

NEW RECORDS OF BUTTERFLIES FROM MACAU, SOUTHEAST CHINA (LEPIDOPTERA: PAPILIONOIDEA)

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ABSTRACT.— Records of 74 species of butterflies are listed for the Portuguese territory of Macau, of which 57 are new records.

KEY WORDS: Acanthaceae, Amaranthaceae, Amathusiidae, Anacardiaceae, Annonaceae, Apocynaceae, Asclepiadaceae, Asia, Cappariaceae, Caprifoliaceae, Celastraceae, Cruciferae, Cycadaceae, Danaidae, distribution, Euphorbiaceae, Flacourtiaceae, Gramineae, Hesperidae, hostplants, Lauraceae, Leguminosae, Loranthaceae, Lycaenidae, Magnoliaceae, Moraceae, Musaceae, Myrsinaceae, Nymphalidae, Oriental, Oxalidaceae, Palmae, Papilionidae, Papilionoidea, Pieridae, Rhopalocera, Riodinidae, Rubiaceae, Rutaceae, Sabiaceae, Salicaceae, Santalaceae, Satyridae, Scrophulariaceae, Smilacaceae, Southeast Asia, Sterculiaceae, Ulmaceae, Urticaceae, Verbenaceae, Zingiberaceae.

Even though Macau is considered to be a very small land area situated near Hong Kong in Southeast Asia (see map, Fig. 1), it is adjacent to Guangdong Province of mainland China and hence is influenced by the fauna from this area. Winged insects, such as the Lepidoptera, can easily fly from mainland China to Macau in a matter of minutes, which could account for the large number of species locally. A previous paper (Easton and Pun, 1996) provided records for moths collected in Macau.

The authors have retained the use of any English common name that is available for species of butterflies in this paper, rather than choosing new names that could be applied locally. In some cases, the use of a particular name may be difficult for the reader to interpret. For example, the use of the name, Common Mormon for *Papilio polytes* Linnaeus, or the Great Mormon for *P. memnon* Linnaeus, in the Papilionidae, may not be descriptive. Other dark butterflies, in the family Danaidae, are called "crows," referring to species in the genus *Euploea*, since they are colored similarly to the common black birds known as crows. The use of the name orange tiger for *Danaus genutia* (Cramer) probably arose in India, where the orange and black striped great cat was most common.

Even though a number of workers have published on the butterfly fauna of the nearby territory of Hong Kong (Hill *et al.*, 1978; Johnston and Johnston, 1980; Marsh, 1960; Potter, 1938-39), Mr. J. C. Kershaw is probably the first to discuss the butterfly fauna in the former Portuguese territory of Macau, within his works on the butterflies of the Hong Kong colony.

The material reported in this study was collected partially with the use of aerial nets, in the case of adults. Larvae that were col-

FRONTISPIECE. Trail on hillside of Taipa Id., Macau: insets illustrate *Parathyma perius* (Linnaeus) upper left (Nymphalidae), *Abisara echerius* (Stoll) upper right (Riodinidae), *Euploea core* (Cramer) lower left (Nymphalidae), *Zemeros flegyas* (Cramer) lower right above corner (Riodinidae), and *Erionota torus* (Evans), lower right corner (Hesperidae).



Fig. 1. Map showing Macau and Hong Kong, southern Guangdong Prov., China.

lected from a hostplant were reared to adult in the government laboratory facility at Siac Pai Van, on Coloane Island. Identifications were undertaken using the book by Johnston and Johnston (1980) for the fauna of Hong Kong, as well as Chou (1994) for China. Names of the hostplants have been taken following the *Macau Catalogue of Plants* and first addendum (Câmara Municipal das Ilhas, Macau, and Instituto de Investigação Científica Tropical, Lisboa, 1991, 1993), as well as Thrower (1983, 1988) for climbing plants and trees in Hong Kong, respectively, and Ho (1981) for poisonous plants. Representatives of most of the species named here are housed at the entomology museum of the Agrarian Services, at Siac Pal Van, Coloane Island, under the curatorship of the second author. Collector names noted are spelled out unless by the authors: Emmett R. Easton (ERE) and Wing-Wah Pun (WWP).

