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**Water hyacinth**


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**Hydrilla**

# Descriptions

***Colocasia esculenta***

**FLEPPC Category I**

**Description:**
This plant can grow up to 1.5 m tall and is found throughout North Carolina to Texas, but presents the most serious threat in Florida. It can be found in ditches and canals as well as along river and lake shorelines.

**Leaves:**
Leaves are large and can range from a dark green color to purple near the top. They are held at the end of petioles up to 1 m long. Leaves can grow up to 0.6-1 m in length and 0.3-0.6 m in width and are shaped similarly to an elephant's ear.

**Flowers:**
Small flowers with a yellow hood grow from fleshy stalks in dense clusters. Rarely produce flowers when outside of their native range, instead reproducing vegetatively.

**Fruit:**
Develop clusters of small berries which can be found growing on the stalk.

***Alternanthera philoxeroides***

**FLEPPC Category II; FDACS Prohibited aquatic plant**

**Description:**
Develops dense mats in still water or saturated soil. Often found along the shoreline of waterways and is somewhat tolerant of salt and immersion during flooding. It is a trailing herb, and the stems can grow up to 1 m.

**Leaves:**
Can be up to 10 cm long and 2 cm wide and grow on opposite sides of the stem. Smooth edged and elliptical in shape. The tips of the leaves are short and pointed and they taper at the base. The petiole is short.

**Flowers:**
Flowers develop during the summer and appear on the ends of stalks (5-7 cm) that stem from the joints between leaf and stem. They develop either on the end of the stalk or in leaf axils. The white flowers are small, papery, and in ball-shaped clusters.

**Fruit:**
Fruits are small capsules that contain one seed. In Florida they are known to reproduce from stem fragments rather than developing fruits.

***Hydrilla verticillata***

**FLEPPC Category I; FDACS Prohibited aquatic plant; USDA Noxious weed list**

**Description:**
Hydrilla is a perennial herb that forms dense mats on the surface of high or low nutrient freshwater areas such as ponds, canals, and lakes. The root systems grow as deep as 6 m with many branches which develop rhizomes and small tubers.

**Leaves:**
Leaves are whorled with 3-8 leaves per whorl, and each leaf is approximately 6-20 mm in length and 2-4 mm in width. The edges of the leaves are coarse bearing visible teeth with a central rib that is reddish in color bearing 1-4 small conical bumps.

**Flowers:**
Plants contain both male and female flowers. Males are reddish brown with 3 sepals and 3 petals which are small (2 mm long). They develop on the stalks, but are released and float once mature. When the flower opens it releases pollen which floats and the surface. Female flowers float and have 3 white sepals and 3 petals (4 mm long) which are translucent.

***Eichhornia crassipes***

**FLEPPC Category I; FDACS Prohibited aquatic plant**

**Description:**
Water hyacinth is a floating aquatic species which grows in dense mats up to 1 m tall in warm climates. It is generally found in still, shallow water. Roots are submerged, but if stranded in mud it will root in the mud. New growth attaches to other planlets in the mat by floating stolons.

**Leaves:**
Leaves are thick and oval or rounded in shape with dense veins. They grow up to 15 cm wide and curve inward at the edges. Petioles can grow to 30 cm.

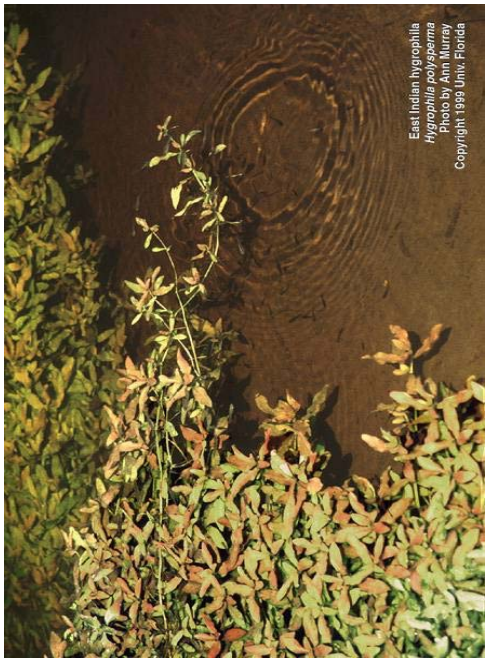
**Flowers:**
Flowers are a lavender or pinkish blue color. They have 6 stamens and petals. The upper petal has a yellow splotch surrounded in blue. They can grow to 5 cm wide

**Fruit:**
Fruits are segmented into 3 parts and contain many ribbed seeds.

## Pictures

*Hygrophila polysperma* 5

**East Indian hygrophila**




*Hymenachne amplexicaulis* 6

**West Indian marsh grass**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**Asian marshweed**

# Descriptions

***Hymenachne amplexicaulis***

**FLEPPC Category I**

**Description:**
West Indian marsh grass is often found in drainage ditches, marshes, and other wet areas in deeper water. It was most likely introduced naturally by migratory birds.

**Leaves:**
1 m or longer pithy stems have glabrous leaves with hairy margins and a membranous ligule. The leaves are flat, long, and narrow up to 35 cm long and 4 cm wide. Leaf base is cordate.

