

Notes on Lepidoptera from the Seychelles

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Abstract: 53 species of Lepidoptera are reported from Mahé and Praslin, 44 species are illustrated. Genitalia images for 25 species are provided.

Key words: Lepidoptera, Seychelles

In July 2014 I spent a short holiday on the inner islands of the Seychelles (Mahé & Praslin) and took the opportunity to track some Lepidoptera. Apparently some islands, notably Praslin, had only scarcely been researched in the past. For Praslin 54 species of Lepidoptera are presently known although only very recently 11 species had been added by Bolotov *et al.* (2015). In this paper, I would like to share my results with the scientific community and I hope that this will incite other naturalists to undertake more research on the islands.

For Praslin I can add another 31 species of Heterocera, 3 new recorded species for the Granitic Islands of the Seychelles and I would like to point out to 3 possible new synonymes that will need additional verifications. I regret that I cannot myself examine the types of the different suggested synonyms for geographical reasons and I would like to invite other researchers to take a closer look at them at their next revision of the respective genera or families.

Stations: all Lepidoptera caught in Praslin were collected at Anse Boudin, at the junction of the main road to Zimbabwe at an altitude of 25m or the nearby surroundings (4°17'55"S, 55°42'35"E). The localities of the Lepidoptera collected in Mahé are indicated in the text.

Distribution records: for most species I only listed the distribution records available for the Seychelles islands, or, if otherwise interesting, the regional records (neighboring countries and Indian Ocean Island). For more precise distribution of the single species I would suggest to consulting the database of www.afromoths.com which has more recent information.

Space bars: 1 mm and 1mm divided in 100/100mm

Rhopalocera:

Borbo gemella (Mabille, 1884) – Pl.01, Fig. 01, 05

5 specimens collected on Praslin, Anse Boudin on 08.VII.2014. 1 male dissected slide SEY-043 (Fig.05).

Leptotes pirithous (Linnaeus, 1767) – Pl.01, Fig. 03

1 specimen collected on Praslin, Anse Boudin on 08.VII.2014. Wingspan: 24 mm.

Zizeeria knysna (Trimen 1862) – Pl.01, Fig. 02

2 specimen collected in Praslin, Anse Boudin on 08.VII.2014. Winglength: 8.5-9 mm

I also observed this species in Mahé (identification from pictures) on 01.VII. 2014 in Victoira, near the ferry jetty and on 02.VII. 2014, Anse aux Pins (cemetery).

Heterocera:

Sphingidae

Agrius convolvuli (Linnaeus, 1758) – Pl.01, Fig. 04

1 specimen from Praslin, Anse Boudin on 04.VII.2014

Wingspan: 96 mm

Hippotion gracilis (Butler, 1875) – Pl. 02, Fig. 06-07; Pl.03, Fig.11-12

2 male (one of them badly rubbed) from Praslin, Anse Boudin on 07/09.VII.2014.

Winglength: 32mm, Wingspan: 70 mm, Slide: SEY-082 (male) (Fig.11)

This species was treated as a synonyme of *Hippotion eson* (Cramer, 1779) until 2006 (Eitschberger, 2006) and records of *Hippotion eson* from the inner islands of the Seychelles might need reconfirmation.

Examination of the genitalia of specimen that I collected in Réunion (Fig. 06, 12) showed that these also belong to *Hippotion gracilis* (Butler, 1875).

Dr. Ian Kitching (BMNH) confirmed me that he doesn't know of any confirmed specimen of *Hippotion eson* from the Mascarenes (Réunion, Mauritius and Rodrigues) as well as Madagascar and that the records for *Hippotion eson* for the Malagasy region would also confirmation as well (pers.comm. 2015).

Biology: in Réunion I collected and raised its larvae from *Ocimum basilicum* L. (Lamiaceae) and *Morinda citrifolia* L. (Rubiaceae). Pupal stage: 25-30 days. Older host-plant records from Réunion (Martiré & Rochat, 2008) on *Alocasia sanderiana* (Schott) G.Don, *Zantedeschia aethiopica* (L.) Spreng., *Caladium bicolor* (Aiton) Vent., *Colocasia esculenta* (L.) Schott (Araceae), *Artemisia verlotiorum* Lamotte (Asteraceae), *Impatiens walleriana* Hook.f. (Balsaminaceae), *Geniostoma borbonicum* (Lam.) Spreng. (Logoniaceae), *Fuchsia* sp. (Onagraceae), *Danais fragrans* (Lam.) Pers., *Mussaenda arcuata* Poir. (Rubiaceae), *Cissus anulata* Desc. and *Vitis labrusca* L. (Vitaceae) most probably also refer to *Hippotion gracilis* and not to *Hippotion eson* as originally published. Earlier food-plant records for *Hippotion eson* from the inner islands of the Seychelles might also refer to *Hippotion gracilis*.

Epiblemidae

Phazaca theclata (Guenée, 1857) – Pl.02, Fig. 08-10

I found numerous specimens between 04.VII. and 09.VII.2014 on Praslin, Anse Boudin and 9./10.VII.2014 on Mahé, Ma Constance (Calypha Guesthouse), alt. (est.) 60-80 m.

Hostplant: in Réunion I bred this species on *Duranta erecta* L. (Verbenaceae).



Plate 01: Fig. 01 - *Borbo gemella* – Praslin; Fig. 02 - *Zizeeria knysna* – underside, Praslin; Fig. 03 - *Leptotes pirithous* – underside, Praslin; Fig. 04 - *Agrius convolvuli* – Praslin; Fig. 05 - *Borbo gemella* – male genitalia, slide SEY-042, Praslin. 05b: aedeagus

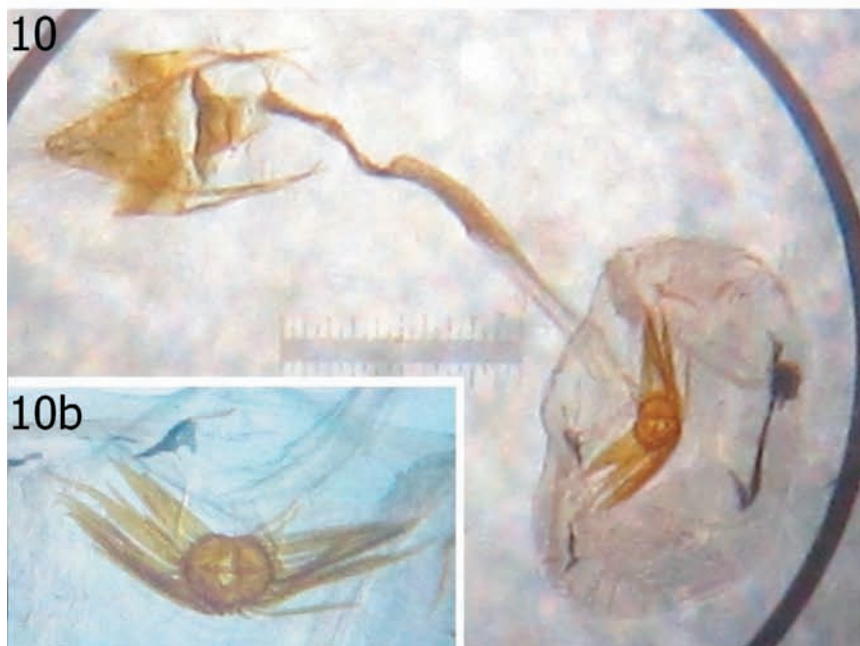


Plate 02: Fig. 06 - *Hippotion gracilis* – male, Praslin; Fig. 07 - *Hippotion gracilis* – larvae, Réunion. Top: early instar, bottom: late instar larvae; Fig. 08 - *Phazaca theclata*; Fig. 09 - *Phazaca theclata* – in situ, Praslin; Fig. 10 - *Phazaca theclata* – female genitalia, Mahé, slide SEY-022. 10b: sigma

