



Recent butterfly observations from Mauritius

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James M. Lawrence

University of South Africa, Private Bag X6, Florida, 1710, South Africa. E-mail: jameslawrence@telkomsa.net

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Abstract: A total of 40 butterfly species have been recorded historically from the western Indian Ocean island of Mauritius. This study presents observations made over five days, from 18–23 October 2015, on the Mauritian butterfly fauna. Four localities were selected to cover a variety of natural and disturbed biotopes, as well as altitudinal ranges. The four localities were: 1) Grande Gaube; 2) Sir Seewoosagur Ramgoolam Botanic Gardens; 3) Le Morne; 4) Chamarel. Thirty species were recorded during this study. Grand Gaube had the highest species richness (i.e. 21 taxa) and the Botanic Gardens the lowest (i.e. 12 taxa). Most of the species recorded were rarely seen with seven taxa very common in one or more localities. All the extant endemic taxa were recorded during this study. Documenting temporal species dynamics can highlight changes in species richness over time, which can assist in identifying taxa of conservation concern. A brief account of each species recorded during this study is given, and discussed in context to the historical published literature.

Key words: Mascarene islands, conservation, western Indian Ocean.

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INTRODUCTION

Recently, interest in Afrotropical butterflies has increased, with much attention focussing on those of the western Indian Ocean islands. Identification guides to the Seychelles (Lawrence, 2014), Comoros (Balletto *et al.*, 2015), Réunion (Martiré & Rochat, 2008) and Mauritius (Williams, 1989; 2007) butterfly species have been published, allowing easy identification of these islands faunas.

The butterfly fauna of Mauritius can be considered fairly well known. A total of 40 butterfly taxa have been recorded, of which almost 25 % (i.e. nine taxa) are endemic (Williams, 2007). Furthermore, three of these endemic taxa are extinct. This species richness is similar to the 39 (Lawrence, 2014) and 32 (Martiré & Rochat, 2008) butterfly taxa recorded from Seychelles and Réunion respectively. The much larger island of Madagascar has more than 300 species (Lees *et al.*, 2003), and the Comoros, which are the closest of the western Indian Ocean islands to continental Africa, has over 90 taxa (Dall'Asta & Turlin, 2009; Balletto *et al.*, 2015).

The island of Mauritius lies in the western Indian Ocean and forms part of the Mascarene islands along with Réunion and Rodrigues (Fig. 1). Mauritius is 47 km wide, 58 km long and is approximately 1865 km²

in area. It is volcanic in origin and is situated at roughly 57°30' E and 20°15' S. The highest point is at 828 m a.m.s.l. The nearest major landmass is Madagascar, some 1300 km to the west.

The climate is tropical maritime with December to May humid and hot, and June to November dryer and cooler. Annual rainfall ranges from 1400–1800 mm in the coastal SE to 3600 mm on the higher central mountainous areas, and down to as little as 800 mm in the western areas.

Historically, indigenous forest covered most of Mauritius. In the 17th century, when Mauritius was first colonised, it was estimated that indigenous forest covered approximately 82.5 % of the island, with this reducing to < 2 % by 1997 (Mauritian Wildlife Foundation, 2005). Furthermore, Mauritius has 731 species of naturalised exotic plants, which makes up 53 % of the total flora (Cheke & Hume, 2008).

In this paper, recent observations on the butterflies from Mauritius are presented, and discussed in context to the historical published literature. Documenting temporal species dynamics can highlight changes in species richness over time, which can assist in identifying taxa of conservation concern. Given the high levels of endemism and the large changes in vegetation cover on the island, the reporting of regular observations on Mauritian butterflies is considered important.

METHODS AND LOCALITIES VISITED

This study was based on observations made by the author from four localities on the island of Mauritius over five days between 18–23 October 2015. The four

