

Botanic Endeavour 250 Trail

Botanic Endeavour Trail - 600m | Botanic Explorers Trail - 900m

Botanic Gardens Australia and New Zealand celebrates 250 years of the discovery of the flora of Australia's east coast and New Zealand by western science in 1770 and over 40,000 years of traditional knowledge.

Be an epic voyager for the day and discover some of the plants that Banks and Solander collected during their voyage along the east coast of Australia. Look out for the Botanic Endeavour 250 symbol to find what other plants were discovered during the voyage as you wander through the gardens.





Botanic Endeavour 250

Our plants, our future

Botanic Gardens and Arboreta throughout Australia and New Zealand (BGANZ) commemorate the anniversary 'voyage of discovery' onboard the barque Endeavour, during which Joseph Banks and Daniel Solander made a comprehensive collection of flora. Captain James Cook mapped the entire coastline of New Zealand in 1769 before traversing the east coast of Australia in 1770 from Point Hicks to Cape York.

Pressings of over 520 new taxa unknown to western science were collected along the route up the east coast of Australia and these, along with thousands of botanical illustrations, somehow made it back to England in the face of shipwreck, waterlogging and the dank and humid conditions below decks. The rich abundance of diverse flora excited the botanic world and ultimately led to the settlement of the new colony. In Australia, 2020 marks the 250th anniversary of these discoveries. New Zealand celebrated this anniversary in 2019.

Our Australian Indigenous heritage

Prior to 1770, the Traditional Custodians of Australia lived in harmony with the land for over 40,000 years and discovered the ethnobotanic use for Australia's native flora for food, medicine, tools, clothing and building materials.

After settlement by Europeans, the significance of our wild landscapes as a place to sustainably harvest for these purposes was often overlooked. Intrepid explorers succumbed to exposure and lack of food, or paid the price for consuming plants that looked, smelled or even tasted edible, but were in fact quite poisonous. Native forests became resources to be swiftly used, or an impediment to farming and the growth of our cities and were rapidly cleared, impacting not just the viability of flora, but also the native fauna at an alarming rate.

Slowly the mindset of the greater populace changed, and national parks and reserves were declared, native plants were more widely appreciated and began appearing in gardens and their use and appreciation in modern culture was cemented. Today, new technologies are exploring our native species as medicines and the conservation of those species, of which little remain in the wild, are a national priority. Botanic Gardens and Arboreta are working with key partners and stakeholders in educating the community of the importance of our native plants and actively conserving species at risk of extinction in the wild.

*Acknowledging Lawrie Smith, OAM and Dale Arvidsson,
Curator Brisbane Botanic Gardens for content in this article.*