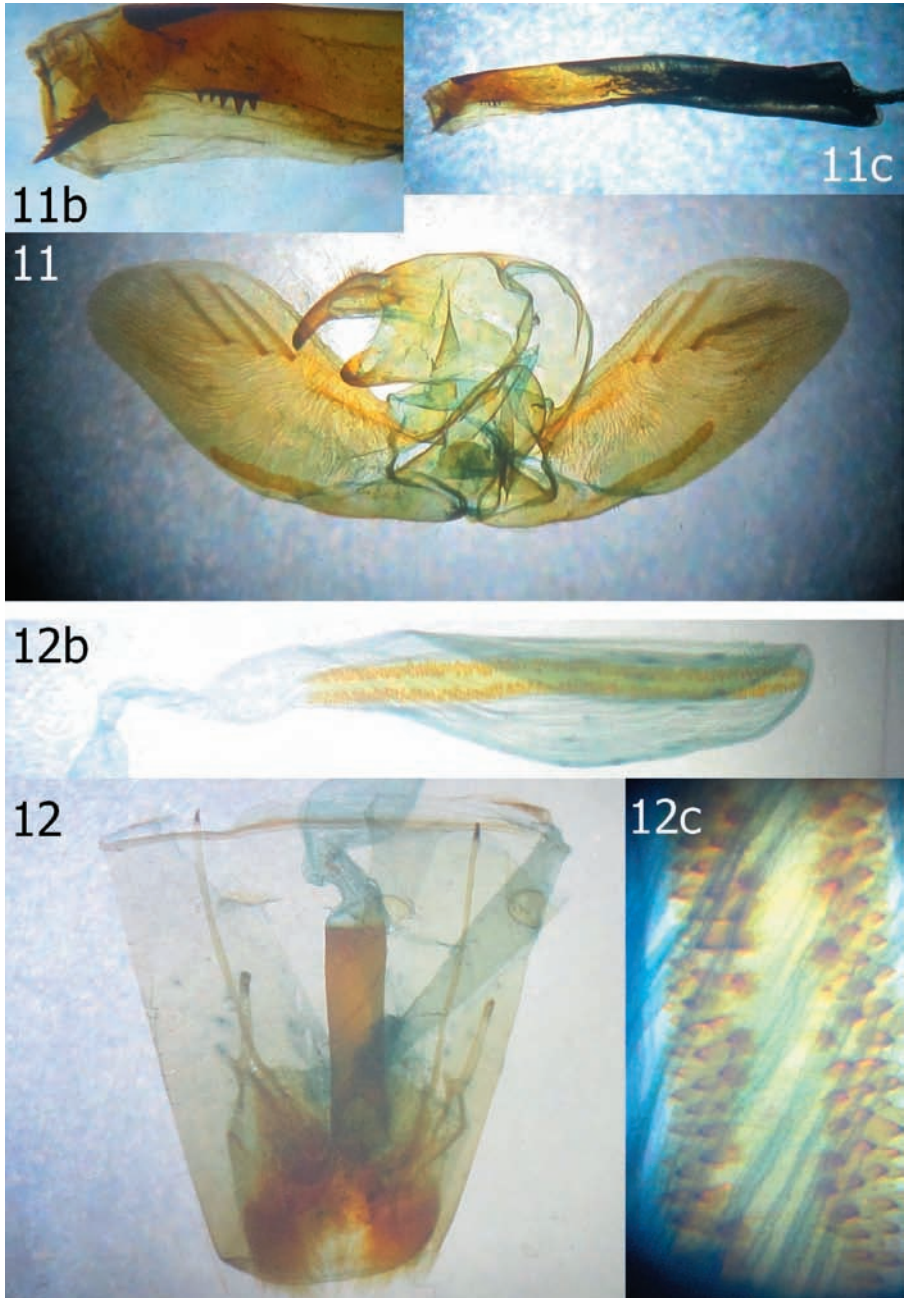


Plate 03: Fig. 11 - *Hippotion gracilis* – male genitalia, slide SEY-082. 11b: detail aedeagus, 11c: aedeagus; Fig. 12 - *Hippotion gracilis* – female genitalia, slide RE-1128, Reunion. 12b: bursae, 12c: detail sigma

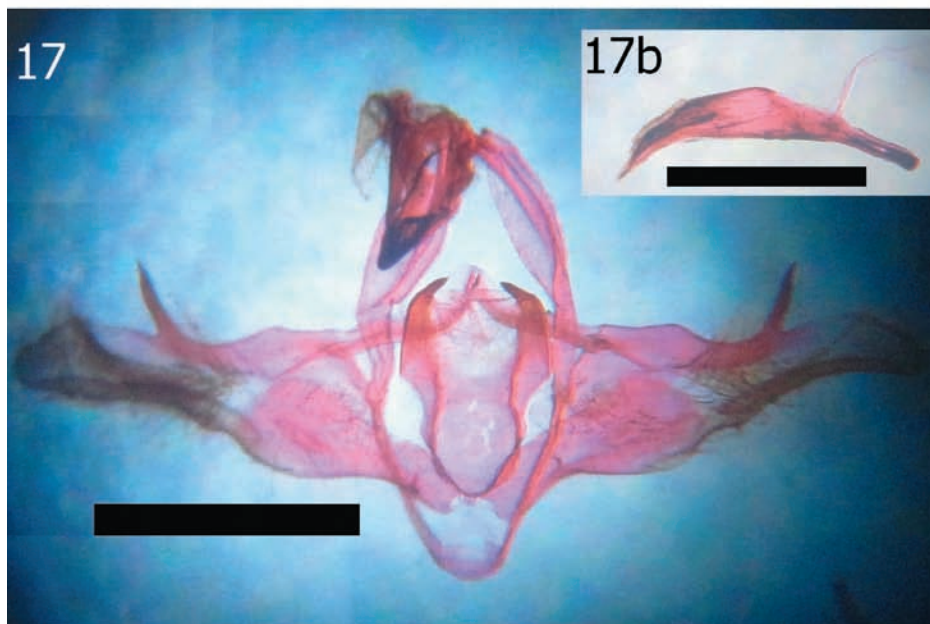


Plate 04: Fig. 13 - *Larentiinae* sp.01 – Praslin; Fig. 14 - *Scopula minorata* – Praslin; Fig. 15 - *Pelagodes antithetica* – male, Praslin; Fig. 16 - *Pelagodes antithetica* – male, Praslin; Fig. 17 - *Pelagodes antithetica* – male genitalia, Praslin, slide SEY-048. 17b: aedeagus

Geometridae

***Larentiinae* sp.** – Pl.04, Fig. 13, Pl.05, Fig. 18

1 worn male collected on Praslin, Anse Boudin, on 05.VII.2014. Winglength: 7.5 mm
Most *Larentiinae* previously stated in or described from the Seychelles have hardly ever been illustrated – and naming the species that I found in Praslin would be pure speculation.

Gymnoscelis tenera Warren, 1901 is smaller in size (10-14 mm wingspan), *Chloroclystis gerberae* Herbulot, 1962 seems to have the same size but a different coloration (wing length 8 mm, Herbulot, 1962)

By its size it fits to descriptions of *Pasiphilodes subtrita* (Walker, 1866) with a winglength of 7-8 mm (Herbulot, 1962) but this species shows to have different genitalia (Fig.18) after the illustrations of Holloway (1997). The illustrated species from Praslin might well be an unrecorded species.

Pelagodes antithetica (Herbulot, 1962) – Pl.04, Fig. 15-17

Endemic to the Seychelles: Cousine, La Digue, Mahé, Praslin, Silhouette.

1 female & 6 males collected on Praslin, Anse Boudin, between 05.-09.VII.2014.

Winglength: female: 17 mm; male: 15-16.5 mm.

This species was recently redescribed (Bolotov et al., 2015).

Scopula serena Prout L.B., 1920

1 specimen on Mahé, 09.VII.2014, 2 specimens on Praslin, 06./07.VII.2014

Winglength: 6mm, Wingspan: 13 mm

Scopula minorata (Boisduval, 1833) – Pl.04, Fig. 14, Pl.05, Fig 19

2 female and 1 male on Praslin, 05-08.VII.2014.

Winglength: 9 mm, Wingspan: 19 mm

(slide SEY-061, female, 6.VII.2014; SEY-062, male, 6.VII.2014 – Fig.19)

Notable on this species from Seychelles is that the blackish cell spots on both wings are almost invisible. The male specimen has furthermore some irregular brownish markings on the right forewing.

Crambidae

***Autocharis* sp.** – Pl.06, Fig.20

The species observed on Praslin is without doubt near *Autocharis linealis* Shaffer J. C. & Munroe, 2007 described from Aldabra that is probably a synonyme of *Autocharis marginata* Guillermet, 1996 (Pl. 06, Fig. 21 & 24), described from Reunion island. Wingspan : 15 mm.

