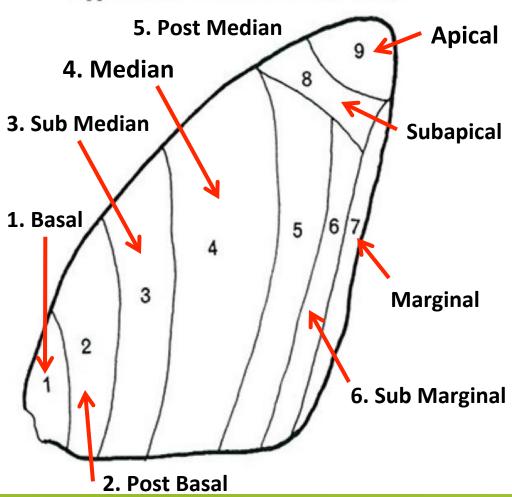
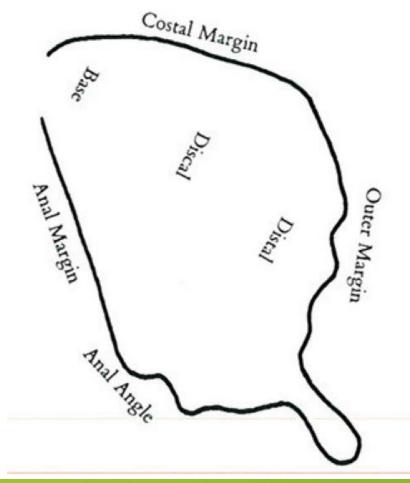


Butterfly Anatomy

Approximate Areas of butterflies' wings



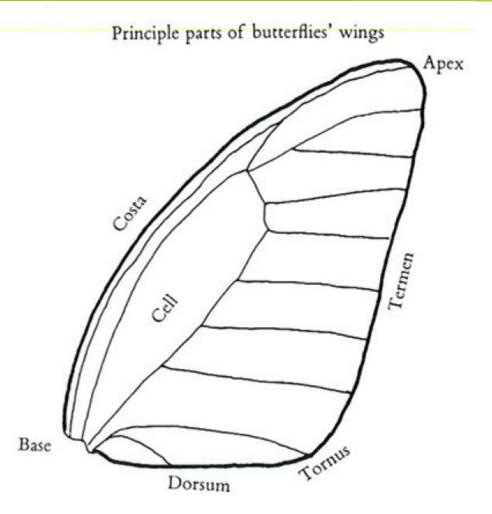


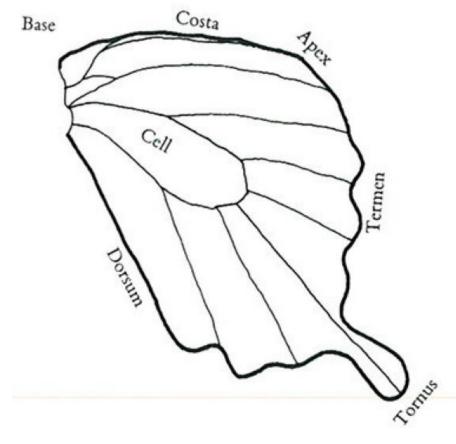
Fore-wing

Hind-wing



Butterfly Anatomy – cont...





Family - Papilionidae



Number of Butterflies: 15
Swallowtails
Proboscis easily visible
Thorax Large, abdomen longer



01, Sri Lanka Birdwing (Endamic)
(Troides darsius)



National butterflies of Sri Lanka.

Male

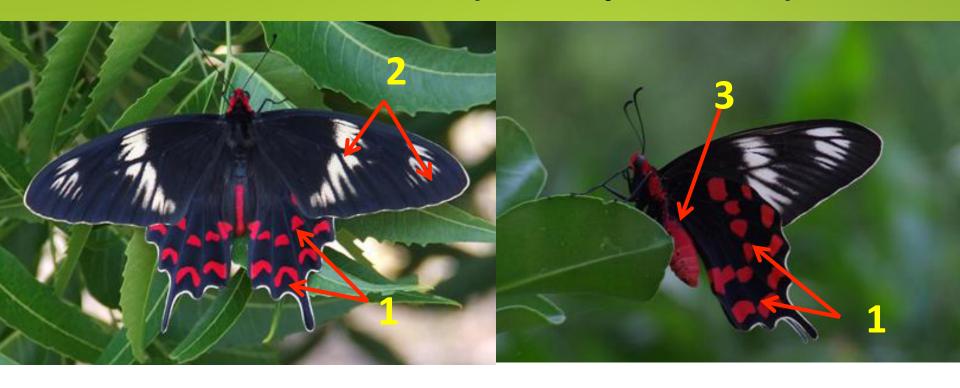
- 1. Black with bright yellow patch on hind-wing separated by black veins.
- 2. White dusting beside the fore-wing veins are very much less than female.

Female

- 1. Bright yellow patch separated by central black patch.
 - Larger than the male.



02, Crimson Rose (Pachliopta hector)

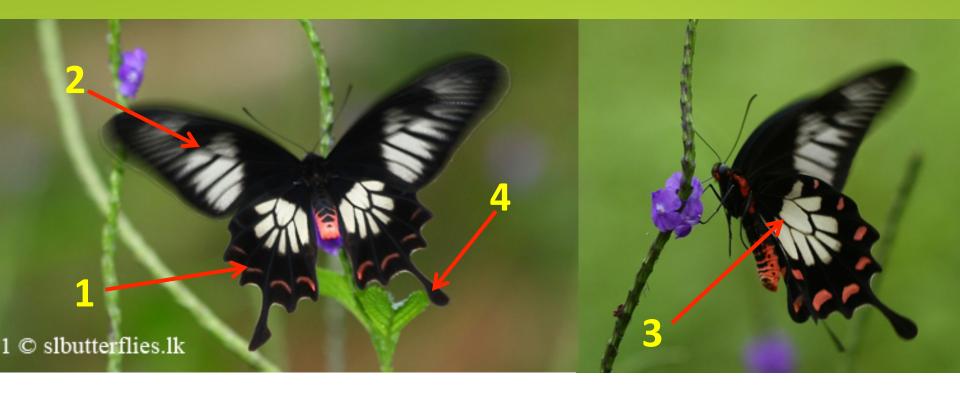


Both sex s are similar pattern.

- Two rows of Crimson spots on hind wing.
- 2. Two white bands on fore-wing.
- 3. Most of the area of abdomen, thorax and head is crimson colored. These patches are reduced in female.



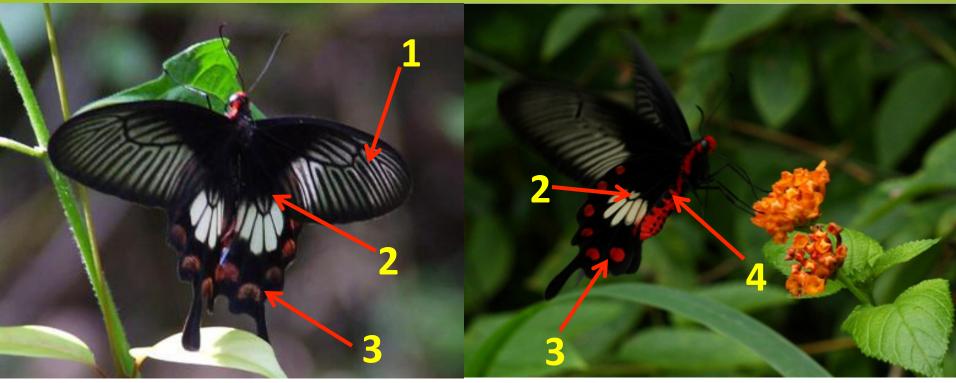
03, Ceylon Rose (Endamic) (Pachliopta jophon)



- 1. Rosy Marking in hind wing are minute.
- 2. White dusting on fore wing is diffused.
- 3. Most of the hind wing cell is white.
- 4. long tail.



