

1. Sunny Seduction Yarrow, *Achillea millefolium*
'Sunny Seduction' PP20808
2. Spiked Speedwell, *Veronica* 'Purpleicious'
3. Black-eyed Susan, *Rudbeckia hirta*
4. Phlox, *Phlox paniculata* 'Uptown Girl' PP32287
5. Cosmos, *Cosmos bipinnatus* (2x)
6. Butterfly Bush Humdinger collection, Buddleja
davidii 'Magenta Munchkin' 'Humdinger' PP28177
7. removed
8. Autumn Joy Stonecrop, *Hylotelephium*
'Herbstfreude'
9. Yellow Sage Lantana, *Lantana camara* (2x)
10. Golden Marguerite 'Kelwayii', *Anthemis*
tinctoria 'Kelwayii'
11. Blue Fescue, *Festuca glauca*
12. removed
13. Dwarf Little Bunny Grass, *Pennisetum*
alopecuroides
14. Super Blue English Lavender, *Lavandula angustifolia*
- 'Super Blue'
15. Red King Blanket Flower, *Gaillardia pulchella*
16. Catmint, *Nepeta cataria*
17. removed
18. Salvia May Night, *Salvia x sylvestris*
'Mainacht'
19. Lime Marmalade Coral Bells, *Heuchera*
'Lime Marmalade' PP21861
20. Lamb's ear, *Stachys byzantina*
21. Rose Campion, *Lychnis coronaria*
22. removed
23. Globe Thistle, *Echinops ritro*
24. removed
25. Threadleaf Giant Hyssop, *Agastache*
rupestris 'Apache Sunset'
26. Tall Verbena, *Verbena bonariensis* (1-3x)
27. Cardinal Climber, *Ipomoea x multifida* (3x)
- A. Stringy stonecrop, *Sedum sarmentosum*

Drought-tolerant plants usually need well-drained soil. Heavy or clay soil will retain water and is not a good option for drought-tolerant plants. When establishing a new drought-tolerant plant, it is essential to water deeply to encourage the roots to grow to full length to be most effective. Apply mulch to drought-tolerant plants to reflect heat and help the soil retain moisture. Never over-fertilize drought-tolerant plants, as encouraging the development of more blooms and foliage than the plant grows typically will require more water, defeating the whole purpose of planting a drought-tolerant perennial. Once established, a drought-tolerant garden will require minimal watering during the growing season.

1. Sunny Seduction Yarrow, *Achillea millefolium* 'Sunny Seduction' PP20808, in *Asteraceae* family, perennial herb, grown for culinary, medicinal, and ornamental uses, deciduous, fragrant, finely divided gray green lanceolate, leaves, resemble fern fronds, juvenile growth darkens, lobed margin, showy, soft, tiny, yellow head/ray flowers, on branched corymbs, held at the edge of the foliage or above, in summer

- 1½-2½' x 1-2', upright, compact, clumping, spreads by rhizomes, fast growth, fine texture
- Full sun, part sun
- Well-drained sandy loam soil, rich, adapts to occasionally dry, wet or poor soil, 5.5-7.5 pH
- Low to moderate water
- USDA 3-8
- Attracts butterflies, bees, and pollinators, and ground
- Cut back to rejuvenate, control plant height, divide clumps every 2-3 years, self-sowing, deadhead to encourage reblooming
- Repels beetles, ants, flies
- A low-water alternative to lawn sod, tolerant of mowing, rotary mower are best on highest setting and trim back for a naturalized look
- Tolerant of light foot traffic, some salt, resistant to deer, drought, heat, humidity, salt, pollution, drought
- Toxic, low severity to humans, cats, dogs, and horses, from flowers and leaves
- Sensitive individuals can get allergic skin rashes or photosensitivity



2. Spiked Speedwell, *Veronica* 'Purpleicious', in *Plantaginaceae* family, perennial, grown for ornamental, vertical accent uses, narrow, lanceolate, 2" leaves, showy, small lavender-purple tubular flowers, upright, slender, dense 8-12" tapered, terminal racemes, flowering from the bottom up, in spring-summer,

