

Wayne County Master Gardeners, September 24, 2005

Ratibida (rah-ti-bid'-a)

Native to North America and Mexico, the Prairie Coneflowers have drooping petals and tall central cones. They are drought tolerant and excellent for naturalizing.

Ratibida columnifera (Prairie Coneflower, Mexican Hat)

Species synonyms: Rudbeckia columnaris, R. columnifera, Lepachys columnifera, Ratibida columnaris

Long, narrow central cones with drooping petals. Drought tolerant.

Hardiness: zones 3-10

Light: Full sun

Flower color: Yellow with brown cone Blooms: Early summer to early fall

Garden height: 24-36" Garden spread: 12-18"

Ratibida pinnata (Prairie Coneflower, Yellow Coneflower)

Taller plant than *R. columnifera*. Easy to grow and tolerant of heat, drought, flooding, and cold temperatures. Tolerates a wide range of soil, including heavy clay.

Hardiness: zones 3-7 Light: Full sun to part shade

Flower color: Yellow with brown cone
Garden height: 36-72"

Blooms: Summer
Garden spread: 18-24"

Rudbeckia (rud-bek'-ee-a)

Native to North America, numerous species are excellent in the gardens. Most species are excellent for naturalizing, mass plantings or in the border. Also attract butterflies, and birds if seedheads are left on plants. Most species also make good cut or dry flowers. The Genus is named for Olaus Olai Rudbeck, an eighteenth-century Swiss physician-botanist and teacher of Linnaeus.

Rudbeckia fulgida var. deamii (Deam's Coneflower)

Species synonyms: Rudbeckia deamii

Light green, hairy foliage and flowers with narrow petals. Can be more floriferous than R. fulgida.

Hardiness: zones 3-9 Light: Full sun to part shade

Flower color: Golden yellow with brown cone
Garden height: 24-40"

Blooms: Summer
Garden spread: 18-24"

Rudbeckia fulgida var. fulgida (Orange Coneflower)

Smaller flowers but longer bloom time than 'Goldsturm.' Flowers on leafless stems.

Hardiness: zones 3-9 Light: Full sun

Flower color: Orange-yellow with brown cone Garden height: 24-30" Blooms: Summer to fall Garden spread: 18-24"

Rudbeckia fulgida var. speciosa (Black-Eyed Susan, Orange Coneflower)

Species synonyms: R. speciosa, R. newmanii, R. speciosa var. newmanii

Basal leaves nearly toothless and stem leaves toothed. Lighter green foliage and different texture than

'Goldsturm.' Hardy perennial with long-lasting flowers and a long bloom period.

Hardiness: zones 3-9 Light: Full sun to part shade Flower color: Golden yellow with brown cone Blooms: Late summer to fall

Garden height: 18-28" Garden spread: 18-24"

Rudbeckia fulgida var. sullivantii 'Goldsturm' (Orange Coneflower)

Excellent German cultivar. Very popular, and an excellent perennial. 1999 Perennial Plant of the Year.

Hardiness: zones 3-9 Light: Full sun to part shade

Flower color: Golden yellow with brown cone
Garden height: 36-72"

Blooms: Summer
Garden spread: 18-24"

Rudbeckia hirta (Black-Eyed Susan, Yellow Oxeye Daisy)

Soft, hairy foliage and upright habit. Short-lived and best grown as an annual or biennial, but may reseed. May be longer lived in mild climates, and if deadheaded. More vigorous types may overwinter in zone 5. Dwarf types should be considered annuals. Powdery mildew can sometimes be a problem.

Hardiness: zones 5-9 Light: Full sun

Flower color: see cultivar descriptions Blooms: Summer to fall

Garden height: see cultivar descriptions Garden spread: see cultivar descriptions

'Autumn Colors' – 20-24" x 12" Flowers in shades of bronze, red, rust with yellow and gold highlights.

'Becky' series – 10-16" x 12" Large (2.5-3.5" diameter) flowers and good pot performance.

'Becky Cinnamon Bicolor' – Golden yellow flowers with red-brown centers.