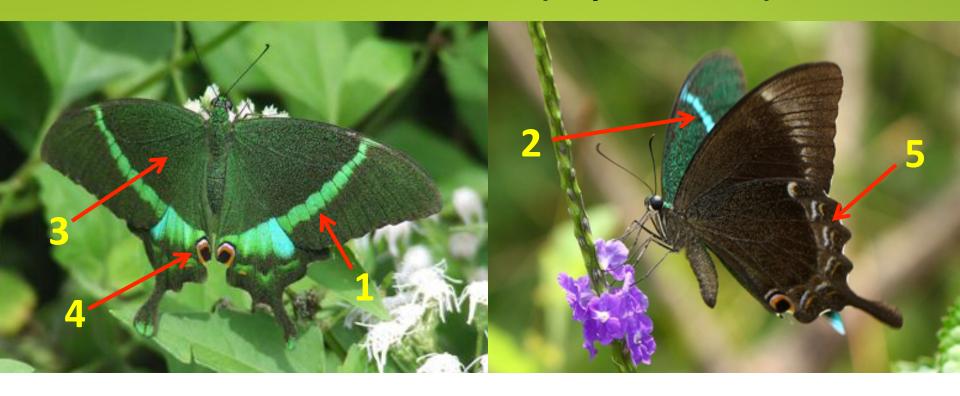
04, Common Rose (Pachliopta aristolochiae)



- 1. White dusting through out the fore-wing in a pattern.
- 2. White patch on the hind-wind cell smaller than Ceylon Rose.
- 3. Crescent shaped red sub-marginal patches on the hind-wind are large.
- 4. Most of the area of abdomen, thorax and head is red colored. These patches are reduced in female.
 - Females are quite large and have much rounded fore-wing apexes.



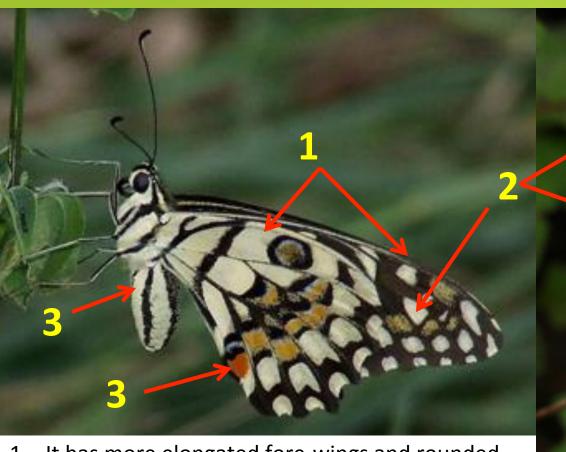
05, Banded Peacock (Papilio crino)



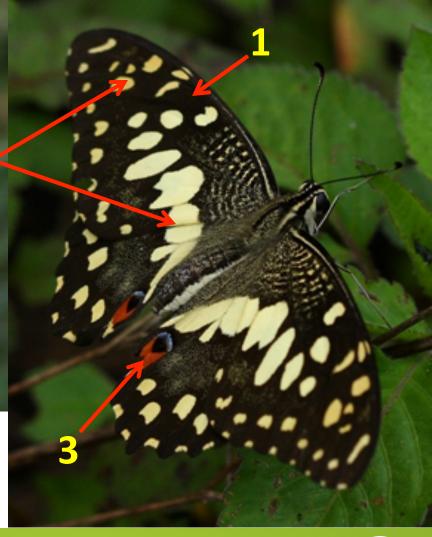
- 1. Shiny bluish green median band across the wings, which is narrow in females.
- 2. Color of the shiny band on upper side varies according to the viewing angle.
- 3. Other area of wings are dusted with shiny scales on a black background.
- 4. 'Eye spot' out lined in red on hind-wing.
- 5. Raw of sub-marginal patches on hind-wing under side.



06, Lime Butterfly (Papilio demoleus)



- 1. It has more elongated fore-wings and rounded hind-wing.
- 2. The wings are spotted with various shades of yellow.
- 3. Red patch on hind-wing varies.
- 4. Abdomen is lemon Yellow with black lines.





07, Red Helen (Papilio helenus)



- 1. White patch on hind wing is prominent when it is in flight, otherwise concealed.
- 2. Very rarely there is a small white patch on the upper side towards the apex on fore-wing.
- 3. Cilia on hind wing marked with white.



08, Common Mormon (Papilio polytes)



Male

1. A black butterfly with a series of white marginal spots on forewings and series of much larger spots across hind wings.



08, Common Mormon (Papilio polytes) cont...

Female - form "cyrus"

1. Resembles the male with additional red markings on hind wing.

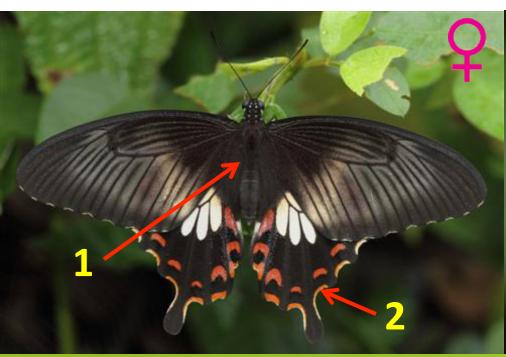




08, Common Mormon (Papilio polytes) cont...

Female - form "stichius"

- 1. Mimics the common rose but the abdomen is completely black.
- 2. Celia is red.







08, Common Mormon (Papilio polytes) cont...

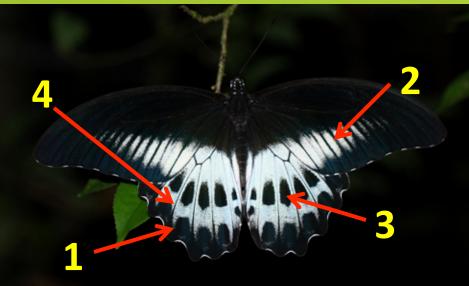
Female - form "romulus"

- 1. Mimics the crimson rose but the abdomen is completely black.
- 2. Patches on hind wing is not bright crimson.



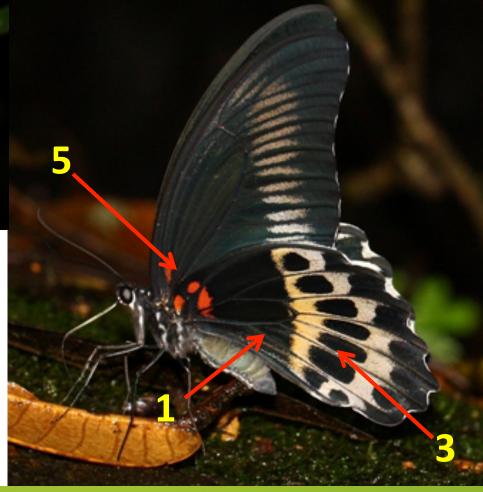


09, Blue Mormon (Papilio polymnestor)



The sexes are similar but female is duller in color

- 1. Hind-wing is large and rounded.
- 2. Fore-wing has a band of blue scales.
- 3. Most of the hind wing is blue with a distal row of black patches.
- 4. Veins on hind wing are clearly marked in black.
- 5. Basal part of both wing have red patches on under side.





