

Jakarta through the Trees



21 trees in Jakarta and around

Acknowledgments

Ibu Raya Yulianti (Tante Anthy) for her time in giving me insights about most of these trees.

Mbak Anthea, the COO of CIPS, for coordinating the meeting with her mom, Tante Anthy.

All my friends and co-workers in Indonesia who showed me around Jakarta, Yogyakarta and Pulau Tidung. This booklet is in appreciation for your places.

Identifying trees

My main tip as a long time tree-spotter: Pay attention to the details- the bark texture and coloration (these can be a bit different for the same species); the tree's silhouette from a distance (e.g., shaggy, oblong, wide, etc.); the arrangement of the leaves on the stem; the thickness of the leaf veins.

Follow-up tip: Start learning to identify trees by picking a few species to get very familiar with, rather than try to learn general characteristics and formal terms. This will help you get a sense for where the *visual* differences lie. This tip also presumes you have a field guide to compare trees to- and you do now:)

That said, below are some generic leaf shapes and their common formal names. You really don't need to memorize them to be good at identifying trees, but because you'll see these terms in this book and others it could be useful to be able to check back here.

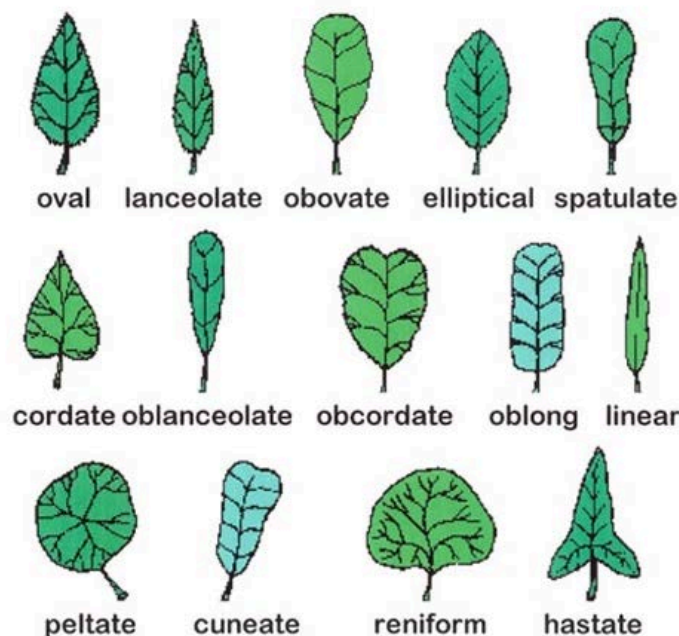


Figure 4. Leaf Shapes

ANGSANA

Pterocarpus indicus

Also known as Sono Kembang in Indonesia, Narra in Filipino, and Burmese Rosewood in English

Conservation status: IUCN Red List (2018)
Endangered

Indigeneity: Native to Southeast Asia, from Myanmar to Pacific Islands.

Leaves: Elliptical. Mature leaves are dark green; light green when new.

Fruit: Disk-shaped winged seed pods, initially green, later brown.

Flowers: Flowers are small and yellow. In bloom, the entire crown can turn a showy yellow from the numerous small flowers (I only noticed flowers on the Angsanas in North Jakarta).

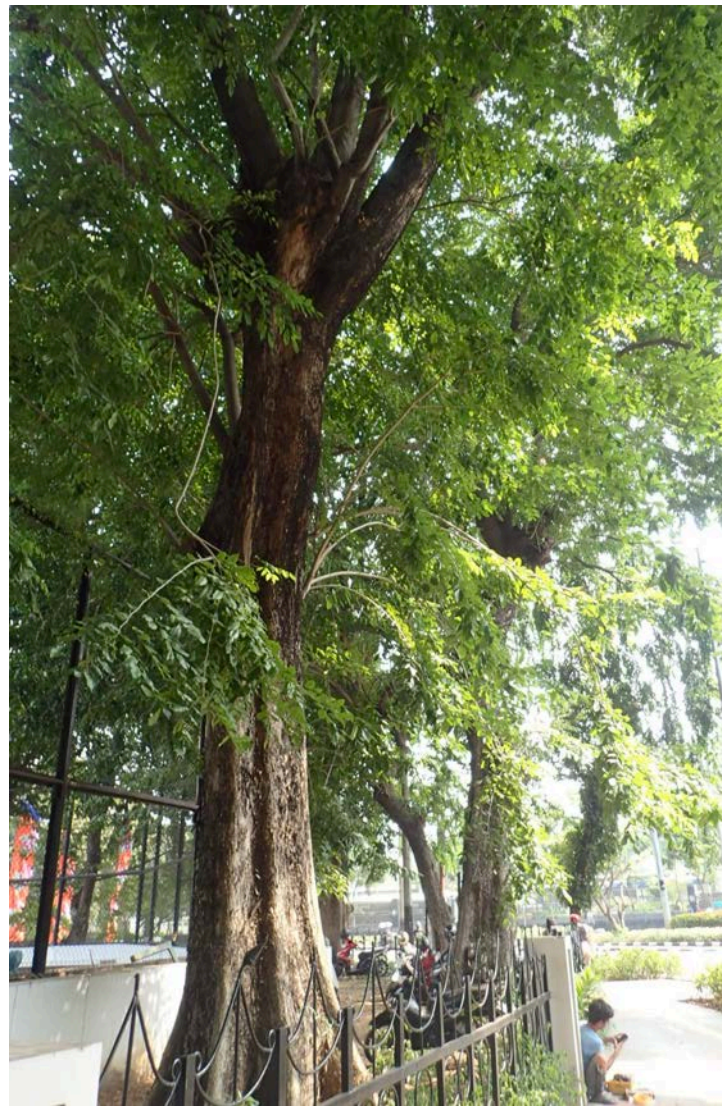
Trunk: Slightly fluted with buttresses on mature trees; branchless until 4-6m up. Brown, flakey bark.

