



## William T. Kemper Center for Home Gardening

Visit us on the Web: [www.gardeninghelp.org](http://www.gardeninghelp.org)

### Best Plants for Problem Clay Soils: Perennials

#### Perennials

##### *Amsonia tabernaemontana* — Bluestar

This Missouri native features upright clusters of light blue star-like flowers in late spring. Its narrow willow-like leaves turn yellow to peach-colored in fall. Bluestar may require staking if grown in shade and may be pruned after flowering to maintain a compact shape. It is most attractive when grown massed, in native plant gardens, shade gardens, open woodland areas, and borders.

##### *Asclepias incarnata* — Swamp milkweed

Despite its common name and native habitat, swamp milkweed may be grown in the average garden. Its fragrant white, pink or mauve flowers attract butterflies and mature into slender pods with silky-haired seeds. Swamp milkweed is a good choice for sunny, low or moist areas such as stream or pond banks, borders, and butterfly gardens.

##### *Baptisia australis* — Blue false indigo

Blue false indigo has beautiful purplish blue lupine-like flowers borne in erect spikes above the trifoliate leaves. The flowers mature into black seed pods that rattle in the breeze and are an interesting addition to dried flower arrangements. This herbaceous perennial does best in full sun as plants grown in part shade may grow taller and need support. Due to an extensive root system, blue false indigo will tolerate drought, but it should not be disturbed once it is established. Attractive in almost any situation including borders, prairies, cottage gardens, and native plant gardens, this plant is best used as a single specimen plant or in small groups. *Baptisia australis* var. *minor* is native to Missouri.

##### *Coreopsis tripteris* — Tall tickseed

Tall tickseed has flower heads with 6 to 10 shiny yellow ray flowers and a brown central disk. Plants grown in dry soil tend to be shorter and more open while plants grown in moist soil are taller and fuller. This plant freely self-seeds and may naturalize to form large colonies. Developing seed heads may be removed to avoid any unwanted invasiveness and to encourage additional blooming. Tall tickseed is a good plant for dry, well-drained clay soils and is attractive with other over-sized plants.

##### *Eryngium yuccifolium* — Rattlesnake master

With its yucca-like leaves and unusual ball-shaped flower clusters, rattlesnake master is a striking addition to the garden. The thick rootstock of this Missouri native does not transplant well so young seedlings should be planted in their permanent position. Once established, rattlesnake master will tolerate drought.

##### *Heliopsis helianthoides* — Oxeye

Providing a long blooming season, oxeye is a vigorous Missouri native that attracts butterflies and birds. Easily grown in full sun, it tolerates drought and light shade, although plants grown in too much shade may need support. Cultivars, such as 'Ballerina' and 'Summer Sun,' are more floriferous and less aggressive than

the species.

*Iris virginica* var. *shrevei* — Southern blue flag

Southern blue flag is a beautiful choice for water gardens or other wet areas, but it can also be grown in garden borders if the soil is kept wet. It has violet blue flowers crested with yellow and white falls and narrow bright green leaves.

*Phlox pilosa* var. *ozarkana* — Ozark prairie phlox

Ozark prairie phlox has loose clusters of rose-colored flowers with five petal-like lobes. This Missouri native has the advantage of being resistant to powdery mildew and is more tolerant of dry soil. Spreading rapidly by stolons, it can form large colonies and is a good choice for rock gardens, borders, wild or naturalized areas, and native plant gardens.

*Physostegia virginiana* — Obedient plant

The flowers of obedient plant have the unusual characteristic of remaining in position when they are gently rotated on the stem. Also known as false dragonhead, this herbaceous perennial is easily propagated from seeds or by stolon division. Although it prefers ample soil moisture, it will tolerate drier soil once established.

*Ratibida pinnata* — Gray-headed coneflower

Gray-headed coneflower has downward-pointing bright yellow ray flowers and a dull gray cone-shaped central disk. This disk has a pungent spicy aroma when crushed and is an interesting addition to the garden even when the yellow petals have fallen. One of the easiest prairie plants to grow, gray-headed coneflower blooms in its second year.

*Senna marilandica* — Wild senna

Also known as *Cassia marilandica*, wild senna features clusters of yellow flowers with prominent brownish purple-tipped stamens and locust-like leaves. Its flattened seed pods are up to 4" long and persist on the plant after it has died back in the fall. This Missouri native tolerates heat and humidity and is an interesting plant for borders or for wildflower or native plant gardens.

