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Natural History Society of Jamaica



Preface

This book is compiled primarily of articles written by members of the Education Subcommittee of the Natural History Society of Jamaica, and published in the Children's Own Newspaper during the 1993-1994 school year. The members of the education subcommittee are all volunteers dedicated to educating the children on Jamaica's natural heritage. Each article is somewhat unique in its approach as the styles of the various authors have been retained as much as possible.

In recognition of the need to make the information available to all, the articles, with some additions, were compiled for this book. It was written for children of age 8 to 14 however teachers, visitors and other persons will find the information useful. It consists mainly of scientific information but historical facts and folklore are also included. The plants (mainly trees but including some herbs and grasses) are arranged in four categories - palms; woodland, pasture and forest trees; fruit trees and seaside trees and represent only a fraction of the over 1000 species of trees which occur in Jamaica.

Acknowledgments

We are grateful to the former editor of the Children's Own Newspaper, Mrs. Crescencia Medhurst who has supported our efforts over the years and to the Department of Life Sciences, University of the West Indies, whose facilities were invaluable in the production of this book.





PALMS	4
COCONUT	5
COCONUT	6
ROYAL PALM	7
ROYAL PALM	8
SILVER THATCH	9
SILVER THATCH	
TREES OF WOODLANDS, FORESTS AND PASTURES	11
BALSA WOOD	
BAMBOO	14
BAMBOO	15
BLUE MAHOE	16
BLUE MAHOE	17
BULL HOOF	18
BULL HOOF	19
CALABASH	20
CALABASH	21
CANNON BALL	22
CANNON BALL	23
CASSIA	24
CASSIA	25
CASAURINA	26
CASAURINA	27
EUCALYPTUS	28
EUCALYPTUS	29
FIGS	30
FRANGIPANI	31
FRANGIPANI	33
GOLDEN SHOWER TREE	34
GOLDEN SHOWER TREE	35
GUANGO	36
JACARANDA	39
LIGNUM VITAE	40
PIMENTO	43
POINCIANA	44
QUICK STICK	47
RED BIRCH	48
SILK COTTON TREE	



Natural History Society of Jamaica

	NHSJ
SPATHODIEA	52
TREE FERN	54
TRUMPET TREE	56
WEST INDIAN CEDAR	58
WEST INDIAN EBONY	60
WEST INDIAN MAHOGANY	62
WHITE BULLET	64
WOMAN'S TONGUE TREE	66
SEASIDE PLANTS	68
RED MANGROVE	69
SCARLET CORDIA	71
SEA GRAPE	73
SEASIDE MAHOE	75
FRUIT TREES	77
ACKEE	78
ALMOND	80
OTAHEITA APPLE	82
AVOCADO PEAR	84
BANANA	86
BREADFRUIT	88
GUAVA	90
MANGO	92
PAWPAW	94
SOPS	96
STAR APPLE	100
TAMARIND	102



PALMS



COCONUT

(Cocos nucifera)

Although the coconut tree is originally native to Southeast Asia and the islands of Melanesia in the Pacific Ocean the tall, graceful, coconut palms can now be found throughout the world's tropical and subtropical regions. The coconut is one of the trees that represent the essence of the tropics to people who live in the colder climates.

The slim trunk which can reach a height of over 25 m is free of branches and is somewhat thicker at the base. The leaves are always at the crown of the tree trunk. They resemble huge green feathers and spread out from the top of the tree for up to 5 m. They have long thin leaflets which hang from a leafblade that runs down the centre of each leaf.

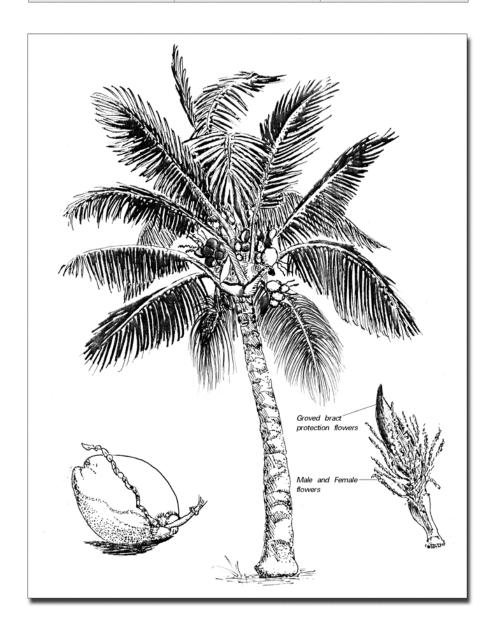
In the central core at the top of the tree there are clusters of yellow-white flowers. Fruits are located at the bases of the leaves. The fruits are large and rounded (about 25 x 30 cm) with an outer green, red-green or yellow rind. Under the rind is a layer of fibre called coir and beneath that a hard brown nut. The immature coconuts are picked and the liquid in the nut drank; it is called coconut water. When the endosperm (coconut meat) from mature coconuts is dried it is called copra and is used to make oil, soap and margarine. The meat is also grated and made into confectionaries such as drops and grater cake.

Coconut leaves are used for thatching roofs, making baskets, mats and hats. The wood from the trunks can be used to build houses and bridges.

COCONUT (Cocos nucifera)



Family:	Species:	Author:	
Palmae	Cocos nucifera	Linneaus	



Height:	Habitat:	Persistence:
28m	Sea level to 1000m	Evergreen

ROYAL PALM

(Roystonea regia)

This palm is often planted as an ornamental in Jamaica and is very often seen lining driveways. It is a native of Cuba and grows up to 25 m.

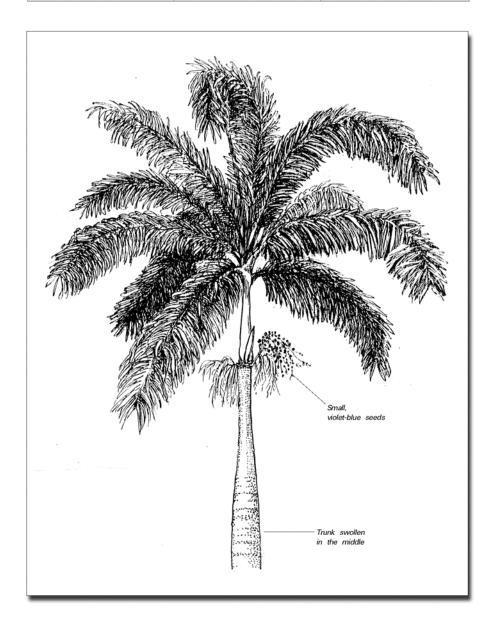
The trunk is light-grey, oftentimes with a swelling in the middle and the leaves are long, measuring up to 4 m. The fruits are small (about 1 cm), ovoid, purple-brown and grow in large numbers.

Two endemic palms related to *R. regia* are *R. altissima* and *R. princeps* but they both have slenderer trunks. *R. princeps* (Swamp Cabbage Palm) can be seen in the marsh forests of the Lower Black River Morass.

ROYAL PALM (Roystonea regia)



Family:	Species:	Author:	
Palmae	Roystonea regia		



leight:	Habitat:	Persistence:
25m	Sea level to 1000m	Evergreen

SILVER THATCH

(Coccothrinax jamaicensis)

This is a typical palm of the dry limestone forests such as Hellshire. It has a characteristic slender trunk of 10-12 cm in diameter and grows between 3 and 8 m tall. The leaves which are shaped like a fan (hence the name fan palm) get up to 1 m in diameter and grow at the end of the stalk. They are lobed and have long pointed segments.

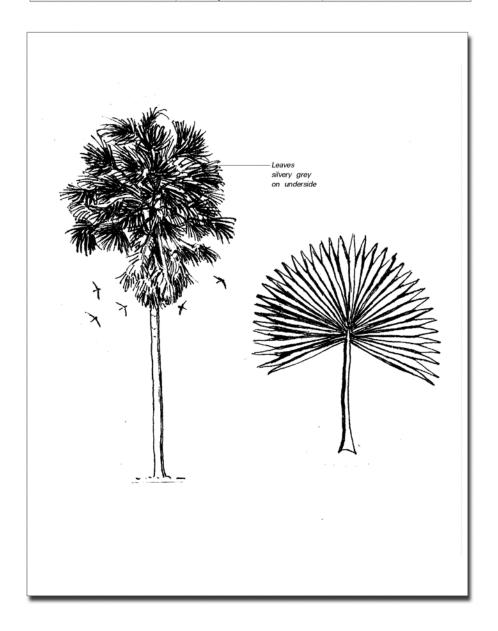
The ripe fruit is dark brown or black; it is small and hard and measures 6 mm in diameter. Thatch palm as the name suggests, is used for thatching of roofs and is also used to make bags, baskets and brooms.

Other thatch palms are: Brown Thatch (*Thrinax parviflora*) and Bull Thatch (*Sabal jamaicensis*), whose dry leaves, hanging from the tree, are often used by nesting colonies of palm swifts.

$SILVER\ THATCH\ (\textit{Coccothrinax jamaicensis})$



Family: Palmae	Species: Coccothrinax jamaicensis	Author: Read	



leight:	Habitat:	Persistence:
8m	Coastal and Limestone forest	Evergreen



TREES OF WOODLANDS, FORESTS AND PASTURES



BALSA WOOD

(Ochroma pyramidale)

The Balsa is also called Down Tree and Corkwood. It is a native of northern South America, Central America and West Indian Islands like Trinidad & Tobago and St. Vincent & the Grenadines where it is called bafflo. In Jamaica, the tree has been recorded in Jack's Hill, upper St. Andrew, near Castleton, Gordon Town, near Port Morant in St. Thomas, Manchester, St. Ann and the John Crow Mountains where it is fairly common.

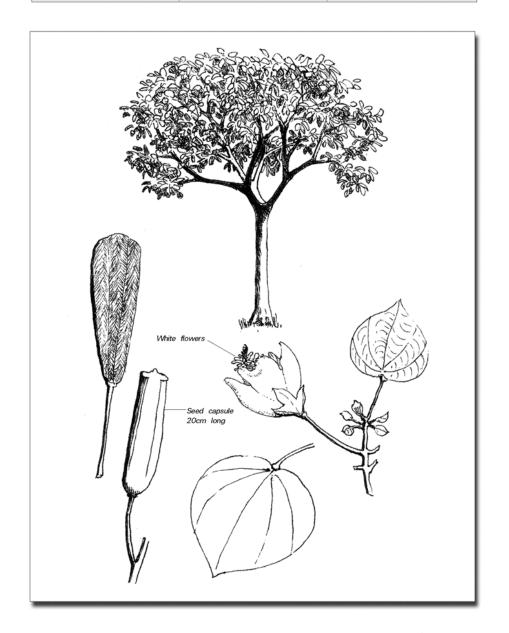
Balsa is a member of the Silk Cotton tree family, Bombacacae. The shape of the leaves is somewhat like that of the Blue Mahoe, the latter being smaller in size. The flowers are 10 cm in diameter and 20 cm in length, creamy-white and bell shaped. The pod is shaped like an enlarged rabbit's foot whilst the "downs" are very much like rabbits fur and are attached to small seeds.

The wood is pinkish-white to brownish with a rather silky lustre and is soft and spongy. Balsa wood is among the lightest known commercial woods. In the 1914-1918 war, balsa wood became very important and large quantities were used in the manufacture of life-preservers, submarine floats, parts of lifeboats, aeroplanes and for insulating refrigerators. The wood is also used by fisher men for making fishing-net floats. The down was once used for stuffing pillows and mattresses whilst the bark can be made into ropes.

$BALSA\ WOOD\ (\textit{Ochroma pyramidale})$



Family:	Species:	Author:
Bombacaceae	Ochroma pyramidale	(Cav.) Urb.



Height:	Habitat:	Persistence:
20m	Wet forest, 150-1000m	Evergreen



BAMBOO (Bambusa vulgaris)

Our common bamboo came to Jamaica in the early eighteenth century. It is a native of the Old World tropics but is now widespread. About 700 species exist worldwide.

Bamboos are really giant grasses with straight hollow, jointed, smooth stems. Bamboos seldom flower and do so once in 30 to 100 years, depending on the species. After blooming the stems tend to die allowing new shoots to spring up from the base of the old plants. Young plants can also grow from seeds. The common bamboo grows up to 25 m tall and occurs from sea level to 1,000 m. The leaves are 15 - 25 cm long and have rough edges.

Bamboo trees are especially cultivated in Jamaica since their roots are so closely matted that they help to control soil erosion. The plant also provides shade and beauty on road banks and hillsides. Bamboo Avenue in Jamaica is a tourist attraction.

Many ornamental varieties of bamboo have also been introduced into Jamaica from Asia and they can be found growing in different gardens across the island.

Laminated bamboo piles make good reinforcement for concrete when building houses. Bamboo is used to make furniture, fences, river rafts, yam sticks, beer mugs, pencil holders, baskets and flower pots of various kinds.

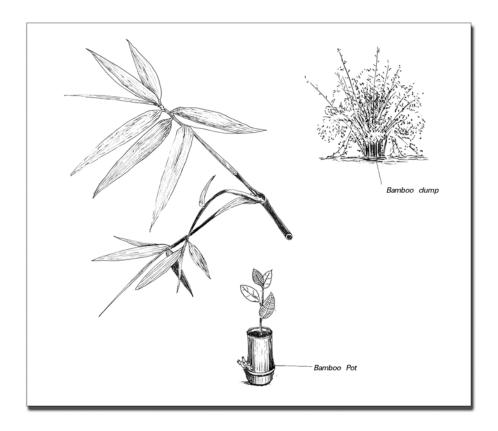
Another bamboo, the endemic Climbing Bamboo (*Chusquea albietfolia*) grows profusely in parts of the Blue Mountains where it forms a thick entanglement along the trails.

Records show that this Bamboo flowered in Jamaica from 1884 - 1886. It is interesting to note that in 1884 some plants sent from Jamaica to the Royal Botanic Gardens at Kew (England) flowered at the same time, in 1886. This happened although the plants were in entirely different environments. In the Blue Mountains the last recorded flowerings were in 1948 and in 1984.

BAMBOO (Bambusa vulgaris)



Family:	Species:	Author:
Gramineae	Bambusa vulgaris	Schard. ex Wendl.