Botanic Endeavours trail – 600m

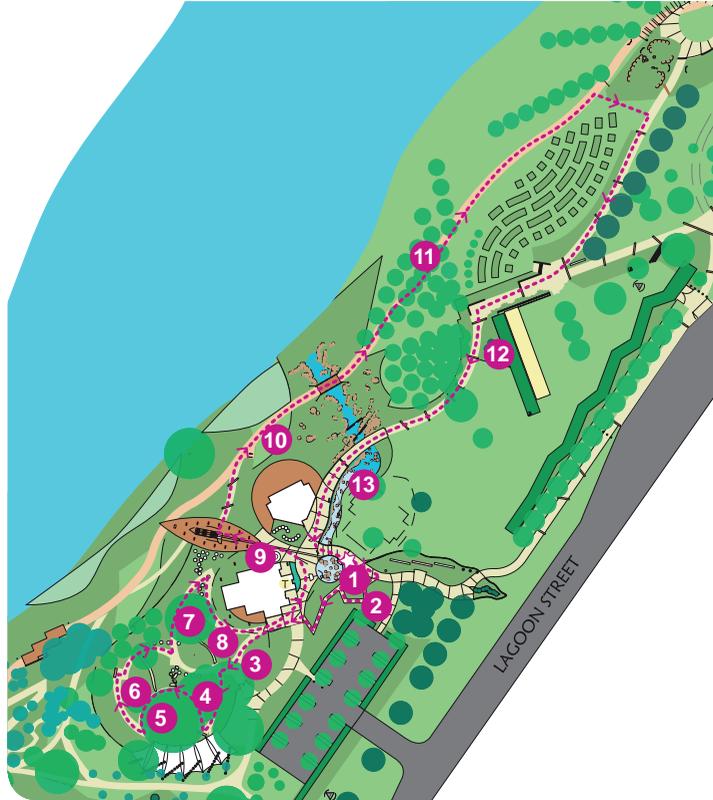


1 Coast Banksia *Banksia integrifolia* subsp. *compar*

Height: 5-8m | Flowers:
March-June,
5-12cm, pale-yellow

First recorded collection:
Botany Bay, between April
and May 1770.

Endemic to Australia, it occurs along the east coast of QLD from Brisbane in the south and north to Proserpine. This subspecies is found at higher altitudes of the Mackay region and favours rocky areas. The foliage is thick and leathery, shiny-green on the upper surface and bright silver below. With showy foliage and large



pale-yellow flower spikes, this small tree makes an attractive feature plant and will attract birds and butterflies to the garden. The woody cones are dark brown and may remain on the plant for several years.

What's in a name

Banksia - Named after Sir Joseph Banks 1743-1820, naturalist, botanist, and patron of the natural sciences.

integrifolia = integer meaning 'untouched', 'whole', 'entire' + *foliosa* meaning 'leafy', refers to the adult leaf margins being 'entire' i.e. not broken by serrations as in other *Banksia* species.

2

Fairy Paintbrushes

Archidendron grandiflorum

Height: 3-10m | Flowers: Oct-Feb.

25-50mm long, cream in the lower half but red, pink or mauve in the upper half

First recorded collection: Endeavour River, between June and August 1770.

An outstanding tree already in cultivation, known for its beautiful pink and white flowers. Usually a small tree but can flower and fruit as a shrub. It requires well-drained soil, preferably in semi-shade but it will tolerate full sun.

Grows in rainforest on a variety of sites from Cape York Peninsular to NE NSW.

What's in a name

Archidendron = archi meaning 'first', 'chief' + dendron meaning 'a tree' - a chief of trees.

grandiflorum = grandis meaning 'great' + floreo, 'to flower', reference to the large flowers of this species.

3

Velvet Leaf

Callicarpa pedunculata

Height: 1-4m | Flowers: July-Sept.

3mm across, lilac or purple

First recorded collection: Endeavour River, between June and August 1770.

Popular in cultivation for its decorative fruit and foliage, this tall shrub is naturally found in disturbed areas of rainforest and wet sclerophyll forest along the east coast from Cape York Peninsula to NE NSW.

Hardy spreading shrub best suited to subtropical areas in a semi-shaded site on heavy soil types. The small mauve flowers and showy purple fruit will attract birds and butterflies.

What's in a name

Callicarpa = calli meaning 'beautiful' + carpos meaning 'fruit', reference to the beauty of the fruit.

pedunculata = refers to flowers with Peduncles.



2



4

Clumping Mat-rush

Lomandra banksii

Height: 0.5-1.5m | Flowers: Dec – March.
4mm across, cream

First recorded collection: Endeavour River, between June and August 1770.

Often described as unusual, this species is common in NE QLD but also extends into New Guinea and New Caledonia. Plants can be slow in growing but their small cream coloured flowers and orange to red fruit make them an attractive planting in rockeries or containers. It will grow in full sun, but the best appearance is gained by having dappled shade.

What's in a name

Lomandra = Loma meaning edge, border + Andros meaning man. Refers to the fringed circular margin of the anthers in some species.
banksii = Named after Sir Joseph Banks 1743-1820, Naturalist, Botanist, and patron of the natural sciences.

6

Cheese Fruit, Noni Fruit

Morinda citrifolia

Height: 2-5m | Flowers: Sporadic.
15mm across, white to cream

First recorded collection: Endeavour River, between June and August 1770.

An attractive looking evergreen shrub to small tree with sweetly fragrant flowers but the pungent aroma of the ripe fruit can be quite off-putting.

For this reason, it is not cultivated widely in gardens. However, it is very useful for coastal erosion control.

