

# Plants for Bees!

*A planting guide for new beekeepers in Florida*



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## INTRODUCTION

Why this publication? Some people have asked us, "Which are the best native plants for bees in Florida?" And there are many people here in Florida who are interested in making the state hospitable to bees. In 2020, there were over 635,000 bee hives registered with the state. According to the UF/IFAS EDIS website, bees contribute an estimated \$20 billion in pollination service to the agriculture industry in the United States.

If you are new to beekeeping or just considering keeping a hive of bees in your backyard, you might want to begin thinking about native plants that thrive in Florida weather and also provide food for your honey bees. This document includes descriptions of some easy-to-grow native plants to help you choose plants for a bee-friendly backyard or flower garden. Information is provided for plants that grow in natural areas of North, Central and South Florida.

This publication does not cover the vegetable crops and fruit trees for which bee pollination is vitally important. Instead, think of this as you would suggestions for a butterfly garden—beautiful plants for your eyes that also serve the needs of wildlife. You might think bees would happily take pollen from any plant, but plants differ in the ways they present their pollen, making it easier or harder for bees, other insects, hummingbirds or butterflies to collect or spread from flower to flower. You can target the pollinators you want to see in your yard by including plants they seek; for example, tropical sage (*Salvia coccinea*) catches the eyes of hummingbirds, and passion vines (*Passiflora incarnata* is a common one) attract zebra longwing and Gulf fritillary butterflies.

This guide includes a description of 15 native plants that provide great food for bees and grow throughout most of Florida. In addition, a longer list of native plants recommended for planting near bees is included at the end of the publication.

## RESOURCES FOR MORE INFORMATION

The DPI Helpline (1-888-397-1517 or on the web at [www.FDACS.gov](http://www.FDACS.gov)) can answer questions about the "Florida Honey Certification and Honeybee Law" (Florida Statues, Chapter 586) and other apiary concerns. Your local county extension agents, Master Gardeners and the Florida Native Plant Society also have information about native plants and their pollinators.

## SUGGESTED REFERENCES

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## *Asclepias tuberosa* – butterfly milkweed



*Asclepias tuberosa*

Photo by Alex de la Paz, FDACS-DPI

You might have seen this neon orange (but occasionally yellow) flowered perennial along roadsides or in drier natural areas. Although it is a favorite in butterfly gardens, bees are also attracted to this multi-stemmed beauty.

### DESCRIPTION

Butterfly milkweed differs from most other milkweeds in having clear sap, not the milky latex to which the common name refers. This species also differs from most other milkweeds because its leaves alternate from side to side along the stem, rather than having two leaves opposite each other at each point of attachment.

### GROWTH FORM

Perennial herb, regrowing from tap root, forming clumps, to 3 feet tall with showy, summer flowers growing above the leaves.

### LEAVES

Alternate, often crowded; very short petioles; linear, lance-shaped or oblong blades, sometimes lobed at the base; soft, shaggy hairs on underside, especially along veins and somewhat hairy on upper leaf surface.

### FLOWERS

Clusters (umbels) about 2 inches across, flat-topped to rounded; each flower with five downward-pointing petal lobes and five upright structures (called hoods and horns) around a central column; brilliant orange to red-orange and sometimes yellow.

### FRUIT

Spindle-shaped pods to 6 inches long that split to release seeds dispersed on the wind by white, silky fibers.

### HABITAT AND DISTRIBUTION

The species is native from Mexico to Canada, including most of the United States. In Florida, it is found throughout the state in drier natural areas and roadsides in most counties. It is often found in dry pinelands and is frequently visited by butterflies as well as bees.

### CULTIVATION

This plant grows from seeds in average, dry to medium, well-drained soils in full sun. They can be slow to establish and may take over a year to begin flowering. If seed pods are not disturbed before splitting, plants will self-seed. Because it has a deep taproot, this milkweed weed does not transplant well.

## *Bidens alba* – beggarticks; Spanish needles, romerillo



*Bidens alba*

Photo by Paul Anderson, FDACS-DPI

Yes, this is a notorious weed in the wrong place, but if there ever were a famine food for bees, this plant would be a prime candidate. In drought and cold and after mowing, this little weed keeps on flowering and producing rewards for insects. If you have a wild spot near the hives or don't mind deadheading a few plants, this weed will reward you with its bounty. Some plant taxonomists consider *Bidens alba* and *Bidens pilosa* to be one species.

### DESCRIPTION

*Bidens alba* is in the plant family traditionally known as Compositae, a reference to the flower heads that are composites of many individual flowers. In some species, all the small flowers are similar; in others, like this one, there are two distinct flower types. Each head consists of an outer ring of flowers with a showy petal (ray flower or floret) and an inner circle of small tubular flowers (disc florets).