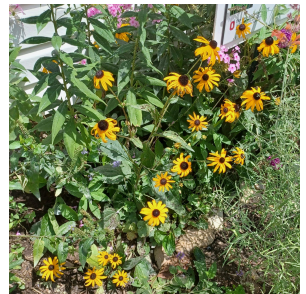
- 1-2' x ¾-1½', clumping, mounded, erect, moderate growth
- Full sun, part sun, part shade
- Well-drained, high organic matter, consistently moist, 5.5-6.2 pH
- Low to moderate water, deep watering during the blooming period, waterings, drought tolerant once established
- USDA 4-8
- Attracts bees, butterflies, hummingbirds, tolerant of deer, and rabbits
- Deadhead to promote blooming



allow to dry between

3. Black-eyed Susan, *Rudbeckia hirta*, in *Asteraceae* family, biennial or short-lived perennial or biennial, grown as an annual for ornamental display, cut flower, and wildlife fodder uses, grooved bristly stiff stems, few branches, deciduous, rough, hairy, lanceolate to spatulate green 3-6" foliage, entire to toothed margin, lobed, basal rosette, prominent veins, winged petioles, hairy, yellow, orange 2-4" daisy-like flower, large dark cone head, 7-20 bright yellow 1-3" ray petals, showy whorl of involucral bracts, in spring-summer

- 2-34' x 1-2", erect, stiff, open density, coarse texture, moderately fast-growing
- Full sun, part sun, part shade
- Well-drained, average soil, clay, loam, sandy, moderate fertility, acidic-alkaline pH
- Medium water, drought tolerant once established
- USDA 3-8
- Attracts butterflies, pollinators, songbirds (goldfinches), larval hosts for Wavy-lined Emerald *Synchlora aerata* and Silvery Checkerspot *Chlosyne nycteis*
- Self-sowing, deadhead to promote blooms, don't plant near fertilized lawns
- Tolerant of neglect, and occasionally dry soil, avoid areas near fertilized lawns, resistant to deer, drought, and salt



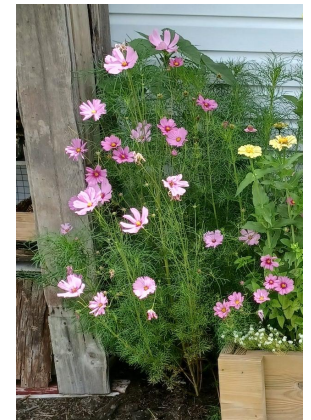
4. Phlox, *Phlox paniculata* 'Uptown Girl' PP32287, in *Polemoniaceae* family, perennial, grown for ornamental uses, small pink star-shaped dark pink-eyed flowers, rounded compound corymb, in mid-summer-late summer

- 2½-3' x 2-2½', upright, moderate growth
- Full sun, part sun
- Well-drained, moist, average to rich soil, organic mulch, 5.8-6.5 pH
- Moderate water, consistently moist, avoid overhead watering
- USDA 3-8
- Attracts bees, butterflies, hummingbirds
- Resists powdery mildew
- Deadhead to promote reblooming, cut back low after the first frost, provide good air circulation



5. Cosmos, *Cosmos bipinnatus*, in *Asteraceae* family, an annual, grown for cut flower, ornamental, and vertical accent uses, showy, compound, lacy thread-like 3-6" green foliage, entire margin, showy 2-3"+ daisy-like, bowl or open cup-shaped, maroon, pink or, white ray flowers, yellow center, late-blooming, in summer-fall frost

