

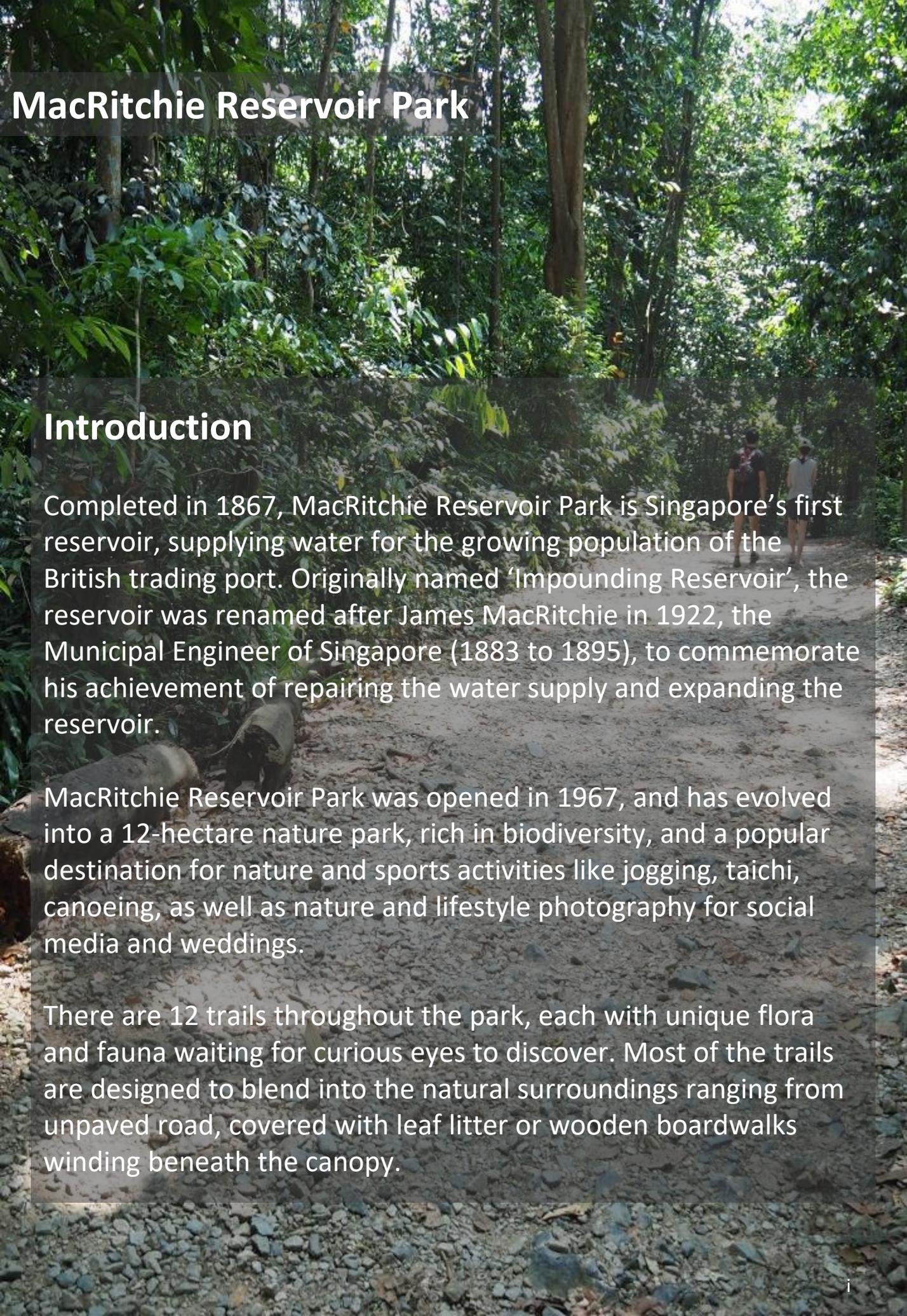


A Field Guide to the  
**Plants** of  
**MacRitchie**

Climbers  
(A to C)