Height:	Habitat:	Persistence:
10m	Sea level to 1000m	Evergreen



BLUE MAHOE (Hibiscus elatus)

The Blue Mahoe is the national tree of Jamaica. This is a fairly common tree which is cultivated extensively. It is native to Cuba and Jamaica but has been introduced into other countries.

This tall, straight tree has few branches arising from all levels of the trunk and may grow up to 20 m tall. The leaves are large (20 cm long), broad, heart-shaped and pointed at the tip.

The plant is related to the Hibiscus (shoe-black) and its flowers are very similar in shape and arrangement of parts. The flowers which can be seen throughout the year grow singly and have colours ranging from orange-yellow and orange red to deep red. The fruits are small brown pods that may be seen all year.

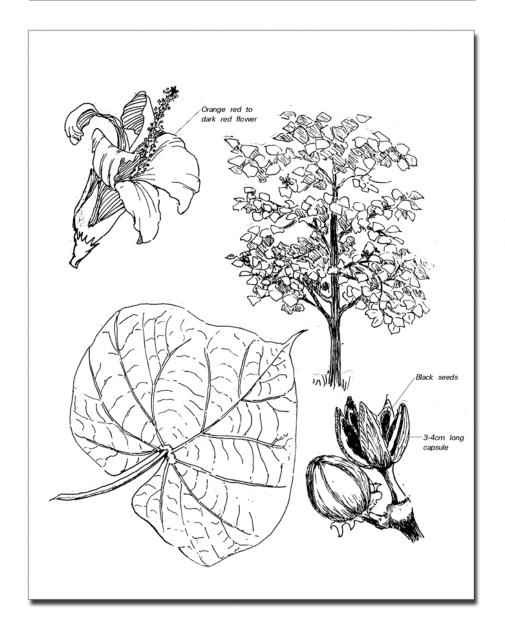
Although commonly seen along the plains this tree shows an obvious preference for damp mountain areas and grows at altitudes from sea level to 1000 m. The name Mountain Mahoe is sometimes used to distinguish it from the Seaside Mahoe. It has been used in many reforestation programmes.

The name "Blue Mahoe" refers to the blueish tinge in the wood when dressed. The wood is hard and durable and produces a fine finish when made into furniture and craft items like trays and bowls. The fibre from the bark is used to make strong ropes and for tying cigars.

BLUE MAHOE (Hibiscus elatus)



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Species:	Author:	
Hibiscus elatus	Sw.	



Height:	Habitat:	Persistence:
20m	Moist forest, sea level-1000m	Evergreen



BULL HOOF

(Bauhinia divaricata)

This is a small tree which grows up to 6 m high is very common in dry limestone areas. The distinctive leaves are bi-lobed approximately 8 x 8 cm and the shape suggests the common name, Bull hoof.

It flowers frequently, clusters of pink and white flowers at the end of the leafy twigs. The arrangement of the flowers is in the form of a raceme, that is, the older flowers are at the bottom of the stalk, and the younger flowers nearer the tip which ends with a bud. There are five petals to each flower, which begin white and turn pink. They are narrow and 1 - 2.5 cm long. Each flower also has one long fertile white stamen, 3-4 cm long, with a black anther. The fruit is a pod containing 3 or 4 seeds.

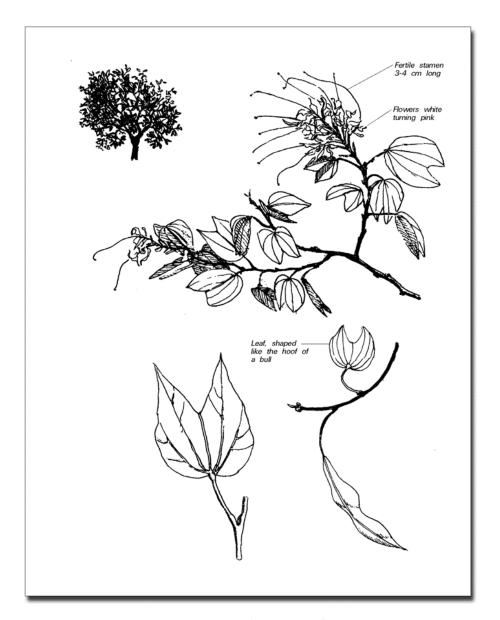
The tree attracts various butterflies, the most prominent of which is the Cloudless Sulphur, *Phoebis sennae*.

There are other species of *Bauhinia* trees growing in Jamaica. One is called the Poor Man's orchid, and has a larger flower, white and mottled with purple. Others have pink or white flowers. The commonly grown Orchid tree with large mauve flowers is a hybrid. All these trees have the characteristic bilobed leaves.

BULL HOOF (Bauhinia divaricata)



			iata diata a
Family:	Species:	Author:	
Caesalpiniceae	Bauhinia divaricava	Linnaeus	



Height:	Habitat:	Persistence:
6m	Sea level-1200m	Evergreen



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CALABASH

(Crescentia cujete)

Calabash trees are common along Jamaican roadside and in old pastures, thickets and woodlands. It is native to Florida, the West Indies and continental tropical America. The calabash belongs to the Bignonia family and is a medium-sized tree varying from 6-10 m in height. It grows up to altitudes of 800 m.

The trees have long thin branches which carry small, oblong-shaped, bright green leaves in clusters. The leaves which are leathery in texture are paler on the undersides than on the tops and are 5 cm - 20 cm long. The bark is light brown.

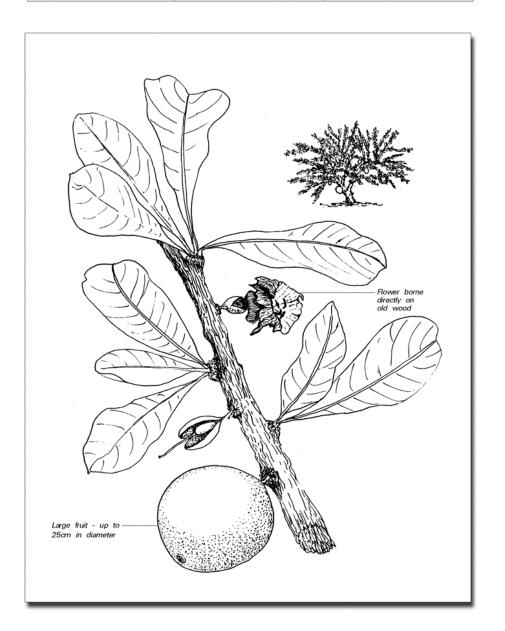
The trees flower and fruit from May to January. The greenish white to greenish yellow flowers are small (5-6 cm long), bell-shaped and occur singly or in clusters, directly on the trunk and branches. An interesting fact about them is that they are pollinated at night by nectar-sipping bats. The fruits which are ovoid or round and have a tough, watertight outer coat, measure up to 25 cm in diameter.

The pulp and seeds are removed from the fruits leaving the tough outer coat which is dried and used as bowls and gourds to carry water. Occasionally, the gourds are used as cooking pots and for making handbags and other ornaments. A gourd with a curved end is used as a pipe for smoking tobacco.

CALABASH (Crescentia cujete)



			0.0001000000000000000000000000000000000
Family:	Species:	Author:	
Bignoniaceae	Crescentia cujeve	Linnaeus	



Height:	Habitat:	Persistence:
6-10m	Sea level-800m	Evergreen



CANNON BALL

(Couroupita guianensis)

This extraordinary tree is from the lowland jungles of northern South America, but has been introduced throughout the Caribbean to Botanical Gardens, (such as Hope Gardens in Kingston), and to some large properties.

It is a large tree growing to 25 m. The upper part of the trunk has many branches with leaves clustering at the tips of the branches. Each leaf is elliptical, ie. oblong, but pointed at both ends, and may reach 30 cm.

The lower part of the trunk has thick fruiting branches distinct from the leaf-bearing branches above. These form a tangled growth around the lower part of the trunk bearing many flowers, and later, fruits.

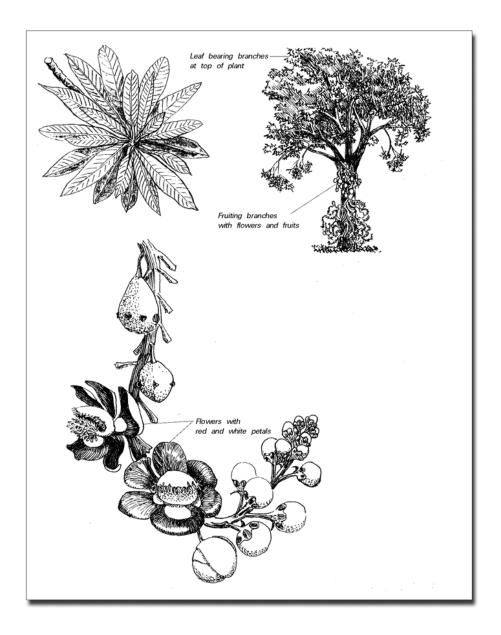
The flowers themselves have a strong fragrance. There are six fleshy red and white petals surrounding a thick white cushion of partly fused stamens with a smaller mat of yellow stamens below. The flower is about 10 cm in diameter

The fruit forms the "cannonball." It is so named because of its appearance, its hard shell, and the sound made when the breeze knocks the hanging balls together or when they crash to the ground. It takes 18 months to mature. When open the pulp and seeds produce a foul odour. However, it is nourishing; monkeys feed on it in its native habitat and it is used for chicken and pig food.

$CANNON\ BALL\ \ ({\it Couroupita guianensis})$



Patriotationalismostationalismostation			
Family:	Species:	Author:	
Lecythidaceae	Couroupita guinensis	Aubl.	



Height:	Habitat:	Persistence:
25m	Moist lowland areas	Evergreen



CASSIA

(Senna siamea)

Senna siamea is a native of Indo-Malaysia. It grows in both moist and dry places to a height of 25 m. The tree grows on our lowlands in Jamaica and when a tree is well established it can withstand months of drought.

The trees are evergreen and can produce much shade when well maintained. They are often planted along the sides of streets and other sites where shade is wanted, hence its other name, Government tree. The leaves are compound and are between 15 and 30 cm long. There is a main central stalk with six to twelve pairs of leaflets on it.

The greenish-yellow flowers occur in bunches and the fruit is a narrow pod 20 - 25 cm long. They too are found in clusters.

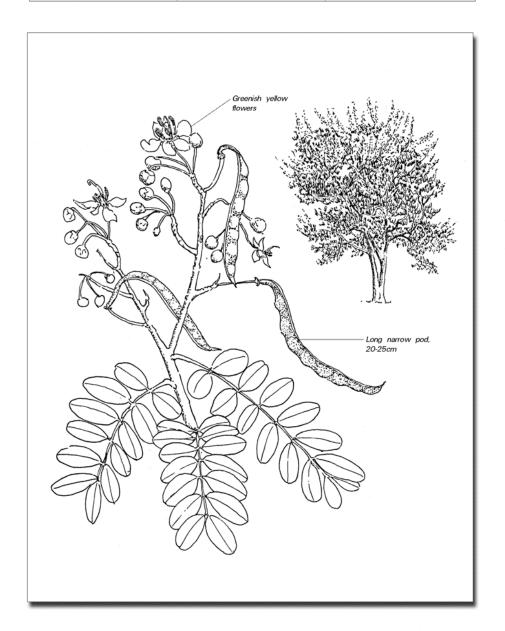
Senna siamea grows easily and quickly and is a favourite of goats and cows. Strangely, pigs get sick when they eat this plant although they too enjoy it. The heartwood of the plant is used in furniture making and as poles in construction. It can be cultivated as a source of fuelwood. Sometimes scale insects attack and can destroy the trees.

Until recently this plant was originally known as *Cassia siamea*.

CASSIA (Senna siamea)



Family:	Species:	Author:	
Caesalpiniaceae	Senna siamea	Lam	



Height:	Habitat:	Persistence:
25m	Lowlands	Evergreen



CASAURINA

(Casurina equisetifolia)

Other names given to this plant are Whistling Pine and Willow. This is a native of Australia and tropical Asia. It arrived in Jamaica in 1788. Casaurina can grow to a height of over 25 m

The trunk is slender and the long slender branches grow upwards. It can be seen in sandy coastal areas and can grow at altitudes from sea level to 300 m. This fast growing plant does not have leaves but branches which are fine and threadlike. These bear small brownish scales which are arranged in whorls.

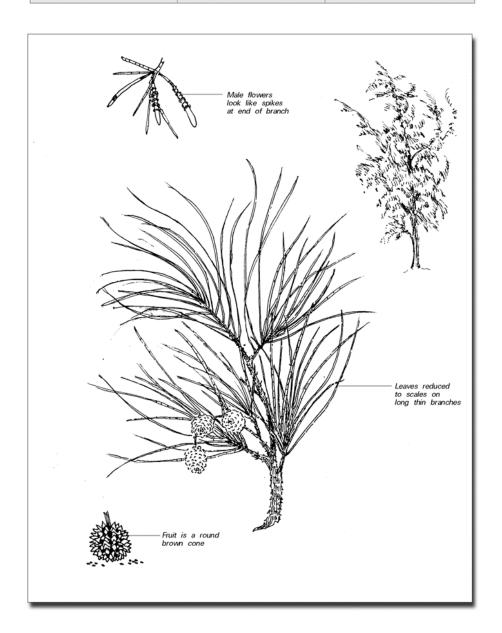
It fruits most of the year and bears male and female flowers separately on the same tree. The male flowers are slender and look like spikes at the tip of the twigs while the female flowers are small, cone like and grow in clusters. The fruit is the round, brown cone that is 1.25-2.5 cm in size.

Causarina is often planted as hedges and is useful in the binding of sandy soil.

$CASAURINA \it{(Casurina equisetifolia)}$



Family:	Species:	Author:	
Malvaceae	Hibiscus elatus	Sw.	



Height:	Habitat:	Persistence:
25m	Sea level-300m	Evergreen





EUCALYPTUS

(Eucalyptus species)

Many different species of Eucalyptus trees have been imported into Jamaica and the Caribbean from their native Australia. Most are tall upright trees, some species reaching heights of 24 m.

The leaves are long, thin and leathery, varying in length from 9 - 12 cm in different species. They have small cup-like fruiting capsules, divided into sections, green when flowering, turning brown and woody as the seeds are formed. The flowers are almost invisible within the green cups. When ripe the seeds fall out as the cups are blown by the wind.