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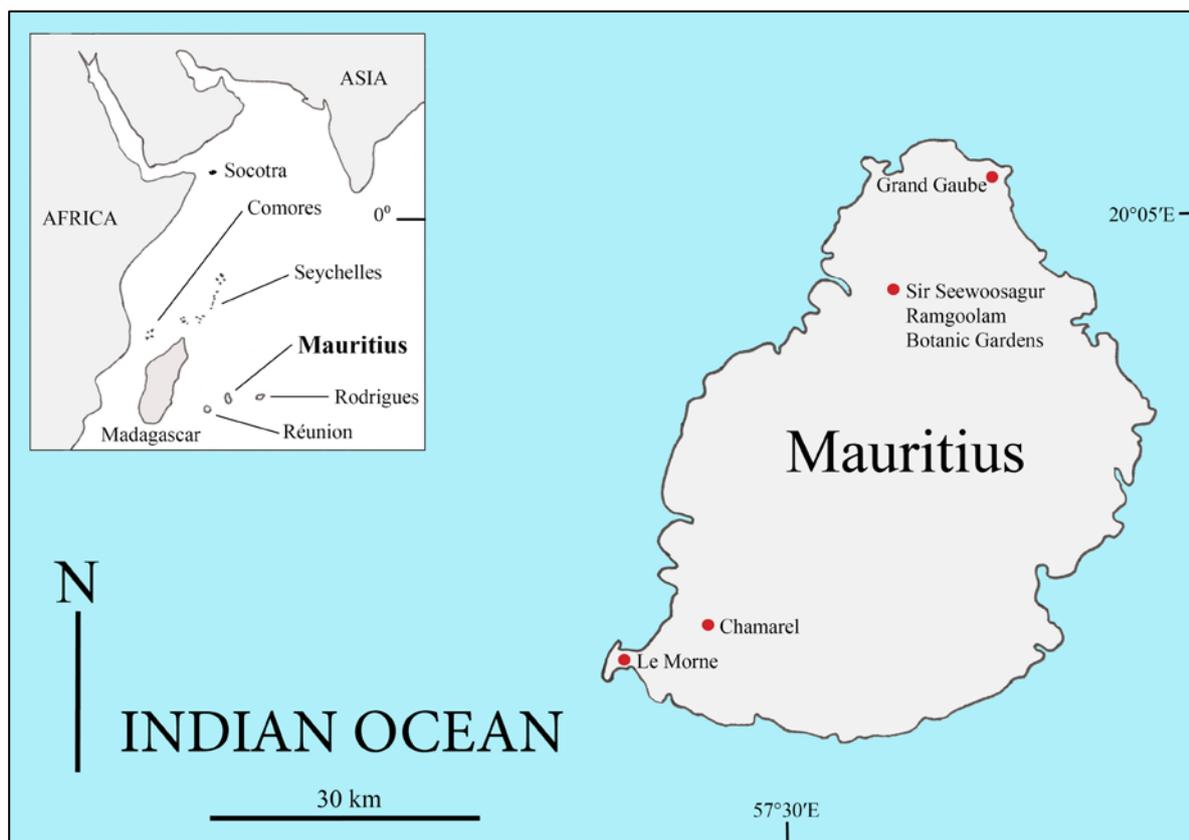


Figure 1 – Mauritius, showing the locations of the four study sites visited between 18 October 2015 and 23 October 2015. Inset map: The western Indian Ocean islands.

localities were selected to cover a variety of natural and disturbed biotopes, as well as altitudinal ranges. The following four sites were visited (Fig. 1):

1. Grand Gaube: 20°01' S; 57°40' E; ± 5–40 m a.m.s.l. Surveyed on 20 and 23 October 2015. Approximately 3 hours observation time was carried out. Vegetation consisted mostly of coastal scrub, *Cocos nucifera* L. and garden biotopes. *Lantana camara* L. was common with butterflies regularly seen feeding on the flowers.
2. Sir Seewoosagur Ramgoolam Botanic Gardens: 20°06' S; 57°34' E; ± 250–270 m a.m.s.l. Surveyed on 17 October 2015 over approximately 2 hours. Vegetation consisted mostly of cultivated gardens with many exotic species (Owadally, 1988)
3. Le Morne: 20°27' S; 57°19' E; ± 5–50 m a.m.s.l. Surveyed on 18, 21 and 23 October 2015. Approximately 2 hours' observation. Vegetation consisted mostly of coastal scrub, *Casuarina equisetifolia* L. stands and garden biotopes.
4. Chamarel: 20°26' S; 57°22' E; ± 400–500 m a.m.s.l. Surveyed on 21 and 23 October 2015. Approximately 6 hours' observation time. Vegetation consisted mostly of indigenous forest biotope.

For each locality, all taxa recorded were placed into an abundance category. Three abundance categories were identified: R = rare, with less than 5 individuals seen per day; C = common, with 6 to 20 individuals seen per day; VC = very common, with more than 20

individuals seen per day. All taxa discussed here are illustrated in Figs 2 & 3 using specimens from the author's collections, unless otherwise stipulated. Butterflies have been illustrated with the dorsal surface of the wing on the left, attached to the thorax, and the ventral surface on the right, separated from the thorax.

ANNOTATED SPECIES ACCOUNTS

A total of 30 butterfly taxa were recorded during this study (Table 1). This represents 75 % of all known Mauritian butterflies. Of the 10 taxa not seen three are considered extinct (i.e. *Antanartia borbonica mauritiana* Manders, 1908, *Salamis augustina vinsoni* Le Cerf, 1922 and *Libythea cinyras* Trimen, 1866). Four (i.e. *Hypolimnas anthedon drucei* (Butler, 1874), *Hypolimnas bolina* (Linnaeus, 1758), *Vanessa cardui* (Linnaeus, 1758) and *Danaus plexippus* (Linnaeus, 1758) are rarely seen in Mauritius and could represent migrants or individuals from ephemeral populations. Alternatively, these species may be established on the island and are just very rarely seen. The endemic lycaenid *Cyclus mandersi* (Druce, 1907) was also not seen, and is considered almost extinct and possibly confined to the small offshore island of Aigrettes (Florens & Probst, 1995). A further lycaenid, *Zizina otis antanossa* (Mabille, 1877), is reported to be common (Williams, 2007), but could have been overlooked due to its similarity to the very common *Zizeeria knysna* (Trimen, 1862), and therefore not recorded during this study. The last species reported from Mauritius and not seen was *Junonia goudoti* (Boisduval, 1833). Only a single specimen of this