- 2-4' x 2-3', clumping, erect, fast growth, fine texture
- Full sun, part sun, part shade
- Well-drained, loamy, sandy, poor soil, dry to moist, 6.5-7.8 pH
- Low, moderate water, drought tolerant once established
- USDA 2-11
- Attracts bees, butterflies, birds and pollinators, resistant to heat
- Avoid rich soil; it will encourage foliage at the expense of blooms
- Shelter from strong winds or stake, place plants close together for support
- Deadhead or cut back to 1-1½" to promote reblooms and branching, self-sowing



6. Butterfly Bush Humdinger collection, *Buddleja davidii* 'Magenta Munchkin' 'Humdinger' PP28177, *Scrophulariaceae*, perennial, grown for floral display, and butterfly attraction, medium-green foliage, fragrant fuchsia-red flowers, light center 'eye', earlier blooming in mid-summer, 7-8" panicle, conical inflorescence

- 2-3' x 3½-4', rounded, ball-shape, low, shorter, compact, fast growth
- Full sun
- Well-drained, average to fertile soil, moist, 5.8-6.5 pH, EC 1.5-3 (salt) = fertility uptake
- Low to moderate water
- USDA 5-10
- Attracts butterflies, hummingbirds, bees, resistant to deer, tolerant of drought
- Transplant in early spring to early summer, add lime to increase growth and floral quality
- Deeper color, and longer floral length in cooler weather, late to break dormancy
- Best to prune hard in the spring, cut back to 12" in fall before dormancy is growing conditions still exist



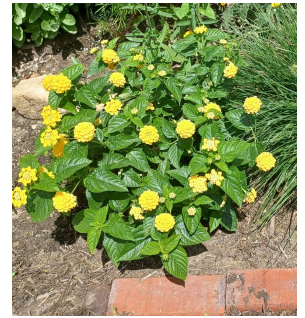
8. Autumn Joy Stonecrop, *Hylotelephium* 'Herbstfreude', aka *Sedum* sp., in *Crassulaceae* family, perennial, grown for ornamental uses, deciduous gray green, thick succulent, fleshy, smooth 1-3" rounded foliage, entire to toothed margin, tiny green buds, open to showy, ½" star-like light pink flowers, fades to reddish-purple, on dense rounded corymbose cymes, 3-4"+ heads, showy held above the foliage, in late summer-early fall, persists into fall

- 2-2½' x 1½-2', semi-upright to upright, succulent, spreading clump, sub-shrub, unbranched stems, fast growth rate
- Full sun, part sun, part shade in hot summer regions
- Well-drained, average, clay, sandy to gravelly soil, low fertility, dry to moist, 6.6-7.8 pH
- Low to moderate water, drought tolerant once established
- USDA 3-10
- Attracts bees, butterflies, and pollinators, tolerant of drought, clay, dry or rocky soil, resistant to rabbits, poor soil
- Mildly toxic to humans and animals from ingesting flowers, leaves, roots or stems



9. Yellow Sage Lantana, *Lantana camara*, in *Verbenaceae* family, perennial, grown as an annual in colder regions, grown for ornamental, houseplant, hanging basket, medicinal uses, woody, square stems, spiny, fragrant when crushed, **evergreen**, medium green ovate leaves, toothed margin, rough blade, dense 1-2" round-headed umbels, of tiny trumpet flowers, shades of yellow, held above the foliage, in summer to fall

- 1-6' x 3-5' mound, rounded, prostrate, arching, fast growth once soil and air are warm, medium texture
- Full sun, part sun, part shade during the hottest part of the day
- Well-drained, any soil, keep the soil moist, rich, don't let it dry out, 5.5-6.5 pH
- Low, moderate water once established; avoid overhead watering; very drought tolerant
- USDA 7-11
- Plants in high humidity can get fungal infections, repot every 2-3 years for house plants, low-maintenance, remove dead, diseased, or damaged foliage as needed, invasive in some parts of the US
- Attracts butterflies, hummingbirds, birds, pollinators, resistant to deer, drought, heat, humidity, salt
- Unripe green fruit cause moderately severe poisonous effects and toxic characteristics for humans, cats, dogs, and livestock (cattle, sheep, horses, goats) from flowers, fruit, leaves or sap