### GROWTH FORM

Annual herbaceous plant, up to 3 feet tall, but in a mowed lawn can flower at only a few inches high, blooming throughout the year.

### LEAVES

Opposite, usually lobed with three, five or seven lobes, but sometimes no lobes at all; leaf margins serrate (toothed); both surfaces sparsely hairy.

### FLOWERS

Five to eight ray flowers with white petals; numerous yellow disc flowers; about .5 to 1 inch across each composite cluster of tiny flowers.

### FRUIT

A dry fruit (called an achene or more technically, a cypsela); flat-sided with two faint grooves; each has two barbs (bi-dent) that attach to fur or clothing to spread and lead to the poor reputation of this great, easy-to-grow plant.

### HABITAT AND DISTRIBUTION

The species is native to large parts of North and South America including most of the southeastern United States and a few other states outside this area. In Florida, it is found throughout the state in disturbed areas and roadsides.

### CULTIVATION

This plant grows easily from seeds in sunny locations. Seeds attach readily to clothing, and hikers have suggested planting your socks after a walk in the woods to get a patch started. Plants are seldom seen for sale in nurseries, although at least one cultivar has been offered for sale.

## *Chamaecrista fasciculata* – partridge pea



*Chamaecrista fasciculata*

Photo from Shutterstock

This plant was called *Cassia fasciculata*, *Cassia chamaecrista* and several other names before the current name was accepted. Older texts and a few plant nurseries might refer to this species as a *Cassia*.

### DESCRIPTION

This species is a member of the Leguminosae or Fabaceae, a plant family with three typical flower shapes. These forms include the sweet pea flower, the powderpuff or mimosa flower and the most “regular” flower as seen in the partridge pea. All have fruit that could be called legumes (familiar as edible beans and peas).

### GROWTH FORM

Erect, herbaceous annual, but persisting by self-seeding, usually no more than 3 feet tall, but sometimes taller, flowering from late spring through fall.

### LEAVES

Alternate, compound (made up of multiple, smaller leaflets), commonly 10 to 20 pairs of small, linear to oblong leaflets, with a nectar gland at the base of the petiole (leaf stalk), margins without teeth, somewhat sensitive to touch (leaflets closing over the rachis when touched).

### FLOWERS

Growing in the axils of the leaves, singly or in small clusters; each about 1 inch across, having five showy petals, yellow with a red splotch at the base of each one.

### FRUIT

A narrow legume to 2.5 inches long; as the bean dries, the sides split and spiral to release the seeds.

### HABITAT AND DISTRIBUTION

The species is native to most of the Midwest and the eastern half of the United States from Massachusetts to Florida on the East Coast and west to South Dakota and New Mexico. In Florida, it is found in almost every county along open roadsides and in sandhills, flatwoods, dunes and disturbed areas.

### CULTIVATION

This plant grows from seeds or nursery stock in most soils and full sun. Seeds germinate more easily if they are scarified and planted in warm, moist soil in early spring or late winter.

## *Conoclinium coelestinum* – blue mistflower



*Conoclinium coelestinum*

Photo by Scott Burton, FDACS-DPI

This plant species name was formerly *Eupatorium coelestinum* before the single genus was divided into several. In either form, the name suggests the celestial (*coelestinum* in Latin) blue color of the flowers. Plant nurseries might continue to use the older name.

### DESCRIPTION

Although *Conoclinium coelestinum* is a member of the Compositae, the blue mist flower has no ray florets, only tubular disc florets, but they are as attractive to bees as sunflowers with giant ray flowers are to us. *Ageratum houstonianum* (bluemink) has very similar flowers, but it is an annual (without a rhizome) found scattered in Central and South Florida counties.

### GROWTH FORM

Herbaceous perennial, usually no more than 1 foot tall, but sometimes to 3 feet, from a woody rhizome, blooming from summer through fall.

### LEAVES

Opposite, ovate to triangular leaf blades, both surfaces glabrous (not hairy) to sparsely hairy, margins serrate or sometimes slightly lobed toward the tip; fragrant when crushed.

### FLOWERS

No ray flowers; numerous disc flowers of blue or blue-violet, sometimes reddish purple.

### FRUIT

A dry fruit (called an achene or more technically, a cypsela); five ribbed; with a ring of tiny barbed bristles to help spread the seeds.

### HABITAT AND DISTRIBUTION

The species is native to large parts of North America including most of the eastern half of the United States from New York to Florida on the East Coast and west to Nebraska and Texas. In Florida, it is found throughout the state in open areas along roadsides, wet hammocks and pond margins.