**Flowers:**
A terminal panicle with dense flowers can grow 8 mm wide and 50 cm long. The inflorescence is spike-like held by a short stalk.

**Fruit:**
3.3 to 4.3 mm long fruit

***Hygrophila polysperma***

**FLEPPC Category I; FDACS Prohibited aquatic plant; USDA Noxious weed list**

**Description:**
Can be found in lakes and ponds and spreads rapidly. It causes issues with irrigation and flood-control systems by clogging the systems as well as presenting a navigational hazard.

**Leaves:**
Leaves are up to 8 cm long and 2 cm wide (wider at tip) with smaller aerial leaves, and they are opposite along the stem which are mostly submerged with free floating and anchored roots. Leaves are sessile and attached at the base by tissue with visible cilia (up to 1.5 mm) at a node.

**Flowers:**
Flowers are solitary and small, found in the axils of uppermost leaves. They have 2 stamens, a 2-lipped and bluish-white corolla with a 5-lobed calyx, and are nearly concealed by leaves.

**Fruit:**
Small round seeds contained in a narrow capsule.

***Limnophila sessiliflora***

**FLEPPC Category II; FDACS Prohibited aquatic plant; USDA Noxious weed list**

**Description:**
Invades areas of slow-flowing, shallow water (swamps, ditches, ponds, lakes, etc.) or saturated soil. It develops into dense mats that can be 3 m deep.

**Leaves:**
Submerged leaves are fan-like and in segmented leaf whorls of 8-13 (up to 3 cm long). Emergent leaves appear differently with a simple, oblong, and narrow shape, whorled, and coarse around the edges from teeth to deep lobes.

**Flowers:**
Small, solitary flowers grow within leaf axils and are sessile. The calyx is hairy, and the corolla ranges from lavender to violet, and the lines are a darker purple shade.

**Fruit:**
Fruits are capsules, small, and dark brown in color.

***Ipomoea aquatica***

**FLEPPC Category I; FDACS Prohibited aquatic plant; USDA Noxious weed list**

**Description:**
Water spinach, which is in morning glory family, is a vine which can grow to over 2.7 m and floats when in an aquatic environment. It is usually found along muddy shorelines, and marshes. The stems contain a milky sap.

**Leaves:**
Leaves grow to 2.5-15.2 cm long and 2.5-7.6 cm wide. They have an arrow-like shape, but variable, with pointed tips and grow along the stem alternately. They have 3-14 cm glabrous petioles. Leaves float above water.

**Flowers:**
Funnel shaped, typical of morning glory, pink or white flowers are 3.7-7.6 cm wide with a purple center. They develop from the leaf axils either in a small cluster or singly.

**Fruit:**
They develop capsules containing 1-6 seeds which are hairy and grayish in color. Fruit are 1 cm wide and oval or spherical. Once mature they become woody.

## Pictures

*Myriophyllum spicatum* 9

**Eurasian water milfoil**


*Nymphoides cristata* 10

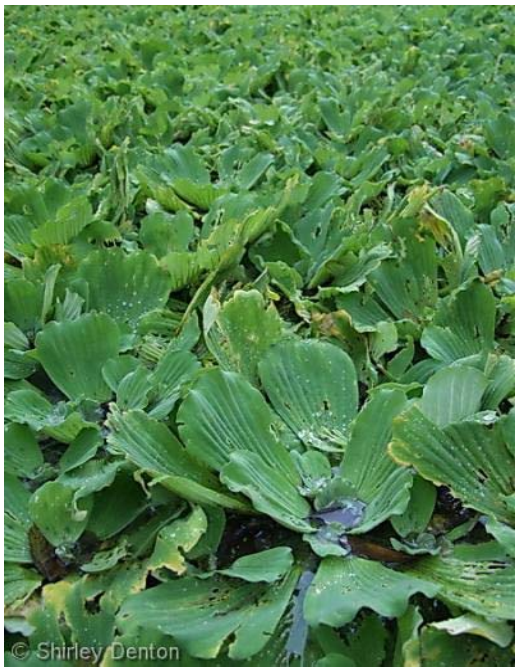
**Crested floating-heart**


*Panicum repens* 11

**Torpedo grass**

*Pistia stratiotes* 12

**Water Lettuce**



# Descriptions

***Nymphoides cristata***

**FLEPPC Category I**

**Description:**
This floating aquatic species can be found in various types of water bodies such as lakes, canals, and ponds in shallower waters throughout Florida.

**Leaves:**
The leaves are heart shaped with smooth margins. Leaf base is cordate. Leaves can develop in saturated soils, but are generally floating with roots attached to the sediment below. They can be free floating for a period of time with tuberous propagule growing from the bottom of leaves.

**Flowers:**
Glabrous, white, 5 petal flowers are 0.75 to 2.4 cm wide. Petals are crested and margins are membranous. A ridge of tissue runs along the upper midvein.

**Fruit:**
Seeds are smooth and rounded and fruit is an oblong capsule.

***Myriophyllum spicatum***

**FLEPPC Category II; FDACS Prohibited aquatic plant**

**Description:**
It develops dense mats that spread at the surface and has a tendency to die back in late Fall. Of all the nonnative aquatic plants, it is the most wide spread throughout North America growing in various locations because of its tolerance for brackish water. It can be found in reservoirs, rivers, and even tidal areas.