My only specimen from Praslin (Fig.20) on 06.VII.2014 escaped and I could not examine its genitalia. Though I still noticed that it's imago is identical to *Autocharis marginata* that I know well from Réunion.

From the images of imago and genitalia published in the original description of Shaffer & Munroe (2007) on *Autocharis linealis* I learnt that this species, described from Aldabra, is probably a synonym of *Autocharis marginata* Guillermet, 1996 (Fig. 21 & 24).

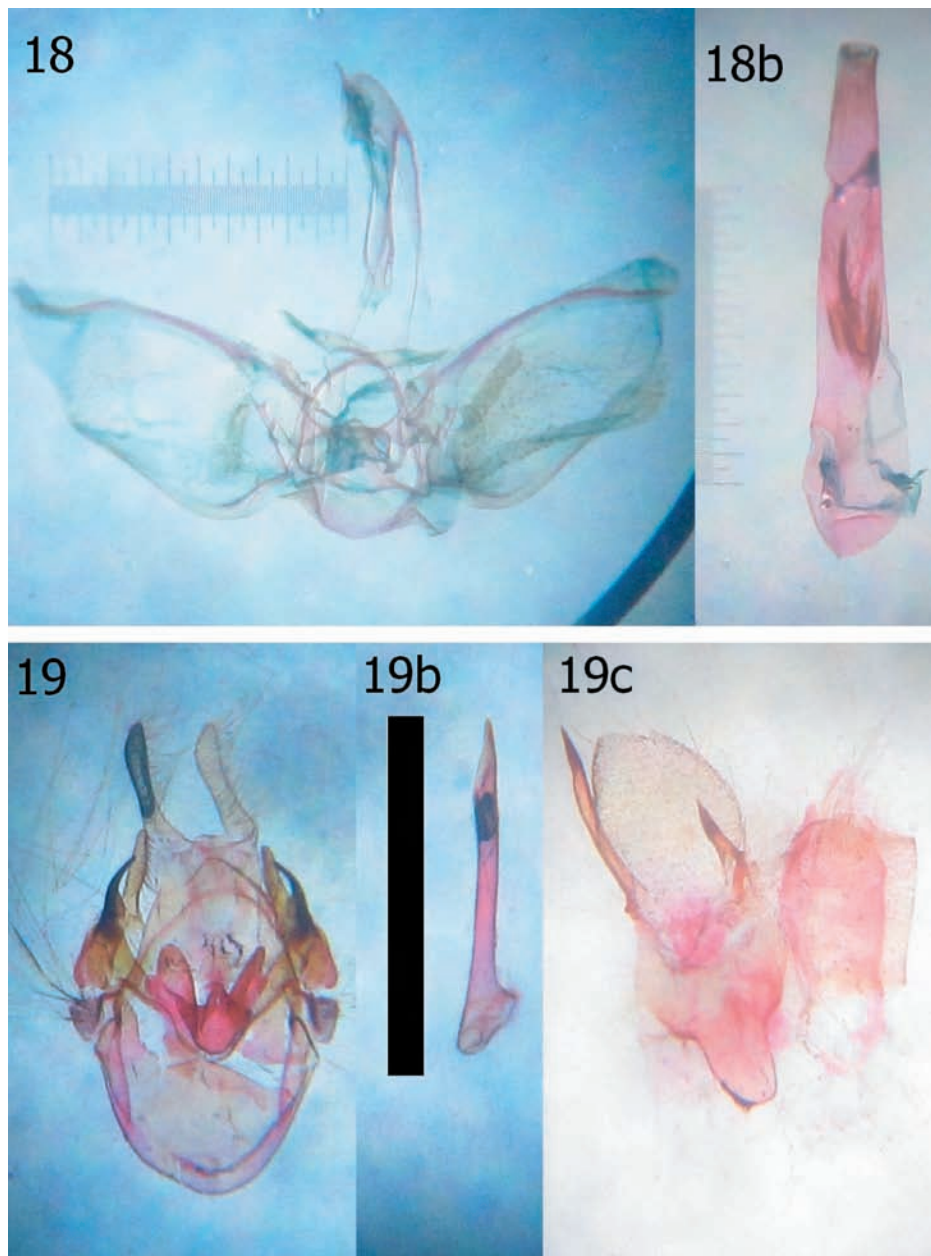


Plate 05: Fig. 18 - *Larentiinae* sp.01 – male genitalia, Praslin. 18b: aedeagus; Fig. 19 - *Scopula minorata* – male genitalia, Praslin, slide SEY-062. 19b: aedeagus 19c: 8th sternite

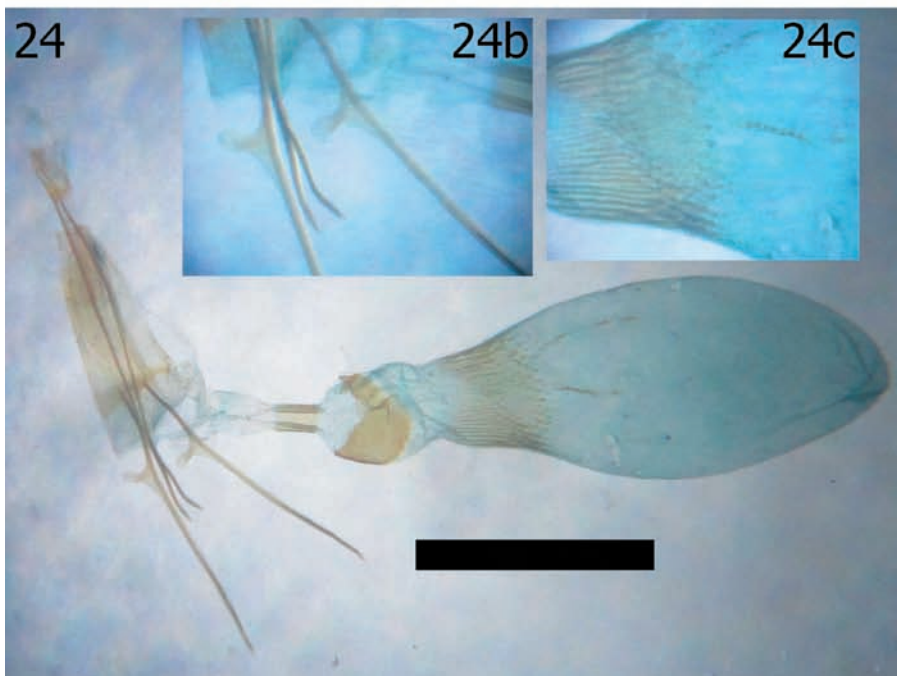


Plate 06: Fig. 20 - *Autocharis* sp. – near *A.linealis* and *A.marginata*. Praslin; Fig. 21 - *Autocharis marginata* – female, Reunion; Fig. 22 - *Cadarena pudoraria* – Praslin; Fig. 23 - *Cnaphalocrocis trebusialis* – Praslin; Fig. 24 - *Autocharis marginata* – female genitalia, Reunion, slide RE-1475. 24a : aphosyses, 24b : bursae

Male & female genitalia are identical. The only small detail that I could not spot on the genitalia images published by Shaffer & Munroe (2007) are some projections on the apophyses (Fig. 24b). Though I believe that these might be present and had been covered by the outer skin of the abdomen on their picture. These projections on the apophyses are also not illustrated in the original publication by Guillermet. A future examination of types may give certainty on the (hitherto unconfirmed) synonymy.

Cadarena pudoraria (Hübner, 1825) – Pl.06, Fig.22

1 female on Praslin, Anse Boudin on 05.VII.2014. Wingspan: 32 mm

Cnaphalocrocis trebusialis (Walker, 1859) – Pl. 06, Fig. 23

1 specimen on Praslin, Anse Boudin on 04.VII.2014

Culladia inconspicuella (Snellen, 1872) – Pl.07, Fig. 25, 27

1 specimen on Mahé, Anse aux Pins, 03.VII.2014, two specimen in Mahé, Ma Constance (Calypha Guesthouse) on 10.VII.2014, 3 specimens in Praslin, Anse Boudin on 04.VII. (slide Sey-047, male), 05. and 07.VII.2014.

Former records of *Culladia admigratella* (Walker, 1963) from Seychelles are probably missidentifications and might refer to *C.inconspicuella* (Snellen, 1872), see Bleszynski (1970d).

