

WINGED JEWELS

LET'S UNFOLD THEIR GRACEFUL WINGS



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YOUTH FORUM FOR NATURE (YoFONA)
COLLEGE OF FORESTRY, SIRSI



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Foreword



Prof. K. N. Ganeshiah

School of Ecology and
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For a serious student of forestry, understanding all aspects of the biological diversity, from local to the global level, is very essential. While 'watching birds' is more popular and relatively well established, 'butterfly watching' and recording their diversity is relatively new area of out-door activity. However, failing to watch these winged jewels is like ignoring a vast, bigger and more colorful part of natural beauty.

The e-Book "Winged Jewels" offers a perfect introduction to the world of butterflies in and around the College of Forestry, Sirsi Campus. Being situated in the heart of the Western Ghats, this campus itself is a wonderful place to learn about butterflies. Reader can really enjoy the glorious pictures, learn natural history of butterflies and also use the printed version outdoors to identify flying jewels. It is easy.

Using this book over different seasons makes oneself familiar with the changing species composition of these tiny marvels. With time, the butterflies around the campus would become your friends.

The students of College of Forestry have passionately watched butterflies, meticulously recorded their diversity and neatly executed the production of this book. I commend their hard work and congratulate them for being an inspiration to the students of other campuses.

I am sure this book would become the means of adding many happy hours of purest enjoyment in the lives of forestry students and lure them into the fields and woods of the out-door world.

I am delighted to see that the student members of the Youth Forum for Nature of the College of Forestry, Sirsi have brought out this very informative e-book on the butterflies found in and around their campus. Today I see a renewed interest in studying insects like butterflies, moths and dragonflies all over India, and I am glad that the student of the College of Forestry, Sirsi have taken a good lead in this pursuit.

I must congratulate the student members of the Youth Forum for Nature for bringing out such an excellent e-book on butterflies found in the Western Ghats. After reading this book on the flying jewels, I am sure people will surely fall in love with nature. And once they start appreciating nature, they will surely strive hard to protect nature, which is now the need of the hour.



Isaac Kehimkar

Director
iNaturewatch Foundation
Navi Mumbai

A Few Opinions



B. P. Ravi, IFS
APCCF & Member Secretary
Zoo Authority of Karnataka

“Glad to see these students bringing out an e-book, titled ‘Winged Jewels’ on 176 species. Identification & documentation of flora and fauna is critical to understand rich diversity of our landscape, specially at the times of climate change & its effects on bio-diversity. When most of us concentrate on bigger & fashionable wild animals, the young authors have done a commendable work of documenting butterflies in their surroundings. I appreciate this special attitude, interest & efforts of young budding researchers. Good photographs, brief description, easy narration in the e-book adopted by the authors are very handy to understand these little natural beauties of the jungle. Definitely this e-book is helpful to create awareness and curiosity about butterflies, especially among children of the area. Learning & getting good grades is important while studying, but these young guys are terrific that they lay their hands-on documentation of local bio-diversity. Hats off to them.”

“I am happy to see educational institutions and students forming partnerships to come out with publications which are a visual delight along with educational value. The book on butterflies is one such and I wish the team many more such publications. The layout and format is simple and is a great reference point for nature lovers as a field guide. The quality of the photographs and text is exceptional. Hope this book serves all nature lovers to hone their natural history skills with respect to butterflies of the Western Ghats”



Vijay Mohan Raj V., IFS
Chief Conservator of Forests
Chikkamagalooru Circle



Manojkumar, IFS
Member Secretary
Karnataka State Pollution
Control Board, Bengaluru

“Butterflies have always been quite fascinating creatures and ecologically sensitive. When we are children the sight, color and activity of butterflies creates a sense of curiosity. As we grow older we tend to lose the sight of these winged jewels that once created curiosity and fascination. Because of their sensitivity towards the climate the population is fast dwindling especially in urban environment. At the same time it requires very little effort to create an enabling atmosphere where the butterflies can thrive. Therefore this e-guide prepared by our students can be a wonderful work in creating awareness and encouraging people to appreciate the beauty and significance of the butterflies in our ecosystem. My sincere gratitude and heartfelt congratulations to all those who are involved in this endeavor.”

Acknowledgement

This book became possible out of a team work with a lot of support and encouragement from professors, seniors, classmates, and juniors of our college. I thank each and everyone who lent their helping hands in our small endeavor. We express our sincere gratitude to Dean, College of Forestry, Sirsi, Shri. Shridhar D. Bhat, Assistant Professor (Wildlife Management), Shri. Ramesh S. Rathod, Assistant Professor (Forestry), Dr. R. Vasudeva, Professor (Forest Biology), Dr. H. Shivanna, Professor (Tree Physiology), Dr K. S. Channabasappa, Professor (Agronomy), Dr. Shrikant Gunaga (Plant Taxonomist), Dr. Jagadeesh M. R., Assistant Professor (Forestry), Dr. Javaregowda, Professor (Entomology) and Shri. Hanumantha M. Assistant Professor (Forest Utilization) for their support.

I thank our seniors Charan G. S., Ashish A. P., Mahesh Mendigeri, Imran A. R. Patel, Sneha S. Kambli, Vijay Kumar G. S., Keshava Murthy V. C., Rakshith Kumar S., Chaithra P. Menasinakai, V. Sarmishta and Rashmi S. Pujar for their pioneering work on butterflies in and around campus and for laying the foundation of YOFONA.

I thank Keshava Murthy V. C. and Girish Kumar for sharing their knowledge with us and helping us in all stages of development of this book.

Our beloved seniors Shravankumar Nalwad, Vinayak Pai, Charan G. S., Shabaz Noori, Shanmukha D. M., Gulshir Nadaf and Praveen R. Barki were along with us, lending all the support and encouragement. I thank them for their unconditional love and support.

I extend my gratitude to my classmates Adarsh U. G., Sankar Thampuran M. V., Krishna N. B., Arun Kumar B. K., Shrikrishna D. Gurava, Amith J., Karthik N. J., Rudregowda B. V., Pramod Kanavi, Shiva Kumar B. H., Manjunath Gugad, Honnesh B. S., Vijay G., Nagaraj Adur, Basavaraj and my juniors Balabheema A. G., Hanumantha B. Karigar, Guruprasad D., Chetan Pujari, Manjunath Rahutar, Anand Meherwade and Chandan C. for their constructive share in the development of this book.

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Udaya Kumar K.
Senior Author, on behalf of YOFONA.

Introduction

Butterflies are the indicators of ecological well being. They have fascinated humankind from times immemorial. Coming under the large insect group called Lepidoptera; Butterflies pollinate plants; are integral part to the food chain and also indicate climate change and degradation or well being of the environment. In the world there are about 17,000-20,000 or more species of butterflies, and in India, 1502 species. Our Western Ghats alone supports 330 species of these magnificent creatures. In Karnataka, this number is about 318 species.

College of Forestry, Sirsi

Our campus, College of Forestry, Sirsi, is situated at an elevation of 600m above MSL, having the coordinates 14° 35'59''N; 74° 50'58''E. This lush green campus though small in area is rich in its biodiversity, housing many endemic and endangered species of flora and fauna. The landscape around our campus comprises of degraded forests, moist deciduous and dry deciduous forests as well as Acacia plantations, which all contribute towards having a biologically diverse natural environment for our studies.



College of Forestry, Sirsi, rich in its butterfly wealth, is home to some of the most amazing species of flora and fauna creating enthusiasm to learn about them in us, the students.

To understand this butterfly diversity, compilers were out in the field, within the college campus and to a radius of 3 km, the area was surveyed and the butterflies observed were listed. This included anecdotal observations and the duration of compilation was about 5 years.

Totally 176 butterfly species belonging to six families were recorded in and around our campus through visual observations of their wing color, patterns and also referring to the field guides. Nymphalidae family consists of maximum number (56) of butterfly species followed by Lycaenidae (52), Hesperidae (36), Papilionidae (16), Pieridae (15) and Riodinidae (1). Among them 18 species Endemic to Western Ghats; and 5, 18 and 2, species in Schedule I, II, IV of the Wildlife (Protection) Act, respectively.

Morphology

Morphology of an adult butterfly can be explained and studied by dividing its body into 3 parts, namely **Head, Thorax** and **Abdomen**

Head

Head, the anterior portion of the body carries the most important sensory organs- A pair of club ended antennae, the receptors of scent and a pair of compound eyes for vision. Also present besides the antennae are two sensory palps acting as the organ of touch and also shielding the eyes.

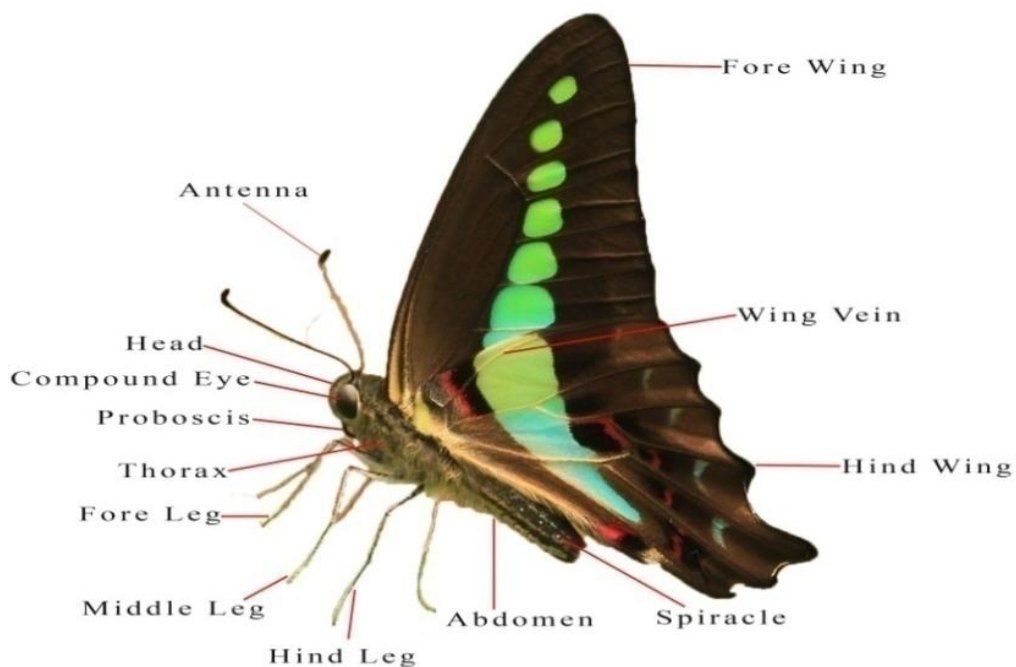
Thorax

Thorax to which the head is joined by a thin , short and membranous neck is a portion made of three segments fused together –the **Pro, Meso** and **Meta-thorax** each segment carrying a pair of legs.

The first two segments i.e. Prothorax and Mesothorax each carry a pair of wings, the forewings and hindwings.

Abdomen

Abdomen of an adult butterfly consists of ten segments, and is cylindrical, slim and fairly long. The abdomen consists of organs for digestion, excretion, respiration and reproduction. Out of ten, only seven or eight are visible with last two or three modified to form reproductive parts. Butterfly exhibit tracheal respiration in which oxygen is supplied directly to tissue through tubules called tracheae which open to the outside through spiracles. A tubular heart at the back keeps the blood moving between the tissues with no blood vessels.



Life cycle of a Butterfly

1. EGG:

Soon after mating, the adult female starts its search for an appropriate food plant for egg laying. Butterflies lay their eggs singly or in batches. According to the species the eggs vary in shape, texture and size. The egg shell or chorion is tough, made up of chitin and coated with an adhesive for sticking to the leaf surface. Micropyle, a minute opening at the top of the egg allows exchange of gases for the developing caterpillar.



