
Native Pollinator Plants of East Texas and the Western Coastal Plain



United States Department of Agriculture
 NRCS Natural Resources
Conservation Service

East Texas Plant Material Center

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The purpose of the Plant Materials Program is to provide plants that can help solve natural resource problems. Beneficial uses for which plant material may be developed include biomass production, carbon sequestration, erosion reduction, wetland restoration, water quality improvement, streambank and riparian area protection, coastal dune stabilization, and other special conservation treatment needs. Scientists at the Plant Materials Centers seek out plants that show promise for meeting an identified conservation need. Selected plants that are beneficial to conservation are released to the private sector for commercial production. This work is carried out in 27 centers across the country. There are three Plant Material Centers in Texas (Nacogdoches, Kingsville and Knox City) which work cooperatively with state and Federal agencies, commercial businesses, and seed and nursery associations.

Plant materials centers also work to develop pollinator-friendly plant species.

According to the North American Pollinator Protection Campaign, possible declines in the health and population of pollinators pose a significant threat to the integrity of biodiversity, to global food webs, and to human health.



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Insect and other animal pollinators play a pivotal part in the production of an estimated one out of every three bites of food that humans eat and in the reproduction of at least 80 percent of flowering plants. The commodities produced with the help of animal pollinators generate significant income for agricultural producers. For example, domestic honeybees pollinate an estimated \$14.6 billion worth of crops in the U.S. each year, produced on more than 2,000,000 acres. Source: www.pollinator.org

The plants featured in this publication are pollinator-friendly plants common to east Texas. While some have been or are being evaluated by the East Texas Plant Materials Center in Nacogdoches, they are all important plants for pollinators. Some can be found commercially for planting or seeding, and others can be found in pastures, rangeland and other open areas providing important habitat for insect and other animal pollinators.



Rough Coneflower
Rudbeckia grandiflora

Swamp Sunflower
Helianthus angustifolius

Pale Purple Coneflower
Echinacea pallida

Black-eyed Susan
Rudbeckia hirta L.

Gayfeather
Liatris pycnostachya



Duration	Perennial	Perennial	Perennial	Annual Biennial Perennial	Perennial
Bloom Time	July August	October	May July	June October	August December
Bloom Color	Yellow	Yellow	Pale Purple	Orange Yellow	Purple
Height (ft)	2 to 4	1 to 5	1 to 3	1 to 3	3 to 5
Soil Types	Medium to Course	Medium to Course	Fine to Course	Fine to Medium	Fine to Course
Drought Tolerance	Medium	Medium	Medium	Medium	Medium
Fire Tolerance	Low Medium	Medium	High	Medium	None
Fertility	Low Medium	Low	Low	Medium	Medium
Light Requirement					
Propagate	Seed	Seed Sprigs	Seed	Seed	Corm Cutting Seed
Seed/Pound	1,000,000+	504,000	106,000	1,575,760	120,000

Remarks

This plant is in the same family as black-eyed susan, but its flowers are more similar in appearance to *Ratibida pinnata*. It is not as common as black-eyed Susan.

Swamp sunflower is not found in swampy areas as its name suggests. It is a prolific seed producer, and germinates very well. The seeds are attractive to birds and wildlife, and it provides blooms for pollinators late in the season.

Plants of this species were highly valued by Native Americans for medicinal purposes. There are several commercial varieties of *Echinacea* available with a vast array of color choices and flower shapes.

This plant has an extremely wide distribution, and is very adaptable to a wide range of environmental conditions. It can be invasive in areas it is not desired.

Gayfeathers are highly attractive to a wide variety of pollinators, especially butterflies. There are several species in this genus, most are very showy plants, producing bright purple flowers.



Yellow Wild Indigo
Baptisia sphaerocarpa

Slender Mountain Mint
Pycnanthemum tenuifolium

Clasping Coneflower
Dracopis amplexicaulis

Ironweed
Vernonia baldwinii

Lemon Beebalm
Monarda citriodora



Duration	Perennial	Perennial	Annual	Perennial	Annual
Bloom Time	April June	June August	April July	July November	May July
Bloom Color	Bright Yellow	White	Bright Yellow	Bright Purple	Purple White Pink
Height (ft)	1 to 3	1 to 4	1 to 6	3 to 6	2 to 4
Soil Types	Medium to Course	Fine to Medium	Fine to Course	Fine to Course	Fine to Course
Drought Tolerance	Medium	Medium	Hig	Medium	Medium
Fire Tolerance	Medium	Medium	None	Medium	None
Fertility	Low to Medium	Low to Medium	Low	Low to Medium	Medium
Light Requirement					
Propagate	Seed	Cuttings Division Seed	Seed	Cuttings Division Seed	Seed
Seed/Pound	25,000	6,000,000+	1,600,000	520,000	800,000

Remarks

This legume is easily recognizable in the spring with its pale, blue-green foliage and bright yellow flowers. It desiccates in mid summer, and becomes unattractive. It is an excellent seed producer.