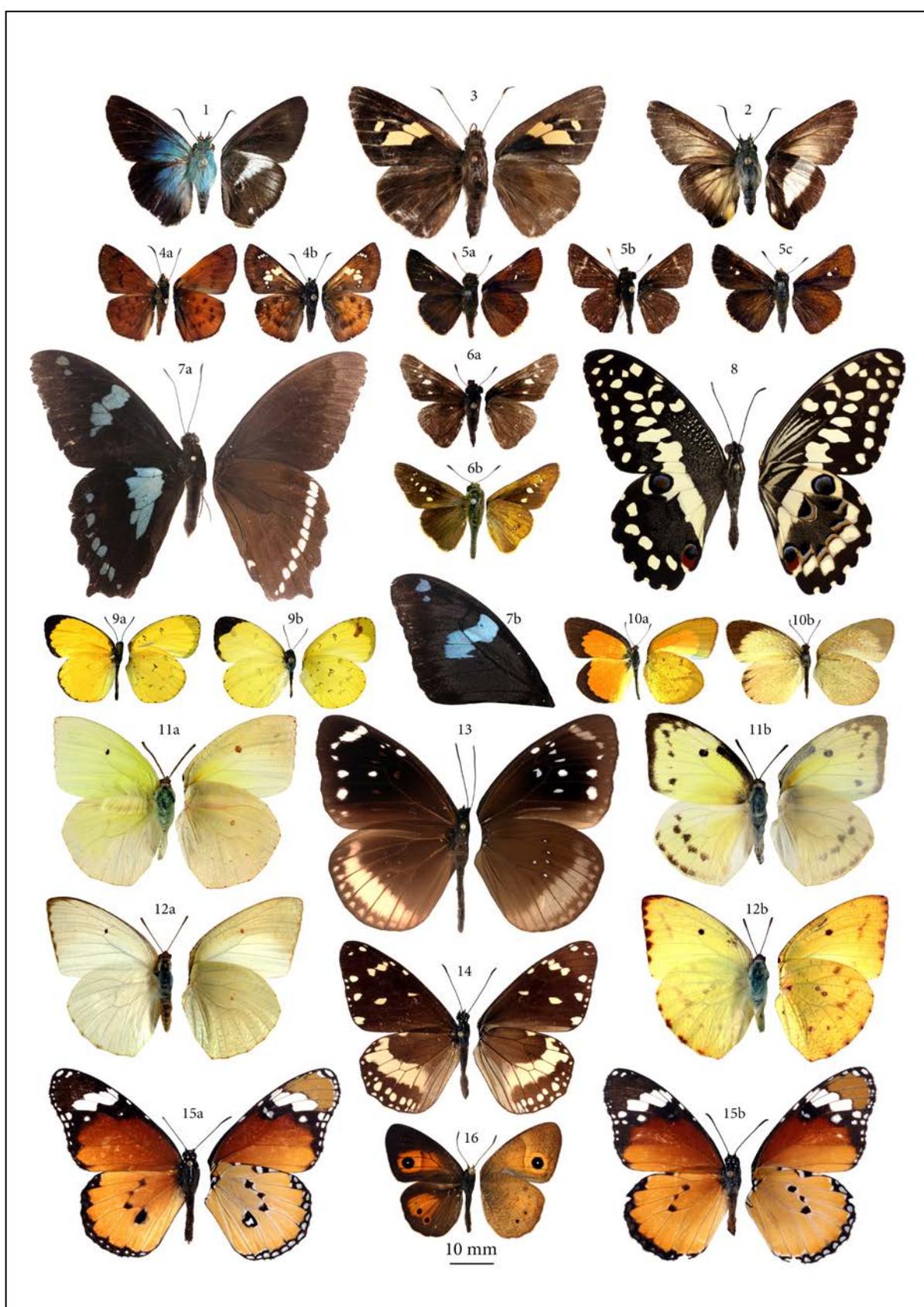


Figure 2 – 1. *Pyrrhiades ernesti*; 2. *Coeliades forestan forestan*; 3. *Erionota torus*; 4a. *Eagris sabadius sabadius* (♂); 4b. *Eagris sabadius sabadius* (♀); 5a. *Parnara naso naso* (♂) (J. Dobson collection); 5b. *Parnara naso naso* (♂); 5c. *Parnara naso naso* (♀) (J. Dobson collection); 6a. *Borbo borbonica borbonica*; 6b. *Borbo borbonica borbonica*; 7a. *Papilio manlius* (♂); *Papilio manlius* (♂) forewing; 8. *Papilio demodocus demodocus*; 9a. *Eurema floricola ceres* (♂); 9b. *Eurema floricola ceres* (♀); 10a. *Eurema brigitta pulchella* (♂); *Eurema brigitta pulchella* (♀); 11a. *Catopsilia thauruma* (♂) (J. Dobson collection); 11b. *Catopsilia thauruma* (♀) (J. Dobson collection); 12a. *Catopsilia florella* (♂); 12b. *Catopsilia florella* (♀); 13. *Euploea euphon*; 14. *Amauris phoedon*; 15a. *Danaus chrysippus orientis* (♂); 15b. *Danaus chrysippus orientis* (♀); 16. *Henotesia narcissus narcissus*.

species has been reported from Long Mountain by Vinson (1938).

Grand Gaube had the highest species richness (i.e. 21 taxa) with the lowest number of taxa recorded from the Botanic Gardens (i.e. 12 taxa). Most of the species recorded were rarely seen with seven taxa very common in one or more localities. All the extant endemic taxa were recorded during this study. A detailed account of each species recorded during this study is presented below.

Hesperiidae

1. *Pyrrhiades ernesti* (Hewitson, 1867) (Fig. 2.1). Two individuals were seen hilltopping at Chamarel. This skipper also occurs on Réunion and Madagascar (Chiba, 2009). It is considered a relatively recent introduction to Mauritius with the first record made in 1980 (Williams, 2007). Its flight is fast and about 1 to 2 m above the ground. It rapidly patrols an area of approximately 10 m radius and often settles between 0.5 m and 1.5 m above the ground.

2. *Coeliades forestan forestan* (Stoll, 1782) (Fig. 2.2). Widespread in Mauritius, but was not commonly seen during this study. Trimen (1866) found it to be uncommon. This taxon occurs throughout Africa, Comoros, Seychelles, Rodrigues and Réunion. Mauritius individuals have been often referred to incorrectly as subspecies *arbogastes* (Guenée, 1863). The subspecies *arbogastes* is confined to Madagascar and the southern Seychelles island of Cosmoledo (Viette, 1956; Lawrence, 2010).

3. *Erionota torus* Evans, 1941 (Fig. 2.3). A single specimen was recorded from Le Morne during this study. It was seen in a residential garden roosting under a banana leaf. Historically, the Mauritian population was incorrectly identified as *E. thrax* Linnaeus, 1767 (Cock, 2015). This species was first recorded in Mauritius in 1970 where it became a banana pest. It is apparently now considered uncommon, possibly due to the introduction of hymenopterous parasitoids in an attempt to achieve biological control (Williams, 2007).