Diasemiopsis ramburialis (Duponchel, 1834) – Pl.08, Fig.30

1 specimen on Praslin, Anse Boudin on 08.VII.2014

Diptychophora muscella Fryer, 1912 – Pl.07, Fig. 26, 28

Endemic to the Seychelles: Mahé & Silhouette.

1 male on Mahé, Ma Constance (Calypha Guesthouse), alt. (est.) 60-80m, 10.VII.2014.

Wingspan: 9.0 mm

Etiella zinckenella (Treitschke, 1832) – Pl.08, Fig. 29

One specimen on Praslin, Anse Boudin, 07.VII.2014.

Glyphodes duponti de Joannis, 1915 – Pl.08, Fig.31-33

Endemic to the Seychelles: Ande, Denis, Félicité, La Digue (pers.comm.Paolo Mazzei, 2014), Long, Mahé, Praslin, Sainte-Anne, Silhouette

1 male, collected 03.VII.2014 at daytime in Mahé, Anse aux Pins, 4°41'23"S/55°30'43"E, alt. estimated 265m (slide SEY-012), 2 female in Praslin, Anse Boudin on 06.VII.2014 (slide SEY-058). Wingspan: 3 4mm.

Glyphodes subamicalis Fletcher T. B., 1910 – Pl.09, Fig. 34-37

Endemic to the Seychelles: Mahé & Praslin

4 specimen on Praslin, Anse Boudin 2 female on 04./07.VII., 2 male on 04./05.VII.2014.

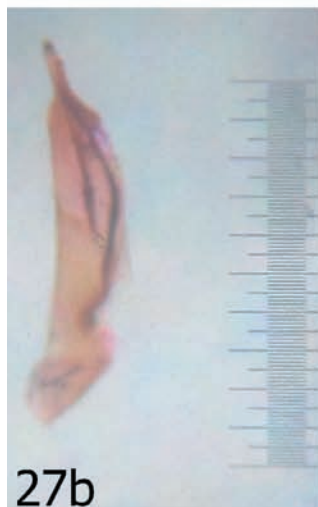


Plate 07: Fig. 25 - *Culladia inconspicuella* – male, Praslin; Fig. 26 - *Diptychophora muscella* – male, Mahé; Fig. 27 - *Culladia inconspicuella* – male genitalia, Praslin, slide SEY-047; Fig. 28 - *Diptychophora muscella* – male genitalia, Mahé, slide SEY-036.

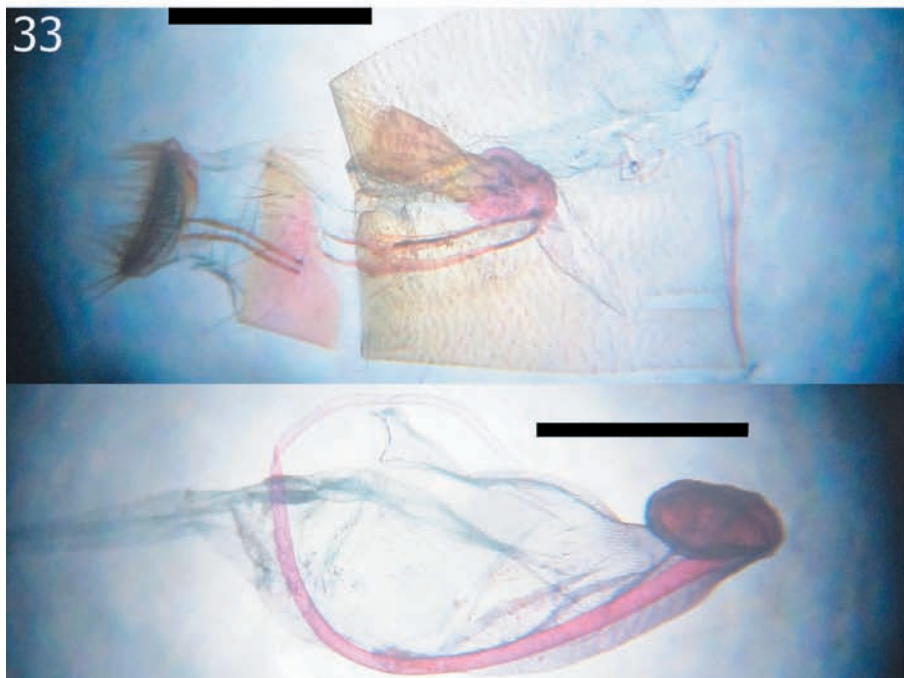


Plate 08: Fig. 29 - *Etiella zinckenella* – Praslin; Fig. 30 - *Diasemiopsis ramburialis* – Praslin; Fig. 31 - *Glyphodes duponti* – female, Praslin; Fig. 32 - *Glyphodes duponti* – female, Praslin; Fig. 33 - *Glyphodes duponti* – female genitalia, Praslin, slide SEY-058.

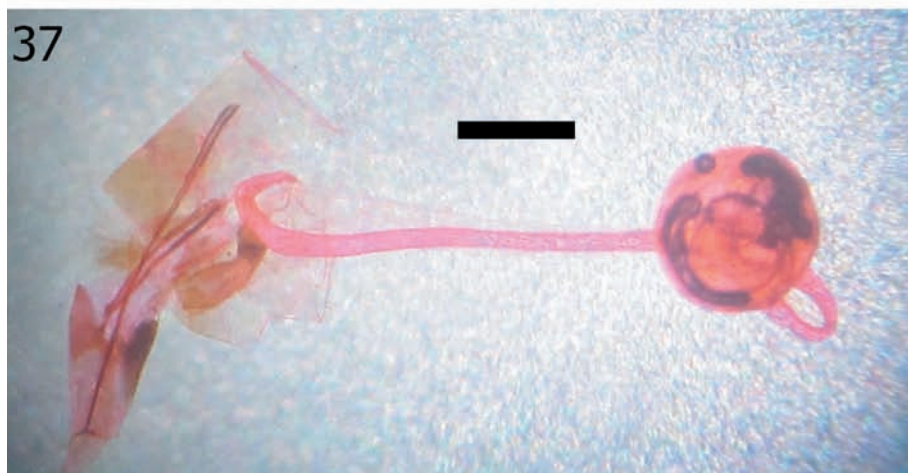
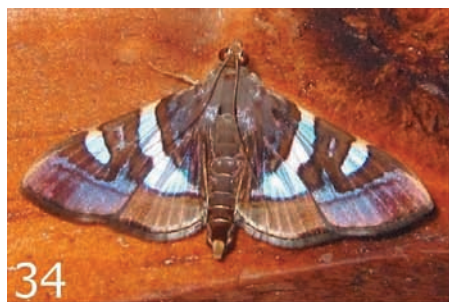


Plate 09: Fig. 34 - *Glyphodes subamicalis* – male, Praslin; Fig. 35 - *Glyphodes subamicalis*; Fig. 36 - *Glyphodes subamicalis* – male genitalia, slide SEY-017, 36b: aedeagus, 36c: 8th sternite; Fig. 37 - *Glyphodes subamicalis* – female genitalia, slide SEY-052



Plate 10: Fig. 38 - *Haritalodes derogata*; Fig. 39 - *Hellula undalis*; Fig. 40 - *Herpetogramma licarsisalis*; Fig. 41 - *Herpetogramma* sp. nr. *basalis*; Fig. 42 - *Microcrambon paphiellus*; Fig. 43 - *Nacoleia charesalis*; Fig. 44 - *Poliobotys ablactalis*; Fig. 45 - *Pycnarmon diaphana*

Wingspan: female 33-35 mm, male 32-34 mm. (slide SEY-052-female, SEY-017-male)

Haritalodes derogata (Fabricius, 1775) – Pl.10, Fig.38

Seychelles: Mahé & Ile de Cerf.

1 specimen bred from larvae, collected in Mahé, Anse aux Pins on 02.VII.2014 in a residential area on *Hibiscus rosa-sinensis* L. (Malvaceae).

Hellula undalis (Fabricius, 1781) – Pl.10, Fig.39

One specimen on Praslin, Anse Boudin, on 05.VII.2014.

Herpetogramma licarsisalis (Walker, 1859) – Pl.10, Fig.40

2 specimens on Praslin, 06, 08-VII-2014, 2 specimens on Mahé on 10-VII-2014 (slide SEY-042, SEY-045)

Herpetogramma sp. nr. basalis (Walker, 1866) – Pl.10, Fig.41

2 specimens (one with badly damaged wings) on Praslin, Anse Boudin on 08.VII.2014.