Growth: Fast, tolerant to drought and poor soil. Tree can reach 40m in height, but more common to see them around 20m high.

Identification tips: Note the leaves growing on long, often weeping, stems and the shaggy appearance of the canopy.



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Jl. Lapangan Banteng Barat, Central
Jakarta

A popular urban greening tree used in the 1980s by the city government (pers. comm. Tante Anthy). There were especially large ones near the ASEAN Secretariat Building and around the Istiqlal Mosque and Jakarta Cathedral (where I took this photo).

Desirability of the durable, red-tinted wood is the reason Angsana is now endangered.

This is the Philippines' national tree. Glad to see so many in Jakarta.

ASAM JAWA *Tamarindus indica*

Commonly known as Tamarind in English and Sampaloc in Filipino



Labuan Bajo, Flores

Conservation status: IUCN Red List (2017) Least Concern

Indigeneity: Native to Africa.

Leaves: ‘Compound leaves’ composed of small oblong leaflets; “fern like” (Singapore National Parks). Mature leaves are dull green. Young leaves are light green.

Flowers: Small yellow orchid-like florets with red veins.

Fruit: Lumpy, brown and pea-pod looking. The skin is a hard shell, and the flesh is edible.

Trunk: Light grey-brown color. Fissured with rough bark.

Growth: Slow; reaches up to 30 m high

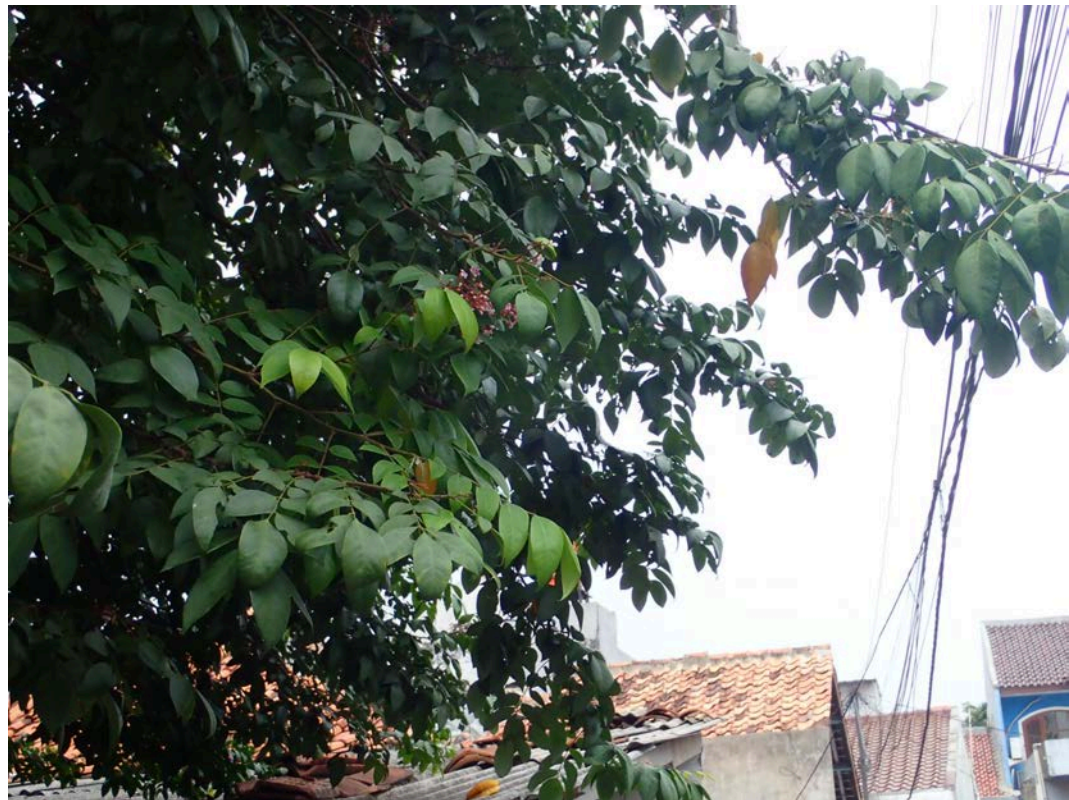
Identification tip: Look for the “fern-like” leaves.

The fruit is eaten ripe and used unripe as a souring agent for sayur asem (a soup) and a flavoring in dendeng blado (a Padang dish of deep fried beef slices).



Jalan Malioboro in Yogyakarta is lined with Asam Jawa trees. I like how the small leaflets would rustle in the wind.