It is best suited to tropical areas and adapts well to most soils. It generally occurs in beach scrubs and on the edges of seasonal waterways.

What's in a name

Morinda = morus meaning mulberry + indicus meaning Indian. Referring to the similarity of the fruit to the mulberry, *Morus indica*.
citrifolia = Having leaves similar to the genus *Citrus*.

5

Native Ixora

Ixora queenslandica

Height: 2-4m | Flowers: March-May.
20mm across, white

First recorded collection: Thirsty Sound, between May and June 1770.

This large shrub or small tree is a common species of coastal districts of NE QLD, usually growing in or around rainforest. New, young growth is bright green while mature leaves are dark, shiny green with a leathery feel.

The fragrant flowers make it popular for native gardens. It requires a protected position in well-drained soil but will grow readily once established.

What's in a name

Ixora = named after Isvara, a god of the Indian Mala bar people, to whom offerings of flowers of this genus were made.
queenslandica = from Queensland.





7 **Brown Kurrajong** *Commersonia bartramia*

Height: 6-12m | **Flowers:** Nov–Jan.
4-6mm across, cream

First recorded collection: Endeavour River,
between June and August 1770.

A fast-growing pioneer species, this tree is common along roads and areas of disturbance. Along the east coast from Cape York Peninsula to NE NSW, it occurs on a variety of sites from well-developed rainforest to open valley forests.

An attractive spreading tree with horizontal branches giving a layered effect when in flower. Suited to a larger home garden, it requires full sun and a well-drained site.

What's in a name

Commersonia = Named after Philibert Commerson, 1727-1773, naturalist.

bartramia = Named after John (1699-1777) and William (1739-1823) Bartram, naturalists.

8 **Red Beech** *Dillenia alata*

Height: 6-18m | **Flowers:** Sept-Jan.
60-80mm across, yellow

First recorded collection: Endeavour River,
between June and August 1770.

A small to medium tree with large glossy leaves, showy yellow flowers with red centres and decorative fruits. This handsome tree grows in rainforests but is frequently found in wet situations in other types of forests, particularly on the coastal lowlands. Best suited to a larger garden in tropical regions, with its red-brown papery bark, it is a great host tree for orchids.

What's in a name

Dillenia = Named after Johann Dillenius (1684-1747), Professor of Botany.

alata = atatus meaning winged, reference to winged main leaf stalk.

9

Wax Flower

Hoya australis subsp. *australis*

Height: 4-10m | Flowers: Sporadic.
15-25mm across, white with red spot on each lobe

First recorded collection:
Cape Grafton, June 9, 1770.

This beautiful native is very popular in cultivation. It will grow successfully in gardens, containers and hanging baskets. The best flowering occurs when good light is available, but the plant will grow in heavy shade.

A slender vine not exceeding a stem diameter of 2cm, with thick and glossy leaves. It grows in open forest and vine thicket, usually among granite boulders, sometimes on old sand dunes.

This showy vine is a food plant for the larval stages of the Australian Crow and Eichhorn's Crow Butterflies.

What's in a name

Hoya = Named after Thomas Hoy (c1750-1 May 1822), gardener and botanist.

australis = meaning 'southern', reference to natural habitat being in the south; does not refer specifically to Australia.



10

Bandicoot Berry

Leea novoguineensis

Height: 1-3m | Flowers: Sporadic.
4mm across, greenish to cream

First recorded collection: Endeavour River,
between June and August 1770.

A hardy, slender, sparsely branched shrub that is seen commonly in undergrowth of disturbed areas through lowland and upland rainforests. This usually multi-stemmed plant with attractive dark green foliage and red to black ovoid berries can be admired in shady home gardens in warm tropical to subtropical regions and is ideal in a courtyard planting.

What's in a name

Previously known in Australia as *Leea indica*, recent studies have restricted the name *L. indica* to specimens from India and named the Australian specimens *L. novoguineensis*.

Leea = Named after James Lee 1715-1795, horticulturist

novoguineensis = *novae* meaning 'new' + *ensis* denoting origin, from New Guinea.

