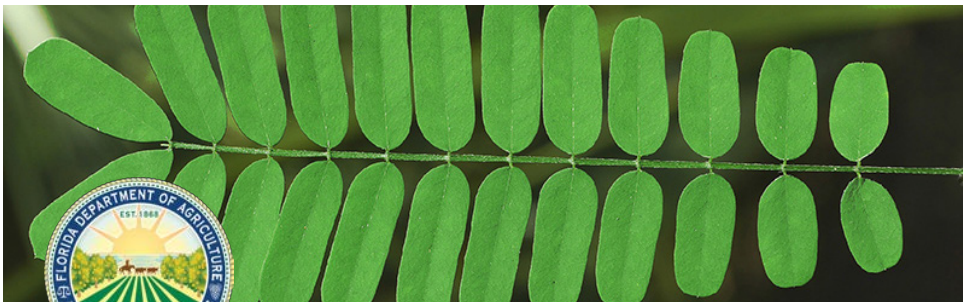




# Terrestrial Noxious Weeds of Florida FIELD GUIDE



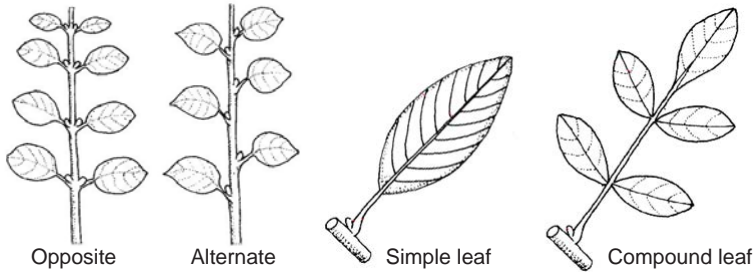
Florida Department of Agriculture and Consumer Services

# Noxious Weed Species

SCIENTIFIC NAME	COMMON NAME	CATEGORY
<i>Abrus precatorius</i>	rosary pea	Vines
<i>Alternanthera sessilis</i>	sessile joyweed	Herbs
<i>Ardisia crenata</i>	coral ardisia	Woody
<i>Ardisia elliptica</i>	shoebutton ardisia	Woody
<i>Casuarina</i> spp.	Australian pine	Woody
<i>Colubrina asiatica</i>	latherleaf	Woody
<i>Commelina benghalensis</i>	tropical spiderwort	Herbs
<i>Cupaniopsis anacardioides</i>	carrotwood	Woody
<i>Cuscuta</i> species	dodder	Vines
<i>Dioscorea alata</i>	white yam	Vines
<i>Dioscorea bulbifera</i>	air potato	Vines
<i>Dolichandra unguis-cati</i>	cat's claw vine	Vines
<i>Imperata cylindrica</i>	cogongrass	Grasses
<i>Ipomoea triloba</i>	little bell morning glory	Vines
<i>Leucaena leucocephala</i>	white lead tree	Woody
<i>Ligustrum sinense</i>	Chinese privet	Woody
<i>Lonicera japonica</i>	Japanese honeysuckle	Vines
<i>Lygodium japonicum</i>	Japanese climbing fern	Ferns
<i>Lygodium microphyllum</i>	small-leaved climbing fern	Ferns
<i>Melaleuca quinquenervia</i>	melaleuca	Woody
<i>Mikania micrantha</i>	climbing hempweed	Vines
<i>Mimosa pigra</i>	catclaw mimosa	Woody
<i>Neyraudia reynaudiana</i>	Burma reed	Grasses
<i>Paederia</i> spp.	skunkvine and sewervine	Vines
<i>Pennisetum pedicellatum</i>	Kyasuma grass	Grasses
<i>Pennisetum polystachyon</i>	missiongrass, thin napiergrass	Grasses
<i>Pueraria montana</i>	kudzu	Vines
<i>Rhodomyrtus tomentosa</i>	downy myrtle	Woody
<i>Rottboellia cochinchinensis</i>	itchgrass	Grasses
<i>Saccharum spontaneum</i>	wild sugarcane	Grasses
<i>Sapium sebiferum</i>	Chinese tallow tree	Woody
<i>Scaevola taccada</i>	beach naupaka	Woody
<i>Schinus terebinthifolius</i>	Brazilian pepper	Woody
<i>Setaria pumila</i>	yellow bristlegrass	Grasses
<i>Solanum tampicense</i>	wetland nightshade	Woody
<i>Solanum torvum</i>	turkeyberry	Woody
<i>Solanum viarum</i>	tropical soda apple	Woody
<i>Tridax procumbens</i>	coat buttons	Herbs

# How to Find Your Noxious Weed

- Decide which category the plant in question best fits: fern, grass, herbaceous, vine or woody plant.
- Note how the leaves are arranged along the twig: opposite, alternate or maybe no leaves.
- Observe the leaf structure: simple or compound.
- Then look through the species descriptions in the category for your plant.



This guide includes plant species regulated as noxious weeds in Florida and known to grow here. Although the descriptions refer mainly to the adult plant, some information about seedlings is also provided. You can confirm a species name by sending a sample to DPI in Gainesville.

Note: This guide does NOT include aquatic weeds.

CATEGORY	LEAF ARRANGEMENT	LEAF STRUCTURE	COMMON NAME	SPECIES
<b>FERNS</b> non-flowering plants, usually with finely divided leaves			Japanese climbing fern	<i>Lygodium japonicum</i>
			small-leaved climbing fern	<i>Lygodium microphyllum</i>
<b>GRASSES</b> herbaceous plants with specialized leaves and flowers			Burma reed	<i>Neyraudia reynaudiana</i>
			cogongrass	<i>Imperata cylindrica</i>
			itchgrass	<i>Rottboellia cochinchinensis</i>
			Kyasuma grass	<i>Pennisetum pedicellatum</i>
			missiongrass, thin napiergrass	<i>Pennisetum polystachyon</i>
			wild sugarcane	<i>Saccharum spontaneum</i>
<b>HERBS</b> tender, not woody plants	alternate	simple	sessile joyweed	<i>Alternanthera sessilis</i>
	alternate	simple	tropical spiderwort	<i>Commelina benghalensis</i>
	opposite	simple	coat buttons	<i>Tridax procumbens</i>

CATEGORY	LEAF ARRANGEMENT	LEAF STRUCTURE	COMMON NAME	SPECIES
<b>VINES</b> climbing with tendrils or twining stems or scrambling over other plants	alternate	compound; 3 leaflets	kudzu	<i>Pueraria montana</i>
	alternate	compound; many leaflets	rosary pea	<i>Abrus precatorius</i>
	alternate	simple	little bell morning glory	<i>Ipomoea triloba</i>
	alternate	simple, heart shaped	air potato	<i>Dioscorea bulbifera</i>
	none; orange stems		dodder	<i>Cuscuta</i> spp.
	opposite	compound; 2 leaflets	cat's claw vine	<i>Dolichandra unguis-cati</i>
	opposite	simple	climbing hempweed	<i>Mikania micrantha</i>
	opposite	simple	Japanese honeysuckle	<i>Lonicera japonica</i>
	opposite	simple	skunkvine and/or sewervine	<i>Paederia</i> spp.
	opposite	simple, heart shaped	winged yam	<i>Dioscorea alata</i>
<b>WOODY</b> trees or shrubs	alternate	compound; 3-7 leaflets	Brazilian pepper	<i>Schinus terebinthifolius</i>
	alternate	compound; usually 5-7 leaflets	carrotwood	<i>Cupaniopsis anacardioides</i>
	alternate	compound; many leaflets	catclaw mimosa	<i>Mimosa pigra</i>
	alternate	compound; many leaflets	white lead tree	<i>Leucaena leucocephala</i>
	alternate	simple	beach naupaka	<i>Scaevola taccada</i>
	alternate	simple	Chinese tallow tree	<i>Sapium sebiferum</i>
	alternate	simple	coral ardisia	<i>Ardisia crenata</i>
	alternate	simple	latherleaf	<i>Colubrina asiatica</i>
	alternate	simple	melaleuca	<i>Melaleuca quinquenervia</i>
	alternate	simple	shoebuttan ardisia	<i>Ardisia elliptica</i>
	alternate	simple	tropical soda apple	<i>Solanum viarum</i>
	alternate	simple	turkeyberry	<i>Solanum torvum</i>
	alternate	simple	wetland nightshade	<i>Solanum tampicense</i>
	needle-like		Australian pine	<i>Casuarina</i> spp.
	opposite	simple	Chinese privet	<i>Ligustrum sinense</i>
opposite	simple	downy rose-myrtle	<i>Rhodomyrtus tomentosa</i>	

# *Lygodium japonicum* - Japanese climbing fern

This twining fern grows in dense clumps from thin, profusely branching rhizomes and from abundant, light weight, windborne spores. Japanese climbing fern has escaped cultivation after being originally introduced as an ornamental and is known to contaminate pine straw harvested from infested pine plantations. It is now classified as a noxious weed by Alabama as well as Florida.

FLEPPC-Cat. I invasive

**HABITAT**

usually found in disturbed roadsides, ditches and pine plantations, but increasingly in natural areas such as pine flatwoods and wetlands

**GROWTH FORM**

vine-like, twining fern with matted, above or below ground rhizome; above ground parts freezing in winter, but resprouting in spring

**LEAVES**

fronds (the leaves of ferns) grow to 90 feet long with a slender, winding and twining, tan rachis; sterile pinnae (major segments of the leaf) triangular in shape, bipinnately compound; pale hairs on pinnae and rachis

**FLOWERS**

no flowers; fertile pinnae on the same fronds as sterile pinnae; slender, fingerlike lobes of the pinnules (divisions of the pinnae)

**FRUIT**

no fruit; spores under curled lobes of pinnules

**SEEDLINGS**

sterile pinnae, similar to adult

## IDENTIFICATION

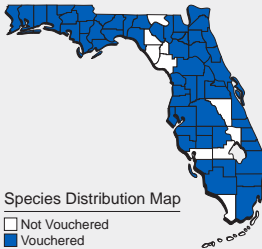
dense stands of tangled, vine-like, climbing ferns with bipinnate fronds

hairy rachis and pinnae

pinnules farthest from rachis are elongated

lacey, dissected fronds distinguish it from old-world climbing fern (*Lygodium microphyllum*)

## DISTRIBUTION



This species is native from eastern and southeastern Asia through Indonesia to northern Australia and is occasionally weedy in the tropical parts of this range. It is apparently absent from South America and Africa. In the United States, it has naturalized throughout the southeastern coastal states from North Carolina to Texas and in Arkansas. It is also reported from Hawaii and Puerto Rico. This climbing fern is rapidly expanding its range in Florida. While it is still most common in the panhandle and the northern peninsula, it has been collected throughout the state.

*Lygodium japonicum* - Japanese climbing fern

James H. Miller & Ted Bodner, Southern Weed Science Society



growth form

Chuck Bergeron, University of Georgia



habitat



fertile frond

Chris Evans, University of Illinois

James Tear



sterile frond



new plant

James H. Miller, USDA Forest Service

## *Lygodium microphyllum* – small-leaved climbing fern

This twining fern grows in dense clumps from thin, profusely branching rhizomes and from abundant, light weight, windborne spores. This species has escaped from cultivation and covers native vegetation, including trees, and can serve as a ladder for fire to climb into the forest canopy.

**FEDERAL NOXIOUS WEED**

FLEPPC-Cat. I invasive



### HABITAT

usually found wet areas, such as flatwoods, moist hammocks, swamps and floodplain forests, as well as abandoned fields, drainage ditches and other disturbed sites



### GROWTH FORM

twining, vine-like fern growing from rhizome; slender, winding, wiry rachis with petiolelike stalks that attach to each pinnule (leaflet), remaining as a stub when the pinnule falls off



### LEAVES

fronds (the leaves of ferns) grow to 100 feet long; sterile pinnae (major segments of the leaf) roughly triangular or somewhat heart-shaped, once compound and not lobed



### FLOWERS

no flowers; fertile pinnae on the same fronds as sterile pinnae; fringe along the leaflet margins created by rolled leaf tissue that covers the sporangia



### FRUIT

no fruit; windborne spores under rolled edges of pinnae, viable up to four years



### SEEDLINGS

sterile pinnae, similar to adultlobes; petioles may be purple-tinged or green

## IDENTIFICATION

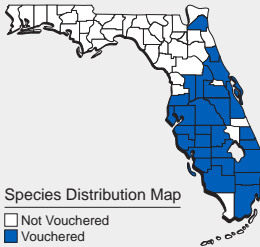
dense stands of tangled, vine-like, climbing ferns with pinnate fronds

nearly glabrous rachis and pinnae

rachis with short petiolelike stalks or stubs remaining after pinnules fall

pinnae somewhat heart-shaped, once compound and not lobed, distinguish it from lacy, dissected fronds of Japanese climbing fern (*Lygodium japonicum*)

## DISTRIBUTION



Old World climbing fern is native through much of the tropics, including tropical Africa, Asia, Australia and Pacific islands. In Florida, this fern is found throughout most of the peninsula, and a separate population has been documented in Duval County.

*Lygodium microphyllum* – small-leaved climbing fern

Amy Ferriter, State of Idaho



young plants

Jim Tear



habitat



sterile and fertile pinnae

Peggy Greb, USDA Agricultural Research Service

Dennis Girard



sterile pinnae



fertile pinna







Amy Ferriter, State of Idaho



# *Neyraudia reynaudiana* - Burma reed

In 1915, Burma reed was introduced to the Chapman Field USDA Subtropical Horticulture Research Station as a potential erosion control and ornamental. By 1993, it had invaded nearly 75% of pine rocklands in Miami-Dade County outside of Everglades National Park. This grass forms large stands like *Phragmites berlandieri* (common reed); however, *Neyraudia* lacks the ring of hairs around the stem just below the inflorescence that helps identify *Phragmites*.

