# **Heritage Trees**

# About the Scheme

Majestic mature trees are the natural heritage of Singapore and serve as important green landmarks of our Tropical Garden City. They help to create a sense of permanence and identity to the place we live. It takes decades and in some cases, more than hundreds of years for these trees to mature gracefully in our landscape.

As Singapore progresses, there is a danger of losing these mature trees. In view of this concern, the Heritage Trees Scheme was announced on 17 Aug 2001 with the objectives to conserve and to educate the community on the importance of protecting our mature trees.

In support of this initiative, a Heritage Trees Fund was established by The Hongkong and Shanghai Banking Corporation Limited (HSBC), with an initial donation of \$125,000. The Fund is used to implement a conservation programme to safeguard our Heritage Trees and to promote appreciation of our natural heritage. Some of these programme initiatives include installation of lightning conductors, interpretive signages, and putting in place a nomination scheme for the community.

S/N	Species	Location	Girth size (m)	Height (m)
1	Adenanthera pavonina	Lawn J, in front of the Prisoner-	4.4	28
		of-War Brick Steps		
	(Saga Daun Tumpul)			
2	Alangium ridleyi	Lawn H, along Dell Lane	2.2	23
	(Mentulang Daun Lebar)			
3	Albizia niopoides	Lawn E, near Swan Lake	5.8	45
	(Silk Tree)			
4	Alstonia angustiloba	Along Lower Palm Valley Road,	4.5	40
	(Common Pulai)	near the toilet		
5	Alstonia angustiloba	Burkill Driveway, near Burkill	6.5	38
	(Common Pulai)	Gate		
6	Alstonia pneumatophora	Lawn H	5.8	30
	(Pulai Basong)			
7	Antidesma bunius	Lawn H	3.5	10
	(Buni)			
8	Barringtonia asiatica	Healing Garden	3.1	15
	(Putat Laut)			
9	Callerya atropurpurea	Lawn F, facing Swan Lake	5.0	36

(Purple Millettia or Tulang Daing) Calophyllum inophyllum			
Calophyllum inophyllum		:	
	Lawn C, Botany Centre	7.3	28
· · · · · · · · · · · · · · · · · · ·			
(Penaga Laut)			
Carapa guianensis	Lawn E	5.6	23
(Andiroba or Carapa)			
	Lawn Ο near Bandstand	14 5	45
eenea pernanara		1 1.0	10
(Kapok or Silk-Cotton			
Tree)			
Ceiba pentandra	Lawn D, beside SBG Heritage	14.0	40
	Museum (Holttum Hall)		
, 			
			12
-			25
	Rain Forest / U2	2.85	15
Dyera costulata	Lawn S	5.0	30
Dacrycarpus imbricatus	Lawn H	2.0	15
(Chuchar Atap or			
	Lawn O, near Bandstand	2.2	28
Diyobalanops aromatica	Lawin O, near Danustanu	2.2	20
(Kapur)			
	Lawn E	2.4	25
(Kapur)			
Dryobalanops aromatica	Lawn H	2.7	26
Cyrtophyllum fragrans	Lawn E	6.0	32
(Tembusu)			
	Lawn W. along Lippor Polm	65	40
		0.0	-10
(Tembusu)	vancy road		
	Tree) Ceiba pentandra (Kapok or Silk-Cotton Tree) Cola gigantea Copaifera officinalis Cyathocalyx sumatranus Dyera costulata Dacrycarpus imbricatus (Chucher Atap or Malayan Yellow-Wood) Dryobalanops aromatica (Kapur) Dryobalanops aromatica (Kapur) Dryobalanops aromatica (Kapur) Dryobalanops aromatica (Kapur) Cyrtophyllum fragrans	Ceiba pentandraLawn O, near Bandstand(Kapok or Silk-Cotton Tree)Lawn D, beside SBG Heritage Museum (Holttum Hall)(Kapok or Silk-Cotton Tree)Orchid PlazaCola giganteaOrchid PlazaCopaifera officinalisLawn HCyathocalyx sumatranusRain Forest / U2Dyera costulataLawn SDacrycarpus imbricatusLawn H(Chucher Atap or Malayan Yellow-Wood)Lawn O, near BandstandDryobalanops aromatica (Kapur)Lawn E(Kapur)Lawn ECyrtophyllum fragrans (Tembusu)Lawn W, along Upper Palm Valley Road	Ceiba pentandraLawn O, near Bandstand14.5(Kapok or Silk-Cotton Tree)Lawn D, beside SBG Heritage Museum (Holttum Hall)14.0(Kapok or Silk-Cotton Tree)Museum (Holttum Hall)14.0(Kapok or Silk-Cotton Tree)S.43.4Copaifera officinalisLawn H3.9Cyathocalyx sumatranusRain Forest / U22.85Dyera costulata Darrycarpus imbricatusLawn S5.0Dacrycarpus imbricatus (Chucher Atap or Malayan Yellow-Wood)Lawn O, near Bandstand2.2Dryobalanops aromatica (Kapur)Lawn E2.4(Kapur)Lawn H2.7Dryobalanops aromatica (Kapur)Lawn H2.7Cyrtophyllum fragrans Valley RoadLawn W, along Upper Palm Valley Road6.5