LEPIDOPTERA

AMATHUSIIDAE

Discophora sondaica tulliana Stichel

Great Duffer, or White Blue Bead. 15 Aug 1994, 27 Sep 1994, WWP leg. NEW RECORD: Coloane Id., Macau. Hostplants of larvae are *Bambusa multiplex* and *B. ventricosa* (Gramineae), and in Hong Kong it is uncommonly found on scrub bamboo (Hill *et al.*, 1978).

Faunis eumeus (Drury)

Common Faun. 19 Jun 1992, WWP leg. Easton (1992) reported it earlier from Coloane Id., where it is considered a common species during the spring months and in early summer; seen along hiking trails that pass through shady undergrowth. Adults have been observed by one of us (ERE) feeding on the decomposing fruits of the rough-leaved stem fig, *Ficus hispida* (Moraceae), that had fallen to the ground near Jardim do Lago, Taipa Id., June 1997. Hostplants are *Smilax china* (Smilacaceae) and *Phoenix hanceana* (Palmae). Larvae have also been reared (by WWP) on other hostplants: *Musa paradisiaca* (Musaceae), sago palm *Cycas revoluta* (Cycadaceae), and the palms *Caryota ochlandra* and *Chrysalidocarpus lutescens*.

DANAIDAE

Danaus genutia (Cramer)

Dark-veined Tiger, or Orange Tiger. 30 Sep 1993, A. Castillo leg. Easton (1991) reported it on Taipa Id. It is believed to feed on *Asclepias curassavica* (Asclepiadaceae), a poisonous perennial herb called butterfly weed that contains a cardiac glycoside (Ho, 1981), so the larvae are poisonous to insectivorous birds. The adult superficially resembles the North American monarch, *D. plexippus* (Linnaeus). Chaturvedi and Haribal (1992) list additional hosts-plants of this species where it occurs in India.

Danaus chrysippus (Linnaeus)

Plain Tiger. 24 Nov 1993, Tai Ip leg. NEW RECORD: Coloane Id. Larvae feed on the poisonous *Asclepias curassavica* (Asclepiadaceae) plants, so they would be distasteful to birds, but Kershaw (1907a) observed a dragonfly consuming two adults.

Euploea core (Cramer) [= *amymone* (Godart)]

Common Crow. 12 Oct 1994, WWP leg. This species was reported on Taipa Id. (Easton 1991) and larvae are reported to feed upon *Ficus microcarpa* (Moraceae), as well as on *Nerium indicum* (Apocynaceae), and the poisonous vine-like plant, *Toxicarpus wightianus* (Asclepiadaceae) (Hill *et al.*, 1978).

Euploea midamus (Linnaeus)

Blue-Spotted Crow. 16 Oct 1993, Chi-Kong Cheong leg. NEW RECORD: Coloane Id. Ex *Nerium indicum* (Apocynaceae) and *Celastrus hindsii* (Celastraceae).

Euploea mulciber (Cramer)

Striped Blue Crow. 20 Jun 1994, Chi-Kong Cheong leg. NEW RECORD: Coloane Id. Larvae feed upon *Nerium indicum* (Apocynaceae) and *Toxicarpus wightianus* (Asclepiadaceae).

Idiopsis similis (Linnaeus)

Blue Glassy Tiger. 24 Nov 1993, Tai Ip leg., Coloane Id. Easton (1992) reported it congregating on tree foliage in a secluded area on a hiking trail, in December. Larvae feed on a poisonous vine, *Tylophora ovata* (Asclepiadaceae), that contains alkaloids.