*Vernonia novaboracensis* — Ironweed

With its broad flat clusters of fluffy brilliant purple flowers, ironweed is an uncommon but attractive choice for cottage gardens, wildflower gardens, naturalized areas, or the background of borders. Easily grown in full sun in medium wet to wet soil. this perennial may be cut back nearly to the ground in late spring to control its size. The rust-colored seed clusters may be removed to avoid unwanted seedlings.

**Sun:** F=Full sun, P=Part shade, S=Shade; **Water:** D=Dry, A=Average, W=Wet

Scientific name	Common name	Height (ft)	MO native	Zone	Bloom color	Bloom time	Sun	Water	Notes
<i>Amsonia tabernaemontana</i>	Bluestar	2-3	Yes	3-9	Blue	Mid to late spring	F-P	A	Tolerates some drought; when grown in part shade, may require staking or pruning
<i>Anemone canadensis</i>	Meadow anemone	1-2	Yes	3-9	White	Late spring to mid summer	F-P	A-W	Ground cover for moist areas in part shade; may be invasive
<i>Asclepias incarnata</i>	Swamp milkweed	4-5	Yes	3-6	White, pink,	Summer	F	A-W	Tolerates average garden conditions; good for low

<i>Aster ericoides</i>	Heath aster	1-3	Yes	3-10	mauve White with yellow center	Late summer to mid fall	F	D-A	wet areas Tolerates drought; daisy- like flowers attract butterflies
<i>Aster novae- angliae</i>	New England aster	3-6	Yes	4-8	Deep purple- pink	Late summer to mid fall	F	A	Pinch plants back until mid July
<i>Baptisia australis</i>	Blue false indigo	3-4	No	3-9	Blue	Mid to late spring	F-P	D-A	Tolerates drought; slow- growing and long-lived; seed pods good for dried flower arrangements
<i>Baptisia leucantha</i>	White false indigo	3-5	Yes	5-8	White	Late spring to early summer	F	D-A	Tolerates part shade; slow-growing and long- lived
<i>Boltonia asteroides</i>	Boltonia	5-6	Yes	3-10	White, lilac, pink to mid or purple fall with yellow centers	Summer to mid fall	F	A	Cultivars may require less staking than species; tolerates moderately dry soil
<i>Butomus umbellatus</i>	Flowering rush	2-3	No	5-11	Rose pink	Late summer	F	W	Good around bodies of water or in boggy soil; leaves are bronze when young
<i>Ceratostigma plumbaginoides</i>	Plumbago	0.75- 1.0	No	5-9	Deep blue	Early summer to mid fall	F-P	A	Good ground cover; does better with afternoon shade in hot summer climates
<i>Chelone obliqua</i>	Turtlehead	2-3	Yes	3-9	Rosy purple, pink, white	Late summer to mid fall	F-P	A-W	May need pruning or support if grown in too much shade; mulch to help retain soil moisture
<i>Convallaria majalis</i>	Lily of the valley	0.5-1.0	No	3-8	White	Mid spring	P-S	A	Fragrant flowers; thin rhizomes when flowering decreases
<i>Coreopsis tripteris</i>	Tall tickseed	2-8	Yes	3-8	Yellow with brown center	Mid summer to early fall	F	D-A	Deadhead to encourage more flowers and control self-seeding; crown rot may be a problem if clay drains poorly
<i>Desmodium canadense</i>	Canada tick trefoil	2-5	Yes	3-6	Rose- purple to lavender	Summer	F-P	A	May grow quite large; attracts bees/butterflies
<i>Dicentra cucullaria</i>	Dutchman's breeches	0.5-1	Yes	3-7	White to pink	Early spring	P-S	A	Soil should not be wet in winter; goes dormant by summer
<i>Dodecatheon</i>	Shooting	0.75-	Yes	4-8	White,	Late	P-S	A	Avoid wet soils in winter;