FLEPPC-Cat. I invasive

-  **HABITAT**  
disturbed areas, swamps, forest edges and pine flatwoods; drought and flood tolerant
-  **GROWTH FORM**  
robust, perennial grass up to 15 feet tall, growing in dense clump spread by fragmented rhizomes; culms (stems), often branched, approximately ½ inch wide
-  **LEAVES**  
leaf blade, up to 40 inches long and 1 inch wide above, glabrous (hairless) on the undersides; with auricles (small earlike projections) at its base; ligule (found where the blade meets the sheath) a cartilaginous ridge with a fringe of hairs about 1/10 inch long
-  **FLOWERS**  
plumelike, glistening, silky inflorescence up to 3 feet long, erect to nodding
-  **FRUIT**  
spikelets break apart to release the tiny seeds, 1/20 inch long
-  **SEEDLINGS**  
N/A

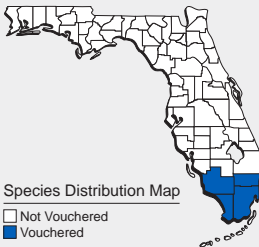
## IDENTIFICATION

dense clumps of tall grass, spreading by rhizomes

shimmery, silky flower plumes to 3 feet long, with hundreds of tiny flowers

ligule composed of a cartilaginous ridge with a fringe of very short hairs

## DISTRIBUTION



This species is native to warm temperate and tropical Asia from northeastern India and Nepal eastward to Taiwan and southward to the Indonesian island of Java. In its native range, Burma reed is found in a variety of habitats at altitudes from sea level to 6,500 feet. It is occasionally cultivated and has now become naturalized in the Bahamas, Mexico and Florida. *Neyraudia reynaudiana* has been vouchered with herbarium specimens from a few South Florida counties.

*Neyraudia reynaudiana* - Burma reed

Pat Howell



inflorescences

Dan Clark



flower



habitat

Tony Pemas

Ann Murray



ligule



leaf blades

Ann Murray

*Imperata cylindrica* - cogongrass

This is a fast-growing, perennial grass averaging 3 to 4 feet in height, but occasionally reaching 6 feet. Cogongrass is recognized as one of the most aggressive weeds in Florida, capable of rapidly choking out and displacing native plant species as well as infesting agricultural lands. The rhizomes (underground stems) it produces forms a dense mat and makes the species difficult to control. Removal of the aboveground portions of the plant is easily accomplished, but rapid regrowth occurs if the rhizomes are not killed or removed.

**FEDERAL NOXIOUS WEED**

FLEPPC-Cat. II invasive

**HABITAT**

fire-adapted natural areas such as pinelands, disturbed areas and agricultural lands

**GROWTH FORM**

rarely seen as a single plant, as it spreads by creeping, horizontal underground stems, forming dense patches over large areas

**LEAVES**

arise directly from underground stems; overlapping leaf sheaths give the base a rounded appearance; yellowish green (turning red-brown in cool weather), prominent white, off-center midrib; blades 1/2 to 1 inch across, with hairy bases and finely serrated margins

**FLOWERS**

flowers are borne in dense, fluffy, silvery white panicles; persistent, purplish-black stigmas among the white hairs

**FRUIT**

fluffy, plumose seedheads 2 to 8 inches in length; up to 3,000 seeds

**SEEDLINGS**

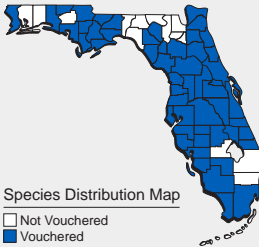
leaf blade glabrous, except for tuft of hair at base

**IDENTIFICATION**

grass with white, off-center midrib

fluffy, plumose seedheads

below ground scaly rhizome with sharp pointed growing tip

**DISTRIBUTION**

Cogongrass is native to Australia, Micronesia, East and Southeast Asia, India and eastern and southern Africa, but it is now naturalized pantropically. In the United States, it occurs in southern states from Texas eastward to South Carolina and a few other scattered states. In Florida, it has been documented from the western panhandle to the Keys. It occurs on both moist and dry sites that are disturbed, but not frequently tilled, such as roadsides, utility corridors, industrial sites, pastures, pine plantations and orchards.

*Imperata cylindrica* - cogongrass

Frank Soltes



flower



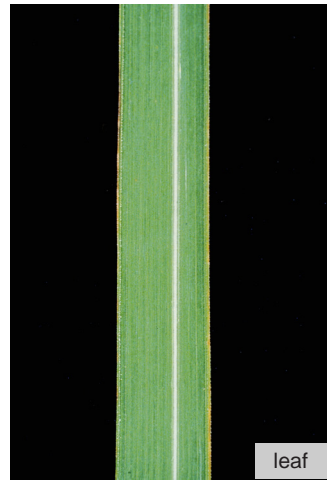
rhizome

Chris Evans

Mark Crosby



seedling



leaf

James H. Miller

Karan A. Rawlins









infestation

# *Rottboellia cochinchinensis* - itchgrass

Itchgrass has become a major weed of upland rice, sugarcane, corn, sorghum, soybean and several vegetable crops throughout the tropics. It competes for soil nutrients, water and light, resulting in reduced yields, and also hosts insect pests and diseases that affect grain crops. Itchgrass plants may begin producing seed six to seven weeks after they emerge, and a single plant can yield between 2,000 and 16,000 seeds.

## FEDERAL NOXIOUS WEED

-  **HABITAT**  
disturbed and agricultural areas such as hammock edges, clearings, pastures and roadsides in Florida; tropical and subtropical agricultural areas worldwide
-  **GROWTH FORM**  
erect, annual grass to 10 feet tall, often with stilt roots at the base of the stem, growing in large clumps from side shoots
-  **LEAVES**  
leaf sheath and blade have stiff hairs with a swelling (tubercle) at the base; hairs break off to penetrate and irritate skin; blades, 6 to 20 inches long, 1 inch wide, with white midribs and scabrous (like sandpaper) margins.
-  **FLOWERS**  
cylindrical, unbranched, segmented inflorescence similar to Fakahatchee grass (*Tripsacum dactyloides*)
-  **FRUIT**  
cylindrical seedhead breaks into segments
-  **SEEDLINGS**  
single first leaf sheath and blade with long, stiff hairs

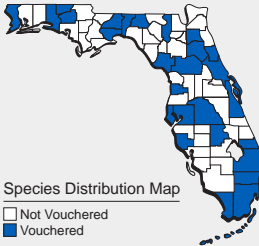
## IDENTIFICATION

tall, erect grass with inch-wide leaf blades and white midrib

irritating hairs with bulbous base, especially dense on the leaf sheaths and base of leaf blade

cylindrical, unbranched, segmented inflorescence that breaks apart when mature

## DISTRIBUTION



Itchgrass is native to tropical Africa, tropical Asia and northern Australia. It has been introduced throughout the Caribbean, tropical America and the southeastern and central United States. It is most commonly found on sunny, disturbed sites with high rainfall or irrigation in subtropical and tropical climates. This species has been reported from scattered locations throughout Florida and has been vouchered with herbarium specimens from Escambia County in the north to Monroe County (Florida Keys) in the south.

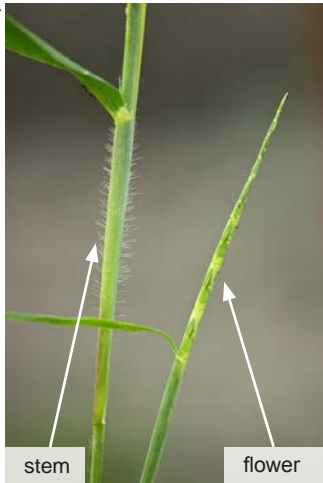
*Rottboellia cochinchinensis* - itchgrass

John Bradford



leaf

Keith Bradley



stem

flower

Keisolyo



whole plant

Julia Scher



fruit

USDA APHIS PPQ









seedling

# *Pennisetum pedicellatum* – kyasuma grass

*Pennisetum pedicellatum* is a tropical grass with a massive root system. Its common names include kyasuma grass, annual mission grass, Deenanth grass, feather pennisetum and hairy fountain grass, as well as kyasuma grass. Although its Latin name is now considered to be *Cenchrus pedicellatus*, we use the name found on the Florida state noxious weed list.

## FEDERAL NOXIOUS WEED

-  **HABITAT**  
dry, disturbed areas; reported as a pest plant in citrus groves; not common in Florida
-  **GROWTH FORM**  
annual or perennial, erect bunch or tussock grass, sometimes bending and growing roots at nodes, to 6 feet tall
-  **LEAVES**  
typical grass leaves, to 10 inches long, with scattered, stiff hairs at the base of the leaf blade
-  **FLOWERS**  
foxtail or bottlebrush shaped panicles, 2-4 inches long, with pale pink to purple tinged bristles
-  **FRUIT**  
grain (caryopsis) remaining enclosed in floret at maturity
-  **SEEDLINGS**  
typical grass seedling with parallel veins

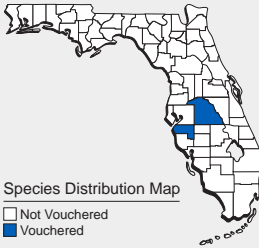
## IDENTIFICATION

clumping, more or less erect grass with no obvious stolon, to 6 feet tall, but usually shorter

inflorescence erect, 2-4 inches long, pale pink to purple

spikelets bundled with 40-90 inner bristles and 10-20 outer bristles

## DISTRIBUTION



Kyasuma grass is native to tropical Africa and India. The weedy species is now naturalized in tropical, subtropical and warm temperate regions in Australia, Hawaii, New Caledonia and Brazil as well as Florida. It has been vouchered with herbarium specimens from Manatee and Polk counties in Florida.

*Pennisetum pedicellatum* – kyasuma grass

Forest and Kim Starr



growth form

Forest and Kim Starr



leaves



flowers

J.M. Garg

Julia Scher



spikelet



florets

Julia Scher









# *Pennisetum polystachion* - missiongrass

Missiongrass was introduced to many areas of Florida as an ornamental and pasture grass. This species has a negative impact on the productivity of agricultural fields and pastures and can out-compete and displace native grasses. It also alters fire regimes, resulting in extremely hot fires that can kill native plant species. The accepted name is now *Cenchrus polystachios*, and that name was included in 2017 on the federal noxious weed list, although this has yet to be changed on the Florida list.

**FEDERAL NOXIOUS WEED**

FLEPPC-Cat. II invasive

-  **HABITAT**  
dry, disturbed sites, including roadsides, pastures, agricultural fields and levees; in Australia, found in undisturbed grasslands and open woodlands
-  **GROWTH FORM**  
variable in appearance, but generally upright and growing in clumps
-  **LEAVES**  
leaf sheaths are hairless, but have ciliate margins; leaf blades,  $\frac{1}{6}$  to  $\frac{3}{4}$  inch wide and up to 22 inches long
-  **FLOWERS**  
inflorescence with one to several spike-like panicles; flower spikelets sessile (stalkless) and surrounded by bristles
-  **FRUIT**  
each spikelet surrounded by plumose (feathery) bristles, with one or several bristles noticeably longer than the others; mature seeds airborne by bristles
-  **SEEDLINGS**  
single first leaf, like corn plants

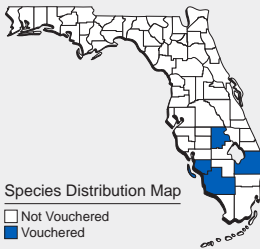
## IDENTIFICATION

clumping, perennial grass with a hard, knotty base and erect, branching stems to 6 feet tall

erect to slightly drooping panicles to 14 inches long with short, dense branches

inflorescence appearing yellow, light brown or purplish brown

## DISTRIBUTION



Native to tropical Africa, missiongrass is now naturalized in tropical, subtropical and warm temperate regions worldwide. It is particularly common on cleared forest lands in Southeast Asia and the Pacific Islands. In the United States, it has been found only in Florida and Hawaii. Missiongrass has been vouchered with herbarium specimens from only a few isolated occurrences, except in Collier County, where missiongrass seems to be locally established in the Immokalee area.

*Pennisetum polystachion* - missiongrass

Christen Mason



Christen Mason



Forest and Kim Starr

Julia Scher



Christen Mason

# *Saccharum spontaneum* – wild sugarcane

*Saccharum spontaneum* is a highly variable, invasive weed. It hybridizes easily with other species and is used in sugarcane breeding research which puts it at risk of escaping and spreading. In Florida, it is believed to have escaped from research facilities during hurricanes. This species is a weed of cotton, pearl millet, sorghum, rice, tea and coffee.

