

# Butterfly Gardens

Peechi & Nilambur



**Kerala Forest Research Institute**

KFRI

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Common Jezebel (*Delias eucharis*)

Butterflies and moths, scientifically classified under the order Lepidoptera, form the second largest group of class Insecta. Kerala has about 330 species of butterflies many of which were once very common in our backyards and countrysides. The developmental activities of man have led to destruction of the natural habitats of butterflies leading to disappearance of many species. Species loss has tremendous implications on the sustenance of natural ecosystems. We need to recreate our lost habitats to conserve our flora and fauna.



Southern Duffer (*Discophora lepida*): a highly endangered species of butterfly in the Western Ghats

### Butterfly Gardening

Butterfly gardening is an attempt to nurture and sustain different species of butterflies in a recreated habitat by providing appropriate ecological niche. Such gardens help in conserving the local butterfly fauna and for creating public awareness on biodiversity conservation.

### Conditions for sustaining butterflies

In a butterfly garden, a sustainable butterfly population is maintained by providing appropriate microclimatic conditions (temperatures between 20 - 25°C and humidity above 85%), appropriate host plants which are preferred by butterflies for laying eggs or feeding on nectar and suitable habitats such as openings, shade, dampness etc. A list of some of the common host plants is provided overleaf.



An aggregation of Common Albatross (*Appias albina*)

### Design of the garden

There are two major areas in the garden: a butterfly exhibit area for observing butterflies at close range and a butterfly forage area to enhance their colonization and breeding within the garden. A long trek path is also set up connecting the different areas.

### Life cycle of Butterflies

Butterflies have a short life cycle, which is completed in a few weeks. There are four distinct stages in the life cycle of a butterfly- egg, caterpillar, pupa and imago(butterfly). The immature stages are quite different from the adult.

*Eggs* are laid singly or in clusters on the foliage of host plants on which the caterpillars feed. The eggs hatch into caterpillars within 3 to 5 days.



Egg of Southern Birdwing

*The Caterpillars* which feed voraciously on foliage of host plants are elongate with the body composed of a head, three-segmented thorax and five-segmented abdomen. Typically there are three pairs of legs on thorax and five pairs of abdominal legs on segments 3 - 6 and 10. Caterpillar stage lasts for 10 - 14 days.



Larva of Southern Birdwing



Pupa of Southern Birdwing

The next stage, *The Pupa*, is entirely different from the caterpillar which is devoid of visible appendages and is oval or cylindrical in shape. Pupal stage lasts for 7-15 days after which eclosion of the adult butterfly takes place.

*The Butterfly* has colourful wings, elongated clubbed antennae and a coiled feeding tube (haustellum). Unlike the caterpillar, it feeds on nectar or sap exuding from trees or fruits. The life span of butterflies is usually 2 - 3 weeks.

Adult : Southern Birdwing (*Troides minos*)







Red Pierrot  
(*Talicada nyseus nyseus*)



Blue Mormon  
(*Papilio polymnestor*)



Commander  
(*Moduza procris*)



Yam Fly  
(*Loxura atymnus atymnus*)

## Some common butterflies of Kerala and their host plants

### BUTTERFLY SPECIES

### LARVAL HOST PLANTS

<i>Pachliopta hector</i> (Crimson Rose)	<i>Aristolochia indica</i>
<i>P. aristolochiae</i> (Common Rose)	<i>Aristolochia indica</i>
<i>Troides minos</i> (Southern Birdwing)	<i>Aristolochia indica</i> , <i>Thottea siliquosa</i>
<i>Graphium doson</i> (Common Jay)	<i>Michelia champaca</i>
<i>Graphium agamemnon</i> (Tailed Jay)	<i>Michelia champaca</i> , <i>Annona</i> sp.
<i>Graphium sarpedon</i> (Blue Bottle)	<i>Cinnamomum verum</i>
<i>Chilasa clytia</i> (Common Mime)	<i>Cinnamomum verum</i>
<i>Papilio demoleus</i> (Lime Butterfly)	<i>Citrus limon</i> , <i>Citrus</i> spp., <i>Aegle marmelos</i> , <i>Ruta graveolens</i> ,
<i>Murraya koenigii</i>	
<i>Papilio polytes</i> (Common Mormon)	<i>Citrus aurantia</i> , <i>Citrus medica</i> , <i>Citrus aurantifolia</i> , <i>Citrus limon</i> ,
	<i>Aegle marmelos</i> , <i>Murraya koenigii</i> , <i>Murraya exotica</i> , <i>Zanthoxylum rhetsa</i> .
<i>Papilio polymnestor</i> (Blue Mormon)	<i>Citrus aurantia</i> , <i>Citrus grandis</i>
<i>Papilio helenus</i> (Red Helen)	<i>Zanthoxylum rhetsa</i>
<i>Delias eucharis</i> (Common Jezebel)	<i>Loranthus</i> sp.
<i>Eurema hecabe</i> (Common Grass Yellow)	<i>Cassia fistula</i> , <i>Cassia tora</i> , <i>Albizia odoratissima</i> ,
<i>Caesalpinia pulcherima</i>	
<i>Catopsilia pomona</i> (Common Emigrant)	<i>Cassia</i> sp.
<i>Catopsilia pyranthe</i> (Mottled Emigrant)	<i>Cassia occidentalis</i> , <i>Cassia</i> sp.
<i>Gangara thyrus</i> (Giant Red Eye)	Ornamental palms
<i>Tirumala limniace</i> (Blue Tiger)	<i>Wattakaka volubilis</i>
<i>Tirumala septentrionis</i> (Dark Blue Tiger)	<i>Wattakaka volubilis</i>
<i>Parantica aglea</i> (Glassy Blue Tiger)	<i>Tylophora indica</i>
<i>Danaus genutia</i> (Striped Tiger)	<i>Asclepias curassavica</i>
<i>Danaus chrysippus</i> (Plain Tiger)	<i>Calotropis gigantea</i>
<i>Euploea core</i> (Common Crow)	<i>Carissa carandas</i> , <i>Ficus religiosa</i> , <i>Ficus tomentosa</i> , <i>Ficus racemosa</i> ,
	<i>Hemidesmus indicus</i>
<i>Talicada nyseus</i> (Red Pierrot)	<i>Kalanchoe blossfeldiana</i> , <i>Kalanchoe pinnata</i>
<i>Rathinda amor</i> (Monkey Puzzle)	<i>Mangifera indica</i> , <i>Ixora</i> sp.
<i>Moduza procris</i> (Commander)	<i>Mussaenda laxa</i>
<i>Cupha erymanthis</i> (Southern Rustic)	<i>Flacourtia</i> sp.
<i>Acraea violae</i> (Tawny Coster)	<i>Passiflora edulis</i>

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