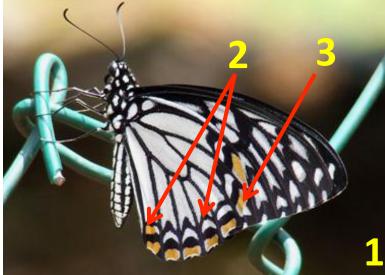
10, Mime (Papilio clytia)

Both sexes occurs in two forms.

- Form "dissimilis"

- 1. Mimic blue colored tigers.
- Sub marginal raw has v marking and an orange spot at anal angle on hind wings.
- These markings are prominent on Under side with a row of orange colored marginal spots.



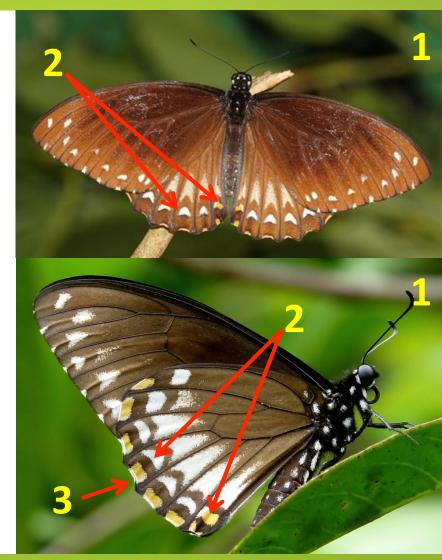




10, Mime (Papilio clytia) cont...

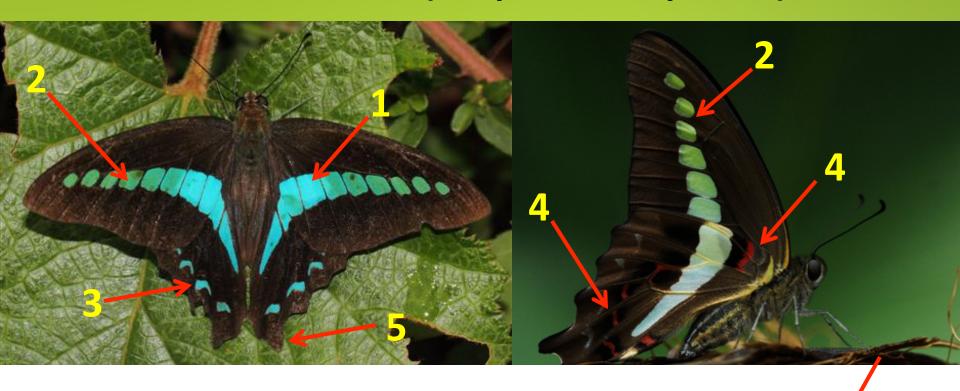
- Form "clytia"

- 1. Mimics crows.
- Sub marginal raw has v marking and an orange spot at anal angle on hind wings.
- 3. These markings are prominent on Under side with a row of orange colored marginal spots.





11, Bluebottle (Graphium sarpedon)

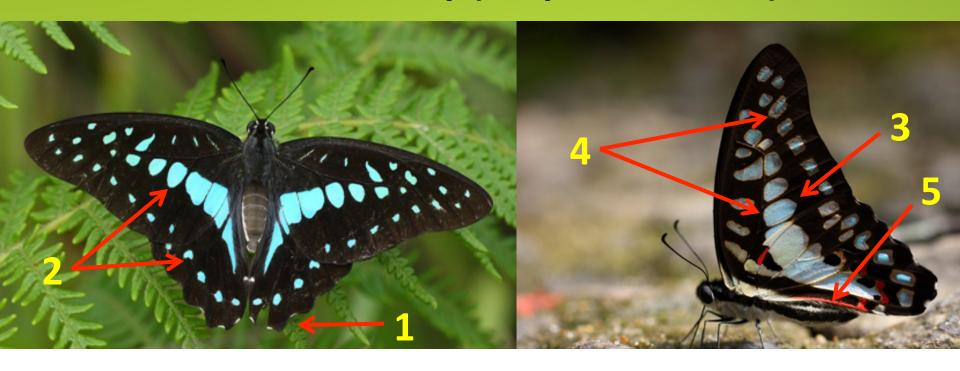


Sexes are similar.

- 1. Upper side of the wings are blackish brown with a blue band which is divided by plack veins.
- 2. Patches towards fore-wing apex have a green tinge.
- 3. Sub marginal band of crescent shaped patches on hind wing.
- 4. Underside have a similar pattern as in upper side with additional red patches.
- 5. Short tail.



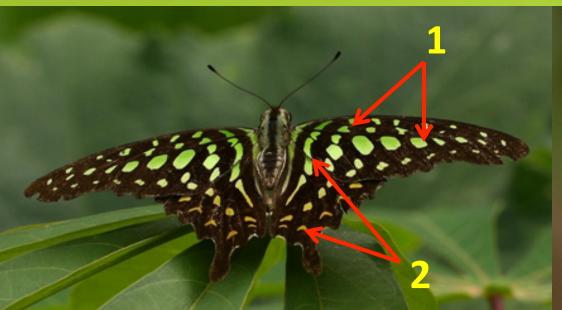
12, Common Jay (Graphium doson)



- 1. Hind-wing is serrated at the outer margin but no tails.
- 2. Upper side is black with median blue band and sub marginal row of spots on both wings.
- 3. Underside background color duller.
- 4. Underside blue marks appears enlarged due to the outline.
- 5. Hind wing have red strip along the inner margin.



13, Tailed Jay (Graphium agamemnon)

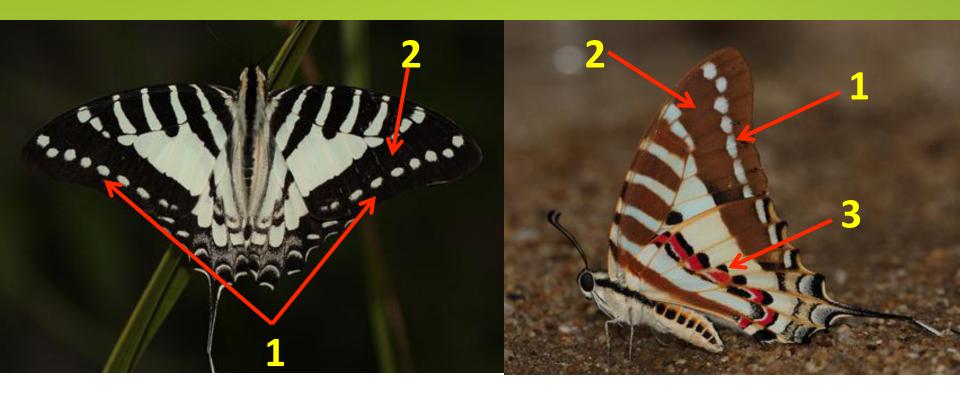


- 1. Green patches throughout the wings.
- 2. Green patches are brighter towards the forewing base and turn yellowish towards the outer margin of hind-wing.
- 3. Female having long a tail.





14, Spot Swordtail (Graphium nomius)



- 1. Raw of white spots on outer marginal band on fore-wing.
- 2. Darker color on upper side is black and it is brown on under side.
- 3. It has a median oblique band in red and black on hind wing under side.



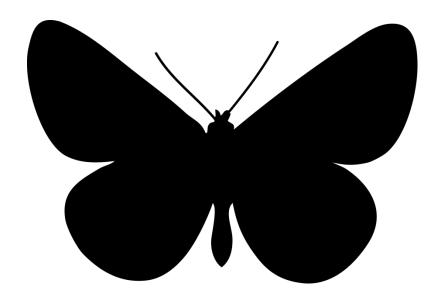
15, Five bar Swordtail (Graphium antiphates)



- 1. Light green band on broad outer margin of fore-wing.
- 2. Most of the hind wing is white on upper side.
- Darker color on both sides are black.
- 4. Central area of hind wing is tinged in orange but not forming a distinct band on under side.



