

# Butterflies and larval food plants

OF THE CENTRAL QUEENSLAND COAST BIOREGION

Butterflies are undeniably one of nature's winged wonders. Discover some of the locally occurring butterflies and how to attract them to your garden.







# Self guided butterfly walk

NAVIGATE YOUR WAY TO EACH NUMBER AND LOCATE THE PLANTS ASSOCIATED WITH THE BUTTERFLIES IN THIS GUIDE.



Planting a range of nectar rich flowering plants will encourage adult butterflies to your garden. Flowering natives from the genus Grevillea, Eucalyptus and Melaleuca are great choices to consider to attract adult butterflies, as well as smaller flowering natives such as Scaevolas and Coleus.

However, if you want to have butterflies breeding in your garden, then you will need to have the appropriate larval food plants. Larval food plants are the plants that the female adult butterfly will lay her eggs on and caterpillars (larvae) will feed on. These plants will vary from one butterfly species to another. Please be aware that to feed caterpillars you must be willing to see your plants eaten. Healthy plants will easily recover. This trail highlights just a few larval food plants that occur locally for some of the common butterflies in the Mackay region. Follow the pathway around the Tropical Shade Garden to find highlighted plants. We have highlighted several other larval food plants outside of the Tropical Shade Garden to look out for as you explore the rest of the gardens. For a comprehensive list of locally occurring butterflies and associated local native larval food plants, please visit mackayregionalbotanicgardens.com.au

Some of these plants are available to purchase through Native Plants Queensland - Society for Growing Australian Plants (SGAP) Mackay branch or Mackay Regional Council's Natural Environment Centre.

To find out more, please contact the Botanic Gardens on (07) 4952 7300.

## Start your self-guided butterfly walk...



#### Love Flower Pseuderanthemum variabile

The Love Flower is a perennial herb with dark green, sometimes mottled leaves. Flowers can be white, pink or pale blue. The height varies between 15-100cm. This plant can be found growing naturally in damp woodland, open forest, rainforest and deciduous vine thicket communities from Cape York Peninsula, north east QLD and to south eastern Australia.

The Love Flower is a larval food plant for *Hypolimnas alimena*, Blue-banded Eggfly Butterfly and *Hypolimnas bolina*, Common Eggfly Butterfly.



#### Common Eggfly Butterfly Hypolimnas bolina

The Common Eggfly Butterfly occurs along the edge of rainforest, parks, gardens and moist creek banks in drier areas. It is widespread in north western and northern Australia and on the eastern coast from the Torres Strait Islands to the Richmond River, near Ballina, NSW. Like the Blue-banded Eggfly Butterfly, males are territorial and will chase everything that passes by.

#### Blue-banded Eggfly Butterfly Hypolimnas alimena

The Blue-banded Eggfly Butterfly occurs in rainforest and along the edges of rainforest, in evergreen and semi-deciduous vine forest and suburban parks and garden areas north of Rockhampton, southern QLD around Gympie and Nambour, and occasionally in north eastern NSW. Males are territorial and will chase everything that passes by.



### Southern Fitzalania Fitzalania bidwillii

Southern Fitzalania is a shrub growing up to 5m high which occurs in coastal and subcoastal notophyll vine forests and thickets, mainly from Sarina and the Percy Isles south to Hervey Bay and Agnes Waters. It has almost black flowers throughout most of the year, followed by clusters of berries, which are orange when ripe. Southern Fitzalania is a larval food plant for *Graphium agamemnon*, Green Spotted Triangle Butterfly.



## Green Spotted Triangle Butterfly Graphium agamemnon

The Green Spotted Triangle Butterfly occurs from Cape York to Rockhampton in QLD in moist to very wet rainforest, occasionally in semi-deciduous vine thickets. Adults are fast flying, stopping for short periods to feed on flowers. As their common name suggests, they are a dark triangular-shaped butterfly with many green spots on their wings.