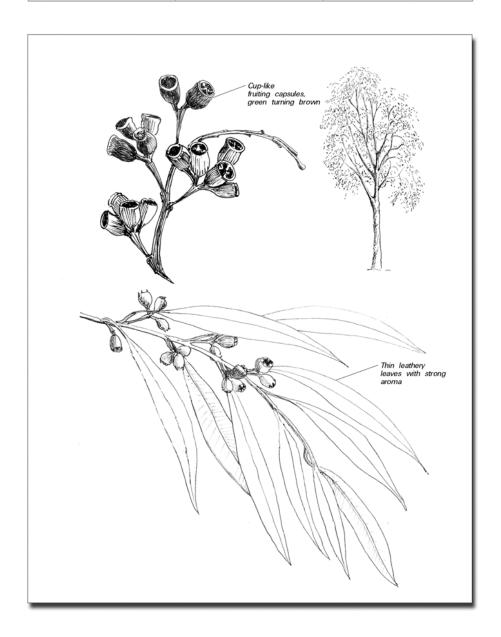
Most are found in the hills, but some species grow at sea-level. They are conspicuous with their tall grey trunks, sometimes 'screwed' and their delicate foliage.

They are fast growing, resistant to insects and regrow quickly after fire. Medicinal eucalyptus oil can be extracted from the leaves of some species. If you pick up leaves that have recently fallen and crush them you can smell the aroma of the oil.

EUCALYPTUS (Eucalyptus species)



Family:	Species:	Author:	
Myrtaceae	Eucalyptus spp.		



Height:	Habitat:	Persistence:
12-24m	Mostly hills, sea level-1000m	Evergreen





FIGS (Ficus species)

The plants in the fig genus *Ficus* vary greatly in size, shape and life style. In Jamaica we have the small-leaved wall-climbing "Ivy", the enormous Banyan, spreading through its aerial roots, pictured on the next page and many different fig trees and shrubs, some of which start as Strangler figs.

One of the commonest shrubs or trees found in limestone coastal area is *Ficus citrifolia* which can grow to 16 m high. It has spreading, drooping branches, leaves something like citrus leaves, and yellow or reddish figs 6 - 7 mm in diameter on short stalks. These figs have a purplish ostiole, or mouth.

Figs are unusual in that the flowers are formed inside what appears to be the fruit, attached to the inner wall. This development is intimately related to the life-cycle of the insect which pollinates it a gall wasp. To allow the wasp to enter and leave the fig and to deter other insects, each fig has a small opening, the ostiole, which may have a few scales over it.

Strangler figs which can be seen in woodlands across the island, start growth from a seed blown or dropped by a bird which has lodged in a crevice in another tree. If there is sufficient moisture and organic matter the seedling puts out roots and the shoot which produces green leaves to nourish it. The roots spread down over the trunk of the supporting tree and in time form a network over the trunk and reach the ground. Eventually the supporting tree may die by exclusion from light.

Other fig trees seen in Jamaica are various ornamental "rubber" trees, the edible fig, and the large ornamental *Ficus benjamina* trees on some big properties.

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FRANGIPANI

(*Plumeria alba* - white Frangipani *Plumeria rubra* - red Frangipani *Plumeria obtusa* - wild Frangipani)

Some say the name Frangipani came from a famous perfume, invented and named by an Italian baker in the 12th century, Signor Frangipani. Others believe the name came from the French word "fangipanier" meaning coagulated milk which described the milky sap which flows from the branches when slashed.

The red and white frangipani are native to Central America, but have spread throughout the Caribbean, and even to Sri Lanka, where they are called Temple trees, and planted near Buddhist temples.

The red and the white species may grow to 13 m in height. They branch into two at each dividing point. The leaves and flowers are borne at the end of the branches so that the tree looks bare beneath its crown.

The leaves are long and lance-shaped with well marked veins. The white Frangipani leaves may grow to 35 cm in length, and the red to 45 cm. The white Frangipani has white flowers with a diffuse yellow at the base. The red has pink red, sometimes orange yellow or even white petals, with a yellowish base.

The third species, the wild Frangipani is a native of Jamaica. It is smaller, up to 6 m in height, or shrub-like. The leaves are shorter and thicker, and unlike the other species, it does not drop its leaves. It has white flowers, also with a yellowish base to the petals which are often less numerous than the other species. It grows in wooded limestone areas, often not far from the sea - eg in Helishire in St. Catherine.

Not many animals feed on Frangipani as they contain poisons. The spectacular Frangipani caterpillar, (*Pseudosphinx tetrio*) eats the leaves of Frangipanis. It grows up to 12 cm long; it is black, with 10 vivid yellow bands ringing the body and has a bright red head





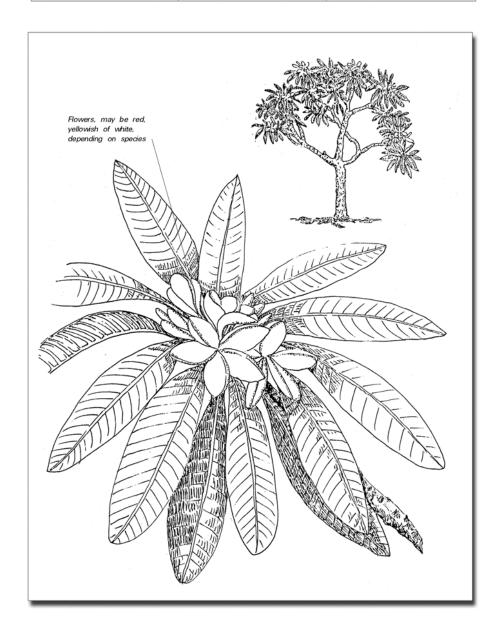
and appendages. This caterpillar takes in the poison and so become poisonous itself. When full grown they head down the trunk and pupate under fallen leaves. The moth that emerges is silvery grey, and has wings about 7 cm long and belong to the family called hawk moths. When there are a large number of caterpillars they may eat every leaf, however the tree recovers perfectly well.

The milky sap has been used for centuries for all manners of poultices and remedies - but beware! It should be treated with great caution.

FRANGIPANI (Plumeria sp.



Family:	Species:	Author:
Apocynaceae	Plumeria spp.	



Height:	Habitat:	Persistence:
Red & White - 14m Wild - 6m	Sea level - 900m	Red & white - decidius Wild - evergreen



GOLDEN SHOWER TREE

(Cassia fistula)

Originally from India and Ceylon this tree has spread throughout the tropics. It grows to over 10 m in height and is cultivated nowadays as an outstanding ornamental tree as well as a shade tree. Though it prefers moist soil, it will grow in dry areas.

The upper branches of the tree tend to droop. It has large compound leaves that have 4 - 8 large leaflets. The tree is deciduous shedding all its leaves in the dry season - at that time they may be covered with masses of delicate looking yellow flowers. The flowers are borne in infloresences which hang down from the branches. The fruits are long pendulous pods about ½ m in length and circular in shape. They are green at first but become a dark shiny brown when mature.

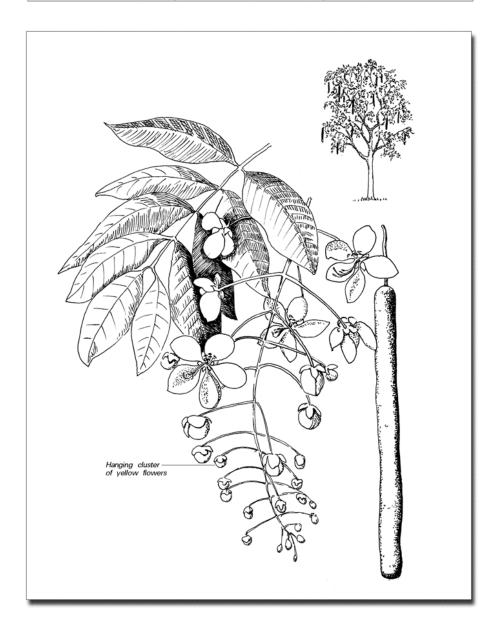
The fruits produce a brown sticky pulp around the seeds. This pulp has been used as a laxative for centuries in Jamaica, in India and other parts of the East where the plant originates. Other parts, such as the bark and flowers, have also been used medicinally.

In India, its bark has been used for tanning and the making of a dye. Its brick-red wood has a lovely finish when polished and is used in the making of cabinets and other furniture.

GOLDEN SHOWER TREE (Cassia fistula)



Family:	Species:	Author:	
Caesalpinaceae	Cassia fistula	Linnaeus	



Height:	Habitat:	Persistence:
15m	Lowlands	Decidous



GUANGO

(Samanea saman)

The large stately guango tree also called rain tree, came originally from South and Central America. It grows well in dry or wet areas at altitudes from sea level to 800 m. It is fast-growing and grows to a height of 26 m. It is found on the flat lands around Jamaica especially in old pastures where it was often planted for shade and on wooded land along river banks.

Guango trees have stout trunks and often low, spreading branches so they make excellent shade trees. The branches can spread out to 30 m.

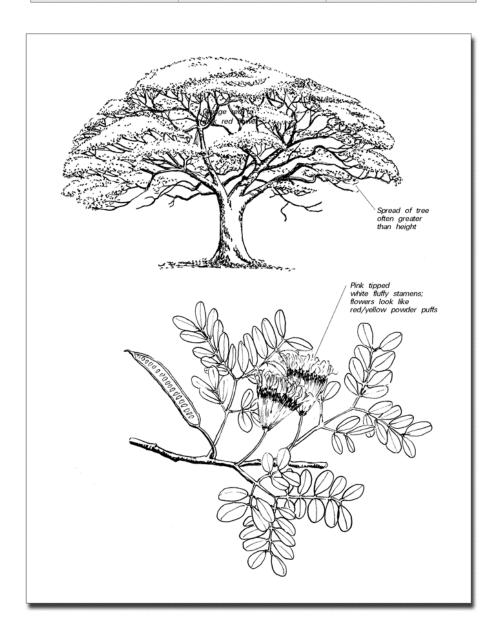
Two to four sets of tiny leaflets (pinnae) grow off stalks central to the compound leaves of the guango. The leaves are shiny above and velvety beneath. The flowers which appear from March to May and from July to November look like yellow or red powder puffs. The fruit is a brown-black, straight pod measuring 10-25 cm long. These appear from December to May. The pods are considered to be good fodder since they are high in protein. Horses and cattle eat the pods which are sweet to the taste. Cows like to rest under the trees and can be observed there, placidly chewing their cud.

This tree has nodules on its roots containing nitrogen-fixing bacteria. This helps to fertilise the soil.

GUANGO (Samanea saman)



Family:	Species:	Author:
Mimosaceae	Samanea saman	(Jacq) Merr.



Height:	Habitat:	Persistence:
26m	Pastures and Plains	Decidous



JACARANDA

(Jacaranda mimosifolia)

Originally from North West Argentina and Uruguay the Jacaranda now grows widely in the Caribbean islands, Florida and South Africa.

The tree reaches a height of 14 m and grows at an elevation of 100 m to 800 m. Sometimes the Jacaranda tree does not have as graceful a shape as the tree shown in the illustration but its pretty blue flowers and its delicate leaves enhance its beauty. In Jamaica, the Jacaranda flowers from April through June. The flowers appear in clusters of little purple-blue bells on almost bare trees; the trees flower after most of their leaves fall. The Jacaranda is sometimes called the fern tree because of its compound leaves with tiny leaflets.

In Brazil, Jacaranda leaves are used to make a medicine for glandular diseases. Panamanians use the bark with other ingredients for treating skin diseases. The wood is useful in carpentry.

$JACARANDA\ (\textit{Jacaranda mimosifolia})$



			201000000000000000000000000000000000000
Family:	Species:	Author:	
Bignoniaceae	Jacaranda mimosifolia	D. Don	



Height:	Habitat:	Persistence:
14m	100-800m	Decidous

SOME COMMON JAMAICAN TREES

Natural History Society of Jamaica



LIGNUM VITAE

(Guaiacum officinale)

Lignum Vitae is a member of the same family (Zygophyllaceae) as the Jamaica Buttercup and like the Jamaica Buttercup it is restricted to the southern coast of Jamaica. The species occurs in other parts of the West Indies and northern South America. The flower of the Lignum Vitae is the National flower of Jamaica.

The tree is about 5-6 m. tall but will get as high as 9 m. The branches spread out to give it a rounded appearance. The trunk is greyish and thick in proportion to the height. The leaves are round and glossy and the plant often it is covered by clusters of bright blue (or white) flowers, orange fruits or both flowers and fruit together.

The tree is very slow growing. The wood is the heaviest of all woods and will sink in water, This denseness makes it valuable for certain purposes. In the past most ships used it for propeller shaft bearings and it is now used for such items as batons for policemen, auctioneer' hammers, speaker's gavels, mallets, craft works and carvings.

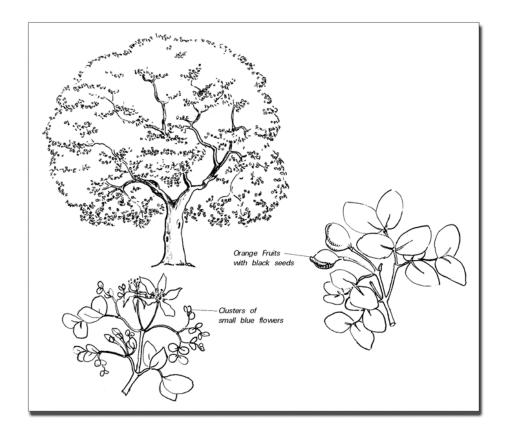
In the 1770's the gum from this tree was of very high economic value. The gum was obtained by jagging the tree and collecting the exudation ("tears") when it hardened. At that time it was sold in Jamaica for two shillings and sixpence per pound. The fruit, bark and flowers were used to make laxatives and the foliage was frequently used to scour and whiten floors. In Jamaica the resin is sometimes soaked in rum as a gargle for sore throat, as a drink for "tummy ache" and as an application to cuts or rubbed on affected parts in the case of rheumatism.

The caterpillar of one species of butterfly called *Kricogonia* uses the leaves as food. This moderate-size pale yellow butterfly is often seen hovering about Lignum Vitae trees, usually during the Months of May to July. In 1997 there was a severe drought up to September and in October after heavy showers of rain they were abundant for a few weeks.