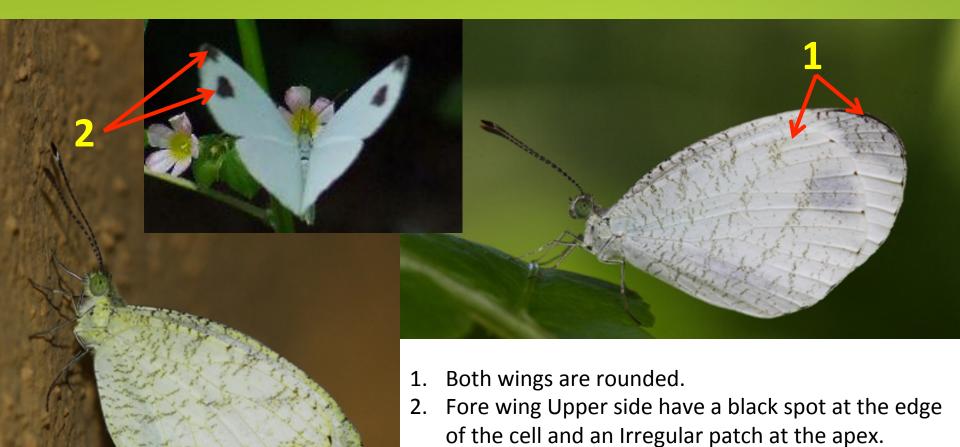
Family - Pieridae



Number of Butterflies : 28
Whites and Yellows
Small to medium size butterflies



01, Psyche (Leptosia nina)



• Wings are transparent at against light conditions.



02, Jezebel (*Delias eucharis*)

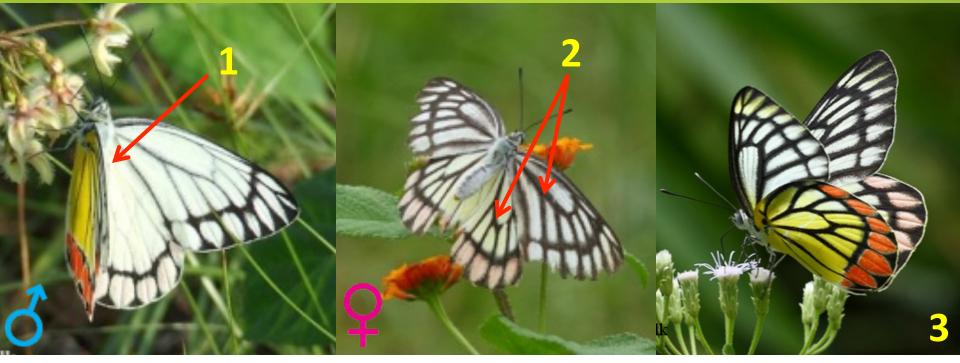
03, Painted Sawtooth (*Prioneris sita*)



- 1. Red Ovel patches along outer margin of hind wing.
- 1. Orange colored rectangular patches along outer margin of hind-wing.



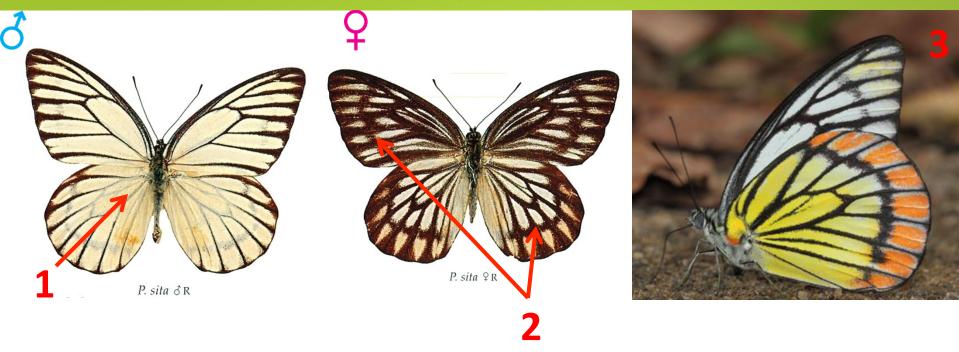
02, Jezebel (*Delias eucharis*) male/female



- 1. Upper side of *male* leaving no trace of black on the basal parts of the hind wings.
- 2. Upper side of **female** expose more black areas along the veins.
- Under side are similar in both sexes.



03, Painted Sawtooth (*Prioneris sita*) male/female



- 1. Upper side of *male* leaving no trace of black on the basal parts of the hind wings.
- 2. Upper side of *female* expose more black areas along the veins.
- 3. Under side are similar in both sexes.



04, Pioneer (*Belenois aurota*)

05, Common Gull (*Cepora nerissa*)

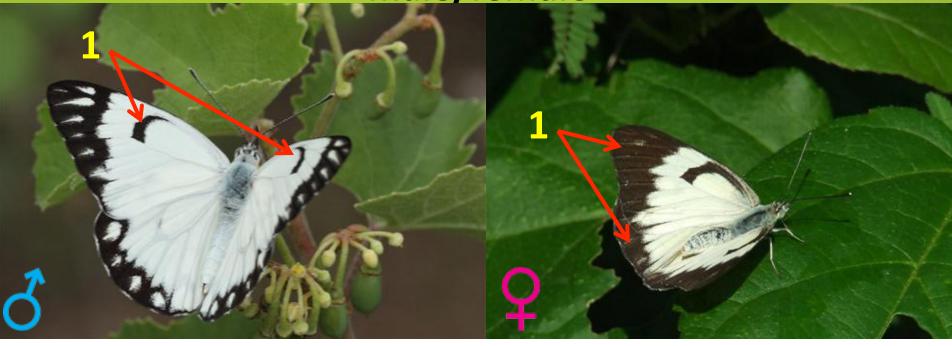


- 1. Orange-yellow markings with dark outer margin on hind wing.
- 1. Yellow wings with a dusting of dark scales along the veins, also it forms an indistinct distal band.



04, Pioneer (*Belenois aurota*)

male/female



1. Black band along the upper vein of forewing cell, is thin.

1. Outer margin of both wings is broadly marked in black with no white patches.



05, Common Gull (*Cepora nerissa*)
male/female

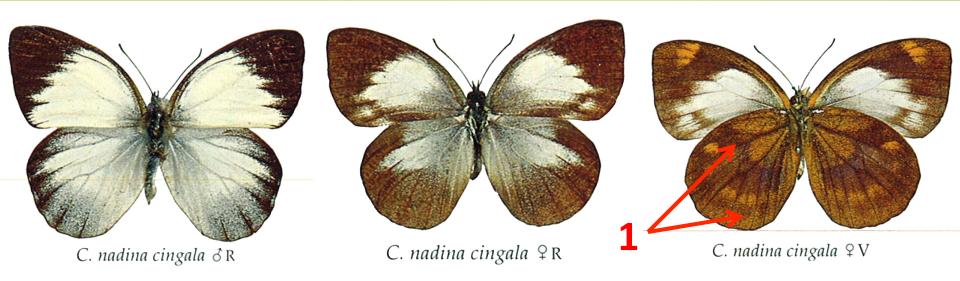


1. Black area on upper side is less.

1. Heavily marked in black on upper side, it is very prominent in the wet season form.



06, Lesser Gull (Cepora nadina)