### Purple Laurel, Rib-fruited Pepperberry Cryptocarya hypospodia

Purple Laurel is a tree, growing up to 30m tall, with an odour that is described as peppery. Its small flowers are pale brown, cream or green, occur in sprays, and have an unpleasant fragrance. Its fruit are berries, black when ripe. It occurs in rainforest and gallery forest from Cape York, south to the Brisbane area. Purple Laurel is a larval food plant for *Graphium sarpedon*, Blue Triangle Butterfly.

## Blue Triangle Butterfly Graphium sarpedon

The Blue Triangle Butterfly occurs in the moist lowland areas of the Great Dividing Range, in rainforest and monsoon forest from Cape York to Victoria. As their common name suggests, they are a dark triangular shaped butterfly with a turquoise strip on their wing. Small lines of red dots can be seen on their outer wing. Adults are fast flying, stopping for short periods to feed on flowers.



# Corky Milk Vine, Secamone Secamone elliptica

The Corky Milk Vine has twining stems and older stems develop a thick, fissured, soft corky bark. Leaves and petioles produce a milky exudate. Its small flowers are pale yellow and occur in axillary sprays. It occurs in rainforest, monsoon forest and vine thickets from the Torres Strait Islands to NSW. It also occurs in NT, WA and outside Australia. Corky Milk Vine is a larval food plant for *Euploea core*, Common Crow Butterfly and *Tirumala hamata*, Blue Tiger Butterfly.

#### Common Crow Butterfly Euploea core

The Common Crow Butterfly occurs in low to mid altitude rainforest, monsoon and coastal rainforest, semi deciduous and deciduous vine thickets, and is quite common in suburban gardens. They occur across northern and eastern Australia, extending into south eastern Australia as well. They are a black and white butterfly, well known for its chrysalis which is a shiny, silvery gold.



### Yellow Corkwood, Yellow Evodia Melicope bonwickii

Yellow Corkwood is a large rainforest tree growing up to 40m high. Its small flowers are pink or white and occur in large clusters along the stems. The small fruits are roundish to obovoid and occur in clusters of one to four. It occurs in rainforest from the Cooktown area to Sarina. Its flowers also attract a range of nectar feeding birds, particularly parrots. A range of other adult butterflies can be seen flocking to this tree when flowering. Yellow Corkwood is a larval food plant for *Papilio ulysses*, Ulysses Butterfly.



### Ulysses Butterfly Papilio ulysses

The Ulysses Butterfly is one of North Queensland's most stunning butterfly species, with its striking blue and black colours that can be seen when flying. They are fast flying, stopping for short periods while hovering on flowers to feed. Their caterpillars are green and white, allowing them to blend in well with plants, protecting them from predators. This species occurs in rainforest from Cape York to Sarina, on the east coast.

Australia's largest butterfly is the Cairns Birdwing Butterfly. (featured)

> Some butterfly species live for just a couple of weeks, while others can live for months.

## Did you know?

When a caterpillar gets too big for its skin, it 'sheds it' to reveal new skin underneath. When a caterpillar is very large, it attaches itself to a leaf or twig and sheds its last skin to reveal a chrysalis underneath. Many female butterflies can taste with their feet. They use this to determine whether the leaf they are sitting on is suitable for laying their eggs on and can be used for their caterpillars' food.

A newly emerged butterfly sucks in air and the fluid in its body is pumped into its tiny wings until they expand to full size. Butterfly wings need to dry and harden for an hour or two before a butterfly can fly.



#### Whitsunday Medicosma Medicosma obovata

Whitsunday Medicosma is a bushy shrub to small tree with shiny dark green leaves. It belongs to the same family as citrus fruit, so the leaves contain aromatic oil. It has tiny four-petalled white flowers that occur in small groups in the leaf axils throughout the year. This species is a Whitsunday endemic only known from rainforests in a restricted location and is classified as Vulnerable under the Environment Protection Biodiversity and Conservation Act 1999 (EPBC Act 1999).