'Becky Formula Mix' – Formula mix of equal proportions of all three colors.

'Becky Orange' – Flowers orange with yellow tips.

'Becky Yellow' – Light yellow flowers

'Cherokee Sunset' – 24-30" x 12" Large (3-4.5" diameter) semi-double and fully double flowers in rusty orange brown to yellow shades. Vigorous, branching habit. AAS winner.

'Cordoba' – 18-20" x 12" Flowers red with wide golden yellow edges. Well-branched habit.

'Goldilocks' – 8-10" x 12" Floriferous cultivar with 70-80% double flowers. AAS winner. May reach 15-18" in the landscape. Flowers yellow with brown centers.

'Indian Summer' – 36-42" x 12" Vigorous cultivar with very the largest flowers of any Rudbeckia (6-9" diameter). 1995 AAS Winner. Flowers light yellow with brown cones.

'Irish Eyes' ('Green Eyes') – 30-42" x 12" Large (3.5" diameter), golden yellow flowers with green cones.

'Marmalade' –18-22" x 12" Long flowering cultivar. Very sensitive to powdery mildew. Goldorange flowers with brown cones.

'Maya' – 18-20" x 14" The first fully double flowered dwarf cultivar. Yellow flowers.

'Moreno' – 20-24" x 12" Flowers in shades of red-brown with yellow-orange tips.

'Prairie Sun' – 28-32" x 12" Large, bicolor flowers are golden yellow with light yellow tips and green cones. AAS Winner and Fleuroselect Gold Medal winner.

'Sonora' – 12-14" x 12" Large (5-6" diam.) golden yellow flowers with rusty brown centers.

'Toto' series – 8-12" x 12" Compact, well-branched, floriferous, and early blooming. Masses of small (2-3" diameter) flowers.

'Toto Gold' – Flowers golden yellow with brown

'Toto Lemon' – Flowers lemon yellow with brown

'Toto Mix' – Formula mix of the three colors

'Toto Rustic' – Flowers in red-brown shades with golden yellow highlights

Rudbeckia laciniata (Cutleaf Coneflower, Green Headed Coneflower)

Dark green, deeply lobed foliage and clump forming habit. Hairy, branching stems produce flowers with drooping yellow petals and a green central disc. Long-lived. Best in moist soil, and tolerates wet soil. Spreading, and may be somewhat invasive in some sites. Cut back after flowering to promote reblooming.

Hardiness: zones 2-9 Light: Full sun to part shade Flower color: Yellow with green Garden height: 30-96" Light: Full sun to part shade Blooms: Summer to fall Garden spread: 24-48"

Rudbeckia maxima (Tall Coneflower, Great Coneflower)

Very erect habit and large, attractive greyish leaves. Flowers with small, drooping yellow petals and tall brown central cones. Tolerates a wide range of soil conditions, but prefers moist soil. Strong stems, and does not require staking. Not widely grown. Leaves and flowers can be used in cut arrangements.

Hardiness: zones 4-9 Light: Full sun

Flower color: Yellow with brown cone Blooms: Summer to fall Garden height: 60-72" Garden spread: 24-36"

Uses: Background, specimen, cut

Rudbeckia nitida (Shining Coneflower)

Flowers with drooping petals and a greenish central cone. Long-lived. May need staking in the landscape. Many plants sold as *R. nitida* are selections of *R. laciniata*. Floriferous, with large (3-4" diameter) flowers.

Hardiness: zones 2-9

Flower color: Golden yellow with green
Garden height: 60-97"

Light: Full sun
Blooms: Summer
Garden spread: 18-24"

'Herbstonne' — German cultivar (name translates as ('Autumn Sun') probably of hybrid origin (*R. laciniata* x *R. nitida*), and sometimes listed as *R. laciniata*. Large flowers.

Rudbeckia subtomentosa (Sweet Coneflower)

Tall, with an upright habit and large flowers. Adaptable, and tolerates heavy clay soil.