## FEDERAL NOXIOUS WEED



### HABITAT

range of environments from wet to dry habitats, low to high elevations, fertile to nutrient poor soils and tropical to temperate climates; agricultural lands, roadsides, disturbed areas and banks of rivers, lakes and ponds



### GROWTH FORM

variable grass, some short bunchgrasses and others with 12-18 feet tall stems; culms less than 1 inch in diameter; very similar to cultivated sugarcane, but culms thinner



### LEAVES

to 6 feet long, about ½ inch wide, usually glabrous (without hairs); white-ish midrib; minute teeth on leaf edges



### FLOWERS

inflorescence an open, multi-branched panicle to 1½ feet long; panicle axis hairy; spikelets composed of two flowers, without awns



### FRUIT

dry fruit typical of grasses, wind dispersal aided by a callus hairs forming a “parachute”



### SEEDLINGS

typical grass seedling

## IDENTIFICATION

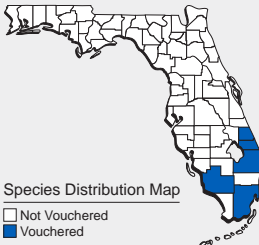
grass with large, plumose inflorescence

terminal, erect, branched panicle inflorescence with unawned spikelets

solitary culms or a few growing in a small clump from elongated rhizomes

leaf blades hairless, except near ligule

## DISTRIBUTION



Wild sugarcane is native to tropical Africa and tropical and temperate Asia, but this weedy species is now naturalized in Mesoamerica, southern Europe and the Pacific, including Hawaii. It has been introduced to North America for breeding research and vouchered with herbarium specimens from a few counties in southern Florida where it has escaped.

*Saccharum spontaneum* – wild sugarcane

Joydeep wikipedia



growth form

Forest and Kim Starr



leaves



flowers

Tony Rodd

Singapore National Parks



leaf with midrib



spikelet

Julia Scher

# *Setaria pumila* - yellow bristlegrass

*Setaria* species are characterized by bristles below each flower spikelet, and this one has 4-12 bristles for each spikelet, giving its inflorescences a foxtail appearance and suggesting its common name, although it is also known as yellow foxtail, cattail grass and pigeon grass. The species name for this plant on the Florida noxious weed list is *Setaria pallidifusca*, but the 2017 federal noxious weed list includes the currently accepted name. It is an early invader of disturbed and agricultural areas.

## FEDERAL NOXIOUS WEED



### HABITAT

roadsides, ditch banks, fields, pastures, railroad beds and other disturbed sites



### GROWTH FORM

annual grass, growing in tufts from fibrous roots



### LEAVES

leaf sheaths are hairless, but have ciliate ligules and a few hairs at the collar; leaf blades up to 12 inches long and ½ inch wide



### FLOWERS

yellowish, densely packed, giving the panicles a cylindrical, spike-like appearance



### FRUIT

each spikelet surrounded by plumose (feathery) bristles, with one or several bristles noticeably longer than the others; mature seeds airborne by bristles



### SEEDLINGS

single first leaf, like corn plants, usually roughly parallel with ground surface

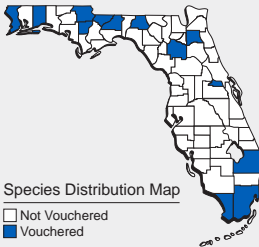
## IDENTIFICATION

clumping, annual grass with no obvious rhizome, to 4 feet tall, but usually shorter

inflorescence erect, yellowish, 1-4-inch long, cylindrical panicle

leaf blades hairless, except near ligule

## DISTRIBUTION



Yellow bristlegrass is native to tropical and temperate Africa, Asia and Europe. The weedy species is now naturalized in tropical, subtropical and warm temperate regions worldwide. It has been introduced throughout most of North America and vouchered with herbarium specimens from counties scattered throughout Florida from Escambia to Miami-Dade.

*Setaria pumila* - yellow bristlegrass

John D. Byrd



leaves

Plantnet



whole plant



ligule

Plantnet

Plantnet



seedling









inflorescence

Plantnet

# *Alternanthera sessilis* - sessile joyweed

This is a perennial herb with stems that are sometimes erect, but usually creep along the soil and produce roots at the nodes. This plant is classified as a terrestrial weed by the state of Florida, but it can grow in water and is found in the aquarium trade.

## FEDERAL NOXIOUS WEED

-  **HABITAT**  
found in a variety of wet sites and disturbed areas
-  **GROWTH FORM**  
perennial, herbaceous weed with creeping or erect stems sometimes lined with rows of whitish hairs
-  **LEAVES**  
simple, opposite, hairless, with no teeth along the margin, narrowly oval to oblong, blunt or pointed at the tip, 2 to 4 inches long and less than an inch wide
-  **FLOWERS**  
tiny, white, with a paper-like texture, and borne in dense, rounded, sessile (without a stalk) clusters in the leaf axils, about 1/2 inch long and wide
-  **FRUIT**  
dry fruits, called "utricles," that remain attached to the flower until the mature fruit is exerted beyond their tips
-  **SEEDLINGS**  
seeds produce new plants with opposite leaves similar to mature plants, but rooting at the nodes allows vegetative reproduction.

## IDENTIFICATION

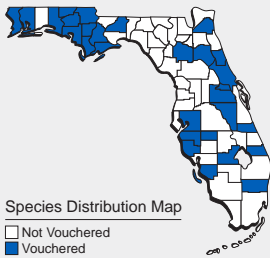
herbaceous weed usually with creeping stems, rooting at the nodes; sometimes weakly erect stem; hairs at nodes and sometimes in lines along the stem

simple, hairless, opposite leaves, 2 to 4 times longer than wide

white, papery flowers in dense clusters attached directly to the leaf axil; very similar to the aquatic weed, *A. philoxeroides*, which has a stalked flower

dry fruits peek out above the persistent flower parts when mature

## DISTRIBUTION



This weed is found in wet disturbed areas as well as rice and sugarcane fields in tropical and subtropical regions. It is possibly native to southern Asia, but is now found in tropical and subtropical regions around the world and has been introduced throughout the southeastern United States from South Carolina to Texas. This species has been reported in Florida counties scattered from the western panhandle through the central peninsula. It grows in wet and drier areas, including roadsides, ditches, bogs, swamps, pond banks, disturbed areas, pastures and other cultivated areas.

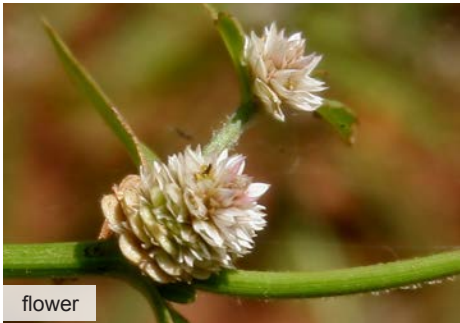
*Alternanthera sessilis* - sessile joyweed

gsquared



leaves and stem

J.M.Garg



flower



whole plant

Dennis Girard

Julia Scher



fruit



habitat

Jim Space

Jim Space




leaves and flowers





# *Commelina benghalensis* - tropical spiderwort


This sprawling, herbaceous plant is a serious pest of peanuts, soybeans and cotton because it is resistant to most commercial herbicides. Manual eradication is difficult because stems produce roots at the nodes, and detached pieces can grow into new plants. Abundant seeds from both the above-ground and below-ground flowers add to the difficulty of control.


## FEDERAL NOXIOUS WEED


 **HABITAT**  
fields, nursery beds and containers, lawns and other disturbed areas

 **GROWTH FORM**  
annual (perennial in frost-free areas) herbaceous plant with succulent, sprawling, hairy stems to 15 inches long

 **LEAVES**  
alternate, with ovate blades about twice as long as wide, 1 to 4 inches long; petiole base sheaths around the stem, sheath margin with reddish brown (or pale tan), eyelash-like hairs

 **FLOWERS**  
above ground: two conspicuous blue or purple petals and a third smaller, inconspicuous, white or pale blue petal; below ground: closed, white, self-pollinating (cleistogamous) flowers on runners

 **FRUIT**  
pear-shaped capsule, splits at maturity; above-ground flowers produce 1 large, 4 small seeds; below-ground flowers produce 1 large, 2 small seeds

 **SEEDLINGS**  
first leaf: erect, ovate to ovate-elliptic, glabrous

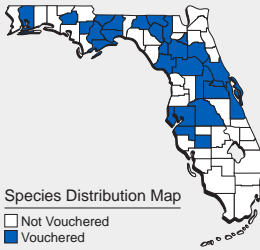
## IDENTIFICATION

herbaceous weed with succulent, sprawling, hairy stems

two conspicuous blue or purple petals and a third smaller, inconspicuous, white or pale blue petal; similar species have flowers with all blue or all white petals

below ground closed, white, self-pollinating (cleistogamous) flowers growing on runners

## DISTRIBUTION



Tropical spiderwort is native in the Old World tropics and subtropics, but has spread to the United States, the West Indies and South America. In this country, it has been reported in Alabama, California, Florida, Georgia, Louisiana, Mississippi and North Carolina. This weed grows in cultivated fields, nursery beds and containers, lawns and other disturbed areas in scattered counties from the panhandle nearly to Lake Okeechobee in the central part of the state.

*Commelina benghalensis* - tropical spiderwort

Jamie Kairalla



leaves with flower

Forest & Kim Starr



seedling



growth form

Byron Rhodes

Byron Rhodes



underground flowers









leaf sheath

Forest & Kim Starr

# *Tridax procumbens* - coat buttons

Coat buttons is common and widespread and is a serious weed of various crops in South Asia, several Pacific islands and tropical Africa. Although it is listed as a noxious weed by the USDA and the State of Florida, it is not yet a serious weed in North America. To help avoid future infestations, be on the lookout for this weedy plant.

## FEDERAL NOXIOUS WEED

-  **HABITAT**  
vacant lots and roadsides, as well as in lawns, nursery containers and sidewalk cracks
-  **GROWTH FORM**  
perennial herbs; stems procumbent (growing along the ground without rooting) to ascending
-  **LEAVES**  
opposite; with or without petioles; arrow-shaped, lanceolate, or ovate, often lobed or coarsely toothed; hairy on both upper and lower leaf blades
-  **FLOWERS**  
heads usually borne singly, 3-8 non-overlapping, creamy yellow (sometimes white or purplish) three-lobed ray florets, 40-80 yellow disc florets
-  **FRUIT**  
3-, 4-, or 5-angled, dry, single-seeded achene with a feathery crown (pappus)
-  **SEEDLINGS**  
first leaves opposite, with a fringe of hairs along the margins

## IDENTIFICATION

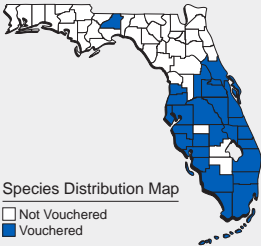
herbaceous plant with opposite leaves, growing along the ground without rooting at the nodes

daisylike, with widely spaced, white or cream ray florets and yellow disc florets

easily confused with *Bidens alba*, Spanish needles, but that plant has upright stems, compound leaves (3-5 leaflets) and much larger, more conspicuous flower heads

pubescent leaves

## DISTRIBUTION



The plant is native to tropical America, but is widely naturalized in tropical and subtropical areas around the world. In the United States, it is established only in Florida, Hawaii and Puerto Rico. It is common in dry, sunny, disturbed areas from Volusia County to the Keys, and in Leon County.

*Tridax procumbens* - coat buttons

Sheldon Navie



leaves

Sheldon Navie



growth form



flowers

Roger Hammer

Julia Scher



fruit



seedlings

Sheldon Navie

# *Pueraria montana var. lobata* - kudzu

In East Asia, kudzu has a long history of use for food, medicine, fiber and forage. It was introduced from Japan as an ornamental and promoted in the southeastern United States as an inexpensive livestock forage and means of erosion control. By the 1950s, kudzu's aggressive, weedy tendencies were becoming more widely known, and it is now listed as a noxious or restricted plant in 13 states.

FLEPPC-Cat. I invasive

## HABITAT

full sun, forming dense masses of vegetation along roadsides, watercourses and hammock edges, flatwoods, gullies, spoil areas and other weedy sites

## GROWTH FORM

fast-growing, climbing and trailing perennial vine with stems to 100 feet long and an extensive root system, producing massive tubers weighing up to 400 pounds

## LEAVES

alternate, trifoliate (with three leaflets) on long petioles; lateral leaflets are usually two-lobed and the terminal leaflet three-lobed, but leaflets may be unlobed; upper and lower surfaces of the leaflets covered with soft, golden hairs

## FLOWERS

pink to reddish-purple, typical pea flowers, 0.5 inch across, in clusters (racemes) in the upper leaf axils; sweet fragrance like grape candy or jelly

## FRUIT

flat legumes, 3 to 4 inches long, brown with golden hairs; three to 10 reddish-brown seeds, with a white scar left from attachment to pod

## SEEDLINGS

young stems vine-like with long, fine hairs; first leaflets usually unlobed

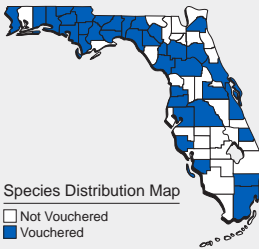
## IDENTIFICATION

vine with rampant growth, massive stature, overtopping trees or covering roadsides

large tri-foliate leaves with lobed leaflets covered in golden hairs

grape-scented flower spikes

## DISTRIBUTION



Kudzu is native to eastern and southeastern Asia and the western South Pacific islands. It has become naturalized in central Asia, eastern Europe, southern Africa, much of the eastern and central United States and parts of the West Indies and Central America. This species has escaped from cultivation and occurs in disturbed habitats throughout the state. Herbarium specimens document kudzu scattered from Escambia County in the panhandle to Miami-Dade County.