# MacRitchie Reservoir Park



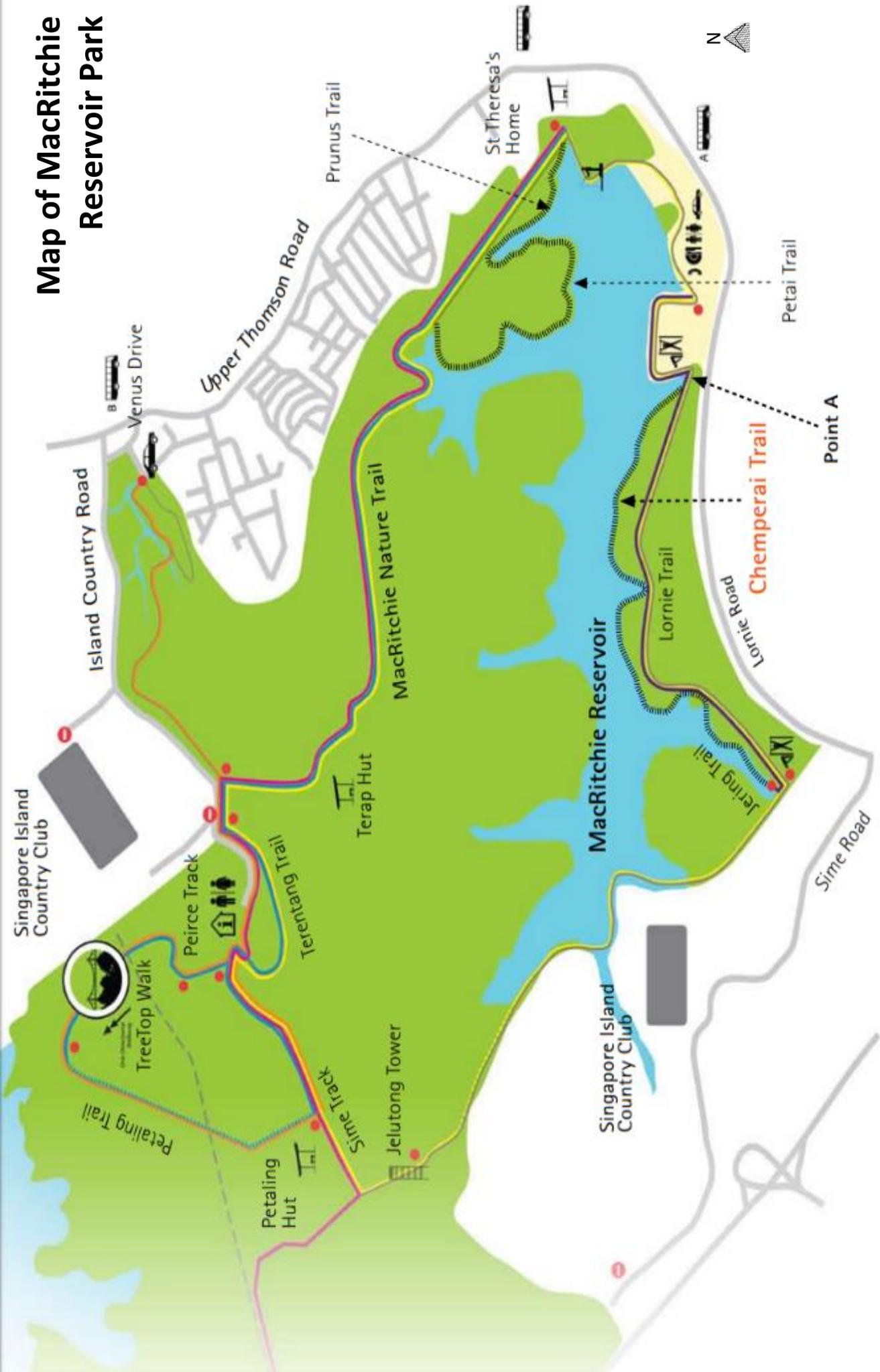
## Introduction

Completed in 1867, MacRitchie Reservoir Park is Singapore's first reservoir, supplying water for the growing population of the British trading port. Originally named 'Impounding Reservoir', the reservoir was renamed after James MacRitchie in 1922, the Municipal Engineer of Singapore (1883 to 1895), to commemorate his achievement of repairing the water supply and expanding the reservoir.