11 Red Coondoo

Mimusops elengi

Height: 5-12m | Flowers: Nov-April.
10mm across, cream, scented

First recorded collection: Thirsty Sound, between May and June 1770.

This small to medium tree can be found widely across northern Australia growing in coastal habitats. With a spreading dense canopy of dark green, glossy leaves, it provides excellent shelter/shade for the larger home garden. It is also frequently found in parks and streetscapes around Mackay and used for soil stabilisation and reclamation in coastal areas.

What's in a name

Mimusops = mimous meaning an ape + ops meaning the face (the flower of some species resembles the face of an ape).
elengi = A native name.

12 Native Olive

Olea paniculata

Height: 15-20m | Flowers: Oct-Dec.
3-4mm across, greenish-white

First recorded collection: Thirsty Sound, between May and June 1770.

A large, bushy tree with a sparse canopy. Its trunk has smooth grey-brown bark and can reach a 90cm diameter at maturity. Commonly found growing along streams in dry and littoral rainforests from Cape York Peninsula in QLD to north of Newcastle in NSW. It is an excellent tree for revegetation projects, particularly on moist slopes near streams. The blue-black fruits attract a wide variety of bird life and the tree is an excellent butterfly host.

13 Native Lassiandra, Blue Tounge

Melastoma malabathricum subsp.
malabathricum

Height: 1.5-2m | Flowers: Sporadic.
20-30mm long, pinkish purple.

First recorded collection: Endeavour River, between June and August 1770.

Commonly grown as an ornamental for its large pinkish purple flowers and rough-textured foliage. It forms a bushy shrub suited to loam or clay soils in full sun to part shade for ideal growth.

Naturally it occurs in northern parts of Australia from Broome in WA to Brisbane in QLD and can be found as far south as NE NSW. It can be seen growing along roads or in disturbed areas of rain and monsoon forests.

What's in a name

Melastoma = Melanos meaning black + Stoma meaning mouth
malabathricum (derivation unknown).



