



Native Plant Uses Guide

NOTICE

This information is strictly intended for educational use. For your own safety, do not eat or use any of these plants unless supervised by a professional who knows how to prepare them safely. Some of these plants can be toxic and deadly if prepared or used incorrectly. Fairchild Tropical Botanic Garden does not guarantee the validity of all of these plant uses; the Garden has not tested these plants for their uses.

Bursera simaruba (gumbo limbo)

- **Medicine-** The bark and/or leaves are believed to be useful as an antidote for poisonwood rash, poison ivy, and mango dermatitis, as well as treatment of insect bites and stings. An infusion of the bark mixed with sugar is said to be useful in treating low blood pressure. An infusion of bark and leaves is thought to be useful for treating fever.
- **Other-** Its wood was used to make carousel horses. It is a source of "bird lime" (resin that traps small birds, used in songbird trade). Large cuttings are often planted as living fence posts throughout Caribbean.
- *Leaf characteristics:* Compound pinnate, opposite, with terminal leaflet
- *Flower / fruit characteristics:* Small, greenish yellow flowers
- *Other unusual characteristics:* Peeling reddish bark



Where to find gumbo limbo at Fairchild: Plots 110, 114, 163, 164, 185, 190A, 197, 199, 21, 24 (see last page for map)

Zamia pumila (coontie)

- **Food-** The thick underground stem is poisonous in its natural state. Despite this, the coontie was a very important source of starch for Native Americans and early South Florida settlers. The underground stems were scraped or peeled, then pounded, washed with water and drained repeatedly, and the resultant starch was dried in the sun. This starch was also known as Florida arrowroot, and was purchased in mass quantities by the U.S. government during WWI, as it was found to be the only food that mustard gas victims could keep down.
- **Other- CAUTION!!!** Although used as a starch source, coontie can be and is extremely poisonous if not properly handled. It is said that turkeys that eat the seeds of coontie, which are known as “comptie corn” are fatally poisoned. Also, early settlers in S. Florida operated small coontie mills, the runoff of which was fatally poisonous to cattle. The toxin is water soluble, so it can be eaten only when rinsed thoroughly and properly. Under no circumstance should you try this at home!
- *Leaf characteristics:* Compound pinnate leaves, up to 3 feet long, leaflets narrow (less than 1/4 in wide), curving upward
- *Flower / fruit characteristics:* Male plants: narrow cylindrical cones, up to 5 in. long. Female plants: thick ellipsoid cone, up to 7 in long, with orange or red seeds
- *Other unusual characteristics:* Is a gymnosperm, contains toxins (steroid-like)



Where to find coontie at Fairchild: Plots 102, 164 (see last page for map)

Serenoa repens (saw palmetto)

- **Food**- The fruit and palm heart (terminal bud) can be consumed. The juice of the saw palmetto berries was mixed with carbonated water to make a soda called "Metto." The berries also provide food for wildlife.
- **Medicine**- This plant is known to affect hormones and is often used in men's health for treatment of benign prostatic hyperplasia, an enlargement of the prostate gland that affects about 50 % of all men over the age of 50. It is also recorded as being used to treat hair loss and infertility in both sexes. It is believed to reduce ambient blood testosterone levels.
- **Other**
 - Saw palmetto was used by Native Americans to make dolls for children.
 - These palms provide shelter for panthers.
 - The stems yield tannin.
 - It can be used as a cork substitute and its fiber can be used for wallboard.
 - Its leaves can be used to make small fans.
 - It can be used as thatch.
 - It is a major source of nectar for honeybees.

Leaf characteristics: Palmate leaves (fan shaped), stiff with serrated edges on leaf stalk

Flower / fruit characteristics: White flowers bloom in clusters, fragrant. Fruit is black when ripe and oblong in shape

Other unusual characteristics: Main stem crawls along ground and can form new plants vegetatively



Where to find saw palmetto at Fairchild: Plots 102, 107, 145, 150A, 150B, 64, 68, 71, 97A (see last page for map)

Opuntia dillenii (prickly pear)

- **Medicinal** – A tea prepared from the pads is said to be useful in treating inflammation and ulcers. The cooked flesh is thought to be useful in treating boils, splinters, tumors, pleurisy, arthritis and rheumatism. The root is documented as being crushed in water and drunk to relieve urinary burning. The baked fruit is believed to be useful for treating asthma, liver congestion and whooping cough. It is also believed the fruit could be useful in treating diabetes.
- **Food** – The fruit can be eaten raw or cooked with cinnamon and butter. The fruit can also be made into jams, jellies and even wine. The pads can also be eaten cooked, battered and fried, or marinated and may also be used as an ingredient in salads or other recipes.
- **Ornamental** – Large, beautiful flowers make this cactus a nice addition to any rock garden.
- **Hygiene/Beauty** – The juice from the pads can be used as shampoo.
- *Leaf characteristics:* Flat, fleshy, succulent stems with "leaves" modified into spines
- *Flower / fruit characteristics:* Large, 1-2 inch yellow to orange flowers with many petals; pear shaped red to purple fruit with many seeds