### CULTIVATION

This plant grows from seeds or nursery stock and spreads easily (too easily for some gardens) by forming clumps growing from the underground stem, in moist soils and full sun.

## Coreopsis leavenworthii – Leavenworth's tickseed



*Coreopsis leavenworthii*

Photo from Shutterstock

We often find a botanical name helpful when it describes a plant, like *Cirsium horridulum*, suggesting the horribly prickly thistle or *Magnolia grandiflora*, recalling the platter-sized flowers of southern magnolias. This species is named for a botanist, another accepted naming convention, rather than suggesting a description of the plant or the location in which it was first found. Florida has 12 native species in this genus and honors all of them by naming the genus *Coreopsis* as the state wildflower.

### DESCRIPTION

*Coreopsis leavenworthii* is a member of the Compositae (or Asteraceae), a plant family characterized by having flower heads that are composites of many individual flowers. In this species, flower heads are composed of two distinct flower types: larger ray flowers circling small disc flowers.

### GROWTH FORM

Erect annual, usually no more than 3 feet tall, but sometimes to 5 feet, on a slender, hairless stem, blooming throughout much of the year.

### LEAVES

Opposite, with both simple and pinnately divided leaves, both surfaces glabrous (not hairy).

### FLOWERS

Ray flowers usually all yellow, but sometimes having a reddish or red-brown spot; numerous disc flowers of reddish brown or purple.

### FRUIT

A dry fruit (called an achene or more technically, a cypsela) with lateral wings and two slender, tapering scales (like awns).

### HABITAT AND DISTRIBUTION

The species is native to Florida and some authorities say Alabama as well. In Florida, it is found throughout the state in open flatwoods, ditches, wet disturbed areas and among mixed wildflowers planted along roadsides.

### CULTIVATION

This plant grows easily from seeds or nursery stock and is often included in mixed wildflower seed packages. Leavenworth's tickseed re-seeds from year to year after becoming established in moist soils and full sun.

## *Gaillardia pulchella* – firewheel, blanketflower



*Gaillardia pulchella*

Photo by Patti Anderson, FDACS-DPI

This species has been in the horticulture trade since John Bartram, the first native-born American botanist, sold it in his Philadelphia nursery. Numerous cultivars have been bred and hybridized to provide interest and variety to garden plantings. If you want to cultivate the native species, check seed packages and nursery tags carefully.

### DESCRIPTION

*Gaillardia pulchella* is a member of the Compositae (or Asteraceae), a plant family characterized by having flower heads that are composites of many individual flowers. In this species, flower heads are composed of two distinct flower types: larger ray flowers circling small disc flowers.

### GROWTH FORM

Erect annual, sometimes surviving more than one year, usually not much more than 1 foot tall on a slender stem with coarse, spreading hairs, blooming throughout much of the year.

### LEAVES

Alternate, linear to spoon-shaped with entire, toothed or lobed margins, both surfaces hairy.

### FLOWERS

Solitary, not clustered; ray flowers, 8-14 (but rarely none), large (2-3 inches across), usually with reddish bases and yellow tips, but colors are variable and sometimes a single color; numerous disc flowers (40 to over 100) of yellow, reddish brown or purple and frequently two colors.

### FRUIT

A dry fruit (called an achene or more technically, a cypsela) with four angles, dense hairs and seven or eight scales with bristled tips.

### HABITAT AND DISTRIBUTION

The species is native to North America and has been widely cultivated. In Florida, it is found throughout the state, especially in coastal counties, in open dry sites, roadsides and disturbed areas.

### CULTIVATION

This plant grows easily from seeds or nursery stock and can re-seed after becoming established in dry soils and full sun. Several cultivars are available.

## *Helianthus debilis* – dune sunflower



*Helianthus debilis*

Photo by Patti Anderson, FDACS-DPI

The dune sunflower, as the common name suggests, is found along dunes as well as in beach or coastal roadside plantings. Three subspecies are known in Florida, and all of them can be found in nurseries. Because all three subspecies are cultivated, the exact range of each is now difficult to determine.

### **DESCRIPTION**

*Helianthus debilis* is another member of the Compositae (or Asteraceae), a plant family characterized by having flower heads that are composites of many individual flowers. In this species, flower heads are composed of two distinct flower types: larger ray flowers circling small disc flowers.

### **GROWTH FORM**

Erect or reclining, annual or perennial, stem up to 6 feet long, hairless or hairy, blooming in summer or throughout much of the year.

### **LEAVES**

Alternate, simple, triangular to ovate, with serrate or slightly serrate margins, both surfaces glabrous (not hairy) or the lower surface with hairs.