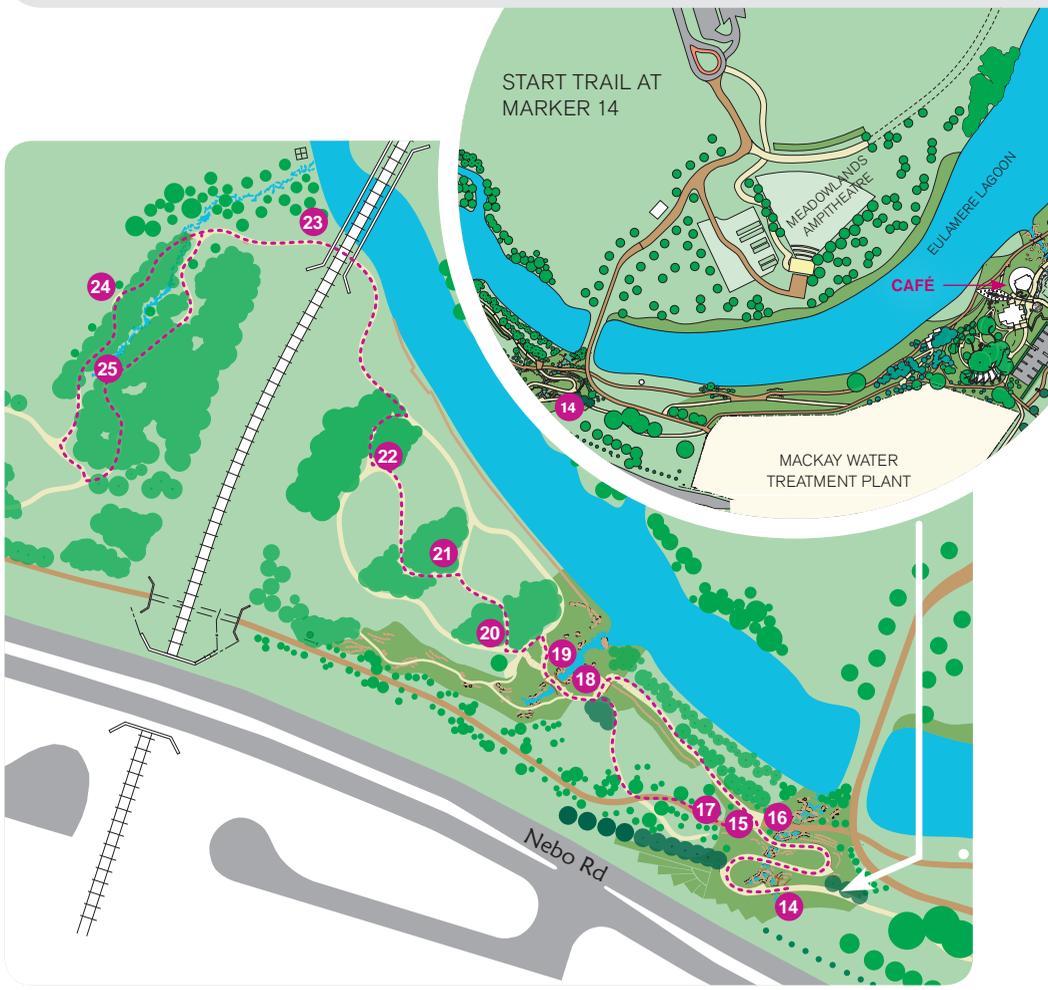
What's in a name

Olea = Olive or Olive Tree.
paniculata = meaning flowers in form of panicle (loose branching cluster of flowers).



Botanic Explorers trail – 900m

This trail starts at the Sarina/Proserpine Garden; number 12 in the Gardens Guide.



14

Brown Macaranga

Macaranga involucrata var. *mallotoides*

Height: 8-15m | Flowers: Oct-Dec. 1.5-2mm across, yellow.

First recorded collection: Endeavour River, between June and August 1770.

A useful species for reclamation projects in tropical and subtropical regions. It varies in form from small and straggly to vigorous and erect. Fast growing in suitable conditions, this small to medium tree often provides shelter for other species. Growing in gaps of well-developed rainforest and along the margins, it is widely distributed through NE QLD and the top end of the NT.

There are separate male and female plants of this species (dioecious species), both need to be grown for fruit and seed to be produced.

What's in a name

Macaranga = meaning from the Madagascan name for the first species to be described.

involucrata = meaning the leaf edges rolled together.

15

Grey Bollywood

Neolitsea brassii

Height: 8-15m | Flowers: Jan-April. 5mm across, cream

First recorded collection: Endeavour River, between June and August 1770.

Widely distributed from NE to SE QLD and into western areas of NT. It's predominantly found growing in rain and monsoon forests but also extends to moist gullies and wet sclerophyll forests. A slender bushy tree, popular in gardens for its glossy foliage and small colourful fruit which attracts birds. Grown easily in a range of soil types, permitting it is well-drained and will perform best in a semi-shaded position.

What's in a name

Neolitsea = neos meaning 'new' + *Litsea*, a related genus in the same family.

brassii = named after Leonard Brass (1900-1971), American botanist.





16 Native Ixora

Ixora timorensis

Height: 4-8m | **Flowers:** Oct-Nov.
2-2.5cm across, cream to pale yellow

First recorded collection: Endeavour River, between June and August 1770.

A beautiful tall understory shrub found in beach forest, monsoon forest and drier, more seasonal rainforest and gallery forest. It naturally occurs in Cape York Peninsula, NEQ and NT.

It makes a great screen or hedge and is a popular choice for native gardens as it is great for attracting birds and butterflies, has dense foliage, profuse showy flowers and a sweet perfume.

What's in a name

Ixora = named after Isvara, a god of the Indian Mala bar people, to whom offerings of flowers of this genus were made.

timorensis = ensis denoting origin, from Timor.



17 Bat's Wing Coral Tree

Erythrina vespertilio

Height: 6-12m | **Flowers:** Aug -Nov.
3-4cm long, scarlet to orange-red

First recorded collection: Endeavour River, between June and August 1770.

This large shrub to small tree is a widespread species which grows in a variety of situations from rainforest margins to harsh open country. The branches are thick, with grey corky bark and stout black thorns. Flowers mainly appear while the tree is leafless giving a stunning display.