HESPERIIDAE

Astictopterus jama chinensis (Leech)

Forest Hopper. 1 Aug 1995, J. Gomes leg. NEW RECORD: Coloane Id. Johnston and Johnston (1980) record the larval plant in Hong Kong as *Miscanthus sinensis* (Gramineae).

Choaspes hemixanthus furcata Evans

Orange Red Skirt. Summer, 1989, ERE leg. Taipa Id., near University: NEW RECORD. The larval food plant in Hong Kong is reported to be *Sabia limoniacea* (Sabiaceae).

Erionota torus (Evans)

Banana Skipper. 11 Aug 1994, Wai-Man Ng leg. NEW RECORD: Coloane Id. The largest skipper locally, the larvae of which lives in rolled up tubes made from a portion of the banana-leaf, *Musa paradisiaca* (Musaceae). Kershaw (1907a) reported it as common wherever there are banana plants. Adults fly at dusk.

Hyarotis adrastus praba Moore

Tree Flitter. 20 Jun 1994, Chi-Kong Cheong leg. NEW RECORD: Coloane Id. Kershaw (1907a) reported it common in Hong Kong and observed adults sucking moisture from the droppings of birds. Larvae are believed to feed upon *Calamus tetradactylus* (Palmae), the rattan palm, or the bamboo palm, *Chrysalidocarpus lutescens* (Palmae) (Hill *et al.*, 1978).

Parnara guttata (Bremer & Grey)

Rice Skipper, or Common Straight Swift. 20 Oct 1992, C. F. Tong leg. NEW RECORD: Coloane Id. Larvae feed upon grasses (Gramineae): glutene-rice grass (*Apluda mutica*), ciliate sasagrass (*Microstegium ciliatum*), as well as rice, *Oryza sativa*. Thus, this species could be a potential pest of rice paddies in China.

Pelopidas conjunctus (Herrich-Schäffer)

Conjoined Swift. 3 Sep 1993, A. Castillo leg. NEW RECORD: Coloane Id. In Hong Kong, this species feeds on the grasses (Gramineae), *Miscanthus sinensis* and *Coix lachryma-jobi*, Job's tears.

Telicota ohara formosana Fruhstorfer

Dark Darter. 28 Jun 1993, Chi-Kong Cheong leg. NEW RECORD: Coloane Id. Larvae are reported to feed upon palm grass, *Setaria palmifolia* (Gramineae).

Udaspes folus (Cramer)

Grass Demon. 23 Apr 1984, Leung-Va leg. NEW RECORD: Coloane Id. Larvae are found on *Zingiber officinale* (Zingiberaceae), common ginger, and the spiny date palm, *Phoenix hanceana* (Palmae).

LYCAENIDAE

Artipe eryx (Linnaeus)

Green Flash. 3 Aug 1993, A. Castillo leg. NEW RECORD: Coloane Id. The light and medium brown colored larva feeds inside flower buds of *Gardenia jasminoides* (Rubiaceae) during the spring months and later bores into the seed pods.

Celastrina puspa barneyi (Corbel)

Common Hedge Blue. 28 Apr 1994, P. F. Cheong leg. NEW RECORD: Coloane Id. Larvae are believed to feed on *Bridelia monoica* (Euphorbiaceae), and adults have been reported throughout the year in Hong Kong.

Euchrysops cnejus (Fabricius)

Grass Blue. 9 Nov 1992, Sin Meng leg. NEW RECORD: Coloane Id. Ex. *Canavalia maritima* (Leguminosae-Papilionaceae): larvae feed on flowers and seedpods (Hill *et al.*, 1978)

Everes lacturnus rileyi Godfrey

Small Blue, or Hong Kong Cupid. 31 May 1994, WWP leg. NEW RECORD: Coloane Id. Larvae feed on the seeds and in developing pods of *Desmodium heterocarpon* (Leguminosae-Papilionaceae).

Iraota timoleon (Stoll)

Silver Streak Blue. 22 Oct 1994, WWP leg. NEW RECORD: Coloane Id. Larval hostplant is *Ficus superba* (Moraceae).