*Pueraria montana* var. *lobata* - kudzu

Forest and Kim Starr



growth form

USDA Forest Service



leaf



seedling

Nancy Dagley, USDI National Park

James H. Miller and Ted Bodner



fruit









flower

Peggy Greb USDA/ARS

# *Abrus precatorius* - rosary pea

This woody vine has no tendrils or other climbing structures, but grows by twining over native shrubs and trees, disturbing natural areas. The deep tap root of this perennial aids in resprouting after fire or attempts at eradication.

FLEPPC-Cat. I invasive

-  **HABITAT**  
invades natural areas, including both pinelands and hammocks, and is established in disturbed areas
-  **GROWTH FORM**  
woody, perennial, twining vine with no tendrils
-  **LEAVES**  
alternate; even-pinnately compound leaves have eight to 20 pairs of oblong leaflets, less than 1 inch long
-  **FLOWERS**  
stalks of pea-like pale purple to lavender or rarely white flowers
-  **FRUIT**  
pubescent legume with a sharp beak at the tip, containing four to eight poisonous, red seeds with a black spot
-  **SEEDLINGS**  
first true leaves are pinnate compound with tiny oblong leaflets

## IDENTIFICATION

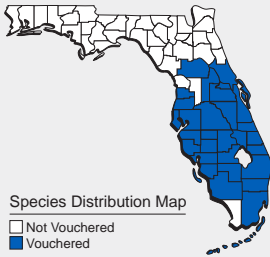
scrambling, woody vine with no tendrils or other climbing structures

even-pinnately compound leaves have eight to 20 pairs of oblong leaflets less than 1 inch long

a pubescent bean pod

bright red seeds with a black spot

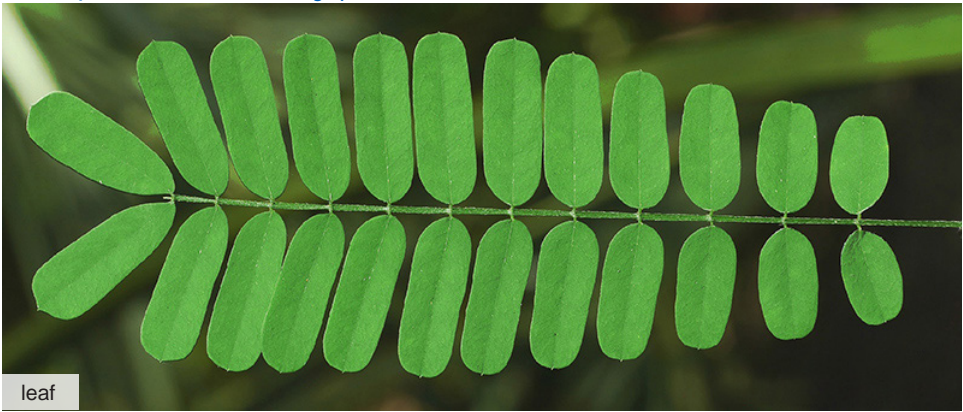
## DISTRIBUTION



This species is possibly native to India, but certainly tropical Asia, and is now found in tropical and subtropical regions around the world. In the United States, *Abrus precatorius* is found in Hawaii and Florida. In Florida, this species is found growing from central peninsula counties southward to Miami-Dade and Collier counties.

*Abrus precatorius* - rosary pea

John R. Park



leaf

Patricia Howell



flowers



fruit

Allen Boatman

Jeff Lotz



seedling



growth form

Forest & Kim Starr



# *Ipomoea triloba* - littlebell

Littlebell is a vine with a twining or creeping habit. It is not a high climber but is more often seen scrambling through grasses and over low shrubs. Stems rarely exceed 10 feet. When cut, the stems and the petioles (leaf stalks) exude a small amount of milky sap.

**HABITAT**

disturbed sites such residential landscapes, nurseries, abandoned homesites, agricultural fields, orchards, old pastures and highway and utility corridors

**GROWTH FORM**

twining or creeping vine, most often described as an annual; but in parts of Australia, a perennial, with a woody, underground tuber

**LEAVES**

alternate; variable in size (ranging from  $\frac{3}{4}$  to  $3\frac{1}{4}$  inches long) and in outline (heart-shaped, three-lobed or five-lobed)

**FLOWERS**

borne in the leaf axils; sometimes solitary but more often in small clusters; pink to pale purple tubular flowers,  $\frac{1}{2}$  to 1 inch long with five short lobes, each ending in a short, abrupt point

**FRUIT**

small (about  $\frac{1}{4}$  inch wide), globose capsules with a persistent style; containing two to four dark brown seeds

**SEEDLINGS**

first leaves deeply dissected with two long, pointed lobes

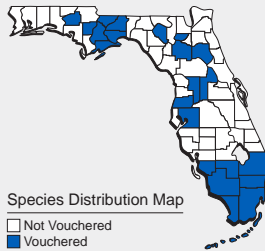
## IDENTIFICATION

vine with low, scrambling habit

milky sap from cut or broken stems

flowers less than an inch long and colored pink or purple with white anthers

## DISTRIBUTION



This species is native to the West Indies, Mexico, Belize and Trinidad, but it is now widely naturalized throughout the tropics. The first record of littlebell in Florida is from Monroe County in 1891. By the 1980s, it was recognized as a serious weed of citrus groves, especially in Hendry County. Littlebell has now been documented from many Florida counties, including the entire southern peninsula, parts of the central and northern peninsula, and the central panhandle.

*Ipomoea triloba* - littlebell

Forest & Kim Starr



fruit



leaves

Carolyn Thomas



flower



seedling

Forest & Kim Starr



habitat


Forest & Kim Starr


College of Natural & Applied Sciences at the University of Guam


# *Dioscorea bulbifera* - air potato


Air potato has separate male (staminate) and female (carpellate or fruit-bearing) flowers borne on different plants, and only carpellate plants have been observed in Florida. Plants reproduce asexually by means of bulbils (aerial tubers). One to four bulbils are produced at each leaf axil, and a single plant can produce 200 bulbils in a growing season. Bulbils spread by gravity, water currents, heavy machinery, and movement of contaminated brush and soil.


FLEPPC-Cat. I invasive


 **HABITAT**  
disturbed sites and natural areas, including hammocks and pinelands, throughout Florida

 **GROWTH FORM**  
deciduous, counter-clockwise twining, herbaceous vine, growing to 65 feet or more, sometimes with an underground tuber

 **LEAVES**  
alternate; heart-shaped, with rounded basal lobes, long tips; conspicuous, arching, longitudinal veins on leaf blade with secondary veins giving a quilted appearance

 **FLOWERS**  
not common in Florida; female in spikes of up to 50 inconspicuous flowers with whitish-green petals

 **FRUIT**  
not seen in Florida

 **SEEDLINGS**  
new plants develop from bulbils growing at each leaf axil; bulbils are either dark brown with a warty texture or light tan to gray and smooth

## IDENTIFICATION

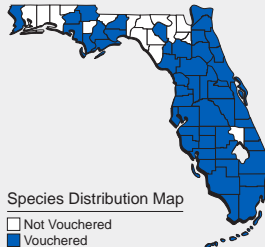
vigorous vine with counter-clockwise twining habit, rounded stems, alternate leaves

abundant globose aerial tubers

heart-shaped leaves with elongated tips and both arching longitudinal veins and puckering secondary veins

avoid confusion with winged yam which has opposite leaves, a winged, squared stem and long, rather than rounded, bulbils

## DISTRIBUTION



Native to tropical Africa, Asia, the Pacific Islands and northern Australia, air potato is now naturalized throughout the West Indies and tropical America. In the United States, it is found in Hawaii, Texas, Louisiana, Mississippi, Alabama, Georgia and Florida. Sensitivity to freezing temperatures has limited its expansion into more temperate areas. Air potato occurs throughout Florida from Monroe County in the south to Escambia County in the western panhandle. It is most often found on disturbed sites, but also invades natural habitats including hammocks and pinelands.

*Dioscorea bulbifera* - air potato

John R. Park



leaves



growth form

Jeff Lotz



dark and warty bubils

Jeff Lotz



lighter and smoother bubils



habitat

Forest & Kim Starr

FDACS

# *Cuscuta* spp. - dodders

Florida's noxious weed list excludes native species of *Cuscuta*, but all dodder species are considered plant pests that reduce the viability of nursery stock. Plant pests include any living stage of parasitic weeds that can injure or damage a plant. Parasitic plants in nursery stock are subject to quarantine to prevent the spread of the pest (F.S. 581.011).

## FEDERAL NOXIOUS WEED



### HABITAT

roadsides, pastures, forest edges; depend on the host plant for nutrition; generally, they do not kill their host, but can substantially weaken it



### GROWTH FORM

fast growing, twining, parasitic vines, with yellow or orange stems; tooth-like projections called "haustoria" that penetrate the host plant; not aromatic when crushed; roots present only on young plants



### LEAVES

inconspicuous or absent



### FLOWERS

white, tubular, about 1/8 inch in diameter, often in dense clusters



### FRUIT

a whitish berry, opening by a cap-like lid in some species, or more often, decaying on the vine or on the soil and releasing the seeds gradually



### SEEDLINGS

single thread-like stem attached by roots until contact with host, then roots wither

## IDENTIFICATION

parasitic vine with spaghetti-like stems, 1-3mm in diameter; forming a dense mat over host plants

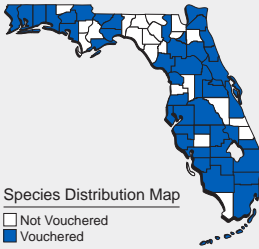
no chlorophyll (not green in color, but orange or yellow)

roots and leaves usually lacking

penetrating haustoria (suckers) along stem

not aromatic when crushed

## DISTRIBUTION



Species Distribution Map

□ Not Vouchered  
■ Vouchered

The genus contains about 150 species with a worldwide distribution. In this country, one or more species is found in every state, except Alaska. Many species are restricted to a single host, but all Florida dodders have a wide host range. Eight species are native in Florida, and of these, *Cuscuta pentagona* is the most widely distributed, but at least one of these species is found in almost every county. Of the exotic species, only *C. japonica* has been collected in Florida and that only in Gadsden County. The native species include *C. americana*, *C. compacta*, *C. exaltata*, *C. gronovii*, *C. indecora*, *C. obtusiflora*, *C. pentagona*, and *C. umbellata*.

*Cuscuta* spp. - dodders

Curtis Clark



*Cuscuta pentagona* flowers

Alan Frank



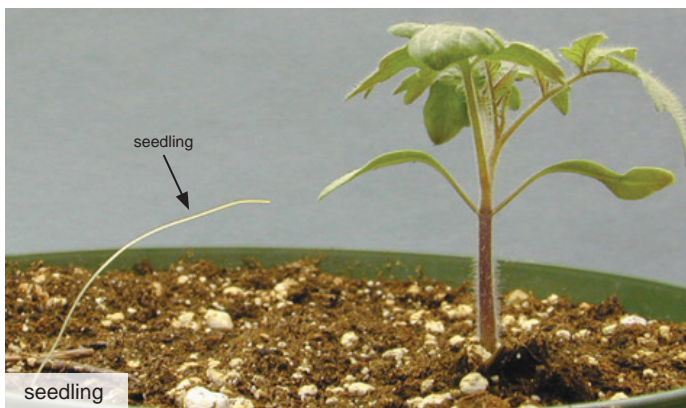
*Cuscuta pentagona* orange stems



*Cuscuta* sp. infestation

Chris Evans

De Moraes



seedling



fruit and flowers

Ohio State Weed Lab

# *Dolichandra unguis-cati* – cat's claw vine

Cat's claw vine was known to be in Florida in the late 1940s when this attractive plant was introduced as an ornamental under the older name *Macfadyena unguis-cati*. This species is a woody vine with root tubers and stolons that can also form at each node as it grows along the soil surface. The name cat's claw refers to the shape of the tendrils, thought to look like a three-toed cat's claw.

FLEPPC-Cat. I invasive



## HABITAT

disturbed areas as well as sandhills, scrub and upland pine and hardwood forests



## GROWTH FORM

woody vine to 50 feet long, often rooting at the nodes, forming underground tubers; climbing with claw-like, three-pronged tendrils



## LEAVES

opposite, compound, with two small, ovate or lanceolate leaflets



## FLOWERS

yellow, trumpet shaped, growing singly or clustered, to 4 inches across



## FRUIT

linear and flat pods, 20 inches long, containing wind-dispersed, oblong, winged seeds



## SEEDLINGS

new plants have simple leaves with slightly toothed margins unlike the compound leaves with smooth margins of adult vines

## IDENTIFICATION

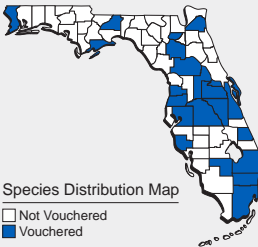
woody vine with opposite, two-leaflet, compound leaves

claw-like tendrils with tree prongs

yellow tubular flowers distinguish it from the native, orange-flowered cross vine

linear, flattened pods to 20 inches long

## DISTRIBUTION



Cat's claw vine is native to the West Indies and from Mexico through Argentina.

In Florida, it has been vouchered by herbarium specimens from scattered counties throughout the state with a concentration in the central and southeastern peninsula.

*Dolichandra unguis-cati* – cat's claw vine

Forest and Kim Starr



leaves

Forest and Kim Starr



growth form



flower

Forest and Kim Starr

Ανώγειος Βικιπαίδιστής



fruit

CSIRO



seedling





# *Mikania micrantha* - climbing hempweed


Although this plant has been found in Miami-Dade County, surveys have found no spread beyond the Redland area. In tropical Asia, the plant is an important weed of plantation crops, such as tea, oil palms, coconuts, cacao, and coffee. The vine covers crops with a dense mat of foliage, shading them and even causing their stems to break.