MacRitchie Reservoir Park was opened in 1967, and has evolved into a 12-hectare nature park, rich in biodiversity, and a popular destination for nature and sports activities like jogging, taichi, canoeing, as well as nature and lifestyle photography for social media and weddings.

There are 12 trails throughout the park, each with unique flora and fauna waiting for curious eyes to discover. Most of the trails are designed to blend into the natural surroundings ranging from unpaved road, covered with leaf litter or wooden boardwalks winding beneath the canopy.

# Map of MacRitchie Reservoir Park



# Content Page



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Pg 2



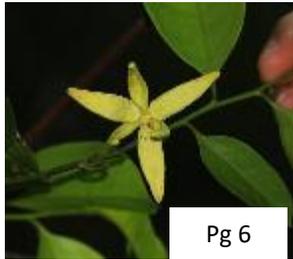
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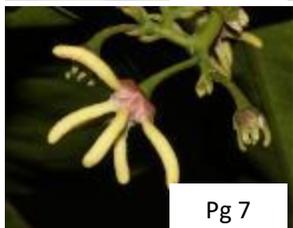
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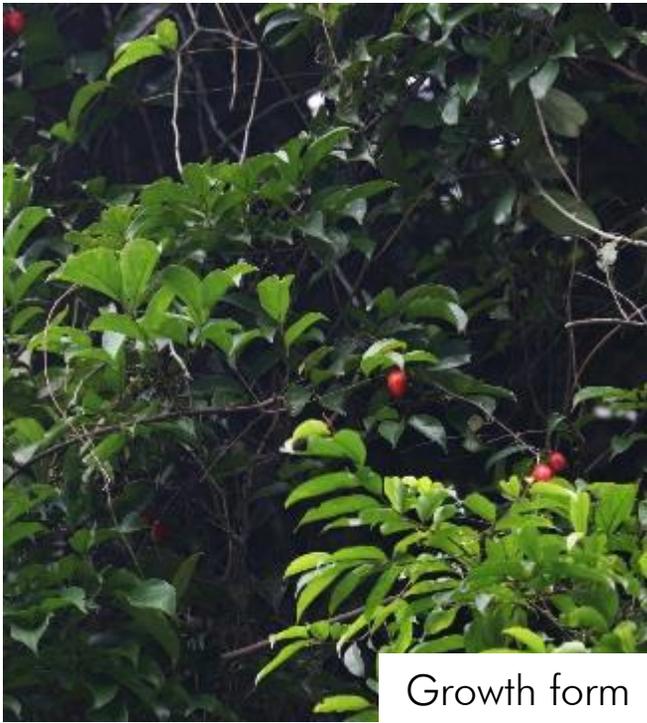
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Pg 13



Growth form



Leaves



Flowers



Fruit

# *Adenia macrophylla* var. *singaporiana*

## Large-leafed Adenia



**Species Name:** *Adenia macrophylla* var. *singaporiana*  
**Family:** Passifloraceae  
**Common Name:** Large-leafed Adenia, Singapore Adenia  
**Distribution:** Peninsular Malaysia (Johor), Singapore  
**Conservation Status:** Native (Endangered)

*Adenia macrophylla* var. *singaporiana* is a slender vine. In its natural habitat it uses tendrils to climb tall trees in primary forests, secondary forests or along forest edges, reaching up to 25 m in height. It is recognisable by its shiny red capsule-shaped fruit, that split open revealing seeds covered in white fleshy pulp.

This fast-growing climber is a preferred host plant for *Cethosia hypsea hypsina* (Malay Lacewing Butterfly).