Best suited to the larger home garden, it requires a sunny position. This species can grow in a wide range of soils, so long as they are well-drained.

What's in a name

Erythrina = Erythros meaning red. Refers to the flowers.

vespertilio = Latin for bat. The leaves look like flying bats.

18

Weeping Bottlebrush

Melaleuca viminalis

Height: 4-10m | Flowers: Sept-Nov.
70-80mm long, red

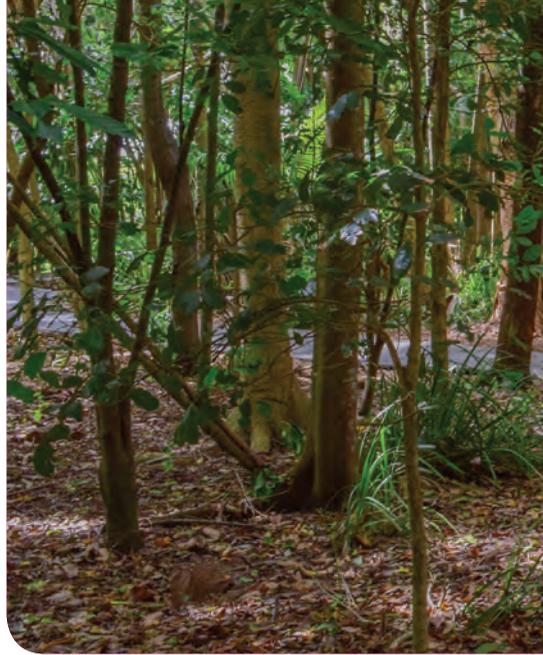
First recorded collection: Endeavour River, between June and August 1770.

This common 'bottle brush' occurs naturally on the east coast of Australia from Cape York to NE NSW growing along creeks and rivers, usually in open forest situations, but sometimes found on streams flowing through rainforest.

A valuable species in landscaping, it's useful as a screen, in erosion control or as a specimen or street tree where it exhibits smog tolerance. It performs best in cultivation if a reliable water supply is available however, it can tolerate extended dry periods once established. It will grow in shade but flowers best in a sunny position and can tolerate less than perfect drainage.

What's in a name

Melaleuca = melanos meaning black + leucos meaning white. The first species described is said to have had white branches against a black (burnt) trunk.
viminalis = vimineous meaning having or resembling long flexible shoots like the willow.



19

Swamp Box or Swamp

Mahogany – *Lophostemon*
suaveolens

Height: 6-15m | Flowers: Oct- Feb.
1cm across, cream

First recorded collection: Endeavour River, between June and August 1770.

A fast-growing adaptable tree that is widely distributed from Cape York Peninsula to NE NSW, this species grows in open forests, along the margins of streams and in swamps and rainforests.

The flowers are cream-coloured and exude a sweet but strong fragrance. The leaves are leathery, dark green on the upper surface but paler underneath. An attractive evergreen large shrub to small tree, it prefers a sunny position, succeeds in a wide range of soils and can tolerate periodic inundation.

What's in a name

Lophostemon = lophis, meaning crest + stemon stamen. The flowers have crested stamens.
suaveolens = suavis, meaning sweet smelling.



Regional Forests

20

Burdekin Plum

Pleiogynium timorense

Height: 8-15m | Flowers: Aug-Oct. 8mm across, whitish

First recorded collection: Endeavour River, between June and August 1770.

This tree is a hardy and attractive species for sub-tropical and tropical areas and can also be grown further inland if water is available. A medium to large tree with a shapely, bushy crown that has reddish new growth. In well-watered sites the trunk can become buttressed.



Tolerant of extended dry periods but requires good light and drainage. The large, fleshy fruit is edible but often 'tart' and suitable for preserves. The fruit is also enjoyed by a large variety of birds and mammals. Found growing in drier rain and monsoon forests, it is a widespread species through Cape York Peninsula, NE QLD, central QLD and southwards to SE QLD.

What's in a name

Pleiogynium = pleion meaning 'more' + gyne meaning 'woman'. Reference to the many female parts of flower.

timorensis = ensis denoting origin, from Timor.