<i>media</i>	star	1.5			pink, purple	spring				best in part shade
<i>Echinacea purpurea</i>	Purple coneflower	2-5	Yes	3-8	Purplish pink	Late spring to fall	F-P	D-A		Tolerates dry conditions; attracts goldfinches
<i>Eryngium yuccifolium</i>	Rattlesnake master	4-5	Yes	3-8	Greenish white	Early summer to early fall	F	D-A		Flowers are tightly packed in one-inch balls; good for native plant gardens or natural areas
<i>Eupatorium maculatum</i>	Joe Pye weed	4-6	No	5-10	Pink	Mid to late summer	F	A-W		Prefers soil that does not dry out; flowers attract butterflies
<i>Eupatorium perfoliatum</i>	Boneset	4-6	Yes	3-8	White	Late summer to early fall	F-P	A-W		Needs consistent moisture as leaves may scorch if soil dries out; good late bloomer
<i>Filipendula rubra</i>	Queen of the prairie	6-8	Yes	3-8	Pale pink	Early to mid summer	F-P	A-W		Intolerant of drought; unusual fragrant leaves
<i>Gentiana andrewsii</i>	Bottle gentian	1-2	Yes	3-7	Dark blue	Late summer to mid fall	P	A		Best in moist cool soil; bottle-shaped flowers remain closed
<i>Geranium sanguineum</i>	Hardy geranium	0.75-1.5	No	4-8	Pink to reddish purple	Late spring to mid summer	F-P	A		Tolerates some drought; foliage often turns red in fall
<i>Hedera helix</i>	English ivy	0.5-90	No	4-9	Greenish white	Fall	P-S	A		Habit ranges from ground cover to vine; tolerates full sun in cooler climates
<i>Helenium autumnale</i>	Sneezeweed	3-5	Yes	3-8	Yellow rays with brown to black center	Late summer to fall	F	A-W		Cut back in early July to reduce need for staking; not for dry soils
<i>Helianthus salicifolius</i>	Willow-leaved sunflower	5-8	Yes	4-9	Yellow rays with dark brown center	Late summer to fall	F	A		Taller with fewer flowers if grown in shade; good cut flower
<i>Heliopsis helianthoides</i>	Oxeye	2-6	Yes	3-9	Orange-yellow with brown centers	Late spring to mid fall	F	D-A		Grow cultivars to avoid aggressive seed dispersal of species; tolerates shade but may need staking
<i>Hemerocallis fulva</i>	Day lily	1-6	No	3-9	Yellow, orange, rusty red, and many variations	Spring to fall	F-P	A		Part shade for pastels; fairly drought tolerant
<i>Hosta lancifolia</i>	Narrow-leaved hosta	0.75-1	No	3-8	Violet	Late summer	P-S	A		Soil must stay moist if grown in hot summer

						to early fall			areas; dense foliage
<i>Iris sibirica</i>	Siberian iris	2-4	Yes	3-9	Blue-violet	Late spring to early summer	F-P	A-W	Best in very moist soil but tolerates dry soil; many cultivars available
<i>Ins virginica</i> var. <i>shrevei</i>	Southern blue flag	1.5-2	Yes	5-9	Violet-blue with yellow and white	Late spring to early summer	F	W	For moist areas such as water gardens but will grow in borders if moisture is sufficient
<i>Liatrix pycnostachya</i>	Prairie blazing star	2-5	Yes	3-9	Lilac-purple	Summer	F	D-A	Tolerates heat and drought; avoid wet soil in winter
<i>Liatrix spicata</i>	Blazing star	3-6	Yes	3-8	Pink-purple	Late summer to early fall	F	A	Tolerates heat and drought; avoid wet soil in winter; good cut flower
<i>Liriope spicata</i>	Lily turf	0.75-1.5	No	4-10	Lavender to white	Late summer	F-P	A	Ground cover; spreads quickly
<i>Lobelia siphilitica</i>	Great lobelia	2-3	Yes	4-9	Blue	Mid summer to early fall	F-P	A-W	Needs constant moisture; best in part shade in hot climates
<i>Monarda didyma</i>	Beebalm	2-4	No	4-9	Scarlet, violet, white, or pink	Early to mid summer	F-P	A	Avoid overly dry soil; culinary herb used for tea and salads; attracts bees and butterflies
<i>Monarda fistulosa</i>	Wild bergamot	2-4	Yes	3-9	Pink to lavender	Summer	F-P	D-A	Tolerates some drought; attracts bees and butterflies
<i>Oenothera macrocarpa</i>	Missouri evening primrose	0.75-1	Yes	3-7	Yellow	Late spring to early fall	F	D-A	Tolerates dry or poor soil; soil should be well-drained; formerly known as <i>Oenothera missouriensis</i>
<i>Oenothera tetragona</i>	Sundrops	1-2	Yes	4-8	Light yellow	Late spring to late summer	F	A	Will need staking if grown in shade; drought tolerant
<i>Pachysandra terminalis</i>	Japanese pachysandra	0.5-1	No	5-9	White	Early spring	P-S	A	Good ground cover under shallowly rooted trees; too much sun bleaches leaves
<i>Parthenium integrifolium</i>	American feverfew	2-4	Yes	4-8	White	Late spring to mid summer	F	D-A	Best in native garden or naturalized areas; also known as wild quinine
<i>Penstemon digitalis</i>	Penstemon	3-5	Yes	3-8	White	Late spring	F	D-A	Avoid wet soil; tolerates high heat and humidity