Growth form



Leaves



Flowers



Fruit

## *Agelaea borneensis* Akar Kachang-kachang



**Species Name:** *Agelaea borneensis*

**Family:** Connaraceae

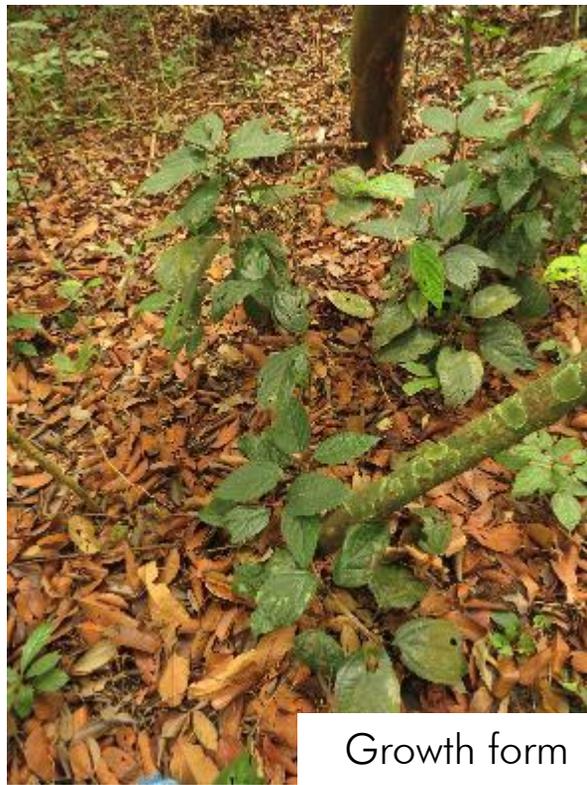
**Common Name:** Akar Kankachang

**Distribution:** Peninsular Thailand to Western and Central Malesia

**Conservation Status:** Native (Least Concern)

*Agelaea borneensis* is a large liana with papery to thinly leathery trifoliate leaves. It has clusters of fragrant, small white flowers located at the leaf axils and are insect-pollinated. The fruit are egg-shaped and hairy, turning red when ripe. The seeds are drop-shaped and smooth, covered by reddish-brown seed coat when dry.

It grows in primary, secondary and swamp forests, near streams and on limestone vegetation. Its stems and branches are used as ropes for tying rafts and hoop-nets in Sumatra. The stems are also used for church bell support in Philippines.



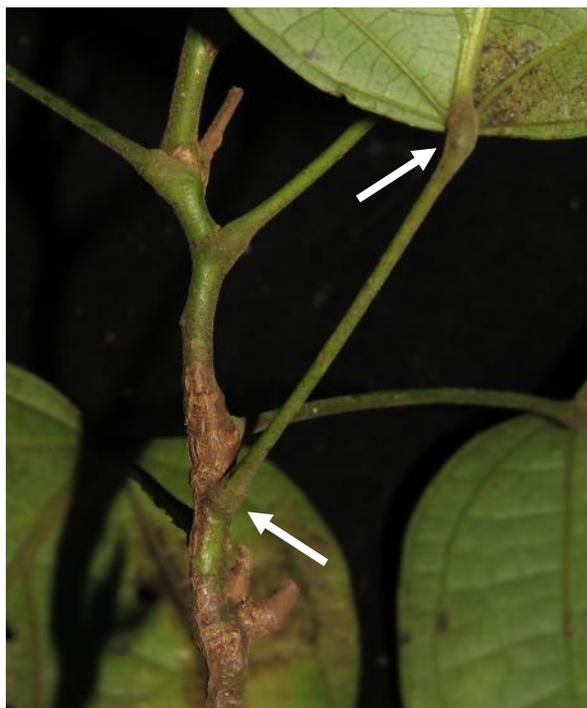
Growth form



Leaves



Blister-like spots on leaf



Swollen on both petiole ends

## *Albertisia crassa*



**Species Name:** *Albertisia crassa*

**Family:** Menispermaceae

**Common Name:** -

**Distribution:** Malaya

**Conservation Status:** Native (Endangered)

*Albertisia crassa* is a twinning liana with thick petioles and leaves that form blister-like spots when dry. This liana can be found growing in areas below 1200 m altitude. Its leaves are glossy oval-shaped the petiole is swollen on both ends. The flowers are located on the axils.