24	Couroupita guianensis	Ginger Garden, behind the waterfall	2.9	15
25	Ficus kerkhovenii	Rain Forest	27.7	25
	(Johor Strangler Fig)			
26	Ficus kurzii	Lawn A, near Swan Lake	16.1	21
	(Burmese Banyan)			
27	Heritiera elata	Lawn O, along Lower Ring Road	4.0	33
	(Mengkulang)			
28	Hymenaea courbaril	Corner House Lawn	3.2	30
29	Horsfieldia irya	Lawn XH, near Red Brick Path	2.2	18
	(Penarahan Pianggu)			
30	Hopea odorata	Lawn X & A	2.10	25
31	Inocarpus fagifer	Eco Garden	5.3	13
01			0.0	10
	(Tahitian Chestnut)			
32	Khaya senegalensis	Lawn A, along Main Gate Rd	4.3	48
		near Swan Lake		
	(Senegal Mahogany)			
33	Kigelia Africana	Lawn H, near Sundial Garden	1.8	10
	(African Sausage Tree)			
34	Koompasia malaccensis	Lawn X & Lawn A	4.1	20
35	Lecythis pisonis	Lawn E, near Swan Lake	5.9	18
	(Monkey Pot Tree)			
36	Lecythis pisonis	Lawn H, near Sun Garden	4.7	23
	(Monkey Pot Tree)			
37	Lecythis pisonis	Lawn H, near Sun Garden	5.4	24
0.				
	(Monkey Pot Tree)			
38	Mangifera pentandra	Lawn H	2.05	15
39	Myristica fragrans	Lawn XJ	1.15	5
40	Nauclea orientalis	Lawn EG 14	2.0	12
41	Palaquium obovatum	Along Evolution Garden Walk	2.1	25
	(Mbito Cutto or Nuctob			
	(White Gutta or Nyatoh Puteh)			
			<u> </u>	

42	Palaquium obovatum	NParks Raffles Building	2.9	30
	(White Gutta or Nyatoh			
	Puteh)			
43	Parkia timoriana	Lawn Y, beside Symphony	2.9	40
		Stage		
	(Petai Kerayong)			
44	Pentadesma butyracea	Healing Garden	3.3	18
	(Tallow Tree)			
45	Phyllanthus pectinatus	Lawn E	3.1	15
45		LawitL	5.1	15
	(Melaka)			
46	Podocarpus neriifolius	Lawn D, near Saraca Stream	4.0	15
		Walk		
	(Jadi Bukit or Mountain			
	Teak)			
47	Pterygota alata	Lawn W	3.3	20
48	Pangium edule	Lawn H	2.9	12
49	Samanea saman	Visitor Centre, Nassim Gate	5.6	32
	(Dain Tree)			
50	(Rain Tree)	Lawa 0		
50	Samanea saman	Lawn G	5.45	28
51	Shorea gratissima	Rain Forest, along Liane Road	4.5	30
	(Meranti Laut)			
52	Shorea macroptera	Rain Forest	4.2	30
53	, Shorea roxburghii	Lawn B, along Main Gate Road	3.3	26
	Ŭ	, J		
	(Temak Nipis)			
54	Shorea pauciflora	Forest / M2	4.93	30
55	Stereospermum	Lawn B, along Main gate Road	4.1	27
	fimbriatum			
	(Snake Tree)			
56	Swietenia mahogani	Lawn R	2.71	6
57	Tectona grandis	Next to Botany Centre	2.3	15
58	Terminalia	Rain Forest, along Liane Road	12.0	50
	subspathulata			
	(Jelawai Jaha)			
		<u>.</u>		

### Adenanthera pavonina

Family: Fabaceae Common name: Saga Origin: India, South China, Indochina, Malesia A common shade tree planted along roadsides in Singapore in the 1970s and 1980's. Saga seeds are amazingly similar in weight and size. The seeds were traditionally used as standard weights for measuring out precious metals and jewellery (four seeds are equal to 1 gramme in weight) across the Middle East and South East Asia.