4. *Eagris sabadius sabadius* (Gray, 1832) (Fig. 2.4). Widespread but not common. Only four individuals were seen in total. This skipper has a rapid flight between 0.5 m and 2 m above the ground. A female was seen feeding on *Stachytarpheta jamaicensis* (L.) Vahl flowers at Chamarel. The nominate subspecies also occurs on Réunion. Numerous other subspecies have been described from the other western Indian Ocean islands and the African continent.

5. *Parnara naso naso* (Fabricius, 1798) (Fig. 2.5). This subspecies is endemic to Mauritius. The other subspecies, *bigutta* Evans, 1937 is confined to Réunion (Martiré & Rochat, 2008). Only a single individual was seen at Grand Gaube feeding on *L. camara* flowers. Davies & Barnes (1991) and Manders (1907) found this skipper to be common. There is considerable variation in the forewing spots, with them absent in some male specimens (as illustrated in Fig.

2.5). In the female the spots are always present, larger and more pronounced compared with the males.

6. *Borbo borbonica borbonica* (Boisduval, 1833) (Fig. 2.6). Only a single individual was seen at Grand Gaube. Williams (2007) incorrectly refers to the Mauritian subspecies as *zelleri* (Lederer, 1855). Although rare during this study, it is considered to be the most commonly encountered skipper on the island (Trimen, 1866; Manders, 1907; Davies & Barnes, 1991; Williams, 2006). This butterfly is found throughout the Afrotropical Region and its islands, with the subspecies *morella* (de Joannis, 1893) found in Seychelles (Lawrence, 2014).

Papilionidae

7. *Papilio manlius* Fabricius, 1798 (Fig. 2.7). This butterfly is endemic to Mauritius and widespread across the island. It is Red-Listed by Collins & Morris (1985). No specimens were seen at Grand Gaube. Single individuals were seen at Le Morne and the Botanic Gardens. This butterfly was regularly seen at Chamarel. An unconfirmed sighting of a single female was made at Chamarel, substantiating historical records that the females are infrequently observed (Trimen, 1866; Williams, 2007). Males are very strong flyers and were never seen settling. Two males were observed circling a hilltop at Chamarel. However, further observations would be required to confirm if this butterfly displays hilltopping behaviour. Slight variations in the forewing patterns of the male was seen and is illustrated in Figs 2.7.

