
down, like small lantern

Notes: Sow where they are to
grow. Let fruit dry to tan then use
in dried arrangements.



Image from Thompson & Morgan

Carex **Sedge**

Sun: part to full sun

Soil: may vary with variety. Many
should be moist to wet soils, but
some may do well in drier
conditions.

Size: Ht 1-3', space 1-2'

Flower color: grown for fine textured
foliage, ornamental annual varieties
often brown or bronze.

Notes: fairly new to the trade as an
annual



Coix lacryma-jobi **Job's tears**

Sun: full sun, perhaps some shade OK

Soil: average, not too dry

Size: Ht 3', space 1'

Flower color: grown for hard, shiny
bead-like clusters of seeds

Notes: Seeds can be strung for
necklaces. It is an edible grain.



Image from
North Carolina State University

Cordyline australis
Cordyline or Dracaena spike

Sun: sun or part sun, possibly fairly shade tolerant

Soil: well-drained, fertile

Size: Ht 24-36+", space 12-24"

Flower color: Grown for sword-like foliage. New colors available

Notes: The classic "tall center" for containers. Apparently drought tolerant but will grow little if moisture insufficient. May be listed as *Dracaena* or *Cordyline indivisa*.



Isolepis cernua
(*Scirpus cernuus*)
Fiber optic grass

Sun: sun to shade, sun only if sufficient moisture provided

Soil: Can tolerate wet conditions

Size: Ht 8-12", space 6-12"

Flower color: Grown for fine foliage and fiber-optic-like spiky flower stalks.

Notes: a conversation-piece



Juncus
Rush

Sun: full to part sun

Soil: most can tolerate wet soils. Ball says its new forms are drought tolerant

Size: Ht 1-5', tend to be upright

Flower color: grown for upright, stiff foliage. Some varieties have twisted leaves.

Notes: New as an annual. Some forms may be perennial.



Lagurus ovatus
Hare's tail, bunny tails

Sun: full

Soil: average to very well-drained

Size: Ht 12-24", space 6-12"

Flower color: grown for white, furry panicles

Notes: Reseeds but not aggressively. Good as cut flowers.



Image from Thompson & Morgan

Melinis nerviglumis
Ruby grass

Sun: full sun

Soil: slightly dry, but needs consistent moisture

Size: Ht 18-24", space 12-18"

Flower color: foliage very stiff forming a half sphere. Flowers pink but do not form until late in the season.

Notes: may reseed, genus formerly *Rhynchelytrum*.



Pennisetum glaucum
or *purpureum*
Ornamental millet

Sun: full sun, perhaps some shade

Soil: average

Size: Ht 2-5', space 2-3'

Flower color: Grown for deep purple foliage. Flowers dark, inflorescence looks like cat tail.

Notes: Foliage does not darken well in greenhouse, must be exposed to sunlight. Seed eaten by birds. Heat tolerant.



Pennisetum setaceum
Purple or red fountain grass

Sun: full sun, perhaps some shade

Soil: average

Size: Ht 1.5-4', space 2-3'

Flower color: Grown for deep purple foliage. Flowers white tinged with purple later in the season

Notes: Exceptionally showy but hardy to only zone 9. Does not reseed. Can be overwintered indoors. Heat tolerant.



***Stipa tenuissima* or**
Nassella tenuissima
Feather grass, spear grass,
needle grass, pony tail grass

Sun: full sun, may take some shade

Soil: average, may tolerate dry soil

Size: Ht 12-24", space~1'

Flower color: grown for foliage and for long, silky seed heads late in season

Notes: Heat tolerant



Annual Vines

Other vines in this Quick Guide:

Ipomoea quamoclit, *x sloteri*, *tricolor*, page 20

Tropaeolum majus, page 35

Asarina scandens Climbing Snapdragon

Culture: Full sun to part shade, moist, well-drained soil

Flower color: purples and pinks in late summer

Climbs by: Twining petioles and twining stems, to about 6'



Cobaea scandens Cup and Saucer Vine, Cathedral Bells

Culture: Full sun in soils of average moisture, may need supplemental water. Extremely fast growing. Climbs by tendril at end of leaf. Tie-in when young to encourage growth.

Flower color: purples, white, in late summer

Climbs by: Twining leaf tendrils

Notes: Large flowers, lower portion resembles saucer, upper portion resembles cup.



Image from Johnson's Seed

Ipomoea lobata Flag of Spain

Formerly *Mina lobata*

Culture: Full sun, moist, well-drained soil.

Flower color: flowers grade from red to yellow in late summer.