BELIMBING *Averrhoa carambola*



Called Balingbing in Filipino; Starfruit and Carambola in English

Conservation status:
IUCN Red List (2023)
Data Deficient

Indigeneity: Tropical
Asia

Leaves: Light-medium
green; small, ovate,
ending at a point

Flowers: very small,
bright pink florets.
Blooms on delicate,
reddish colored stems.

Fruit: oblong with 5 ridges; grows off the
trunk. Becomes lighter green as it ripens;
yellow to orange when very ripe. Tangy-
sweet flavor.

Trunk: Light colored bark, often patchy in
appearance; slightly scaly.

Growth: The largest one I saw (ever) was
about 7-8 meters high. It's generally a small
tree, however.

Identification tip: Look for a small tree with
a 'lumpy' silhouette. The small leaves and
their parallel arrangement relative to each
other. The fruits and flowers are very
distinctive but not always present.

BERINGIN *Ficus benjamina*

Also called Waringin in Indonesia, Balete in the Philippines, and Weeping fig or Benjamin's fig in English

Conservation status: IUCN Red List (2018) Least Concern

Indigeniety: Native to South Asia, Southeast Asia, Northern Australia and Solomon Islands.

Leaves: Light to medium green. Ovate ending at a point, glossy, smooth textured.

Flowers: Cream colored.

Fruit: Small, round and red.

Trunk: Light grey with mostly smooth bark. Chaotic appearance because of all the roots growing from it.

Growth: Fast; grows up to 20 m high.



A beringin is depicted in the Garuda Pancasila, the National Emblem of Indonesia, symbolizing unity. The widespread ground and aerial roots of the beringin tree reflect Indonesia's ethnic, cultural and religious diversity, unified together (Binus Square Student Committee).



source: cleanpng.com



Jalan Terogong Raya, South Jakarta

Because of their national significance, alun-aluns (town squares) always have a beringin tree (pers. comm. Tante Anthy).

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BUAH MENTEGA *Diospyros blancoi*



Called Buah Lemak in Malaysia, Kamagong and Mabolo in the Philippines, and Velvet Apple in English

Conservation status: IUCN Red List (2019) Near Threatened. Critically endangered in the Philippines.

Indigeneity: Naturalized in Indonesia (Native to the Philippines and Taiwan).

Leaves: Elliptical. Dark green top surface with a waxy sheen; dull and grey-green on underside. Young leaves are dull red.

Flowers: White colored.

Fruit: Looks similar to a peach. Rounded with red, velvety skin. *Edible but not commonly eaten in Indonesia (pers. comm. Tante Anthy)*

Trunk: Straight, sometimes branching from near the base. Mature bark is dark, almost black, and has fissures. Very hard wood.

Growth: Slow, up to 30 meters high

Identification tip: Note the smooth dull leaves and seriously dark trunk.



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See if you can spot the clump of buah mentega trees at Gelora Bung Karno (GBK) stadium. Hint: they're along the jogging track.

BUNGA RAYA *Hibiscus x rosa-sinensis*



Commonly known as Chinese Hibiscus in English and Gumamela in the Philippines

Conservation status: IUCN Red List- not assessed

Indigeneity: Naturalized pantropically, but thought to have originated in the Pacific Islands.

Leaves: large, glossy, dark green; ovate with jagged margin, ending at a point.

Flowers: Large, delicate petals arranged in groups of 5, with distinctive protruding stamen. Comes in several colors, the most common are, red, pink and yellow.