Lampides boeticus (Linnaeus)

Pea Blue, or Long-Tailed Blue. 24 Feb 1994, Pak-Fai Cheong leg. NEW RECORD: Coloane Id. The larvae are believed to feed on the flowers and then later inside the developing seed pods of rattlebox, *Crotalaria mucronata* (Leguminosae-Papilionaceae).



Fig. 2-9. Macau and its butterflies: 2) Hillside vegetation by urban area of Macau. 3) Natural History Museum, Seac Pai Van Agricultural Park, Coloane Id., Macau. 4) One of the butterfly exhibits in the museum. 5) adult of the 5-bar swordtail, *Graphium antiphates* (Cramer) (Papilionidae) from Macau. 6) Larva of the blue grassy tiger, *Idiopsis similis* (Linnaeus) (Nymphalidae), on hostplant *Tylophora ovata*. 7) Larva of the common mime swallowtail, *Chilasa clytia* (Linnaeus) (Papilionidae), on pond spice. 8) Larva of the common faun butterfly, *Faunis eumeus* (Drury) (Amathusiidae), on banana leaf. 9) Leaf rolls made by larvae of *Erionota torus* (Evans) (Hesperiidae) on its host, banana.

***Spindasis lohita formosana* Moore**

Long-Banded Silver Line. 9 Sep 1993, Sin Meng leg. Coloane Id. Kershaw (1907b) reported larvae feeding upon *Dendrotrophe frutescens* (Santalaceae) and witches broom, *Loranthus parasiticus* (Loranthaceae), but he reared the larvae that he found only in the presence of ants which apparently tend to the caterpillars and obtain a liquid from them.

***Zizeeria maha serica* (Felder)**

Pale Grass Blue. 7 Jun 1994, WWP leg. NEW RECORD: Coloane Id. Larvae feed upon a clover-like plant known as sorrel, *Oxalis repens* (Oxalidaceae) in Hong Kong (Hill *et al.*, 1978).

NYMPHALIDAE

***Apatura parisatis* (Westwood)**

Black Prince. 27 Jan 1990, ERE leg. NEW RECORD: Taipa Id., near the university. Larvae are reported in Hong Kong to feed on Philippine hackberry, *Celtis philippensis* (Ulmaceae).

***Athyma nefti seitzi* (Fruhstorfer)**

Color Sergeant. 31 Aug 1992, WWP leg. NEW RECORD: Coloane Id. Larval hostplant is the hairy-fruited abacus plant, *Glochidion eriocarpum* (Euphorbiaceae).

***Athyma perius* (Linnaeus)**

Common Sergeant. 3 Mar 1993, WWP leg. NEW RECORD: Coloane Id. In Hong Kong, it is found on the same hostplant as the color sergeant (Hill *et al.*, 1978).

***Cupha erymanthis* (Drury)**

Rustic. 23 Oct 1992, Sin Meng leg. Coloane Id.; 10 Nov 1989, ERE leg., Taipa Id.: NEW RECORD. Larval hostplants are reported as *Homalium cochinchinensis* (Flacourtiaceae) and *Scolopia chinensis* (Flacourtiaceae) (Johnston and Johnston, 1980)

***Euthalia phemius* (Doubleday)**

Blue Baron. 23 Jun 1992, Pak-Fai Cheong leg. NEW RECORD: Coloane Id. Ex *Mangifera indica* (Anacardiaceae).

***Hestina assimilis* (Linnaeus)**

Red Ring Skirt. 27 Oct 1993, Che-Kong Cheong leg. Coloane Id. Ex *Celtis sinensis* (Ulmaceae). Kershaw (1907a) claimed it as uncommon here.

***Hypolimnas bolina* (Linnaeus)**

Common Egg-Fly, or Great Egg-Fly. 17 Oct 1993, Chi-Kong Cheong leg. NEW RECORD: Coloane Id. Kershaw (1907a) reported it as common in Hong Kong and he found larvae feeding upon *Alternanthera sessilis* (Amaranthaceae); adults attracted to *Lantana* sp. (Verbenaceae).