**FEDERAL NOXIOUS WEED**


FLEPPC-Cat. II invasive

 **HABITAT**  
disturbed habitats, crop plantations, abandoned plant nurseries

 **GROWTH FORM**  
rampantly growing, perennial, twining vine; stem round in cross section or indistinctly six-angled, deciduous flap of leaf-like tissue (pseudostipule) between the two leaves at each node

 **LEAVES**  
opposite, heart-shaped or triangular, with a long, slender, tapering tip and a coarsely toothed margin; yellow-green, 5-7 nerved from the base, mostly without hairs (glabrous) on the leaf blade

 **FLOWERS**  
florets white, less than  $\frac{5}{8}$  inch long, densely arranged in long-stalked, glabrous, axillary flower clusters

 **FRUIT**  
black, dry fruits (achenes) with five ribs, sparsely sprinkled with glandular dots; pappus of 30 to 32 fine, hair-like, white bristles

 **SEEDLINGS**  
leaves similar to adult form

## IDENTIFICATION

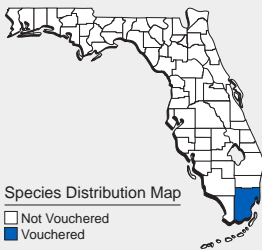
twining vine without sharp angles on the stem, overtopping other vegetation in disturbed areas

opposite, heart-shaped leaves with long, tapering tip

deciduous flap of leaf-like tissue (pseudostipule) between the two leaves at each node

heads of four white florets, less than  $\frac{5}{8}$  inch long, on glabrous inflorescence branches

## DISTRIBUTION



The species is native throughout tropical America, but it has become widely naturalized in the Old World tropics, particularly in Asia and the Pacific islands. In the United States, it was found in Florida. So far, the plant has only been found in the Redlands area of Miami-Dade County.

*Mikania micrantha* - mile-a-minute

DPI



Roger Hammer

Keith Bradley



Julia Scher

Patti J. Anderson, DPI









PlantNet

# *Lonicera japonica* – Japanese honeysuckle

Japanese honeysuckle was introduced in Florida in 1875 as an ornamental and has been used as a deer forage. This species is a woody vine that can cover forest floors, climb tall trees and form dense mats in forest canopies. The vine can even strangle small saplings by twining around them and girdling their trunks.

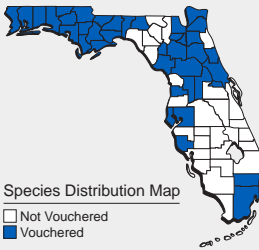
FLEPPC-Cat. I invasive

-  **HABITAT**  
disturbed areas, hammock edges, wetlands, scrub and upland hardwood forests
-  **GROWTH FORM**  
woody, evergreen to semi-evergreen vine, twining or scrambling, without tendrils or aerial roots; to 30 feet in length
-  **LEAVES**  
opposite, simple, ovate to oblong, 1-2 inches long, sometimes lobed, midrib pubescent
-  **FLOWERS**  
fragrant, tubular, two-lipped, white to cream colored
-  **FRUIT**  
spherical berry, 1/4 inch in diameter; black when ripe
-  **SEEDLINGS**  
leaves can be simple, like the adult leaves, or with lobed margins

## IDENTIFICATION

- woody vine, usually very hairy, with opposite, simple leaves and twining habit
- white to yellow tubular flowers with very unequal lobes forming two lips
- black spherical fruit

## DISTRIBUTION



Japanese honeysuckle is native to China, Japan and Korea. In the United States, it has escaped cultivation throughout most of the East Coast and southern states from New York and Michigan through Florida and California. It is regulated as a noxious weed, prohibited plant or invasive species in Connecticut, New Hampshire, Ohio and Vermont. In Florida, it has been vouchered by herbarium specimens from scattered counties throughout the state with a concentration in the central and southeastern peninsula.

*Lonicera japonica* – Japanese honeysuckle

Chris Evans



growth form

Wendy VanDyk Evans



leaves



fruit

Karan A. Rawlins

Chuck Bargerion



flowers



seedling

Bruce Ackley

# *Paederia foetida* - skunkvine

*Paederia foetida* (skunkvine) and *Paederia cruddasiana* (sewervine) are very similar in habit, appearance and odor. The following description applies to both perennial twining vines. Both are aggressive, fast-growing vines that can trail over the ground or climb high up in trees forming thick, tangled masses of vegetation and killing trees and understory plants. In Florida, sewervine has been found only in Broward and Miami-Dade counties.

FLEPPC-Cat. I invasive

## HABITAT

disturbed sites such as residential landscapes, parks, abandoned lots, pastures, fencerows, roadsides and utility corridors; native plant communities, including sandhills, floodplains, hammocks and upland mixed forests

## GROWTH FORM

vines with slender and herbaceous stems, reaching over 30 feet in length; evergreen in South Florida, but deciduous in central and northern Florida; woody roots and stem base possible; can produce roots along stem at nodes

## LEAVES

opposite or whorled; disagreeable (skunklike) odor when crushed; variable blade shape, but usually lobed or cordate (heart shaped) at base; petioles from ¼ to 3½ inches long; flap of tissue (interpetiolar stipule) between the two leaves at each node

## FLOWERS

pinkish-white, grayish-pink or pale purple, less than ½-inch-long, tubular with five short lobes, darker purplish-red throat; outside of tube densely hairy

## FRUIT

globose, pea-sized, capsule, shiny brown and papery at maturity; two black seeds, dotted with white, needle-shaped crystals

## SEEDLINGS

no description found, assume leaves similar to adult

## IDENTIFICATION

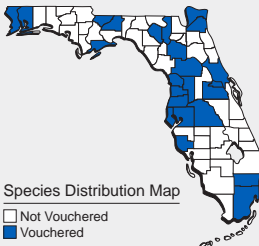
vine with opposite leaves, obvious stipules and disagreeable odor when crushed

small, white to pinkish-lavender, tubular flowers with purple throat

*Paederia cruddasiana* fruit ellipsoid to ovoid and laterally compressed capsules and conspicuous wings on the seed margins

*Paederia foetida* capsules subglobose with unwinged seeds

## DISTRIBUTION



Skunkvine is native to temperate and tropical Asia and has naturalized in North America, South America, the Mascarene Islands and the Pacific Islands. In the United States, it occurs in Hawaii, Texas, Louisiana, Florida, Georgia and the Carolinas. Skunkvine has been vouchered from Florida counties scattered from Escambia in the north to Miami-Dade in the south, while sewervine has been found only in Broward and Miami-Dade.

*Paederia foetida* - skunkvine

Bob Upcavage



leaves

Shirley Denton



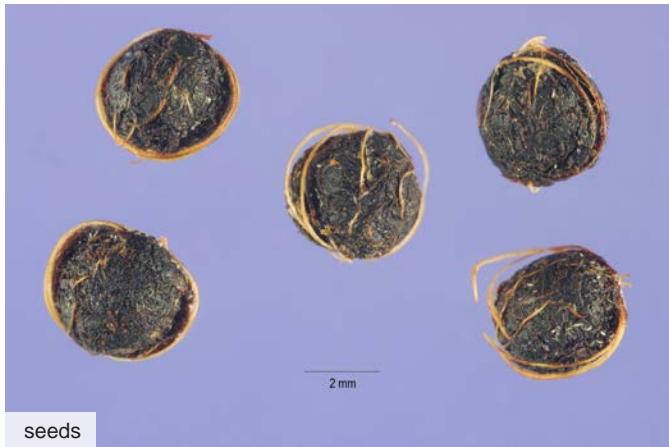
flower



fruit

Forest and Kim Starr

Steve Hurst





seeds


# *Dioscorea alata* - winged yam


This yam is an important food crop throughout the tropics. Although it is not as common as the air potato (*Dioscorea bulbifera*), vines of the winged yam are just as vigorous, smothering other vegetation from ground level into the tree canopy. The winged yam reproduces primarily by means of aerial tubers (called bulbils) borne on the stems and seldom develops flowers in Florida.


FLEPPC-Cat. I invasive

 **HABITAT**  
growing in disturbed sites, canopy gaps and forest edges throughout the state;  
escapes from cultivation

 **GROWTH FORM**  
deciduous, clockwise twining, herbaceous vine, growing to 50 feet or more, with four usually purplish wings

 **LEAVES**  
opposite, but often alternate at the base of the vine; heart-shaped or arrowhead-shaped; 5-7 conspicuous, arching, longitudinal veins on leaf blade

 **FLOWERS**  
rarely seen in Florida; inconspicuous, whitish petals

 **FRUIT**  
rarely seen in Florida; three-winged capsules in drooping racemes

 **SEEDLINGS**  
rarely seen in Florida; new plants develop from elongated, tuber-like bulbils

## IDENTIFICATION

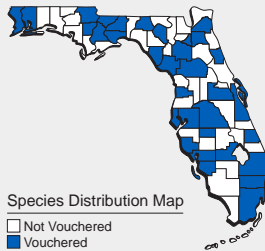
vine, with twining, winged stems, dying to the ground during the winter

leaves opposite, but can be alternate at the base of the vine

elongated, rough-textured tubers in the axils of the leaves; up to 4 inches long.

two native species, *D. floridana* and *D. villosa*, do not produce aerial tubers, but have flowers and fruit in Florida; air potato (*D. bulbifera*) has alternate leaves and no wings on the stem

## DISTRIBUTION



This plant is widely cultivated as a food plant, with hundreds of named cultivars. Its area of origin is believed to be in Southeast Asia. In the United States, it is reported to be naturalized in Florida, Georgia and Louisiana, with its naturalized range is expanding. Although the winged yam was introduced into Florida by Spanish and Portuguese traders in the 1500s, it only recently has become widely naturalized. At present, it is found growing outside cultivation in counties scattered throughout the state, from Escambia to Miami-Dade.

*Dioscorea alata* - winged yam

Ann Murray / IFAS



flower



stem showing wings

Forest & Kim Starr

Forest & Kim Starr



fruit



leaves

Forest & Kim Starr



# *Schinus terebinthifolia* - Brazilian pepper

Brazilian pepper was first introduced to Florida as an ornamental in the 1840s, and by the 1950s it had been documented as an invasive pest in both disturbed and natural habitats. It is estimated to have invaded over 700,000 acres in Florida, including large swaths of Everglades National Park. The name of this genus has been treated as either masculine or feminine, so the epithet may be spelled *terebinthifolius* or *terebinthifolia*. Classical Greek and Latin usage seems to be feminine. We are following the Atlas of Florida Vascular Plants and other authorities in spelling the epithet *terebinthifolia*.

FLEPPC-Cat. I invasive



## HABITAT

moist to mesic disturbed sites, sand dunes, shell mounds, coastal strands, tidal marshes, swamps, hammocks, wet flatwoods, scrub and upland pine forests



## GROWTH FORM

shrub or a small- to medium-sized multi-stemmed tree to 45 feet tall (usually shorter) with a dense tangle of branches



## LEAVES

alternate, odd-pinnately compound, with usually seven to nine sessile leaflets; oblong to elliptic leaflets, 1 to 2 inches long, dark green above and paler green below, conspicuous midvein and parallel lateral veins are lighter in color; margins often toothed



## FLOWERS

male and female flowers on separate plants; tiny (less than  $\frac{1}{10}$  inch long), five-petaled, white flowers in short clusters in the leaf axils near the branch tips



## FRUIT

spherical, fleshy fruit with a single seed, about  $\frac{1}{5}$  inch in diameter; glossy, bright red at maturity



## SEEDLINGS

first true leaves are not compound, but have sharp teeth along the margins and can be lobed at the base

## IDENTIFICATION

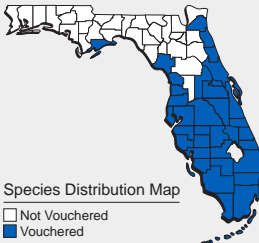
medium tall shrub or small tree with intertwining branches

dark green, pinnate compound leaves with prominent lighter colored veins

clusters of bright red, ripe fruit

clear, resinous sap from wounds that turns black when dry

## DISTRIBUTION



Native to Brazil, Argentina and Paraguay, Brazilian pepper is widely cultivated as an ornamental. It has escaped from cultivation and naturalized in much of tropical America, the West Indies, Africa, the Mascarene Islands, Europe, southern Asia, Pacific Islands, and the coasts of Australia. In the United States, Brazilian pepper has established outside of cultivation in southern regions of California, Texas, and Alabama as well as Hawaii and Florida. Brazilian pepper occurs throughout peninsular Florida.

*Schinus terebinthifolia* - Brazilian pepper

Jeff Lotz



leaf

Jeff Lotz



seedling



fruit

Forest and Kim Starr

João Medeiros



flower



whole plant

Ann Murray

# *Cupaniopsis anacardioides* - carrotwood

This fast-growing, evergreen tree has smooth, gray outer bark, but the inner bark is often orange; hence, the common name "carrotwood." It was introduced to Florida as an ornamental as early as 1955; by 1990, it was observed in both disturbed and natural communities, especially moist coastal lowlands such as mangroves.