8. *Papilio demodocus demodocus* Esper, 1798 (Fig. 2.8). This species was widespread but not frequently seen during this study. However, it is generally considered to be common during the summer months (Williams, 2007). It was collected in Mauritius for the first time in 1870 (Vinson, 1938; Paulian & Viette, 1968). This butterfly is common throughout the Afrotropical Region including the Indian Ocean islands (except for Seychelles and Rodrigues) and is represented by the subspecies *bennetti* Dixey, 1898 on the Yemen island of Socotra (Smith & Vane-Wright, 2008).

Pieridae

9. *Eurema floricola ceres* (Butler, 1886) (Fig. 2.9). This butterfly was the most commonly seen species during the study. Interestingly, most individuals seen were females with very few males observed. It is a weak flyer, rarely settles, and tends to keep close to the ground. This taxon is confined to Mauritius and Réunion. Numerous other subspecies have been described from the other western Indian Ocean islands and the African continent (Yata, 1994).

10. *Eurema brigitta pulchella* (Boisduval, 1833) (Fig. 2.10). Only seen at Grand Gaube during this study, where it was not common. Only the wet season form was seen. Davies & Barnes (1991) reported it as common, especially in garden biotopes, while

Williams (2007) found it to be uncommon and localised. Its flight is similar to the preceding species but it appears to settle more often. Several subspecies have been described, where *pulchella* is confined to the western Indian Ocean islands (Paulian & Bernardi, 1951; Yata, 1989).

11. *Catopsilia thauruma* (Reakirt, 1866) (Fig. 2.11). Only two females were seen during this study, one at Grand Gaube and the other at Le Morne, indicating it is widespread. However, as the males are superficially similar to the next species, it could have been overlooked. Davies & Barnes (1991) found it common over the whole island, while Williams (2007) considered it uncommon. This butterfly also flies on Madagascar (Paulian, 1951) and Réunion (Martiré & Rochat, 2008).

12. *Catopsilia florella* (Fabricius, 1775) (Fig. 2.12). This butterfly was widespread but not commonly seen during this study. However, Williams (2007) found it abundant. Individuals were seen feeding on *L. camara* flowers at Grand Gaube. This butterfly is common and widespread throughout the Afrotropical Region and a well known migrant.

Nymphalidae

13. *Euploea euphon* (Fabricius, 1798) (Fig. 2.13). This butterfly is endemic to Mauritius where it is considered to be widespread by Williams (2007). Both Trimen (1866) and Manders (1907) found it to be widespread and common. Furthermore, Trimen (1866) incorrectly listed this species as occurring on Madagascar and Zanzibar. During this study it was only seen at the SW of the island, where it was regularly observed flying in forest and garden areas. It generally flies 3–5 m above the ground, but several individuals, presumably females, were seen flying just above the ground in dense forest at Chameral. Flight is often slow but when disturbed it can be very active.

The *Euploea* butterflies are largely an Indo-Australian genus represented in the Afrotropical Region by *euphon* (Mauritius), *desjardinsii* (Guérin-Méneville, 1844) (Rodrigues, where it is thought to be extinct), *goudotii* Boisduval, 1833 (Réunion), *mitra* Moore, 1858 (Seychelles) and *rogeri* (Geyer, 1837) (Seychelles, where it might not be a valid taxon (Lawrence, 2009)). Interestingly, Manders (1907) lists a single *E. goudotii* specimen captured by J.A. de Gaye on the NE of Mauritius. Whether this individual represented a wind-blown or mislabelled specimen is difficult to determine.

14. *Amauris phoedon* (Fabricius, 1798) (Fig. 2.14). This butterfly is endemic to Mauritius. The occurrence of this species on Madagascar as reported by Boisduval (1833) and subsequent authors (e.g. Aurivillius 1898) is now rejected (Paulian, 1956). During this study only two individuals were seen feeding on *L. camara* flowers at Le Morne in *C. equisetifolia* stands. Manders (1907) found it abundant at the coast, where it congregated in *C. equisetifolia* trees, and uncommon at the higher elevations. Trimen (1866) considered it much rarer

than *E. euphon*, which is supported by the observations made here.

15. *Danaus chrysippus orientis* (Aurivillius, 1909) (Fig. 2.15). This species was widespread during this study. It was regularly seen at Chamarel, where it was flying in open areas in the forest. Individuals were seen feeding on various garden flowers at Grand Gaube. Trimen (1866) only saw a single specimen at the SW area during his stay on the island. This butterfly occurs throughout the entire Afrotropical Region including the western Indian Ocean islands where it is generally common.