***Kaniska canace* (Linnaeus)**

Blue Admiral. 31 Dec 1993, Tai Ip leg. NEW RECORD: Coloane Id. Larval hostplant is reported to be greenbrier, *Smilax china* (Smilacaceae).

***Neptis hylas* (Linnaeus)**

Common Sailor. 10 Oct 1994, WWP leg. NEW RECORD: Coloane Id. Ex false groundnut, *Desmodium heterocarpon* (Leguminosae-Papilionaceae).

***Parathyma sulpitia* (Cramer)**

Five-Dot Sergeant. 25 May 1990, ERE leg. NEW RECORD: Taipa Id., near University campus. The larval hostplant for this species in Hong Kong is wild honeysuckle, *Lonicera confusa* (Caprifoliaceae).

***Phalanta phalantha* (Drury)**

Small Leopard. 1 Jul 1992, Tai Ip leg.; 17 Oct 1993, Chi-Kong Cheong leg. NEW RECORD: Coloane Id. Hill *et al.* (1978) in Hong Kong reported the larval hostplant as weeping willow, *Salix babylonica* (Salicaceae) and *Scolopia chinensis* (Flacourtiaceae).

***Phaedyma columnella columnella* (Cramer)**

Short-Banded Sailor. 12 Jul 1995, J. Gomes leg. NEW RECORD: Coloane Id. Ex *Sterculia lanceolata* (Sterculiaceae), scarlet sterculia tree.

***Polygonia canace* (Linnaeus)**

Blue Admiral. Summer 1990, ERE leg. NEW RECORD: Taipa Id., near university. The larval hostplant is *Smilax china* (Smilacaceae). Kershaw (1907a) reported it as a fairly common species in his book on Hong Kong butterflies.

***Polyura arja arja* (Felder & Felder)**

Genus is known by common name of Nawabs. 14 Dec 1996, ERE leg. NEW RECORD: Taipa Id. The mature larva was found crossing a road near Jardim do Lago (garden pond) and reared to adult. It has not been reported as yet in Hong Kong but Bascombe (1997) lists its distribution in China from Fujian, Guangxi, Guangdong, Hainan, Sichuan, and Yunnan provinces. Chou (1994) lists its hostplant as *Ficus microcarpa* (Moraceae).

***Precis almana* (Linnaeus)**

Peacock Pansy. 16 Nov 1992, Chi-Kong Cheong leg. NEW RECORD: Coloane Id. In Hong Kong, its hostplant is reported to be *Alternanthera philoxeroides* (Amaranthaceae), but in Macau it was collected from *Ruellia repens* (Acanthaceae).

***Precis atlites* (Linnaeus)**

Grey Pansy. 24 Feb 1993, Pak-Fai Cheong leg. NEW RECORD: Coloane Id. Larval hostplant is *Alternanthera philoxeroides* (Amaranthaceae) in Hong Kong.

***Precis orithya* (Linnaeus)**

Blue Pansy. 27 Dec 1993, Tai Ip leg. NEW RECORD: Coloane Id. Hostplant is reported as *Antirrhinum majus* (Scrophulariaceae) in Hong Kong.

***Symbrenthia hippoclus lucina* (Stoll)**

Common Jester. Summer 1990, ERE leg. NEW RECORD: Taipa Id., at university campus. Its foodplant is reported to be dense-flowered false nettle, *Boehmeria densiflora* (Urticaceae).

***Vanessa cardui* (Linnaeus)**

Painted Lady. Coloane Id. (date and collector unknown).

PAPILIONIDAE

***Chilasa clytia* (Linnaeus)**

Common Mime. 15 Oct 1993, Tai Ip leg. NEW RECORD: Coloane Id. Larval hostplant for this species is pond spice, *Litsea glutinosa* (Lauraceae).