2. Caterpillar:

The fertilized egg takes from 3-7 days for hatching. The caterpillar emerges by biting through the egg shell and its first food is the empty eggshell. Later it feeds only on its food plant, eating leaf, bud, flower and shoot that come in its way. This is the only stage of growth in the life of a butterfly, though caterpillar body grows rapidly, its skin does not grow along with the body, but stretches to accommodate the growing body to a limit.



3. Pupa:

On attaining full growth, the caterpillar ceases to feed and begins to wander restlessly on the food plant or moves away to some other plant or ground. Soon the undigested food is thrown out clearing the digestive tract. Finally the caterpillar settles down on a suitable spot. Each type or species form a pupa of its own peculiar shape and pattern, appearing almost lifeless and inert, but inside there is great activity and metamorphosis. The tissues and structures of the caterpillar are broken down and replaced with those of the adult butterfly. The duration of the pupal stage depends upon the prevailing weather and vegetational season; some may go for hibernation or diapause if climate is not suitable.



4. Adult:

The sight of emergence of the butterfly is one of the fascinating moments in nature. The pupal case becomes transparent the night before emergence, making the colours of the wings to be seen and by morning, the colours darken and the pupal case splits open at the head. On exposure to the air, the soft wings gradually become stronger. After resting thus for half an hour or so, the newly emerged butterfly first starts flapping its wings a few times and then takes off. (Life cycle of Commoner butterfly)



Interesting facts on Butterflies

I. Butterfly Behavior

Patrolling: Exhibited by male butterflies, they fly up and down in different probable areas like streams, flower patches, etc to find a female.

Basking: Being cold blooded, butterflies rely on solar radiation to absorb heat energy to maintain their metabolism. Hence they bask in the sunlight with their wings widely opened to maximize the heat absorption.

Courtship: In courtship flight, the male flies near the female vibrating his wings and dispersing airborne pheromones to make the female receptive for mating.

Roosting: You can find butterflies sitting on the tip of grass blades or under the leaf surface to take an overnight rest after its day time activity.



Basking



Courtship



Roosting

Mud puddling: Newly born males are often found puddling in damp places to absorb salts and minerals required for pheromone and sperm production.

Hill topping: The male butterfly can usually be found on top of hills or tree tops from which it has a clear view and waits for female to make an appearance. At the same time he can guard his territory.

Hibernation: In extreme climatic condition butterflies can go into a stage of diapause till favorable conditions are achieved. This is usually exhibited during developmental stage.



Mud puddling

II. Adaptations

Speed: Faster the butterfly flights, lesser the chance of predation.

Camouflage: An anti-predatory adaption by which the butterfly can remain undetectable to its predator by resembling its surrounding.



Camouflage

Butterfly mimicry: An adaption, in which a butterfly survives from its predators by resembling an unpalatable or toxic species.

Batesian mimicry- In this, a butterfly which is palatable escapes its predator by resembling an unpalatable or toxic one (Example: Common Mormon female)



Form stichius - mimics Common Rose



Form romulus – mimics Crimson Rose

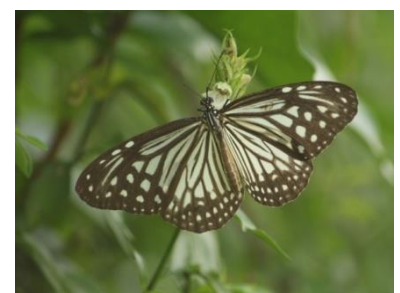
Mullerian mimicry- A form of mimicry in which all members of a group have similar appearance and are unpalatable, which act as shared protective device.



Blue Tiger



Dark Blue Tiger



Glassy Tiger

Flash colouration: Prominent eye spots on the upper side of different butterflies help them to startle the predator.



Peacock Pansy



Blue Oakleaf

Warning colouration: Bright colouration and pattern on wings which warns the predator about a prey that is unpalatable, toxic or dangerous.



Danaid Eggfly



Plain Tiger

III. Variation

Seasonal forms: As an adaptive response to changing season providing protection against predators.



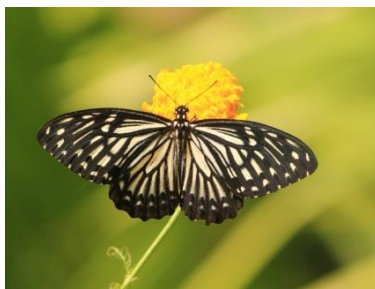
Wet Season Form (WSF)



Dry Season Form (DSF)

Chocolate Albatross

Dimorphism: Existence of two different forms within a species.



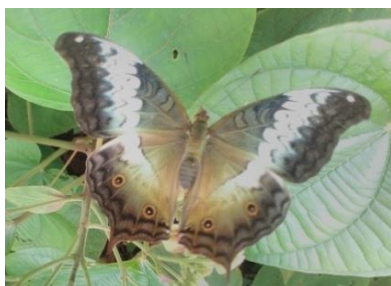
Form dissimilis



Form clytia

Common Mime

Sexual Dimorphism: Phenomenon in which male and female of a species are morphologically different.



Female



Male

Cruiser

Polymorphism: Some butterflies exhibit more than two forms, like in case of Common Mormon wherein females have 3 different forms - namely, *form stichius* - mimicing Common Rose, *form romulus* - mimicing Crimson Rose and *form cyrus* - mimicing male of the same species.

Migration: Butterflies tend to move from one geographical area to another either as response to adverse climatic conditions or in search of food.

Short distance migration and Long distance migration

Lifespan: The lifespan of most butterflies ranges from two to four weeks (even upto 8 months as in case of some Nymphalids and Swallowtails) depending on the species. The larger the size, the longer will be the lifespan.

HESPERIIDAE (SKIPPERS)

HESPERIIDAE -

The skipper family derives their name from their Skipping nature i.e. the rapid flight, enabling their fast movement. They have stout bodies and relatively small angular wings making their appearance different from other butterfly families. Most HesperIIDae members have their antennae tip modified to a narrow hook like projection and are equipped with long proboscis for taking nectar from tubular flowers.

Skippers either rest holding their wings open flat or closed with forewings partially open. Most of the skippers lay dome shaped eggs either singly or in batches, which on hatching, cylindrical caterpillar with flat belly and narrow anterior and posterior ends comes out. Caterpillars of skippers are usually leaf folders or leaf rollers with nocturnal feeding habit. Chrysalis formed is long and tapering.

Most Skippers are monophagous, depending on monocotyledons, especially grasses, bamboos, palms etc. Others depend on dicotyledons such as *Grewia*, *Terminalia*, *Dalbergia*.



1. **Common name:** Common Banded Awl

Scientific name: *Hasora chromus*

Wingspan : 45-50mm

Status : Common



2. **Common name:** Brown Awl

Scientific name: *Badamia exclamationis*

Wingspan : 50-55mm

Status : Not rare



3. **Common name:** Indian Skipper

Scientific name: *Spialia galba*

Wingspan : 20-27mm

Status : Common

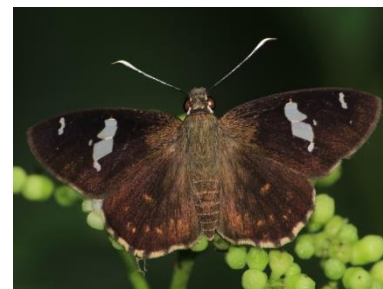


4. **Common name:** Common Spotted Flat

Scientific name: *Celaenorrhinus leucocera*

Wing span : 45-55mm

Status : Common



5. **Common name:** Common Small Flat
Scientific name: *Sarangesa dasahara*
Wing span : 26-35mm
Status : Common



6. **Common name:** Fulvous Pied Flat
Scientific name: *Pseudocoladenia dan*
Wing span : 40-46mm
Status : Common



7. **Common name:** Tricoloured Pied Flat
Scientific name: *Coladenia indrani*
Wing span : 40-46mm
Status : Common



8. **Common name:** Suffused Snow Flat
Scientific name: *Tagiades gana*
Wing span : 45-50mm
Status : Not rare



9. **Common name:** Water Snow Flat
Scientific name: *Tagiades litigiosa*
Wing span : 37-44mm

Status : Not rare



10. **Common name:** Chestnut Angle
Scientific name: *Odontoptilum angulata*
Wing span : 40-45mm

Status : Not rare



11. **Common name:** Golden Angle
Scientific name: *Caprona ransonneti*
Wing span : 35-45mm

Status : Not rare



12. **Common name:** Tamil Grass Dart
Scientific name: *Taractrocera ceramas*
Wing span : 23-30mm

Status : Locally Abundant



13. **Common name:** Indian Dartlet
Scientific name: *Oriens goloides*
Wing span : 24-28mm
Status : Common



14. **Common name:** Dark Palm Dart
Scientific name: *Telicota ancilla*
Wing span : 33-36mm
Status : Common



15. **Common name:** Pale Palm Dart
Scientific name: *Telicota colon*
Wing span : 32-36mm
Status : Not rare



16. **Common name:** Oriental Straight Swift
Scientific name: *Parnara bada*
Wingspan : 32-38mm
Status : Common



17. **Common name:** Rice Swift
Scientific name: *Borbo cinnara*
Wing span : 30-36mm
Status : Common



18. **Common name:** Small Branded Swift
Scientific name: *Pelopidas mathias*
Wing span : 32-38mm
Status : Common



19. **Common name:** Conjoined Swift
Scientific name: *Pelopidas conjuncta*
Wing span : 45-52mm
Status : Not rare



20. **Common name:** Blank Swift
Scientific name: *Caltoris kumara*
Wing span : 42-46mm
Status : Common



21. **Common name:** Karwar Swift
Scientific name: *Caltoris canaraica*
Wing span : 41mm
Status : Common
❖ **Endemic to Western Ghats**



22. **Common name:** Bicolor Ace
Scientific name: *Sovia hyrtacus*
Wing span : 36mm
Status : Rare
❖ **Endemic to Western Ghats**



23. **Common name:** Vindhyan Bob
Scientific name: *Arnetta vindhiana*
Wing span : 25-32mm
Status : Not rare



24. **Common name:** Indian Palm Bob
Scientific name: *Suastus gremius*
Wing span : 32-45mm
Status : Common



25. **Common name:** Tree Flitter
Scientific name: *Hyarotis adrastus*
Wing span : 38-48mm

Status : Not common

❖ **Schedule IV Species**



26. **Common name:** Common Redeye
Scientific name: *Matapa aria*
Wing span : 40-55mm

Status : Common



27. **Common name:** Chestnut Bob
Scientific name: *Iambrix salsala*
Wing span : 26-30mm

Status : Common



28. **Common name:** Restricted Demon
Scientific name: *Notocrypta curvifascia*
Wingspan : 38-50mm

Status : Common



29. **Common name:** Common Banded Demon

Scientific name: *Notocrypta paralysos*

Wing span : 33-40mm

Status : Locally Common



30. **Common name:** Grass Demon

Scientific name : *Udaspes folus*

Wing span : 40-48mm

Status : Common



31. **Common name:** Bush Hopper

Scientific name: *Ampittia dioscorides*

Wing span : 22-28mm

Status : Locally Common



32. **Common name:** Pygmy Scrub Hopper

Scientific name: *Aeromachus pygmaeus*

Wing span : 20-22mm

Status : Common



33. **Common name:** Indian Ace
Scientific name: *Halpe homolea*
Wing span : 30-36mm

Status : Common

❖ **Schedule II Species**



34. **Common name:** Moore's Ace
Scientific name: *Halpe porus*
Wing span : 32mm

Status : Not rare



35. **Common name:** Madras Ace
Scientific name: *Thoressa honorei*
Wing span : 30-38mm