Herpetogramma basalis is part of a species complex that had never been studied in modern times. (M.Shaffer in a pers.comm., published in Guillermet, 2009a) and its identity remains doubtful. I still would like to illustrate the specimen that I found in the Seychelles (Praslin).

Microcrambon paphiellus (Guenée, 1862) – Pl.10, Fig.42

Distribution: La Réunion, Mauritius, Seychelles: Mahé, Praslin, Silhouette

Several specimen of this species were observed on Praslin, Anse Boudin from 04.-07.VII.2014. Seems to be common in Praslin.

Nacoleia charesalis (Walker, 1859) – Pl.10, Fig.43

1 specimen on Praslin, Anse Boudin on 06.VII.2014. Winglength: 10 mm

Poliobotys ablactalis (Walker, 1859) – Pl.10, Fig.44

1 specimen on Praslin, Anse Boudin, 05.VII.2015. Wingspan: 21 mm.

Pycnarmon diaphana (Cramer, 1779) – Pl.10, Fig.45

1 specimen, collected 03.VII.2014 at daytime in Mahé, Anse aux Pins, 4°41'23"S/55°30'43"E, alt. estimated 250-280m. Wingspan: 25 mm.

Sameodes cancellalis (Zeller, 1852) – Pl.11, Fig.46

1 specimen on Praslin, Anse Boudin, 05.VI.2015. Wingspan: 18 mm.

Spilomelinae sp.01 (possibly *Phostria* sp., *Omiodes* sp. or allied genus) – Pl.12, Fig.51-52, Pl.13, Fig.56-57



Plate 11: Fig. 46 - *Sameodes cancellalis* – Praslin; Fig. 47 - *Zebronia phenice* – male, Mahé; Fig. 48 - *Endotricha mesenterialis* – male, Praslin; Fig. 49 - *Endotricha mesenterialis* – female, Mahé; Fig. 50 - *Zebronia phenice* – male genitalia, Mahé, slide SEY-090. Aedeagus: bottom left

5 specimens on Mahé, Anse-aux-Pins, approx. 25m altitude, mainroad (opposite of the Night Club), reared from *Canavalia cathartica* Thouars (Fabaceae) on 13.-15.VII.2014.
3 male, 2 female

Wingspan: 24-26 mm.

This seems to be an unrecorded species for the Seychelles. Due to its hostplant I believe that it might have an oriental origin.

Its female genitalia (Fig.57) shows some affinity to *Omiodes indicata*, with a long ductus bursae (length: about 3 times the bursae diameter) but in distinction with a shorter, round bursae with 2 signa (Fig.57b-c).

Only few species of Spilomelinae and *Omiodes* described from southern Asia or continental Africa had been illustrated. Genitalia images are not available for most species. This is also true for many other species included in similar genera such as *Phostria* (etc.) that have not yet been revised. Therefore I think it would be pure speculation to try to name this species for the moment.

Koen V. Maes from Belgium (pers.comm. 2016) suggested that this species has some resemblance with the African species *Phostria niphealis* (Walker, 1859) and *Phostria caniusalis* (Walker, 1859). Personally I think that this might also be the Indian species *Phostria obscurata* Moore, [1886]. A future revision of this family complex might help us out of this problem, and I hope that we can count on Koen for this. I would like to take the opportunity to thank Koen V. Maes also for his help, advice and suggestions on other questions concerning species of the Crambidae and Pyralidae families.

Zebronia phenice (Cramer, 1780) – Pl.11, Fig.47, 50

2 male collected 03.VII.2014 in Mahé, Anse aux Pins, 4°41'23"S/55°30'43"E, alt. estimated 250-280 m. Wingspan: 24 and 25 mm.

Pyralidae

Endotricha mesenterialis (Walker, 1859) (ssp: *E. mesenterialis mahensis*, Whalley, 1963) – Pl.11, Fig.48, 49

Seychelles: Curieuse, Mahé, Praslin, Silhouette, St.Anne

Numberous specimens were collected on Praslin and Mahé between 03.VII. and 10.VII.2014. This is one of the most abundant species that I found in the Seychelles.

Wingspan: 18 mm

Cosmopterigidae

Gisilia armigera (Meyrick, 1923) – Pl.14, Fig.58-62

1 female on Praslin, Anse Boudin, 07-VII-2014 (Fig.61 - slide SEY-088). Wingspan: 8 mm

Gisilia armigera, described from Fiji, is also present in Réunion and Mauritius (new records).

The female genitalia (Fig.61, slide SEY-088) of the only specimen collected on Praslin corresponds to the specimen of this species that I also find in Réunion. Though I think that it would be good to obtain additional specimen from the Seychelles and confirm its identity by a male (Fig.62) that is far more recognizable by its asymmetrical valvae and the S-shaped aedeagus.



Plate 12: Fig. 51 - *Spilomelinae* sp.01; Fig. 52 - *Spilomelinae* sp.01; Fig. 53 - *Dichomeris acuminata*; Fig. 54 - *Thiotricha tenuis*; Fig. 55 - *Thiotricha tenuis* – male genitalia 55b: aedeagus

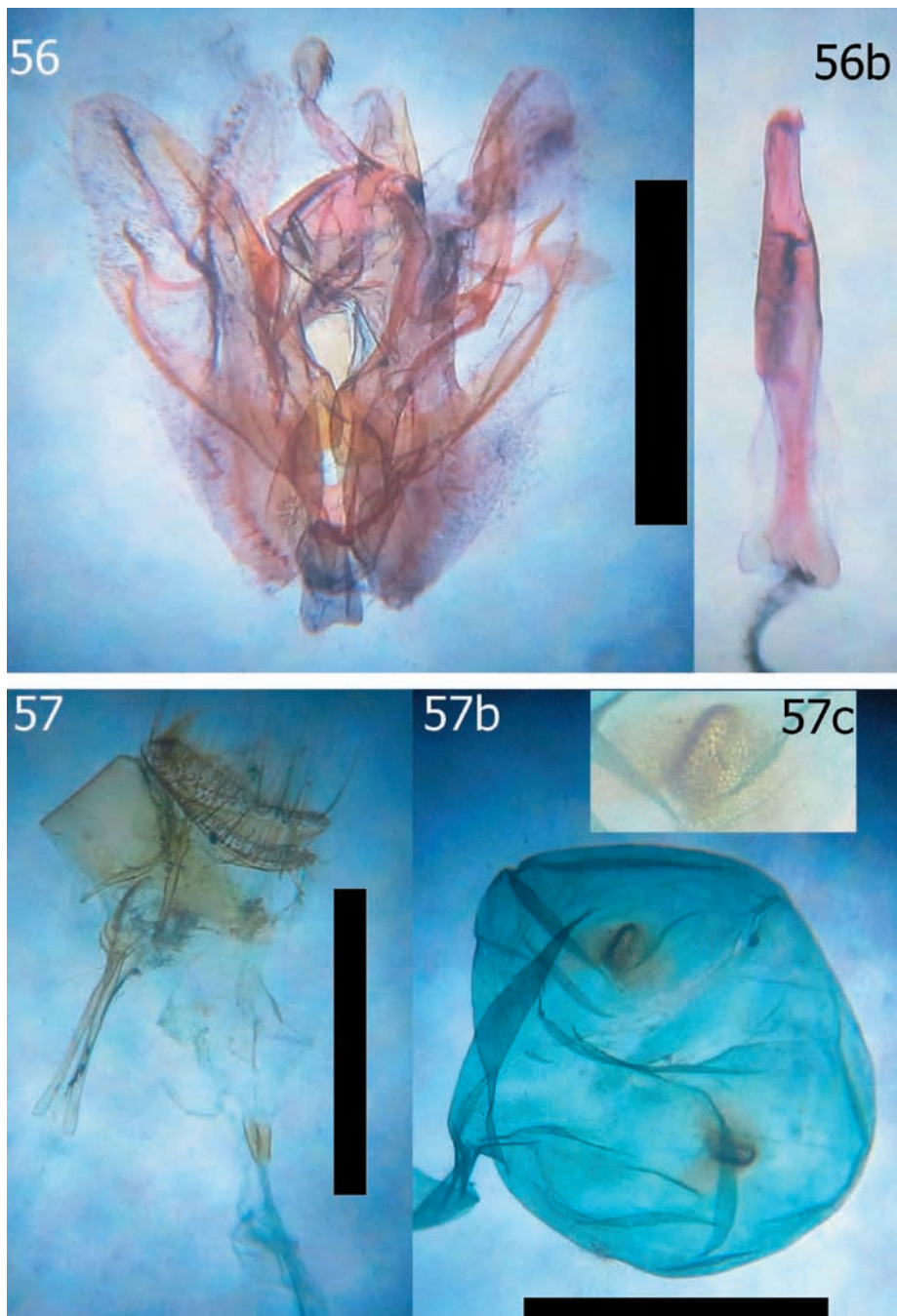


Plate 13: Fig. 56 - *Spilomelinae* sp.01 – male genitalia. 56b: aedeagus; Fig. 57 - *Spilomelinae* sp.01 – female genitalia 57b: bursae 57c: detail sigma