### **FLOWERS**

Solitary or two to three in a cluster, large (2-3 inches across); ray and disc flowers, yellow, numerous; disc flowers with reddish lobes.

### **FRUIT**

A dry fruit (called an achene or more technically, a cypsela) in a slightly compressed pyramid shape with two lance-shaped scales.

### **HABITAT AND DISTRIBUTION**

The species has two subspecies found growing in nature only in Florida, one on the east coast, one on the west coast, and the third subspecies (called cucumberleaf dune sunflower) has leaves like those of cucumbers and is found growing from Maine to Florida and westward to Michigan and Texas.

### **CULTIVATION**

This plant grows easily from seeds or nursery stock and re-seeds from year to year after becoming established in well-drained soils and full sun. Plants also reproduce by runners. Too much water can be a problem, but it tolerates salt spray and drought, typical of Florida beaches and dunes.

# *Monarda punctata* – dotted horsement, spotted bee balm



*Monarda punctata*

Photo by Shirley Denton

Both common names of this plant refer to the purplish spots on the petals, as does *punctata* in the species name. Although the flowers are interesting at close range, for the botanical observer driving 30 miles per hour, the colorful pink to lavender leaf-like bracts surrounding the flowers are more noteworthy.

## DESCRIPTION

*Monarda* is a genus in the Labiate/Lamiaceae, a plant family characterized by having opposite (or sometimes whorled) leaves, square stems and bilaterally symmetrical flowers.

## GROWTH FORM

Erect, herbaceous, short-lived perennial, 1 to 3 or 4 feet tall, often forming thickets; blooming summer through fall.

## LEAVES

Opposite, hairy on both upper and lower surfaces, with toothed margins; very aromatic when crushed.

## FLOWERS

Spikes of small, yellowish to white, two-lipped, tubular flowers with purple or maroon spots, growing in whorls and surrounded by showy pink to lavender (or yellow) bracts.

## FRUIT

Dry, nut-like fruit (schizocarp) divided into four nutlets, each containing one seed with a hard, outer wall.

## HABITAT AND DISTRIBUTION

*Monarda punctata* is native to Ontario and Quebec in Canada and most of the eastern half of the United States from Vermont and Minnesota to Florida and westward as far as New Mexico and possibly California. In Florida, it is found in almost every county in flatwoods and dry, disturbed areas including roadsides.

## CULTIVATION

This plant is easy to grow from seeds and self-seeds readily in well-drained soil. It can survive in a range of conditions from full sun to part shade.

## *Penstemon multiflorus* – manyflower beardtongue



*Penstemon multiflorus*

Photo by Alex de la Paz, FDACS-DPI

*Penstemon multiflorus* has a name that comes from two languages: *Penstemon* comes from the Greek words for five (*penta*) and stamen (*stamo*) while *multiflorus* combines the Latin words for many (*multi*) and flowers (*flora*). The common name, beardtongue, suggests the long hairs along a filament that protrudes like a tongue from the tubular flowers.

### DESCRIPTION

The white corolla (the collection of petals) distinguishes manyflower beardtongue from the other two members of the genus native to Florida. Those have bluish or reddish-purple flowers. In fact, some people call this species white, rather than manyflower beardtongue, although just to make things complicated, the petals can have a pale pinkish-lavender blush.

### GROWTH FORM

Herbaceous perennial, sometimes freezing to the ground and regrowing from roots in North Florida; reddish stems to 3 feet tall with showy, spring and summer flowers growing above the leaves.

### LEAVES

Basal rosettes, followed by opposite leaves along the stem, without petioles (sessile); lance-shaped or oblong blades, sometimes slightly toothed.

### FLOWERS

Whorled clusters of nodding, bell-shaped tubular white flowers; each flower with five petal lobes and five stamens, one of which is sterile.

### FRUIT

Small, inconspicuous capsules.

### HABITAT AND DISTRIBUTION

The species is native to Florida and parts of Georgia and Alabama. It is found throughout the state in sandhills, flatwoods and disturbed areas.

### CULTIVATION

This plant grows from seeds in average, dry to slightly moist, well-drained soils in full sun. These plants will self-seed or spread from offshoots of the basal rosette.

## *Pityopsis graminifolia* – narrowleaf silkgrass



*Pityopsis graminifolia*

Photo by Patti Anderson, FDACS-DPI

Narrowleaf silkgrass has leaves that shine like silk because of the silvery hairs that cover both upper and lower surfaces of the narrow, grass-like leaves. Some botanists recognize up to five different varieties in Florida, but the species is treated as a single, variable species here.

### DESCRIPTION

*Pityopsis graminifolia* is another member of the Compositae (or Asteraceae), a plant family characterized by having flower heads that are composites of many individual flowers. In this species, flower heads are composed of two distinct flower types: larger ray flowers circling small disc flowers.