1. Underside is chocolate brown with brown with brownish yellow tinge.



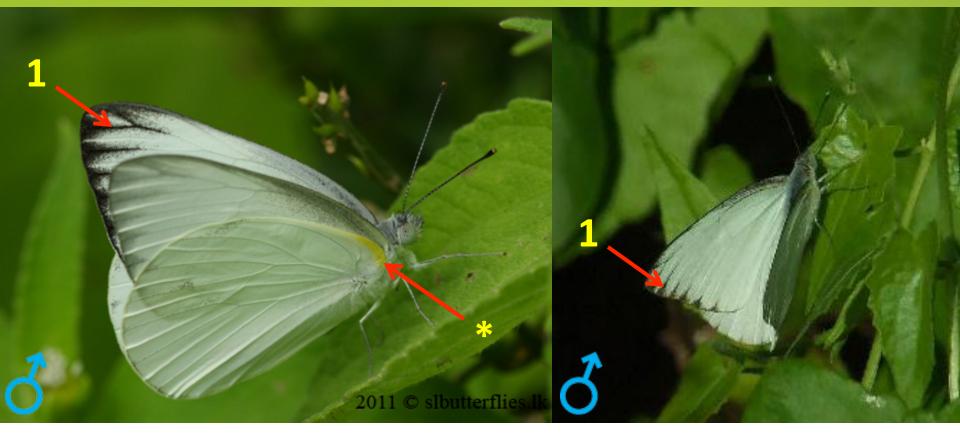
07, Plain Puffin (Appias indra)



1. Yellow with brown speckles and purplish sheen on hind wing underside.



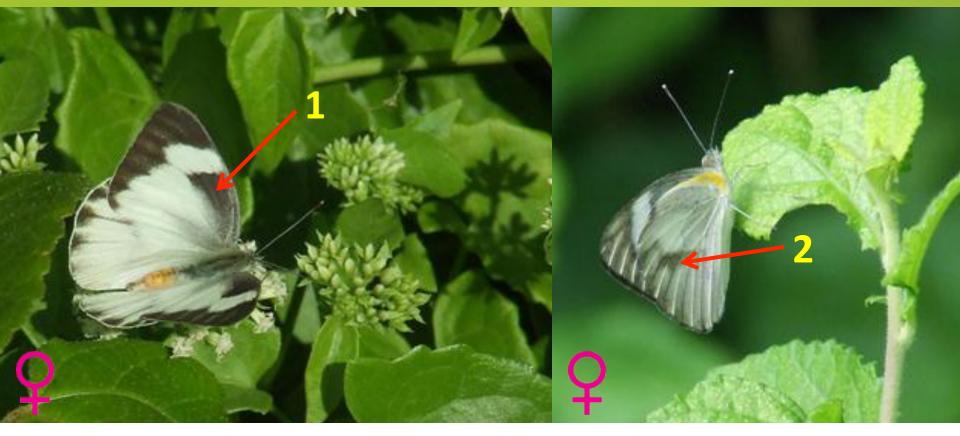
08, Striped Albatross (Appias libythea) male



- Upper margin of hind wing is usually yellow at the base on under side.
- 1. Dusting of black scales on the outer margin and along veins variable.



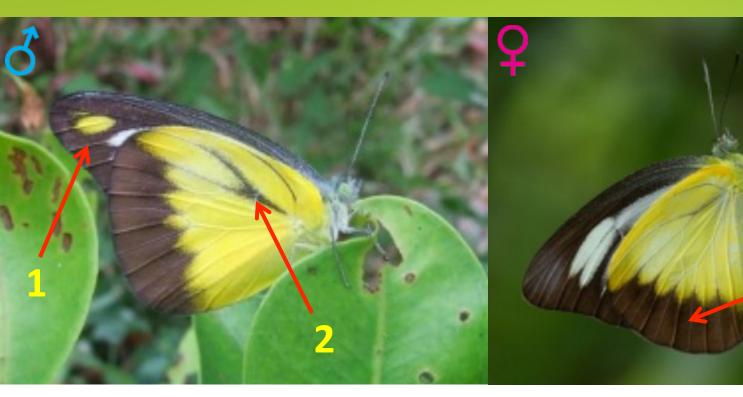
08, Striped Albatross (*Appias libythea*) female



- 1. Cell and upper margin of fore-wing are black.
- 2. Underside is white with diffused black scales.



09, Chocolate Albatross (Appias lyncida)



Male

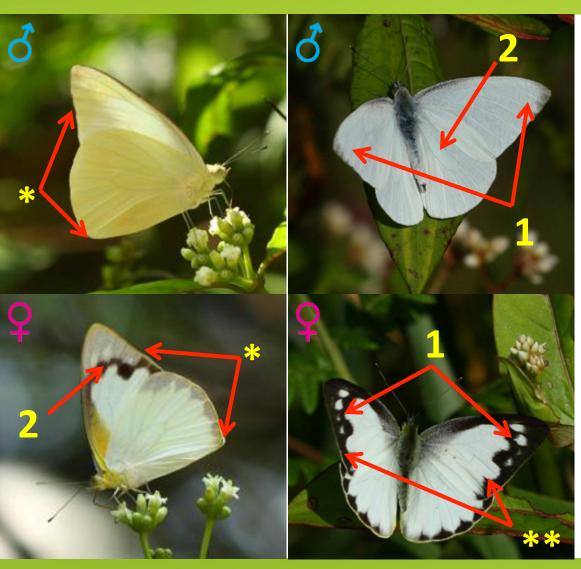
- 1. Forewing apex has yellow spot.
- 2. Hind wing underside has prominent black veins.

Female

1. Hind wing yellow with **thick** chocolate brown outer margin.



10, Common Albatross (Appias albino)



- Fore-wing outer margin straight and tonus of hind wing pointed.
- •Irregular black band along fore wing margins.

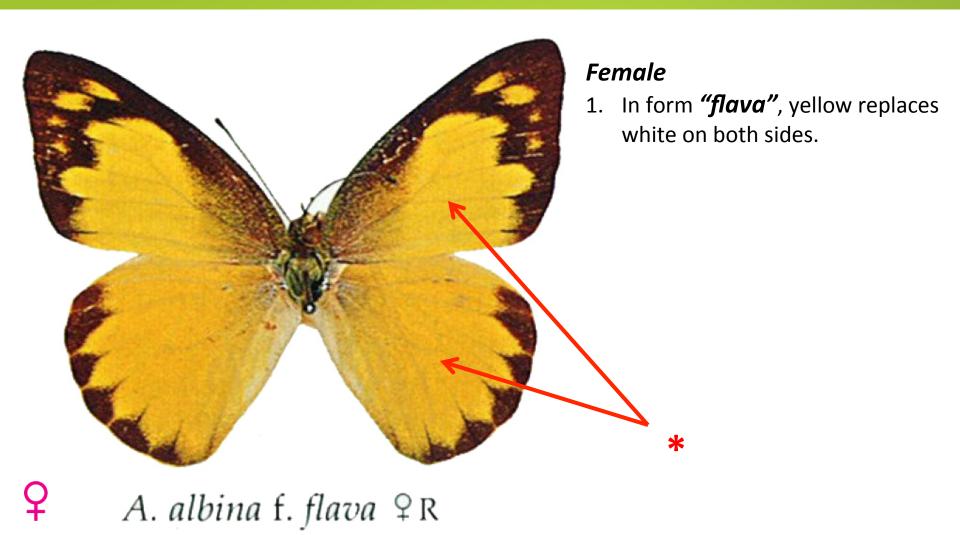
Male

- 1. Black scaling along apical margin of fore-wing variable.
- 2. White on both wing upper side.