LIGNUM VITAE (Guaiacum officinale)



Family:	Species:	Author:	
Zygophyllanceae	Suaiacum officinale	Linnaeus	



Height:	Habitat:	Persistence:
6m	Sea level to 250m	Evergreen



PIMENTO

(Pimenta dioica)

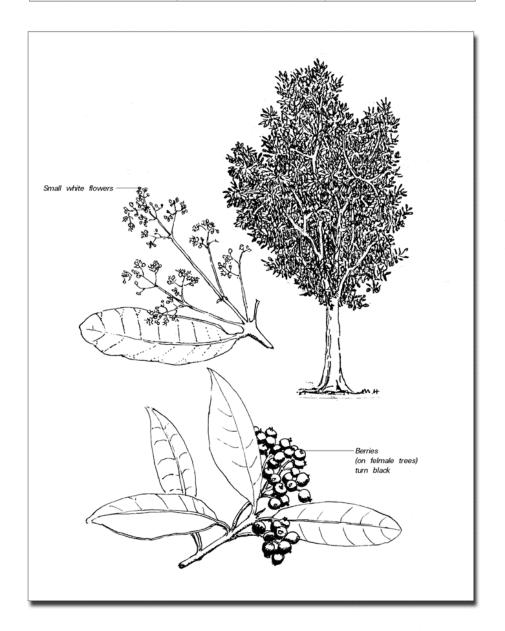
The pimento tree is found in wooded hillsides and upland pastures of Jamaica. Our pimento tree may grow up to 15 m high. The leaves are pointed, narrow and very shiny. The tree has a smooth, pale brown bark and little white flowers which bloom from January to August. Little dark berries appear from August to September. The berries are ground into a powder or sold whole after they are dried on a barbecue.

Most of the world's supply of pimento come from Jamaica and is highly regarded. One encyclopedia describes its taste as a mixture of cinnamon, cloves and nutmeg and not surprisingly it is also known as Allspice. It is also sometimes called Jamaican pepper. Allspice is used to season baked goods, fish, meats, liqueurs and pickles. The oil squeezed from the berries can be used to make perfume for soap and to hide the bad taste of medicines.

PIMENTO (Pimenta dioica)



			9201203000
Family:	Species:	Author:	
Myrtaceae	Pimenta dioica	(L.) Merr	



Height:	Habitat:	Persistence:
15m	Sea level-1000m	Evergreen



POINCIANA

(Delonix regia)

The Poinciana originates from Madagascar and is named after M. De Poinci, a governor of French West Indies. It is now distributed throughout the tropics. Poincinas are often cultivated along roadsides and can grow at altitudes from sea level to 700 m.

This is a fast-growing tree that grows up to 10 m high but can get to 15 m tall. Its flowers grow in clusters and each has five petals. The colour of flowers may vary from light pink to scarlet and sometimes orange and yellow. Flowers appear between June and September and fruits, July to November. The leaves are compound and can get as long as 45 cm; each leaf has many small leaflets. The seed pods grow to 60 cm long and are dark brown and woody. The leaves are deciduous and during the colder months the tree appears bare.

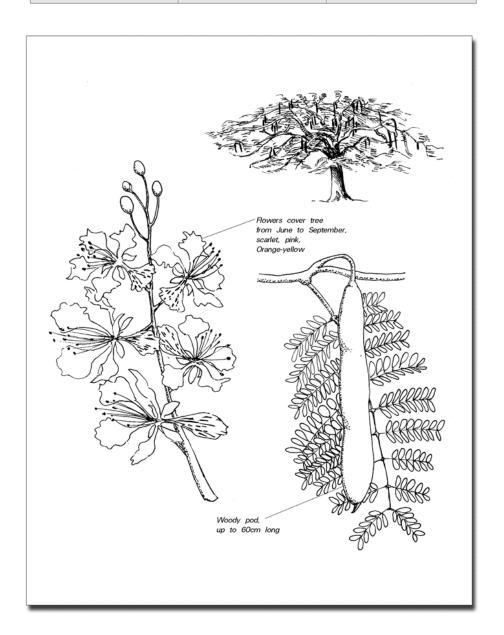
Some persons have described the Poinciana tree as "the most beautiful tree in the world!" The tree is spectacular when in bloom, especially after the new foliage begins to appear. For about 6-8 weeks flowers together with young feathery leaves present a beautiful floral display.

Hundreds of caterpillars are often seen covering the trunk of the tree during the daytime. At nights they feed on the leaves. These are the caterpillars of the moth, *Melipotis acontiodes*. This moth is small, about 2 cm long, and not very conspicuous. When sitting on the bark of trees with wings folded it is hardly noticeable because its resemblance to the bark.

$POINCIANA \ \, (\textit{Delonix regia})$



Family:	Species:	Author:
Caesalpiniaceae	Delonix regia	(Boj. ex houk.) Raf.



Height:	Habitat:	Persistence:
15m	Sea level-700m	Deciduous



QUICK STICK

(Gliricidia sepium)

Quick stick is the name given to any tree whose branches, when cut and set in the ground as fence posts, take root and grow. In Jamaica it is most commonly applied to a useful tree, *Gliricidia sepium* which came from Central America.

The tree grows to a height of 6 m and can be found from sea-level to 900 m. The branches are long, and bear the leaves which alternate. The leaves may grow to 25 cm, each with 4-7 paired leaflets and one terminal one. The leaves are shed, often during or before flowering. In Jamaica this takes place between January and April, leaving the dense clusters of pink-mauvish blossoms.

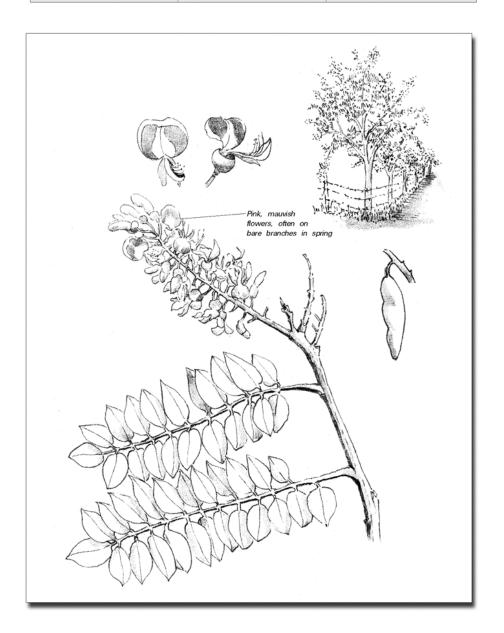
Each individual flower is like a sweet-pea flower, about 3 cm long. It has an upright petal, the standard, two wings and a keel which channels the stamens and style. The cluster of flowers contains many individuals. The seeds, each about 1 cm in length, grow like peas in a 10-12 cm pod.

This tree is a member of the pea family, and like others in the group it has nodules on its roots containing nitrogen-fixing bacteria. This helps to fertilise the soil. It is also useful as a shade tree and has a long history of use in shading cocoa and coffee. The leaves and seeds contain toxins used to poison rats.

QUICK STICK (Gliricidia sepium)



Family:	Species:	Author:
Papolionaceae	Gliricidia sepium	(Jacq.) Kunth ex Griseb.



Height:	Habitat:	Persistence:
6m	Planted in fences and shade plant, sea level-1000m	Deciduous



RED BIRCH

(Bursera simaruba)

This native of Florida, West Indies and Central America can grow to 18 m. The bark of the tree is coppery-red and smooth and is often seen peeling. Its colour makes it very conspicuous in its dry limestone habitat.

When the trunk is cut a thick glue which smells like turpentine exudes. The leaves are 10 - 2 cm long and consist of leaflets that can grow to 7 cm long. The flowers are greenish and the fruit small, dark red and oblong. This tree is deciduous shedding its leaves during the months of March and April.

The wood is white, soft, light and used to make matchsticks and packing boxes.

RED BIRCH (Bursera simaruba)



Family:	Species:	Author:
Burseraceae	Bursera simaruba	(L.) Sarg. Gard & For.



Height:	Habitat:	Persistence:
18m	Sea level-1000m	Evergreen

SOME COMMON JAMAICAN TREES

Natural History Society of Jamaica



SILK COTTON TREE

(Ceiba pentandra)

The tree has a large girth and can grow to 40 m. It is native to tropical America and the West Indies but has been introduced into most tropical countries.

The cotton tree is deciduous and its branches start far up on the trunk. The roots are buttressed (see illustration) in older trees. The leaves are palmate and each has about six or seven sections. The flowers come out in ivory-coloured clusters in January and February. They develop into pods 10 to 30 cm long which, when mature, open to reveal a white-brown silky fibre that resembles cotton; this is called kapok, also the other name for this tree. Kapok fibre is more buoyant than a cork and was used for stuffing life-saving canoes.

The silk cotton tree, with its thick trunk was once used extensively to make canoes. It can grow to altitudes about 800 m but is often found in our dryer coastal areas. Today, only few large cotton trees remain and these are still being harvested for making canoes.

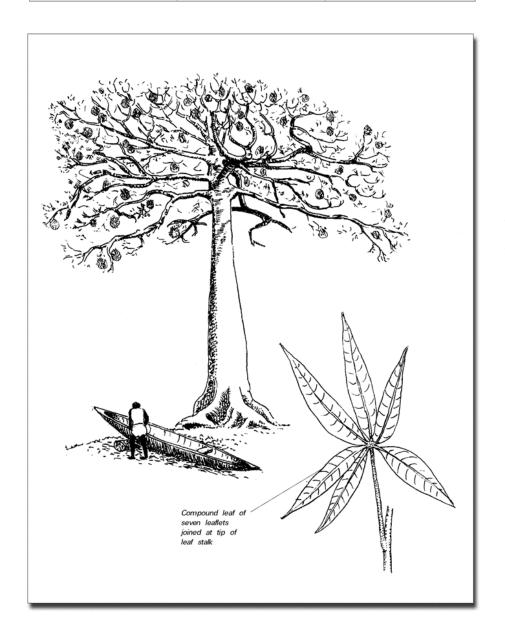
Traditionally the cotton tree is regarded as the home of duppies or spirits. It is a sacred tree in the Maya's culture, and in Central American Indian groups. Here in Jamaica, before cutting down a tree to make a canoe, a man will propitiate the 31 spirits with a libation of white rum sprinkled around its roots.

A very large beetle, the giant metallic wood borer (*Euchroma gigantea*) lays its eggs on the barks of the silk cotton tree and the grubs that hatch feed on the dead bark of the tree. This beetle is about 5 cm long and has iridescent powder-like scales on its tough wings.

SILK COTTON TREE (Ceiba pentandra)



Family:	Species:	Author:
Bombacaceae	Ceiba pentandra	(L.) Gaerth., Fruct. & Sem.



Height:	Habitat:	Persistence:
40m	Sea level-800m	Deciduous



SPATHODIEA

(Spathodia campanulata)

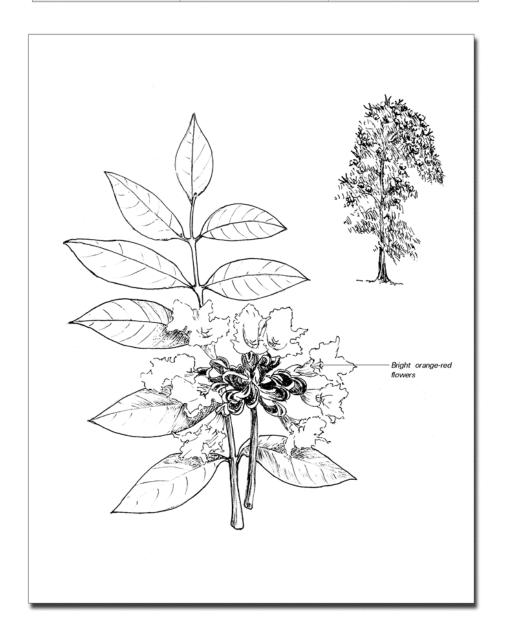
This tree is also called African Tulip and Flame of the Forest. It is a native of West Tropical Africa and is now widespread in the tropics.

The leaves are compound, each has about nineteen leaflets and are 30-40 cm long. The scarlet flower which is yellow at the base can be seen from a far off among the glossy, dark-green compound leaves. The flowers are cup-shaped, 10 to 12 cm long and grow in a circular manner. The flowers and fruit appear most of the year and the fruit is 18 - 23 cm long and shaped like a boat. The bark is grey.

Spathodiea can grow over 16 m and at altitudes from sea level to 500 m. Children make water pistols out of the unopened buds which are full of water. They also use the opened fruit as a toy.

SPATHODIEA (Spathodia campanulata)

Family:	Species:	Author:
Bignoniaceal	Spathodea campanulata	Beauv., Fl. Oware & Benin



Height:	Habitat:	Persistence:
18m	Sea level-500m	Evergreen



TREE FERN

(Cyathea species)

The Tree Fern is not a tree in the true sense of the word, it is a true fern, not a flowering plant.

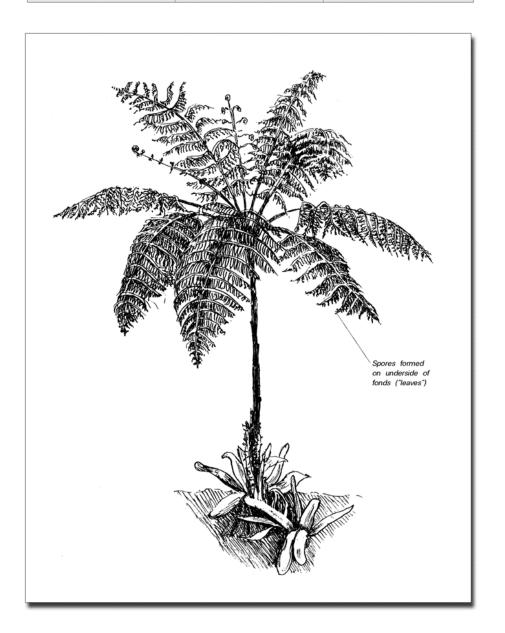
The genus of tree ferns - *Cyathea* - has about 350 species. They are native to tropical and subtropical regions. Most species have spines on their trunks. Most tree ferns grow to a height of about 3-4 m with no foliage on the trunk but a large head of fronds arranged in a circle at the very top. Under good conditions they grow fairly rapidly. This genus (*Cyathea*) does not produce adventitious roots.