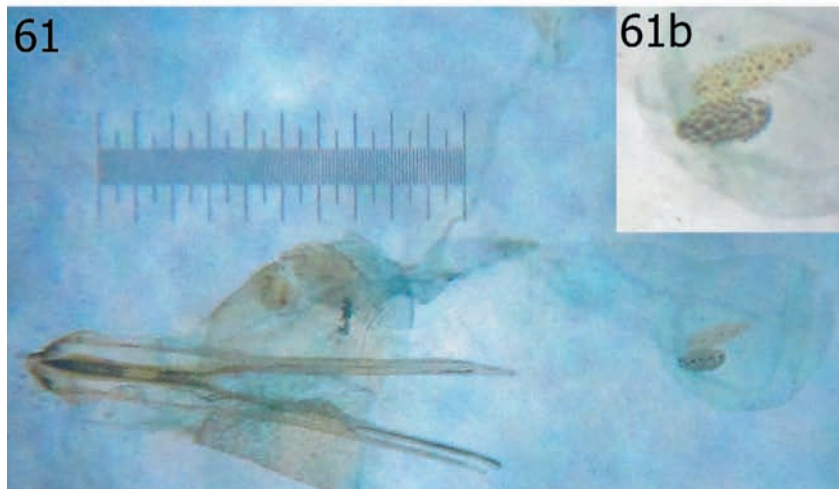


Plate 14: Fig. 58 - *Gisilia armigera*; Fig. 59 - *Gisilia armigera* – wing venation ; Fig. 60 - *Gisilia armigera* – in situ, Praslin; Fig. 61 - *Gisilia armigera* – female genitalia, Praslin 61b: detail sigma; Fig. 62 - *Gisilia armigera* – male genitalia, Réunion. Aedeagus below



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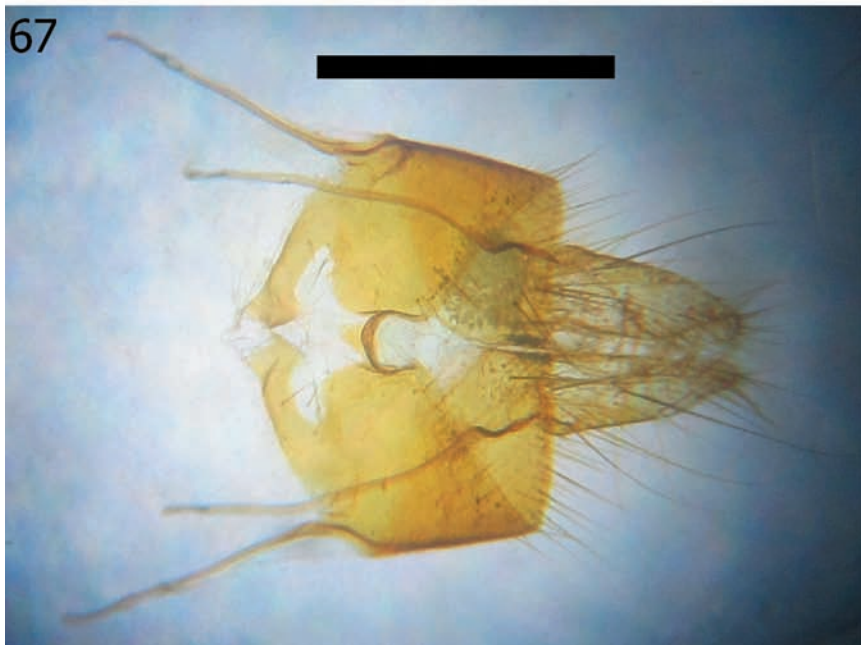
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65



66



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Plate 15: Fig. 63 - *Achaea violaceofasciata* ssp. *seychellarum*; Fig. 64 - *Hyospila bolinoides*; Fig. 65 - *Hyospila bolinoides*; Fig. 66 - *Amyna axis*; Fig. 67 - *Hyospila bolinoides* – female genitalia.

This species might have its origins in Australia. Known hostplants of species of the *Gisilia/Ascalenia/Bifascioides* complex from the Palaearctic ecozone and India are *Acacia* ssp. (Kasy, 1968, 1970a; Fletcher, 1933). Most *Acacia* species found on the islands of the Indian Ocean (and also in Fiji) were introduced from Australia.

Unfortunately the Australian species of this complex have not been revised and no genitalia had been published in modern times. Therefore it is presently impossible to determine if this species might be a synonym of another Australian species, or not.

There is another species of the *Ascalenia/Bifascioides/Gisilia* complex that had been described from the Seychelles (Mahé) and that has a similar coloration (Gerlach & Matyot, 2006: pl. 6, Fig.2): *Ascalenia isotacta* (Meyrick, 1911). Thanks to Dr. Lees of the British Museum of Natural History I obtained a photograph of its type and it seems to have a different blackish punctuation on the forewings. In addition it looks to be scattered with more greyish scales.

Mrs. Jurate de Prins (formerly BMNH) informed me already in early 2015 that the type series had not been dissected.

Erebidae

Achaea violaceofasciata Saalmüller, 1891; *ssp. seychellarum* Holland, 1895 – Pl.15, Fig. 63

2 specimens on Praslin on 05. and 06.VII.2014 (one male dissected).

I would like to thank Mr. Albert Legrain (Belgium) for his great help and for sending me the pictures of the MNHN collection from Aldabra & Madagascar of this subspecies.

Amyna axis Guenée, 1852 – Pl.15, Fig.66

One specimen with damaged wings (Fig.66) on Praslin, Anse Boudin on 04.VII.2014.

Gesonina obeditalis Walker, 1859

1 specimen on Praslin, Anse Boudin, on 08.Jul.2014.

Hypospila bolinoides (Guenée, 1852) – Plate 15, Fig.64, 65, 67

Synonyms (Holloway, 2005): *Hypospila thermesina* Guenée, 1862, *Hypospila andamana* Swinhoe, 1919, *Moepa concisa* Walker, 1865, *Thermesia orientalis* Leech, 1900, *Thermesia signipalpis* Walker, 1858

Distribution: Andaman and Nicobar Islands, China, India, Indonesia (Java) Japan, New Guinea, Queensland and the Carolines.

Seychelles: Félicité, La Digue, Mahé, Silhouette & Praslin

Doubtful: La Réunion

1 female from Praslin, Anse Boudin on 06.VII.2014. Wingspan: 31 mm

In La Réunion and the Seychelles there is some confusion about this species. Most literature cites this species as *Hypospila thermesina* Guenée, 1862 although this was first treated as a synonym of *Hypospila bolinoides* by de Joannis (1899) furthermore by Fryer (1912) and Holloway (2005). Both, de Joannis (1899) and Fryer (1912) treated *Hypospila bolinoides* as a synonym of *Hypospila thermesina*. They probably ignored the publication dates for these species and inversed the names. Guénée had purchased

the type from a merchant and possibly the origin of the type specimen of *Hypospila thermesina* was incorrectly transmitted to Guénée as being from La Réunion.

Hypospila bolinoides is a variable species and even Guénée (1862) mentioned in the original description of *H. thermesina* that it differs only in the length of the 3rd articulation of the palpal segments from *H. bolinoides* and that the same is more dressed.

Citation from the original description of Guénée (1862) :

« J'ai acheté cet insecte d'un marchand qui l'a reçu de l'île de la Réunion. Il partage et confirme tous les caractères de mon genre *Hypospila*: seulement le troisième article des palpes est plus long et plus redressé que chez la *Bolinoides*. ».