- 1. <u>Four or more</u> white apical spots on fore-wing.
- Underside of the fore-wing has thin black band.

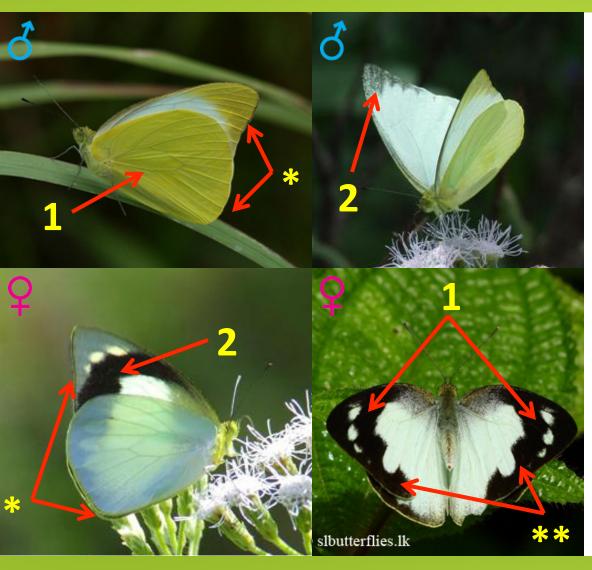


10, Common Albatross (Appias albino) cont...





11, Lesser Albatross (Endamic) (Appias galene)



- Fore-wing outer margin slightly inward curved and tonus of hind wing not pointed.
- Irregular black band along fore wing margins.

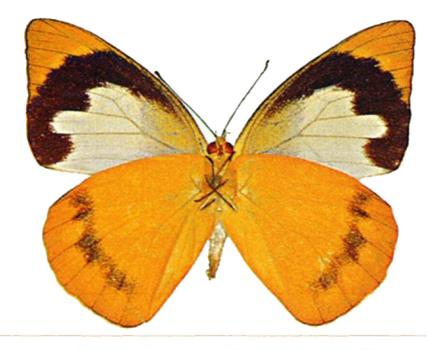
Male

- 1. Underside color varies from yellow to pale cream.
- 2. White on upper side with black scales towards margin of forewing. some time these scales are absent in dry season form.

- 1. Up to **three** white apical spots on fore-wing.
- Underside of the fore-wing has <u>thick</u> black band.



11, Lesser Albatross (Endamic) (Appias galene) cont...



A. paulina galene (yellow form) ♀ V



Female – Yellow form



12, White Orange Tip (Ixias marianne)



Upper side is white with an orange colored apical patch.

Male:

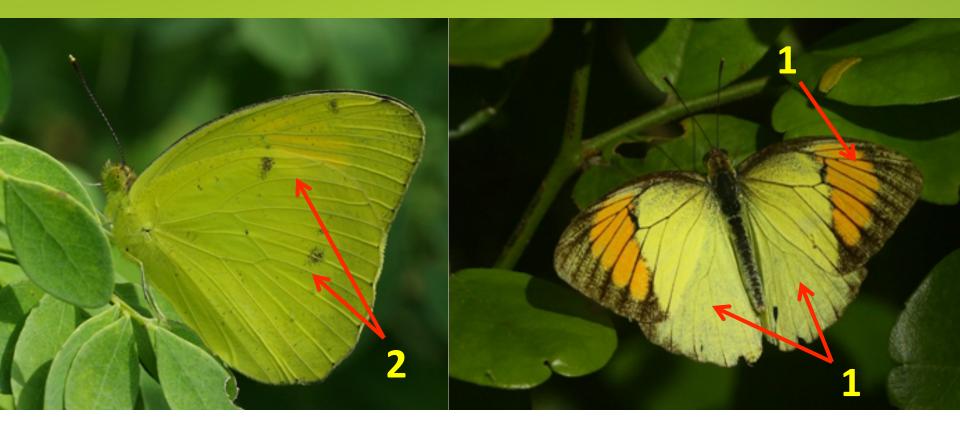
1. No black marking in the orange colored apical patch.

Female:

1. Black marking in the orange colored apical patch.



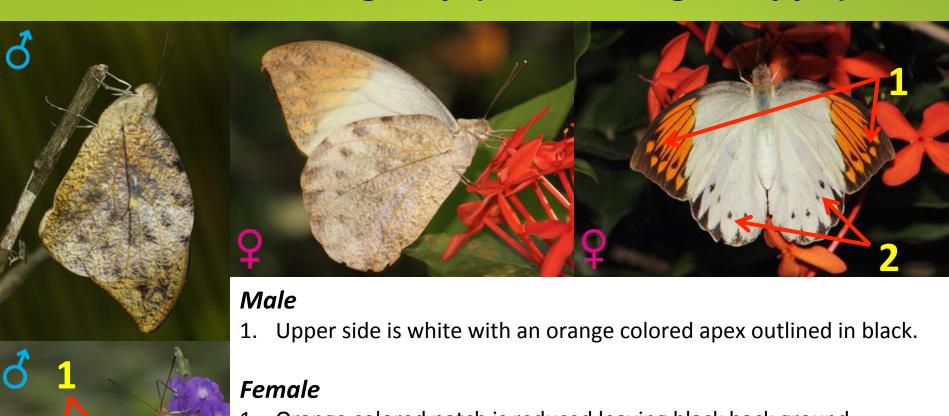
13, Yellow Orange Tip (Ixias pyrene)



- 1. Upper side is yellow with an orange colored apical patch, which is reduced in female.
- 2. Brown spots on under side is less than White OT, it is almost absent in male.



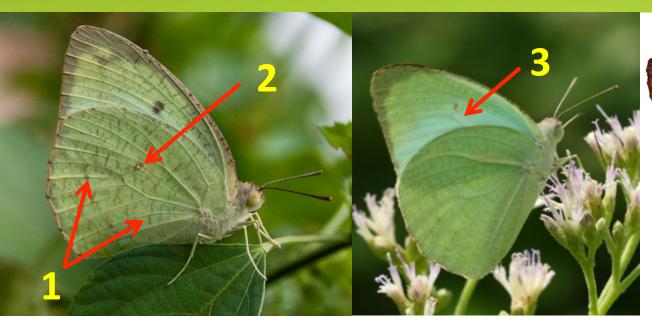
14, Great Orange Tip (Hebomoia glaucippe)

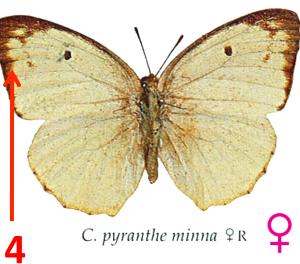


- 1. Orange colored patch is reduced leaving black back ground.
- 2. Distal row of black spots on hind wing upper side.



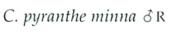
15, Mottled Emigrant (Catopsilia pyranthe)





- 1. Mottled markings throughout the wings. On under side.
- 2. Sometime silver spots near hind wing cell.
- 3. Back ground color varies from greenish white to bluish white.
- 4. Female has much broader apical band on upper side.







16, Lemon Emigrant (Catopsilia pomona)

- According to color of its antennae this species divided in to two forms.
- No mottled marking in all forms, may have silver spots.
- Females have much broader marginal bands on fore wing upper side in all forms.

The 'crocale' forms

- Antennae <u>black</u> colored.
- 2. Light greenish yellow wings.