The roots need large amounts of water for plants to grow healthily and the trunks should be kept moist constantly. Fern Gully in St. Ann used to have an abundance of tree ferns which seemed to thrive there as it is a moist valley that gets a fair amount of rain. Many of the tree ferns in Fern Gully have died leaving smaller ferns to justify the name of the area

They are usually propagated from the spores which are found in spore cases on the under surface of the fronds ("leaves").

TREE FERN (Cyathea species)

Family:	Species:	Author:	
Cyatheaceae	Cyathea speis		



Height:	Habitat:	Persistence:
3-4m	Moist hilly areas	Evergreen



TRUMPET TREE

(Cecropia peltata)

This slender tree is a native of central and northern South America and the West Indian Islands. It grows up to 12 m high and has a watery sap which becomes sticky, like glue. It grows at medium elevations of up to 1000 m and it is often seen on recently cleared forest land. It is fast growing and can colonize these areas in great numbers in a short time.

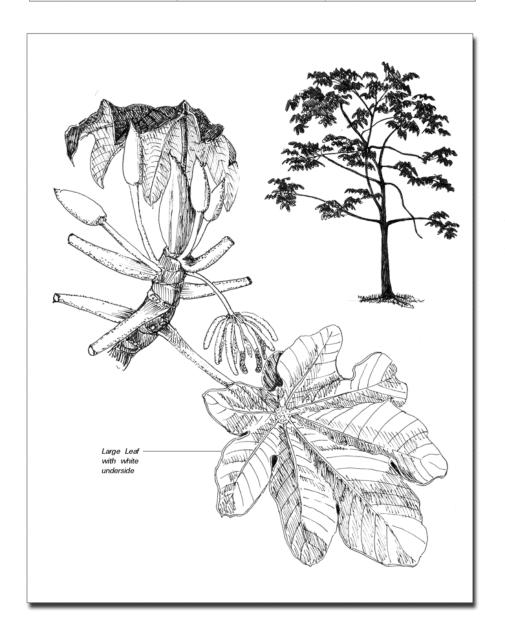
The leafstalk or petiole and small branches of the trumpet tree are hollow and can be used for making a trumpet-like noise. The leaf itself is deeply lobed or indented into as many as eleven sections. It is broad (measuring up to 30 cm across) and strongly veined with a whitish underside which shows up clearly when it is windy. These leaves are palmate, grow in an alternate pattern on the tree trunk and form clusters around the ends of the branches.

Small male and female flowers (10-12 cm long) grow at the base of the leaves. The fruits are edible, grey-brown and look like clusters of rounded spikes. The tree trunk is smooth and grey and when the tree is young it sometimes develops prop roots.

Trumpet tree wood is used to make rafts and boards for fences. When boiled the leaves make a tea which is thought to be cleansing and healing for the kidneys, useful for causing sleep and for control of diabetes, high blood pressure and asthmatic attacks.

$TRUMPET\ TREE\ (\textit{Cecropia peltata})$

Family:	Species:	Author:	
Moraceae	Cecropia peltata	Linneaus	



Height:	Habitat:	Persistence:
12m	Moist hilly areas, sea level-1000m	Evergreen

SOME COMMON JAMAICAN TREES

Natural History Society of Jamaica



WEST INDIAN CEDAR

(Cedrela odorata)

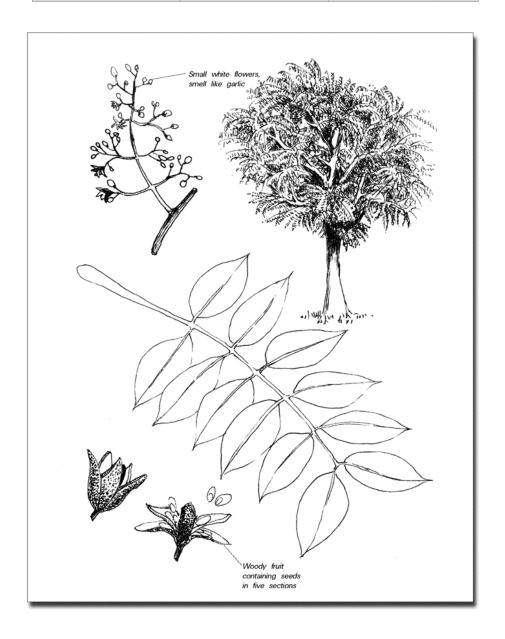
This tree was once common in pastures and along roadsides but because of its economic importance few large trees remain. The plant is a native of the West Indies, Central and South America and grows up to 20 m. It is a close relative of the West Indian Mahogany.

The leaves are compound and can grow to 80 cm long with an average of six to seven pairs of leaflets. The flowers are small, white and smell like garlic. The fruit is 2.5-4.5 cm long. Flowers appear in December to February and the fruits during January to April. Plants will grow at an altitude of 30-1000 m.

The wood is used in cabinet-making, the making of cigar boxes and shingles. The wood repels moths so it is frequently used in the making of drawers and shelves used for storing clothes and linen.

WEST INDIAN CEDAR (Cedrela odorata)

		iosalmosalmosm
Species:	Author:	
Cedrela odorata	Linnaeus	



Habitat:	Persistence:
Sea level-1000m	Evergreen



WEST INDIAN EBONY

(Brya ebenus)

This small tree grows up to 8 m in height. It may originally have come to Jamaica from Cuba. Ebony which is also called coccus wood, has a rough bark and short branches with spines. Its leaves are small somewhat egg-shaped and are inclined to cluster together.

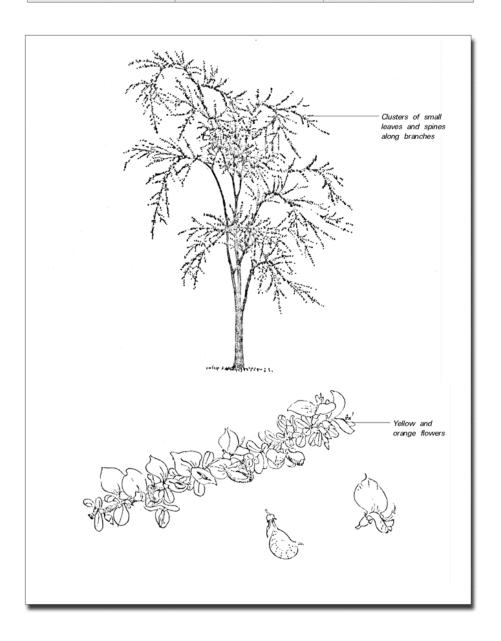
The plant sometimes shed its leaves.

The Ebony tree flowers throughout the year after rain and its lovely little blossoms which seem almost to cover the tree at times are deep orange-yellow. Its inedible fruit when ripe has a brownish colour and off-white hairs.

This tree is quite common in pastures on rocky limestone hills or on rocky alluvial plains in arid areas. It is also cultivated in gardens and coastal areas because of its beauty when in flower.

WEST INDIAN EBONY (Brya ebenus)

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Family:	Species:	Author:	
Papilionaceae	Brya ebenus	(L.) DC, Prodr.	



Height:	Habitat:	Persistence:
8m	Dry limestone hills and plains, Sea level-1000m	Evergreen



WEST INDIAN MAHOGANY

(Swietenis mahogani)

In the timber trade the name is applied to several kinds of wood but to us in Jamaica it means either our native wood of that name or the Honduras mahogany which grow in large quantities in Belize. Ours is the original Mahogany, *Swietenis mahogani* which belongs to the West Indies and southern Florida, while the Honduras species is its very close relative *Swietenia macrophylla* from Mexico, Central America and northern South America.

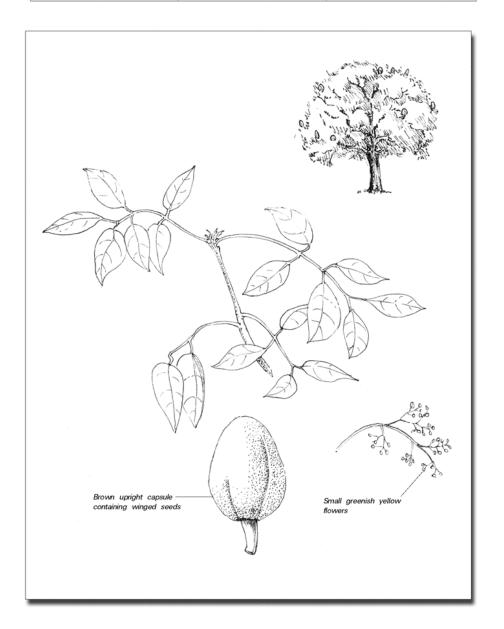
This slow growing tree can get as tall as 20 m. The bark is greyish or brown and frequently flakes. The trunk is grey and straight and sometimes has buttress roots. The leaves are compound measuring 10-30 cm long and are shiny and dark green above and lighter below. The flowers are small, fragrant and greenish-yellow or cream coloured. The ovoid, brown fruit range between 7 and 12.5 cm long and has a rough outer coat.

Much of our most prized furniture is made of it and in many old churches and houses not only the furniture but the doors, the window casements and even the floors sometimes are made of mahogany. The bark is used as a dye for staining floors. Three hundred years ago, we would have been well acquainted with the tree as well as the wood but due to over harvesting only a few are left in the natural woodlands mainly in the central and western parishes. Most of the wood used today is imported from Central America.

The tree can grow at altitudes from sea level to 900 m, but is frequently found between 150 m and 500 m.

WEST INDIAN MAHOGANY (Swietenis mahogani)

Family:	Species:	Author:	
Meliaceae	Swietenia mahagoni	(L.) Jacq.	



Height:	Habitat:	Persistence:
20m	Sea level-900m	Evergreen



WHITE BULLET

(Bumelia salicifolia)

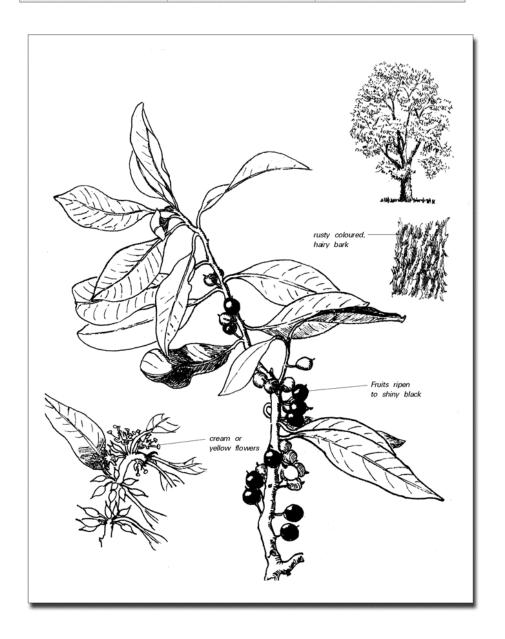
White Bullet trees can be found in Florida, Central America, the Bahamas and many Caribbean Islands. This tree grows up to 22 m high. It can be found in woodlands on limestone rocks in moderately dry areas at an elevation of up to 900 m above sea level, although it sometimes grows near to the sea.

Its bark is rusty-coloured and hairy and the small leaves are oval shaped. The tree has pretty, fragrant, cream or yellow flowers which blossom in clusters from December to June. The tiny fruits are a shiny black and they appear from March through July. They are food for many birds including the bald-plate pigeon, parakeets, and hopping dicks.

There are many species of *Bumelia*. One variety has a wood that is so hard it is impossible to hammer a nail into it. *Bumelia salicifolia*, however, has a softer wood than this other variety.

WHITE BULLET (Bumelia salicifolia)

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Family:	Species:	Author:	
Sapotaceae	Bumelia salicifolia	(L.) Sw.	



Height:	Habitat:	Persistence:
22m	limestone woodlands, sea level-900m	Evergreen



WOMAN'S TONGUE TREE

(Albizzia lebbek)

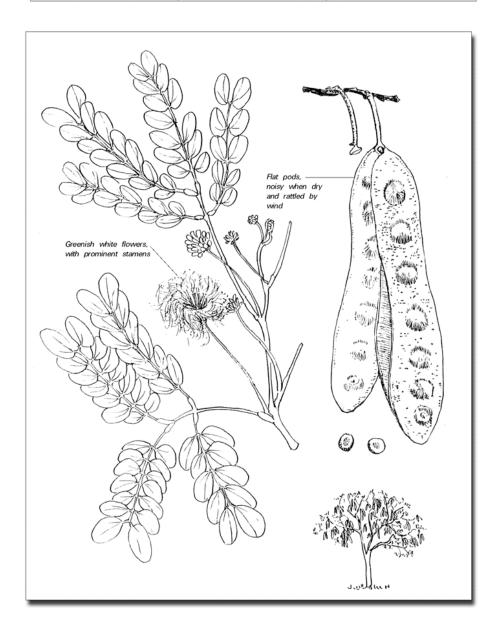
This tree is found in India and other eastern countries where it is called East Indian walnut or the siris tree. Woman's tongue is a native of Asia and Africa and its common name probably comes from the sound of the wind rattling the thin, dry, straw-coloured pods which are its fruits.

This adaptable tree belongs to the Leguminosae family and small structures on the root called nodules enrich the soil with nitrogen as they contain nitrogen fixing bacteria. It is a good soil binder and can be used for reforesting dry soils. It thrives in many types of soil but prefers moist, well-drained loam. Woman's tongue can grow to a height of 30 m.

Its leaves are compound and deciduous and its flowers are fragrant and greenish-white in colour. For a part of each year it is entirely leafless. The leaves make good fodder for livestock and in some countries the leaves are used as green manure. The sizes of the pods range from 15-30 cm in length. When the leaves and the pods of this tree fall to the ground a lot of litter is created further enriching the soil. The wood is used for fuelwood.

WOMAN'S TONGUE TREE (Albizzia lebbek)

Family:	Species:	Author:	
Mimosaceae	Albizia lobbeck	(L.) Benth.	



Height:	Habitat:	Persistence:
30m	Sea level-800m	Deciduous



SEASIDE PLANTS

SOME COMMON JAMAICAN TREES

Natural History Society of Jamaica



RED MANGROVE

(*Rhizophora mangle*)

There are about 40 species of mangroves in the world. Four species grow in Jamaica: white mangrove (*Laguncularia racemosa*), black mangrove (*Avicennia germinans*), button mangrove (*Conocarpus erectus*) and red mangrove (*Rhizophora mangle*).