Trunk: Light brown,

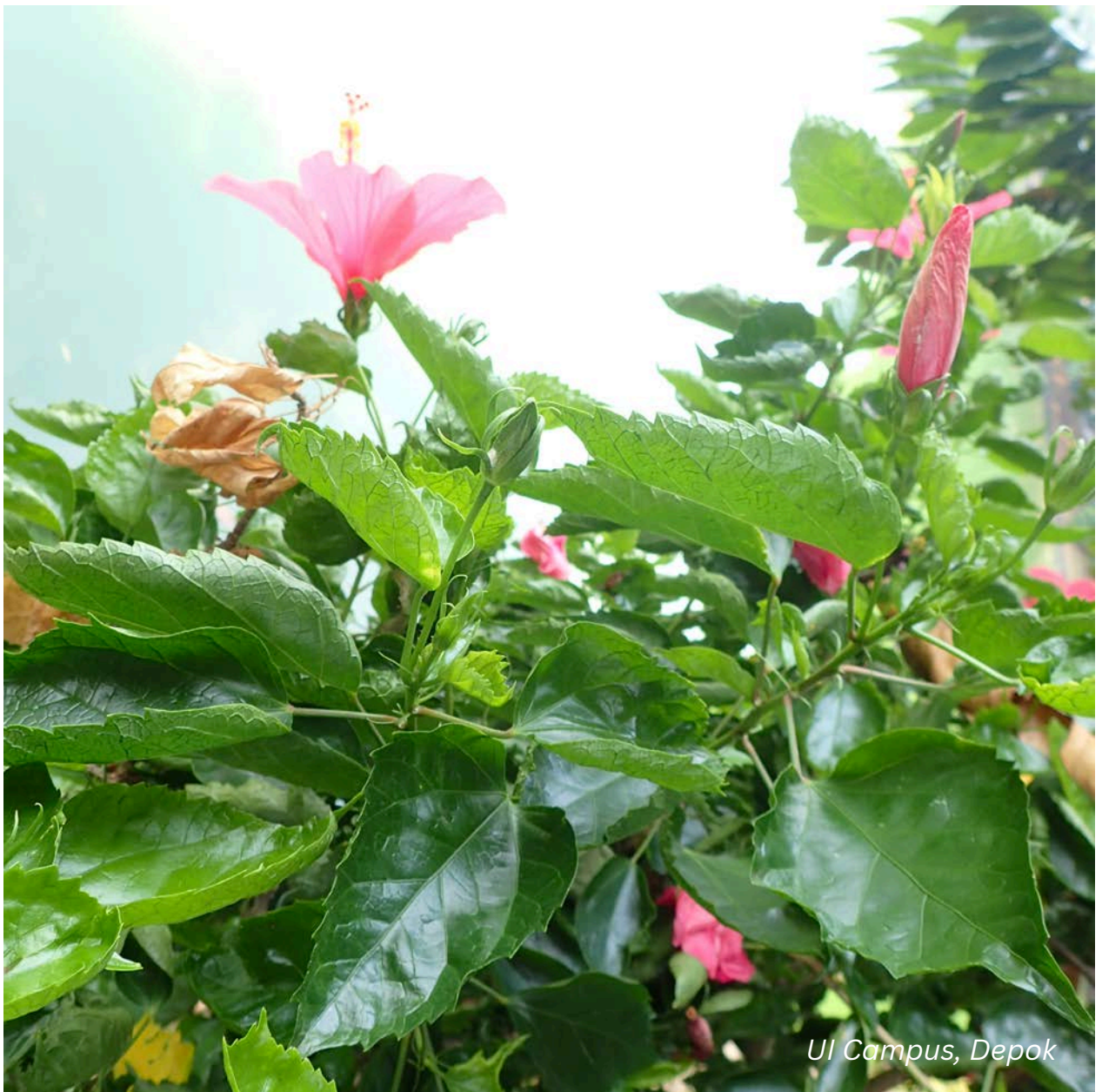
Growth: Shrub-like, branching chaotically from the ground, usually 1-2 meters high.

Identification tip: The flowers are very unique; without those, look for a bush with glossy, pointed and serrated leaves.



Interesting:

Bunga raya is not a naturally occurring plant. It is in fact a hybrid of *Hibiscus cooperi* and *Hibiscus kaute*. There has been lots of debate about its biogeographic origin, but recent research shows that it was first bred by Pacific Islander peoples who took it with them on their outrigger canoes (Braglia et al, 2024). This was before contact with European and mainland Asian societies. Braglia et al (2024) says that hybrid species need to be denoted with an 'x', hence the scientific name of Bunga Raya.



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CAMBODJA *Plumeria* spp.



Also known as Plumeria and Frangipani in English and Calachuchi in Filipino

Conservation status: IUCN Red List (2018) Least Concern

Indigeneity: Introduced in Asia, but native to the Americas

Leaves: Large; thick with prominent veins. Shape varies slightly for different cultivars, but generally elliptical to oblanceolate.

Flowers: Showy with 5 petals. Waxy to the touch; most fragrant at night. Most common colors in Jakarta were yellow, white, pink and red.

Fruit: The pod “resembles a pair of horns”; contains 20-60 seeds inside (Singapore National Parks).

Trunk: Light grey, lumpy, with rough bark. Releases white sap if cut.

Growth: Moderate rate; can reach 12 m high.

Identification tip: The flowers are very distinctive.



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The flowers are used for oil infusion. In Jakarta, it is commonly planted in cemeteries, probably because of the shallow roots. Easy to grow from stem cuttings (pers. comm. Tante Anthy).

CEMARA LAUT

Casuarina equisetifolia



Pulau Tidung, Thousand Islands



Phuket, Thailand

English names include Casuarina and Australian pine; Agoho in Filipino

Conservation status: IUCN Red List (2018) Least Concern

Indigeneity: Native (but not endemic) to Indonesia

Leaves: Dull green coloration; scaly needles on thin stems,

Flowers: hermaphroditic, trees produce cones and

Trunk: Scaly, fissured bark. Dark brown in color.

Growth: Grows moderately fast; adapted to drought and saline environments.

Identification tip: The only “pine tree” you will see growing on the beach.

Laut (La-ot) means ocean or sea in Indonesian. They grow right on the beach sand, but don't go into the water as mangroves do. We saw a lot in Phuket as well. Contrary to their appearance, Cemara Laut are not related to pine trees.



CEGUK *Combretum indicum*

Also known as Akar Dani in Melayu and Rangoon Creeper in English

Conservation status: No data (IUCN Red List)

Indigeniety: Native to Malaysia, India and the Philippines.

Leaves: Elliptical-oblong, velvet-y texture when mature.

Flowers: Numerous, fragrant; younger flowers are white, and age to pink.

Fruit: Long elipitical winged pod.

Trunk: Woody, climbs using hook like

Growth: Fast growing

Identification tip: Distinctive overflowing look with bunched pink flowers (almost always in bloom).