FLEPPC-Cat. I invasive



## HABITAT

planted as a street ornamental; escaped into disturbed areas and natural areas



## GROWTH FORM

evergreen, usually single-trunked tree up to 35 feet tall



## LEAVES

alternately, pinnately compound, with four to 10 leaflets on short, swollen stalks; glossy, leathery leaflets may be oblong, elliptic or obovate and have no teeth or lobes, but the rounded apex is sometimes notched



## FLOWERS

less than ½ inch wide, greenish-white to yellow, borne in branched, often pendulous, inflorescences in the axil of leaves



## FRUIT

three-lobed or three-ridged, woody capsules; orange-yellow when ripe and ½ to 1 inch in diameter; splitting, when ripe, to reveal three shiny, black seeds enclosed in a fleshy orange to red tissue called an aril



## SEEDLINGS

first true leaves are pinnate compound or trifoliate (sometimes only two leaflets), with a few teeth along the leaflet margin; petiole and rachis winged

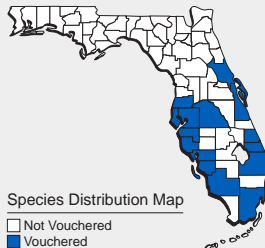
## IDENTIFICATION

conspicuous clusters of orange-yellow, three-lobed fruit

black seeds surrounded by bright red aril when fruits open

pinnate, compound leaves, some with a notch indented at the tip

## DISTRIBUTION



Carrotwood is native to New Guinea and the northern and eastern coasts of Australia. It is cultivated as an ornamental in subtropical and tropical regions. In Florida, this species has escaped from cultivation and is naturalized in both disturbed and undisturbed coastal habitats on the central and southern peninsula. Tolerant of poor soils, periodic flooding, drought, salt and shade, carrotwood is found in coastal hammocks, dunes, strands, mangrove swamps, marshes, pine scrub, flatwoods and spoil islands.

*Cupaniopsis anacardioides* - carrotwood

Forest & Kim Starr



leaves

Amy Ferriter



seedlings



fruit and seeds

Top Tropicals

Karen Coffey



tree



flowers

Dennis Girard

# *Mimosa pigra* - catclaw mimosa

This species was first collected in Florida in 1953 and is thought to have been introduced through intentional cultivation or as a contaminant in imported nursery stock. By 1985, large infestations were noted in South Florida. Catclaw mimosa forms dense, impenetrable thickets that displace native vegetation and choke waterways.

**FEDERAL NOXIOUS WEED**

FLEPPC-Cat. I invasive

**HABITAT**

scrub, sandhills, coastal berms, shell mounds, mesic flatwoods, strand swamps, depression marshes and weedy areas

**GROWTH FORM**

sprawling, multi-branched shrub, 10 to 20 feet high; stems covered with short, stiff, appressed hairs and scattered, curved prickles to ½ inch long

**LEAVES**

alternate and bipinnately compound, with 8 to 14 pairs of pinnae and 25 to 43 pairs of leaflets; solitary, vertical prickles where opposing pinnae meet and paired horizontal prickles on the rachis between each pair of pinnae; leaflets and pairs of pinnae are sensitive (fold together at night or when touched)

**FLOWERS**

tiny; four inconspicuous petals and eight showy, pink, lilac or white stamens in dense, globular heads about ½ inch wide composed of about 100 flowers

**FRUIT**

flattened pods 1½ to 5 inches long, covered with bristly hairs in clusters of two to 30; turning from green to brown at maturity and breaking into single-seeded segments

**SEEDLINGS**

first leaves may be pinnate, rather than bipinnate

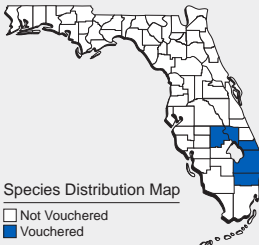
**IDENTIFICATION**

sprawling, multi-branched shrub with scattered, curved prickles to ½ inch long on the stem

bipinnate leaves, with 8 to 14 pairs of pinnae armed with horizontal and vertical prickles

pink, lilac or white flowers with showy stamens in heads ½ inch wide

flattened pods 1½ to 5 inches long, covered with bristly hairs in clusters of two to 30

**DISTRIBUTION**

Catclaw mimosa is native to Mexico, Central America, South America and probably the West Indies. It is also widely distributed in large parts of continental Africa, as well as the islands of Madagascar and Mauritius, but it is unclear whether it is native or a very early introduction to Africa. This species has escaped from cultivation and naturalized in northern Australia, Southeast Asia, the Galapagos Islands, Hawaii and Florida. In Florida, it has been vouchered by herbarium specimens from a few counties in the southern peninsula.

*Mimosa pigra* - catclaw mimosa

Wibowo Djatmiko, wikipedia



flowers

USDA APHIS PPQ



fruit



fruit

Julia Scher

USDA APHIS PPQ



leaf




habitat


Any Ferriter


# *Leucaena leucocephala* - white lead tree


The tree is frost-sensitive and is usually killed to the ground during most winters in northern Florida; however, regrowth is rapid and most trees recover sufficiently to produce a large crop of seeds each year. This species is very similar to the tree *Albizia julibrissin* (mimosa), but the flower colors differ.


FLEPPC-Cat. II invasive


 **HABITAT**  
disturbed flatwoods, spoil areas, roadsides, and other weedy sites

 **GROWTH FORM**  
deciduous shrub or small tree to 25 feet tall has an open, spreading crown and smooth, pale gray-brown bark

 **LEAVES**  
alternate; twice-pinnately compound, to about a foot long; 4-9 pairs of pinnae (main divisions); dimple-like gland on the rachis; leaflets, with a pointed tip and an uneven base, about 1/2 inch long and 1/8 inch wide; 13 to 17 pairs per pinna

 **FLOWERS**  
tiny, white or yellowish; in dense ball-like clusters (heads) about 3/4 inch in diameter

 **FRUIT**  
flat pods, rounded or blunt at the tip or with a short, broad point, 5 to 7 inches long and an inch or less wide, reddish brown when mature; 10 to 20 flattened seeds

 **SEEDLINGS**  
first leaves pinnate, but twice-pinnate leaves quickly develop

## IDENTIFICATION

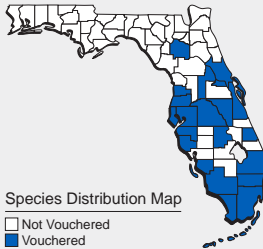
small tree twice-pinnately compound leaves

dimple-like gland on the rachis

during flowering, numerous tiny, white or yellowish-white flowers in dense, spherical heads

during fruiting, numerous seed pods, reddish brown when mature

## DISTRIBUTION



The lead tree is native to Mexico and Central America, but it is cultivated throughout the tropics, and it has widely escaped and naturalized. In the United States, it has been reported from Arizona, California, Florida, Hawaii and Texas. Lead tree has been collected in scattered counties from Alachua County to the Keys (Monroe County).

*Leucaena leucocephala* - white lead tree

Sheldon Navie



seedling

John M. Randall, The Nature



fruit



growth form

Keith Bradley

Sheldon Navie



leaf gland



flower

Dan Clark, USDI National Park Service



# *Scaevola taccada* - beach naupaka

The name of this species has been the source of considerable debate. Other names that have been used include *Scaevola sericea*, *Scaevola koenigii* and *Scaevola frutescens*. In Asia, the pith of the stems is used to make rice paper, and the leaves and fruit are said to be edible, but not palatable. In Florida, beach naupaka is displacing endangered native plant species. It grows rapidly and produces abundant seed, which has hastened its spread.

FLEPPC-Cat. I invasive

## HABITAT

coastal strands, tidal swamps, beach dunes, rock barrens, maritime hammocks and disturbed coastal sites

## GROWTH FORM

variable, evergreen, multi-stemmed shrub forming rounded mounds, usually 3 to 8 feet high, but can reach 16 feet

## LEAVES

leathery, spirally arranged, densely clustered at the branch tips; 3 to 9 inches long, with a spoon-like shape; glossy, lime green; revolute (with the margins rolled under)

## FLOWERS

in groups of three in short, axillary clusters; corolla is split along one side, fan-like, five pale green and white petal lobes, with faint dark lines running lengthwise

## FRUIT

single-seeded, globose to ovoid, fleshy, white fruits about ½ inch long with persistent sepals; small seeds are white to off-white in color, with longitudinally ridges

## SEEDLINGS

juvenile leaves are similar to mature leaves

## IDENTIFICATION

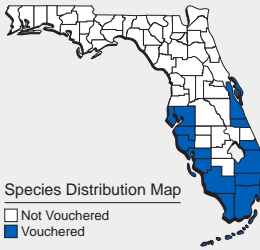
shrub near coastal strands or beaches similar to native inkberry, *Scaevola plumieri*

leathery, flexible leaves 3 to 9 inches long, with margins often rolled under

flower corolla split along one side, in a distinctive fan-like shape

ripe fruit white in color (native inkberry fruit turns black when ripe)

## DISTRIBUTION



Beach naupaka is native to coastal areas and islands of the Old World tropics and subtropics, including East Africa, Asia, the South Pacific and northern Australia. It is naturalized in Florida, the West Indies and possibly in other parts of tropical America. This species is found in frost-free areas along the coast from Brevard and Pinellas counties southward.

*Scaevola taccada* - beach naupaka

Pancrat



flower

Chris Feate



seedling



fruit

Shirley Denton

Forest and Kim Starr



habitat




leaves


Forest and Kim Starr


*Sapium sebiferum* (*Triadica sebifera*) – Chinese tallow


There is not general agreement as to the correct generic name for this plant (*Triadica* or *Sapium*), so we use the name as it appears in Rule 5B-57, Florida Administrative Code, where *Sapium sebiferum* is designated a noxious weed by the state of Florida. Louisiana, Mississippi and Texas have also designated it a noxious weed. Before its invasive character was known, Chinese tallow (also known as popcorn tree) was planted as an ornamental with leaves that turn brilliant shades of red in the fall.


FLEPPC-Cat. I invasive

 **HABITAT**  
mostly moist sites, from roadsides to mesic flatwoods and swamps

 **GROWTH FORM**  
deciduous tree to 40 feet tall, with an airy, rounded crown; abundant root suckers

 **LEAVES**  
alternate; blade roughly diamond-shaped, broad base and long-pointed tip, 1 to 3 inches long; petiole often as long as the blade; milky sap

 **FLOWERS**  
separate male and female flowers in long, slender, drooping yellow catkins

 **FRUIT**  
three-parted capsule, brown at maturity, with three white seeds, remaining on the branches and resembling a popped kernel of popcorn

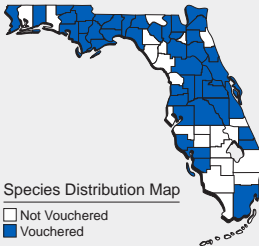
 **SEEDLINGS**  
first leaves similar to adult leaves

**IDENTIFICATION**

simple diamond-shaped leaves, with long petioles and long, pointed tip

conspicuous brown, three-lobed fruit with three white seeds like popped popcorn

milky sap exuded when leaves are damaged

**DISTRIBUTION**

The tree is native to Central China and Japan, but it is widely cultivated for the oil in its seeds. It has escaped and has become a weed in various parts of the world, but particularly in Asia and Australia. In the United States, it is naturalized in the coastal states from North Carolina to Texas. It has been recorded from counties in all parts of Florida.

*Sapium sebiferum* (*Triadica sebifera*) – Chinese tallow

Cheryl McCormick



leaves

Royal Botanic Gardens and Domain Trust



seedling



fruit

James H. Miller

John D. Byrd



habitat



flower

Chuck Bargeron

# *Ardisia crenata* - coral ardisia

This species is a multi-stemmed shrub up to 6 feet tall, but usually shorter. It is sometimes found in dish gardens or potted as a houseplant. This highly ornamental species has escaped from cultivation and is now thoroughly naturalized. The dense clusters of bright red berries ripen in winter.

FLEPPC-Cat. I invasive

**HABITAT**

dense stands of coral ardisia cover forest understories, especially wetter areas, and shade out seedlings of native ground covers

**GROWTH FORM**

multi-stemmed shrub up to 6 feet tall; usually no more than 3 feet tall; large underground storage stem; plants resprout after fire or stem damage

**LEAVES**

alternate, elliptic, evergreen, glossy, up to about 8 inches long; margins are conspicuously crenate (scalloped)

**FLOWERS**

in the axils of the leaves in dense, drooping, rounded clusters; five, small, pale pink or white petals

**FRUIT**

bright red when ripe, round, about 1/3 inch in diameter, in dense drooping clusters; occasional plants with white or pink fruits

**SEEDLINGS**

even very young plants have the characteristic leaves with scalloped margins

## IDENTIFICATION

understory shrub

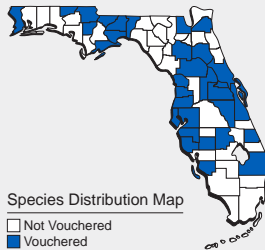
glossy green leaves with conspicuously crenate (scalloped) margins; nodules in the crenations

bright red, round fruit about 1/3 inch in diameter, in dense drooping clusters, persisting through the winter

small, white or pale pink, star-shaped flowers

other species of *Ardisia* occur in Florida, but only coral ardisia has leaves with scalloped margins and red fruit

## DISTRIBUTION



Coral ardisia is native to temperate and tropical Asia, from Japan to northern India, but has been widely introduced in other areas as an ornamental and has become naturalized in Alabama, Georgia, Hawaii, Louisiana and Texas as well as Florida. In Florida, the shrub is usually found in rich, moist, often dense woods in the panhandle and in the peninsula in scattered counties from Duval south to Lee and Palm Beach counties.