**Leaves:**
3-5 leaf whorls grow from 1-1.2 m reddish stems and are divided into leaflets of 12-16 pairs which are thin and 1.3 cm long. Submerged leaves appear gray-green and feathery because they are in 3-4 leaf whorls with 14-20 thread-like pairs of segments.

**Flowers:**
Flowers can emerge up to a foot out of the water on a spike. They are small and develop solitarily in leaf axils. Reddish males develop higher on the spike than females with reddish bisexual flowers in the middle.

**Fruit:**
Tiny (3mm), 4-lobed, rounded fruits

***Pistia stratiotes***

**FLEPPC Category I; FDACS Prohibited aquatic plant**

**Description:**
Water lettuce gets its name from is similar appearance to a head of lettuce. It can be found in slow moving bodies of water such as lakes and streams. It cannot tolerate temperatures colder than 59℉ so it is most commonly found in Florida although it ranges as far as New York and California.

**Leaves:**
The leaves are large (15 cm long) with scalloped edges and parallel ridges. They are soft to touch due to soft hairs, thick, and light green. Submerged roots attach the rosettes at the base.

**Flowers:**
Flowers are not easily visible as they are concealed by the leaves, but there is a single female flower that develops on a short stem, and the male flowers grow in a whorl on top.

**Fruit:**
Fruits are green, small berries

***Panicum repens***

**FLEPPC Category I**

**Description:**
This grass grows along lakes, canals, or swamps in damp soil and can also develop mats into the water. It can also be found in pastureland or sand dunes and is salt-tolerant allowing it to grow in coastal regions.

**Leaves:**
Grow long rhizomes which can be longer than 5.6 m in length. They are white to brown in color with a knotty appearance and torpedo shaped tips yielding the name Torpedo grass. Stems grow to 1 m from the rhizome ending in long, narrow leaves (2.5-25.4 cm length, 0.12-0.63 cm width). Leaves have a hairy surface and they can be rolled down along the edges.

**Flowers:**
Flower almost throughout the year on branched inflorescence which grow 7.6-22.9 cm in length.

**Fruit:**
Whitish seeds are produced from the flower, but seed viability is fairly low.

## Pictures

*Salvinia minima* **13**

**Water spangles**

# Descriptions

***Salvinia minima***

**FLEPPC Category I**

**Description:**
This floating fern usually inhabits still or slow moving water such as ponds, marshes, and swamp s ranging along the eastern coast from Florida to Virginia, and along the southern states to California. They are shade, sun, and cold (but not freezing) tolerant, and are found in the same areas as water hyacinth.

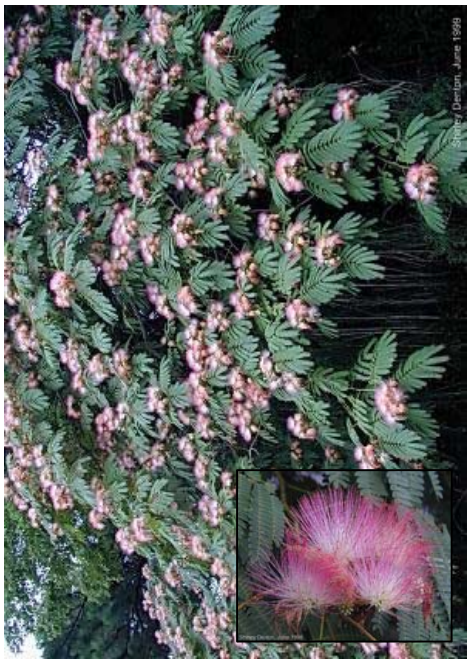
**Leaves:**
Leaves that grow in the shade are 2.5-3.7 cm long, flat, and oval shaped with rounded tips and a heart-shaped base whereas leaves that grow in sunlight have a crumpled appearance, are longer, and brown over time. Crowded leaves also crumple. The leaves are coated with white hair on the top, and brown hairs cover the bottom. In general a plant will have 3-leaf clusters with two leaves on the surface with a single, longer, brown leaf submerged.

**Spores:**
Plants have a sporocarp beneath the plant which has a nutlike appearance.

## Pictures

*Albizia julibrissin* 1

**Silktree**




*Ardisia crenata* 2

**Coral ardisia**


*Ardisia elliptica* 3

**Shoebutton ardisia**


*Casuarina equisetifolia* 4

**Australian pine**

# Descriptions

***Ardisia crenata***

**FLEPPC Category I**

**Description:**
This evergreen subshrub invades many habitats in Florida from scrub and sandhill, to hardwood hammocks and lake shores. It can grow to 1.8 m tall, but is generally shorter at 0.5-1 m.

**Leaves:**
Leaves alternate on the stems and can grow to 21 cm long. On the top they appear waxy, smooth, without hair, and dark green. The edges are scalloped with calluses within the notches.

**Flowers:**
Small flowers are white or pink with yellow anthers and are bisexual. They grow on stalks and usually droop below the leaves in axillary clusters.