### Alangium ridleyi

Family: Cornaceae Common name: Mentulang Daun Lebar Origin: Malay Peninsula This native Mentulang Daun Lebar tree is probably part of the original type population described by Garden's Director, Henry Ridley. Even in Ridley's time this species was rare, and he had only ever seen this tree in the Gardens. This tree in the Gardens is believed to be the last of its kind on the island.

#### Albizia niopoides

Family: Fabaceae

Common name: Tekik

Origin: India, Indochina, Sumatra, Papua New Guinea

The Tekik Heritage Tree arrived as a seed, no bigger than a 10-cent coin, from Darjeeling, India in May 1925. It has since attained a height of 46 metres, growing an average of half a metre each year and dwarfing all its neighbours on the lawn. The bark yields a red dye called soga tekik, used for colouring batik fabrics in Java.

### Alstonia angustiloba

Family: Apocynaceae

Common name: Common Pulai

Origin: Thailand to West Malesia

This very tall specimen is an old and likely wild example, dating from before the Singapore Botanic Gardens acquired this piece of land in 1866. One of the tree's characteristic habitats is the edge of freshwater swamps, which is exactly where this Heritage Tree is growing today, together with other plants that favour this kind of habitat, such as the Sealing Wax and Sago palms, which can be seen adjacent to it.

### Alstonia angustiloba

Family: Apocynaceae

Origin: Thailand to West Malesia

The Common Pulai is a fast-growing pioneer species of very humid tropical rainforest vegetation and is commonly encountered as a wild plant throughout Southeast Asia, including Singapore. This specimen is very likely derived from a self-sown wild seedling.

### Alstonia pneumatophore

Family: Apocynaceae Common name: Pulai Basong Origin: Malaysia, Indonesia

The Pulai Basong is one of only 17 of its kind known to be left in Singapore. A characteristic plant of freshwater swamp forests, this tree is an important remnant of a swamp forest that was known to have existed along the western boundary of the Gardens in the 19th century. Freshwater swamp forests once covered as much as 60 sq km of Singapore. Today, only 1 sq km of land surface is occupied by this type of forest, mostly found in the Nee Soon Swamp Forest in the Central Catchment Nature Reserve.

### Antidesma bunius

Family: Phyllanthaceae Common name: Buni

Origin: India to Australia

The Buni tree is native to Southeast Asia. An interesting point about the Buni and some members of its family (Phyllanthaceae) is that each tree produces either male or female flowers only. This particular tree produces only female flowers. In this region, the fruits of this tree are used to produce jams, jellies and wines.

### Barringtonia asiatica

Family: Lecythidaceae Common name: Putat Laut Origin: Madagascar to Pacific

This tree species is found in coastal forests and mangroves. This specimen is believed to be the largest of its kind in Singapore. The exact history of the tree is unknown, but its size and location suggests that it could be a remnant of the former Economic Gardens. The fruits float on water and are dispersed long distances via ocean currents. They are sometimes used by fishermen as floats for their nets. The seeds of this tree are sometimes crushed and thrown into streams to stun fish, which then die and float to the surface, allowing them to be easily harvested. The large white flowers of this tree are fragrant and open at night, attracting bats and moths.

### Callerya atropurpurea

Family: Fabaceae Common name: Tulang Daing or Purple Millettia Origin: Indochina, West Malesia

The Tulang Daing Heritage Tree was planted in 1889, when the lawn adjacent to Swan Lake (then known as Main Lake) was developed for a collection of plants from the bean family (Fabaceae or Leguminosae). The fruits are fat, woody pods, curved to a point at opposite ends like the keel of a boat. They split open when ripe to release one to four brown seeds, each about 6 cm across.

### Calophyllum inophyllum

Family: Clusiaceae Common name: Penaga Laut Origin: East Africa to French Polynesia

Our Penaga Laut is probably the largest specimen in Singapore and home to many epiphytes and climbers, including Bird's Nest Ferns (Asplenium nidus) and a massive Tiger Orchid (Gramatophyllum speciosum). Oriental Pied Hornbills have been seen feeding on the climbing figs wrapped around its massive trunks. Squirrels often bite into the stalk of the tree's immature fruit to drain the embryo, discarding the rest of the fruit, which is poisonous to them.