*Ardisia crenata* - coral ardisia

Batholith



leaf

KENPEI



flower



resprouted young plant

Forest & Kim Starr

Forest & Kim Starr



whole plant









unusual white fruit

KENPEI

# *Colubrina asiatica* - latherleaf

*Colubrina asiatica* was used the plant as a traditional source of soap, medicine and fish poison. This fast-growing plant has become extremely problematic in hammocks of South Florida and the Keys where its dense growth is threatening native flora.

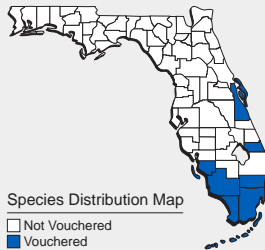
FLEPPC-Cat. I invasive

-  **HABITAT**  
coastal dunes and hammocks, marshes, beaches and disturbed areas
-  **GROWTH FORM**  
fast-growing, scrambling evergreen shrub with stems to 30 or more feet long
-  **LEAVES**  
alternate, glossy green, serrate margins and three main veins arising from the base; 1.6 to 3.5 inches long by 1 to 2 inches wide
-  **FLOWERS**  
small, green to white flowers in small clusters near leaf axils; five conspicuous sepals, five concave petals clasping a fleshy nectar ring; each petal enclosing a stamen
-  **FRUIT**  
green and fleshy turning to brown and dry capsule containing three grayish brown seeds that float and are salt-tolerant
-  **SEEDLINGS**  
first true leaves small, but resemble adult foliage

## IDENTIFICATION

- leaves with serrate margins with three main veins
- scrambling growth form
- upright glabrous stems
- crushed leaves producing a thin soapy lather in water

## DISTRIBUTION



This species is native from eastern Africa across to southern Asia and Australia. It is also found naturally on some Pacific Islands, including Hawaii. The plant has spread from introductions in Jamaica throughout the Caribbean and to Mexico and Florida. Latherleaf has been documented along the central Florida coasts south through the Keys, where it is very common. Often, the plant invades coastal hammocks and dunes as well as mangrove forests, marshes and disturbed areas.

*Colubrina asiatica* - latherleaf

Forest & Kim Starr



flower

Forest & Kim Starr



habitat



fruit

Forest & Kim Starr

Forest & Kim Starr



seedlings



leaves

Forest & Kim Starr



# Melaleuca quinquenervia – melaleuca

Melaleuca was first introduced to Florida around 1886 as an ornamental, shade tree and windbreak. In the 1930s, the U.S. Army Corps of Engineers planted it to stabilize levees on Lake Okeechobee, and seeds were spread from airplanes over the Everglades.

**FEDERAL NOXIOUS WEED**

FLEPPC-Cat. I invasive

**HABITAT**

usually expected in wetlands, but found in a variety of habitats, including scrub, sandhills, mesic to wet flatwoods, coastal hammocks, marshes, lakes, mangroves, coastal strands and disturbed sites

**GROWTH FORM**

evergreen tree to 80-100 feet tall; white, orangish-tan or gray peeling bark

**LEAVES**

alternate, narrowly lance-shaped or sickle-shaped, leathery, gray-green, usually with five parallel veins running lengthwise; strong eucalyptus aroma when crushed

**FLOWERS**

white, cream or greenish-white flowers in bottlebrush-like spikes at branch tips; conspicuous stamens, held in bundles of 5-10, fused at their bases

**FRUIT**

cup-shaped, woody capsules, approximately  $\frac{3}{8}$ -inch-wide, in dense clusters along branches; each with hundreds of tiny seeds

**SEEDLINGS**

silvery hairs on young leaves, otherwise similar to adult leaves

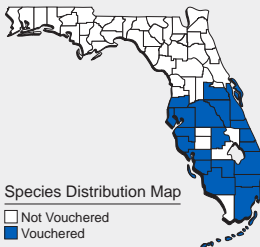
**IDENTIFICATION**

evergreen tree with peeling white, orangish-tan or gray bark

alternate, narrow, leathery, gray-green, leaves with (usually) five longitudinal veins

bottlebrush-like of white flower clusters at the branch tips

dense clusters of woody capsules along branches, persisting for years

**DISTRIBUTION**

Melaleuca is native to New South Wales and Queensland, Australia, New Caledonia and Papua New Guinea. It is widely cultivated in tropical regions and has naturalized in southern Africa, India, the Philippines, the West Indies, Central America, Guyana, Hawaii, Louisiana and Florida. This species is found in central and southern Florida counties. Melaleuca's impact is most profound in the Everglades, where it forms dense stands that severely impact the ecosystem by altering water flow, displacing native plant species and reducing habitat and food sources for wildlife.

*Melaleuca quinquenervia* – melaleuca

Albert "Bud" Mayfield



fruit and leaves

Keith Bradley



bark



flower

Forest and Kim Starr

Tony Pemas, USDI National Park Service



seedling



whole plant

Shirley Denton

# *Ardisia elliptica* - shoebutton ardisia

This evergreen tree or shrub invades natural areas, forming clumps or thickets that crowd out other species. It is a pest plant in tropical and subtropical areas, including Hawaii.

FLEPPC-Cat. I invasive



## HABITAT

escaped from cultivation into mesic hammocks in the central and southern peninsula



## GROWTH FORM

evergreen tree or shrub, 15 to 20 feet in height, with a large tap root that aids in resprouting after fire or other damage



## LEAVES

leathery, alternate leaves; entire, elliptic to elliptic-obovate or ovate; dotted with glands on the lower surface of the leaf blade; new leaves reddish



## FLOWERS

axillary cluster of pinkish-purple, star-shaped flowers



## FRUIT

fruit looks like a berry, but is a round drupe (like a peach fruit, with a single seed), about 1/4 inch across; first white, and then maturing from red to purple to black



## SEEDLINGS

first true leaves are similar to mature leaves

## IDENTIFICATION

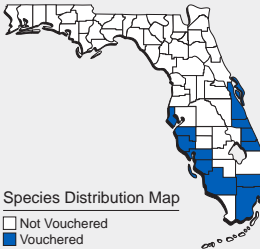
tree or shrub in dense stands within natural areas

new foliage is often with a red tint

conspicuous clusters of small, purplish-pink, star-shaped flowers in the axils of leaves

black fruit (when ripe)

## DISTRIBUTION



This species is possibly native to India, but certainly tropical Asia, and is now found in tropical and subtropical regions around the world. Documented occurrences of shoebutton ardisia are known from several coastal counties in the central and southern peninsula. This species thrives in maritime hammocks, coastal forests, swamplands, flatwoods and waste places in South Florida.

*Ardisia elliptica* - shoebutton ardisia

Patricia Howell



white, red and black fruit stages

Roger Hammer



flowers



leaves

Forest & Kim Starr

Forest & Kim Starr



growth form



seedlings

Forest & Kim Starr

# *Solanum viarum* - tropical soda apple

Tropical soda apple is a fast-growing, rapidly spreading species that adapts to a broad range of environmental conditions. It displaces native plant species and poses a serious threat to the cattle and vegetable industries. A successful biocontrol program using the tropical soda apple leaf-eating beetle, *Gratiana boliviana*, has helped control this weed by causing extensive defoliation.

**FEDERAL NOXIOUS WEED**

FLEPPC-Cat. I invasive



## HABITAT

pastures, citrus groves, vegetable fields and roadsides as well as natural areas of scrub, flatwoods, swamps, floodplain forests and edges of pinelands and hammocks



## GROWTH FORM

shrubby, herbaceous perennial, 3 to 6 feet tall; stems finely pubescent with simple hairs and broad-based, curved prickles (occasionally straight prickles also)



## LEAVES

alternate, glistering, ovoid, slightly sticky blades, three to five broad lobes on each side, 4 to 8 inches long, covered with a mix of simple, gland-tipped and stellate (star-shaped) hairs (seen with a 10X hand lens); petioles to 2 inches long; straight, rigid, yellowish prickles along midvein and secondary veins on upper and lower surfaces and petiole



## FLOWERS

star shaped with 5 white petals and 5 prominent, pale-yellow anthers in clusters of up to 5 flowers



## FRUIT

spherical berries ½ to 1½ inches across; immature fruit pale green with darker green markings, turning dull yellow; up to 400, small, rounded seeds



## SEEDLINGS

first leaves and petioles have prickles

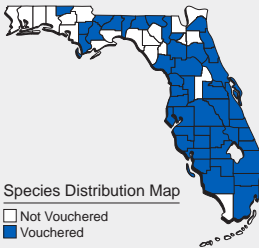
## IDENTIFICATION

shrubby plant with prickles and hairy, sticky-feeling leaves

immature fruit pale green with darker green markings, turning dull yellow when ripe

most often found in pastures and agricultural fields

## DISTRIBUTION



Although native to South America, tropical soda apple is now naturalized in the West Indies, Mexico and Central America, as well as tropical regions of Africa, Asia and Australia. It has invaded the United States, from North Carolina and Tennessee west to Texas and Oklahoma. First reported from Florida in 1988, tropical soda apple has now been vouchered with herbarium specimens from most counties in the peninsula and several in the eastern panhandle.

*Solanum viarum* - tropical soda apple

J. Jeffrey Mullahey



growth form

Charles T. Bryson



fruit



flower

Charles T. Bryson

Allan Boatman



leaf



seedling

Charles T. Bryson

# *Solanum torvum* - turkeyberry

This is an evergreen, multi-branched shrub or small tree that can grow to 16 feet high. Branchlets bear stellate (star-shaped) hairs and scattered, flattened, broad-based, straight to slightly hooked prickles (absent on older woody branches).

**FEDERAL NOXIOUS WEED**

FLEPPC-Cat. II invasive

**HABITAT**

usually open, disturbed areas (with full to partial sun exposure), such as roadsides, agricultural fields, pastures and cleared woodlands, but also dry to mesic hammocks, floodplain marshes and swamps

**GROWTH FORM**

evergreen, multi-branched shrub or small tree and grow up to 16 feet tall

**LEAVES**

alternate, blade is 3-10 in. long, oblong to ovate in shape, irregularly lobed or unlobed; upper leaf surface, is green and stellate pubescent; lower surface, paler grayish-green and more densely stellate pubescent with scattered prickles along the midveins

**FLOWERS**

stalks of up to 100 bright white, star-shaped flowers, 1/2 to 1 inch across in a mix of bisexual and staminate (male) flowers at leaf axils; scattered stellate hairs and simple gland-tipped hairs are found on the calyx

**FRUIT**

globose to ovoid fruit, to 1/2 inch wide, yellow to brown at maturity; in erect clusters

**SEEDLINGS**

cotyledons with short trichomes; first true leaves green, pubescent, with irregular lobes; petioles may be purple-tinged or green

**IDENTIFICATION**

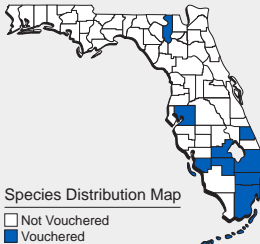
tree-like habit (or at least the development of woody tissue)

stout, flattened, slightly hooked prickles

petiolate leaves with oblique bases and dense stellate hairs below

bright white flowers with short, glandular hairs mixed with stellate hairs on the inflorescence branches, pedicels and calyces

clusters of blueberry-sized fruit that turn yellow, orange or brownish with age

**DISTRIBUTION**

Turkeyberry is native to the West Indies (including the Bahamas, the Greater Antilles and the Lesser Antilles), Mexico, Central America and northern and western South America. In Florida, it has been documented with herbarium specimens mainly in southern Florida, but also in Columbia County.

*Solanum torvum* - turkeyberry

Forest & Kim Starr



whole plant

Forest & Kim Starr



flower



fruit

Forest & Kim Starr

Forest & Kim Starr



seedling



leaf underside with dense stellate hairs

Forest & Kim Starr



# *Solanum tampicense* - wetland nightshade

This species, known as aquatic soda apple and scrambling nightshade as well as wetland nightshade, is especially difficult to control. Plants resprout readily, and in full sun, plants produce flowers and fruit year-round. It displaces native species by forming extensive, impenetrable thickets in remote areas, in full sun or deep shade in hammocks, on ditch banks and along roadsides.

**FEDERAL NOXIOUS WEED**

FLEPPC-Cat. I invasive



## HABITAT

floodplain forests, swamps, disturbed and regularly flooded wetlands, open marshes



## GROWTH FORM

sprawling to clambering multi-stemmed shrub with a woody base or small tree; stems to 16 feet tall with broad-based, curved prickles; forming dense, tangled thickets



## LEAVES

alternate, ovate to lanceolate, 3 to 9 inches long, and pinnately lobed with broad, rounded sinuses between the lobes; curved prickles on veins of lower surface; sometimes straight prickles along veins on the upper leaf surface; unlike tropical soda apple (*Solanum viarum*) **not** sticky to the touch



## FLOWERS

borne in short-stalked clusters in the leaf axils; white corolla, about  $\frac{5}{8}$  inch wide, with five linear-lanceolate petals united only at the base; bright yellow anthers



## FRUIT

globose berries, about  $\frac{3}{8}$  inch in diameter; lustrous surface changing from green to orange to red; 10 to 60 flattened, roundish, yellow to tan seeds



## SEEDLINGS

first true leaves green with sinuate margins, glabrous or with a few short hairs; purple main veins, petiole and prickles

## IDENTIFICATION

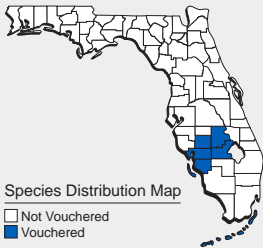
sprawling to clambering multi-stemmed shrub or small tree

found growing near water in dense thickets

clusters of small (less than  $\frac{3}{8}$  inch wide) fruit, maturing red

pubescent leaves with stellate hairs only (no sticky, glandular hairs)

## DISTRIBUTION



Wetland nightshade is native to Cuba, the Cayman Islands, Mexico and Central America. This species has been observed in a few central Florida counties and the Keys of Monroe County. It has invaded three major river basins, including the Peace River drainage, Fisheating Creek (part of the western Okeechobee River drainage), and the Big Cypress Swamp drainage.