**Fruit:**
Fruits are approximately 8 mm in diameter, bright red, and rounded. They contain one seed.

***Albizia julibrissin***

**FLEPPC Category I**

**Description:**
This tree can grow 6-12 m tall in a variety of habitats and soil types including forests, floodplains, and open areas. It tolerates wind, salt, and drought well. Can be found throughout much of the United States, and typically in disturbed areas in central and south Florida.

**Leaves:**
Trees often have multiple stems with tan and smooth bark and branching with feathery leaves. Leaves are also double compound appearing alternately. They are about 50 cm long and divided into 10 to 25 12.7-20.3 cm long pinnae and further divided into 40 to 50 small leaflets.

**Flowers:**
Bloom early in the summer in clusters at the ends of branches. Flowers are about 3.7 cm wide, pink, fragrant, and puff-like.

**Fruit:**
Develop 15 cm long pods that are flat and tan late in the summer. Each pod holds several oval shaped seeds

***Casuarina equisetifolia***

**FLEPPC Category I; FDACS Prohibited Aquatic Plant; FDACS Noxious weed list**

Also known as Australian-oak, Horsetail Tree, and Beach She-oak

**Description:**
Introduced into the United States in the late 1800's. The tree itself is pine-like, with shaggy open crowns. The bark of the Australian Pine is dark brown to light gray, furrowed into thin strips. It can achieve a height of 100'.

**Leaves:**
Tiny, scale-like, whorled on jointed, quill-like twigs

**Flowers:**
Males and female flowers are present on the same plant and are inconspicuous. Male flowers occur in terminal spikes, while the female flowers are in small, axillary clusters.

**Fruit:**
¾" yellowish-brown, woody balls

***Ardisia elliptica***

**FLEPPC Category I; FDACS Noxious weed list**

**Description:**
Shoebutton ardisia ranges from the size of a small shrub to 6.1 m tall. It can be found in lowland areas and other wet areas. It tolerates shade.

**Leaves:**
Leaves are leathery 7.6-15.2 cm long and 2.5 cm wide. Alternating on the stem, elliptical in shape with smooth margins. Young leaves can be a reddish color.

**Flowers:**
Flowers develop in clusters branching from where the leaf meets the stem. They have 5 petals and are star shaped. Petals are mauve colored. They flower year round, but peak during the summer.

**Fruit:**
Fruits begin as pink clusters which transform to a shiny dark purple or black. Each fruit contains one seed. Seeds develop throughout the year.

## Pictures

*Cinnamomum camphora* 5

**Camphor tree**

*Cupaniopsis anacardioides* 6

**Carrotwood**

*Dioscorea bulbifera* 7

**Air potato**

*Imperata cylindrica* 8

**Cogongrass**

# Descriptions

***Cupaniopsis anacardioides***

**FLEPPC Category I; FDACS Noxious weed list**

**Description:**
Grows to 10.7 m tall in various habitats from marshes, pinewoods, mangrove forest, dunes, and riverbanks. It tolerates salt as well as shade and sun. Its name derives from its orange inner bark while the outer bark is dark gray.

**Leaves:**
Leaves attach at the stem by a stalk and contain 4-10 leaflets. They are 10-20 cm, shiny, and oblong with rounded or indented tips.

**Flowers:**
Flowers bloom during winter and they develop on stalks emerging from the leaf axils that can be over a foot. The 5-petal flowers are whitish-green and develop in clusters.

**Fruit:**
Seed capsules are yellow-orange in color. On the interior the capsules are segmented into 3 sections with 3 seeds. Seeds are shiny and black, but are covered in an orange tissue.

***Cinnamomum camphora***

**FLEPPC Category I**

**Description:**
The camphor tree is a tall (15-30 m) evergreen that is named from the odor produced when its leaves are crushed. It can be twice as wide as it is tall and is found most commonly in dry sandy soils.

**Leaves:**
Leaves are 3.7-10.1 cm long and 2-5 cm wide and attached to green or reddish twigs. They are oval shaped and simple, but can have wavy margins. When they are young they are reddish, but become green as they mature, waxy on the bottom and glossy on top.

**Flowers:**
Small flowers grow from new growth during the spring. The color is white or cream and they form 7.6 cm long spikes.

**Fruit:**
In the summer black fruits grow. They are small and round and remain into winter.

***Imperata cylindrica***

**FLEPPC Category I; FDACS Noxious weed list; USDA Noxious weed list**

**Description:**
Due to its lack of cold tolerance it is found in the southeastern United States from South Carolina to Florida and Texas to the west. Often found in pastures, sand dunes, roadsides, and forests.

**Leaves:**
Leaves are green to red-brown in cold and can grow to 0.3-1.2 m long and 1.3-1.9 cm wide and begin close the ground in bunches. They are stiff and sharp at the tips with a white, off center midrib. Margins are serrated and sharp.

**Flowers:**
Flowers develop in the winter or spring. They are 5-28 cm long and 3.7 cm wide with white seed panicles. They are usually held on a white rhizome spike.