Status : Not common

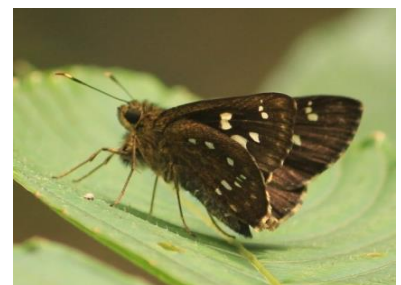
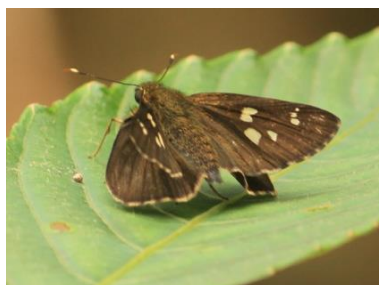
❖ **Schedule IV Species**
❖ **Endemic to Western Ghats**



36. **Common name:** Southern Spotted Ace
Scientific name: *Thoressa astigmata*
Wing span : 39mm

Status : Not rare

❖ **Endemic to Western Ghats**



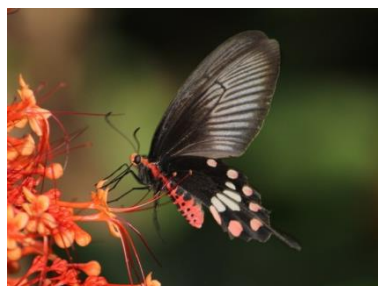
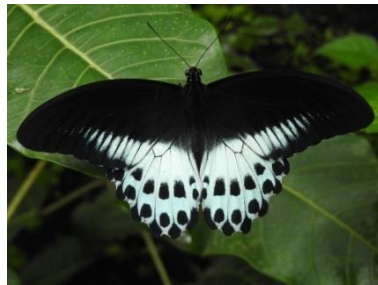
PAPILIONIDAE (SWALLOWTAILS)

PAPILIONIDAE-

This brightly coloured group of butterflies can attract anyone with their mesmerizing colouration. They get the name swallowtail as most of them are with tailed hindwings. This family comprises of the largest butterflies of the world. In swallowtails, bases of the antennae are close together.

Swallowtails lay large spherical eggs. The egg hatches to give stout, cylindrical caterpillar which feeds on the egg shell as their first diet. Papilionid larvae have a fork shaped defensive organ called 'Osmeterium' in the prothoracic segment which can be everted, emitting pungent smell, when the larvae feels threatened. Pupa is of different forms but usually curved backward. It is attached in perpendicular position by the tail and secured by a silk loop round the middle.

Southern Birdwing (140-190mm), India's largest butterfly comes under this family.



Papilionidae

Swallowtails

37. **Common name:** Common Bluebottle

Scientific name: *Graphium sarpedon*

Wing span : 80-90mm

Status : Common



38. **Common name:** Common Jay

Scientific name: *Graphium doson*

Wing span : 70-80mm

Status : Locally Common



39. **Common name:** Tailed Jay

Scientific name: *Graphium agamemnon*

Wing span : 85-100mm

Status : Common



40. **Common name:** Spot Swordtail

Scientific name: *Graphium nomius*

Wing span : 75-90mm

Status : Locally Common

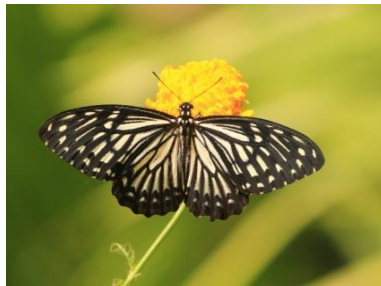


41. Common name: Common Mime

Scientific name: *Chilasa clytia*

Wing span : 90-100mm

Status : Not rare



form *dissimilis*



form *clytia*

42. Common name: Common Mormon

Scientific name: *Papilio polytes*

Wing span : 90-100mm

Status : Very Common



Male



form *stichius*



form *romulus*

Female

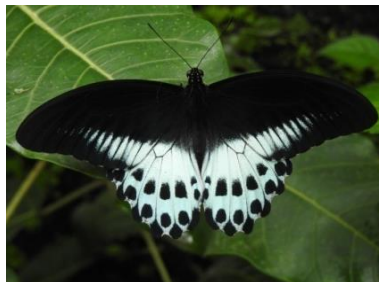
43. **Common name:** Malabar Raven
Scientific name: *Papilio dravidarum*
Wing span : 80-120mm
Status : Uncommon
❖ **Endemic to Western Ghats**



44. **Common name:** Red Helen
Scientific name: *Papilio helenus*
Wing span : 110-130mm
Status : Common



45. **Common name:** Blue Mormon
Scientific name: *Papilio polymnestor*
Wing span : 120-150mm
Status : Not rare
❖ **State butterfly of Maharashtra**



46. **Common name:** Lime Butterfly
Scientific name: *Papilio demoleus*
Wing span : 80-100mm
Status : Very Common



Papilionidae

Swallowtails

47. **Common name:** Paris Peacock

Scientific name: *Papilio paris*

Wing span : 90-140mm

Status : Not rare



48. **Common name:** Malabar Banded Peacock

Scientific name: *Papilio buddha*

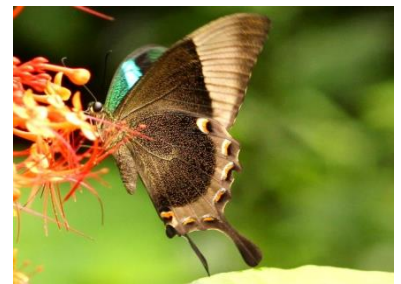
Wing span : 90-100mm

Status : Rare

❖ **Endemic to Western Ghats**

❖ **Schedule II Species**

❖ **State butterfly of Kerala**

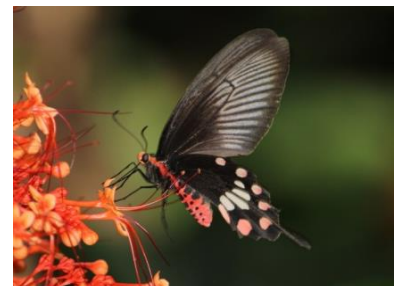
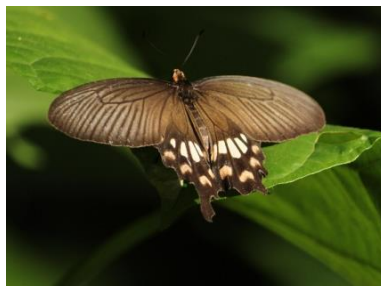


49. **Common name:** Common Rose

Scientific name: *Pachliopta aristolochiae*

Wing span : 80-110mm

Status : Common



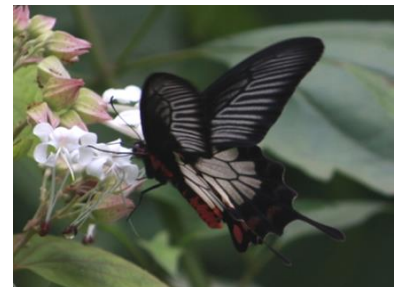
50. **Common name:** Malabar Rose

Scientific name: *Pachliopta pandiyana*

Wingspan : 100-130mm

Status : Locally Common

❖ **Endemic to Western Ghats**



51. **Common name:** Crimson Rose
Scientific name: *Pachliopta hector*
Wing span : 90-110mm

Status : Common

❖ **Schedule I Species**



52. **Common name:** Southern Birdwing
Scientific name: *Troides minos*
Wing span : 140-190mm

Status : Not Rare

- ❖ **Endemic to Western Ghats**
- ❖ **State butterfly of Karnataka**
- ❖ **The Largest Butterfly of India**



PIERIDAE (WHITES AND YELLOWS)

PIERIDAE-

Whites and Yellows, as the name suggests have white and yellow colouration, with black, red or orange markings. Being strong fliers, most of them prefer open lands as their habitat. The males can be spotted gregariously during mud-puddling when they imbibe salts from moist soils. Most Pieridae members exhibit sexual dimorphism with male and female differing in the pattern and number of black markings.

Spindle shaped eggs are laid singly or in batches. On hatching, the early instar larvae usually feed together in groups. The caterpillar is greenish in colour with a smooth and cylindrical body. The Pierids have their pupae held at an angle by a silk girdle running at the first abdominal segment.

Most of them exhibit seasonal variation in colouration, i.e., different wet and dry season forms. As a protective mechanism against predators, a few Pierids have unpalatable nature derived from chemicals obtained from host plants and warning colourations.



53. **Common name:** One Spot Grass Yellow

Scientific name: *Eurema andersoni*

Wing span : 38-45mm

Status : Not rare

❖ **Schedule II Species**



54. **Common name:** Three-Spot Grass Yellow

Scientific name: *Eurema blanda*

Wing span : 40-50mm

Status : Common



55. **Common name:** Small Grass Yellow

Scientific name: *Eurema brigitta*

Wing span : 30-40mm

Status : Common



56. **Common name:** Common Grass Yellow

Scientific name: *Eurema hecabe*

Wing span : 40-50mm

Status : Common



Pieridae

Whites and Yellows

57. **Common name:** Spotless Grass Yellow

Scientific name: *Eurema laeta*

Wing span : 30-45mm

Status : Common

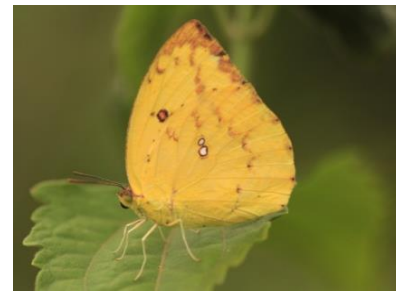


58. **Common name:** Common Emigrant

Scientific name: *Catopsilia pomona*

Wing span : 55-80mm

Status : Common



59. **Common name:** Mottled Emigrant

Scientific name: *Catopsilia pyranthe*

Wing span : 50-70mm

Status : Common

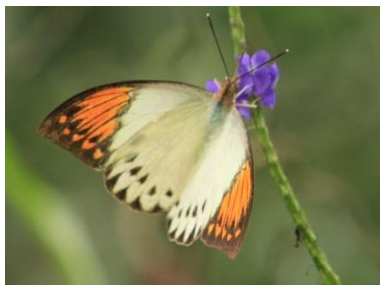


60. **Common name:** Great Orange Tip

Scientific name: *Hebomoia glaucippe*

Wing span : 80-100mm

Status : Common



Pieridae

Whites and Yellows

61. **Common name:** Common Wanderer

Scientific name: *Pareronia valeria*

Wing span : 65-80mm

Status : Common



Male



Female

62. **Common name:** Chocolate Albatross

Scientific name: *Appias lyncida*

Wingspan : 55-70mm

Status : Locally Common

❖ **Schedule II (part II) Species**



63. **Common name:** Common Albatross

Scientific name: *Appias albina*

Wingspan : 60-75mm

Status : Common

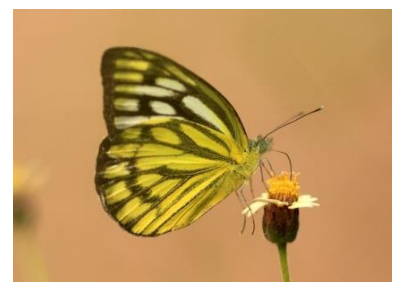


64. **Common name:** Common Gull

Scientific name: *Cepora nerissa*

Wingspan : 40-65mm

Status : Common



Pieridae

Whites and Yellows

65. **Common name:** Common Jezebel

Scientific name: *Delias eucharis*

Wing span : 66-83mm

Status : Common



66. **Common name:** Oriental Psyche

Scientific name: *Leptosia nina*

Wing span : 35-50mm

Status : Common



67. **Common name:** Pioneer

Scientific name: *Belenois aurota*

Wingspan : 40-55mm

Status : Common



LYCAENIDAE (BLUES)

LYCAENIDAE-

Blues, the second largest family comprises of small to medium sized butterflies which are brightly coloured, usually with a metallic tinge. Many Lycaenids despite having the name blue have no blue colouration on their wings. Adult individuals often have hairy antenna-like tails complete with black and white annulated (ringed) appearance. The dark spots at the end of tail provides decoy from potential predator, making the predator unable to recognize the true head.