*Solanum tampicense* - wetland nightshade

Alison Fox



fruit

Jeff Lotz



prickles



habitat

Charles T. Bryson

Keith Bradley



flowers



leaves

Chelcie Vandaveer

# Casuarina spp. - Australian pines

Three species of *Casuarina* have naturalized in Florida: *C. cunninghamiana*, *C. equisetifolia* and *C. glauca*. The latter two are listed as noxious weeds in Florida, but all species of *Casuarina* are Class I Prohibited Aquatic Plants. Also, hybrids of *Casuarina* in Florida with intermediate characteristics make species-level field identification difficult. For that reason, this guide will help you to recognize the genus, not species or hybrids.

FLEPPC-Cat. I invasive



## HABITAT

dense stands



## GROWTH FORM

evergreen tree with gray-brown to reddish-brown bark, smooth and peeling on younger trees, becoming rough and furrowed with age



## LEAVES

true leaves are tiny, triangular, scale-like; arranged in whorls at the end of each branchlet; structures that appear to be needle-like leaves are slender, segmented branchlets, olive-green to gray-green with minute, longitudinal ridges



## FLOWERS

tiny, inconspicuous; *C. equisetifolia* is monoecious, with male and female flowers on a single tree; *C. glauca* and *C. cunninghamiana* are dioecious, with male and female flowers on separate trees.



## FRUIT

$\frac{1}{6}$  to  $\frac{1}{5}$  inch long, single seeded, samaras, borne in woody, cone-like fruiting heads  $\frac{1}{2}$  to 1 inch long



## SEEDLINGS

even very young plants have the characteristic branchlets with segments that break apart

## IDENTIFICATION

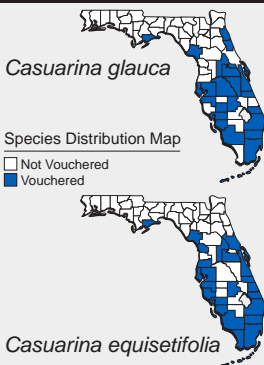
trees, superficially like pines, which have needle-like leaves in bundles of two to five needles, but on *Casuarina* the needle-like structures are branchlets that snap apart in segments

true leaves are tiny, triangular, scales arranged in a whorl around the branchlet

samaras, borne in woody, cone-like fruiting heads  $\frac{1}{2}$  to 1 inch long

no pine fragrance

## DISTRIBUTION



Of the three Australian pine species found in Florida, *C. equisetifolia* has the widest native distribution, ranging from the Andaman and Nicobar Islands through Southeast Asia, Malaysia and the western Pacific Islands to northern and eastern Australia. *Casuarina cunninghamiana* and *C. glauca* are native Australia. All three are cultivated throughout the subtropics and tropics. In Florida, *C. equisetifolia* and *C. glauca* are most common in coastal habitats near brackish or salt water; *C. cunninghamiana* is typically found on the fringes of freshwater rivers and streams and can occur further inland than the two other species. In Florida, Australian pine is found in frost-free areas most often on coastal strands, but also in tidal swamps, beach dunes, rock barrens, maritime hammocks and disturbed coastal sites. *Casuarina equisetifolia* is the most common and widespread Australian pine species in Florida.

Casuarina spp. - Australian pines

Bob Bierman



*C. equisetifolia* female flower

Keith Bradley



*C. equisetifolia* male flower

Roger Hammer



*C. glauca* fruit



*Casuarina equisetifolia* in landscape/growth form

Roger Culos Wikipedia



leaf, fruit and seeds

Forest & Kim Starr



*Casuarina equisetifolia* seedling

# *Ligustrum sinense* - Chinese privet

Chinese privet was introduced to the United States as an ornamental shrub in 1852 and had escaped from cultivation by the 1930s. It has colonized abandoned homesteads, vacant lots, pastures and forests and is now regarded as one of the major weeds of woodland habitats in the southeastern United States.

FLEPPC-Cat. I invasive

## HABITAT

usually open, low and moist disturbed sites, but also reported from upland hammocks, pinelands, floodplains, maritime hammocks, beach dunes and edges of swamps, marshes, lakes and streams

## GROWTH FORM

evergreen to semi-deciduous shrub or small tree to 16 feet tall; shallow, but extensive root system, with frequent suckers that help form dense stands

## LEAVES

opposite to subopposite; petioles (leaf stalks) and leaf undersides sparsely pubescent; ovate to elliptic leaf blades, less than 2 inches long

## FLOWERS

tiny, white to off-white flowers borne in 2- to 4-inch-long, cone-shaped clusters at branch tips and leaf axils; disagreeable odor

## FRUIT

small (less than 1/4 inch long), blue-black; one to four seeds

## SEEDLINGS

first true leaves opposite and similar to adult leaves

## IDENTIFICATION

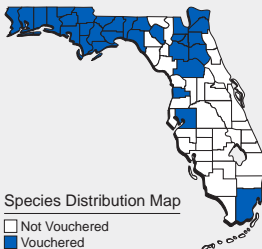
dense stands of shrubs or small trees

hairy twigs with raised, tan-colored lenticels (plant pores)

blunt-tipped, opposite leaves less than 2 inches long with hairs on leaf undersides

cone-shaped clusters of tiny, white flowers with a disagreeable odor

## DISTRIBUTION



Chinese privet is native to China, Vietnam and Laos. It is naturalized in South Africa, the Mascarene Islands, Australia, New Zealand, the Pacific Islands, Argentina and much of the eastern and central United States, from southern New England west to Kansas and south to Texas and Florida. It is particularly problematic in wetlands and moist forests in the southeastern United States. This species has been documented with herbarium specimens from most of the panhandle, parts of North and Central Florida and Miami-Dade County.

*Ligustrum sinense* - Chinese privet

Nancy Loewenstein, Auburn University



seedlings

Karan A. Rawlins, University of Georgia



flower



fruit

James H. Miller, USDA Forest Service



growth form



leaves

Karan A. Rawlins, University of Georgia

Ronald F. Billings, Texas A&M Forest

# *Rhodomyrtus tomentosa* - downy rose-myrtle

This attractive ornamental with sweet and edible fleshy fruits was introduced into Florida in the 1920s, where it soon escaped and rapidly became a serious pest. It is fire-resistant, resprouting rapidly after being burned, and it forms dense stands in pinelands and other habitats, mostly in the central part of the state.

FLEPPC-Cat. I invasive

**HABITAT**

varied sites including scrub, coastal strands and flatwoods

**GROWTH FORM**

shrub growing to 6 feet tall with many branches

**LEAVES**

opposite, leathery evergreen with three conspicuous main veins; densely hairy on the underside with gray or tawny hairs, occasionally glabrous (without hairs); oval, blunt at the apex, 2 to 3 inches long

**FLOWERS**

growing singly or a few together in the axils of the leaves; five rose-pink petals, central mass of pink stamens

**FRUIT**

juicy berry is about 1/2 inch across, turning dark purple when ripe, blueberry shape, up to 200 small seeds

**SEEDLINGS**

young leaves similar to adult leaves

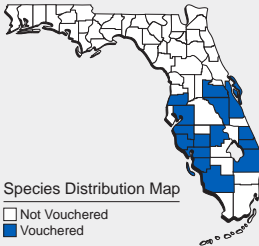
## IDENTIFICATION

shrub with opposite leaves

three-nerved leaves, dark green on the upper side and gray or tawny on the underside from dense hairs

rosy pink flowers with five petals and many stamens

## DISTRIBUTION



The downy myrtle is native to southern and southeastern Asia, from India to the Philippines and Indonesia, where it grows in a variety of habitats from sea level to 7,000 feet elevation. It has been introduced into the Pacific Islands where it has become seriously invasive. In the United States, it has only been recorded from Hawaii and Florida, where it has been documented in scattered counties, from Central Florida to Collier and Palm Beach counties in the south.

*Rhodomyrtus tomentosa* - downy rose-myrtle

Forest and Kim Starr



leaf underside

Roger Hammer



flower



habitat

Zhihong Pan

Susan Leach Synder



growth form



fruit

Dennis Girard



# Noxious Weed Species

COMMON NAME	SCIENTIFIC NAME	CATEGORY
air potato	<i>Dioscorea bulbifera</i>	Vines
Australian pine	<i>Casuarina</i> spp.	Woody
beach naupaka	<i>Scaevola taccada</i>	Woody
Brazilian pepper	<i>Schinus terebinthifolius</i>	Woody
Burma reed	<i>Neyraudia reynaudiana</i>	Grasses
carrotwood	<i>Cupaniopsis anacardioides</i>	Woody
catclaw mimosa	<i>Mimosa pigra</i>	Woody
cat's claw vine	<i>Dolichandra unguis-cati</i>	Vines
Chinese privet	<i>Ligustrum sinense</i>	Woody
Chinese tallow	<i>Sapium sebiferum</i>	Woody
climbing hempweed	<i>Mikania micrantha</i>	Vines
coat buttons	<i>Tridax procumbens</i>	Herbs
cogongrass	<i>Imperata cylindrica</i>	Grasses
coral ardisia	<i>Ardisia crenata</i>	Woody
dodder	<i>Cuscuta</i> spp.	Vines
downy myrtle	<i>Rhodomyrtus tomentosa</i>	Woody
itchgrass	<i>Rottboellia cochinchinensis</i>	Grasses
Japanese climbing fern	<i>Lygodium japonicum</i>	Ferns
Japanese honeysuckle	<i>Lonicera japonica</i>	Vines
kudzu	<i>Pueraria montana</i>	Vines
Kyasuma grass	<i>Pennisetum pedicellatum</i>	Grasses
latherleaf	<i>Colubrina asiatica</i>	Woody
little bell morning glory	<i>Ipomoea triloba</i>	Vines
melaleuca	<i>Melaleuca quinquenervia</i>	Woody
missiongrass, thin napiergrass	<i>Pennisetum polystachyon</i>	Grasses
rosary pea	<i>Abrus precatorius</i>	Vines
sessile joyweed	<i>Alternanthera sessilis</i>	Herbs
shoebutton ardisia	<i>Ardisia elliptica</i>	Woody
skunkvine and sewervine	<i>Paederia</i> spp.	Vines
small-leaved climbing fern	<i>Lygodium microphyllum</i>	Ferns
tropical soda apple	<i>Solanum viarum</i>	Woody
tropical spiderwort	<i>Commelina benghalensis</i>	Herbs
turkeyberry	<i>Solanum torvum</i>	Woody
wetland nightshade	<i>Solanum tampicense</i>	Woody
white lead tree	<i>Leucaena leucocephala</i>	Woody
white yam	<i>Dioscorea alata</i>	Vines
wild sugarcane	<i>Saccharum spontaneum</i>	Grasses
yellow bristlegrass	<i>Setaria pumila</i>	Grasses

# Noxious weeds are regulated by the state of Florida, based on CHAPTER 5B-57, F.A.C.

## Additional Information Sources

### Websites

#### FDACS DPI

<https://www.freshfromflorida.com/Divisions-Offices/Plant-Industry/Bureaus-and-Services/Bureau-of-Entomology-Nematology-Plant-Pathology/Botany/Noxious-Weeds>

#### UF/IFAS Center for Aquatic and Invasive Plants

<http://plants.ifas.ufl.edu/>

#### UF/IFAS Assessment of Non-native Plants in Florida's Natural Areas

<https://assessment.ifas.ufl.edu/>

#### Florida Exotic Pest Plant Council

<http://www.fleppc.org/>

#### Federal Noxious Weed List

[https://www.aphis.usda.gov/plant\\_health/plant\\_pest\\_info/weeds/downloads/weedlist.pdf](https://www.aphis.usda.gov/plant_health/plant_pest_info/weeds/downloads/weedlist.pdf)

### Books

Bryson, C.T. and M.W.DeFelice. 2009. Weeds of the South. University of Georgia Press, Athens, Georgia. 468 p.

Langeland, K.A., H.M. Cherry, C.M. McCormick and K.A.Craddock Burks. 2008. Nonnative plants in Florida's natural areas. The University of Florida, IFAS Communications Services, Gainesville, Florida. 193 p.

Simberloff, D. et al. 1997. Strangers in paradise: impact and management of nonindigenous species in Florida. Island Press, Washington, DC. 479 p.

### Acknowledgements

This guide would not have been possible without the much appreciated effort of DPI staff, especially Scott Burton and other staff of our Technical Assistance Section, including Denise Feiber, Christina Bunch and Jeff Lotz. Staff from our Bureau of Plant and Apiary Inspection were also extremely helpful in planning this guide. The work of all the volunteers and professionals who provide information about noxious weeds or attempt to control them is noted with gratitude.

The photographs made easily available from Bugwood <https://www.bugwood.org>, Florida Plant Atlas <http://florida.plantatlas.usf.edu> and wikipedia <https://www.wikipedia.org> are appreciated. Photographers are acknowledged for individual photographs within the guide.

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