16. *Henotesia narcissus narcissus* (Fabricius, 1798) (Fig. 2.16). This subspecies is endemic to Mauritius where it is widespread and commonly encountered. It flies low to the ground among the vegetation and often settles. It occurs in coastal, garden and forest biotopes, and prefers shade covered areas. It was not seen in the botanic gardens during this study, but could have been overlooked. Both Trimen (1866) and Manders (1907) also found it to be a very common Mauritian species. Numerous other subspecies have been described from the other western Indian Ocean islands.

17. *Melanitis leda* (Linnaeus, 1758) (Fig. 3.17). Several individuals were seen in the early evening flying around coastal gardens at Grand Gaube. Both wet season (w.s.f.) and dry season (d.s.f.) forms were recorded. Reported to be widespread and common in Mauritius by Williams (2006; 2007), Manders (1907) and Trimen (1866). This butterfly is distributed throughout Africa (including the western Indian Ocean islands), Asia and Australia.

18. *Neptis frobenia* (Fabricius, 1798) (Fig. 3.18). *Neptis frobenia* is endemic to Mauritius (Eltringham, 1921). This butterfly was only seen at Chameral where it was very common. It is confined to forest biotopes where it flies slowly through the dense forest approximately 1–2 m above the ground. Individuals were often seen sunning on leaves along forest paths and in open patches. Trimen (1866) found it to be uncommon. However, Manders (1907) found it to be abundant. Nevertheless, being an endemic forest specialist and given the extent of the deforestation on the island, regular monitoring of its population should be carried out. A similar related species, *Neptis dumetorum* (Boisduval, 1833) is endemic to Réunion (Martiré & Rochat, 2008).

19. *Hypolimnas misippus* (Linnaeus, 1764) (Fig. 3.19). Only four individuals, one at Chamarel and three at Grand Gaube, were seen during this study. At Grand Gaube they were observed feeding on various garden flowers including *L. camara* and *Catharanthus roseus* (L.)G.Don. Davies & Barnes (1991) found it scarce and never saw any females during the period 1976–1980. Both Trimen (1866) and Manders (1907) found it uncommon. Williams (2007) reported it as not common but sometimes locally numerous. *H. misippus* is cosmopolitan in distribution.