***Graphium agamemnon* (Linnaeus)**

Tailed Green Jay. 14 Aug 1994, WWP leg. Coloane Id.; 31 July 1990, ERE leg. Taipa Id. Larval hostplant is *Michelia alba* (Magnoliaceae).

***Graphium antiphates* (Cramer)**

5-Bar Swordtail. 31 Dec 1990, ERE leg. NEW RECORD: Taipa Id., on University campus. Hostplants are *Desmos cochinchinensis* (Annonaceae) and the white jade orchid tree, *Michelia alba* (Magnoliaceae) (Johnston and Johnston, 1980), and the shrub, *Uvaria microcarpa* (Annonaceae).

***Graphium doson* (C. Felder & R. Felder)**

Common Jay. 2 Jun 1994, Chi-Kong Cheong leg. NEW RECORD: Coloane Id. This species develops on the leaves of *Michelia alba* (Magnoliaceae) and the camphor tree, *Cinnamomum camphora* (Lauraceae).

***Graphium sarpedon* (Linnaeus)**

Blue Triangle, or Common Bluebottle. Sep 1989, ERE leg. Taipa Id.; 25 Feb 1994, WWP leg. Coloane Id. Larvae of this species feed on the camphor tree, *Cinnamomum camphora* (Lauraceae), as well as *Litsea glutinosa* (Lauraceae), pond spice tree. Daccordi *et al.* (1988) mention adults attracted to *Lantana* (Verbenaceae). Flight of the adults is exceedingly swift and often above the ground in tree canopies.

***Papilio bianor* Cramer**

Chinese Peacock. 23 Feb 1994, Pak-Fai Cheong leg. NEW RECORD: Coloane Id. Hostplant of larvae is listed by Hill *et al.* (1978) as *Evodia meliaefolia* (Rutaceae) in Hong Kong, while in Macau it has been found on *Citrus* sp (Rutaceae).

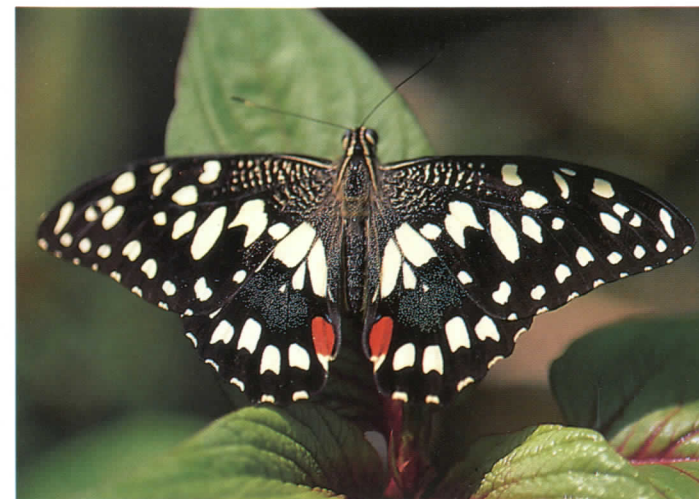


Fig. 10. The citrus swallowtail (*Papilio demoleus*) in Macau.

***Papilio demoleus* Linnaeus**

Lime Butterfly, or Citrus Swallowtail. 31 Jul 1990, ERE leg. Taipa Id.; 20 Oct 1994, WWP leg. Coloane Id. Easton (1992) reported it earlier from Taipa Id. Plant hosts for the larvae are *Atalantia buxifolia* (Rutaceae) and *Citrus* sp. (Rutaceae).

***Papilio helenus* Linnaeus**

Red Helen. 22 Oct 1994, WWP leg. NEW RECORD: Coloane Id. Ex *Citrus* sp., *Toddalia asiatica* and *Zanthoxylum avicennae*, prickly ash, all in the family Rutaceae.