The red mangrove is a native of tropical America, the Pacific islands, the west coast of tropical Africa. The plant grows in brackish water and grows to a height of 15 m. It grows into small and large spreading trees. The little shiny, dark green, leathery leaves are 5-7 cm long. The flowers are small and yellow or white.

Aerial roots grow down from their branches and trunks and go deep into the mud. These roots support the branches which are above the water. The roots trap the silt (mud deposits) and these deposits pile up in the water especially at the mouths of streams. This helps to build up the land. These plants have underground roots as well, which absorb nutrients from the mud and water.

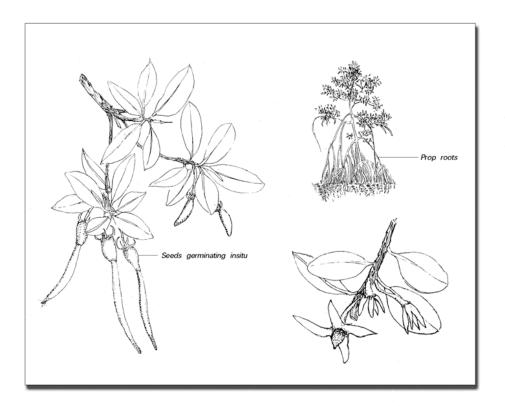
The fruit is brown and measures 2.5 cm long. Mangrove seeds often germinate while the fruit is still on the tree. The seed sends down a long, heavy root which holds up the young plant when the fruit falls in mud. If the fruit falls in water it will float until its root strikes mud and then it continues to grow.

Mangroves protect the coastal areas where they grow from the full force of storm waves, and they filter pollutants which are washed down from the land. Many animals including crabs, young fish, and oysters live in mangrove swamps. Destruction of our mangrove swamps is harmful to fishing since these swamps are nurseries for young animals. They are also feeding and nesting grounds for many sea birds.

The wood makes excellent firewood and charcoal and can be harvested carefully without killing the plant. Tannins used in the leather industry can be extracted from mangroves.

$RED\ MANGROVE\ (\textit{Rhizophora mangle})$

Family:	Species:	Author:	
Rizophoraceae	Rhizophora mangle	Linneaus	



Height:	Habitat:	Persistence:
15m	Shallow coast & brackish rivers	Evergreen

SOME COMMON JAMAICAN TREES

Natural History Society of Jamaica



SCARLET CORDIA

(Cordia sebestera)

This is a native of Florida, tropical America, and the West Indies. It is a showy tree when in bloom, consequently it has been cultivated as an ornamental in many tropical countries.

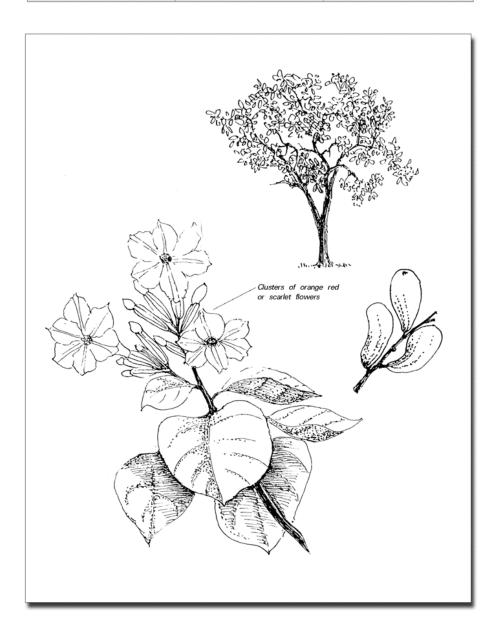
The tree grows to about 6 m tall and has a light grey bark. The leaves are dark green and can get to 20 cm long. The scarlet or reddish- orange flowers grow in clusters and each is shaped like a trumpet. The petals are crinkled and look like crushed crepe paper.

The fruit is pointed, white and about 4 cm long when ripe. The tree flowers and fruits most of the year but more often from April to June. It can be seen from sea-level to 200 m on limestone rocks along dry coastal areas. It is also seen in sandy areas.

The wood is useful for making furniture.

SCARLET CORDIA (Cordia sebestera)

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Family:	Species:	Author:	
Boraginaceae	Cordia sebestena	Linneaus	



Height:	Habitat:	Persistence:
6m	Coastal areas, sea level-200m	Evergreen

Natural History Society of Jamaica



SEA GRAPE

(Coccoloba uvifera)

This tree is common along the sea coast on sand dunes. It is a native of the West Indies, Florida, and Central America.

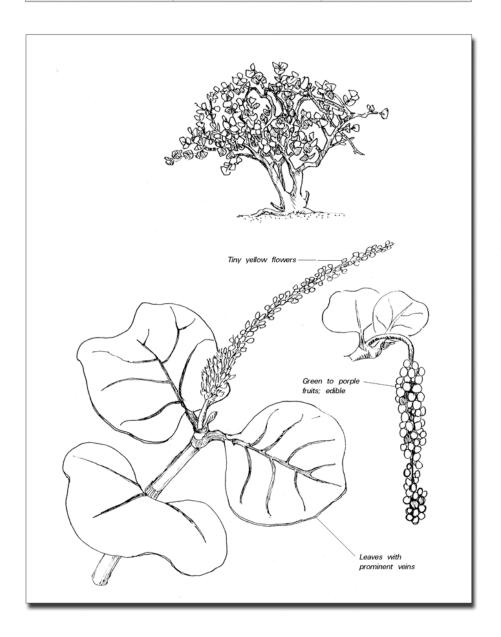
The trees usually attain a height of 1-5 m but some get as tall as 15 m. The white or greenish yellow flowers which grow on long slender structures appear from June to August. The fruits appear from March to October and are green when unripe and purplish when ripe. These 2 cm long fruits are edible though sour and grow in bunches like grapes do.

The leaves are broad and rounded and measure 12 cm to 20 cm wide. They are smooth and leathery and heart-shaped. The young leaves are often bright red.

The wood is hard and is sometimes used in cabinet making.

$SEA\ GRAPE\ (\textit{Coccoloba uvifera})$

Family:	Species:	Author:	
Polygonaceae	Coccoloba uvifera	Linneaus	



Height:	Habitat:	Persistence:
15m	Coastal areas	Evergreen

Natural History Society of Jamaica



SEASIDE MAHOE

(Hibiscus tiliaceus)

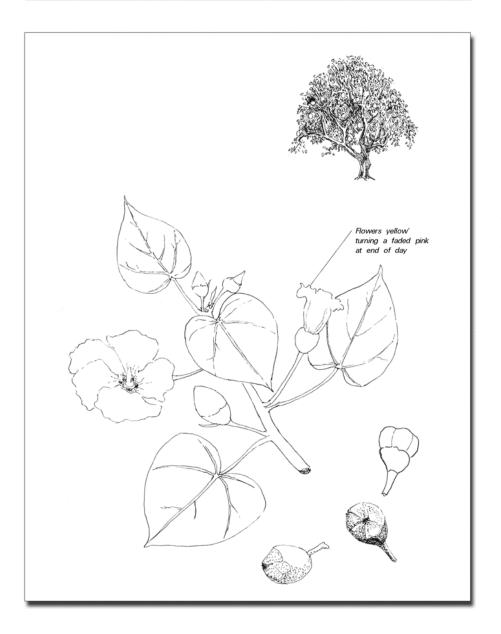
This species is called seaside mahoe to distinguish it from Mountain, the seaside mahoe is shorter with heavy low branches.

It has pale yellow flowers which are less than 8 cm in length (the flowers of the Blue Mahoe are bigger). The seeds are smooth.

This species is found only at sea-level in shallow muddy coastal swamps. The branches often grow so low that they touch the ground and these will take root much like mangrove branches do. The wood is soft and not durable like that of the Blue Mahoe which is used extensively in cabinet-making.

SEASIDE MAHOE (Hibiscus tiliaceus)

Family:	Species:	Author:	
Malvaceae	Hibiscus tiliaceus	Linneaus	



Height:	Habitat:	Persistence:
12m	Coastal areas	Evergreen



FRUIT TREES



ACKEE

(Blighia sapida)

The ackee is a West African tree, the seeds of which are used there for playing a game. It was named after Captain Bligh a famous British explorer who it is said brought the plant to Jamaica. However, some persons believe that the ackee was brought to the island by a botanist called Thomas Clarke or maybe by other unknown individuals - probably a slave. Captain Bligh did take the ackee with him from Jamaica to Europe.

The tree is medium-sized and can grow to over 15 m in height. The leaves are compound and hang on opposite sides of the long stalks which carry them. The trees flower and fruit for most of the year. The flowers are small, fragrant and cream coloured. They are the source of a Ghanian perfume. When young the fruit is green and becomes orange-red as it matures. When mature the fruit opens revealing three hard, round black seeds attached to three yellow-white fleshy arils.

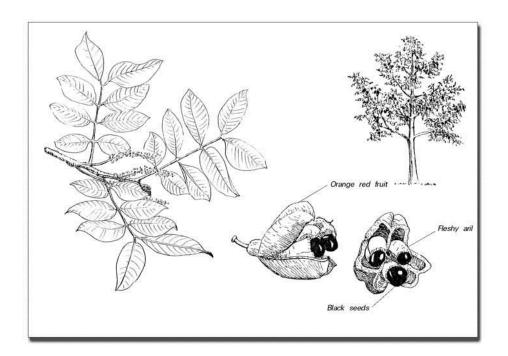
The arils are the edible portions, but if eaten before the fruit opens they will be poisonous. There are two types of arils, "cheese" or hard type and the "butter" or soft type. When boiled the hard type is firmer to the touch. The aril consists mainly of water but protein, fat, carbohydrates, minerals and vitamins are present.

Ackee is Jamaica's national fruit. The national dish is ackee and saltfish, preferably made with salted cod. Much of this cod has always come from places like Nova Scotia, Eastern Canada. It was imported to feed the slaves. Jamaica is the only country that eats cooked ackee as a standard meal. Ackee is grown mainly for local consumption although canned ackee is exported.

"Vomiting sickness" is associated with the eating of unopened ackee. Unopened ackee contains Hypoglycin A, which is an amino acid that lowers blood sugar. To be safe therefore, ackees should be picked when opened.

ACKEE (Blighia sapida)

Family:	Species:	Author:
Sapindaceae	Blighia sapida	Konia



Height:	Habitat:	Persistence:
15m	Cultivated	Evergreen



ALMOND

(Terminalia catappa)

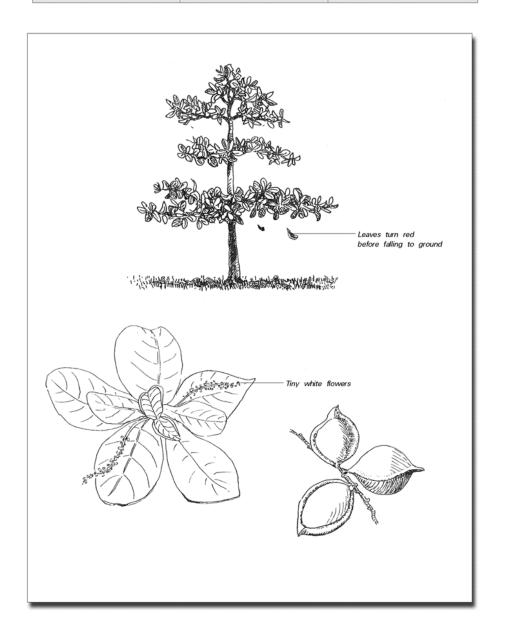
The Almond came from Northern Australia, Malaya and the East Indies and was introduced in Jamaica in the 1790's. It is often found near the sea in wet areas although almond trees can remain healthy without too much water.

This tree can grow as high as 23 m. The branches spread out horizontally in layers one above the other and provide good shade. The leaves are big, up to 30 cm in length and 16 cm wide, and are leathery in texture. The dark green, glossy leaves turn orange and sometimes red before falling to the ground. Leaves are shed twice per year.

The flowers of the almond tree are whitish in colour, very small and appear on slender spikes. The fruits are green, oval shaped, corky and measure 8 cm in length. They may become yellow or reddish as they ripen and fall off the tree. Children enjoy breaking open the nut at the centre of the fruit so as to eat the small white kernel inside. The fleshy fibre outside the nut is also edible.

ALMOND (Terminalia catappa)

			0.0010000000000000000000000000000000000
Family:	Species:	Author:	
Combretaceaa	Terminalia catappa	Linneaus	



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OTAHEITA APPLE

(Engenia malaccensis)

As its name suggests the Otaheita or Malay Apple comes from the far east. Originally found in Malaya, it spread further east to the Society Islands which include Tahiti, and to Hawaii. It was brought to Jamaica in 1793 along with Breadfruit by Captain Bligh in the ship "Providence". The plantation owners had requested these in an effort to increase the sustainable food supply for the slaves.

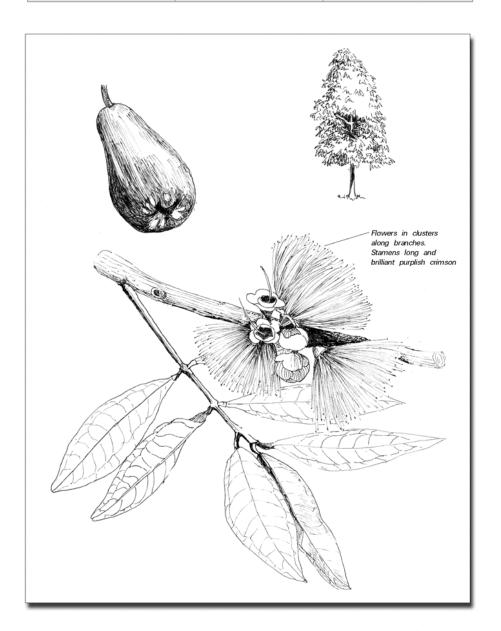
The tree grows at altitudes from sea-level to about 600 m especially in moist areas. The trunk is straight and the branches spread out to make a good shade tree. It grows to a height of 8-10 m. The leaves are thick, glossy and oval in shape, averaging 20-26 cm x 10 cm in size.