Hardiness: zones 4-9 Light: Full sun

Flower color: Yellow with brown cone Blooms: Summer to fall Garden height: 48-60" Garden spread: 18-24"

Uses: Naturalizing, cut, border, butterfly

Rudbeckia triloba (Three-Lobed Coneflower, Brown-Eyed Susan)

Upright, well-branched habit and small (1.5" diameter) yellow flowers with purple brown centers. Floriferous, with a long bloom period (2+ months). A short lived perennial or "persistent biennial," which reseeds readily, but not aggressively, and wanders about the garden.

Hardiness: zones 3-10

Flower color: Golden yellow with brown cone
Garden height: 24-40"

Light: Full sun to part shade
Blooms: Summer to fall
Garden spread: 18"

Uses: Border, naturalizing, cut

Echinacea (ek-in-ay'-see-a)

North American natives. Several species have a long history of medicinal use. Good plants for the border, massing, and naturalizing. Great butterfly plants, and attract birds if seedstalks are left in fall and winter. The numerous new hybrid varieties considerably extend the color range and flower forms of this interesting genus. Genus name from "echinos", Greek for "hedgehog", referring to the central cone of disc flowers. Generally drought tolerant.

Echinacea angustifolia (Narrow-Leaf Purple Coneflower)

Bristly, narrow leaves and flowers with drooping petals. Taprooted. Not recommended for heavy clay soil. Very drought tolerant. The most potent species for medicinal use.

Hardiness: zones 3-9 Light: Full sun Flower color: Light pink with brown cone Garden height: 12-36" Light: Full sun Blooms: Summer Garden spread: 12"

Echinacea pallida (Pale Purple Coneflower)

Narrow leaves and flowers with drooping petals. Taprooted and long-lived. Tolerates poor soil, heavy soil, and prefers dry soil. May require staking in shade. Pinching back in late spring promotes branching and reduces need for staking. Short lived in hot climates. Fragrant flowers. Used medicinally.

Hardiness: zones 4-8 Light: Full sun to part shade Flower color: Pink with brown cone Garden height: 36-60" Light: Full sun to part shade Blooms: Early summer Garden spread: 18-24"

Echinacea paradoxa (Yellow Coneflower)

Simiar to *E. pallida*, but with smooth, lighter green foliage. Flowers with drooping petals. Attractive, rare species found wild in only a few dry prairie sites. Deer resistant and drought tolerant.

Hardiness: zones 4-7 Light: Full sun

Flower color: Yellow with brown cone
Garden height: 24-36"

Blooms: Summer to fall
Garden spread: 18-24"

Echinacea purpura (Purple Coneflower, Hedgehog Coneflower)

Species synonyms: Rudbeckia echinacea

Large, coarse, dark green leaves are stiffly hairy. Flowers with brown central cone and wide petals, often slightly drooping. Relatively long lived, low maintenance, and drought tolerant. Tolerates poor soil and heavy clay soil. Excellent butterfly plant. Used medicinally. Cutting back plants by up to 1/2 when 2.5-3' tall will result in delayed flowering and shorter height, extending the season of bloom.

Hardiness: zones 3-8 Light: Full sun to part shade

Flower color: see cultivar descriptions Blooms: Summer

Garden height: see cultivar descriptions Garden spread: see cultivar descriptions

'Bravado' – 28-32" x 18-24" Rose purple petals are wide and held horizontally. Purple stems. Heat tolerant cultivar.