Typically found in low, moist areas, this plant is very attractive to pollinators and is highly aromatic. It gives off a strong minty smell when walked through or crushed. The seed are black and extremely small..

This plant is commonly found along roadsides in ditches and disturbed areas. It produces a very large cone, and large quantities of seed that germinate readily.

Flowers of this plant are extremely showy and vivid. It is highly attractive to butterflies. Few seeds are fertile, so heavy seeding rates are needed to establish this species.

Lemon Beebalm has many common names. It can form large colonies, and can be aggressive in cultivation. It is very attractive to a wide array of pollinators, and is easy to grow.



Powder puff
Mimosa strigillosa

Showy Ticktrefoil
Desmodium canadense

Goldenrod
Solidago odora

Illinois Bundleflower
Desmanthus illinoensis

Butterfly Milkweed
Asclepias tuberosa L.



Duration	Perennial	Perennial	Perennial	Perennial	Perennial
Bloom Time	May July	June September	July August	May September	May September
Bloom Color	Pink	Pink Purple	Yellow	White	Bright Orange
Height (ft)	1 or less	3 to 6	3 to 6	2 to 4	1 to 3
Soil Types	Fine to Coarse	Fine to Coarse	Medium to Coarse	Fine to Coarse	Medium to Coarse
Drought Tolerance	High	Low to Medium	Medium to High	Medium to High	High
Fire Tolerance	Medium	Low to Medium	High	Low	High
Fertility	Low	Moderate	Low	Medium to High	Low
Light Requirement					
Propagate	Seed Sprigs	Seed	Plant Division Seed	Seed	Root Cuttings Seed
Seed/Pound	38,000	72,000	900,000	120,000	70,000

Remarks

This legume is very similar to sensitive brier, and occupies a similar niche. Lacking thorns, it is easily distinguished from sensitive brier. It is a low growing ground cover, and is very attractive to insects.

There are many species of *Desmodium*. *Desmodiums* have high forage value for browsing animals, and are very attractive to a wide array of pollinators. They prefer moist soils, but will tolerate a wide range of environmental conditions.

Goldenrod's leaves give off a licorice smell when crushed. There are many species of goldenrods. All are excellent plants for attracting pollinators. They often occupy disturbed sites with moist soils

Bundleflower is one of the best native, wildlife plants. It is a legume that has high forage value, produces large amounts of seed, and has a long bloom time that attracts pollinating insects.

Monarch butterflies are frequent visitors to this plant. It is difficult to establish, but produces a very showy, orange bloom.



Compass Plant
Silphium laciniatum

Goat's Rue
Tephrosia virginiana

Southern Dewberry
Rubus trivialis

Coralbean
Erythrina herbasea

Partridge Pea
Chamaecrista fasciculata



Duration	Perennial	Perennial	Perennial	Perennial	Annual
Bloom Time	July September	April July	March April	March November	June October
Bloom Color	Bright Yellow	Yellow and Pink	White	Bright Red	Yellow
Height (ft)	3 to 7	1 to 3	1 to 4	3 to 8	1 to 3
Soil Types	Medium to Course	Medium to Course	Medium to Course	Fine to Course	Medium to Course
Drought Tolerance	High	High	Medium	Medium	Medium
Fire Tolerance	Medium	Medium	Medium	Medium	None
Fertility	Low	Low	Medium	Medium	Medium
Light Requirement					
Propagate	Seed	Seed	Plant Division Seed	Cuttings Division Seed	Seed
Seed/Pound	10,000	31,680	150,000	1,500	64,000

Remarks

Compass plant needs well drained soil, and produces a tap root up to 15 feet long. It is long lived, slow growing, and drought resistant. The leaves are as rough as sandpaper. Its large seeds are used by birds and small mammals.

The roots of this legume contain rotenone, and were used by Native Americans to poison fish. The roots were beaten or crushed in calm pools, and fish would rise to the top, stunned by the rotenone. The seed is attractive to wildlife.

The white flowers are attractive to a variety of insects, and the edible berries are used in jams, cobblers, and pies. Wildlife also utilizes the berries and deer will browse the foliage.

The bright red flowers of this legume attract hummingbirds and are very showy. The seed, which are also bright red, are poisonous. Care should be taken with children to avoid them ingesting the brightly colored seed.

Partridge pea is an important honey plant. It is also known as sleeping plant, and is considered toxic to livestock. Its leaves contain a cathartic substance. The seed is utilized heavily by quail and other birds.



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Additional Resources

The Xerces Society | www.xerces.org

NRCS Plants Database | plants.usda.gov/pollinators/NRCSdocuments.html

North American Pollinator Protection Campaign (NAPPC) | www.napcc.org

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