Jl. Caringin Timur, South Jakarta

The only non-tree I included because it was very common, and also a pleasant part of my walks to work.

JAMBU

Psidium guajava

Also known as Jambu Biji* and Guava

Conservation status: IUCN Red List (2018)
Least Concern.

Indigeniety: Introduced from the Americas.

Leaves: Elliptical with smooth margins (i.e., not wavy or serrated); muted green color but yellows with age. Feels stiff to the touch.

Flowers: Small, white, with 4-5 petals. The face has hundreds of white stamens with yellow anthers (i.e., part that holds pollen).

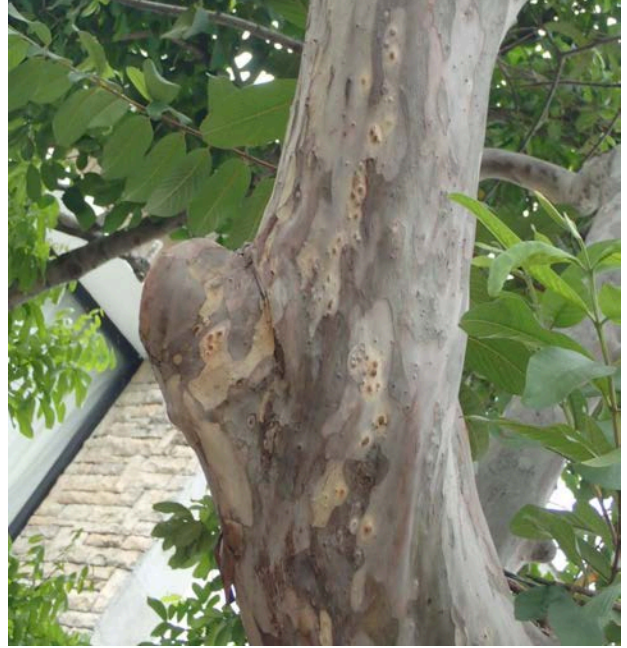
Fruit: Round with green skin; widely eaten and 'juiced'. *The flesh can be either pink or white. The original variety produces small fruits with white flesh and lots of seeds. The larger fruits are a hybrid cultivar (pers. comm. Tante Anthy).*

Trunk: Light brown to pink; patchy appearance from continuously peeling bark. The bark is smooth until it peels.

Growth: Moderately fast. Can reach 10 m high, but is often much shorter.

Identification tip: The smooth, pinkish, peeling bark is very distinctive.

**pers. comm. Tante Anthy*



JAMBU AIR *Syzygium aqueum*

Also called Water Apple, Java Apple in English; Macopa in the Philippines.

Conservation status: IUCN Red List (2022) Least Concern

Indigeneity: Native to Indoneisa, Northern Australia and Malaysia (incl. Sabah/Sarawak)

Leaves: Elliptical; medium to dark green. Young leaves are glossy and light green.

Flowers: Pink or white. “Fluffy appearance” due to many stamens (Singapore National Parks).

Fruit: Smooth pink-red skin with white flesh.

Trunk: Brown, flake-y bark. Branching begins quite low to the ground.

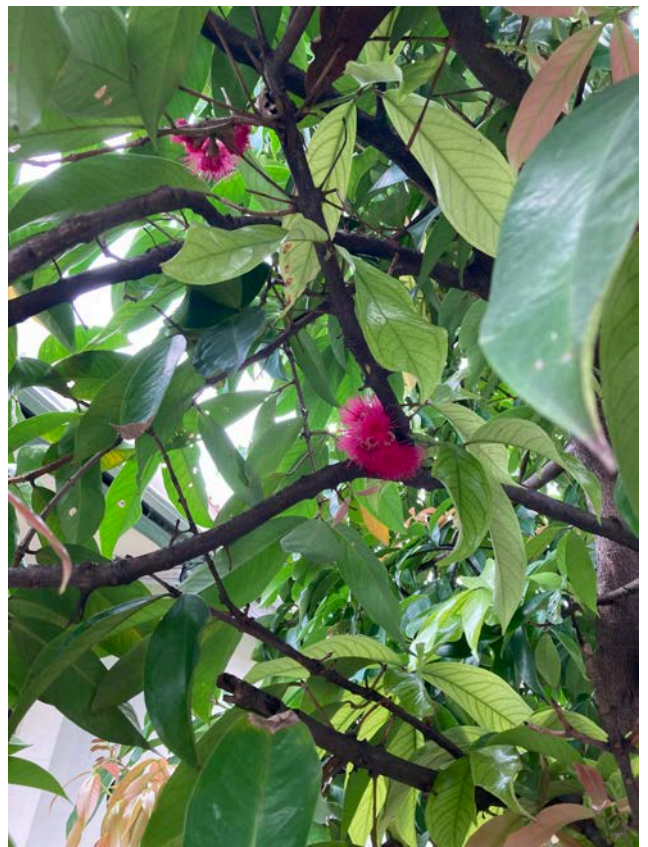
Growth: Moderate rate, reaches up to 10 m high.

Identification tip: Look at the leaves. The white-ish central veins taper towards the far end, and are quite prominent near the leaf's base.



Note that this species has hybrid varieties, where the fruits look different: Cincaloh is a (green Jambu Air and Citra is a red one. The native (original) version produces very red fruit, which are small and grow in bunches (pers. comm. Tante Anthy).