### GROWTH FORM

Erect perennial, 30 inches tall, with silver hairs on the stem, blooming in late summer through fall.

### LEAVES

Alternate, simple, linear to lance-shaped, without teeth on the margins, both surfaces covered with silky, silvery hairs.

### FLOWERS

Solitary, or two to three in a cluster, .5 to 1 inch across; ray flowers, yellow, 9-13; disc flowers, yellow, numerous (30–50).

### FRUIT

A dry fruit (called an achene or more technically, a cypsela) somewhat spindle-shaped with 8-10 ribs and an outer band of linear to triangular scales and one or more inner bands of minutely barbed bristles.

### HABITAT AND DISTRIBUTION

This species is native to Mexico and the southern United States, from Delaware and Maryland to Texas, and a few counties in southern Ohio. In Florida, it is found in almost every county in scrubs and sandhills.

### CULTIVATION

This plant grows easily from seeds or nursery stock and re-seeds from year to year after becoming established in well-drained soils and full sun.

## Rudbeckia hirta – blackeyed Susan



*Rudbeckia hirta*

Photo by Patti Anderson, FDACS-DPI

Blackeyed Susan is a wide-spread, native wildflower often found in seed mixes used by highway beautification projects and home gardeners alike. This easily grown species can behave as an annual, biennial or perennial depending on geography and growing conditions. This plant was used as a traditional Native American medicinal herb.

### DESCRIPTION

*Rudbeckia hirta* is another member of the Compositae (or Asteraceae), a plant family characterized by having flower heads that are composites of many individual flowers. In this species, flower heads are composed of two distinct flower types: larger ray flowers circling small disc flowers.

### GROWTH FORM

Erect perennial, 2-3 feet tall, with hairy stems, blooming in summer through fall.

### LEAVES

Alternate, simple, elliptic, lance-shaped or ovate, usually without teeth on the margins, but sometimes irregularly toothed; both surfaces covered with stiff hairs.

### FLOWERS

Solitary, or two to five in a cluster, .5 to 1 inch across; 8-16 yellow ray flowers, usually with a basal red colored splotch; disc flowers, brownish purple, numerous (250-500).

### FRUIT

A dry fruit (called an achene or more technically, a cypsela) four-angled, without scales or bristles.

### HABITAT AND DISTRIBUTION

This species is native to most of North America. In Florida, it is found in almost every county in flatwoods, sandhills and roadsides.

### CULTIVATION

This plant grows easily from seeds and re-seeds from year to year after becoming established in most soil types and sunny or shady locations.

## *Sabal palmetto* – cabbage palm



*Sabal palmetto*

Photo by Kenneth Langdon, FDACS-DPI

*Sabal palmetto*, the state tree of Florida and South Carolina, has been used as food for humans as well as bees. The heart of palm, the terminal bud at the top of the stem or trunk, is edible, but removing the bud kills the palm—better to leave it for the bees.

### DESCRIPTION

*Sabal palmetto* in the Palmae/Arecaceae, a plant family characterized by plants in the form of trees, shrubs or climbing vines with woody stems made of hardened fibers, rather than the growth rings seen in true wood. The leaves of the family are usually pinnately compound (feather palms) or palmately divided (fan palms).

### GROWTH FORM

Erect, perennial, 20–60 (or more) feet tall, forming thick stands in coastal swamps or clumps in pine forests; flowering in spring and summer.

### LEAVES

Fan shaped, 3–5 feet across, with a deep, arrow-shaped costa (extending from the leaf stem), causing the leaf to curve; leaf segment margins split into thin fibers that have been used to make rope and twine; if not pruned, the canopy forms a giant cabbage-shaped sphere.

### FLOWERS

Cream to yellowish white, fragrant flowers are small (about .25 inch across) but are held in large, showy arching or drooping clusters that extend beyond the canopy of leaves.

### FRUIT

Small, black berries, to .5 inch in diameter (about the size of a medium blueberry), each with one, hard, brown seed.

### HABITAT AND DISTRIBUTION

*Sabal palmetto* is native from the southeastern tip of coastal North Carolina southward to Florida as well as Cuba and the Bahamas. In Florida, it is commonly found in almost every county in savannas, hammocks and swamps and is often planted along roadsides and in residential and commercial landscapes.

### CULTIVATION

The palm is usually sold as an adult, harvested from pastures or woody areas. Cabbage palms re-seed aggressively and thrive in sun or part shade after becoming established. Irrigation is needed for recent transplants.