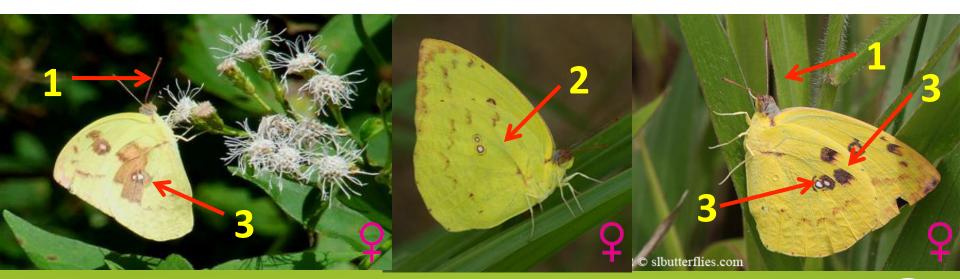




16, Lemon Emigrant (Catopsilia pomona) cont...

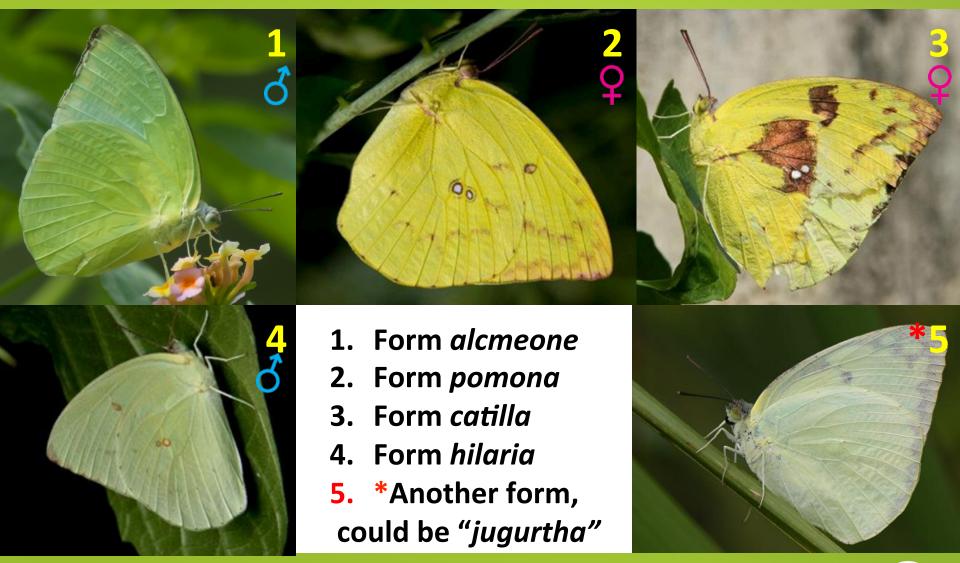
The 'pomona' forms

- Antennae <u>red or pink</u> colored.
- 2. Have yellow wings on both side.
- **3.** <u>Females</u> of this forms may have brown patches and silver spots on under sides.



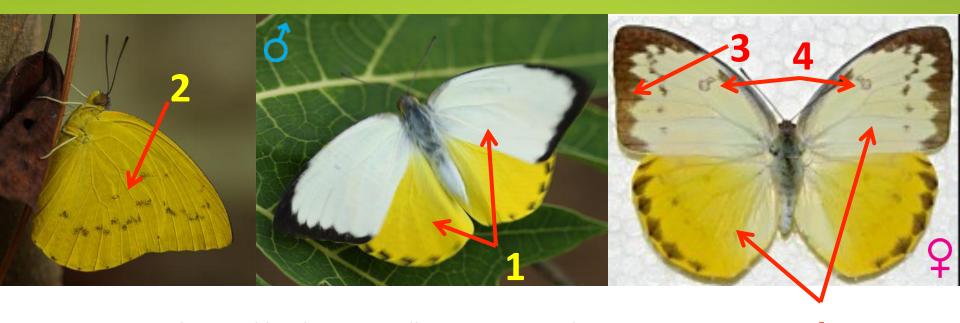


16, Lemon Emigrant (Catopsilia pomona) cont...





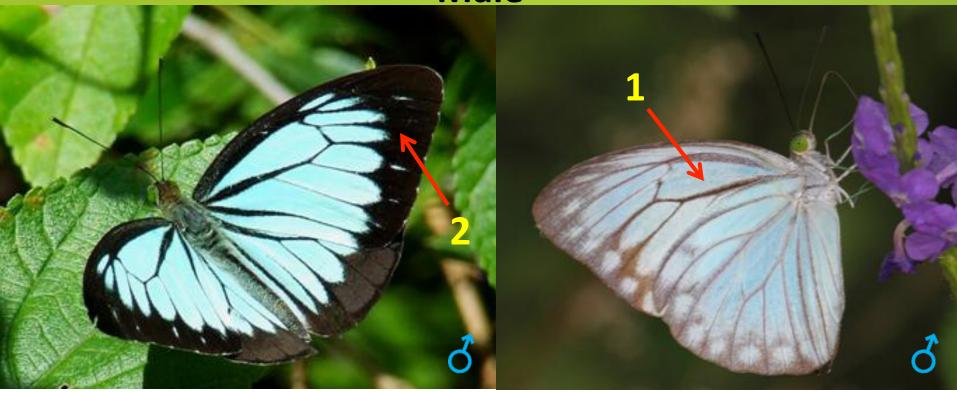
17, Orange Migrant (Catopsilia scylla)



- 1. Forewing is white and hind wing is yellow on upper side.
- 2. Under side is always yellow.
- 3. <u>Female</u> has much broader marginal bands.
- **4. Female** has spot on forewing cell.



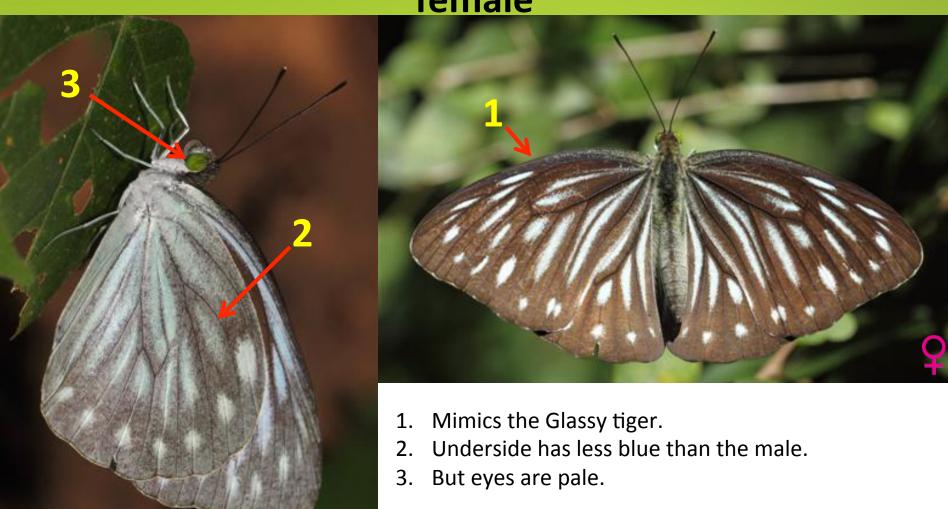
18, Dark Wanderer (*Pareronia ceylanica*) Male



- Underside has more blue than female.
- 2. Thickness of marginal bands on upper side is broader in <u>dry</u> season form.



