

the mainland. It was first recorded in 1992 in Langkawi Islands, and has spread south along the western coast, reaching Singapore in 2006, where it is now common. It is easily recognised by its chrome colour and sparsely black-spotted wings. In Singapore, the larva feeds on various species of Passifloraceae including *Passiflora suberosa*, *P. foetida* and *Turnera ulmifolia*. After mating, the male deposits a seal, termed a sphragis, over the ostium bursae of the female so that a second mating is impossible.

A. issoria occurs commonly from north India to south Myanmar, and in the hills in Sumatra, Java and Bali, and has been recently recorded in Hong Kong. It may yet become established in the Cameron Highlands, where a large area of suitable habitat has been created in recent years. The butterfly is pale buff with all the veins darkened and with a narrow fuscous border bearing a series of yellowish marginal spots. The gregarious larva feed on *Boehmeria* and other species of Urticaceae.

Genus *Cethosia*

The adults, which appear to be distasteful to predators, are rather large and elegant butterflies, with the termens of both wings deeply crenulate. Upperside bright orange-red (rarely green), with black borders, and with a white band or fascia on the forewing. The wings are richly variegated on the underside. The hindwing cell is slenderly closed and, as in the Neotropical species of *Heliconius*, space 1a is not noticeably channelled to accommodate the abdomen. The mid- and hind tarsal claws are very long (fig. 53). Egg with the ridges complete. Larvae gregarious and strikingly coloured, with long barbed spines reported to have urticating properties, and with a pair of long horns on the head. Food plants species of Passifloraceae. Pupae with spines and foliated excrescences.



Fig. 53. *Cethosia biblis*. Mid-leg.

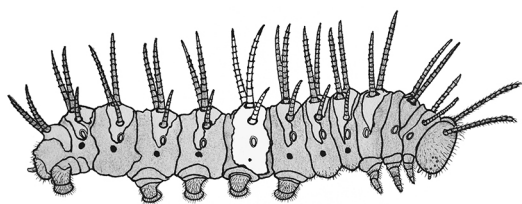


Fig. 54. *Cethosia methypsea*. Larva.

The genus is distributed from Sri Lanka and India through the Malay Archipelago to the Papuan subregion.

Key to the identification of the species of *Cethosia*

- 1 (2) Upperside forewing without a white subapical band, the black area bearing a series of white sagittate markings. ...*C. biblis*
- 2 Upperside forewing with a white or yellowish subapical band.
- 3 (4) Upperside forewing without a series of white subapical spots; underside hindwing without a white submarginal band. ...*C. hypsea*
- 4 (5) Upperside forewing with subapical white spots; underside hindwing with a narrow white submarginal band outwardly defined by short black stripes.
- 5 (6) Upperside ♂ rich orange red; underside hindwing submarginal white band narrow, interrupted, outwardly defined by short black stripes. ...*C. methypsea*
- 6 Upperside ♂ much paler, ♀ becoming whitish; underside hindwing submarginal white band broader, continuous, outwardly defined by prominent black spots. ...*C. cyane*

Cethosia hypsea hypsina

The Malay Lacewing

Plate 48, figure 5

The genus *Cethosia* includes some of the most beautiful butterflies of Sundaland. Above, the species are bright orange-red and black, the red colour being confined to the basal area on the forewing, while the hindwing is entirely red except for the scalloped black distal border. The undersurface is orange-red, both wings have whitish fasciae and are spotted with black, and the forewing cell has several black-edged, pale blue transverse stripes. The duller females are more heavily spotted in the orange-red areas on both wings. The butterflies emit a disagreeable odour when squeezed.

C. hypsea; *C. methypsea*; *C. biblis*: The commonest species, *C. hypsea*, closely resembles *C. m. methypsea* (Pl. 48:3; g. 69): both have a white subapical band on the forewing (more yellowish in *C. methypsea*), but on the underside, *C. m. methypsea* has a narrow, white, submarginal band. In *C. biblis perakana* (Pl. 48:4; g. 68), the black apical area on the forewing is ornamented by a series of white spots and lunules. The typical female is pale orange above, but in a second form, the orange colouring is wholly or partially replaced by dull green.

C. hypsea is not uncommon at flowering plants on forest roads (excluding coastal mangroves and upper montane areas), and *C. methypsea* is nearly as common in the same situations. *C. biblis* is much more local,

PLATE 48



PLATE 48

1 *Vindula erota chersonesia* (p. 136)

2a *Vindula dejone erotella* (p. 136)

2b *Vindula dejone tiomana*

3 *Cethosia methypsea methypsea* (p. 131)

4 *Cethosia biblis perakana* (p. 131)

5 *Cethosia hypsea hypsina* (p. 131)

6 *Cethosia cyane* (p. 132)

[♂ Singapore; ♀ Langkawi]

Scale: x 2/3 natural size

PLATE IS-3



- 1 Nymphalidae: Biblidinae: *Ariadne ariadne minorata* (Sri Lanka)
 2 Nymphalidae: Nymphalinae: *Doleschallia bisaltide* ?*bisaltide* var.
 3 Nymphalidae: Cyrestinae: *Chersonesia peraka peraka*
 4 Nymphalidae: Limenitidinae: *Athyma asura idita*
 5 Nymphalidae: Pseudergolinae: *Stibochiona nicea nicea* (India)