## *Salvia coccinea* – tropical sage



*Salvia coccinea*

Photo by Patti Anderson, FDACS-DPI

The tropical sage is also called blood sage or scarlet sage, a reference to the scarlet red flowers, also indicated by the Latin name, *coccinea*, meaning either “scarlet colored” or “dyed scarlet,” referring to the flower color.

### DESCRIPTION

*Salvia coccinea* is member of the Labiate (or Lamiaceae), a plant family characterized by having opposite (or sometimes whorled) leaves, square stems and bilaterally symmetrical flowers.

### GROWTH FORM

Erect perennial, usually 2–3 feet tall, with hairy stems; blooming nearly all year (warm months in North Florida).

### LEAVES

Opposite, triangular to ovate in shape, with rounded teeth on the margin and hairy on both upper and lower surfaces of the leaf blade; pungent aroma when crushed.

### FLOWERS

Clustered in showy spikes of widely-spaced whorls; scarlet, tubular, two-lipped flowers with the lower lip twice as long as the upper.

### FRUIT

Dry, nut-like fruit (schizocarp) divided into four nutlets, each containing one seed with a hard, outer wall.

### HABITAT AND DISTRIBUTION

Tropical sage is native to tropical America and the southeastern United States from South Carolina to Florida and westward to Texas. In Florida, it is found in almost every county in hammocks and disturbed sites.

### CULTIVATION

This plant grows easily from seeds or nursery stock and re-seeds from year to year after becoming established. It grows in full sun or part shade in well-drained soil and has the potential to spread widely over time.

## *Solidago odora* – anise-scented goldenrod

*Solidago odora*

Photo by Patti Anderson, FDACS-DPI

Goldenrods in Florida include 21 native wildflower species and are commonly found in forests, along roadsides and even cultivated as ornamentals. Among the most abundant of the goldenrod species is *Solidago odora*. Both the common name and specific epithet reflect the odor of anise or licorice released when this plant's leaves are crushed. Many other *Solidago* species are good for bees, too!

### DESCRIPTION

*Solidago odora* is one more member of the Compositae (or Asteraceae), a plant family characterized by having flower heads that are composites of many individual flowers. In this species, flower heads are composed of two distinct flower types: small ray flowers circling even smaller, tubular disc flowers.

### GROWTH FORM

Erect perennial, 3 feet tall, blooming in late summer through fall; in northern Florida, the stem has hairs growing in vertical lines, while farther south, another variety has hairs covering the stem uniformly.

### LEAVES

Alternate, simple, ovate to lance-shaped, attached directly to the stem (sessile), usually without teeth on the margins, and dotted with translucent glands.

### FLOWERS

One-quarter inch wide heads held in pyramid-shaped clusters with short arching branches; 3–6 tiny, yellow ray flowers and 3–5 yellow, tubular disc flowers.

### FRUIT

A dry fruit (called an achene or more technically, a cypsela) obconic (cone-shaped, but attached at the narrow end), with 8–10 ribs, either with sharp, straight hairs or hairless; crowned with short scales surrounding two inner circles of barbed bristles (magnification usually needed to see barbs).

### HABITAT AND DISTRIBUTION

This species is native to the eastern United States from Vermont and New Hampshire southward to Florida and westward to Missouri and Texas. In Florida, two varieties may be found, and together they grow throughout the state in sandhills; dry, open forests; scrubby flatwoods and roadsides.

### CULTIVATION

This plant grows easily from seeds and re-seeds from year to year after becoming established in well-drained soils and sunny or partly shady locations. This goldenrod does not form runners nor spread as quickly as some other *Solidago* species.

## *Viburnum obovatum* – Walter's viburnum



*Viburnum obovatum*

Photo by Patti Anderson, FDACS-DPI

Romans gave the name *Viburnum* to a local plant in this genus, meaning the original common name is the current Latin name, because the Romans spoke Latin. The name *obovatum* reflects the shape of the leaf: obovate describes leaves with an egg-shaped outline, attached at the narrower end, the inverse (*ob-*) of ovate (attached at the broad end).

### DESCRIPTION

*Viburnum* is genus in the Adoxaceae, a plant family characterized by having opposite leaves with teeth, small flowers, usually with five petals in branched, flat-topped or round-topped clusters. Previously, this genus was thought to belong to the honeysuckle family, Caprifoliaceae.

### GROWTH FORM

Erect perennial in Florida; deciduous in cooler areas within its range; usually a large shrub to 6 feet tall and wide, but sometimes a small tree to 20 feet tall, spreading by root suckers; blooming in spring.

### LEAVES

Opposite, spatulate (spatula shaped) or obovate in shape, with small, obscure teeth on the margins.

### FLOWERS

Small, white, tubular flowers with five petals growing in showy, domed or flat-topped clusters.