***Papilio memnon* Linnaeus**

Great Mormon. 20 Aug 1990, Tai Ip leg. Coloane Id. Recorded from Taipa Id. earlier (Easton, 1991).

***Papilio paris* Linnaeus**

Paris Peacock. 21 Oct 1994, WWP leg. NEW RECORD: Coloane Id. Ex *Toddalia asiatica* (Rutaceae). Kershaw (1907a) lists *Zanthoxylum nitidum* (Rutaceae), a prickly woody climber as a hostplant.

***Papilio polytes* Linnaeus**

Common Mormon. 16 and 27 Oct 1989, ERE leg. Easton (1991) reported it from Taipa Id.; 11 Jun 1992, Pak-Fai Cheong leg. Coloane island, Macau. Larvae feed on various species of *Citrus*, plus *Zanthoxylum avicennae* (Rutaceae).

***Papilio protenor* Cramer**

Dark Mormon. 23 Feb 1994, Pak-Fai Cheong leg. NEW RECORD: Coloane Id. Ex *Citrus* sp and *Zanthoxylum nitidum* (both Rutaceae).

***Papilio xuthus* (Linnaeus)**

Swallowtail. 27 Oct 1992, Pak Fai Cheong leg. NEW RECORD: Coloane Id. Ex *Citrus* sp. (Rutaceae). Considered to be rare in Hong Kong, it ranges north to Taiwan and Japan where Watanabe (1976) reported high mortality in caterpillars from ants, spiders and bugs in early instars, and with wasps in later instars.

PIERIDAE

***Catopsilia pomona* (Fabricius)**

Lemon Migrant. 9 Sep 1992, Kassod Tree, Tai Ip leg. NEW RECORD: Coloane Id. Ex *Cassia fistula*, *C. siamea* (Leguminosae-Caesalpinaceae).

***Catopsilia pyranthe* (Linnaeus)**

Mottled Migrant, 23 Oct 1992, Chi-Kong Cheong leg. Coloane Id., Macau. Kershaw (1907a) reported this species as the commonest butterfly of the genus in this general area, so presumably he observed it in Macau. He reported eggs laid singly on leaves and stems of *Cassia occidentalis* (Leguminosae), where larvae could be found at almost any time of the year and were susceptible to the attack of wasps.

***Cepora nerissa* (Fabricius)**

Lesser Gull or Brown Vein. 29 Nov 1993, Wai-Man Ng leg. NEW

RECORD: Coloane Id. Ex *Capparis pumila* (Capparidaceae).

***Delias agleja* (Linnaeus) [= *Delias pasithoe* (Linnaeus)]**

Common Black Jezebel. 31 Dec 1993, WWP leg. Coloane Id.; 11 Feb 1995, ERE leg. Macau Peninsula, along Avenue de Republica. Kershaw (1907a) reported it commonly as occurring in Macau and he observed larvae dropping to the ground on silken strands from branches of *Ficus microcarpa* and *F. retusa* (Moraceae). One of us (ERE) observed newly eclosed adults, some of which were malformed, near the base of *F. microcarpa* trees (Feb 1995). As the hostplant for this species is *Dendrotrophe frutescens* (Santalaceae) and witches broom, *Loranthus parasiticus* (Loranthaceae), which is parasitic on the trunks of large trees, the latter may have been growing on the Chinese banyan trees that Kershaw (1907a) observed in Macau and called a "host."

***Eurema hecabe* (Linnaeus)**

Common Grass Yellow. 22 Oct 1994, WWP leg. NEW RECORD: Coloane Id. Ex *Albizia lebbek* and *Cassia siamea* (Leguminosae-Caesalpinaceae).

***Hebomoia glaucippe* (Linnaeus)**

Great Orange Tip. 25 May 1994. Chi-Kong Cheong leg. NEW RECORD: Coloane Id. Ex spider tree, *Crataeva religiosa* (Capparidaceae).