10. Anthemus kelwayi, *Anthemis tinctoria* 'Kelwayii' (Golden Marguerite), Golden Marguerite 'Kelwayii', Golden Chamomile 'Kelwayii', Oxeye Chamomile 'Kelwayii', Dyer's Chamomile 'Kelwayii', in *Asteraceae* family, perennial, grown for form, and ornamental uses, short-lived perennial, fragrant, finely divided, foliage, green above, woolly below, showy, mass of bright yellow 1½-2" daisy-like flowers, held above the foliage, in summer, winter interest

- 2-3' x 1-1½', clumping, shrubby, spreading, fast growth
- Full sun
- Well-drained, average, dry to medium soil, tolerant of hot, dry, or poor soils 5.8-7.5 pH
- Low to moderate water, drought tolerant once established
- USDA 3-7
- Attracts butterflies and hummingbirds, toxic to cats, dogs, and horses, tolerant of deer drought, dry soil and salt, shelter from heat and humidity of the deep South
- Deadhead to extend flowering season, and reduce self-sowing, prune back after flowering, divide every 2 years



11. Blue Fescue, *Festuca glauca*, in *Poaceae* family, short-lived, perennial, grown for form, and ornamental, groundcover uses, glaucous, blue-gray foliage, dome of erect to arching foliage, needle-like 9-ribbed, 5½"-8" blades, light yellow-green flowers, purple tinge, on 10-14" terminal panicles, held above the foliage, fades to tan, in late spring - early summer

- ¾-1' x 1-1½', clumping, short mound, moderate growth, fine texture, medium density
- Full sun, part sun, light-shade
- Well-drained, average soil, moist, 7.0 pH
- Low, moderate water
- USDA 4-9
- Tolerant of air pollution, black walnut, neglect, drought, shallow-rocky, dry and poor soils
- Resistant to groundhogs, and deer
- Trim to 3-4" in early spring to give space to emerging leaves, divide every 2-3 years in winter
- Short-lived, in winter cut back to 1½" to rejuvenate, if declining in hot, humid conditions



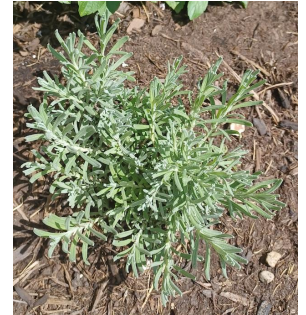
12. Removed - replaced with a another 9



13. Little Bunny Dwarf Fountain Grass, *Pennisetum alopecuroides* 'Little Bunny', in *Poaceae* family, perennial, grown for form, texture, ornamental and winter interest uses, gray-green, chartreuse juvenile foliage, matures medium to deep green, narrow, linear, yellowis to tan fall color, showy pinkish-white flower, furry 2" floral oval panicle, in late summer-fall, showy, dry tan, doesn't shatter, arching bristly spikes, warm-season grass, not true from seed
- 1-1½' x ¾-2', clumping, mounding, arching, fast growth, fine texture
 - Full sun, part sun, part shade may not flower fully in part shade
 - Well-drained, loam, sandy soil, 6.6-7.5 pH
 - Moderate to high water, lower once established, moderate for container or in extreme heat
 - USDA 5-9, in cold regions shelter or bring indoors to overwinter once 50-60°F
 - Attracts birds, resistant to groundhogs, tolerant of drought, erosion, pollution, wet soil, and black walnut
 - Cut to the ground before new shoots emerge, self-sowing and can become invasive in some regions