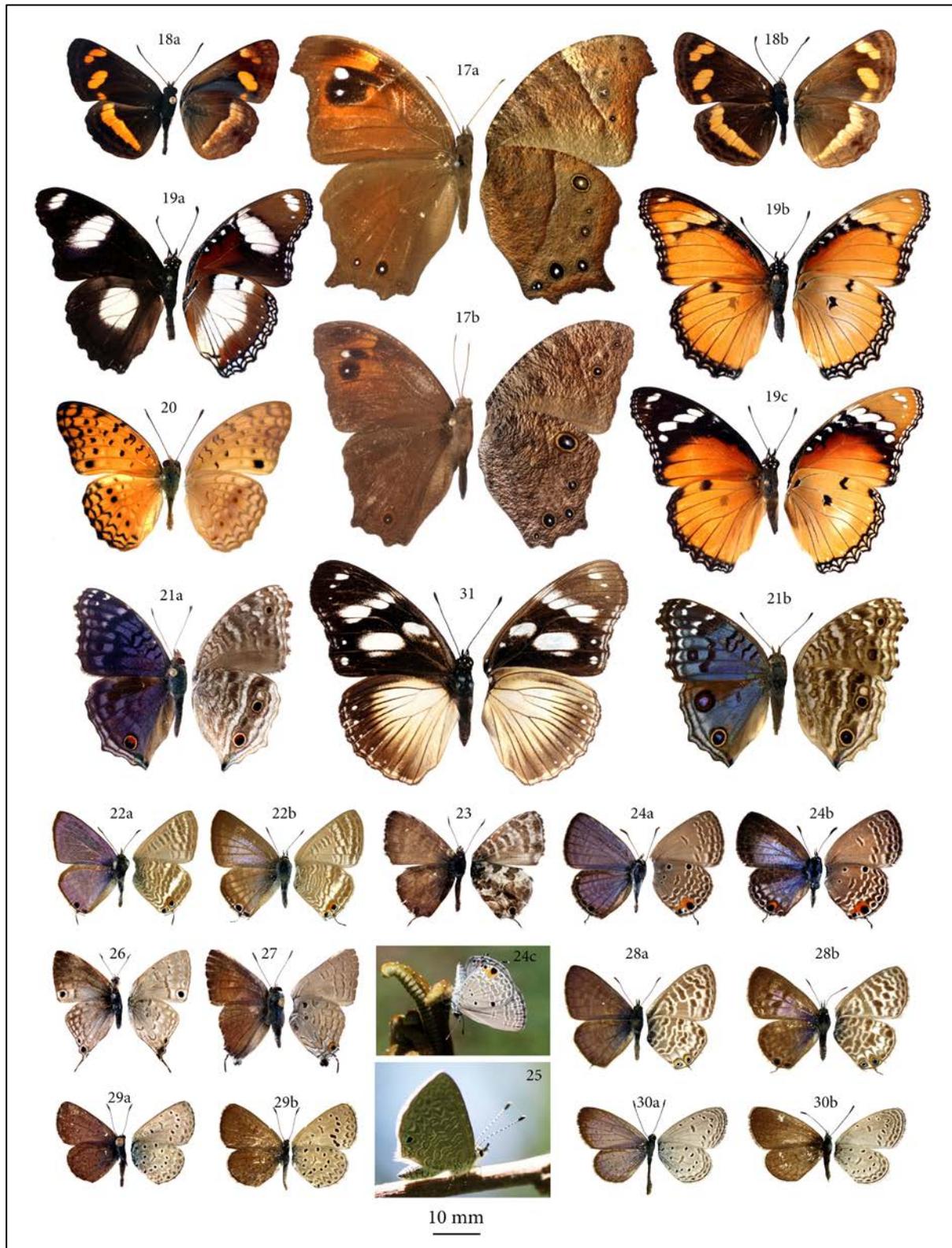


Figure 3 – 17a. *Melanitis leda*; 17b. *Melanitis leda*; 18a. *Neptis frobenia* (♂); 18b. *Neptis frobenia* (♀); 19a. *Hypolimnas misippus* (♂); 19b. *Hypolimnas misippus* (♀); 19c. *Hypolimnas misippus* (♀); 20. *Phalanta phalantha aethiopica*; 21a. *Junonia rhadama* (♂); 21b. *Junonia rhadama* (♀); 22a. *Lampides boeticus* (♂); 22b. *Lampides boeticus* (♀); 23. *Cacyreus darius*; 24a. *Chilades pandava* (♂) (J. Dobson collection); 24b. *Chilades pandava* (♀) (J. Dobson collection); 24c. *Chilades pandava*; 25. *Pseudonacaduba sichela reticulum*; 26. *Leptomyrina phidas*; 27. *Virachola antalus*; 28a. *Leptotes pirithous* (♂); 28b. *Leptotes pirithous* (♀); 29a. *Zizeeria knysna* (♂); 29b. *Zizeeria knysna* (♀); 30a. *Zizula hylax* (♂); 30b. *Zizula hylax* (♀); 31. *Hypolimnas anthedon drucei* (J. Dobson collection)

Although not recorded during this survey, J. Dobson collected a specimen of *H. anthedon drucei* from Black River Gorges on 4 January 2007 (Fig. 3.31). This butterfly is considered to be exceedingly rare on

Mauritius. According to Williams (2007) there are only four previous records, two from La Mivoie caught in the early 20th century and two at an unspecified locality collected in 1953.

Table 1 – Butterfly taxa recorded from four localities on Mauritius between 18 October 2015 and 23 October 2015, with three abundance categories (R = rare; C = common and VC = very common). Endemic taxa are highlighted in **bold**.

Species	Grand Gaube	Botanic Gardens	Le Morne	Chamarel
<i>Pyrriades pansa</i>	---	---	---	R
<i>Coeliades forestan forestan</i>	R	R	---	R
<i>Erionota torus</i>	---	---	R	---
<i>Eagris sabadius sabadius</i>	R	R	---	R
<i>Parnara naso naso</i>	R	---	---	---
<i>Borbo borbonica borbonica</i>	R	---	---	---
<i>Papilio manlius</i>	---	R	R	C
<i>Papilio demodocus demodocus</i>	R	R	R	R
<i>Eurema brigitta pulchella</i>	R	---	---	---
<i>Eurema floricola ceres</i>	VC	C	C	C
<i>Catopsilia thauruma</i>	R	---	R	---
<i>Catopsilia florella</i>	C	R	R	R
<i>Euploea euphon</i>	---	---	R	C
<i>Amauris phoedon</i>	---	---	R	---
<i>Danaus chrysippus orientis</i>	R	R	R	C
<i>Henotesia narcissus narcissus</i>	C	---	R	VC
<i>Melanitis leda</i>	R	---	---	---
<i>Neptis frobenia</i>	---	---	---	VC
<i>Hypolimnas misippus</i>	R	---	---	R
<i>Phalanta phalantha aethiopica</i>	VC	C	C	VC
<i>Junonia rhadama</i>	C	---	C	VC
<i>Lampides boeticus</i>	VC	R	C	C
<i>Cacyreus darius</i>	---	---	---	R
<i>Chilades pandava</i>	---	C	---	---
<i>Pseudonacaduba sichela reticulum</i>	R	---	---	---
<i>Leptomyrina phidias</i>	R	---	---	---
<i>Virachola antalus</i>	---	---	R	R
<i>Leptotes pirthous</i>	R	---	R	R
<i>Zizeeria knysna</i>	VC	VC	C	C
<i>Zizula hylax</i>	C	R	R	C
Species richness	21	12	17	20

20. *Phalanta phalantha aethiopica* (Rothschild & Jordan, 1903) (Fig. 3.20). This butterfly was widespread and commonly seen during this study. They were often observed feeding on various garden flowers. It occurs in disturbed as well as indigenous forest biotopes, where it prefers open sunny areas. Trimen (1866), Manders (1907) and Davies & Barnes (1991) found it to be a common Mauritian butterfly. This taxon is found throughout the Afrotropical region including the western Indian Ocean islands.

