

- 中文名稱：水黃皮
- 英文名稱：Poongaoil Pongamia , Poonga-oil Tree , Pongamia

- 學名：
Pongamia pinnata (L.) Pierre
Millettia pinnata (L.) G. Panigrahi
Cytisus pinnatus L.
Pongamia pinnata(L.) Pierre exMerr.

- 科名：豆科(Leguminosea)水黃皮屬(Pongamia)

水黃皮，九重吹、重吹舅、掛錢樹、水流豆、野豆、臭腥仔、鳥樹

Category (分類)	Chinese Alias (中文別稱)	Meaning & Origin (意義與由來)
Growth & Dispersal (生長與傳播)	Shui-Huang-Pi, Water-Flowing Bean, Wild Bean (水黃皮、水流豆、野豆)	Often grows along watersides or coasts. Its lignified pods possess buoyancy , allowing them to disperse via water currents, hence the name "Water-Flowing Bean."
Wind Resistance (抗風能力)	Jiu-Chong-Chui, Jiu-Chong-Chui-Jiu (九重吹、重吹舅)	" <i>Jiu-Chong-Chui</i> " (Nine-fold Wind) describes its extreme wind resistance , capable of withstanding fierce coastal gusts. In Hokkien, " <i>Jiu</i> " (Uncle/Maternal) signifies a resemblance to another plant.
Fruit Morphology (果實形態)	Hanging Money Tree (掛錢樹)	The ripe pods hang from the tree in a flat, circular shape resembling ancient coins , symbolizing good fortune and wealth.
Sensory Traits (感官特徵)	Chau-Senn-A (Fishy One) (臭腥仔)	When the leaves, flowers, or wood are crushed, they emit a distinct, strong fishy odor .
Ecological Link (生態關聯)	Bird Tree (鳥樹)	Its dense foliage provides an ideal sanctuary for birds to shelter from wind and rain and to build nests in coastal environments.

- 原產地：印度、馬來西亞、華南、琉球和澳洲、台灣、蘭嶼海岸。Native Origin (原產地):
 - **Regional:** India, Malaysia, Southern China, the Ryukyu Islands, and Australia.
 - **Taiwanese Context:** Naturally native to the coasts of **Taiwan (Main Island)** and **Orchid Island (Lanyu)**.

臺灣零星生長在恆春半島、台東及蘭嶼海邊。現被廣種為園景樹，行道樹及防風樹。

Distribution (分布):

• 分佈：

- **Wild Populations:** Sparsely grows along the shores of the **Hengchun Peninsula, Taitung, and Orchid Island.**
- **Modern Cultivation:** Currently widely planted as an **ornamental landscape tree, roadside street tree, and windbreak.**

1. 優良水土保持樹種：水黃皮生長快速，生性強健，樹冠傘形，枝葉濃密，抗風、耐乾旱，適合種為海岸護堤、防風林使用。 2. 園藝景觀用：樹姿優美，其淡紫色花多成串密生，頗其觀賞價值，為優良行道樹和公園、庭園景觀樹種。3. 藥用：種子提煉的油，可以外用治療皮膚病。性味：種子：苦、寒。效用：微毒。祛風除濕，解毒殺蟲。治汗斑，疥癬，膿瘡，風濕關節痛。**Multi-purpose Uses: Pongame Oil Tree (水黃皮的用途)**

1. Soil and Water Conservation (水土保持)

- **Ideal Protection:** A robust, fast-growing species with a **dome-shaped (umbellate)** canopy and dense foliage.
- **Hardiness:** Its high resistance to **strong winds and drought** makes it a premier choice for **coastal levees, embankments, and windbreaks.**

2. Horticultural and Landscape Architecture (園藝景觀)

• 用途：

- **Aesthetic Value:** Known for its graceful tree form. The **pale purple flowers** grow in dense, cascading racemes, offering high ornamental value.
- **Urban Greenery:** Widely utilized as an excellent **roadside street tree** and a centerpiece for parks and private gardens.