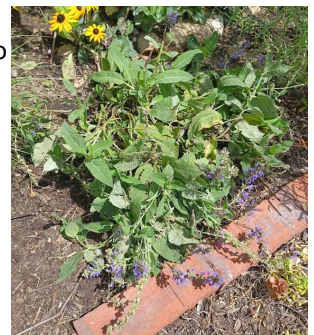
14. Super Blue English Lavender, *Lavandula angustifolia* 'Super Blue PP #24,929', in *Lamiaceae* family, perennial, grown for ornamental, cut flower, product ingredient, culinary uses, semi-woody, square stems, narrow, fragrant medium green foliage, fragrant, deep violet-blue flowers, on terminal spikes, in summer, deadhead to promote new growth
- ¾-1' x ¾-1', mound, compact, low-growing, medium growth
 - Full sun
 - Well-drained, average, lite to sandy, poor soil, dry, 6.4-8.2 pH, alkaline in full sun
 - Low-moderate water
 - USDA 4-9
 - Attracts bees, butterflies, hummingbirds, rabbits, goats, deer, squirrels, groundhogs, grasshoppers, ladybugs, caterpillars, and hedgehogs
 - Tolerant of deer, rabbits, drought, dry or shallow-rocky soil, air pollution, heat and humidity
 - Deadhead to encourage reblooming, prune every three years, in spring, to 8" to control the size, plant in a sheltered location, and protect with a cover in winter for snow protection, use rock instead of mulch depending on humidity



15. Red King Blanket Flower, *Gaillardia pulchella*, in *Astraceae* family, annual, grown for ornamental, medicinal uses, gray green, 1-3" oblong foliage, entire margin, lower leaves 4.5-6", coarsely toothed to entire, 1½-3" daisy-like, red, yellow bicolor ray, and disc flowers, with dark centers, solitary terminal head, held above the foliage, in summer-first frost
- 1-2' x ½-1', erect, clumping, fast growth, coarse texture
 - Full sun, part sun, part shade
 - Well-drained, sandy loam, clay, poor, calcareous soils, dry to moist, 6.8-7.2 pH
 - Low once established, moderate water for containers, avoid overwatering
 - USDA 2-11
 - Attracts native bees, butterflies, songbirds, and groundhogs, resistan to drought, heat, and salt
 - Start from seed as nurseries carry perennial Gaillardia
 - Deadhead to tidy up, self-sowing, heavy blooming can exhaust itself to be short-lived

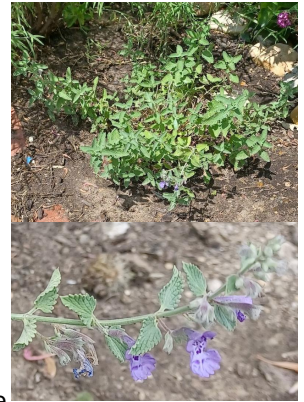


16. Catmint, *Nepeta cataria*, in *Lamiaceae* family, perennial herb, grown for fragrance ingredient, medicinal, culinary, repellant use, square stems, deciduous, fragrant gray-green 1-3" ovate, to triangular foliage, more hairy below, coarsely toothed margin, fragrant small blue and white two-lipped, purple spotted flowers, whorled on dense terminal spikes, in late spring-fall
- 2-3 x 2-3', clumping, spreading, moderate growth rate
 - Full sun, part sun, part shade (provide afternoon shade in the deep South)
 - Well-drained, average, dry to medium, tolerant of poor, shallow-rocky soil
 - Low to moderate water, drought tolerant once established
 - USDA 3-9
 - Attracts cats, groundhogs, bees, butterflies, birds, wasps, and flies
 - Resistant to deer, drought, dry soil, air pollution, repellant for aphids, squash bugs
 - Deadhead/shear to promote continued blooms and reduce self-sowing,, prune to the ground after flowering