21

Scrambling Heliotrope*Heliotropium sarmentosum***Length: 1-5m | Flowers: Dec-Feb.
5-6mm across, white****First recorded collection: Endeavour River,
between June and August 1770.**

This thick-stemmed climbing shrub can be found in gallery forest and well-developed lowland and upland rainforest in Cape York Peninsula, NE QLD and southwards as far as coastal central Queensland. The clusters of small, white, fragrant flowers and bird attractant berries make it a showy addition to any collection.

What's in a name

Heliotropium = Helios meaning 'the sun' + trope meaning 'turning'. The flowers follow the sun.

sarmentosum = Sarmentose meaning 'having stems in the forms of runners'.

22

Heart Leaf or Blush*Macaranga – Macaranga tanarius***Height: 4-6m | Flowers: Oct-Jan,
1.5-2.5mm across, greenish yellow.****First recorded collection: Endeavour River,
between June and August 1770.**

This is a fast-growing bushy shrub, found from NE QLD to NE NSW. Although these plants occur naturally in rainforest, this species is most prominent in regrowth, resulting from clearing or damage.

A distinctive species readily recognised by its large, shiny, bright green peltate leaves. The leaves of juvenile plants may assume large proportions and often have attractive pink veins.

Excellent for coastal gardens, it prefers a sunny position and can adapt to a wide range of well-drained soils.

What's in a name

Macaranga = meaning from the Madagascan name that the first species was described. *tanarius* (derivation unknown).

23

Boobialla*Myoporum acuminatum***Height: 2-8m | Flowers: Aug-Nov.
15mm across, white with purple spots****First recorded collection: Bustard Bay,
May 23-25, 1770.**

Endemic to eastern Australia, this coastal species grows on the edges of wet forests and adjacent to tidal areas. Occasionally it can be found in drier rainforests.

A large shrub or small tree with coarsely fissured bark, smooth branches, attractive green foliage and small white flowers, it is useful for a wide range of purposes in gardens, parks and roadside plantings. Good drainage is required and once established they are extremely hardy and drought tolerant.

**What's in a name**

Myoporum = Myo, 'I close' + poros, 'a pore'. Refers to the ability of the plants to close the pores on the leaves reducing water loss and enabling survival in dry periods.
acuminatum = Acuminate meaning tapering to a slender point.



Garden of Memories

24 Large-leaved Pollia

Pollia macrophylla

**Height: 0.5-1.5m | Flowers: Dec-Feb.
3-4mm long, blue and white**

**First recorded collection: Endeavour River,
between June and August 1770.**

Endemic to Queensland, this terrestrial creeping herb occurs in Cape York Peninsula, NE QLD and southwards as far as coastal central QLD. It can be found growing in disturbed but somewhat shaded areas in well-developed rainforest on a variety of soils.

It is a vigorous stem rooting and large-leaved groundcover, reaching a height of about 50cm. Under favourable conditions it can reach 1-2m in height. A great understory plant in moist gardens where it forms colonies.

What's in a name

Pollia (derivation unknown).
macrophylla = macros meaning 'large' +
phyllon meaning 'leaf'.

25 Queensland Nutmeg

Myristica globosa subsp. *Muelleri*

**Height: 15-25m | Flowers: Oct-June.
2.5-3.5mm across, cream to white**

**First recorded collection: Endeavour River,
between June and August 1770.**

Occurs in eastern QLD from Cape York Peninsula to Byfield, in moist rainforest and notophyll vine forest. A beautiful large tree, it often stands out as the branches are on right angles to the trunk and the foliage is dark green above with a pale blue-green tint below.

The fruit and seeds are eaten by the Southern Cassowary as well as many bird species.

There are separate male and female plants of this species (dioecious species), both need to be grown for fruit and seed to be produced.

What's in a name

Myristica = myristicas meaning fragrant.
globosa = L. globosus, meaning nearly
spherical, round fruits.

subsp. *Muelleri* = Baron Ferdinand von
Mueller 1825 -1896, one of Australia's most
famous collectors and botanists.



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IMAGE CREDITS

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