21. *Junonia rhadama* (Boisduval, 1833) (Fig. 3.21). This species was widespread and commonly encountered during this study. According to Trimen (1866) this butterfly was introduced from Madagascar to Mauritius in 1857 or 1858. Its flight

is low to the ground and it is a wary and active insect. Males are territorial and appear to set up territories in rocky areas, where the grey ventral surface patterns give it some camouflage. This species was particularly common at Chamarel where it was flying in open patches and along roads in the indigenous forest. Females were observed feeding on various flowers. Trimen (1866), Manders (1907) and Davies & Barnes (1991) found it to be a common Mauritian species. This butterfly has also been recorded from Seychelles (i.e. Astove Island), Comoros, Madagascar, Réunion and Rodrigues.

Lycaenidae

22. *Lampides boeticus* (Linnaeus, 1767) (Fig. 3.22). This species was regularly seen at all four sites

during this study. Manders (1907) and Davies & Barnes (1991) found it to be common and widespread on the island. Trimen (1866) found it uncommon and generally confined to garden biotopes. This butterfly is cosmopolitan in distribution and occurs on all the western Indian Ocean islands.

23. *Cacyreus darius* (Mabille, 1877) (Fig. 3.23). Only a single male of this species was seen at Chamarel. It is thought this butterfly was introduced from Madagascar around the beginning of the 20th century. It is considered rare in Mauritius and according to Williams (2007) the last individual captured was in December 1985 at Trois Mamelles. However, this butterfly has more recently been seen by I. Bampton at Le Morne and at Pailles (I. Bampton, *pers. comms.*), and was also recorded by de Freina (2011). Historically, Manders (1907) found it common in the Botanic Gardens, but it seldom wandered far from its larval foodplant, *Plectranthus* species. Vinson (1938) found it scarce and Davies & Barnes (1991) never saw it during the period 1976–1980.

24. *Chilades pandava* (Horsfield, 1829) (Fig. 2.24). This species was only seen at the Botanic gardens during this study, where it was common. It was first recorded on Mauritius in 2000 at Réduit (Williams, 2007), where it most likely was introduced via plantings of ornamental garden *Cycas* species (Williams, 2006). This species is Oriental in distribution and also occurs on Réunion (Martiré & Rochat, 2008).

25. *Pseudonacaduba sichela reticulum* (Mabille, 1877) (Fig. 3.25). Only a single individual was seen at Grand Gaube during this study. This is another recent lycaenid that is now established on Mauritius. It was first collected in 2000 at St Antoine and is considered common on the island where it is frequently seen feeding on *Terminalia* flowers (Williams, 2007). This taxon also occurs on Madagascar (Grandidier, 1887).

26. *Leptomyrina phidias* (Fabricius, 1793) (Fig. 3.26). A single male of this species was seen at Grand Gaube. This butterfly was first recorded on Mauritius in 1989 at Curepipe. It is also considered as fairly common on the island (Williams, 2006; 2007). This species also occurs on Madagascar (Ackery *et al.*, 1995), Réunion (Martiré & Rochat, 2008) and Comoros (Balletto *et al.*, 2015).

27. *Virachola antalus* (Hopffer, 1855) (Fig. 3.27). A single male of this butterfly was seen at Chamarel, where it was patrolling a small territory in an open area in the indigenous forest. It was apparently first collected in Mauritius in 1976, and is considered as fairly common in localities of the Black River District (Davies & Barnes, 1991). It occurs throughout the Afrotropical Region including the western Indian Ocean islands (Libert, 2004).

28. *Leptotes pirithous* (Linnaeus, 1767) (Fig. 3.28). This butterfly was widespread on the island but not commonly seen during this study. However, it is reported to be one of the most frequently encountered butterflies on the island by others (Trimen, 1866; Manders, 1907; Davies & Barnes, 1991; Williams, 2007). This butterfly was seen feeding on garden flowers. This species occurs throughout most of the Afrotropical Region including the western Indian Ocean islands.

29. *Zizieeria knynsa* (Trimen, 1862) (Fig. 3.29). Commonly seen at all four localities during this study. At Chamarel it was observed in open areas and along the forest roads. Trimen (1866), Manders (1907) and Davies & Barnes (1991) also found it common over the whole island. This species occurs throughout most of the Afrotropical region including the western Indian Ocean islands.

30. *Zizula hylax* (Fabricius, 1775) (Fig. 3.30). Recorded from all four localities during this study. It is considered a common Mauritian species (Manders, 2007; Davies & Barnes, 1991; Williams, 2007) that is widely distributed throughout the Afrotropical Region. It was not recorded by Trimen (1886) during his stay on the island.

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