### Carapa guianensis

Family: Meliaceae

Common name: Andiroba or Carapa

Origin: Tropical America

The Andiroba was obtained from British Guiana and planted on 28 December 1938. Known as the British Guianan or Demerara Mahogany, its timber is durable and it grows well in Singapore and Malacca. The medicinal and insecticidal value of the oil, obtained from the seeds, is well known in the countries where the tree grows.

#### Ceiba pentandra

Family: Malvaceae

Common name: Kapok or Silk-Cotton Tree

Origin: Tropical America, Tropical West Africa

The seed of this tree was part of an exchange between Singapore and the Bogor Botanic Gardens, West Javain 1933 and planted in 1934 by former Director, Eric Holttum. As the common name suggests, this tree is a source of the cotton used for stuffing pillows. The cotton-like fibre surrounds its seeds. Besides this, the tree has an interesting habit where major branches change their leaves at different times, giving the tree a somewhat sparse appearance during some weeks of the year. The massive trunk is protected by thorns. The Herbarium, which is located below ground, was positioned in order to protect the roots of this tree.

#### Ceiba pentandra

Family: Malvaceae

Common name: Kapok tree or Silk-Cotton Tree

Origin: Tropical America, Tropical West Africa

The seed of this tree was part of an exchange between Singapore and the Gold Coast (now Ghana) in 1932 and planted in 1934 by former Director, Eric Holttum. As the common name suggests, this tree is a source of the cotton used for stuffing pillows. The cotton-like fibre surrounds its seeds. Besides this, the tree has an interesting habit where major branches change their leaves at different times, giving the tree a somewhat sparse appearance during some weeks of the year. The roots of this particular tree have been measured to extend up to 50 metres away from the trunk. Together with the other Heritage Kapok beside Holttum Hall, this specimen is one of the most massive biological entities in the Gardens.

### **Copaifera officinalis**

#### Family: Fabaceae

Commonly known as the Copaiba Balsam, this tree was planted on 21 July 1927 and was grown from seeds initially received from Kew in 1926. It originates from South America and its resin is used for medicinal purposes by indigenous tribes as a strong antiseptic.

#### Cyathocalyx sumatranus

#### Family: Annonaceae

This tree is the only living specimen in the Gardens and is native to Peninsular Malaysia & Singapore. A Critically Endangered species in Singapore, it has only been recorded elsewhere in Singapore in Bukit Timah and Changi, but may no longer be present due to developments.

#### Dyera costulata

#### Family: Apocynaceae

This specimen of Jelutong is believed to be part of the original forest vegetation that pre-existed the establishment of the Singapore Botanic Gardens and is one of the largest in Singapore, with a girth of about 5 metres. A native tree of Singapore, its latex can be used to make chewing gum and its wood to make furniture.

#### Dacrycarpus imbricatus

#### Family: Podocarpaceae

Common name: Chucher Atap or Malayan Yellow-Wood Origin: Indochina, Malesia

This Malayan Yellow-Wood is a remnant of the old conifer collection that once dominated parts of the current Tanglin Core of the Gardens. This is an interesting tropical conifer that is found in lowland and lower montane forests. These vegetation types are disappearing in the region. The wood is used in construction and for furniture, and a resin is harvested for use as fuel.

### Dryobalanops aromatic

#### Family: Dipterocarpaceae

Common name: Kapur Origin: Peninsular Malaysia, Sumatra, Borneo

This tree was planted on 1 January 1942 from seeds collected by former Assistant Director E J H Corner from forests on the east coast of Peninsular Malaysia. Most of these forests, which were dominated by this species, are long gone. Harvested for its timber, this tree has also been traded for almost two millennia as a source of camphor, an oleo-resin. Marco Polo even mentioned it in his book when he described his visit to Sumatra in 1290. This means that traders were aware of the Kapur more than five centuries before it became known to science. When crushed, its pointed leaves give off the familiar fragrance of the oleo-resin the tree is famous for. Kapur resin in crystalline form is found in crevices that run lengthwise in the heart wood. To obtain it the tree must be cut down and split open. Only a small percentage of Kapur trees actually contain any resin. Its harvest has been surrounded by many native superstitions, of which the most important is the use of a peculiar camphor language. Apparently, speaking Malay when searching for camphor was forbidden because it was believed to bring bad luck.