Climbs by: Twining stems



Lablab purpureus
Hyacinth Bean

formerly *Dolichos lablab*

Culture: Full sun in soils of average moisture. Flowers and fruits best in hot weather. Give adequate support - may get heavy. Young pods edible.

Flower color: Purple flowers, fragrant followed by purple pod.

Climbs by: Twining stems

Notes: most common problem is not flowering – appears to be temperature related. No flowers until it gets hot..



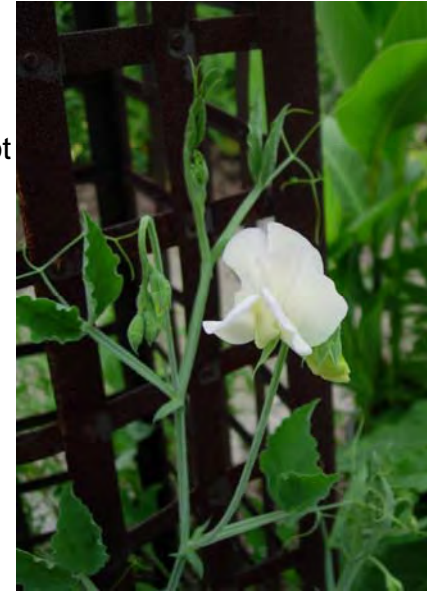
Lathyrus odoratus
Annual Sweet Pea

Culture: Full sun, moist, well-drained soil. Prefers cool weather and does not grow well when temperatures exceed 80°F.

Flower color: many, fragrant, can be used as cut flowers.

Climbs by: Twining tendrils on leaves

Notes: **FRUIT POISONOUS**



Manettia luteorubra
Candy Corn Vine

Formerly *Manettia inflata* and *Manettia bicolor*

Culture: Full sun, moist, well-drained soil. Prefers hot weather. Best flowering if allowed to climb.

Flower color: orange and yellow

Climbs by: Twining stems

Notes: Also known as Brazilian firecracker vine, cigar flower



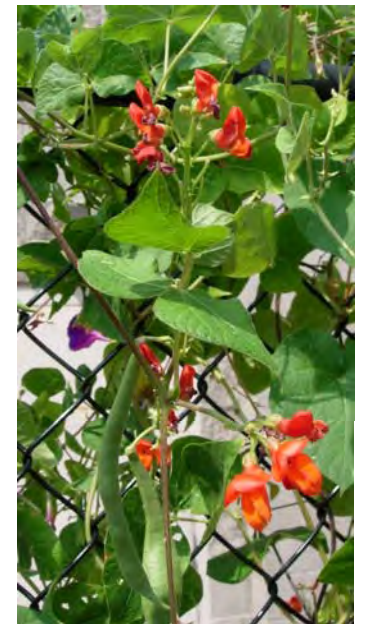
Photo courtesy of
Jessica Willsey

Phaseolus coccineus
Scarlet Runner Bean

Culture: Full sun in soils of average moisture, may need supplemental water. Pods and beans edible.

Flower color: red, salmon, white

Climbs by: Twining stems



Solanum jasminoides
Potato Vine

Culture: Full sun with average moisture

Flower color: white to pale blue, often grown for yellow or variegated leaves

Climbs by: Twining stems, used in hanging baskets

Notes: frost tolerant



Thunbergia alata
Black-eyed Susan Vine

Culture: Full sun or afternoon shade, moist soil. May need additional water. Flowers in late summer after weather has cooled slightly.

Flower color: yellow, orange, white with darker center, not in the Aster family as are true black-eyed Susan

Climbs by: Twining stems

Notes: flowers often do not appear until late summer.



Vigna caracalla
Snail Vine, Corkscrew Vine

Formerly *Phaseolus caracalla*

Culture: Full sun in soils of average moisture. Best in warm weather.

Flower color: pink, lavender, white, fragrant

Climbs by: Twining stems

Notes: Much confusion on the web about this plant. There may be flowers of different shape within the species, giving rise to corkscrew versus snail (or shell). I could not find any documented differences.



Notes

References:

Manual of Annuals, Biennials, and Half-Hardy Perennials, Allan Armitage, 2001

Annuals for Ohio, Debra Knapke and Alison Beck, 2003

Annuals, Sunset Books, 1992

Easy Beauty with Annuals, Time-Life Books, 1996

Ball Seed and Simply Beautiful websites

Proven Winners website

Other Resources for you by MWK: Culture and Use Summary for Ornamental Annuals and for Tropicals, grasses, and vines and Common-Scientific Name Cross-reference

All photos ©Mary Welch-Keesey unless otherwise indicated. Please let me know if you need copies of photos, I'll share.

Deer resistance: information from IL MG manual, Ball Seed and Proven Winners websites.