Where to find prickly pear at Fairchild: Plot 31 (see last page for map)

Guaiacum sanctum (lignum vitae)

- **Medicinal**- A tea made from leaves may be useful for treatment of rheumatism, asthma, high blood pressure and diabetes. The bark, wood and resin are said to be used to treat gout and rheumatism. It has been recorded that the resin soaked with rum can be used as a gargle for sore throats and also applied to cuts and bruises in Jamaica.
- **Food** – The fruit can be cooked as survival food, and the extract of the wood resin can be used as flavoring in ice cream, candy and baked goods (it contains 15% vanillin).
- **Construction**- The wood is highly valued for its strength and durability and fine uniform grain. It is said to have a natural gloss. It is a heavy hardwood, so heavy in fact that it sinks in water (most wood floats). However, due to its extreme popularity, this plant is listed under Appendix II of CITES (Convention on International Trade in Endangered Species of Wild Fauna and Flora), which includes species not necessarily threatened with extinction, but in which trade must be controlled in order to avoid utilization incompatible with their survival.
- *Leaf characteristics*: Small, compound pinnate leaves with oval leaflets, no terminal leaflet
- *Flower / fruit characteristics*: Deep blue to purple fragrant flowers, yellow fruit pod
- *Other unusual characteristics*: Very hard, dense wood



Where to find lignum vitae at Fairchild: Plots 137, 138B, 138C, 156A, 185, 186, 34, 37, 3B, 55B (see last page for map)

Avicennia germanis (black mangrove)

- **Food** – The sprouting seeds are said to be edible as a famine food if cooked, though they can be toxic if eaten raw. Sometimes called the honey mangrove, the flowers of this plant are an excellent honey source of nectar for honeybees. Beekeepers will intentionally keep beehives near black mangroves to make “mangrove honey.” The salt exuded the leaves can be collected and consumed.
- **Medicinal** – A tea prepared from the bark may be useful for treating ulcers, hemorrhoids, diarrhea, tumors and rheumatic pain.
- **Poison:** The raw fruit is toxic and can be used as poison or insect repellent.
- *Leaf characteristics:* Opposite leaves, very thick, leathery, often exuding salt
- *Flower / fruit characteristics:* White flowers with what looks like four petals. Fruit is a flattened, fleshy green pod
- *Other unusual characteristics:* The roots commonly send up many pencil-sized pneumatophores (roots that stick up from under the water)



Where to find black mangrove at Fairchild: Plot 158 (see last page for map)

Sabal palmetto (cabbage palm)

- **Food**- Palm heart can be obtained from the terminal bud (the growing tip), which taste like "cabbage", giving this plant its common name. This can be eaten raw or cooked, but it kills the palm (don't worry - commercial palm heart comes from other multi-stem palms, like the peach palm, which can be harvested without killing the plant). The fruits are eaten raw when ripe and are said to taste prune-like, or they can be made into syrup. Native Americans reduced the dried fruits to a coarse meal, which they used to make bread.
- **Ritual**- The leaves are gathered and stripped for use in church services on Palm Sunday.
- **Ornamental** - This palm is very popular for landscaping.
- **Construction** - This palm is an important source of thatch and was historically used for building chickees.
- *Leaf characteristics*: Costapalmate leaves (Fan shaped and slightly folded, with arched midrib). Leaf segments slender, the ends are thread-like.
- *Flower / fruit characteristics*: Small, white flowers formed in clusters, fragrant. Fruit is black when ripe and round in shape.
- *Other unusual characteristics*: The "trunk" is often covered with old leaf bases.



Where to find cabbage palm at Fairchild: Plots 101D, 102, 106, 109, 11A, 137, 144, 163, 183, 61, 62, 72, 84A, 97B (see last page for map)

Piscidia piscipula (Jamaica dogwood)

- **Medicinal** - The crushed bark or leaves are thought to be useful for pain relief. The dried root bark has been recorded as being used for neuralgia, insomnia, hysteria, toothaches and asthma. Research has found that the active ingredient (piscidic acid – C₁₁H₁₂O₇) has narcotic effects, which explains the plant's use as an analgesic and calming agent. Other research has found that it lowers the intensity of uterine and intestinal contractions and has antispasmodic action.
- **Poison** - Indigenous people used the bruised twigs and leaves of this plant to stun fish. Several compounds have been isolated from the plant that are known to be toxic to fish. The fruits were used for arrow poison when hunting. The scientific name of the plant was derived from the Latin for "fish killer." Extracts of the plant have been found to be effective natural pesticides.
- **Construction** - The wood is a heavy, durable hardwood with a yellow-brown color. It is valued for boat building, woodcarving, making fences and for charcoal.
- **Other** - The flowers of the plant are an important pollen and nectar source for honeybees.
- *Leaf characteristics*: Pinnate leaves with seven leaflets, each 5 to 10 cm (2 to 4 in.) long.
- *Flower / fruit characteristics*: Pink to lavender pea flowers, which appear in clusters after the tree loses its leaves in the dry season. The seedpods have 4 papery wings and are each around 7 cm (3 in) long



Where to find Jamaica dogwood at Fairchild: Plots 163, 164, 199 (see last page for map)