Whitsunday Medicosma is a larval food plant for *Papilio fuscus*, Fuscous Swallowtail Butterfly.

#### Fuscous Swallowtail Butterfly Papilio fuscus

The Fuscous Swallowtail Butterfly occurs in northern and eastern Australia, mainly in drier rainforest and monsoon rainforest in coastal and subcoastal areas, especially where citrus species are common. It is a large dark swallowtail butterfly with cream-coloured white patches in both fore and hind wings. A slow flying butterfly, they can be seen feeding on flowers in open areas.



#### White Bollywood Neolitsea dealbata

White Bollywood is an understorey tree growing up to 12m high. Its drooping, delicate pink softly hairy new growth is a feature of this tree. Small white, yellow or brown perfumed flowers occur in small sprays along the stems and in the leaf axils. The small fruit are red to black when ripe. It occurs in rainforests, stream banks and moist areas in open forests. It attracts a wide range of wildlife.

White Bollywood is a larval food plant for *Graphium sarpedon*, Blue Triangle Butterfly.



#### Northern Towra Bosistoa medicinalis

Endemic to Queensland, Northern Towra is a tree noted for its hard bark. Its leaves are arranged in opposite pairs and it has large sprays of small white flowers. Fruit are green to brown with a silvery marbling. It occurs in a wide range of habitats, from moist lowland rainforests to the drier eucalypt woodlands west of the Great Dividing Range. Northern Towra is a larval food plant for *Papilio ulysses*, Ulysses Butterfly.

#### Orchard Swallowtail Butterfly Papilio aegeus

The Orchard Swallowtail Butterfly occurs in a wide range of habitats, from wet tropical lowland rainforest to very dry inland central Australia, west of the Great Dividing Range. You are likely to find this species in your garden if you grow citrus plants. One of the showiest butterflies of Eastern Australia, the male is black with creamy white patches and a red spot on each wing. The female is similar, but browner, with a white patch on the forewings, showing brown veins. Caterpillars are regularly seen on citrus species.



#### **Creek Bosistoa** Bosistoa pentacocca var. connaricarpa

Endemic to Queensland, Creek Bosistoa is a rainforest tree growing up to 18m high. Its conspicuous new growth is an eye catching deep pinkish red colour. It has small white perfumed flowers in large axillary or terminal sprays. Fruit are wrinkled, dry leathery and brown when mature. It is found in subtropical and dry rainforest communities from the Proserpine area to north eastern NSW. Creek Bosistoa is a larval food plant for *Papilio aegeus*, Orchard Swallowtail Butterfly.





#### **Pink Lime** Glycosmis trifoliata

Pink Lime is a hardy shrub to small tree, with axillary or terminal sprays of small fragrant white flowers. Large clusters of pink or orange berries start to appear in late spring and it will keep fruiting throughout most of the year. It occurs in rainforest, monsoon forest, vine thickets and littoral rainforest from the Torres Strait Islands to Wide Bay's southeast. It also occurs in NT, WA and outside Australia. Pink Lime is a larval food plant for *Papilio fuscus*, Fuscous Swallowtail Butterfly.

# Did you know?

Butterflies are mostly cold-blooded and need to warm up in the sun before they can take flight. They are generally most active from mid-morning to mid-afternoon.



#### Native Plumbago Plumbago zeylanica

Native Plumbago is a small scrambling subshrub that is seldom without clusters of small white flowers and small burr-like fruit. It occurs in monsoon forest and vine thickets from the Torres Strait Islands to southern NSW. It also occurs in NT, WA and outside Australia. You can find this plant growing in the garden opposite the Botanic Gardens administration building. Native Plumbago is a larval food plant for *Leptotes plinius*, Plumbago Blue butterfly.