**Seeds:**
The seeds are attached to long, hairy plumes which can be transported by wind or animals.

***Dioscorea bulbifera***

**FLEPPC Category I; FDACS Noxious weed list**

**Description:**
Air potato is a twining vine that is generally found in hardwood tree hammocks, disturbed areas, and the edges of wetlands. A 10-15 cm tuber sprouts the vine from underground and it can grow to 18 m.

**Leaves:**
The heart-shaped leaves can grow more than 20 cm long and are located alternately on the stem with pronounced veins.

**Flowers:**
They usually don't produce flowers, but if they do they flower in the late summer or fall with 10 cm long spikes of green or white, fragrant flowers that drop from leaf axils. They are dioecious.

**Fruit:**
They produce aerial tubers called "bulbils" during June or July which fall to the ground from which new plants grow.

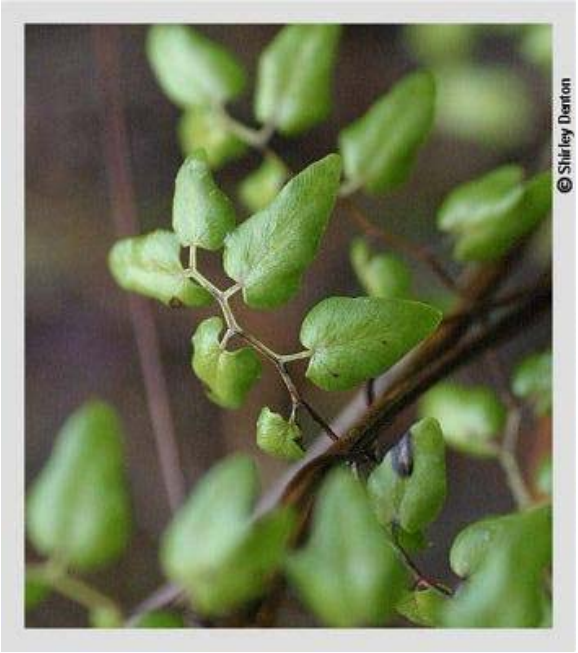
## Pictures

*Lygodium japonicum* 9

**Japanese climbing fern**


*Lygodium microphyllum* 10

**Old World climbing fern**




*Macfadyena unguis-cati* 11

**Cat's claw vine**


*Melaleuca quinquenervia* 12

**Melaleuca**

# Descriptions

***Lygodium microphyllum***

**FLEPPC Category I; FDACS Noxious weed list; USDA Noxious weed list**

**Description:**
Found in various habitats including forested swamps, stranded swamps, floodplain forests, mesic and wet flatwoods, and hydric hammocks. This fern can grow to 30 m and develops climbing fronds.

**Leaves:**
Leaves branch from the rachis and are generally oblong and 5-12 cm long leaflets are stalked, unlobed. When leaves detach they leave a wiry stalk. Leaves are generally glabrous on the underside.

**Spores:**
Leaflets containing spores have tiny lobes fringed along the edges. The tissue of these fringes rolls to cover the sporangia.

***Lygodium japonicum***

**FLEPPC Category I; FDACS Noxious weed list**

**Description:**
Found commonly in shade or sun in areas that have been disturbed, such as yards, but also upland woodlands, marshes, swamps, creeks, and hammocks. This fern can grow to 30 m and develops climbing fronds.

**Leaves:**
Leafy branches develop from a wiry rachis. 10-20 cm long and are triangular in overall shape. Leaflets are lobed and terminal ones are often dissected while lower leaflets can be dissected or irregularly lobed.

**Spores:**
Fertile leaflets contain sporangia on the margins of the leaflets in two rows. The margins roll to partially conceal the sporangia.

***Melaleuca quinquenervia***

**FLEPPC Category I; FDACS Prohibited Aquatic Plant; FDACS Noxious weed list; USDA Noxious weed list**

**Description:**
Grows along the edges of canals, lakes, and cypress swamps. It forms dense stands and can take over marsh areas creating a tree dominated habitat. It can grow to 24 m tall.

**Leaves:**
Leaves are gray-green, elliptical, 2.5-5 cm, and grow alternately. When crushed they smell like eucalyptus.

**Flowers:**
Flower almost year round with clusters of white bottlebrush like flowers.

**Fruit:**
Rounded seed capsules grow along the stem in dense clusters. The seeds can be water or wind dispersed and hundreds of seeds are housed in each capsule. The seeds remain in the capsules until some disturbance such as fire, a branch breaking, herbicide, or frost.

***Macfadyena unguis-cati***

**FLEPPC Category I**

**Description:**
Often used as an ornamental because of its bright yellow flowers. Found mostly around human inhabited areas, hardwood forests, and hammocks

**Leaves:**
Leaves are opposite with a tendril growing between 2 elliptical leaflets. The vine is able to climb trees due to hooks on the ends of the 3-forked tendril. The leaflets grow 3.7-7.6 cm.

**Flowers:**
The vine flowers in the spring. The yellow, tubular flowers develop from leaf axils in clusters and grow to 7.6 cm long.

**Fruit:**
The vine develops flat capsules that can grow to 15-20 cm. The capsules contain seeds which are winged. In more mature plants a foot long tuber can develop underground.