- 'Cygnet White' ('Baby White Swan') 20-30" x 18-24" Compact white flowered cultivar. Large central cone.
- **'Doubledecker' ('Indiaca', 'Indianer')** 35-40" x 18-24" Rose pink flowers with a "two tier" effect, with short petals emerging from top of cones. Upper petals may not develop until 2nd year. German cultivar from Eugen Schleipfer, selected over 2 decades. Some variation in amount of doubleness.
- **'Fancy Frills'** 24-" x 30" Large, semi-double rose purple flowers with somewhat ruffled petals. Long blooming.
- **'Fragrant Angel'** 30" x 24" Large, white, fragrant flowers with horizontal, overlapping petals and large central cones. Well-branched habit.
- **'Green Envy'** 30-36" Light green flowers with reddish markings at the base of petals. Developed by Mark Veedner, hobbyist gardener.
- **'Kim's Knee High'** 15-30" x 24-36" Dwarf habit and purple flowers with downward reflexed petals and brown cone. Introduced in 1999 by Kim Hawkes (Niche Gardens), from a seedling selected from seed collected from the garden of Jimmy and Becky Stewart (Atlanta, GA) in 1990.
- **'Kim's Mop Head'** 18-24" x12-24" White-flowered sport of 'Kim's Knee High' discovered at Sunny Border Nursery (CT). Compact habit and downward reflexed petals.

- **'Leuchtstern' ('Bright Star')** 24-42" x 18-24" Large flowered cultivar, with good uniformity and horizontal petals. Floriferous. Large orange-brown cones and strong stems.
- **'Magnus'** 36-48" x 18-24" Large flowered cultivar (4" diameter), with petals held horizontally, and a long bloom period. Perennial Plant of the Year in 1998. Named for Magnus Nielsen.
- **'Prairie Frost'** 26" x 18" Variegated foliage and 3" diameter flowers. Selected from 'Bravado' by Alan Costa.
- 'Razzmatazz' 36" x 18" Fully double, "pompom" flowers. Very striking.
- **'Ruby Giant'** 30-36" x 24"Dan Heims (TerraNova) reproduction of original 'Rubinstern', from originator's stock (the European garden of the son of Magnus Nielson, namesake of Echinacea 'Magnus'). Large (5-7" diameter), deep rose purple, fragrant flowers with horizontal petals and upturned tips.
- **'Ruby Star' ('Rubinstern')** 36-40" x 18-24" Reselction of 'Magnus' for darker flower color. Petals held horizontally.
- **'Sparkler'** 18" x 26" Large (4" diameter) rose purple flowers. Foliage speckled with creamy white variegation. Leaves become more green during summer.
- **'White Swan'** 28-36" x 18-24" White, drooping petals with greenish-yellow cones.

Echinacea tennesseensis (Tennessee Coneflower, Tennessee Purple Coneflower)

Narrow, hairly leaves and flowers with narrow, upright turned petals. Floriferous. Taprooted. For well-drained soil, and prefers alkaline conditions. Long-lived species. Federally endangered in the wild.

Hardiness: zones 5-9 Light: Full sun to part shade

Flower color: Deep pink brown cone
Garden height: 18-30"

Blooms: Summer
Garden spread: 12-18"

'Rocky Top Hybrids' – 24-30" x 12-18" Long blooming cultivar with deep pink flowers.

Echinacea hybrids

Plant breeders have been developing new, interspecific hybrids by crossing the above species, to come up with an expanded color range, improved fragrance, and (hopefully) improved garden performance. Many are patented.

- **'Big Sky'TM series** 24-36" x 18" Interspecific hybrid series developed by the Saul Brothers (Atlanta, GA). Hardy in zones 4-9. Summer blooming.
 - **'Big Sky Harvest Moon'** Very fragrant, yellow flowers and a well-branched habit.
 - **'Big Sky Sunrise'** Citron yellow flowers with green cones which change to gold.
 - 'Big Sky Sunset' Orange flowers with brown cones
 - **'Big Sky Twilight'** Fragrant, watermelon-colored flowers and well-branched habit and dark stems.
- **'Meadowbrite' series** 24-36" x 12-36" The first series of interspecific *Echinacea* hybrids, developed by Jim Ault (Chicago Botanic Garden). Summer blooming. Somewhat drooping, narrow petals.
 - **'Mango Meadowbright'** Very fragrant yellow flowers with narrow petals and brown cones. Glossy leaves. Developed in tissue culture as a sport of 'Orange Meadowbrite.'
 - 'Orange Meadowbright' ('Art's Pride') Vigorous, floriferous plants with fragrant orange flowers and narrow petals. Narrow, dark green leaves.