Plant	Leaf characteristics	Reproductive (flower/cone/fruit) characteristics	Other unusual characteristics	Uses (Fairchild Tropical Garden does not guarantee the validity of all of these plant uses)
Gumbo Limbo (<i>Bursera simaruba</i>)	Compound pinnate, opposite, with terminal leaflet	Small, greenish yellow flowers	Peeling reddish bark	<ul style="list-style-type: none"> • Bark and leaves - antidote to poison wood, relief of rashes, stings, burns • Tea from bark used to treat fever and low blood pressure
Coontie (<i>Zamia pumila</i>)	Compound pinnate leaves, up to 3 feet long, leaflets narrow (less than 1/4 in wide), curving upward	Male plants: narrow cylindrical cones, up to 7 in. long. Female plants: thick ellipsoid cone, up to 7 in long, with orange or red seeds	Is a gymnosperm, contains toxins (steroid-like)	<ul style="list-style-type: none"> • Used for food - the thick underground stem was made into starch, though it is poisonous - cycasin (a poisonous substance) has to be removed first by washing
Saw Palmetto (<i>Serenoa repens</i>)	Palmate leaves (fan shaped), stiff with serrated edges on leaf stalk	White flowers bloom in clusters, fragrant. Fruit is black when ripe and oblong in shape	Main stem crawls along ground and can form new plants vegetatively.	<ul style="list-style-type: none"> • Known to affect hormones, used for treatment of benign prostatic hyperplasia, treating hair loss and infertility in both sexes • Fruit and palm heart (terminal bud) are used for food and the juice of berries is used in a soda called "Metto" • Used as a cork substitute and for wallboard, leaves used to make small fans • Flowers major source of nectar for honeybees
Prickly Pear (<i>Opuntia dillenii</i>)	Flat, fleshy, succulent stems with leaves modified into spines	Large, 2 inch yellow to orange flowers with many sepals; pear shaped red to purple fruit with many seeds		<ul style="list-style-type: none"> • Fruit and pads are edible • Tea from pads used to treat inflammation, • Flesh cooked and used for boils, splinters, tumors, arthritis • Root crushed in water and drunk for urinary burning, flowers for diarrhea • Fruit baked and used for asthma, liver congestion, whooping cough • Juice extract from pads can be used as shampoo
Lignum Vitae (<i>Guaiaacum sanctum</i>)	Small, compound pinnate leaves with oval leaflets, no terminal leaflet	Deep-blue to purple fragrant flowers, yellow fruit pod	Very hard, dense wood	<ul style="list-style-type: none"> • Used medicinally in the Caribbean for fighting swollen glands and fever • In Jamaica the resin soaked in rum is used as gargle for sore throats and for cuts and bruises • The wood is highly valued for its strength and durability

Plant	Leaf characteristics	Reproductive (flower/cone/fruit) characteristics	Other unusual characteristics	<i>Uses</i> (Fairchild Tropical Garden does not guarantee the validity of all of these plant uses)
Jamaican Dogwood (<i>Piscidia piscipula</i>)	Costapalmate leaves (Fan shaped and slightly folded, with arched midrib). Leaf segments slender, the ends are thread-like	Small, white flowers formed in clusters, fragrant. Fruit is black when ripe and round in shape	The trunk is made up of old leaf bases.	<ul style="list-style-type: none"> • Palm heart made from the terminal bud or “cabbage”. This can be eaten raw or cooked, but it kills the tree. (Commercial heart of palm that you find in the store is harvested from multi-stemmed palms that are not killed). • The fruits are eaten raw when ripe and are said to taste prune-like, or are made into syrup • Native Americans reduced the dried fruits to a coarse meal, which they used to make bread • Leaves used to make thatch roofs for chickens
Cabbage Palm (<i>Sabal palmetto</i>)	Pinnate leaves with seven leaflets, each 5 to 10 cm. (2 to 4 in.) long	Pink to lavender pea-sized flowers, which appear in clusters after the tree loses its leaves in the dry season. The seed pods have 4 papery wings and are each 7 cm (3 in) long	Main stem crawls along ground and can form new plants vegetatively	<ul style="list-style-type: none"> • The bark or leaves have been crushed and used to relieve pain • The dried root bark has been used for neuralgia, insomnia, hysteria, toothaches and asthma. • The bruised twigs and leaves of this plant were used by indigenous people to stun fish • The fruits were used for arrow poison when hunting • Extracts of the plant have been found to be effective natural pesticides
Black Mangrove (<i>Avicennia germinans</i>)	Opposite leaves, very thick, almost leathery, often exuding salt	White flowers with what looks like four petals. Fruit is a flattened, fleshy green pod	The roots commonly send up many pencil-sized pneumatophores (roots that stick up from under the water)	<ul style="list-style-type: none"> • Sprouting seeds are edible as famine food if cooked, though can be toxic if raw • Flowers are an excellent honey source. Beekeepers will intentionally keep beehives near black mangroves to make “mangrove honey.” • Salt on leaves can be collected and consumed. • Medicinal – rheumatic pain, poison and insect repellent