





#### Butterflies are .....

#### o Type of insects

3 main body segments
3 pairs of jointed legs
chitinous exoskeleton
pair of compound eyes

#### o Belongs to order Lepidoptera

pair of antennas

2 pairs of scaly wings scaly body proboscis complete metamorphism

# Classification

#### Order

Lepidoptera 174, 250 species

Super Family Papilionoidea

#### **Families**

Papilionidae	15 species
Pieridae	28 species
Nymphalidae	68 species
Riodinidae	01 species
Lycaenidae	84 species
Hesperidae	49 species

# Difference between a Moth & a Butterfly

**True Butterflies** 







Common Silverline

# Difference between a Moth & a Butterfly

#### **Skipper Butterflies**



Branded Orange Awlet



Hedge Hopper

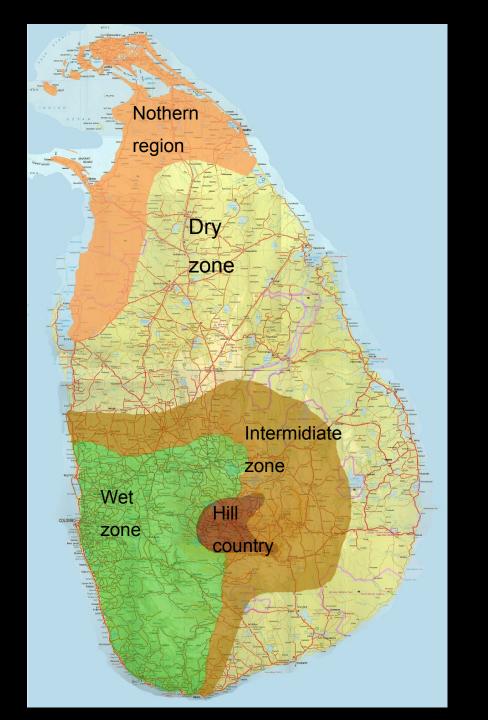
# Difference between a Moth & a Butterfly Moths



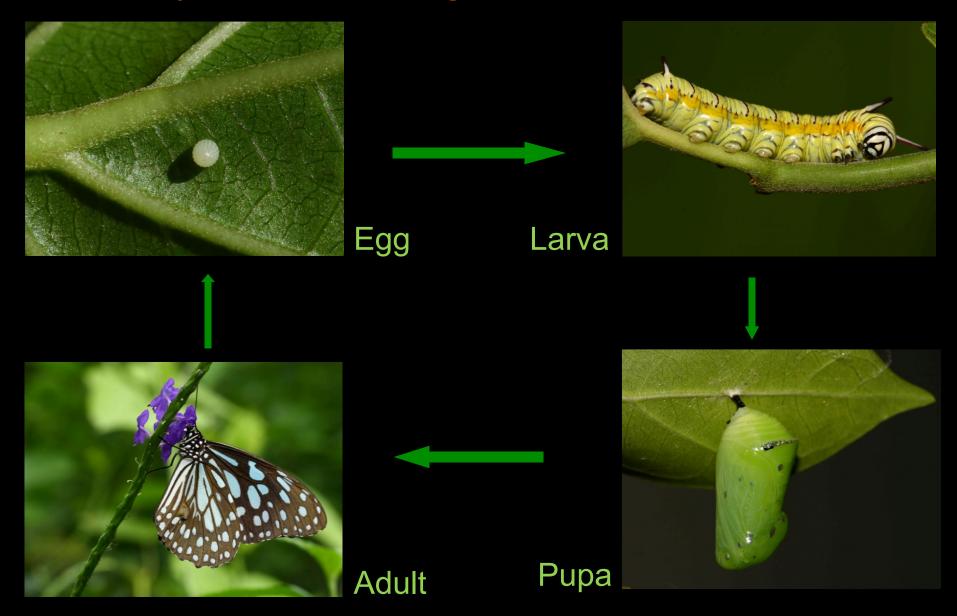


# Distribution

- O Over 17,000 in world
- o 245 species in SL
- o 26 are endemic to SL



# Life cycle of Blue Tiger



# Eggs

Has many shapes, patterns, colors and sizes

Microphyler pit – a small depression @ top



Common Mormon

Common Rose

**Blue Mormon** 

## o Eggs of Nymphalids



Common Palm Fly



Plain Tiger



Joker



**Tawny Coster** 



White Four ring

## o Eggs of Pierids



## o Eggs of Hesperids



Giant Red Eye



Dark Palm Dart



Indian Palm Bob

# Protective mechanisms of eggs

#### Tamil Yoeman



Protective mechanisms of eggs





# Hatching





Glassy Tiger

Jezebel

#### Larva

#### o Three segments

Head

Thorax (3 sub segments)
Abdomen (10 sub segments)