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This timber tree has also been traded for almost two millennia as a source of camphor, an oleo-resin. It was even mentioned by Marco Polo when he visited Sumatra in 1290. This meant that traders were aware of the Kapur about five and a half centuries before it was known to science. You can crush its pointed leaves and immediately smell the familiar fragrance of the oleo-resin this tree is famous for. Kapur resin is found in longitudinal crevices in the heart wood in a crystalline form. To obtain it the tree must be cut down and split up. Only a small percentage of Kapur trees actually contain any resin. Its harvest has been surrounded by many native superstitions, of which the most important is the use of a peculiar camphor language. Apparently speaking Malay when searching for camphor was forbidden because it was believed to bring bad luck.

#### Cyrtophyllum fragrans

Family: Gentianaceae Common name: Tembusu

Origin: Indochina, Malesia

Estimated at more than 270 years old, this Tembusu has a girth spanning approximately 6.5 metres and a height of about 40 metres. It is the largest of its kind in the Gardens and perhaps the finest specimen in Singapore. Growing on the tree is a huge liana of Morinda umbellata, which may be nearly as old as the tree on which it grows. The Tembusu is an evergreen with deeply fissured bark. The wood is durable and hard; in olden days, its trunk was used to make chopping boards. The Tembusu has a relatively regular flowering pattern, blooming in May/June and again around October/November, when the sweet fragrance can be enjoyed in the evening. As the flowers age, they turn from creamy white to yellow and the fragrance deteriorates. Later, small red fruits are formed.

# Cyrtophyllum fragrans

Family: Gentianaceae Common name: Tembusu Origin: Indochina, Malesia

Reportedly more than 170 years old, this Tembusu has a girth spanning six metres in circumference and stands at a height of 30 metres. It is easily recognised by its signature lower branch. The Tembusu is an evergreen with deeply fissured bark. The wood is durable and hard; in olden days, its trunk was used to make chopping boards. The Tembusu has a relatively regular flowering pattern, which occurs twice a year – usually in May or early June and October or November. During flowering seasons, its creamy-white blooms emit an enticing fragrance. You will not miss their perfume, especially in the late evening, when the fragrance is strongest.

# Ficus kerkhovenii

Family: Moraceae Common name: Johore Strangler Fig Origin: West Malesia The Johor Fig is a native of our rainforests and this Heritage Tree is believed to be the largest in Singapore. This species is Critically Endangered on the island and our specimen also supports a plant of the equally threatened climber, Ficus villosa.

# Ficus kurzii

Family: Moraceae Common name: Burmese Banyan Origin: South China, Indochina, Malay Peninsula, Java The Burmese Banyan Heritage Tree is thought to be as old as the Gardens. It is a rare tree, found in scattered locations throughout the western part of Southeast Asia but not native in Singapore.

### Heritiera elata

Family: Malvaceae Common name: Mengkulang Origin: Malay Peninsula, Borneo

This species was described as new to science in 1908 from material obtained from this tree. Henry Ridley, the first Director of Singapore Botanic Gardens, had this to say when he described the species: "There are two or three of these fine trees in the Gardens' Jungle. The finest is a conspicuous object by the plant sheds." Besides being probably older than the Gardens and the first plant of its kind known to science, the tree itself has a unique growth habit. The entire trunk of the tree is made up of vertically folded plates, which are a unique feature of this species.

### Horsfieldia irya

Family: Myristicaceae Common name: Penarahan Pianggu Origin: Sri Lanka, Indochina, Malesia

A characteristic plant of freshwater swamp forests, this Pianggu is an important remnant of the Singapore Botanic Gardens' nutmeg plot. Former Curator of the Herbarium, J F Sinclair, studied plants of the nutmeg family in detail. This tree is believed to be part of the original taxonomic living collection plot he established in the 1950s for his research. What is interesting about some members of its family (Myristicaceae), including this species, is that each tree produces either male or female flowers only. This particular tree produces only male flowers, so it can be considered to be a 'male' tree. More plants of this species have been planted in the plot. However, until they reach maturity and flower, their sex cannot be determined.

#### Hopea odorata

Family: Dipterocarpaceae

Hopea odorata is a species of emergent rainforest tree widely introduced throughout Singapore as a shade tree and has been found in Gardens' Checklists as far back as the 1910s. It is native to Indochina and the northern region of Peninsular Malaysia. Its crown, which is distinctly conical at early stages, grows to become rounder as the tree ages.

### Inocarpus fagifer

Family: Fabaceae

Common name: Tahitian Chestnut Origin: New Guinea, Polynesia, Malay Peninsula Our Tahitian Chestnut Heritage Tree was planted in 1890 in what was once the Economic Garden. It is likely that our specimen originates from Polynesia, where the large seeds are eaten boiled or roasted. The wood is used for making canoes, interior furnishing and also as fuel.