This species was previously been reported only from Peninsular Malaysia until 2010, when it was collected in Singapore for the first time.



Growth form



Leaves



Flowers



Brown hairs

***Ampelocissus elegans***  
 Elegant Ivy Vine

**Species Name:** *Ampelocissus elegans*  
**Family:** Vitaceae  
**Common Name:** Elegant Ivy Vine  
**Distribution:** Malaya, Myanmar, Sumatera, Thailand  
**Conservation Status:** Native (Vulnerable)

*Ampelocissus elegans* is an herbaceous climber covered with thick woolly brown hairs on its stem, petioles, lower surface and on the veins of the upper surface of the leaves. The leaves display dimorphism whereby leaves of immature plants are simple and smooth and in mature plants, the leaves are compound with 3- to 5-lobes covered in dense woolly hairs. These hairs turn from white to brown with age. The small, green flowers are arranged in panicles of spikes. The glossy red ovoid-shaped fruits produce 1-4 seeds.

This climber can be found growing in lowland dipterocarp and secondary forests, along the margins and in the understorey.



Growth form



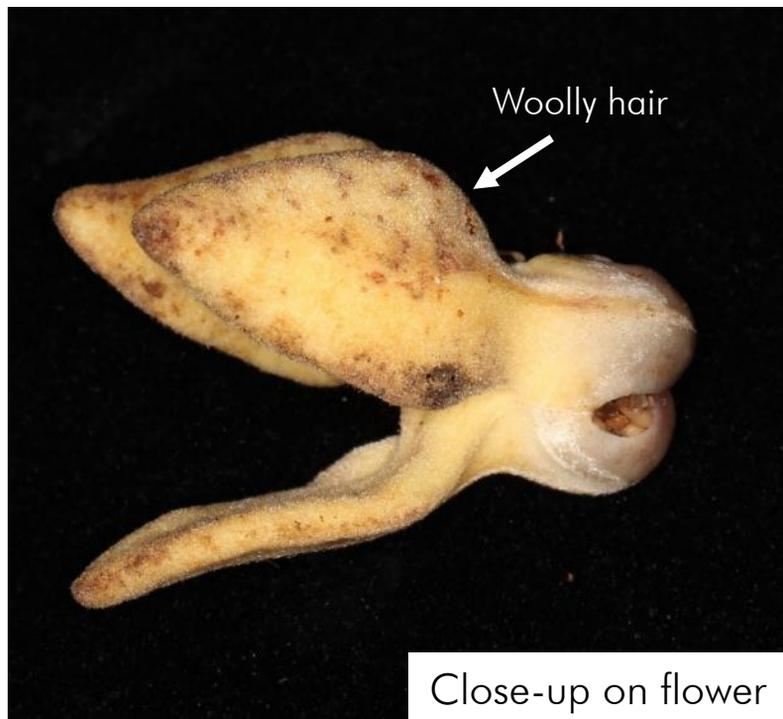
Leaves



Fruit



Flowers



Close-up on flower

## *Artabotrys crassifolius*



**Species Name:** *Artabotrys crassifolius*

**Family:** Annonaceae

**Common Name:** -

**Distribution:** Myanmar, Thailand, Malaya

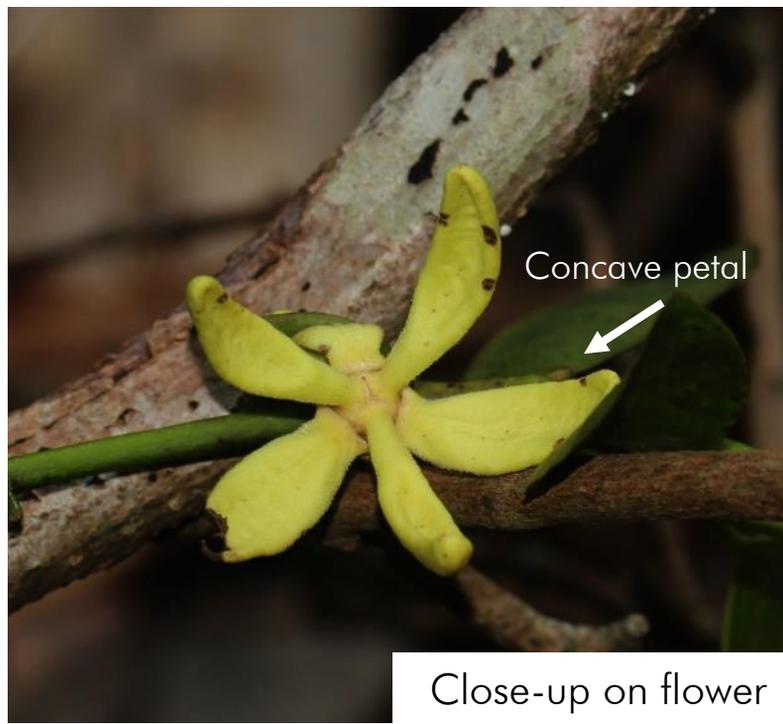
**Conservation Status:** Native (Endangered)

*Artabotrys crassifolius* is a climbing shrub or small tree that can grow to 15 m tall. It can be found in lowland rainforests. The leaves are leathery, glossy and dark green. The yellow flowers are about 3.8 cm long with oblong-shaped petals covered with woolly hair. The fruit are egg to drop-shaped measuring about 2 cm wide and can be found growing in clusters of about 8. Each fruit contains 2 flattened seeds.