Also, 'air' (pronounced ai-er) means water in Indonesian. So Jambu Air translates to "water guava".



Jl. KH Muhasyim Raya, South Jakarta (our street)

KARET MERAH *Ficus elastica*



Also called **Pohon Karet, Karet Kebo and Indian Rubber Tree** (because of its white sap).

Conservation status: IUCN Red List (2021) Least Concern

Indigeneity: Native to Indonesia, Peninsular Malaysia, Myanmar and India.

Leaves: Elliptical; thick and glossy, with a prominent central vein. *Leaves can be either green or red. Hence, the 'merah' - red. (pers. comm. Tante Anthy).*

Flowers: *Small, green; concealed within the young fruit. Pollinated by a specialized wasp (Gardener's Path).*

Fruit: Small, yellow.

Trunk: Grey-brown. Chaotic appearance with numerous aerial roots.

Growth: Moderate rate. Can reach 30 m high.

Identification tip: Distinguishable from beringin by the considerably larger, darker leaves.



Jl. Caringin Timur, South Jakarta

This is a cultivar of Ficus elastica. There was a row of them planted along the sidewalk, on the long way home from work. It's the same species as Karet Merah but has been bred for variegated leaves.

KEMUNING *Murraya paniculata*



Known in English as Orange Jessamine or Orange jasmine, and Kamuning in Filipino

Conservation status: Not threatened

Indigeneity: Native to the tropical Pacific from China to Australia.

Leaves: Small, dark green and ovate.

Flowers: Sweet-smelling, small and white. Flowers bloom frequently, year round. Attracts pollinator insects.

Fruit: Small, red and oval -shaped.

Trunk: Fissured dark bark. Hard wood.

Growth: Somewhat fast, reaching up to 8m high, but more often seen shorter.

Identification tip: You'll smell it before you see it! Look for thick white bunches of flowers, with lush dark leaves nearly the same size as the flowers.



Jl. Caringin Timur, South Jakarta

Walking home from the office, it was always a 'sweet' surprise when the kemunings were in bloom.

LONTAR *Borassus flabellifer*



Known as Lontar in East Kalimantan*. It's called Pohon Siwalan in Melayu and Palmyra-palm in English

Conservation status: IUCN Red List (2018) Least Concern

Indigeneity: Native to Southeast and South Asia, and tropical Africa.

Leaves: Very large, fan-shaped. Between 1 - 1.5 m wide.

Flowers: Male flowers have a long, branching form and are much larger than the female flowers. Female flowers don't usually have branching.

Fruit: Looks like a black coconut, sprouts from the female flowers.

Trunk: straight cylindrical, reaching up to 30m high. Bark of older trees has scarring from old leaf stems ('petioles').

Growth: Slow; reaches flowering age after 12 years.

Identification tip: Easy to see towering over other vegetation. Also note the shorter ones have stacks of dead leaves covering their trunks (look closely at the photo).

*Sukamaluddin et al, 2016

In Jenepono, South Sulawesi, the Lontar is a fixture in most people's livelihoods: They make "red sugar" from the sap and weave the leaves into various products. Also, the fruit is used to make "traditional wine or gin" (Sukamaluddin et al, 2016).



MAHONI *Swietenia* spp.

The small leaf species is Mahoni
daun kecil in Indonesian;
Mahogany in English

Conservation status:

S. macrophylla- Endangered (IUCN Red List 2023)

S. mahagoni- Near Threatened (IUCN Red List 2018).

Indigeneity: Native to tropical South America. Introduced to Indonesia by the Dutch for urban greening purposes.

Leaves: Dark green, lanceolate.

Flowers:

S. macrophylla - small, white, scented; grows in clusters.

S. mahagoni - small; yellow-green.

Fruit: Chocolate colored shell-like pod, containing numerous winged seeds inside.

Trunk: Mature trees have buttressing. Bark darkens with age, and becomes scaly. Hard wood extensively used in construction and woodworks.

Growth: Fast growing; up to 25 meters tall.

Identification tip: It's a 'dark' tree overall, because of the leaves.





UI Campus, Depok

There are actually two species of mahoni in Jakarta: Small leaf mahogany (*S. mahagoni*) and big leaf mahoni (*S. macrophylla*). At the UI Campus in Depok, big-leaf mahoni is labeled as just *mahoni*, while small-leaf mahoni gets the '*daun kecil*' ('small leaf') distinction.

In the Philippines (presumably in other non-native ecosystems as well), mahoni trees inhibit the growth of native species, and create biodiversity dead zones when planted for reforestation.

MANGGA *Mangifera indica*



In English this is the Mango tree, specifically the Indian Mango. Some cultivars found in Indonesia are Mangga Aplukat (Avocado mango) and Harumanis/Arumanis.

Conservation status: IUCN Red List (2021) Data Deficient

Indigeneity: Naturalized in Indonesia; Native to South Asia.

Leaves: lanceolate, light green when young; dark green when mature. Sturdy feeling leaf surface with thick veins.

Flowers: Small, light yellow. Grows in large bunches.

Fruit: *M. indica* fruits can vary from nearly spherical (with a slight droop) to elongated. The fruit skin colors also depend on the variety: green, yellow or red when ripe.