Lycaenid eggs are turban shaped with both ends flattened and slightly cylindrical with smooth or pitted surface. Larvae are often flattened with segmented body and retractable head having glands that produce secretions that attract and subdue ants. Pupation occurs in ground (leaf litter) or tree cervices with the pupae existing in association with ants in many cases.

Lycaenids are diverse in their food habits and apart from phytophagy, some of them are entomophagous feeding on aphids, scale, insects and ant larvae.

Grass jewel (15-22mm), the smallest butterfly of India comes under this family.



68. Common name: Common Apefly

Scientific name: *Spalgis epius*

Wing span : 20-30mm

Status : Not Common



69. Common name: Indian Sunbeam

Scientific name: *Curetis thetis*

Wing span : 40-48mm

Status : Not rare



70. Common name: Angled Sunbeam

Scientific name: *Curetis acuta*

Wing span : 35-42 mm

Status : Not rare



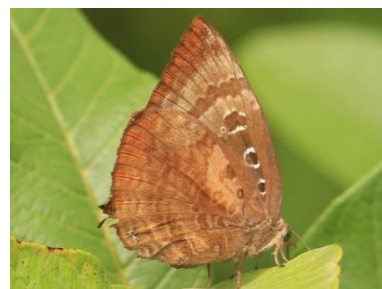
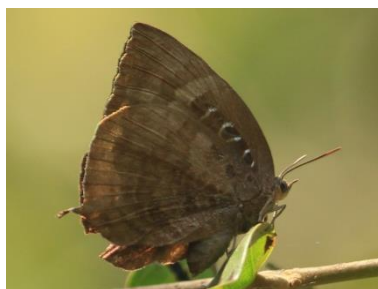
71. Common name: Western Centaur Oakblue

Scientific name: *Arhopala pseudocentaurus*

Wing span : 53-62mm

Status : Not common

❖ **Largest Lycaenid of Western Ghats**



72. **Common name:** Large Oakblue

Scientific name: *Arhopala amantes*

Wing span : 45-57mm

Status : Locally Common

❖ **2nd largest Lycaenid of Western Ghats**



73. **Common name:** Kanara Oakblue

Scientific name: *Arhopala alea*

Wingspan : 44-45mm

Status : Locally Common

❖ **Schedule I Species**

❖ **Endemic to Western Ghats**



74. **Common name:** Indian Purple Leafblue

Scientific name: *Amblypodia anita*

Wingspan : 45-52mm

Status : Not rare

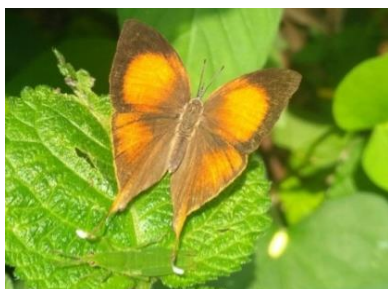


75. **Common name:** Yamfly

Scientific name: *Loxura atymnus*

Wing span : 36-40mm

Status : Common



76. **Common name:** Common Onyx

Scientific name: *Horaga onyx*

Wing span : 27-33mm

Status : Locally Common

❖ **Schedule II (part II) Species**



77. **Common name:** Monkey Puzzle

Scientific name: *Rathinda amor*

Wing span : 26-28mm

Status : Not rare



78. **Common name:** Common Imperial

Scientific name: *Cheritra freja*

Wing span : 38-42mm

Status : Locally Common



79. **Common name:** Peacock Royal

Scientific name: *Tajuria cippus*

Wingspan : 31-45mm

Status : Uncommon

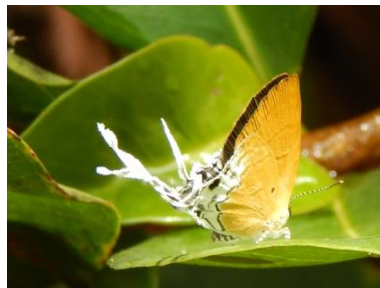
❖ **Schedule II Species**



- 80. Common name:** Banded Royal
Scientific name: *Rachana jalindra*
Wingspan : 36-44mm
Status : Rare to Very Rare
❖ **Schedule II Species**



- 81. Common name:** Fluffy Tit
Scientific name: *Zeltus amasa*
Wing span : 28-32mm
Status : Not Common



- 82. Common name:** Orchid Tit
Scientific name: *Chliaria othona*
Wing span : 24-27mm
Status : Rare
❖ **Schedule I Species**



- 83. Common name:** Common Guava Blue
Scientific name: *Deudorix isocrates*
Wingspan : 34-50mm
Status : Common



84. Common name: Large Guava Blue

Scientific name: *Deudorix perse*

Wingspan : 48-52mm

Status : Not rare



85. Common name: Cornelian

Scientific name: *Deudorix epijarbas*

Wing span : 34-44mm

Status : Not common



86. Common name: Indian Red Flash

Scientific name: *Rapala iarbus*

Wing span : 33-41mm

Status : Common



87. Common name: Slate Flash

Scientific name: *Rapala manea*

Wing span : 30-33mm

Status : Common



88. Common name: Indigo Flash
Scientific name: *Rapala varuna*
Wing span : 28-29mm

Status : Not rare

❖ **Schedule II (part II) Species**



89. Common name: Malabar Flash
Scientific name: *Rapala lankana*
Wingspan : 38-41mm

Status : Rare

❖ **Endemic to Western Ghats**



90. Common name: Common Tinsel
Scientific name: *Catapaecilma elegans*
Wingspan : 28-32mm

Status : Not rare



91. Common name: Long-banded Silverline
Scientific name: *Spindasis lohita*
Wing span : 30-42mm

Status : Common

❖ **Schedule II Species**



92. Common name: Common Silverline

Scientific name: *Spindasis vulcanus*

Wing span : 26-34mm

Status : Common



93. Common name: Scarce Shot Silverline

Scientific name: *Spindasis elima*

Wingspan : 28-42mm

Status : Not Common

❖ **Schedule II Species**



94. Common name: Pointed Ciliate Blue

Scientific name: *Anthene lycaenina*

Wing span : 24-29mm

Status : Not rare

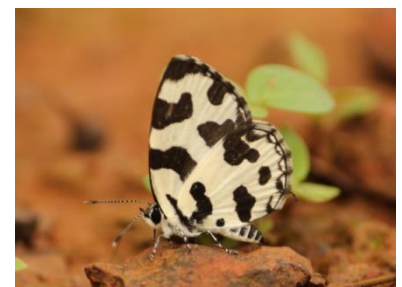


95. Common name: Angled Pierrot

Scientific name: *Caleta caleta*

Wingspan : 26-32mm

Status : Not rare

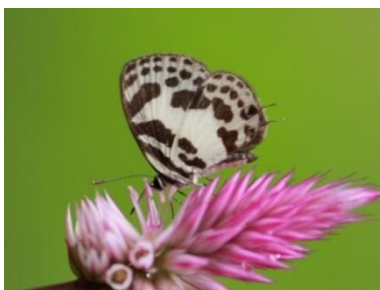


96. Common name: Banded Blue Pierrot

Scientific name: *Discolampa ethion*

Wing span : 26-30mm

Status : Locally Common

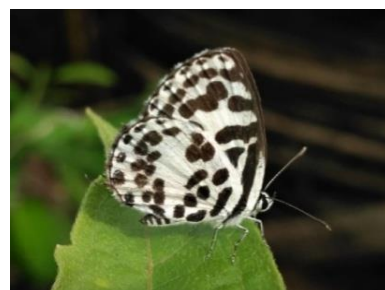
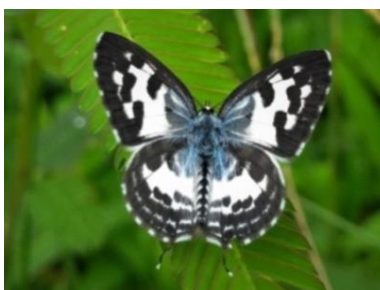


97. Common name: Common Pierrot

Scientific name: *Castalius rosimon*

Wing span : 24-34mm

Status : Common



98. Common name: Zebra Blue

Scientific name: *Leptotes plinius*

Wing span : 22-30mm

Status : Common



99. Common name: Dingy Line Blue

Scientific name: *Petrelaea dana*

Wing span : 24-28mm

Status : Not rare



100. Common name: Transparent Six-Lineblue

Scientific name: *Nacaduba kurava*

Wing span : 30-38mm

Status : Not rare



101. Common name: Common Lineblue

Scientific name: *Prosotas nora*

Wing span : 18-25mm

Status : Common

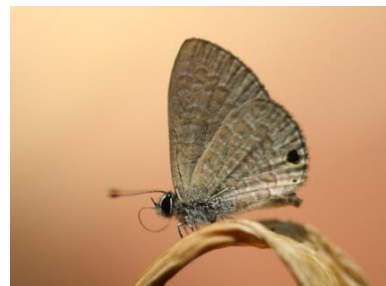


102. Common name: Tailless Lineblue

Scientific name: *Prosotas dubiosa indica*

Wing span : 22-26mm

Status : Common

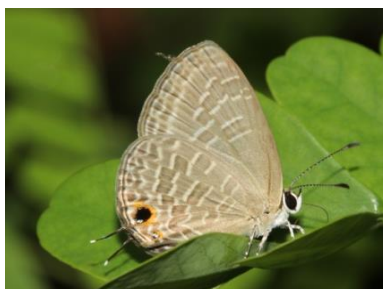


103. Common name: Dark Cerulean

Scientific name: *Jamides bochus*

Wing span : 25-34mm

Status : Common



104. Common name: Common Cerulean

Scientific name: *Jamides celeno*

Wing span : 27-40mm

Status : Common



105. Common name: Metallic Cerulean

Scientific name: *Jamides alecto*

Wing span : 30-44mm

Status : Locally Common



119. Common name: Forget-Me-Not

Scientific name: *Catochrysops strabo*

Wing span : 25-35mm

Status : Common



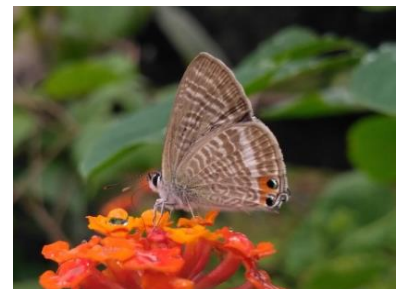
106. Common name: Pea Blue

Scientific name: *Lampides boeticus*

Wing span : 24-36mm

Status : Common

❖ **Schedule II Species**



- 107. Common name:** Dark Grass Blue
Scientific name: *Zizeeria karsandra*
Wing span : 18-24mm
Status : Common

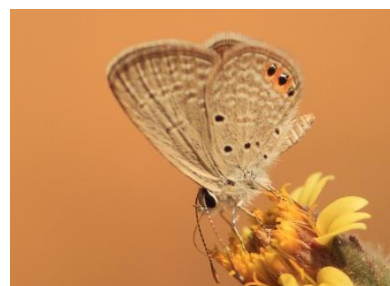


- 108. Common name:** Pale Grass Blue
Scientific name: *Pseudozizeeria maha*
Wing span : 26-30mm
Status : Common



- 109. Common name:** Grass Jewel
Scientific name: *Freyeria trochylus*
Wing span : 15-22mm
Status : Locally Common

❖ **The Smallest Butterfly of India**



- 110. Common name:** Lesser Grass Blue
Scientific name: *Zizina otis*
Wing span : 19-26mm
Status : Common