Unfortunately the abdomen of my only specimen from Praslin was completely infested by a parasite. Corpus and ductus bursae were completely destroyed. Though, it shows some small differences in the ostium of the female genitalia (Fig.67) compared to the illustrations of Holloway (1997) in Moths of Borneo. Alberto Zilli (BMNH) noticed on my specimen also a difference on the crenulated postmedial line on the hindwing (A.Zilli, pers.comm.) and suggested that a different species might be involved. It will certainly be helpful to obtain more specimen to clear the exact position of this species from the Seychelles.

In Réunion this species had never been caught since its description (pers.comm. C.Guillermet, J.Rochat and my own captures). Due to the uncertain source of acquisition of the type, I consider its presence in Réunion as doubtful.

Hostplant: unknown.

Holloway (2005) indicates *Derris* sp. (Fabaceae) for *H. bolinoides* in Asia. There is found one native species of this genus in the Seychelles: *Derris trifoliata* Lour. that might be a possible hostplant that would need verification. This species of plant is also found in tropical Asia and Austral-Pacific region (USDA, ARS, National Genetic Resources Program, acc.2015).

Ozarba perplexa Saalmüller, 1891 – Pl.16, Fig.68-71, Pl.17, Fig.74

Distribution: Kenya, La Réunion, Madagascar, Socotra, South Africa, Zambia, Seychelles: Praslin & Mahé

2 male from Praslin, Anse Boudin, on 06.VII.2014 (slide SEY-015). Winglength: 9-10 mm, Wingspan: 22-23 mm.

Ozarba perplexa, described from Madagascar, was reported from the Seychelles by Legrand (1965). Berio (1954) illustrated the male genitalia.

This species is identical with *Microplexia costimaculalis* Guillermet, 1992, described from La Réunion, in imago and genitalia though I regret that I could not yet examine their types.

Hostplant: The main hostplant of this species is *Asystasia gangetica* (L.T.Anderson) (Acanthaceae). Sevastopulo (1978) had already reported this species on *Asystasia* sp. from East Africa. Martiré & Rochat (2008) report it also on *Clerodendrum speciosissimum* Drapiez (Verbenaceae).

It was treated as rare in La Réunion though I find it regularly throughout the year, both, larvae and adults. On my own and on the neighboring ground there is a rather big field of *A.gangetica* which may explain why I find it more frequently than other collectors

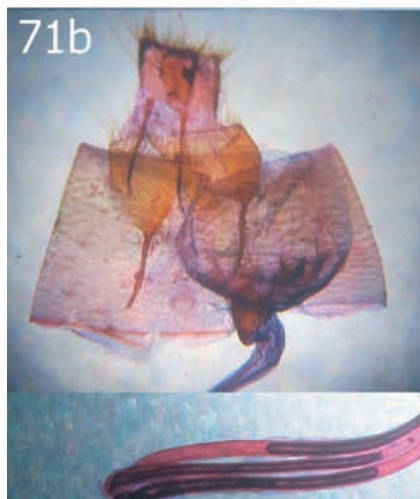
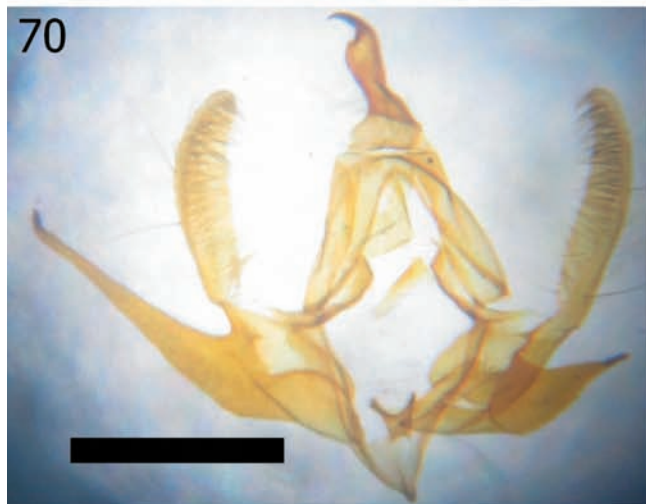
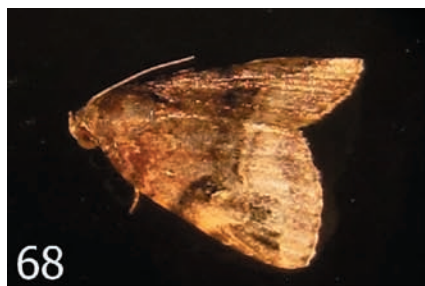


Plate 16: Fig. 68 - *Ozarba perplexa*; Fig. 69 - *Ozarba perplexa*; Fig. 70 - *Ozarba perplexa* – male genitalia 70b: aedeagus; Fig. 71 - *Ozarba perplexa* – female genitalia.

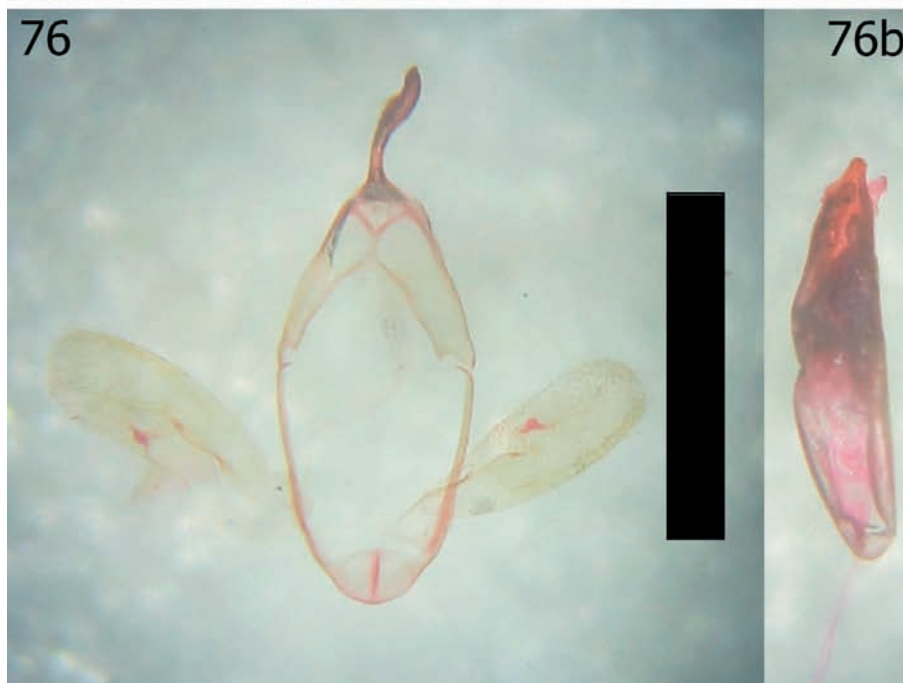


Plate 17: Fig. 72 - *Simplicia extinctalis*; Fig. 73 - *Rivula dimorpha*; Fig. 74 - *Ozarba perplexa* – caterpillar; Fig. 75 - *Rivula dimorpha* – caterpillar; Fig. 76 - *Rivula dimorpha* – male genitalia 76b: aedeagus