#### o Head

Chitinous capsule
Chewing appendages
Simple eyes

#### o Thorax

3 pairs of jointed legs1 pair of spiracles

#### o Abdomen

8 pairs of spiracles5 pairs of pro legs

# First meal of the larva



Blue Mormon

# o Some larval food plants.....



#### o Immature leaves





Lime Blue - යකි නාරන්

Sri Lankan Pale 6 Lineblue - මොර

#### o Mature leaves



Commander - කුඩුම්බේරිය



Gaudy Baron - පිළිල

o Flowers



Sri Lankan Hedge Blue - Persicaria chinensis

Monkey Puzzle - රත් මල්

#### o Fruits



#### Common Guava Blue - පුපුරු මහ





#### o Seeds



Indian Cupid - ඇත් උදුපියලිය



Pea Blue - අඩනහිරියා

#### o Aerial roots



Nilgiri Tit - උඩවැඩියා

#### o Other creatures



Apefly - පිටි මකුණා

Green's Silverline - කුඹි බිත්තර

#### Threats to larvae .....

Birds and other creatures
Parasites
Parasitoids
Cannibalism
Diseases



**Diseased Common Palmfly** 

## Threats to larvae .....



Pupae of a parasitoids on Sri Lankan Rose



Egg laying by a fly on Blue Admiral



## o hiding



Red pierrot, in අක්කාපාන

o hiding



#### Common Guava Blue







## o hiding the head



**Common Indian Crow** 



White Four Ring



**Common Sailor** 



Commander

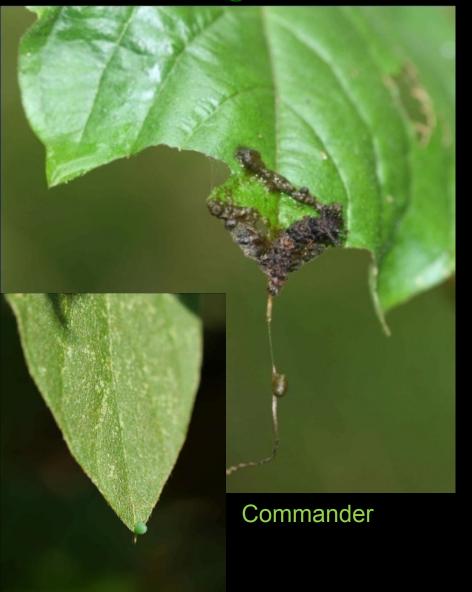


Lime Butterfly





**Common Mormon** 





**Gaudy Baron** 



Banded Blue Pierrot



Monkey Puzzle





Apefly feeds on Mealy bugs (පිටි මකුණා)