It can be differentiated from other *Artabotrys* species by long woolly hairs covering its young twigs and flowers. Laboratory studies showed that extracts of the bark show anticancer and antimicrobial activity due to its high alkaloid content.



Growth form



Concave petal

Close-up on flower



Leaves



Flowers

## *Artabotrys maingayi*



**Species Name:** *Artabotrys maingayi*

**Family:** Annonaceae

**Common Name:**

**Distribution:** Borneo, Malaya

**Conservation Status:** Native (Vulnerable)

*Artabotrys maingayi* is a climber that can reach 25 m long. It can be found in primary rainforests. The thinly leathery, dark green elliptic leaves have a smooth shiny surface. Yellow flowers form in clusters and are covered with fine hair. The flower petals are centrally concave, resembling rabbit ears. Each round-shaped fruit has no stalk and contains 2 seeds with a stone-like hard coat.

Laboratory studies showed that extracts of the bark indicate anticancer and antimicrobial activity due to its high alkaloid content.



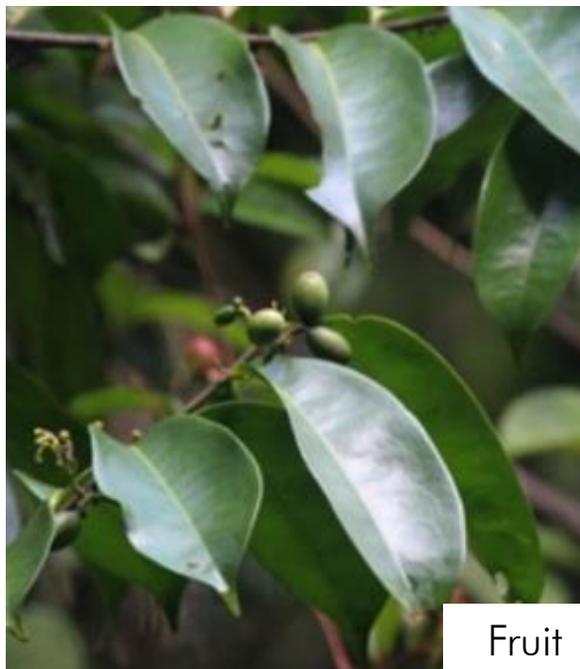
Growth form



Flowers



Leaves



Fruit

## *Artabotrys suaveolens*



**Species Name:** *Artabotrys suaveolens*

**Family:** Annonaceae

**Common Name:**

**Distribution:** Myanmar, Thailand, Malesia, New Guinea

**Conservation Status:** Native (Least Concern)

*Artabotrys suaveolens* is a climber that can reach about 15.5 m long. The oblong-lance-shaped leaves are dark green and shiny. Fragrant, pinkish-yellow flowers form in clusters in whorls of 3. The fruit is ellipsoid-shaped and glossy green in colour, containing 1-2 ellipsoid seeds.