3. Medicinal Properties (藥用價值)

- **Karanja Oil:** Oil extracted from the seeds is used topically to treat various skin conditions.
- **Nature (性味):** Seeds are **Bitter and Cold.**
- **Efficacy:**
 - **Caution:** Noted to be **slightly toxic.**
 - **Key Effects:** Dispels wind-dampness, detoxifies, and acts as a natural insecticide.

- **Indications:** Historically used to treat **tinea versicolor (sweat spots)**, scabies, pustules, and **rheumatic joint pain**.

喬木，高8~15 公尺，直立，樹冠傘形，深根性，樹皮灰褐色，上常有瘤狀小突起；嫩枝通常無毛，有時稍被微柔毛。 **Stem and Trunk (莖)**

• 莖：

- **Form:** A deciduous or evergreen tree reaching **8 – 15 meters** in height. It features an erect trunk and a broad, **umbrella-shaped (umbellate) canopy**.
- **Root System:** Characterized by a **deep-rooting system**, making it highly stable.
- **Bark:** Grayish-brown, often marked with small **lenticel-like tubercles** (nodules).
- **Twigs:** Young branches are typically hairless (**glabrous**) or occasionally covered in fine, soft hairs (**puberulent**).

葉互生，奇數羽狀複葉，長 20~25 公分，葉柄長 5~7 公分，基部膨大，光滑無毛；小葉 5~7 枚，卵形至長橢圓形，長 5~10 公分，寬 4~8 公分，先端短漸尖或圓形，基部寬楔形、圓形或近截形，近革質，表面為有光澤的綠色，背面顏色較淡，全緣或略呈波狀源；小葉柄長 0.6~0.8 公分。 **Foliage (葉)**

• 葉：

- **Structure:** Alternate, **odd-pinnate compound leaves**, approximately 20 – 25 cm long.
- **Petiole:** 5 – 7 cm long with a **swollen base (pulvinus)**; smooth and hairless.
- **Leaflets:** 5 – 7 leaflets per leaf; ovate to oblong; 5 – 10 cm long and 4 – 8 cm wide.
- **Details:** Nearly leathery (**sub-coriaceous**) in texture. The upper surface is **lustrous green**, while the underside is paler. Margins are entire or slightly wavy (**undulate**).

花多數，粉紅色至紫紅色，呈腋生的總狀花序排列，長 15~27 公分，直立或斜上昇，通常 2 朵花簇生於花序總軸的節上；花梗長 0.5~1.5 公分，有細毛茸，在花萼下有卵形的小苞片 2 枚；花萼長約 0.3 公分，萼齒不明顯，外面略被鏽色短柔毛，邊緣尤密；花冠白色或淡紫色，長 1.2~1.4 公分，各瓣均具柄，旗瓣下半部有一綠色中生的斑塊，背面有柔細密生的毛茸，邊緣內捲，龍骨瓣鈍，略彎曲。花期 5~9 月。 **Flowers (花)**

• 花：

- **Inflorescence:** Axillary **racemes**, 15 – 27 cm long, growing erect or obliquely upward. Flowers usually appear in **clusters of two** along the main axis.
- **Characteristics:** Numerous, ranging from pink to **pale purple**.

- **Calyx:** Approximately 0.3 cm long with indistinct teeth; exterior covered in fine **rusty-colored hairs**.
- **Corolla:** Standard (banner) petal features a **central green patch** at the lower half, with fine, dense hairs on the back. Wings and keel petals are clawed (narrowed at the base).
- **Flowering Season:** May to September.