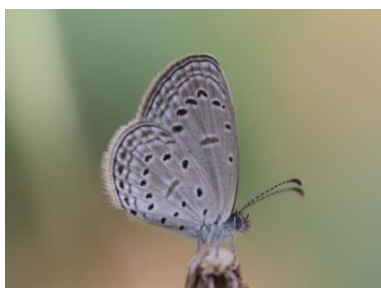


111. Common name: Tiny Grass Blue

Scientific name: *Zizula hylax*

Wing span : 16-24mm

Status : Common



112. Common name: Red Pierrot

Scientific name: *Talicauda nyseus*

Wing span : 30-36mm

Status : Locally Common



113. Common name: Quaker

Scientific name: *Neopithecops zalmora*

Wing span : 16-30mm

Status : Common

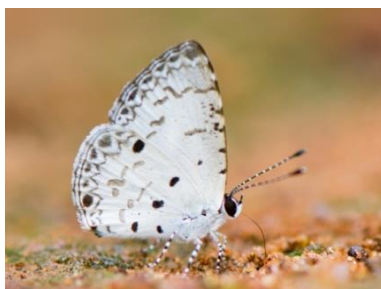


114. Common name: Malayan

Scientific name: *Megisba malaya*

Wing span : 19-30mm

Status : Not rare



115. **Common name:** Gram Blue
Scientific name: *Euchrysops cnejus*
Wing span : 25-33mm

Status : Common

❖ **Schedule II (part II) Species**



116. **Common name:** Common Hedge Blue
Scientific name: *Acytolepis puspa*
Wing span : 28-35mm

Status : Common



117. **Common name:** Plains Cupid
Scientific name: *Chilades pandava*
Wing span : 25-35mm

Status : Locally Common



118. **Common name:** Lime Blue
Scientific name: *Chilades lajus*
Wing span : 26-30mm

Status : Common

❖ **Schedule II (part II) Species**



RIODINIDAE (Metalmarks)

RIODINIDAE-

Earlier treated as a subfamily under Lycaenidae, Riodinidae consists of members with metallic markings on their wings, hence the name Metalmarks. They are small reddish brown bodied with yellowish green eyes. Being active fliers, they exhibit short hopping flight and can be observed usually in motion. Male butterflies are devoid of scent scales.

Riodinid eggs are round with smooth surface. On hatching, hairy larvae with its body covered with setae comes out. Life histories of Riodinid butterflies are poorly known.

120. Common name: Double Banded Judy

Scientific name: *Abisara bifasciata*

Wing span : 40-50mm

Status : Common



NYMPHALIDAE (Brush-footed)

NYMPHALIDAE-

The largest family of butterflies, this group has members with four legs reduced to a small hairy brush, giving the name Brush-footed butterflies. The fore legs are held pressed against the underside of the thorax, giving a fore legged appearance. Size of Nymphalids ranges from medium to large, with a vast majority being in medium size. Brush-footed butterflies vary greatly in colouration.

Size and shape of egg vary considerably within the family. The caterpillars are hairy or spiky with projections on head. Chrysalids having shiny spots are suspended free from the anal hook or cremaster without any silken girdle.

Nymphalids exhibit powerful and energetic flight and feed on animal droppings, urine, and carcasses, nectar and even overripe fruits.



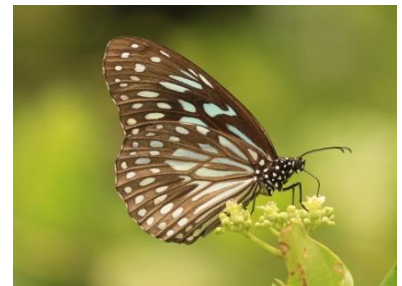
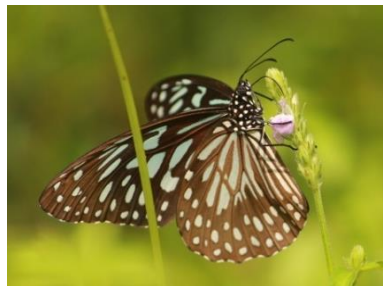
Nymphalidae

Brush-footed Butterflies

- 121. Common name:** Blue Tiger
Scientific name: *Tirumala limniace*
Wing span : 90-100mm
Status : Common



- 122. Common name:** Dark Blue Tiger
Scientific name: *Tirumala septentrionis*
Wingspan : 75-95mm
Status : Common



- 123. Common name:** Striped Tiger
Scientific name: *Danaus genutia*
Wing span : 72-100mm
Status : Common



- 124. Common name:** Plain Tiger
Scientific name: *Danaus chrysippus*
Wing span : 70-80mm
Status : Common



Nymphalidae

Brush-footed Butterflies

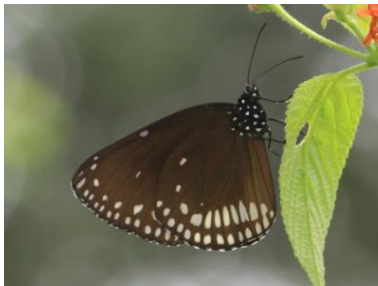
- 125. Common name:** Glassy Tiger
Scientific name: *Parantica aglea*
Wing span : 70-85mm
Status : Common



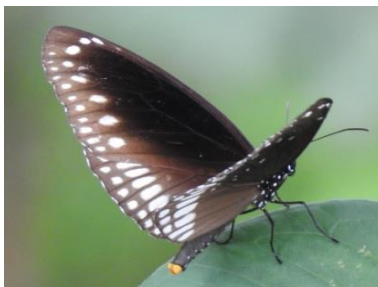
- 126. Common name:** Double-Branded Crow
Scientific name: *Euploea sylvester*
Wing span : 95-105mm
Status : Locally Common



- 127. Common name:** Brown King Crow
Scientific name: *Euploea klugii*
Wingspan : 85-100mm
Status : Locally Common



- 128. Common name:** Common Indian Crow
Scientific name: *Euploea core*
Wing span : 85-95mm
Status : Common



Nymphalidae

Brush-footed Butterflies

129. **Common name:** Malabar Tree Nymph

Scientific name: *Idea malabarica*

Wing span : 110-160mm

Status : Locally Common

❖ **Endemic to Western Ghats**



130. **Common name:** Common Nawab

Scientific name: *Polyura athamas*

Wing span : 60-75mm

Status : Common



131. **Common name:** Blue Nawab

Scientific name: *Polyura schreiber*

Wing span : 90-100mm

Status : Rare



132. **Common name:** Southern Duffer

Scientific name: *Discophora lepida*

Wing span : 85-110mm

Status : Uncommon

❖ **Endemic to Western Ghats**

❖ **Schedule II Species**



Nymphalidae

Brush-footed Butterflies

133. Common name: Common Evening Brown

Scientific name: *Melanitis leda*

Wing span : 60-80mm

Status : Common



134. Common name: Dark Evening Brown

Scientific name: *Melanitis phedima*

Wing span : 60-85mm

Status : Not rare

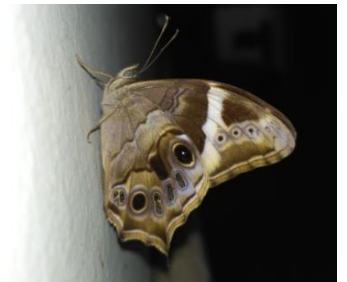


135. Common name: Bamboo Treebrown

Scientific name: *Lethe europa*

Wing span : 65-75mm

Status : Common



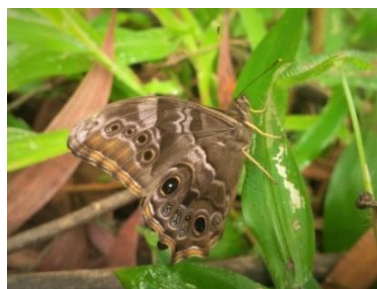
136. Common name: Tamil Treebrown

Scientific name: *Lethe drypetis*

Wing span : 65-70mm

Status : Common

❖ **Endemic to Western Ghats**



Nymphalidae

Brush-footed Butterflies

137. **Common name:** Common Bushbrown

Scientific name: *Mycalesis perseus*

Wing span : 38-55mm

Status : Common

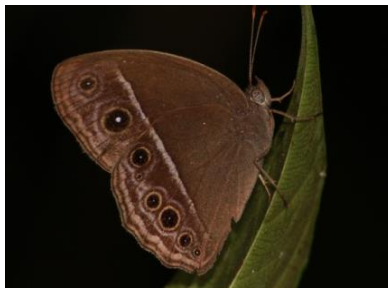


138. **Common name:** Dark-brand Bushbrown

Scientific name: *Mycalesis mineus*

Wing span : 40-50mm

Status : Common



139. **Common name:** Glad-eye Bushbrown

Scientific name: *Mycalesis patnia*

Wing span : 40-45mm

Status : Common

❖ **Endemic to Western Ghats**



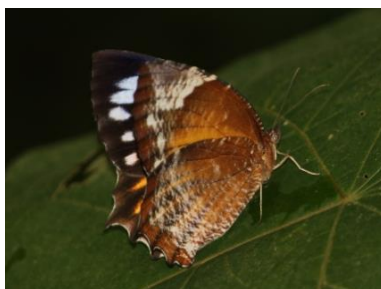
140. **Common name:** Tailed Palmfly

Scientific name: *Elymnias caudata*

Wing span : 65-80mm

Status : Common

❖ **Endemic to Western Ghats**



Nymphalidae

Brush-footed Butterflies

141. Common name: Medus Brown (Nigger)

Scientific name: *Orsotrioena medus*

Wing span : 45-55mm

Status : Common



142. Common name: Common Five-ring

Scientific name: *Ypthima baldus*

Wing span : 32-48mm

Status : Common



143. Common name: Common Four-ring

Scientific name: *Ypthima huebneri*

Wing span : 30-40mm

Status : Common



144. Common name: Tawny Coster

Scientific name: *Acraea violae*

Wing span : 50-65mm

Status : Common



Nymphalidae

Brush-footed Butterflies

145. Common name: Tamil Lacewing
Scientific name: *Cethosia nietneri*
Wing span : 80-95mm

Status : Locally Common

❖ **Endemic to Western Ghats**

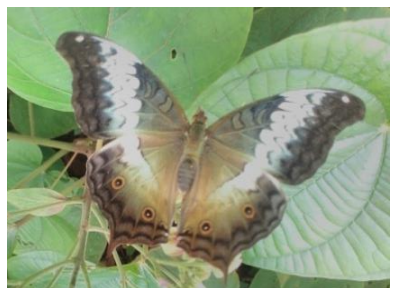


146. Common name: Cruiser
Scientific name: *Vindula erota*
Wing span : 72-110mm

Status : Not rare



Male



Female

147. Common name: Tamil Yeoman
Scientific name: *Cirrochroa thais*
Wing span : 60-75mm

Status : Locally Common

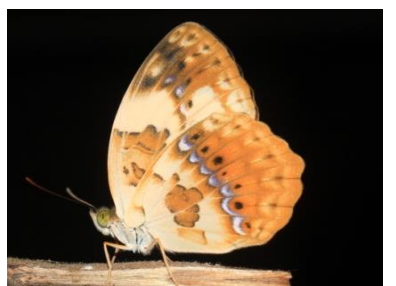
❖ **Endemic to Western Ghats**

❖ **State butterfly of Tamil Nadu**



148. Common name: Rustic
Scientific name: *Cupha erymanthis*
Wing span : 50-60mm

Status : Common



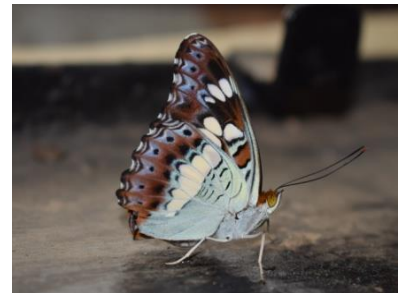
Nymphalidae

Brush-footed Butterflies

- 149. Common name:** Common Leopard
Scientific name: *Phalanta phalantha*
Wing span : 50-60mm
Status : Common



- 150. Common name:** Commander
Scientific name: *Moduza procris*
Wing span : 60-75mm
Status : Common



- 151. Common name:** Common Sergeant
Scientific name: *Athyma perius*
Wing span : 60-70mm
Status : Locally Common