### FRUIT

Single-seeded drupe turning from green to red to black as it ripens.

### HABITAT AND DISTRIBUTION

*Viburnum obovatum* is native to the southeastern United States from South Carolina to Florida and westward to Alabama. In Florida, it is found in almost every county in floodplain forests, coastal hammocks and riverbanks.

### CULTIVATION

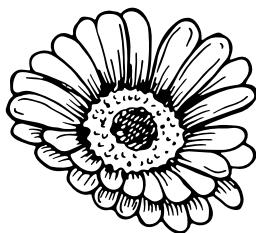
This plant grows easily from cuttings or nursery stock and spreads by suckers after becoming established. Seeds require scarification before planting. This species grows in full sun to shade in moist to wet, sandy or clay, fertile soils.

## Brief List of Native Plants Recommended for Beekeepers

Genus Species	Common name	Family	USDA zones	Flowering season	Wet/dry, sun/shade	Former name
<i>Acer rubrum</i>	red maple	Sapindaceae	8-10b	Jan-Feb	Wet, sun/shade	
<i>Amorpha fruticosa</i>	bastard false indigo	Fabaceae/Leguminosae	8-10a	spring-summer	Dry/wet, sun/shade	
<i>Asclepias perennis</i>	swamp milkweed	Apocynaceae	8-10b	spring-fall	Wet, sun/shade	
<i>Asclepias tuberosa</i>	butterfly milkweed	Apocynaceae	8-10b	spring-fall	Dry, sun	
<i>Bidens alba</i>	Spanish needles	Asteraceae/Compositae	7a-11	continuous without frost	Dry/wet, sun/shade	
<i>Callicarpa americana</i>	American beautyberry	Lamiaceae/Labiatae	8a-11a	spring-summer	Dry/wet, sun/shade	
<i>Cephaelanthus occidentalis</i>	common buttonbush	Rubiaceae	8-11	spring-fall	Wet, shade	
<i>Chamaecrista fasciculata</i>	partridge pea	Fabaceae/Leguminosae	8a-10b	spring-summer	Dry/sun	
<i>Cirsium spp.</i>	thistle	Asteraceae/Compositae	8-10b	summer-fall	Dry/wet, sun	
<i>Conoclinium coelestinum</i>	blue mist	Asteraceae/Compositae	8-11	summer-fall	Dry/wet, sun	
<i>Coreopsis leavenworthii</i>	Leavenworth's tickseed	Asteraceae/Compositae	8-11	almost all year	Wet, sun	
<i>Eryngium yuccifolium</i>	button rattlesnake master	Apiaceae	8-10a	spring-fall	Dry/wet, sun	
<i>Euthamia caroliniana</i>	flattop goldenrod	Asteraceae/Compositae	8-10b	late summer-early winter	Dry, sun	
<i>Gaillardia pulchella</i>	firewheel	Asteraceae/Compositae	8-11	continuous without frost	Dry, sun	
<i>Geobalanus oblongifolius</i>	gopher apple	Chrysobalanaceae	8a-11a	spring-summer	Dry, sun	<i>Licania michauxii</i>
<i>Helenium spp.</i>	bitterweed; sneezeweed	Asteraceae/Compositae	8-10b	summer	Wet, sun/shade	
<i>Helianthus spp.</i>	example: dune sunflower	Asteraceae/Compositae	8-11	summer-fall	Dry/wet, sun/shade	
<i>Hypericum tenuifolium</i>	Atlantic or scrub St.John's wort	Clusiaceae/Guttiferae	8a-10b	spring-summer	Dry/moist, sun	<i>Hypericum reductum</i>
<i>Ilex glabra</i>	gallberry	Aquifoliaceae	8-10b	spring	Wet, sun/shade	
<i>Ilex vomitoria</i>	yaupon holly	Aquifoliaceae	8-10a	spring	Wet, sun/shade	
<i>Ilex cassine</i>	dahoon holly	Aquifoliaceae	8a-10b	spring	Wet, sun/shade	
<i>Liatris spicata</i>	dense gayfeather	Asteraceae/Compositae	8-10b	summer-fall	Dry/wet, sun	
<i>Lonicera sempervirens</i>	coral honeysuckle	Caprifoliaceae	8-10b	late spring-summer	Wet, sun/shade	
<i>Lyonia ferruginea</i>	rusty staggerbush	Ericaceae	8-11	spring	Dry, sun	
<i>Magnolia virginiana</i>	sweetbay	Magnoliaceae	8-10b	spring-summer	Wet, shade	
<i>Mimosa strigillosa</i>	sunshine mimosa	Fabaceae/Leguminosae	8a-10b	spring-summer	Dry/moist, sun	
<i>Monarda punctata</i>	dotted horsemint	Lamiaceae/Labiatae	8-10a	early summer-fall	Dry, sun	
<i>Oxalis corniculata</i>	yellow wood sorrel	Oxalidaceae	8-11	continuous	Dry/wet, sun/shade	
<i>Penstemon multiflorus</i>	manyflower beardtongue	Plantaginaceae	8-10b	early spring	Dry, sun/shade	
<i>Phyla nodiflora</i>	frogfruit; matchhead	Verbenaceae	8a-11a	continuous	Wet, sun/shade	<i>Lippia nodiflora</i>
<i>Pinus clausa</i>	sand pine	Pinaceae	8-10b	January	Dry, sun/shade	
<i>Pityopsis graminifolia</i>	silkgrass	Asteraceae/Compositae	8-11	fall-early winter	Dry, sun	
<i>Polygonum spp.</i>	knotweed; jointweed	Polygonaceae	8-11	summer-fall	Dry/wet, sun/shade	
<i>Rudbeckia hirta</i>	blackeyed Susan	Asteraceae/Compositae	8-10b	summer-fall	Dry/wet, sun	
<i>Sabal palmetto</i>	cabbage palm	Arecaceae/Palmae	8-11	summer	Wet, sun/shade	
<i>Salvia coccinea</i>	tropical sage	Lamiaceae/Labiatae	8-11	spring-fall	Dry/wet, sun/shade	
<i>Sambucus nigra subsp. canadensis</i>	elderberry	Adoxaceae	8-10b	continuous, peak spring/fall	Wet, sun/shade	<i>Sambucus canadensis</i>
<i>Serenoa repens</i>	saw palmetto	Arecaceae/Palmae	8-11	summer	Dry/wet, sun	
<i>Silphium asteriscus</i>	starry rosinweed	Asteraceae/Compositae	8b-11	summer	Dry/wet, sun	
<i>Solidago odora</i>	anise-scented goldenrod	Asteraceae/Compositae	8b-11	summer-fall	Dry, sun	var. <i>chapmanii</i> and var. <i>odora</i>
<i>Solidago sempervirens</i>	seaside goldenrod	Asteraceae/Compositae	8-11	fall	Wet, sun	
<i>Spermacoce verticillata</i>	false buttonweed	Rubiaceae	8-11	continuous without frost	Dry/wet, sun/shade	
<i>Symphyotrichum spp.</i>	example: climbing aster	Asteraceae/Compositae	8-11	fall	Dry/wet, sun/shade	<i>Aster</i> spp.
<i>Tradescantia ohiensis</i>	bluejacket	Commelinaceae	8-10b	spring-fall	Dry, sun/shade	
<i>Verbesina virginica</i>	frostweed	Asteraceae/Compositae	8-10b	summer-late fall	Dry/wet, shade	
<i>Vernonia gigantea</i>	giant ironweed	Asteraceae/Compositae	8-10b	summer-fall	Wet, sun/shade	
<i>Viburnum obovatum</i>	Walter's viburnum	Adoxaceae	8-10a	winter-spring	Wet, sun/shade	