Trunk: Dark brown scaly bark. Usually has large primary branches starting 2-3 meters up.

Growth: Somewhat slow; reaches up to 35 m high.

Identification tip: Look for the long and narrow leaves.



There are several species of mangoes in Indonesia. However *Mangifera indica*- the Indian mango- is the most common species and so you will most likely only see that species. Virtually all commercially available mangoes (globally) are a cultivar of the Indian mango, like *mangga alpukat* and *Arumanis* in Indonesia. The fruits look different but they are the same species.

NANGKA *Artocarpus heterophyllus*



Called Jackfruit in English. In the Philippines the local name is Langka

Conservation status: No data (IUCN Red List)

Indigeneity: Found throughout tropical Asia

Leaves: Dark green, glossy on top, with thick veins. Obovate shaped.

Fruit: The world's "largest tree fruit"- can be up to 55kg (Wikipedia). Green to dull yellow. Skin is covered in small thorns. The flesh is yellow when ripe.

Trunk: Grey-brown scaly bark, with a maximum trunk width of 80 cm. Reaches up to 20 m high.

Growth: Moderate rate.

Identification tip: I always look for the odd yellow or orange leaf amongst green leaves (look closely at the photo above).



Small, unripe nangka at the UI Campus, Depok

Nangka fruit is widely eaten and used in cooking in Indonesia. For example, stewed young/unripe nangka is a staple side in Nasi Padang. Chopped-up ripe fruit is sometimes used as a topping for Es Cendol, a sweet, shaved-ice drink (*pers. comm. Tante Anthy*).

I've eaten the boiled seeds a few times, I recall they taste similar to potatoes.



Nasi Padang; the nangka is the dull yellow vegetable right of the dark green papaya leaves.

POHON BIOLA CANTIK *Ficus lyrata*



Also called Fiddle-leaf fig or Lyre-leaf figtree in English

Conservation status: IUCN Red List (2018) Least Concern

Indigeneity: Native to West and Central Africa. *Recently introduced to Indonesia for landscaping and decoration (pers. comm. Tante Anthy)*

Leaves: Large, lyre-shaped (lyrate); Mature leaves are dark green; young leaves light green. Has large, white-ish veins and a wavy margin.

Flowers: Hidden inside the fruit 'receptacle' (Singapore National Parks). Pollinated by an African species of wasp (not in Indonesia).

Fruit: small, green, spherical; with yellow dots. Hollow inside; grows in pairs. Ficus fruits are called syconiums.

Trunk: Grey colored.

Growth: Moderate rate; up to 12 m high.

Identification tip: The leaves are very distinctive.

POHON KAPOK

Ceiba pentandra



Commonly called Kapok in both English and Malay and Cotton Tree in English.

Conservation status: IUCN Red List (2017) Least Concern

Indigeneity: Native to Africa, Central and South America but historically grown in Southeast Asia

Leaves: Lanceolate, grows radially from a central node in groups of 6.

Flowers/Fruit: Seed pods contain white cotton-like fibers.

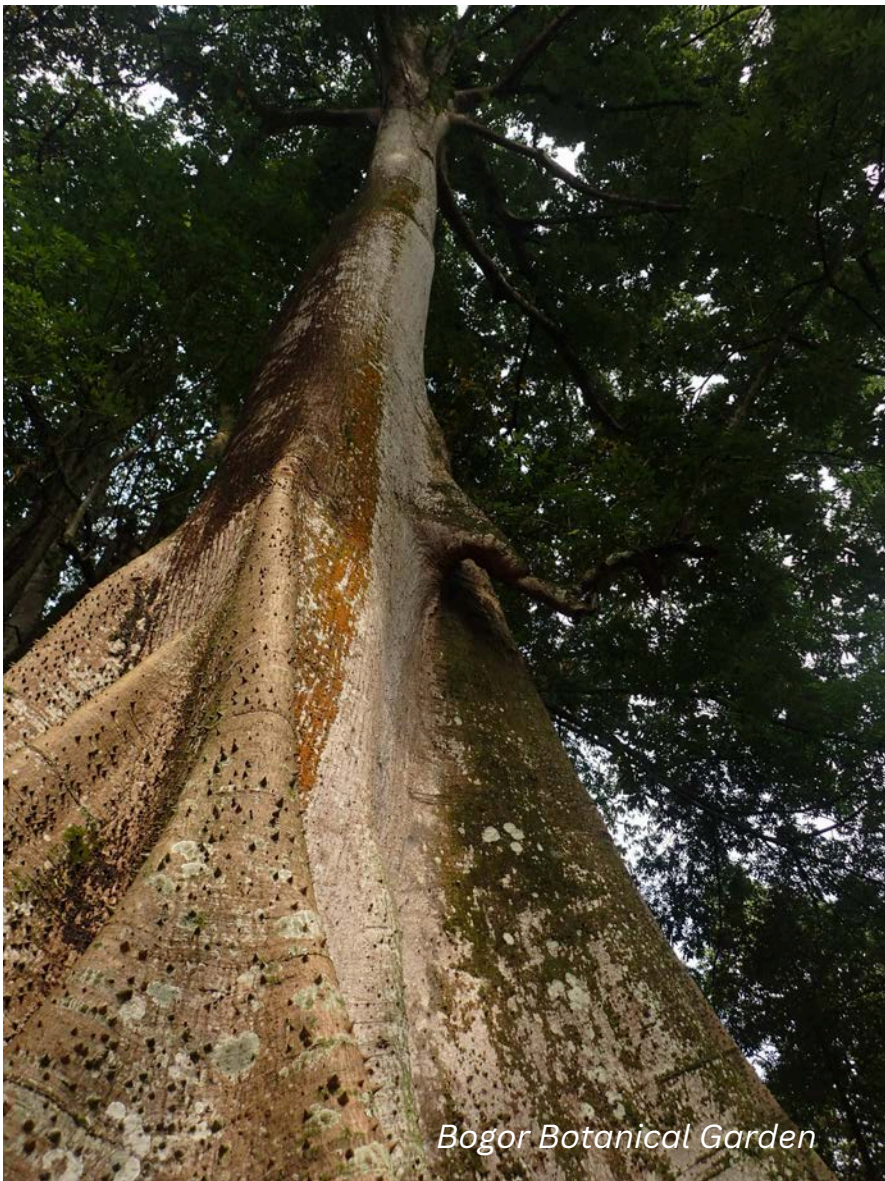
Trunk: Light brown, patchy coloration. Straight, often branchless up to the crown. Mature trees have large buttresses.