- 152. Common name:** Blackvein Sergeant
Scientific name: *Athyma ranga*
Wing span : 60-70mm
Status : Not Common



❖ **Schedule II (part II) Species**

Nymphalidae

Brush-footed Butterflies

153. Common name: Colour Sergeant

Scientific name: *Athyma nefte*

Wing span : 55-70mm

Status : Not rare



154. Common name: Common Lascar

Scientific name: *Pantoporia hordonia*

Wing span : 45-50mm

Status : Common

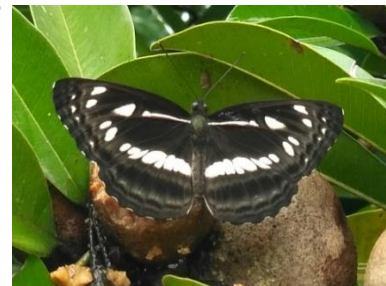


155. Common name: Chestnut-Streaked Sailer

Scientific name: *Neptis jumbah*

Wing span : 60-70mm

Status : Common

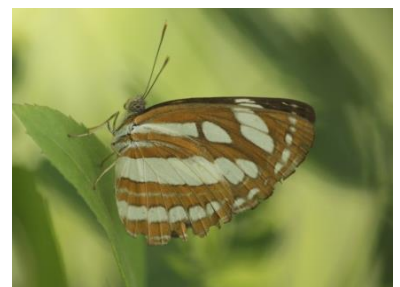


156. Common name: Common Sailer

Scientific name: *Neptis hylas*

Wing span : 50-60mm

Status : Common



Nymphalidae

Brush-footed Butterflies

157. **Common name:** Clear Sailer

Scientific name: *Neptis nata*

Wing span : 45-60mm

Status : Rare



158. **Common name:** Clipper

Scientific name: *Parthenos sylvia*

Wing span : 95-130mm

Status : Rare

❖ **Schedule II Species**



159. **Common name:** Guady Baron

Scientific name: *Euthalia lubentina*

Wing span : 60-80mm

Status : Common



160. **Common name:** Common Baron

Scientific name: *Euthalia aconthea*

Wing span : 55-80mm

Status : Common



Nymphalidae

Brush-footed Butterflies

- 161. Common name:** Baronet
Scientific name: *Euthalia nais*
Wing span : 60-70mm
Status : Locally Common



- 162. Common name:** Grey Count
Scientific name: *Tanaecia lepidea*
Wing span : 65-80mm
Status : Rare

❖ **Schedule II (part II) Species**



- 163. Common name:** Redspot Duke
Scientific name: *Dophla evelina*
Wing span : 81-113mm
Status : Not Common

❖ **Schedule II (part II) Species**



- 164. Common name:** Common Castor
Scientific name: *Ariadne merione*
Wing span : 45-60mm
Status : Common



Nymphalidae

Brush-footed Butterflies

- 165. Common name:** Black Prince
Scientific name: *Rohana parisatis*
Wing span : 45-50mm
Status : Not rare



Male



Female

- 166. Common name:** Painted Lady
Scientific name: *Vanessa cardui*
Wing span : 55-70mm
Status : Common



- 167. Common name:** Blue Pansy
Scientific name: *Junonia orithiya*
Wing span : 45-60mm
Status : Common



- 168. Common name:** Yellow Pansy
Scientific name: *Junonia hierta*
Wing span : 45-60mm
Status : Common



Nymphalidae

Brush-footed Butterflies

169. Common name: Chocolate Pansy

Scientific name: *Junonia iphita*

Wing span : 55-80mm

Status : Common



170. Common name: Grey Pansy

Scientific name: *Junonia atlites*

Wing span : 55-65mm

Status : Locally Common



171. Common name: Peacock Pansy

Scientific name: *Junonia almana*

Wing span : 60-65mm

Status : Common



172. Common name: Lemon Pansy

Scientific name: *Junonia lemonias*

Wing span : 40-60mm

Status : Common



173. Common name: Great Eggfly

Scientific name: *Hypolimnys bolina*

Wing span : 70-110mm

Status : Common



Male



Female

174. Common name: Danaid Eggfly

Scientific name: *Hypolimnys misippus*

Wing span : 70-85mm

Status : Common

❖ **Schedule I Species**



Female



Male

Nymphalidae

Brush-footed Butterflies

175. **Common name:** Blue Oakleaf
Scientific name: *Kallima horsfieldi*
Wing span : 85-110mm

Status : Locally Common

❖ **Endemic to Western Ghats**



176. **Common name:** Autumn Leaf
Scientific name: *Doleschallia bisaltide*
Wing span : 75-85mm

Status : Rare

❖ **Schedule II Species**



Butterfly watching

Butterflying/Butterfly watching is an interesting pursuit for butterfly lovers, to be out in the field observing these delightful creatures flying around us. Butterflies are commonly found and are easily approachable making it easier to do. Unlike birds, butterflies rise late in the morning, usually an hour after the Sun has set in. Butterfly observation can be usually done with binoculars or with the help of a camera.



Best time to watch Butterflies:

Butterflies start their activity late in the morning, often basking in the morning rays to raise their body temperature, making it easier to approach them during this time for a closer look than during the hours of peak activity. At late evening after the peak hours of activity, butterflies tend to move into the shade and undergrowth. During monsoon, with the host plants grown luxuriantly butterfly populations increase from August to early December making it the best time for an observer to watch butterflies.

Places to observe:

Sun loving butterflies are often found at the edges of woodlots hovering in the sun rays like Blues, Grass yellows, Pansies etc. Butterflies like Emigrants, Albatross, Common Bluebottle, Common Gull etc, can be seen in groups during mud-puddling in damp places. Most Swallowtails and Tree Browns are forest dwellers found the tree patches. The Common Evening Brown found in undergrowth and fallen leaves and its activity peak at late evening. All butterflies are visitor to flower patches to meet their diet.



Nectaring on Cosmos flowers



Mud-puddling



Nectaring on *Leea indica*

Mobile Photography:

Though it needs patience, Mobile Photography can be used as the best tool for observing and recording butterflies surround us. A good mobile phone with a decent camera is something which we all carry with us 24×7, which can be efficiently employed as a tool of butterfly watching. It is unlikely to have a professional camera with us every time we run into a rare butterfly and it's always our phone that comes as a handy tool. While taking a mobile photograph we also get a closer look at the morphology of the winged jewel.



ETHICS OF BUTTERFLY WATCHING

- Do not collect butterflies, their larvae or eggs. By doing so you might hinder the ecological balance.
- Try to be in camouflage, the butterflies should not sense an alien presence.
- Always carry with you, paraphernalia for observing and recording the butterflies.
- As always in forest, maintain silence. Do not disturb the pious and calmness of the environment.
- Never take a butterfly onto your hand; you will harm their delicate wings and tender body.
- Never disturb a butterfly or the developmental stages for the sake of getting a photograph.
- Your love for butterflies should not make you harm other creatures. A butterfly is also a part of food chain.

Butterfly gardening: some tips

By planting of nectar plants and larval host plant, you can attract the winged jewels in our urban environment to our backyard and at the same time save them from the ever growing threat of habitat destruction. This proves to be an excellent hobby for nature lovers.

While selecting the area for butterfly gardening, keep in mind that it should be sunny with no heavy wind movements. The food plants and the nectar plants require a few hours of sunlight for their luxuriant growth and abundant flowering, thus resulting in excellent activity of butterflies. The area should be free from pesticides or any other toxic components.

Specific larval host plants and nectar plants preferred by butterflies of your locality must be planted. The more you care for the plants the better your butterfly garden will become.

Butterfly Garden, College of Forestry, Sirsi

For conserving butterflies in a human dominated landscape or any institutional campus, planting and maintaining high plant diversity and different types of habitat is a good option. Keeping this in view, we the students of College of Forestry created a small garden as an initiation to butterfly gardening by planting species like *Crotalaria retusa*, *Aschlepias currassavica*, *Bryophyllum pinnatum*, *Murraya koenigii*, *Plumbago zeylanica*, *Wendlandia thyrsoidae* etc.

As a result, congregation of Danaine butterflies on *Crotalaria retusa* happened during the month of December 2018. This is a success story of butterfly gardening in our campus.

A few of the butterfly species recorded in the garden during the congregation were Blue tiger, Dark blue tiger, striped tiger, Plain tiger, Common crow, Slate flash etc.



We started out by planting *Crotalaria retusa* seedlings which were raised from seeds brought during our visits. First raised in polybags, they were transplanted to our garden site with utmost care during the monsoon, and they grew up well to our expectations.



Regular watering and weeding was done in the garden ensuring better establishment. Other Food and Nectar plants such as *Aschlepias currassavica*, *Bryophyllum pinnatum*, *Murraya koenigii*, *Plumbago zeylanica*, etc. were also added to the garden to attract more species of butterflies.



Crotalaria retusa started flowering during the month of October, inviting different butterfly species to our campus which gave an opportunity for us to observe and study butterflies closely.



We could observe congregation of Danaine butterflies on *Crotalaria retusa* during the month of December 2018. Danaine butterflies are attracted to and feed on withered plants like *Crotalaria retusa* which have the presence pyrrolizidine alkaloids required by the males as a precursor for biosynthesis of pheromone components.



Butterfly – larval host plants

Sl.No	Common Name	Scientific Name	Host(s)
1	Common Banded Awl	<i>Hasora chromus</i>	<i>Ricinus communis</i> <i>Pongamia pinnata</i>
2	Brown Awl	<i>Badamia exclamationis</i>	<i>Combretum albidum</i> <i>Terminalia bellerica</i>
3	Indian Skipper	<i>Spialia galba</i>	<i>Hibiscus spp.</i> <i>Sida rhombifolia</i>
4	Common Spotted Flat	<i>Celaenorrhinus leucocera</i>	<i>Asystasia gangetica</i> <i>Carvia callosa</i> <i>Eranthemum roseum</i>
5	Common Small Flat	<i>Sarangesa dasahara</i>	<i>Asystasia spp.</i> <i>Blepharis asperima</i>
6	Fulvous Pied Flat	<i>Pseudocoladenia dan</i>	<i>Achyranthes aspera</i>
7	Tricolored Pied Flat	<i>Coladenia indrani</i>	<i>Mallotus philippinensis</i> <i>Desmodium spp.</i> <i>Grewia microcos</i>
8	Suffused Snow Flat	<i>Tagiades gana</i>	<i>Dioscorea oppositifolia</i> <i>Dioscorea alata</i>
9	Water Snow Flat	<i>Tagiades litigiosa</i>	<i>Dioscorea oppositifolia</i> <i>Dioscorea alata</i> <i>Smilax sp.</i>
10	Chestnut Angle	<i>Odontoptilum angulata</i>	<i>Ceiba sp.</i> <i>Urena lobata</i> <i>Allophyllus cobbe</i>
11	Golden Angle	<i>Caprona ransonnetti</i>	<i>Helicteres isora</i> , <i>Urena lobata</i>
12	Tamil Grass Dart	<i>Taractrocera ceramas</i>	Grass species, including <i>Oryza sativa</i>
13	Indian Dartlet	<i>Oriens goloides</i>	<i>Axonopus compressus</i>
14	Dark Palm Dart	<i>Telicota ancilla</i>	<i>Calamus sp.</i> <i>Imperata cylindrical</i>
15	Pale Palm Dart	<i>Telicota colon</i>	<i>Bambusa striata</i> <i>Ochlandra travancorica</i>
16	Straight Swift	<i>Parnara bada</i>	<i>Oryza sativa</i> <i>Saccharum officinarum</i>
17	Rice Swift	<i>Borbo cinnara</i>	<i>Andropogon sp.</i> <i>Cymbopogon sp.</i>
18	Small Branded Swift	<i>Pelopidas mathias</i>	<i>Cymbopogon nardus</i> <i>Imperata cylindrical</i>
19	Conjoined Swift	<i>Pelopidas conjuncta</i>	<i>Andropogon sp.</i> <i>Bambusa spp.</i>
20	Blank Swift	<i>Caltoris kumara</i>	<i>Bambusa spp.</i>
21	Karwar Swift	<i>Caltoris canaraica</i>	<i>Bambusa spp.</i>
22	Bicolor Ace	<i>Sovia hyrtacus</i>	<i>Kydia calycina</i>
23	Vindhyan Bob	<i>Arnetta vindhiana</i>	Grass species