They can be found in dry thickets, secondary forests and primary forests up to 800 m in altitude. The leaves are used in traditional medicine for treating cholera in India and Indonesia while the roots and bark are used to relieve fatigue after childbirth in the Philippines.



Growth form



Flowers



Fruit



Close-up of fruit



Close-up of flowers

## *Aspidopterys concava*

Akar Ulan



**Species Name:** *Aspidopterys concava*

**Family:** Malpighiaceae

**Common Name:** Akar Ulan, 广西盾翅藤

**Distribution:** Southeastern China to Thailand, Malaya, Borneo

**Conservation Status:** Native (Endangered)

*Aspidopterys concava* is a woody climber that can grow up to 20 m long. The leaves are slightly leathery, usually egg-shaped or elliptic-shaped. Flowers are borne on branching, slender shoots that are covered with dark red-brown hairs. The white flowers are insect-pollinated. The fruit is dry and three-winged, containing linear-shaped seeds.

They can be found in dense forests on limestone mountains and shrub forests on hilly regions below 500 m in altitude. The leaves are eaten as wild vegetables by the locals of Guangxi province (China).



Growth form



Leaves



Fruit



Flowers

## *Byttneria maingayi*

Akar Kachubong



**Species Name:** *Byttneria maingayi*

**Family:** Malvaceae

**Common Name:**

**Distribution:** Malaya

**Conservation Status:** Native (Endangered)

*Byttneria maingayi* is a woody climber that can reach 15 m tall. The leaves are usually elliptic-oblong, measuring up to 22 cm long and 9 cm wide and has smooth on both upper and lower surfaces. The inflorescences are located along the stem, and the small flowers have yellow petals and white sepals. The fruit is a globose spiny capsule about 3 cm across, green with red ribs that open into 5 valves.

They can be found in both primary and secondary lowland forests, growing on trees near forest edges or roadsides. The leaves are eaten by the stick insect, *Singaporoidea meneptolemus*.



Growth form



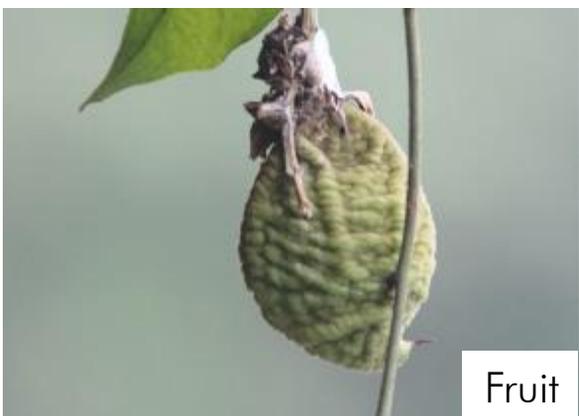
Close-up of flowers

## *Whitfordiodendron erianthum*

Tulang Daeng



Leaves



Fruit

**Species Name:** *Whitfordiodendron erianthum*

**Family:** Fabaceae

**Common Name:** Tulang Daeng

**Distribution:** Thailand, Malaya, Sumatera, Borneo

**Conservation Status:** Native (Critically Endangered)

*Whitfordiodendron erianthum* is a climbing shrub that can reach 25 m tall. Its compound leaves are oppositely arranged along the stem and elliptic in shape. The leaf apex (leaf tip) is acuminate (drip-like). Coppery red flowers form in clusters and are covered in golden hairs. The fruit pod usually has 1 seed.