## Pictures

*Melia azedarach* **13**

**Chinaberry**


*Nephrolepis cordifolia* **14**

**Erect sword fern**

*Pueraria montana* **var.** *lobata* **15**

**Kudzu**


*Rhodomyrtus tomentosa* **16**

**Downy rose-myrtle**

# Descriptions

***Nephrolepis cordifolia***

**FLEPPC Category I**

**Description:**
They grow well in normal to poor conditions often in the shady areas of hammocks. They can grow on other plants, rocks or terrestrially.

**Leaves:**
The fronds are pinnate growing to 1 m long and 7 cm wide. Petioles have brown scales and grow to 20 cm. There are many leaflets on either side of the rachis with 40-100 on each side. Leaflets are oblong and pointed at the tip. The rachis is overlapped on the upper side by a lobe at the base of the leaflet. The margins are toothed, either completely or mildly. Leaflets are glabrous at the midvein.

**Spores:**
Sterile and fertile fronds appear similarly in both size and shape. Spores grow between the margin of the leaflets and the midvein. The sporangia are covered by kidney shaped tissue.

***Melia azedarach***

**FLEPPC Category II**

**Description:**
It is tolerant of drought conditions as well as poor soil and high temperatures and grows often in disturbed sites. It can grow to 15 m high and is found as either a bush or tree.

**Leaves:**
Leaves are alternate along the stem and composed of tiny leaflets which are blue-green, toothed along the margins, and narrow with a point at the tip. The leaflets only grow 2.5-7.6 cm whereas the entire leaf is 0.6 m.

**Flowers:**
Chinaberry has fragrant, lilac or white flowers. Flowers are 1.9 cm wide and 5-petaled with a purple center. They grow in clusters from the nodes of new leaves.

**Fruit:**
During the summer they develop long stalks of round, cherry-sized berries that grown in large clusters. Initially the berries are green, but become yellow as they mature, and eventually dark brown in fall. They remain on the tree into winter.

***Rhodomyrtus tomentosa***

**FLEPPC Category I; FDACS Noxious weed list**

**Description:**
Often found in pineland areas, downy rose myrtle grows to 2 m tall and develops dense stands that outcompete native species. It is believed to become a more serious threat than Brazilian pepper in central Florida.

**Leaves:**
Leaves are simple and elliptical to oval in shape. They grow 7 cm long on opposite sides of the stem. The top is glossy whereas the bottom is covered in hairs. Three veins run laterally from base to leaf tip.

**Flowers:**
Flowers have 5 sepals and 5 petals. They are bright pink with pink filaments on the multiple stamens and approximately 2.5 cm wide. Flowers may be in a cluster with a few others.

**Fruit:**
Dark purple fruits are round, about 1.3 cm across and only contain a few seeds. They are also fragrant and sweet.

***Pueraria montana* var. *lobata***

**FLEPPC Category I; FDACS Noxious weed list**

**Description:**
Kudzu is a vine that grows in hot climates with mild winters. It grows quickly and can cover an area quickly, covering up buildings, power lines, and trees. It is estimated that Kudzu is impacting approximately 7 million acres of land.

**Leaves:**
They have large leaves (10 cm wide) which contain three leaflets. The leaves can either be lobed with 2 to 3 lobes or unlobed. Leaves grow alternately and leaf margins are hairy.

**Flowers:**
Flowers are purple and grow to 1.3 cm long and grow in large, hanging clusters. They develop during the middle of summer.

**Fruit:**
Kudzu develops brown seed pods which are hairy and contain 2-10 hard seeds.

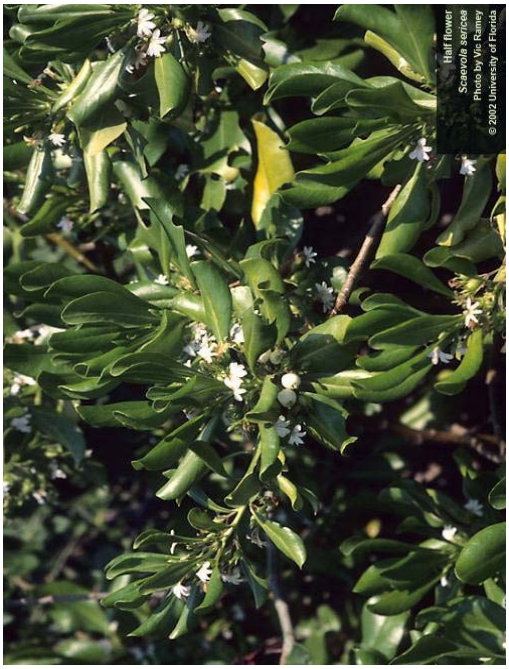
## Pictures

*Sapium sebiferum* 18

**Chinese tallow tree**


*Scaevola taccada* 19

**Beach naupaka**




*Schinus terebinthifolius* 20

**Brazilian pepper**


*Solanum viarum* 21

**Tropical soda apple**

# Descriptions

***Scaevola tacadda***

**FLEPPC Category I; FDACS Noxious weed list**

**Description:**
Beach naupaka grows in coastal areas along dunes, in mangroves, and rock barrens. On sand dunes it supplants other species which are better suited to control erosion. It grows as a tree or shrub to 4.8 m.