18, Dark Wanderer (*Pareronia ceylanica*) female





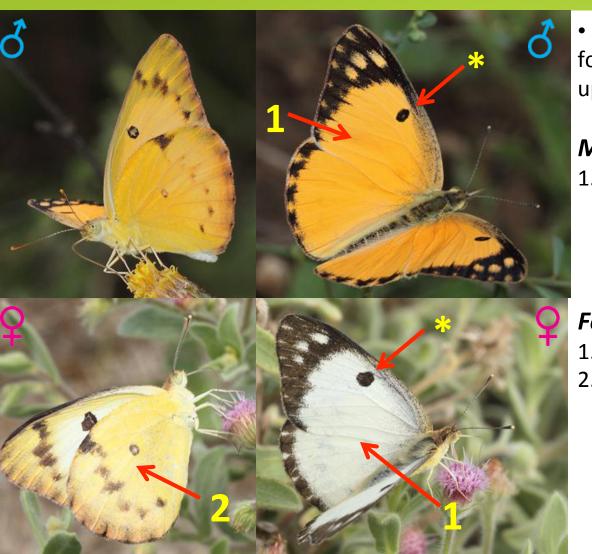
19, Small Salmon Arab (Colotis amata)



- 1. Outer margin and upper margins on upper side of forewings has broad black borders.
- 2. ELEONGATED Black patch at end of the forewing cell touches the black upper margin of forewing.
- 3. Females upper side white and heavily marked on underside. **
- 4. Undersides are yellow with gray dusting.



20, Large Salmon Arab (Colotis fausta)



• Circular Black patch at end of the forewing cell doesn't touch the black upper margin.

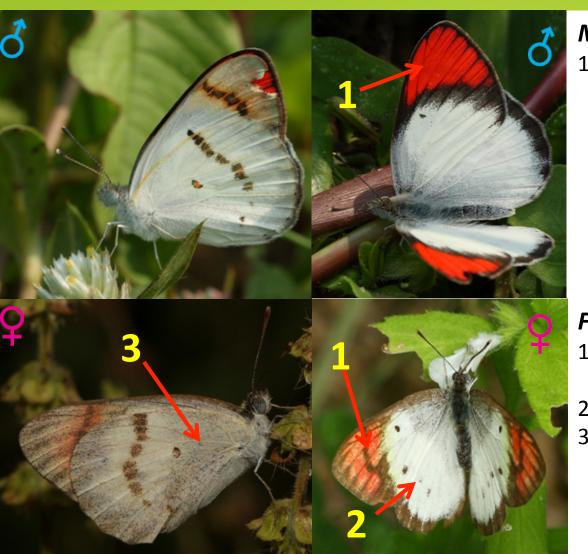
Male

1. Upper side Salmon color.

- 1. Upper side white.
- 2. Under sides always lighter than males.



21, Crimson Tip (Colotis danae)



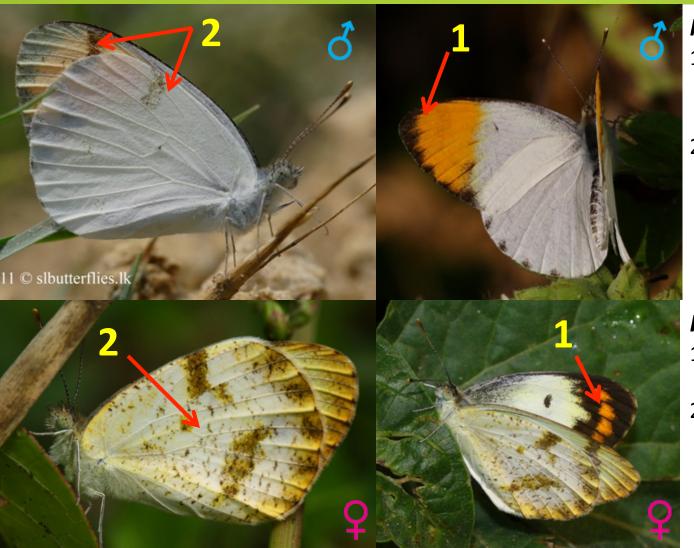
Male

 Crimson apex on fore-wing with a very <u>thin</u> black marginal band.

- Crimson patch is truncated by a black line.
- 2. Black spots on discal area.
- 3. Underside with gray color dust pattern.



22, Plain Orange Tip (Colotis eucharis)



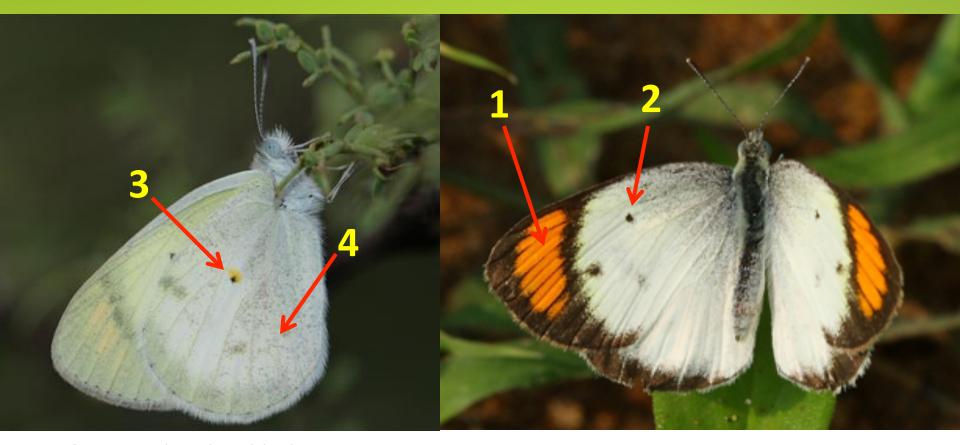
Male

- Orange fore-wing apex with <u>thin</u> black margins.
- 2. Underside almost white with few golden speckling on forewing.

- Orange band on black apex.
- Golden speckles on underside.



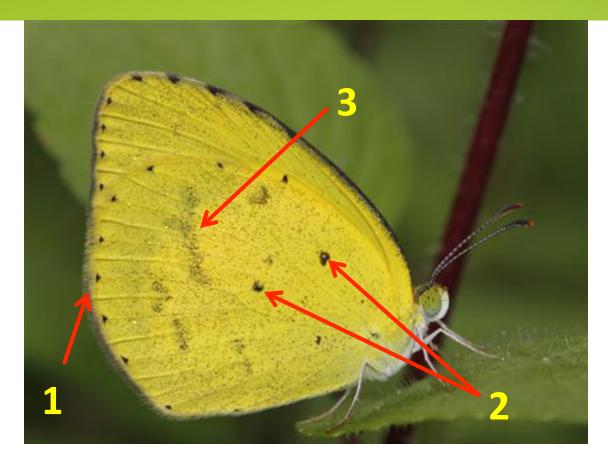
23, Little Orange Tip (Colotis etrida)



- **1. <u>Rich</u>** orange band on black apex.
- 2. Minute black spot on the fore wing cell.
- 3. A black dot at the center of the wings on under side.
- 4. Under side finely marked with gray scales.



24, Small Grass Yellow (Eurema brigitta)



- 1. Outer margin of hind wing is truncated at half way.
- 2. Underside slightly dusted with black scales, some times forming diffused on hind wing.
- 3. Underside has black spots, but never on fore wing cell.



25, Spotless Grass Yellow (Eurema laeta)



- 1. Outer margin of hind wing is truncated at half way.
- 2. Underside hasn't any black spots.
- 3. Underside finely dusted with black scales and that makes bands on hind wing.



26, Common Grass Yellow (Eurema hecabe)

27, Three Spot Grass Yellow (Eurema blanda)

28, One-Spot Grass Yellow (E) (Eurema ormistoni)



- **1.** <u>Two</u> spots at the base of forewing cell.
- 2. Outer margin are **not** wavy.
- **1.** Three spots at the base of forewing cell.
- 2. Outer margin is wavy.

- **1. One** spot at the base of forewing cell.
- 2. Wings are much rounded.

• All these species have large black patches on each cell ends, leaving the background color in the centre.







Thank You!