Sl.No	Common Name	Scientific Name	Host(s)
24	Indian Palm Bob	<i>Suastus gremius</i>	<i>Calamus spp.</i> <i>Caryota urens</i>
25	Tree Flitter	<i>Hyarotis adrastus</i>	<i>Calamus spp.</i> <i>Phoenix spp.</i>
26	Common Redeye	<i>Matapa aria</i>	<i>Bamboo spp.</i> <i>Bambusa striata</i>
27	Chestnut Bob	<i>Iambrix salsala</i>	Bamboo and grass species
28	Restricted Demon	<i>Notocrypta curvifascia</i>	<i>Costus speciosus</i> <i>Curcuma decipiens</i>
29	Common Banded Demon	<i>Notocrypta paralysos</i>	Ginger and turmeric species of Family Zingiberaceae
30	Grass Demon	<i>Udaspes folus</i>	<i>Curcuma aromatic</i>
31	Bush Hopper	<i>Ampittia dioscorides</i>	<i>Oryza sativa</i>
32	Pygmy Scrub Hopper	<i>Aeromachus pygmaeus</i>	Grasses
33	Indian Ace	<i>Halpe homolea</i>	<i>Bamboo spp.</i>
34	Moore's Ace	<i>Halpe porus</i>	<i>Bamboo spp.</i>
35	Madras Ace	<i>Halpe honorei</i>	<i>Bamboo spp.</i>
36	Southern Spotted Ace	<i>Thoressa astigmata</i>	<i>Data deficient</i>
37	Common Bluebottle	<i>Graphium sarpedon</i>	<i>Alseodaphne semecarpifolia</i> <i>Cinnamomum camphora</i> <i>Polyalthia longifolia</i>
38	Common Jay	<i>Graphium doson</i>	Plants of the families Annonaceae, Lauraceae, Magnoliaceae
39	Tailed Jay	<i>Graphium agamemnon</i>	<i>Polyalthia longifolia</i> <i>Polyalthia cerasoides</i> <i>Annona squamosa, A. reticulate</i>
40	Spot Swordtail	<i>Graphium nomius</i>	<i>Miliusa tomentosa</i> <i>Polyalthia longifolia</i>
41	Common Mime	<i>Chilasa clytia</i>	<i>Cinnamomum verum</i> <i>Alseodaphne semecarpifolia</i>
42	Common Mormon	<i>Papilio polytes</i>	<i>Aristolochia bracteolata</i> <i>Murraya koenigii</i>
43	Malabar Raven	<i>Papilio dravidarum</i>	<i>Glycosmis pentaphylla</i> <i>Toddalia asiatica</i>
44	Red Helen	<i>Papilio helenus</i>	<i>Glycosmis pentaphylla</i> <i>Toddalia asiatica</i> <i>Zanthoxylum rhetsa</i>
45	Blue Mormon	<i>Papilio polymnestor</i>	<i>Atalantia racemosa,</i> <i>Atalantia wightii</i> <i>Glycosmis arborea</i>
46	Lime Butterfly	<i>Papilio demoleus</i>	Cultivated lime, orange and lemons (Family Rutaceae)
47	Paris Peacock	<i>Papilio paris</i>	<i>Citrus spp.,</i> <i>Toddalia asiatica</i> <i>Zanthoxylum rhetsa</i>

Sl.No	Common Name	Scientific Name	Host(s)
48	Malabar Banded Peacock	<i>Papilio buddha</i>	<i>Zanthoxylum rhetsa</i>
49	Common Rose	<i>Atrophaneura aristolochiae</i>	<i>Aristolochia bracteolata</i> <i>Thottea siliquosa</i>
50	Malabar Rose	<i>Atrophaneura pandiyana</i>	<i>Thottea siliquosa</i>
51	Crimson Rose	<i>Atrophaneura hector</i>	<i>Aristolochia indica</i> <i>Aristolochia bracteolata</i> <i>Thottea siliquosa</i>
52	Southern Birdwing	<i>Troides minos</i>	<i>Aristolochia indica</i> <i>Aristolochia tagala</i> <i>Thottea siliquosa</i>
53	One Spot Grass Yellow	<i>Eurema andersoni</i>	<i>Data deficient</i>
54	Three Spot Grass Yellow	<i>Eurema blanda</i>	<i>Cassia spp.</i> <i>Delonix regia</i> <i>Moulluva spicata</i>
55	Small Grass Yellow	<i>Eurema brigitta</i>	<i>Cassia kleinii</i> <i>Smithia sensitiva</i>
56	Common Grass Yellow	<i>Eurema hecabe</i>	<i>Cassia tora</i> <i>Abrus precatorius</i> <i>Sesbania sesban</i>
57	Spotless Grass Yellow	<i>Eurema laeta</i>	<i>Cassia pumila</i> <i>Chamaecrista mimosoides</i>
58	Common Emigrant	<i>Catopsilia pomona</i>	<i>Cassia spp</i> <i>Butea monosperma</i> <i>Cassia fistula</i>
59	Mottled Emigrant	<i>Catopsilia pyranthe</i>	<i>Cassia spp. (e.g., C. fistula, C. auriculata, C. occidentalis, C. tora)</i>
60	Great Orange Tip	<i>Hebomoia glaucippe</i>	<i>Capparis sepiaria</i> <i>Capparis roxburghii</i>
61	Common Wanderer	<i>Pareronia valeria</i>	<i>Capparis zeylanica, C. rheedii</i>
62	Chocolate Albatross	<i>Appias lyncida</i>	<i>Crateva adansonii</i> <i>Capparis roxburghii</i>
63	Common Albatross	<i>Appias albino</i>	<i>Drypetes oblongifolia</i> <i>Drypetes roxburghii</i>
64	Common Gull	<i>Cepora nerissa</i>	<i>Capparis zeylanica</i>
65	Pioneer	<i>Belenios aurota</i>	<i>Capparis zeylanica</i> <i>Cadaba fruticosa</i>
66	Common Jezebel	<i>Delias eucharis</i>	<i>Dendrophthoe falcata</i> <i>Helicanthes elastic</i>
67	Oriental Psyche	<i>Leptosia nina</i>	<i>Cleome viscose</i> <i>Capparis zeylanica</i>
68	Common Apefly	<i>Spalgis epius</i>	Feeds on scale insects and mealy bugs Caterpillars are carnivorous.
69	Indian Sunbeam	<i>Curetis thetis</i>	<i>Abrus precatorius</i> <i>Pongamia pinnata</i>
70	Angled Sunbeam	<i>Curetis acuta</i>	<i>Pongamia pinnata</i>
71	Western Centaur Oakblue	<i>Arhopala pseudocentaurus</i>	<i>Terminalia paniculata</i> <i>Lagerstroemia microcarpa</i>

Sl.No	Common Name	Scientific Name	Host(s)
72	Large Oakblue	<i>Arhopala amantes</i>	<i>Terminalia alata</i> , <i>T. catappa</i> , <i>T. paniculata</i> , <i>Lagerstroemia microcarpa</i>
73	Kanara Oakblue	<i>Arhopala alea</i>	<i>Syzygium</i> spp. <i>Hopea ponga</i>
74	Purple Leaf blue	<i>Amblypodia anita</i>	<i>Olex imbricate</i> <i>Olex scandens</i>
75	Yamfly	<i>Loxura atymnus</i>	<i>Dioscorea pentaphylla</i> <i>Smilax zeylanica</i>
76	Common Onyx	<i>Horaga onyx</i>	<i>Coriaria nepalensis</i>
77	Monkey Puzzle	<i>Rathinda amor</i>	<i>Ixora</i> spp. <i>Mangifera indica</i> <i>Schleichera oleosa</i>
78	Common Imperial	<i>Cheritra freja</i>	<i>Cinnamomum</i> spp. <i>Xylia xylocarpa</i>
79	Peacock Royal	<i>Tajuria cippus</i>	<i>Dendrophthoe falcata</i> <i>Helicanthes elastic</i>
80	Banded Royal	<i>Rachana jalindra</i>	<i>Dendrophthoe falcate</i> <i>Helicanthes elastic</i>
81	Fluffy Tit	<i>Zeltus amasa</i>	<i>Data deficient</i>
82	Orchid tit	<i>Chilaria othona</i>	<i>Cottonia peduncularis</i> , <i>Aerides maculosa</i>
83	Common Guava Blue	<i>Deudorix isocrates</i>	<i>Psidium guajava</i> <i>Gardinia gummifera</i> <i>Strychnos nux-vomica</i>
84	Large Guava Blue	<i>Deudorix perse</i>	<i>Gardinia gummifera</i>
85	Cornelian	<i>Deudorix epijarbas</i>	<i>Punica granatum</i> <i>Aesculus indica</i> <i>Sapindus marginatus</i>
86	Indian Red Flash	<i>Rapala airbus</i>	<i>Ougeinia dalbergioides</i> , <i>Melastoma malabathricum</i>
87	Slate Flash	<i>Rapala manea</i>	<i>Quisqualis indica</i> <i>Antidesma acidum</i> <i>Trema orientalis</i>
88	Indigo Flash	<i>Rapala varuna</i>	<i>Quisqualis indica</i> <i>Ziziphus rugosa</i> <i>Sapindus laurifolia</i>
89	Malabar Flash	<i>Rapala lankana</i>	<i>Acacia</i> spp.
90	Common Tinsel	<i>Catapaecilma elegans</i>	<i>Terminalia paniculata</i>
91	Long-banded Silverline	<i>Spindasis lohita</i>	<i>Terminalia paniculata</i> <i>Xylia xylocarpa</i> <i>Smilax</i> spp,
92	Common Silverline	<i>Spindasis vulcanus</i>	<i>Cadaba fruticosa</i> <i>Ziziphus mauritiana</i> <i>Canthium coromandelicum</i>
93	Scarce-shot Silverline	<i>Spindasis elima</i>	<i>Data deficient</i>
94	Pointed Ciliate Blue	<i>Anthene lycaenina</i>	<i>Buchanania lanzan</i> , <i>Bridelia retusa</i>