17. Removed

18. *Salvia* May Night, *Salvia x sylvestris* 'Mainacht', in *Lamiaceae* family, perennial, grown for ornamental uses, fragrant oblong to lanceolate medium green foliage, wrinkled, entire or toothed margin, hairy below, showy, ½" tubular, two-lipped, deep violet-blue flowers, 2-6 paired on, dense terminal square stemmed 1½-2' racemes, in early summer-mid-summer, held above the foliage, 1997 Perennial Plant Association Plant of the Year
- 1½-2' x 1-1½', clumping mound, branched, upright, compact, fast growth
 - Full sun
 - Well-drained average, dry to moist, rich, gravelly or sandy soils, acidic-neutral pH
 - Low to moderate water, more often in high heat or containers, water regularly
 - USDA 4-9
 - Attracts hummingbirds, butterflies, bees, birds, tolerant of deer, drought and dry soil
 - Deadheaded to promote reblooming, cut back floppy growth, and after blooming is done
 - Best with cool spring and summer nights, floppy open density in hot, humid climates



19. Lime Marmalade Coral Bells, *Heuchera* 'Lime Marmalade' PP21861, in *Saxifragaceae* family, perennial, grown for foliage color, shade-tolerant uses, deciduous, lime green foliage, ruffled margin, showy, tiny white flowers, on 14-16" panicles, on slender, wiry stems, in late spring-summer, held above foliage, move in a breezedeadhead to promote reblooming
- ¾-1½' x 1-1½', clumping, rounded, mounding, moderate growth
 - Part sun, filtered sun, partial shade
 - Well-drained, organically rich, humusy soil, moderately moist, 6.0-8.0 pH
 - Moderate water, regularly apply, weekly, or more often in full sun, containers, or extremely hot climates, better to be dry than wet once established
 - USDA 4-9
 - Attracts hummingbirds, pollinators
 - Apply mulch in winter to avoid roots heaving, and divide clumps in spring every 3-4 years



*photo <https://www.pukulauki.lv>

20. Lamb's Ear, *Stachys byzantina*, in *Lamiaceae* family, perennial, grown for fragrance, ornamental, texture, form, medicinal uses, angular hairy stems zig zag, fragrant when crushed, silver-gray 3-6" oblong to elliptical foliage, wrinkled, rounded toothed margin, thick, soft white woolly hairs above and below, basal leaves in a rosette, tiny purplish-pink, two-lipped tubular flowers, covered in white-woolly bracts, on spikes or racemes, held above the foliage, in summer
- 1-1½' x 1-1½', clumping, compact, spreading mound, moderate growth rate, heavy density, medium-coarse texture, rhizomes, self-sowing, stems root at the nodes, spreading aggressively, divide every 2-4 years
 - Full sun, part sun, part shade (damp foliage can bring on some diseases)
 - Well-drained, sandy, loam, shallow-rocky soil, moist to occasionally dry, 6.1-7.8 pH
 - Low water, drought tolerant once established, avoid overwatering
 - USDA 4-9
 - Attracts bees, butterflies, hummingbirds, pollinators, birds, songbirds, and groundhogs
 - Resistant to deer, rabbits, black walnut, drought, dry or poor soil, and pollution



21. Rose Campion (Rabbit's Ears, Crown Pink, Bloody William, Mullein Pink, Catchfly), *Silene coronaria*, in *Caryophyllaceae* family, biennial, short-lived perennial or biennial, grown for basal clump, and ornamental uses, hairy stems, widely branched, deciduous, silvery pale lanceolate to spatulate, green, foliage, leathery, woolly, entire margin, vivid mass magenta, pink or white 1" flowers, mostly solitary, on cymes, in early summer-mid summer, may perform best in a raised bed for better drainage, has a slender to stout taproot,
- 2-3' x 1½-2', clump-forming, upright, moderate growth rate, coarse texture, thin density
 - Full sun, part sun, best with morning sun locations
 - Well-drained (even in winter), average soil, shallow-rocky, moist to very dry, 6.0-7.0 pH
 - Moderate to low water, drought tolerant once established
 - USDA 4-10
 - Deadhead to reduce self-sowing and encourage reblooming
 - Attracts: butterflies, bees, mice, mole, squirrel, and pollinators, resistant to deer, rabbit, sticky hairs ward off insects