Growth: Moderate rate. This massive tree can get up to 70 m tall.

Identification tips: Note the large buttresses (sometimes with stubby thorn-like growths), and the radial arrangement of the leaves.



Kapok is also called “cotton tree” because of the fluff in the seed pods. It was hard to get a close up shot of the leaves because they were so high up!



The “cotton” they produce was commonly used to fill mattresses and pillows until synthetic stuffing became popular (pers. comm. Tante Anthy).

It is also traditionally valued for medicinal uses in Asia, the Americas, and Africa.

POHON TANJUNG *Mimusops elengi*

English names include Spanish Cherry and Indian Medlar; in the Philippines it is called Bansalangin

Conservation status: IUCN Red List (2018) Least Concern

Indigeniety: Native to most of Southeast Asia (including the Pacific Islands), Bhutan, India and Northern Australia.

Leaves: Lanceolate. Dark green, glossy, with slightly ruffled margins.

Flowers: Small, white and fragrant.

Fruit: Small, oval with a pointed tip; red when ripe.

Trunk: dark, fissured. Sometimes branching from quite low to the ground.

Growth: Up to 15 meters high.

Identification tip: Look for roughly palm sized dark green leaves (note the wavy leaf margins) and small red fruits.





Jakarta Outer Ring Toll Road, South Jakarta

These are very common street trees and you will undoubtedly see some along most roads. There are some on CIPS' street, Jalan Terogong Raya, near Warung Ega. The trees in the above photo are all *Pohon Tanjung*.

*The fragrant flowers are dried to extract essential oils
(pers. comm. Tante Anthy).*

TALOK *Muntingia calabura*



Talok is the Central Java name. Also called Kersem in Indonesia, Aratiles in the Philippines, and Malayan Cherry in English.*

Conservation status: IUCN Red List (2022) Least Concern

Indigeniety: Naturalized in Southeast Asia, but native to the tropical Americas

Leaves: Dull green; ovate-lanceolate. Has a serrated margin ending at a point, and is velvet-y in texture.

Fruit: Small, spherical; pink to red when ripe; green when unripe. Popular eating, but not commercially sold. Fruiting year round.

Flowers: Small and white. Attracts bats and pollinator insects.

Trunk: Grey-brown, lightly fissured, and a little velvet-y like the leaves.

Growth: Fast growing, up to 12 meters high (but often will be shorter).

Identification tip: Note the disheveled, roughly 'T-shaped' canopy, and the velvet-y, dull colored leaves.

**pers. comm. Sarah Firdausi*



There's a talok tree in front of the CIPS office (not this one). It provides shade to some food stalls selling mie ayam and snacks. One day, around lunchtime (I was coming in late) I saw a group of young boys picking the fruits on the lower hanging branches- it's popular amongst kids (and kids at heart).

As I walked past them, one of the boys looked at me. Recognizing the harvesting potential I- a tall boy- could provide, he called me over with a casual greeting, "bang", one of the Indonesian terms for "bro". I helped them pick a few fruits above their reach.

There were some other Talok trees in our neighborhood. At night, down some quiet alleys, there was often a bat or two circling them.

External Sources

Conservation status data:

- International Union for the Conservation of Nature (IUCN) Red List of Threatened Species.
- Occasionally used: *Philippine Native Trees 101: Up Close and Personal*. 2012. ABS-CBN Publishing

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Specific external sources (not for all trees):

Lontar

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- Frangipani in Encyclopedia Britannica.

Asam Jawa

- Pisang Susu. Dendeng Blado recipe.
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Bunga Raya

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Nangka

- Jackfruit in Wikipedia

Personal Communication Sources:

- Ibu Raya Yulianti (Tante Anthy) - We had a zoom meeting (credit to mba Anthea for organising this).
- Mbak Sarah Firdausi - She told me the name “Talok” was what they called that tree in her province, Central Java. Not a planned meeting.