<i>Perovskia atriplicifolia</i>	Russian sage	3-5	No	5-9	Lavender-blue	to early summer Summer to mid fall	F	D-A	Tolerates drought; plants grown in shade will sprawl or flop over
<i>Petalostemum purpureum</i>	Purple prairie clover	1-3	Yes	3-8	Rose-purple to crimson	Mid to late summer	F	D-A	Tolerates drought when established; flowers bloom in a ring around flower head from bottom to top
<i>Phlox divaricata</i>	Woodland phlox	0.75-1	Yes	3-8	Rose-lavender, violet-blue	Spring	P-S	A	Should not dry out or get too much sun; light summer mulch is beneficial
<i>Phlox paniculata</i>	Perennial phlox	2-4	Yes	4-8	White, pink red, purple, orange, lilac	Summer to early fall	F-P	A	Plant resistant cultivar or promote good air circulation to avoid mildew; summer mulch beneficial
<i>Phlox pilosa</i> var. <i>ozarkana</i>	Ozark prairie phlox	1-2	Yes	4-9	Rose	Spring to mid summer	F	D	Tolerates dry soil better than other phlox; resists powdery mildew
<i>Physostegia virginiana</i>	Obedient plant	3-4	Yes	3-9	Pink, white	Summer to early fall	F	A	Good for naturalizing; may need staking; good cut flower
<i>Pycnanthemum flexuosum</i>	Slender mountain mint	2-3	Yes	4-8	White	Mid to late summer	F-P	D-A	Fragrant; for herb garden, border or naturalized area
<i>Ratibida pinnata</i>	Gray-headed coneflower	3-5	Yes	3-8	Yellow	Summer	F	D	Drought resistant; long bloom period
<i>Rudbeckia fulgida</i>	Coneflower	2-3		3-9	Yellow, orange	Mid summer to fall	F	D-A	Tolerates heat and humidity; good cut flower
<i>Rudbeckia subtomentosa</i>	Sweet coneflower	3-5	Yes	4-8	Yellow with brownish purple centers	Summer to mid fall	F-P	A-W	Long-lasting flowers; also known as sweet coneflower
<i>Scutellaria incana</i>	Skullcap	2-3	Yes	5-8	Blue	Mid summer to mid fall	F-P	D-A	Best in naturalized settings; prefers dryish soil
<i>Sedum spectabile</i>	Showy stonecrop	1.5-2	No	3-10	Pink, red, white	Late summer	F-P	D-A	Prune to ½ height in mid July to reduce need for support; attracts bees and butterflies
<i>Senna marilandica</i>	Wild senna	3-6	Yes	4-9	Yellow	Summer	F	A	Used to be known as <i>Cassia marilandica</i> ;

<i>Silphium perfoliatum</i>	Cup plant	4-8	Yes	3-9	Yellow	Mid summer to early fall	F-P	A-W	tolerates heat and humidity Water held in "cups" formed by junction of leaf and stem attracts birds and butterflies; seeds eaten by goldfinches
<i>Silphium terebinthinaceum</i>	Prairie dock	3-10	Yes	4-8	Yellow	Mid summer to mid fall	F	A	Good for rear of border or naturalizing; flowers resemble sunflowers
<i>Solidago</i> species and cultivars	Goldenrod	1.5-5	Yes/No	5-9	Yellow to gold	Late summer to mid fall	F-P	D-A	Attracts butterflies and bees; seeds eaten by birds
<i>Symphytum officinale</i>	Comfrey	2-3	No	5-10	White, pink, mauve	Late spring to summer	F-P	A	Has bell-shaped flowers and large hairy leaves; medicinal herb no longer recommended for internal use
<i>Tradescantia virginiana</i>	Spiderwort	1.5-3	Yes	4-9	Blue to violet-blue, rarely rose to white	Late spring to mid fall	P-S	A	Cut back almost to the ground after flowering to encourage new growth; may self-seed
<i>Vernonia novaboracensis</i>	Ironweed	4-6	No	5-9	Purple	Late summer to fall	F	A-W	For naturalized area or background of borders; control self-seeding tendencies by removing spent flowerheads
<i>Viola sororia</i>	Woolly blue violet	0.5-0.75	Yes	3-7	White, blue	Early spring	F-P	A	Best massed or as small-scale ground cover; self-seeds freely
<i>Waldsteinia fragarioides</i>	Barren strawberry	0.25-0.5	Yes	4-7	Yellow	Spring	F-P	A	Best as ground cover; foliage is evergreen but may bronze up in cold winters