22. removed

23. Small Globe Thistle, *Echinops ritro*, in *Asteraceae* family, perennial grown for ornamental uses, branched silvery-green stems, deciduous, gray green oblanceolate, 6-8 x 1-3" foliage, leathery, coarse, deeply lobed, downy below, basal leaves, alternate, smaller fern-like stem foliage, green-white buds, tiny blue to purple star-shaped flowers, in a **golf ball sized** globe floral head, in mid-summer-early fall
- 2-4' x 1¾-2½", clumping, erect, compact, sprawling, medium growth rate, coarse texture
 - Full sun, part sun
 - Well-drained, dry, shallow rocky, sandy, loamy, or poor soil, 5.5-7.0 pH
 - Moderate water, drought, heat, and humidity tolerant
 - USDA 2-8
 - Deadhead to encourage reblooming and reduce self-sowing
 - Difficult to divide or transplant due to a taproot
 - Attracts: butterflies, bees, tolerant of drought, deer, and rabbits



25. Threadleaf Giant Hyssop (aka Licorice Hyssop), *Agastache rupestris* 'Apache Sunset', in *Lamiaceae* family, perennial, ornamental uses, square stems, fragrant, silvery-gray finely cut 1-2" thread-like linear-lanceolate leaves, showy, small, salmon-orange 2-lipped tubular flowers, purplish calyxes, on 12" terminal square stemmed spikes, held above the foliage, in mid-summer-fall
- 1½-2' x 1-1½', clumping, upright, fast growth, fine texture
 - Full sun, part sun, part shade
 - Well-drained, gravel mulches, moist sandy soil, dry soil tolerant, 6.0-7.5 pH
 - Low to moderate water, deep and infrequent once established, drought and heat tolerant
 - USDA 6-9
 - Attracts: bees, butterflies, hummingbirds, tolerant of heat, dry soils, deer, and rabbits
 - Deadhead and/or cut back in late summer to encourage reblooming, pinch to contain size, apply sandy to gravelly mulches to avoid rot



26. Tall Verbena, *Verbena bonariensis*, in *Verbenaceae* family, tender perennial, grown as an annual, for movement, thin density, religious rites, and ornamental uses, square, rough stems, slender, wiry, branching, 1' basal mound, dark green, 3-5" lanceolate foliage, serrated margin, long internodes ascending the stems, showy, tiny rose-violet $\frac{1}{4}$ " tubular flowers, in 2-3" rounded panicles, on long wispy stems, in early summer-fall
- 2-6' x 1-3', clump-forming, upright, fast growth rate, fine texture, thin density
 - Full sun, part sun
 - Well-drained, average, shallow rocky, moist to occasionally dry soil, 6.0-6.8 pH
 - Moderate water, drought tolerant
 - USDA 7-11
 - Remove volunteer seedlings if unwanted, and apply mulch to protect roots in winter
 - Attracts: native bees, butterflies, goldfinches, hummingbirds, insects, and pollinators
 - Tolerant of poor soil, resistant to deer, rabbits, drought, dry or poor soil



27. Cypress Vine, *Ipomoea x quamoclit* Convolvulaceae, in *Ranunculaceae* family, tender perennial, grown as an annual for thin density, vertical and ornamental uses, thin green stems intertwine, deciduous, delicate 2-4" fern-like pinnately compound leaves fold in the sun and expand at sunset, $\frac{3}{4}$ " scarlet red tubular star flowers, on cymes, in early summer to fall frost
- 6-20' x 3-6', twining, vine requires support to climb, fast growth, thin density, fine texture
 - Full sun, part sun
 - Well-drained, average soil, consistently moist, 6.2-7.0 pH
 - Moderate water, tolerant of dry conditions
 - USDA 11-12, grown as an annual in other USDA zones
 - Toxic to cats, dogs, and horses
 - Attracts: butterflies, hummingbirds, specialized bees (*Melitoma taurus*, *Cemolobus ipomoeae*), and other pollinators
 - Tolerant of deer and some drought and, occasionally wet or dry soil, self-sowing