***Ixias pyrene* (Linnaeus)**

Yellow-Orange Tip. 6 Jul 1992, Pak-Fai Cheong leg. NEW RECORD: Coloane Id. Larval hostplant in Hong Kong is *Capparis cantoniensis* and *Crataeva religiosa* (Capparidaceae). Eggs are laid on dry twigs, according to Hill *et al.* (1978), and newly hatched larvae migrate to the foliage.

***Pieris canidia* (Linnaeus) [= *Artogeia canidia* (Linnaeus)]**

Common White. 2 Feb 1994, WWP leg. NEW RECORD: Coloane Id. Ex *Brassica chinensis* and *B. oleracea* (Cruciferae).

***Pieris rapae* (Linnaeus) [= *Artogeia rapae* (Linnaeus)]**

Imported Cabbage Worm, or Small White. 26 Nov 1991, Pak-Fai Cheong leg. NEW RECORD: Coloane Id. Larvae feed on cultivated *Brassica* species (Cruciferae).

***Prioneris thestylis* (Doubleday)**

Spotted Sawtooth. This pierid was reported to occur in Macau by Kershaw (1907a), but we have not been able to document its presence in recent years. However, recently Walthew (1996) observed a number of individuals on Ma On Shan, in Hong Kong.

RIODINIDAE

***Abisara echerius* (Stoll)**

Plum Judy. 26 Oct 1996, ERE leg. Taipa Id. (along hiking trail). Recorded hostplant is *Embelia laeta* (Myrsinaceae).

***Zemeros flegyas* (Cramer)**

Punchinello. 20 Jun 1994, WWP leg. Coloane Id. This species is commonly found along the hiking trail in forested areas of Taipa Id. Its hostplant is believed to be *Maesa japonica* (Myrsinaceae). It generally is not attracted to flowers, but settles on the foliage. Kershaw (1907a) claimed it was uncommon in the territory during his period of residence, but his observations were probably restricted to the land area that is now considered the peninsula.

SATYRIDAE

***Lethe europe heroe* (Cramer)**

Bamboo Tree Brown. Date unknown, Leung-Va leg. NEW RECORD: Coloane Id. Ex *Bambusa multiplex* (Gramineae).

***Melanitis leda leda* (Linnaeus)**

Common Evening Brown. 14 Sep 1993, WWP leg. NEW RECORD: Taipa Id. Ex *Bambusa* sp. (Gramineae). In Hong Kong, this species is reported to feed upon glutene-rice grass, *Apluda mutica* (Gramineae). Kershaw (1907a) reported adults feeding on the sap of plants or over-ripe fruits rather than being attracted to flowers.

Melanitis phedima (Cramer)

Dark Evening Brown. 14 Jul 1994, WWP leg. NEW RECORD: Coloane Id. Larval hostplant is green fox-tail grass, *Setaria viridis* and palm grass, *S. palmifolia* (Gramineae).

Mycalesis horsfieldii panthaka Fruhstorfer

Common Bush Brown. 5 Mar 1993, Wai-Man Ng leg. NEW RECORD: Coloane Id. Larval hostplant is not reported.

Mycalesis mineus mineus (Linnaeus)

Dark Brand Bush Brown. 9 Sep 1993, A. Castilho leg. NEW RECORD: Coloane Id. Ex *Pogonatherum critinum* (Gramineae), golden-hair grass.

Ypthima baldus (Fabricius)

Common Six-Ring. 16 Apr 1994, V. V. Tong leg. NEW RECORD: Coloane Id. Ex *Miscanthis sinensis* (Gramineae). Eggs are believed to be laid close to the ground on debris or old leaves (Hill *et al.*, 1978).

Ypthima lisandra lisandra (Cramer)

Straight Six-Ring. 31 Mar 1995, Pak-Fai Cheong leg. NEW RECORD: Coloane Id. Larval hostplants in Hong Kong is reported to be *Miscanthis sinensis* and *Pogonatherum critinum* (Gramineae) (Johnston and Johnston, 1980).

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