### Plumbago Blue Butterfly Leptotes plinius

The Plumbago Blue Butterfly occurs from Cape York to southern NSW. It is found in open forests and woodlands with native species, and in parks and gardens with ornamental shrubs. They are a small brownish and blue-grey butterfly. The underside is a marbled brown and white pattern. Up close you will be able to see their pretty blue patterns.



#### Native Mock Orange Murraya ovatifoliolata

Native Mock Orange is a medium bushy shrub growing up to 4m high and its leaves are aromatic when crushed. It has white perfumed flowers and can flower any season, especially after rain. Fruits are red berries. It occurs in monsoon forest, littoral rainforest and vine thickets from Weipa to Bundaberg.

You can find this species on display as a hedge in the main entrance car park, off Lagoon Street, near the staff car park.

Native Mock Orange is a larval food plant for *Papilio fuscus*, Fuscous Swallowtail Butterfly.





#### Tree Omphalea Omphalea celata

Tree Omphalea is a small tree with a somewhat weeping habit. It has soft textured leaves and tiny greenish flowers in terminal sprays of both male and female flowers. It is a Vulnerable species only known from very isolated populations in Hazelwood Gorge and on Gloucester Island. You can find Tree Omphalea growing at the main entrance car park off Lagoon Street and in the Regional Forests. Tree Omphalea is a larval food plant for *Alcides metaurus*, Zodiac Moth.

## Zodiac Moth

#### Alcides metaurus

Whilst not a butterfly, the Zodiac Moth is a beautiful, large daytime flying moth and deserves special attention. It occurs in rainforests of Northern Queensland, from Cape York to Mackay. Adults are black with bands of yellow and pink. Their underside is pale green with black bands. When resting, their wings are open and flat. These moths are just lovely to see flying around the Botanic Gardens in areas where Tree Omphalea grows.



#### Northern Fitzalania, Orange Annona Fitzalania heteropetala

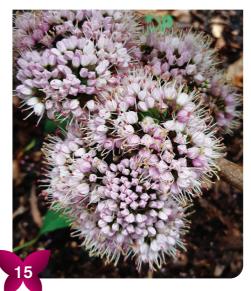
The Northern Fitzalania is an erect shrub growing 4-5m high with distinct horizontal branching. Flowers are dark maroon to almost black and occur from October to June. Fruits are bright orange berries in clusters of one to 12. It is endemic to QLD and grows in drier lowland rainforest, monsoon and littoral forest in north-east and central-east QLD. You will find Northern Fitzalania on display in the Orientation Garden and in the Regional Forests.

Northern Fitzalania is a larval food plant for *Graphium agamemnon*, Green Spotted Triangle Butterfly and *Graphium eurypylus*, Pale Green Triangle Butterfly.

## Pale Green Triangle Butterfly

#### Graphium eurypylus

The Pale Green Triangle Butterfly occurs in northern QLD to about the Sydney area in NSW. It is found in vine forests, edges of rainforest and in suburban gardens. They are a dark butterfly with a triangular shape, with a pale central stripe through the wing with a strip of spots up the outer edges of the wings. Like the Blue Triangle Butterfly, they are also fast flying.



#### Euodia, Pink Evodia, Corkwood Melicope elleryana

Euodia is a medium to large rainforest tree with a creamy-coloured corky bark and a fairly open canopy. Dense clusters of small pinklavender flowers are borne along the branches in summer. It occurs from Cape York to NSW. It also occurs in NT, WA and outside Australia. It attracts a wide range of adult butterflies and birds to its flowers and seeds. You will find Euodia on display in the Regional Forests and along the bottom pathway near Eulamere Wetlands. Euodia is a larval food plant for *Papilio ulysses*, Ulysses Butterfly.

#### REFERENCES

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Thank you to Pamela Finger and Maya Harrison for contributing several images.

Blue-banded Eggfly Butterfly



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Thank you to NPQ SGAP Mackay branch for assistance with information.

Free guided walks, April to October, every Friday at 10am.