莢果長 4~8 公分，寬 1.5~2.5 公分，表面有不甚明顯的小疣凸，先端有微彎曲的短喙，成熟時不開裂，沿縫線處無隆起的邊或翅，有種子 1 粒；種子腎形。果期 8~10 月。**Fruit and Seeds (果實與種子)**

• **果實：**

- **Pod:** A woody **legume (pod)**, 4 – 8 cm long and 1.5 – 2.5 cm wide. The surface has faint tubercles and a **slightly curved short beak** at the tip.
- **Dispersal:** Crucially, the pod is **indehiscent** (does not split open at maturity) and lacks wings or raised edges along the sutures. This allows it to float.
- **Seeds:** Typically contains **one kidney-shaped (reniform) seed**.
- **Fruiting Season:** August to October.

• **特性：**

半落葉性喬木，單幹，直立，樹冠傘形，深根性，樹皮灰褐色，上常有瘤狀小突起，株高 6~12 公尺。葉為奇數羽狀複葉，互生，革質，小葉對生，有柄長橢圓形或卵形。花腋生，總狀花序，蝶形，淡紫色；中秋節前後開花。莢果木質，長橢圓形，略呈刀狀，扁平。種子扁球形，黑色，富含油脂。種子和根部毒性較強，誤食會頭暈嘔吐，所以可以用來催吐。屬於蝶形花科喬木，葉面光亮潔淨，葉茂盛，往往重壓枝條，使下垂生長，花簇生紫紅色，春、秋季開花，莢果似豆，種子提煉之油脂可治皮膚病。抗風、耐鹽性特強，為台灣特有之優良海岸樹種。水黃皮根系深，超能耐風，故稱『九重吹』，台中梧棲沿海多見植為行道樹，生長良好；野生之水黃皮大多沿著河流或溪谷生長，其果實具漂浮性，可藉水流傳播，因此又稱『水流豆』、『野豆』；莢果長橢圓形略呈扁平刀狀，成熟後不開裂，掛在樹上猶如黃色的清代銅幣(去尤~)，所以又稱為『掛錢樹』；因葉似「黃皮」而稱「水黃皮」。1.

Physical Growth & Form (生長形態)

- **Type:** A **semi-deciduous** tree with a single, erect trunk and a wide, **umbrella-shaped canopy**.
- **Size:** Typically grows **6 – 12 meters** tall.
- **Bark:** Grayish-brown with unique **tubercular lenticels** (small bump-like protrusions).

- **Roots:** Characterized by a **deep-rooting system**, providing exceptional stability against extreme weather.

2. Foliage and Flowers (葉與花)

- **Foliage:** Alternate, **odd-pinnate compound leaves**. Leaflets are leathery, glossy, and arranged oppositely. The foliage is so dense that it often causes the branches to **droop gracefully** under the weight.
- **Blooming:** Features axillary **racemes** of **pale purple, papilionaceous (butterfly-shaped)** flowers. In Taiwan, they typically bloom around the **Mid-Autumn Festival** (Spring and Autumn).

3. Fruit and Seeds (果實與種子)

- **The Pod:** A woody, flattened, **oblong-elliptical** pod (resembling a blade).
- **The Seed:** Black, compressed-globose seeds that are **rich in oil**.
- **Toxicity:** Both seeds and roots contain higher levels of toxins. Ingesting them can cause dizziness and vomiting, and they were historically used as **emetics** (to induce vomiting).

4. Cultural and Ecological Names (命名與生態智慧)

- **The Wind-Resistant "Nine-fold Wind" (九重吹):** Due to its deep roots and extreme salt/wind tolerance, it thrives even in harsh coastal areas like **Wuqi, Taichung**.
- **The Floating "Water-Flowing Bean" (水流豆):** The pods possess natural buoyancy, allowing them to disperse via rivers and ocean currents.
- **The Lucky "Hanging Money Tree" (掛錢樹):** When the flat, yellowish pods hang from the tree, they resemble ancient **Qing Dynasty copper coins** (T ā ng/幣), symbolizing wealth.
- **The "Water Huang-Pi" (水黃皮):** Named so because its leaves resemble those of the "Huang-Pi" (*Clausena lansium*) but it prefers growing near water.