Sl.No	Common Name	Scientific Name	Host(s)
95	Angled Pierrot	<i>Caleta caleta</i>	<i>Zizyphus rugosa</i>
96	Banded Blue Pierrot	<i>Discolampa ethion</i>	<i>Zizyphus spp.</i>
97	Common Pierrot	<i>Castalius rosimon</i>	<i>Ziziphus jujuba</i> , <i>Z. mauritiana</i> , <i>Z. rugosa</i>
98	Zebra Blue	<i>Leptotes plinius</i>	<i>Albizia lebbbeck</i> , <i>Sesbania bispinosa</i> <i>Plumbago zeylanica</i>
99	Dingy Lineblue	<i>Petrelaea dana</i>	<i>Mallotus philippensis</i>
100	Transparent Six Lineblue	<i>Nacaduba kurava</i>	<i>Ardisia humilis</i> , <i>Embelia robusta</i>
101	Common Lineblue	<i>Prosotas nora</i>	<i>Acacia catechu</i> , <i>A. tora</i> <i>Mimosa spp.</i> <i>Pithecellobium dulce</i>
102	Tailless Lineblue	<i>Prosotas dubiosa indica</i>	<i>Acacia spp.</i> , <i>Mimosa pudica</i> <i>Leucaena spp</i>
103	Dark Cerulean	<i>Jamides bochus</i>	<i>Butea monosperma</i> <i>Crotalaria spp.</i> <i>Pongamia pinnata</i>
104	Metallic cerulean	<i>Jamides alecto</i>	<i>Elettaria cardamomum</i>
105	Common Cerulean	<i>Jamides celeno</i>	<i>Saraca asoca</i> , <i>Abrus precatorius</i> <i>Butea monosperma</i>
106	Pea Blue	<i>Lampides boeticus</i>	<i>Butea monosperma</i> <i>Crotalaria spp.</i> <i>Pisum sativum</i> ,
107	Dark Grass blue	<i>Zizeeria karsandra</i>	<i>Amaranthus spinosus</i> <i>Polygonum plebeium</i>
108	Pale Grass Blue	<i>Pseudozizeeria maha</i>	<i>Oxalis corniculata</i> <i>Strobilanthes spp.</i>
109	Lesser Grass Blue	<i>Zizina otis</i>	<i>Desmodium heterophyllum</i> , <i>Sesbania bispinosa</i>
110	Tiny Grass Blue	<i>Zizula hylax</i>	<i>Lantana camara</i> <i>Ruellia simplex</i> , <i>R. tuberosa</i>
111	Grass Jewel	<i>Freyeria trochylus</i>	<i>Heliotropium strigosum</i> <i>Indigofera spp.</i>
112	Red Pierrot	<i>Talica nyseus</i>	<i>Kalanchoe laciniata</i> , <i>K. pinnata</i> (Syn. <i>Bryophyllum pinnatum</i>
113	Quaker	<i>Neopithecops zalmora</i>	<i>Glycosmis pentaphylla</i>
114	Malayan	<i>Megisba malaya</i>	<i>Allophyllus cobbe</i> <i>Mallotus philippensis</i>
115	Gram blue	<i>Euchrysops cnejus</i>	<i>Butea monosperma</i> <i>Ougeinia dalbergioides</i> <i>Pisum sativum</i>
116	Common Hedge blue	<i>Acytolepis puspa</i>	<i>Xylia xylocarpa</i> <i>Peltophorum pterocarpum</i> <i>Schleichera oleosa</i>

Sl.No	Common Name	Scientific Name	Host(s)
117	Plains Cupid	<i>Chilades pandava</i>	<i>Cycas circinalis</i> , <i>Cycas revoluta</i> <i>Acacia</i> spp. <i>Xylia xylocarpa</i>
118	Lime Blue	<i>Chilades lajus</i>	<i>Citrus aurantifolia</i> , <i>C. maxima</i> <i>Murraya paniculata</i>
119	Forget-Me- Not	<i>Catochrysops strabo</i>	<i>Ougeinia dalbergioides</i> <i>Desmodium elegans</i>
120	Double Banded Judy	<i>Abisara bifasciata</i>	<i>Embelia robusta</i> <i>Ardisia</i> spp.
121	Blue Tiger	<i>Tirumala limniace</i>	<i>Asclepias currassavica</i> <i>Tylophora indica</i> <i>Wattakaka volubilis</i>
122	Dark blue Tiger	<i>Tirumala septentrionis</i>	<i>Dregea volubilis</i>
123	Striped Tiger	<i>Danaus genutia</i>	<i>Asclepias currassavica</i> <i>Ceropegia</i> sp.
124	Plain Tiger	<i>Danaus chrysippus</i>	<i>Asclepias curassavica</i> <i>Calotropis gigantea</i> , <i>C. procera</i> <i>Cryptolepis buechanani</i>
125	Glassy Tiger	<i>Parantica aglea</i>	<i>Calotropis</i> sp. <i>Ceropegia</i> sp. <i>Cryptolepis buechanani</i>
126	Double-Branded Crow	<i>Euploea sylvester</i>	<i>Hoya</i> sp. <i>Cynanchum</i> sp.
127	Brown King Crow	<i>Euploea klugii</i>	<i>Ficus hispida</i> , <i>Ficus tinctoria</i>
128	Common Indian Crow	<i>Euploea core</i>	<i>Nerium oleander</i> , <i>Asclepias curassavica</i> <i>Cryptolepis buechanani</i> <i>Hemidesmus indicus</i>
129	Malabar Tree Nymph	<i>Idea malabarica</i>	<i>Aganosoma cymosa</i> , <i>Parsonia spiralis</i>
130	Common Nawab	<i>Polyura athamas</i>	<i>Caesalpinia bonduca</i> <i>Delonix regia</i>
131	Blue Nawab	<i>Polyura schreiber</i>	<i>Moullava spicata</i> <i>Adenanthura pavonina</i>
132	Southern Duffer	<i>Discophora lepida</i>	Bamboos
133	Common Evening Brown	<i>Melanitis leda</i>	<i>Oryza sativa</i> <i>Sorghum</i> spp.
134	Dark Evening Brown	<i>Melanitis phedima</i>	<i>Microstegium ciliatum</i> <i>Setaria palmifolia</i>
135	Bamboo Treebrown	<i>Lethe europa</i>	<i>Bambusa</i> spp. <i>Microstegium ciliatum</i>
136	Tamil Treebrown	<i>Lethe drypetis</i>	<i>Bambusa arundinacea</i> (Family Poaceae)
137	Common Bushbrown	<i>Mycalesis perseus</i>	<i>Oryza</i> spp. and Grasses
138	Dark-brand Bushbrown	<i>Mycalesis mineus</i>	<i>Oryza</i> spp. and Grasses
139	Glad-eye Bushbrown	<i>Mycalesis patnia</i>	<i>Oryza</i> spp.

Sl.No	Common Name	Scientific Name	Host(s)
140	Tailed Palmfly	<i>Elymnias caudata</i>	<i>Caryota urens</i> <i>Cocos nucifera</i>
141	Medus Brown (Nigger)	<i>Orsotrioena medus</i>	<i>Imperata</i> spp. <i>Oryza sativa</i>
142	Common Fivering	<i>Ypthima baldus</i>	Grasses
143	Common Fourring	<i>Ypthima huebneri</i>	<i>Axonopus compressus</i> , Grasses
144	Tawny Coster	<i>Acraea violae</i>	<i>Passiflora edulis</i> <i>Adenia hondala</i>
145	Tamil Lacewing	<i>Cethosia nietneri</i>	<i>Modecca palmate</i> <i>Passiflora edulis</i> , <i>P. subpeltata</i>
146	Cruiser	<i>Vindula erota</i>	<i>Adenia hondala</i>
147	Tamil Yeoman	<i>Cirrochroa thais</i>	<i>Hydnocarpus wightiana</i>
148	Rustic	<i>Cupha erymanthis</i>	<i>Flacourtia indica</i> , <i>F. montana</i>
149	Common Leopard	<i>Phalanta phalantha</i>	<i>Flacourtia montana</i> , <i>F. ramontchi</i>
150	Commander	<i>Moduza procris</i>	<i>Mitragyna parvifolia</i> <i>Mussaenda frondosa</i>
151	Common Sergeant	<i>Athyma perius</i>	<i>Glochidion lanceolairum</i> , <i>G. velutinum</i>
152	Blackvein Sergeant	<i>Athyma ranga</i>	<i>Ligustrum</i> spp. <i>Olea dioica</i>
153	Colour Sergeant	<i>Athyma nefte</i>	<i>Glochidion</i> sp.
154	Common Lascar	<i>Pantoporia hordonia</i>	<i>Acacia concinna</i> <i>Pithecellobium</i> sp.
155	Chestnut-streaked Sailer	<i>Neptis jumbah</i>	<i>Moulluva spicata</i> <i>Bombax ceiba</i>
156	Common Sailer	<i>Neptis hylas</i>	<i>Moulluva spicata</i> <i>Thespesia populnea</i>
157	Sahyadri Clear Sailer	<i>Neptis nata</i>	<i>Data deficient</i>
158	Clipper	<i>Parthenos sylvia</i>	<i>Tinospora cordifolia</i> <i>Adenia hondala</i>
159	Common Baron	<i>Euthalia aconthea</i>	<i>Anacardium occidentale</i> <i>Mangifera indica</i>
160	Gaudy Baron	<i>Euthalia lubentina</i>	<i>Dendrophthoe falcate</i>
161	Baronet	<i>Euthalia nais</i>	<i>Shorea robusta</i> <i>Diospyros melanoxylon</i>
162	Grey Count	<i>Tanaecia lepidea</i>	<i>Melastoma malabatricum</i> <i>Careya arborea</i>
163	Red spot Duke	<i>Dophla evelina</i>	<i>Anacardium occidentale</i> <i>Diospyros melanoxylon</i> , <i>D. candolleana</i>
164	Common Castor	<i>Ariadne merione</i>	<i>Ricinus communis</i>
165	Black Prince	<i>Rohana parisatis</i>	<i>Celtis cinnamomea</i> , <i>C. lycodoxylon</i>
166	Painted Lady	<i>Vanessa cardui</i>	<i>Artemisia</i> , <i>Girardinia diversifolia</i>

Sl.No	Common Name	Scientific Name	Host(s)
167	Blue Pansy	<i>Junonia orithiya</i>	<i>Mimosa pudica</i> <i>Hygrophila auriculata</i> <i>Sida rhombifolia</i>
168	Yellow Pansy	<i>Junonia hierta</i>	<i>Barleria cristata</i> <i>Hygrophila auriculata</i>
169	Chocolate Pansy	<i>Junonia iphita</i>	<i>Carvia callosa</i> , <i>Hygrophila auriculata</i>
170	Grey Pansy	<i>Junonia atlites</i>	<i>Barleria cristata</i> <i>Hygrophila auriculata</i>
171	Peacock Pansy	<i>Junonia almana</i>	<i>Barleria cristata</i> <i>Hygrophila auriculata</i>
172	Lemon Pansy	<i>Junonia lemonias</i>	<i>Sida rhombifolia</i> <i>Corchorus capsularis</i>
173	Great Eggfly	<i>Hypolimnas bolina</i>	<i>Hibiscus sp.</i> <i>Sida rhombifolia</i>
174	Danaid Eggfly	<i>Hypolimnas misippus</i>	<i>Portulaca oleracea</i> <i>Barleria cristata</i>
175	Blue Oakleaf	<i>Kallima horsfieldi</i>	<i>Strobilanthes capitatus</i>
176	Autumn Leaf	<i>Doleschallia bisaltide</i>	<i>Eranthemum malabaricum</i> <i>Gratophyllum hortense.</i>

References:

1. Isaac Kehimkar, The Book of Indian Butterflies, 2008.
2. Raju Kasambe, Butterflies of Western Ghats (e-book), 2nd edition 2018.
3. Milind Bhakare and Hemant Ogale, A Guide to the Butterflies of Western Ghats (India), 2018.
4. The Wildlife Protection Act, 1972, amended 2006.
5. A Handbook on Butterflies in and around College of Forestry, Sirsi. Youth Forum for Nature (YOFONA). 2019.
6. www.ifoundbutterflies.org website.

About the e-book

This is an e-book having information on 176 species of butterflies, observed and recorded in and around the College of Forestry campus, Sirsi. These species are pictorially depicted through photographs, majority of them with images of both upper and lower wing surfaces and a few with only the underside of the wing. In this book we have covered the most valid and relevant information on each species, making it helpful for field observations. We also took care to add in a few amazing behavioral facts of butterflies, some tips for butterfly gardening as a conservation tool, info on larval host plants and our tips for mobile photography of butterflies.

The family wise arrangement of butterflies in this e-book is in line with the Bible of butterfly enthusiasts, “The Book of Indian Butterflies” by Issac Kehimkar. For common names, wing spans and status of species, along with the above stated, we followed the latest versions of butterfly books, “A Guide to the Butterflies of Western Ghats (India)” by Milind Bhakare and Hemant Ogale; “Butterflies of Western Ghats (e-book)” by Raju Kasambe.

The present generation of nature lovers prefers those field guides that are handy and easy to use. Keeping this in mind, we have made this endeavor available for all free of cost, to be used in smart phones and computer.



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