They can be found in lowland forests and mixed dipterocarp forests at elevations of up to 600 m. The fruit pulp is edible to humans.



Growth form



Close-up of flowers



Leaves



Fruit

## *Cansjera rheedei*

山柑藤



**Species Name:** *Cansjera rheedei*

**Family:** Opiliaceae

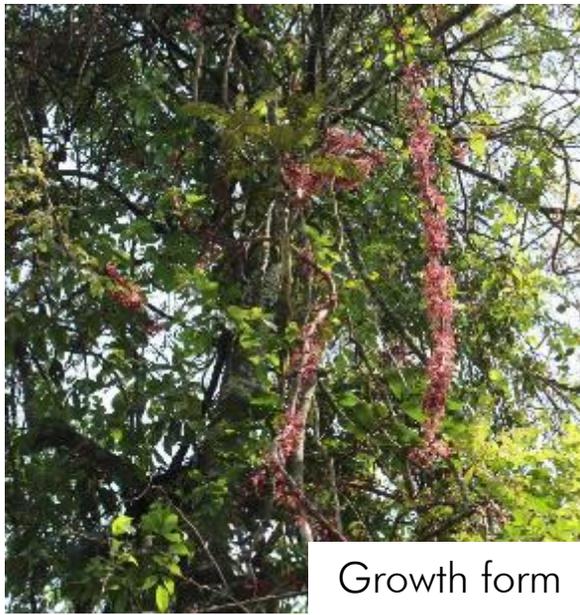
**Common Name:** 山柑藤

**Distribution:** Southern China to Tropical Asia

**Conservation Status:** Native (Vulnerable)

*Cansjera rheedei* is a climber that can reach up to 8 m long and can sometimes grow into a shrub. It has spiny branches that hang downwards. The egg-shaped leaves are smooth. Greenish-yellow flowers form in clusters along the stem and are shaped like an urn and pollinated by insects. The fruit is berry-like, orange-red, and ellipsoidal in shape with a smooth surface. Each fruit usually has 1 seed.

They can be found in tropical to subtropical rainforests and beach forests at altitudes of up to 1,400 m. The Nilgiris tribes in India use the plant extract to treat intermittent fever.



Growth form



Flowers



Leaves



Fruit

## *Cnestis palala*

Sembelit Merah



**Species Name:** *Cnestis palala*

**Family:** Connaraceae

**Common Name:** Sembelit Merah

**Distribution:** Hainan to Western and Central  
Malesia

**Conservation Status:** Native (Vulnerable)

*Cnestis palala* is climber that twines for support and can grow up to 25 m long. It can grow into a scandent shrub or small tree. The leaves are oblong to ovate shaped, and hairy on the undersides. It is the caterpillar food plant of *Lasippa heliodore dorelia* (Burmese Lascar) and *Pantoporia paraka paraka* (Perak Lascar). Flowers form in clusters and are white to creamy in colour. The fruit has reddish hairs on the outside, and the seed is surrounded by a black aril.

The species can be found in primary and secondary forests, riverine and marsh forests, dry forests and thickets at elevations of up to 500 m. The Jakun community in Malaysia consume a mixture of this species together with a locally found fungi for post-partum recovery and an energy boost.



Stem



Leaves

## *Coscinium fenestratum*

Kunyit-kunyit Babi



Flowers



Fruit

**Species Name:** *Coscinium fenestratum*

**Family:** Menispermaceae

**Common Name:** Kunyit-kunyit Babi

**Distribution:** Southern India to Western Malaysia

**Conservation Status:** Native (Endangered)

*Coscinium fenestratum* is a liana that can reach up to 10 m long. It has yellow coloured wood and sap. The ovate leaves are arranged spirally along the stem. Small yellow flowers form in a head-like cluster. The fruit is a globe shaped drupe, eaten by orangutans, gibbons and macaques.

This species can be found in primary lowland forests and brushwood at up to 200 m altitude. In Peninsular Malaysia, the root decoction is used by the Temuan tribe as aphrodisiac, given to women during recovery after childbirth and is also used to treat nose ulcer.

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