The blossom is spectacular - growing on short stems in clusters of 2 - 5 flowers along the branches. Each flower is about 5 cm in diameter, has 5 petals and more than a hundred long stamens, all of a brilliant purplish crimson colour. The leaves may hide the blossom from the outside, but step into the shady interior and the whole tree seems full of blossom and birds. As the flowers age, the stamens drop to form a crimson carpet.

The apple itself is shaped like a pear. The skin is a waxy crimson. The inside is a white, slightly woolly, juicy pulp surrounding a single stone or seed. The fruit is edible raw, or cooked.

OTAHEITA APPLE (Engenia malaccensis)

Family: Species: Author: Syzygium malaccense (L.) Merr. and Perry



Height:	Habitat:	Persistence:
10m	Sea level-600m	Evergreen

Natural History Society of Jamaica



AVOCADO PEAR

(Persea amencana)

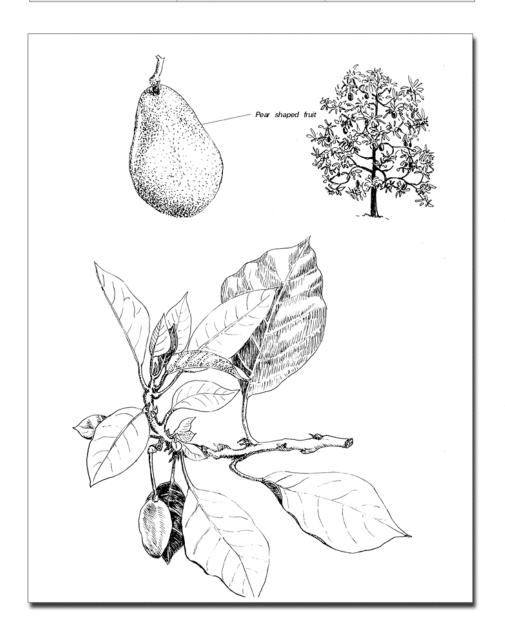
This tree is a native of tropical America, Mexico, Central America and the West Indies. In Jamaica we often speak of it simply as 'pear'.

There are several varieties of the avocado pear, one of the most popular being Simmonds. Most fruits ripen between August and October but a few varieties are "out-of-season" and their fruits mature between December and February.

The fruit is a favourite in our diet and is often eaten with bread or bun, as well as with a meal. It is also used in the cosmetic industry. There is some exportation of Avocado pears from Jamaica but it is not one of the main export crops. Avocados bruise easily so great care has to be taken when handling them.

$AVOCADO\ PEAR\ (\textit{Persea amencana})$

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Family:	Species:	Author:	
Lauraceae	Persea americana	Mill	



Height:	Habitat:	Persistence:
14m	Cultivated, sea level-1000m	Evergreen





BANANA

(Musa sp.)

You may have noticed that banana "trees" do not look like ordinary trees. They do not have wooden trunks and boughs; they are really perennial herbs. The plants are kept erect by their overlapping leaf stalks which grow up out of the earth. At the top of the plant which grows to between 3 and 9 m in height these stalks open out and have long wide leaves measuring between 1 and 3.5 m long and 30 cm wide.

The banana plant loves rich sandy loam soil with good drainage since banana roots tend to deteriorate in soil that is waterlogged. Nonetheless, bananas need lots of water and grow well in Portland and St. Mary which receive much rainfall.

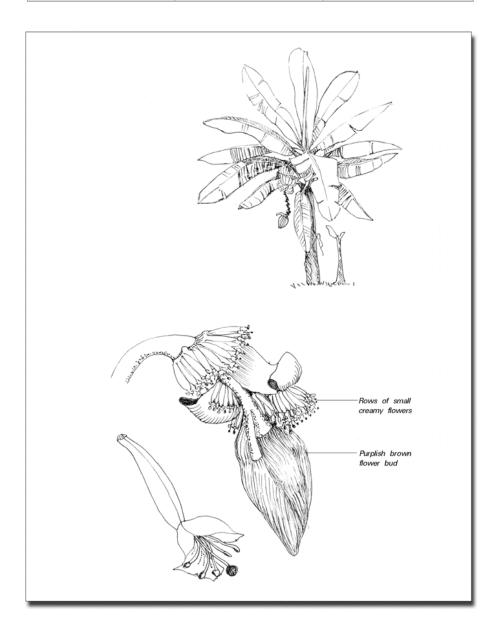
The banana plant puts out a giant purple-red bud on a thick stem and as the bud develops it opens to reveal clusters of small flowers. Each cluster becomes tiny green bananas forming a bunch. Bananas are propagated by shoots or suckers which grow out from the roots of the plant.

Bananas originated in southern Asia but now grow in all tropical countries. The earliest variety cultivated in Jamaica was the Gros Michel.

Panama disease (a fungus) and leaf spot have been two of the diseases that have caused much harm to the banana industry. The banana weevil borer is also a pest. Today, many banana varieties more resistant to these problems have been introduced.

BANANA (Musa sp.)

Family:	Species:	Author:	
Musaceae	Musa spp.	Sw.	



Height:	Habitat:	Persistence:
9m	Cultivated, sea level-1000m	Evergreen



Natural History Society of Jamaica

BREADFRUIT

(Artocarpus incisus)

Breadfruit trees are native to the islands of the South Pacific but in 1793 the plant was brought to the West Indies from Tahiti by Captain Bligh on the ship Providence. In Jamaica breadfruit is commonly cultivated on lower elevations in the more rainy areas of the island.

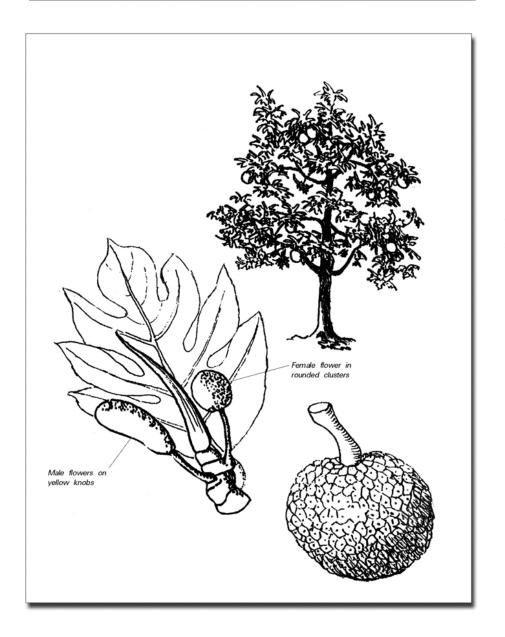
A fully-grown breadfruit tree can be 9 - 12 m in height. Breadfruit leaves can be as long as $\frac{1}{2}$ m each and they are deeply indented or lobed (see illustration). The tops of the leaves are dark green and smooth but underneath, the leaves are paler and veined.

The tree produces both male and female flowers with the male appearing on yellow knobs (or catkins) of about 36 cm in length, and the female flowers coming out in rounded clusters. The mature fruits are yellow-green, rough-skinned, large, elongated or round. The fruit gets to 20 cm in diameter. The trees flower and fruit throughout the year. The fruit is sterile and breadfruit is propagated by cuttings

The younger fruit is eaten boiled and the mature ("fit") one is roasted on an open fire or baked in an oven. The male flowers can be boiled and made into candid fruits. Recent studies show that the leaves contain a substance which has insecticidal properties. Infusions of the leaves are drank and are said to alleviate symptoms of certain heart diseases.

BREADFRUIT (Artocarpus incisus)

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Family:	Species:	Author:	
Moraceae	Artocarpus incisus		



Height:	Habitat:	Persistence:
12m	Cultivated, sea level-1000m	Evergreen



Natural History Society of Jamaica

GUAVA

(Psidium guajava)

Guava is indigenous to the West Indies and tropical and subtropical America. It grows at altitudes from sea level up to 1500 m and in wet areas.

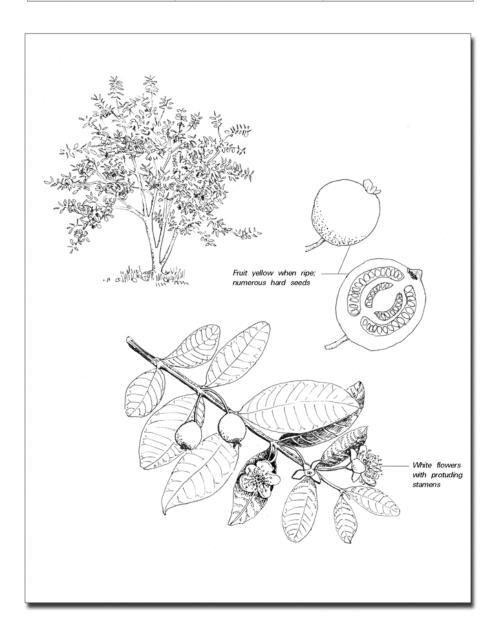
This tree seldom grows much higher than 7 m. The bark is shiny and smooth and the branches start near the ground. The oblong leaves are 5-7 cm in length, smooth above and hairy below. The flowers are small, white and sweet-smelling. The fruit is round, oval or pear-shaped. The unripe fruit is yellow or light green. The ripe fruit has a yellow skin and the flesh yellowish or pink.

The fruits of some varieties are sweet and eaten raw. Others are sour and the pulp used to make jellies and guava cheese. The juice is used to flavour cakes and ice-cream.

In some countries the leaves and green fruit are used for dyeing and tanning. In Jamaica the wood which is very hard is used for making handles of tools and other implements.

$GUAVA \ (\textit{Psidium guajava})$

		030000000000000000000000000000000000000
Species:	Author:	
Psiaium guajara	Linneaus	



Height:	Habitat:	Persistence:
7m	Sea level-1500m	Evergreen



MANGO

(Mangifera indica)

The Mango was first cultivated about 4000 years ago in India and the Malay Archipelago. It was introduced into the Caribbean in the 1780's.

The tree usually has a short trunk but the somewhat heavy branches and the narrow dark green leaves generally spread out into a large round crown. The leaves are 10-25 cm long, are reddish when young and dark green, thick, shiny and leathery as they get older. *Mangifera* grows up to 20 m in height and occurs at elevations from to 1500 m.

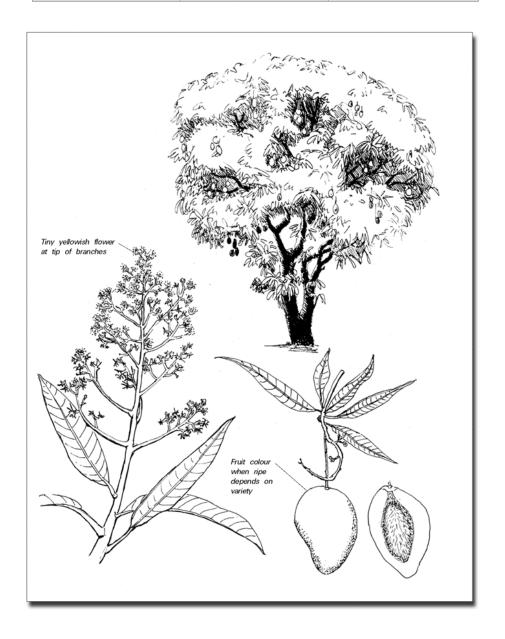
Small greenish white, fragrant flowers appear in terminal clusters (i.e., at the ends of branches) in the dry season. In Jamaica this is usually just before and after Christmas time. The fruits which hang from long stalks ripen in the wet season (May to June). It takes about five months for the blossoms to develop into ripe mangoes. The mangoes are kidney-shaped and as long as 10 cm. The skin when ripe can be green, or shades of orange or yellow.

Mango pulp is juicy, yellow-orange in colour and is very tasty. Unripe mangoes are good for making chutneys and the ripe fruits used for juices as well as preserves.

There is a large variety of mangoes with interesting names which change from place to place. When the mangoes first arrived amongst them was one labeled No. 11 and from this the mango got its name.

$MANGO \, (\textit{Mangifera indica})$

			1023142023142034
Family:	Species:	Author:	
Anacardiaceae	Magnifera indica	Linneaus	



Height:	Habitat:	Persistence:
20m	Cultivated, sea level-1000m	Evergreen



PAWPAW

(Carica papaya)

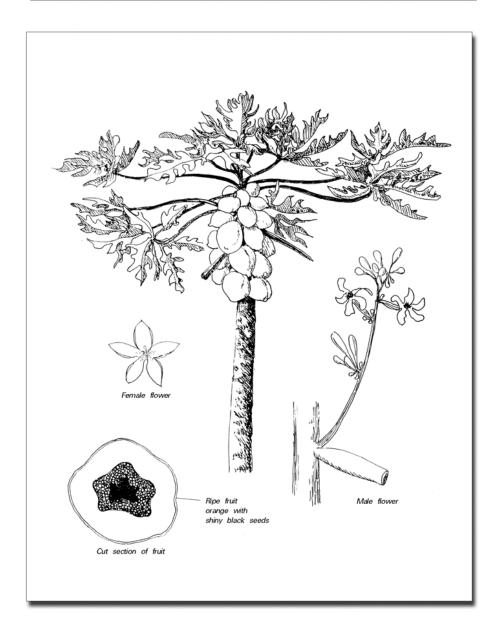
Carica papaya is a native of the West Indies and tropical America. Jamaica's cultivated pawpaw varieties grow quickly, usually without branching, to a height of 7-10 m. The tree develops a crown of large deeply indented leaves measuring up to 60 cm long. The stem of the tree is hollow.

A tree bears either male or female yellowish flowers. The fruit of course develops on the trees which bear female flowers. Pawpaws are rounded or elongate in shape. The unripe fruit is green and turns yellow when ripe. The flesh of the ripe fruit is orange-yellow in colour. The pea-sized black seeds of the pawpaw have a pulpy coat.

The ripe fruit is eaten raw at breakfast time or as a dessert and is rich in vitamins A and C. Immature fruit can be used to make jams, chutney and other condiments. Unripe pawpaws are a source of papain, an enzyme used as an aid to digestion and as a meat tenderizer. In Jamaica, pieces of green pawpaw are cooked with meat or uncooked meat is wrapped in pawpaw leaves to tenderize it.