**Leaves:**
Leaves are succulent and glossy. They are shaped like a spoon and narrow at the base with indented margins. Leaves grow 12.7-23 cm long and 2.5-10 cm wide. Different varieties may or may not have leaf hairs.

**Flowers:**
Pink or white flowers grow throughout the year. The y are small (2.5 cm wide) and form with 5 fused petals that eventually separate into a semicircular arrangement.

**Fruit:**
0.6-1.9 cm sized round fruits begin as green and become white as they mature. Fruits are fleshy.

***Sapium sebiferum***

**FLEPPC Category I; FDACS Noxious weed list**

**Description:**
Chinese tallow tree can be found in moist areas such as along ditches and in low lying areas, however it can also be found uplands that drain well in either human inhabited or undisturbed sites. It also inhabits canopy and hardwood forests and tolerates both fresh and salt water soils that do not drain well and even floating islands. They can grow to 16 m.

**Leaves:**
Leaves are 3-6 cm wide, simple, and alternate along the stem. They are broad and ovate shaped. Towards the petiole they are very rounded at the base and pointed at the tip.

**Flowers:**
Flowers grow on a spike (to 20 cm long). The flowers themselves are small and yellow with parts in 2 or 3.

**Fruit:**
They have small, 3-lobed capsules which contain 3 white seeds which temporarily remain attached when the fruit opens.

***Solanum viarum***

**FLEPPC Category I; FDACS Noxious weed list; USDA Noxious weed list**

**Description:**
Generally grows in dry areas that have been disturbed. It can be found in pastures and fields, alongside ditches, and roadsides.

**Leaves:**
Leaves have pointed lobes and covered in hairs. Stems and leaf veins have prickles (1.3-2.5 cm long). Leaves are alternate along the stems, 15-20 cm long and 5-15 cm wide.

**Flowers:**
Develop small, white, 5-petaled flowers in clusters of 1-5. Flowers and fruits grow year round, but most heavily from fall to spring.

**Fruit:**
The common name, Tropical Soda Apple, comes from the fruits. Round fruits are approximately 2.5 cm wide and contain over 400 small seeds. Fruits are mottled green and yellow when mature with red-brown seeds.

***Schinus terebinthifolius***

**FLEPPC Category I; FDACS Prohibited aquatic plant; FDACS Noxious Weed List**

**Description:**
Brazilian Pepper is a sprawling shrub that can reach a height of 7-10 m. The branches can be upright, reclining, or nearly vine-like, all present on the same plant.

**Leaves:**
The leaves are alternate, 10-22 cm long, pinnately compound with 5-15 leaflets; the leaflets are roughly oval (lanceolate to elliptical), 3-6 cm long and 2-3.5 cm broad, and have finely toothed margins, an acute to rounded apex and yellowish veins. The leaf rachis between the leaflets is usually (but not invariable) slightly winged.

**Flowers:**
Small white flowers borne profusely in axillary clusters

**Fruit:**
The fruit is a small, red, spherical drupe 4-5 mm diameter, carried in dense clusters of hundreds of berries.

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*Urena lobata* **22**

**Caesarweed**


*Urochloa mutica* **23**

**Para grass**

*Salsola kali* **17**

**Prickly Russian thistle**

# Descriptions

***Urochloa mutica***

**FLEPPC Category I**

**Description:**
Generally found in wet areas including the edges of canals, rivers, and lakes as well as marsh areas. It can also grow near brackish water. It is drought, but not frost tolerant. Stems that grow vertically can be 1 m tall, but stems growing along the ground can be up to 4.6 m.

**Leaves:**
Hairy and swollen nodes are at the base of the leaves. Leaves are long growing up to 0.3 m long, yet narrow (1.3 cm). There are hairs on the bottom of the leaves where they wrap around the stem at the node.

**Flowers:**
They develop long flower clusters in fall to winter. Each flower cluster contains 5-20 branches which are 2.5-7.6 cm long. The purplish flowers are densely packed along the branches.

**Fruit:**
They produce seeds with low viability so they mostly reproduce from root fragments.

***Urena lobata***

**FLEPPC Category I**

**Description:**
Caesarweed grows in dense thickets along roadsides, in hardwood hammocks, sandhills, swamp edges, coastal dunes, essentially all types of habitats.

**Leaves:**
Star-shaped hairs cover the papery leaves which grow from 5 cm petioles. Leaves are simple and broad, ovate shaped with 3-5 lobes at the tip. The upper surface is rough and the lower is grayish. They grow alternately along the stem. Finely toothed along the edges.

**Flowers:**
The flowers are small, pink with a darker shade at the base, and solitary. They have 5 petals and a 5 lobed calyx which is hairy. They also have a 5-lobed style and a pink, fused stamen. Flowers are similar to hibiscus.

**Fruit:**
The fruit are small (1 cm wide), spiky capsules. Each capsule is segmented into 5 sections and each segment holds one seed.

***Salsola kali***

**FLEPPC Category I**

**Description:**
Prickly Russian thistle occurs in various habitats, but it often found in sandy beach areas as well as disturbed sites. It can be 0.3-1 m tall and 0.3-1.5 m across.

**Leaves:**
It forms a highly branched rounded bush which is covered in small leaves which are awl-shaped and have a spiny tip.