#### Khaya senegalensis

Family: Meliaceae Common name: Senegal Mahogany Origin: Tropical Africa The Senegal Mahogany Heritage Tree was planted by Mr Lee Kuan Yew to commemorate Tree Planting Day on 2 November 1980. This species was introduced to Southeast Asia more than a century ago. It became a popular street tree in 1980s Singapore due to its rapid growth, ease of transplanting, and ability to tolerate the harsh, dry urban conditions.

# Kigelia Africana

Family: Bignoniaceae Common name: African Sausage Tree Origin: Tropical Africa The African Sausage Tree gets its name from its unique fruit, which looks like a sausage. The tree is sacred to many African communities. When they believe someone who is missing to be dead, they bury an African Sausage fruit to symbolise the body. Every part of the tree is used in herbal medicine. It is the medicinal properties that brought this plant to Singapore as an experimental economic plant.

#### Koompasia malaccensis

#### Family: Fabaceae

Being one of the biggest specimens in the Gardens, this tree is likely to have existed as part of the original forest vegetation. A species usually found in peat-swamp forests, this is one of the native forest trees in Singapore. Its wood is highly sought after as timber for construction.

#### Lecythis pisonis

Family: Lecythidaceae Common name: Monkey Pot Tree Origin: Tropical America

The Monkey Pot Tree gets its name from its unique fruit which looks like a pot with a lid. Monkeys in South America are known to put their hands into the pot to get to its rich seeds. It is these very seeds that are rich in oils that brought this plant to Singapore as an experimental economic plant. Known in South America as Sapucaia nuts, they have a less firm shell than Brazil nuts, and a somewhat better flavour. The oil expressed from them is clear in colour, nearly white, tasteless, and rapidly becomes rancid. It is used in Brazil for making white soap and burnt as a source of light. Its timber is hard and durable, making it valuable for house-frames, wharves and sluices.

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### Mangifera pentandra

#### Family: Anacardiaceae

A wild relative of the commercial mango species, *Mangifera indica*, this tree is native to Singapore and has small green-yellow fruits with orange-coloured flesh that is sweet to taste.

#### Myristica fragrans

Family: Myristicaceae

These two specimens of *Myristica fragrans* are believed to be part of the original plantings of the Economic Garden and were likely planted before 1925. Being an economical crop, Myristica fragrans is cultivated for its fruit from which the popular spices nutmeg and mace are derived. The former comes from its seeds and the latter from its aril, a fleshy covering which surrounds its seeds.

#### Nauclea orientalis

Family: Rubiaceae

*Nauclea orientalis* is a species distributed within Malesia but found only in cultivation in Singapore. It is used for many purposes including wood carving, fish poison derived from its bark, as well as traditional medicine for stomach aches and bites.

#### Palaquium obovatum

Family: Sapotaceae Common name: White Gutta or Nyatoh Puteh Origin: India, Indochina, Malesia The latex of this tree was widely used prior to the promotion of the South American Pará rubber tree by former director Henry Ridley. The first undersea telegraphic cables were insulated by rubber derived from the latex of Palaquium species. To this day, dentists still use latex derived products of this tree for root canal fillings. This tree is located on the site of the former Economic Gardens. The 1899 annual report of the Gardens mentions that a plantation was created here in response to the loss of wild trees that were formerly exploited for latex.

#### Parkia timoriana

Family: Fabaceae Common name: Petai Kerayong Origin: India to Java

The Petai Kerayong was brought in from east Malesia as a potential timber tree as well as a potential source of food in the form of its seeds. It grows to great heights and produces flower heads that hang down, looking like microphones or percussion drumsticks. It is pollinated by bats at night.

### Pentadesma butyracea

Family: Clusiaceae Common name: Tallow tree Origin: West Africa Our Heritage Tallow Tree was introduced from Sierra Leone in 1897, no doubt as a potential economic crop for its fatty seeds, which can contain more than 40% fat. They yield an edible oil that can be made into butter or margarine. Other products made from the oil include soap, candles, and moisturiser.

### Phyllanthus pectinatus

Family: Phyllanthaceae Common name: Melaka Origin: India, West Malesia

There is a story that in the 1400s, Parameswara, a Sumatran prince from Palembang, landed on the west coast of Peninsular Malaysia. He rested under a tree of this species. Later, he enquired about the name of the tree he had slept under – Malacca. He named the place after the tree and went on to establish the city of Malacca (Melaka). The fruits of this tree are used for making pickles and the tree has medicinal properties.