$PAWPAW \ (\textit{Carica papaya})$

		mankalimankalimanim
Species:	Author:	
Carica papaya	Linneaus	



Height:	Habitat:	Persistence:
10m	Sea level-800m	Evergreen



SOPS

Sweet sop (Annona squamosa)
Sour sop (Annona muriata)
Custard apple (Annona reticulata)

These fruits of these three trees have a cream or pinkish pulp which is characteristic of members of the family.

Sweet sop

This is a native of the tropics and grows to a height of 5 - 8 m. The plant is normally cultivated and grows at elevations up to 300 m. The leaves are 7 - 15 cm long. The flowers grow in clusters and are light green on the outside and reddish purple at the base. The fruits are yellowish green or light green in colour. They have a white pulp, dark brown or black seeds and are easily recognized by the rounded bulging segments on the outside. Each bulge represents a single berry as the whole sop is actually a fusion of many fruits from different flowers (aggregate fruit).

Custard apple

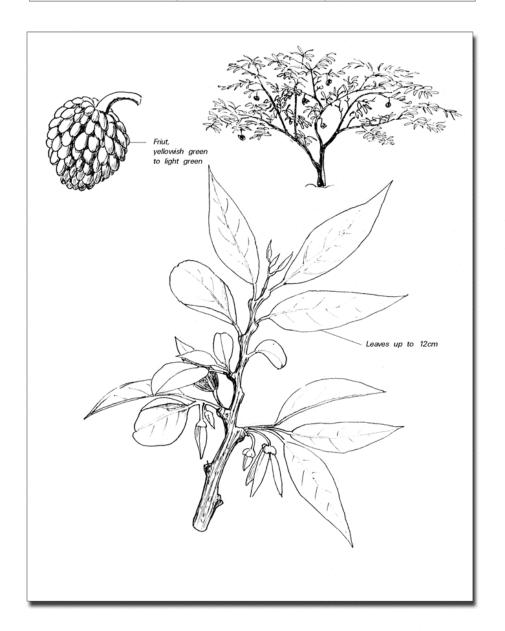
It is a native of South Florida, Mexico, Peru, Brazil and the West Indies and grows to 5-10 m high. The plant is found at elevations up to 300 m. This is easily distinguished from the others by its smooth, heart-shaped fruit. The leaves are 10 - 15 cm long. The flowers are fragrant, greenish in colour and appear in July. The fruit is 10-12 cm in diameter and the pulp is granular and yellowish with dark brown or black seeds. Fruits appear in February.

Sour sop

This is a native of the American tropics. It is found at altitudes of up to 600 m. It grows to 8 m high and the fruits are ovoid, ranging from 15-20 cm in size, though some do get to 30 cm long. The fruit which is green when ripe is spiny and the pulp is white and slightly acidic. The seeds are brown or black. Flowers appear from June to November while fruits appear from September to January. Leaves are 8-25 cm long and the flowers are greenish yellow and small.

$Sweet\ sop\ {\it (Annona\ squamosa)}$

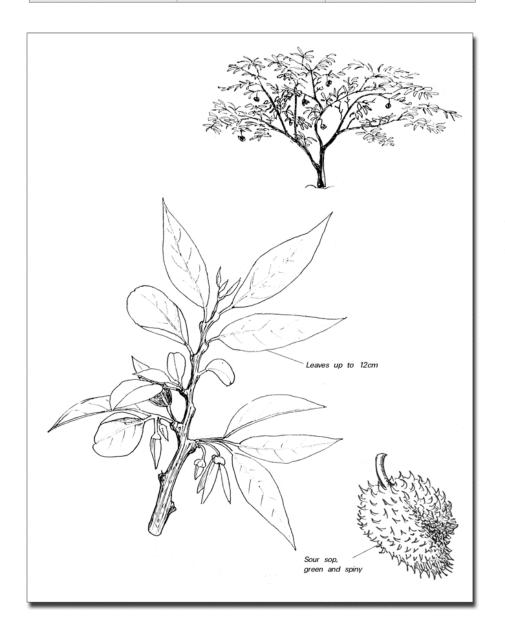
			0.010.00.010.00.01
Family:	Species:	Author:	
Annonaceae	Annona squamosa	Linneaus	



Height:	Habitat:	Persistence:
8m	Sea level-600m	Evergreen

$Sour\ sop\ (Annona\ muriata)$

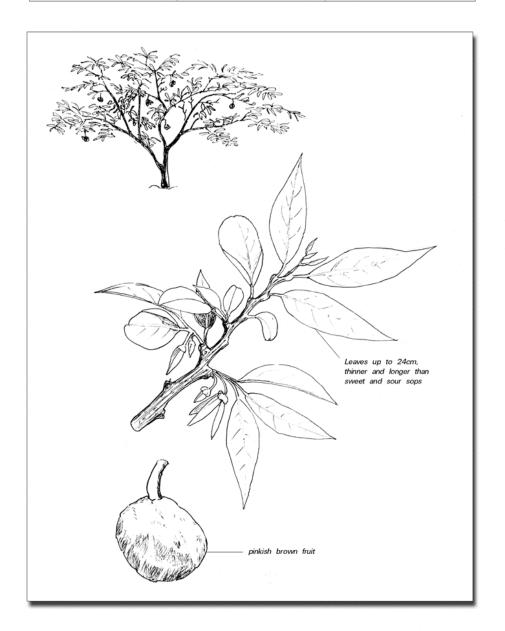
		atarona miatanosatanosatanosatanosatanosatanosatanosatanosata	
Family:	Species:	Author:	
Annonaceae	Annona muricata	Linneaus	



leight:	Habitat:	Persistence:
8m	Sea level-600m	Evergreen

$Custard\ apple\ ({\it Annona\ reticulata})$

Family:	Species:	Author:
Annonaceae	Annona Reticulata	Linneaus



Height:	Habitat:	Persistence:
8m	Sea level-600m	Evergreen



STAR APPLE

(Chrysophyllum cainito)

This attractive fruit tree is native in the Greater Antilles and grows from an altitude of 30 to 500 m. It grows to a height 20 m.

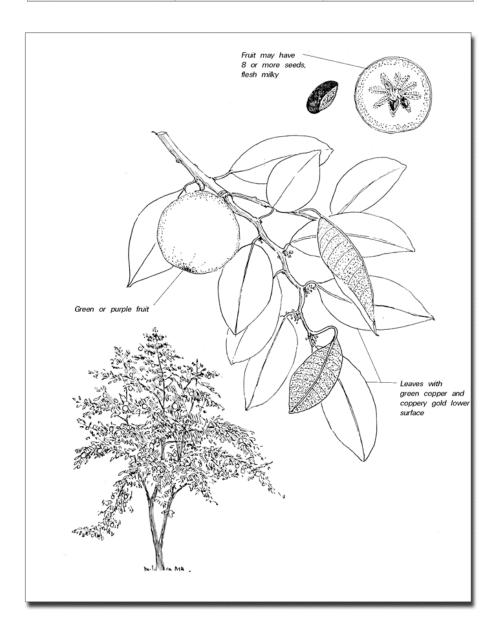
Star apple leaves are pointed at both ends. The uppersides are dark green and shiny while the undersides are bronze-gold and velvety. The leaves are between 7 and 16 cm long.

The tree produces small, fragrant, greenish yellow or purplish flowers in August to September. The fruit is round, smooth and is about 5-7 cm in diameter. It is either purple or green, and ripens from November through March.

If the fruit is sliced through the centre the pattern of black seeds in their thick transparent covering resembles a star against the rest of the fruit pulp; hence the name star apple. A white sticky substance sometimes oozes from the skin of the star apple when it is cut. The fruit is tasty and combined with the pulp of an orange makes an excellent dessert which is called "matrimony".

$STAR\ APPLE\ (\textit{Chrysophyllum cainito})$

			0.0000000000000000000000000000000000000
Family:	Species:	Author:	
Sapotaceae	Chyoophyllum cainito	Linneaus	



Height:	Habitat:	Persistence:
20m	30-500m	Evergreen



Natural History Society of Jamaica

TAMARIND

(Tamarindus indica)

Tamarind is said to be a native of tropical Africa but is found throughout the tropics. It grows in dry areas.

This tree is large, growing up to 27 m and sometimes having a girth of 1.6 m. The bark is brownish-grey and the characteristic light-green compound leaves distinguish it from most other trees. A leaf can be 7.5-10 cm long with about sixteen pairs of leaflets. These leaflets fold at nights as if to sleep.

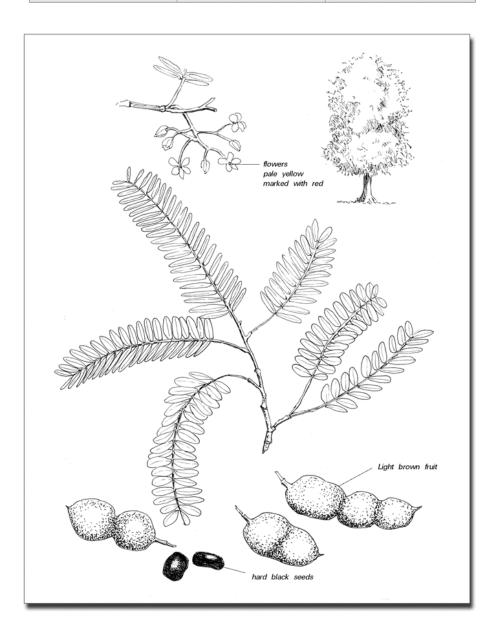
The flowers which are seen from June to October are pale yellow marked with red. Hanging a midst the leaves from October to June are fruits which look like pods. The fruit is 7-15 cm long, light brown, cork-like and rough. The shape varies. The outer coat is crispy when the fruit is ripe. The seeds are reddish brown.

The fruit is eaten half ripe or ripe sometimes with salt sprinkled on it. The brown pulp, when separated from the seeds, makes a tasty drink when sugar, water and spices are added. Some persons add baking soda for extra zest. The fruit (including seeds) is added to sugar and made into balls to make a confectionery called tamarind balls. The seeds when strung together make necklaces and in rural Jamaica the seeds are used to play "jacks".

An unrelated tree, Wild Tamarind which has a similar leaf shape and size is found in woodlands. The fruit is however bright red.

TAMARIND (Tamarindus indica)

Family:	Species:	Author:	
Caesalpiniaceae	Tamarindus indica	Linneaus	



Height:	Habitat:	Persistence:
27m	Sea level-700m	Evergreen





GLOSSARY

Aggregate fruit One formed by coherence of several fruits.

Alternate arrangement An arrangement of leaves or other parts placed singly at different heights on the axis or stem.

Endemic Occurring naturally only in a particular geographic Native (tree) Originating from an geographic area.

Palmate leaf Lobed or divided or ribbed in palm-like or hand-like fashion

Pinnae Leaflets of a compound leaf.

Raceme Elongate inflorescence in which the short pedicellate flowers are arranged with youngest at the apex.





COMMON NAMES FOR SOME TREES IN CARIBBEAN COUNTRIES

COMMON	NAMES	
JAMAICAN NAME	OTHER NAME	CARIBBEAN COUNTRY
Ackee	Jamaica ackee Guinep	St. Vincent & the Grenadines St. Vincent & the Grenadines, Grenada, Barbados
Almond	Zaman	St. Lucia
Avocardo	Zaboka	Dominica, St. Lucia, Grenada, St. Vincent & the Grenadines Trinidad & Tobago
Breadfruit	Bwa pen Yanm pen Penmbwa	St. Lucia Dominica Trinidad & Tobago
Calabash	Bolie	Dominica, Grenada, St. Vincent & the Grenadines.
Canon-ball tree	Comb & brush Forbidden fruit	St. Vincent & the Grenadines Grenada Guyana
Cassia	Apple blossom cassia	Barbados
Casuarina	Beef wood Mile tree Needle and thread Whistling pine/willow	Bahamas Barbados Guyana Grenada, Trinidad & Tobago St. Vincent & the Grenadines, Jamaica
Frangipani	Jasmine	Cayman
Guango	Saman tree	Caribbean area





COMMON	I NAMES	
JAMAICAN NAME	OTHER NAME	CARIBBEAN COUNTRY
Lignum Vitae	National tree of Baham	as, National flower of Jamaica
Otaheite apple	Malacca apple Malaba Plumrose	Antigua, Guyana St. Vincent & the Grenadines St. Vincent & the Grenadines
Poinciana	Flamboyant	Caribbean area. National flower of St. Kits & Nevis
Quick-Stick	Glericida Sweet man	Anguilla, St. Vincent & the Grenadines. St. Vincent & the Grenadines
Red birch	Birch gum tree Gumba limba	Barbados St. Vincent & the Grenadines
Royal palm	Victoria palm	Bahamas
Scarlet cordia	Red cordia	Anguilla, Barbados, St. Kitts Cayman Islands
Sea grape	Seaside grape	Barbados, Cayman Islands, Guyana, St. Vincent & Grenadines
Seaside Mahoe	Harti-harti Seaside hibiscus Mahoe	US Virgin Islands US Virgin Islands Caribbean area
Silk cotton	Ceiba Kapok tree Cotton tree	Caribbean area Virgin Islands Caribbean area
Star apple	Caimite	Dominica, Grenada, Trinidad & Tobago

Natural History Society of Jamaica



COMMON	N NAMES	
JAMAICAN NAME	OTHER NAME	CARIBBEAN COUNTRY
Tamarind	Tambran	St. Vincent & the Grenadines
Tatch palm	Troolie (Truli) palm Timite palm	Guyana Trinidad
Tree fern	Drummond joe	St. Vincent & the Grenadines
Woman's tongue	Barbados ebony Tang-fanm Monkey fiddle Monkey-shack-shack Shack-shack Whistling bean Wild tamarind West Indian Ebony	Barbados St. Lucia Turks & Cacicus Guyana Barbados, Trinidad & Tobago Bahamas Cayman Islands Trinidad & Tobago





BIBLIOGRAPHY

- Adams, C.D. 1972. Flowering plants of Jamaica. University of the West Indies, Jamaica.
- Allsopp, Richard. 1996. Dictionary of Caribbean English Usage. Oxford.
- Proctor, George, R. 1985. Ferns of Jamaica. British Museum (Natural History).
- Thompson, D. A., P. K. Bretting and M. Humphreys. 1986. Forests of Jamaica. Jamaican Society of Scientists and Technologist.