**Flowers:**
Small flowers develop at the leaf axils which are very small and not easily noticeable.

**Fruit:**
The plant produces many winged seeds which develop in the leaf axils and remain on the plant after it dies. The seeds do not have endosperm, but rather a complete, coiled embryo. The plant detaches at the base when it dies and is tumbled by the wind which disperses the seeds.

# Pictures

# Descriptions

# Pictures

**FDACS = Florida Department of Agriculture and Consumer Services**

**USDA = U.S. Department of Agriculture**

**FLEPPC = Florida Exotic Pest Plant Council**

**FLEPPC Category I –** invasive exotics that are altering native plant communities by displacing native species, changing community structures or ecological functions, or hybridizing with natives. This definition does not rely on the economic severity of geographic range of the problem but on the documented ecological damage caused.

**FLEPPC Category II** – invasive exotics that have increased in abundance or frequency but have not yet altered Florida plant communities to the extent shown by Category I species. These species may become ranked Category I, if ecological damage is demonstrated.

The Florida Exotic Pest Plant Council's 2011 List of Invasive Plant Species can be found at www.fleppc.org

**Glossary:**

**Alternate** – borne one at a node, as in leaves, appearing on one side of the axis and then the other

**Axil** – angle formed where two parts join, as a leaf and stem or branch and stem

**Axillary** – in the axil

**Bisexual** – an individual flower that has both male and female parts

**Bulbil** – small bulb (enlarged, shortened stem), born on a stem or in a inflorescence

**Calyx** – the sepals of a flower; the outermost whorl of flower parts, usually green, or at least a different size and shape from the petals

**Ciliate** – bearing cilia, often said of leaf or petal margins that bear more or less short, stiff hairs

**Compound** – composed of two or more similar and united parts, as a leaf with two leaflets

**Glossary:**

**Glabrous** – without hairs

**Inflorescence** – the characteristic cluster of flowers of a plant

**Ligule** – in grasses and sedges, and outgrowth (membrane or hairs) at the adaxial junction of leaf blade and sheath.

**Membranous** – thin, pliable, somewhat translucent or transparent

**Node** – place on a stem or other axis where a leaf, branch, or other organ arises

**Oblong** – longer than broad, with more or less parallel sides

**Opposite** – with two leaves (or other parts) at the same node, one on each side

**Panicle –** an inflorescence that is a compound (further branched) raceme

**Glossary:**

**Serrate** – toothed with the teeth pointing toward the blade tip; saw-toothed

**Sessile** – without a stalk, attached directly

**Spike** – a raceme with the flowers sessile on the main axis

**Sporangium** – spore case, a sac or body in which reproductive spores are borne. (plural: sporangia)

**Stamen** – the male part of a flower, consisting of a filament (sometimes absent) and a pollen- bearing anther.

**Stolon** – prostrate stem growing at the surface of the ground, often giving rise to new growth

**Translucent** – transmitting light without being transparent; fine or sheer enough to see through

**Tuber** – a swollen, starch-storing portion of an underground stem, or less often of an aerial stem

**Whorl** – with three or more leaves (or other parts) at a node.

# Descriptions

**Glossary:**

**Cordate** – with an indentation and rounded lobes at the base; heart shaped

**Corolla** – the petals of a flower; the inner, usually colorful, whorl of flower parts

**Crenate** – shallowly round-toothed; scalloped

**Dioecious** – said of plants bearing only male or only female flowers; bearing unisexual flowers, with male and female on separate plants.

**Drupe** – a more or less fleshy, indehiscent fruit, with a stone, a hard inner layer enclosing a seed.

**Elliptic** – an outline narrowed to rounded at the ends and widest at about the middle

**Evergreen** – said of species that retain their leaves for more than a single growing season, hence are never without leaves.

**Filament** – the stalk bearing the anther (filament and anther together form the stamen)

**Native plant –** a plant species that occurs naturally in a geographic region or area (indigenous plant); it has not been introduced by humans, intentionally or unintentionally

**Non-native plant –** a plant species that is present in a region outside its original, historic range due to intentional or unintentional introduction; not necessarily invasive. Also referred to as non-indigenous or exotic.

**Invasive plant** – a non-native plant species that develops self-sustaining populations outside of cultivation and causes environmental or economic harm

**Glossary:**

**Perennial** – a plant with a life cycle lasting over two years; stem not dying back over winter

**Petal** – a lobe or segment of a flower's corolla, often colored and showy

**Petiole** – stalk of a leaf (not always present)

**Pinnate –** divided into more or less similar units (e.g., leaflets) along an elongated axis (rachis)

**Prickle** – a sharp-pointed, usually still and hard, protuberance from the epidermis of a plant

**Raceme** – an inflorescence with stalked flowers arranged along an elongate axis (lower flowers opening first)

**Rachis –** the main axis above the petiole of a pinnately compound leaf

**Rhizome** – elongate, prostrate stem, typically underground, but may be at surface as in some epiphytes

**Sepal** – a lobe or segment of a flower's calyx

## Pictures

**Photography by:** Shirley Denton, Ann Murray and Vic Ramey (UF IFAS)

**Information adapted from:**

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