#### Podocarpus neriifolius

Family: Podocarpaceae

Common name: Jati Bukit or Mountain Teak

Origin: India to Japan, Malesia, Fiji

This Mountain Teak is one of the last remnants of a larger collection of tropical conifers that once occupied this part of the Singapore Botanic Gardens. Conifers such as pine trees are distinctive plants in colder climates. However, many conifers are found in the tropics as well. This tree is found in closed evergreen lowland and lower montane forests from the Himalayas and South China to New Guinea. In Peninsular Malaysia, it is found on the mountains where it occurs sporadically in rather remote places.

#### Pterygota alata

Family: Malvaceae

Reportedly planted in 1932, this tree is at least 83 years old (as of 2015). This tree is one of the largest specimens in the Gardens and is native to India, Indochina and the Malay Peninsula. It is commonly known as Buddha Coconut because of its fruits which resemble coconuts.

#### Samanea saman

Family: Fabaceae Common name: Rain Tree Origin: Tropical America The Heritage Rain Tree at the Nassim Gate could potentially date from 1882, when the species was first successfully introduced to Singapore via the Gardens. It is home to a variety of epiphytes and climbers, including Bulbophyllum orchids, Dragon Scales (Pyrrosia piloselloides) and wax vines (Hoya spp.).

#### Samanea saman

#### Family: Fabaceae

Well known for its enormous spreading crowns that provide shade, *Samanea saman* is a widely planted species in Singapore and in many parts of the world. However, unlike most mature rain trees which have a much wider crown, this particular specimen is notable for being much taller than it is wide. A tropical American native, the leaves of the Rain Tree fold up in the evenings, having earned it the local Malay name "Pukul Lima" which means five o'clock.

#### Shorea gratissima

Family: Dipterocarpaceae

Common name: Meranti Laut

Origin: Myanmar, Thailand, Malay Peninsular, Borneo, Sumatra

This tree species is critically endangered throughout its natural range. It has a unique distribution – it occurs only in northern Peninsular Malaysia and southern Johor/Singapore. Most of the southern Johor populations are gone or threatened by habitat conversion, making this population important for the global conservation of this species. Current surveys in the nature reserves of Singapore show there are an estimated 50 trees. However, all these trees are 395 cm or more in girth. No seedlings or smaller trees of this species have ever been found in Singapore. So it seems the species is not regenerating and might actually become locally extinct when these giant trees eventually die. This tree is certainly older than the Gardens and is a reminder of the great forests that once covered the island.

#### Shorea roxburghii

Family: Dipterocarpaceae

Common name: Temak Nipis

Origin: India, Indochina, Northern Malay Peninsula

In 1978, Mr Wong Yew Kwan, the first Commissioner of Parks and Recreation, planted a row of Dipterocarp trees near the Tanglin Gate. These trees would eventually grow into towering giants, screening off the Gardens from the skyscrapers rising up outside its boundary. Our Temak Heritage Tree was planted as part of this collection.

#### Shorea pauciflora

Family: Dipterocarpaceae

Shorea pauciflora is an emergent rainforest tree species native to Singapore. Classified as a Vulnerable, this species produces wood known as dark red meranti and has been exported to Europe under the trade name Nemesu.

#### Stereospermum fimbriatum

Family: Bignoniaceae Common name: Snake Tree Origin: Indochina, Malay Peninsula Snake Trees were planted in the Gardens as early as 1882. This specimen, brought from the municipal nursery in 1937, is the only one that survives from the Gardens' early years. Snake Trees were popular in 1970s Singapore for their attractive flowers, which carpet the ground after each major flowering period.

### Terminalia subspathulata

Family: Combretaceae
Common name: Jelawai Jaha
Origin: Malay Peninsula, Sumatra, Java, Borneo
A native of the Singapore Botanic Gardens' rainforest, it has been standing here for more than 150 years. It has been identified from photographs taken in the early 1900s. It is a hardwood timber tree.
At more than 50 metres tall, this is one of the tallest trees in the Gardens. It is an uncommon species in the wild. In the 1980s, the tree was struck by lightning, but subsequently recovered. The Jelawai periodically sheds its leaves, leaving almost the entire tree bare. The fruits are winged to aid in the dispersal of the seeds. This tree was dedicated to Lady Yuen-Peng McNeice, in 2004, at the inaugural Heritage Tree dedication ceremony.