**Baronet** 

o Warning – weird look



Clipper



Peacock Pansy



Sri Lanka Tree Nymph



Common Indian Crow



o Warning – colors, proboscis





o Warning – false head



Common Jay



Blue Mormon

Mime

#### o Dew droplets of Pierids



#### o Relationship with ants



Common Tinsel - කොඩයා

Red Spot - දිමියා

#### o Nocturnal behaviors



**Chocolate Soldier** 

Peacock Pansy



Tawny coster



Jezebel

# Getting ready for pupation



Lemon Migrant



Blue Mormon





# Pupation



### o Hiding



Plane







#### o Hiding

#### Common Guava Blue







### o Camouflage



Lemon Migrant



### o Camouflage and hibernating



#### o Warning



Apefly



**Common Mormon** 



### o Warning





Blue Tiger



## Getting ready to emerge from pupa.....



Three Spot Grass Yellow



Common Indian Crow

## Emerging from pupa.....















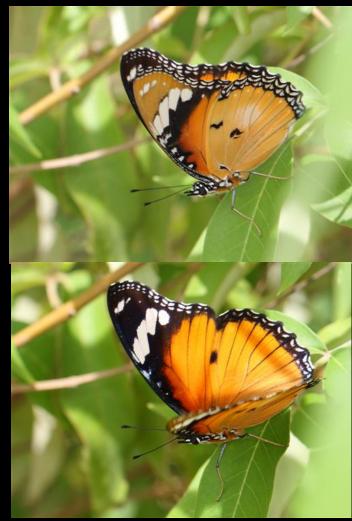


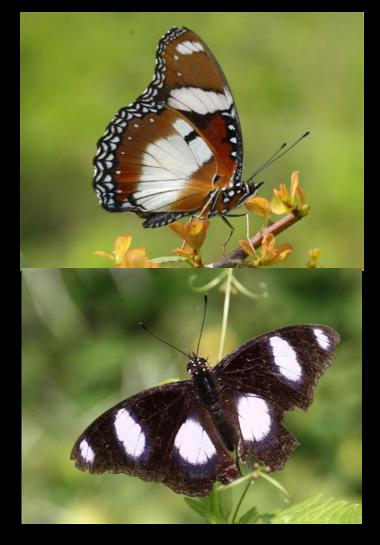
Head – Pair of compound eyes
Pair of simple eyes
Proboscis
Pair of antennae

Thorax – 2 pairs of scaly wings 3 pairs of jointed legs 1 pair of spiracles

Abdomen – 8 pairs of spiracles Mating appendages

#### Sexual dimorphism





female male

#### Seasonal dimorphism



Dry season form



Wet season form

Size of the butterfly vary too according to prevailing environmental condition

#### Variations



**Common Albatross female** 

#### o Camouflage



**Autumn Leaf** 





#### o Camouflage







**Common Evening Brown** 

Blue Admiral

#### o Mimicry



Double Branded Crow







#### o Mimicry



Blue Glassy Tiger



Dark Blue Tiger



Blue Tiger



**Glassy Tiger** 



Mime

### o ' eye spots'









White Four Ring

#### o ' eye spots'



Cornelian







Large Oak Blue

# Basking





Common Silverline

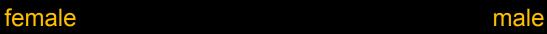




# Basking

#### Lemon migrant







#### o Nectar

Hedge Hopper



Long Banded Silverline



Common Mormon

o Special Attractions.....







Lesser Grass Blue on උලුපියලි

Common Banded Demon on තෙඹු

## o Mud Sipping





#### o Sweat Sipping











Pointed Ciliated Blue

#### o Fecal Matter











#### o Rotting Fruits



Dark Brand Bush Brown



Black Rajah



Common Bush Brown

#### o Tree Sap



Blue Admiral



Southern Duffer

#### o Dead animals



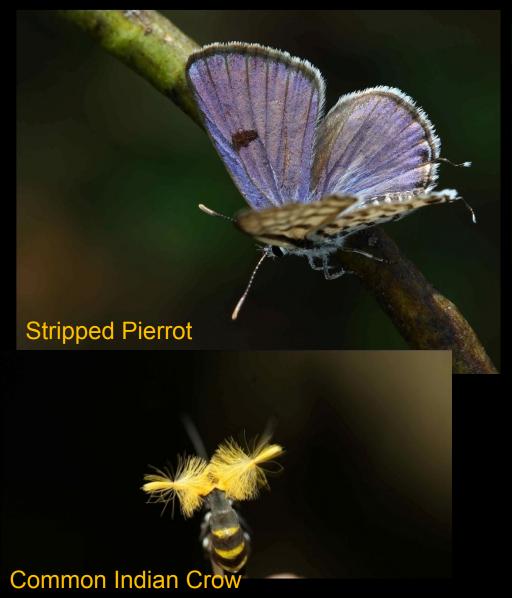
Common Hedge Blue & Malayan

#### Prominent colors in males



Peacock Royal

#### Sex brands in males







Plain Tiger

#### o Danoide for Danaids.....



Blue Tigers on අඩනහිරියා



Glassy Tigers and Crows on ඇත් හොඬ

#### o How do males & females meet?

Hill topping

Searching around L.F.P.

Waiting until meets



Blue Oak Leaf





Tamil Yoeman

Common Grass Yellow



Tiny Grass Blue



**Small Cupid** 

#### Laying eggs .....

Lay on their larval food plants

On young shoots, leaves, flower buds, fruits, aerial roots, barks etc

Commonly seen in flushing season

A sticky liquid attach the egg to the plant

Lay eggs singly or in clusters

Eggs are not protected by adults

# Where they lay eggs?



Large Guava Blue, laying on a fruit of පුපුරු මහ



Pea Blue, laying on flower buds of අඩනහිරියා

# Where they lay eggs?





Yellow Pansy, laying on bare ground

Buttler's Spotted Pierrot, laying on leaf base of එරමිණියා

#### End of the life .....



Chestnut Streaked Sailor eaten by a dragonfly



Common Grass Yellow eaten by a spider