spp. = multiple species

Scientific Name	Common Name	Page Number
<i>Asclepias tuberosa</i>	butterfly milkweed	1
<i>Bidens alba</i>	Spanish needles	2
<i>Chamaecrista fasciculata</i>	partridge pea	3
<i>Conoclinium coelestinum</i>	blue mist	4
<i>Coreopsis leavenworthii</i>	Leavenworth's tickseed	5
<i>Gaillardia pulchella</i>	firewheel	6
<i>Helianthus debilis</i>	dune sunflower	7
<i>Monarda punctata</i>	spotted bee balm	8
<i>Penstemon multiflorus</i>	manyflower beardtongue	9
<i>Pityopsis graminifolia</i>	silkgrass	10
<i>Rudbeckia hirta</i>	blackeyed Susan	11
<i>Sabal palmetto</i>	cabbage palm	12
<i>Salvia coccinea</i>	tropical sage	13
<i>Solidago odora</i>	anise-scented goldenrod	14
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#### ACKNOWLEDGEMENTS

Our thanks to Dr. John McVay, Dr. Paul Skelley and Dr. Greg Hodges for their careful reading of the manuscript and apt suggestions for its improvement; Lisa Reynes, for her comments and suggestions for additions from the beekeeper's perspective; Scott Burton, for his graphic wizardry and the entire DPI Public Information and Outreach team for their support and expertise. We also thank the Bureau of Plant and Apiary Inspection for their cooperation and support.

*Verbesina virginica*

Photo by Patti Anderson, FDACS-DPI