#### Shorea macroptera

Family: Dipterocarpaceae Common name: Meranti melantai Girth: 4.2 m

Shorea macroptera is a large tree in the Dipterocarpaceae family. It can grow up to about 50 meters tall with straight cylindrical trunk and buttresses up to 2.5 m high. When the fruits of the Shorea macroptera start to form, each of them looks like a shuttlecock with 3 long wings hanging upside down on the tree. Upon maturation, these fruits will spin as they fall from the tree. This enables them to drop more slowly and thus have a better chance to be carried away by the wind over a longer distance. The wood of this tree is harvested for commercial purposes and often known as light red meranti timber.

### Swietenia mahogani

#### Family: Meliaceae

There are records of Swietenia mahagoni in the Gardens dating back to 1912 and this tree is the only specimen remaining in the Gardens. This tree is believed to be among the first few specimens introduced for this species and thus estimated to be about 100 years' old (as of 2015). A species native to south Florida, this is the tree species from which the original mahogany wood was produced.

### Cola gigantean

Family: Malvaceae Common name: Giant Cola Nut Girth: 3.4 m

Cola gigantea is a large tree commonly known as the Giant Cola found in the dry semi-deciduous forests in West Africa and the West Indies. It can grow to about 50m high and 5m in girth. The tree prefers full sun and grows on a wide range of soil types and can tolerate partial shade. It can be propagated by seeds and performs well in plantations. The nuts, which have high caffeine content and bitter flavour, are related to the Cola nut (Cola nitida) and often used to treat whooping cough, asthma, malaria, and fever. Other traditional uses include increasing the capacity for physical exertion and for enduring fatigue without food, stimulating a weak heart, and treating nervous debility, weakness, lack of emotion, diarrhoea, depression, despondency, brooding, anxiety, and sea sickness. This tree was dedicated to the late Nelson Mandela to commemorate his visit to the Singapore Botanic Gardens in 1997.

### Hymenaea courbaril

Family: Fabaceae Common Name: West Indian Locust Tree Girth: 3.2 m

Located not far from EJH Corner house, the earliest known records of this tree come from topographical drawings that indicate this tree was already a large mature specimen with a measured girth of 2.4 m when the drawings were produced in May 1989. Known to be able to grow up to 50 m in height, this tree bears compounds leaves which are made up of a single pair of falcate leaflets. Its seed pods give off an unpleasant smell when they split open, revealing instead a dry pulp with colours varying from brown to green and which is reportedly sweet to taste. The species originates from tropical America and was introduced to Singapore in 1875.

### Pangium edule

Family: Achariaceae Common Name: Kepayang Girth: 2.9 m Pangium edule is a tall tree, nati and glossy leaves. The fruits are

Pangium edule is a tall tree, native to Southeast Asia, which can grow up to 60m height with broad and glossy leaves. The fruits are the size and shape of American footballs. Traditionally, the processed seeds have an almond-like taste and are used as the cooking ingredients in Peranakan cuisine, where they are known as buah keluak. The seed, bark, leaves and other parts of the tree is poisonous. The seed oil is used to make soap and dart poison. The Pangium edule planted at Lawn H was first flowered in 28 Oct 1953.

### Tectona grandis

Family: Lamiaceae Common Name: Teak Girth: 2.3 m Teak trees are highly val

Teak trees are highly valued for their wood, which is durable and easily worked. The natural oils in teak timber make it both pest- and weather-resistant, and suitable for outdoor use even when untreated. This heritage teak tree, located next to the Botany Centre, was first recorded by I. H. Burkill in his illustrated guide of the Gardens published in 1927. Burkill speculated that the tree, which at the time was still young, would not grow into a large tree because it was adapted to a seasonally dry climate and not suited to our local conditions. Our tree has certainly defied Burkill's expectations and grown into a magnificent heritage tree.

# Couroupita guianensis

Family: Lecythidaceae Common Name: Cannonball Tree Girth 2.9 m

Cannonball Trees are some of the most noticeable trees in the Gardens. The lower parts of their trunks are covered in a tangled mass of tendrils which bear large, pink, fragrant flowers. These flowers produce the spherical fruits that give the Cannonball Tree its name. The heritage Cannonball Tree came from a batch of seeds collected by E. J. H. Corner from the Royal Botanic Gardens in Peradeniya, Sri Lanka in 1934. Corner had only a few hours to collect the seeds during a brief stop on his way back to Singapore from London, so they must have been very valuable to him indeed!