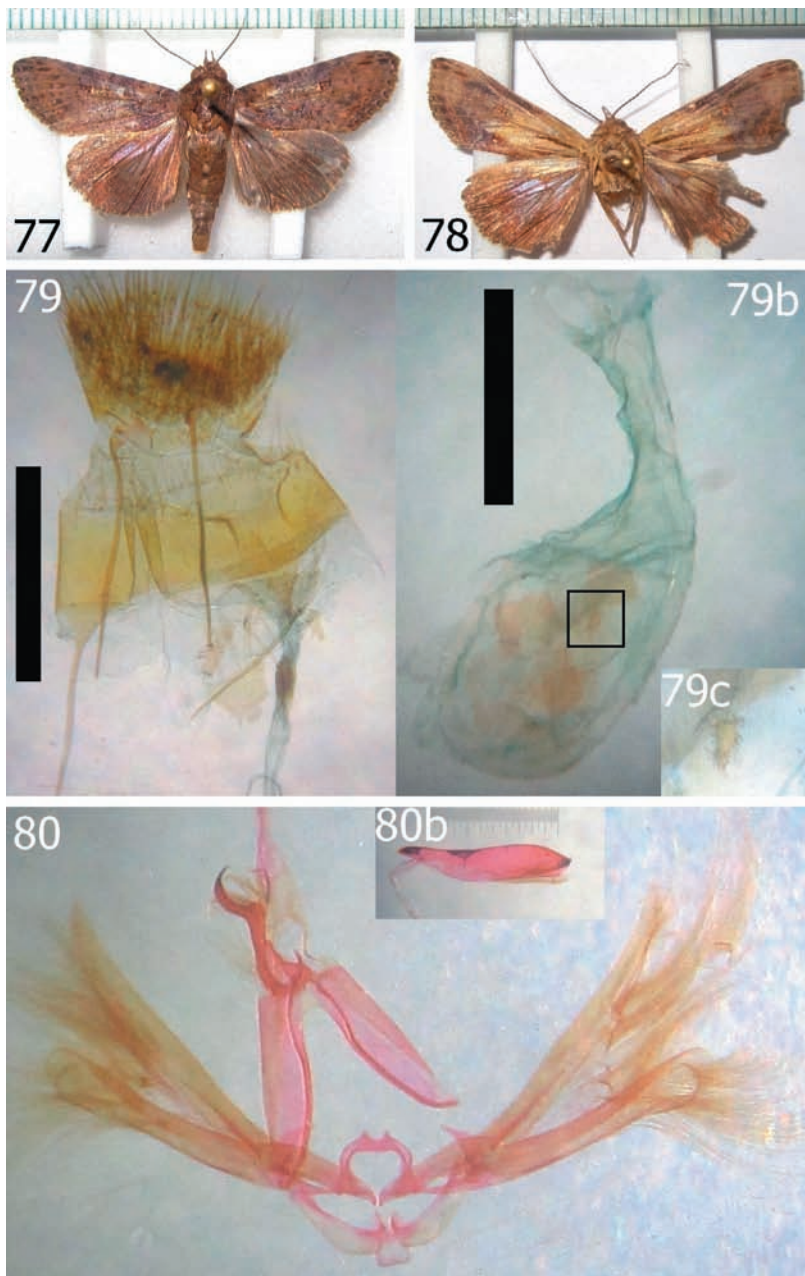


Plate 18: Fig. 77 - *Stictoptera antemarginata*, morphe *pernigra* – male, Praslin; Fig. 78 - *Stictoptera antemarginata* – female, Praslin; Fig. 79 - *Stictoptera antemarginata* – female genitalia, slide SEY-013 79b: bursae 79c: sigma; Fig. 80 - *Stictoptera antemarginata* – male genitalia, slide SEY-051 80b: aedeagus

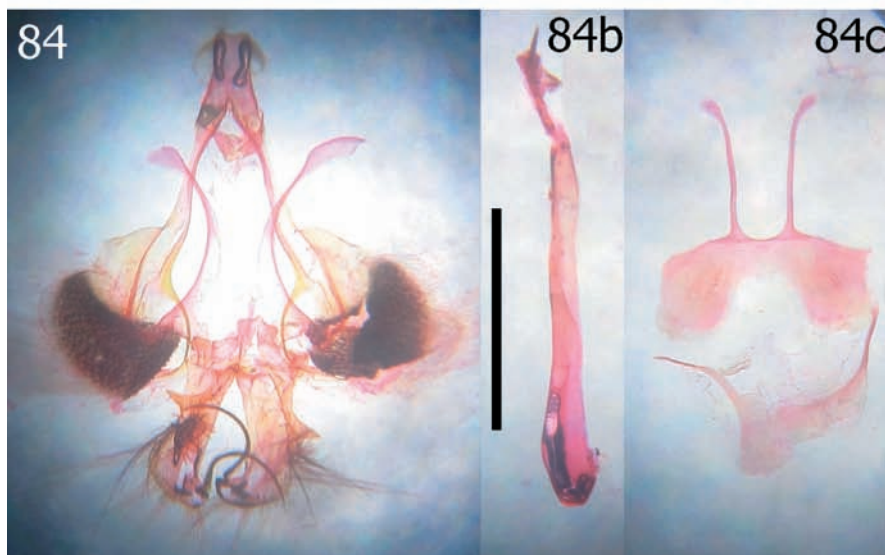
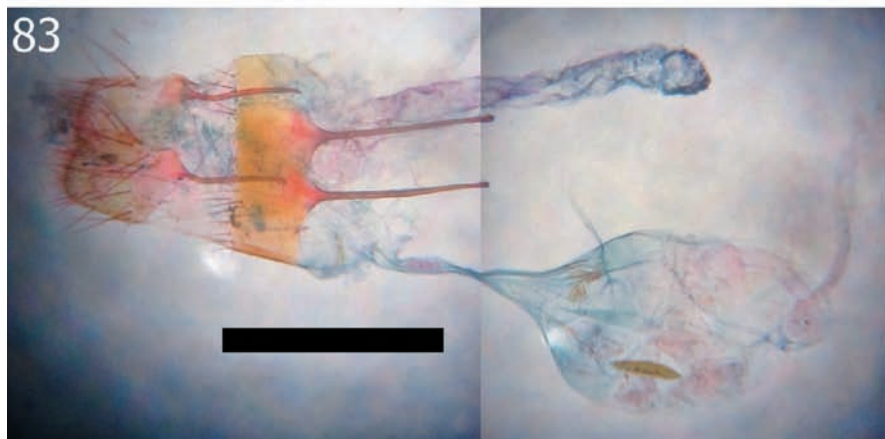


Plate 19: Fig. 81 - *Pardasena mangifera* – male, Mahé; Fig. 82 - *Pardasena mangifera* – male, Mahé; Fig. 83 - *Pardasena mangifera* – female genitalia, Praslin; Fig. 84 - *Pardasena mangifera* – male genitalia 84b: aedeagus 84c: 8th sternite

in the past. *A.gangetica* is also present on the roadsides in Anse Boudin, Praslin where I collected the specimen. This plant is considered as a possibly native plant in the Seychelles. In Réunion it is treated as introduced and invasive.

O. perplexa is also present in Mauritius (new record). In June 2016 I also collected an adult in Flic-en-Flac and mature larvae, also on *Asystasia gangetica*, in Rivière Noire.

Rivula dimorpha Fryer, 1912 – Pl.17, Fig. 73, 75, 76

Distribution: La Réunion and Seychelles: Mahé, Praslin & Silhouette

1 male in Praslin, Anse Boudin on 05.VII.2014 (slide SEY-040).

Hostplant: in La Réunion I bred this species from *Cynodon dactylon* (L.) Pers. (Poaceae) and from another unidentified Poaceae sp.

Simplicia extinctalis (Zeller, 1852) – Pl.17, Fig. 72

1 female in Mahé, on 10.VII.2014 and a damaged male (Fig.71) on 07.VII.2014 in Praslin, Anse Boudin. Wingspan: 27 mm

Hostplant: The caterpillars of this species were found and raised on mango leaf litter (*Mangifera indica* L.) in January 2015 by Guillaume Julliand (pers.comm.) in La Réunion.

Noctuidae

Chrysodeixis chalcites (Esper, 1789)

Seychelles: Aldabra, Arros, Bird, Remire ('Eagle'), Coëtivy, Desroches, Mahé, Poivre, Praslin, Providence, St.Anne & Silhouette

1 male from Praslin, Anse Boudin on 06.VII.2014.

Hostplant: *C.chalcites* is an extremely polyphagous species. In Réunion I bred it from *Ocimum basilicum* L. (Lamiaceae), *Ageratum conyzoides* L., *Synedrella nodiflora* (L.) Gaertn. (Asteraceae), *Kalanchoe* sp. (Crassulaceae), *Duranta erecta* L., *Stachytarpheta jamaicensis* (L.) Vahl (Verbenaceae), *Solanum lycopersicum* L., *Solanum mauritianum* Scop. (Solanaceae), *Trema orientalis* (L.) Blume (Cannabaceae) and *Melochia pyramidata* L. (Malvaceae).

Stictoptera antemarginata Saalmüller, 1880 – Pl.18, Fig. 77-80

1 male, morphe pernigra (genitalia slide SEY-051, Fig.77, 80) and 2 fairly worn females (genitalia slide SEY-013, Fig.78, 79) on Praslin, Anse Boudin, on 07. and 09.VII.2014. Wingspan: 35 mm.

The bursae of the female shows a very small signa (Fig.79c)

Nolidae

Nycteola mauritia (de Joannis, 1906)

Distribution: La Réunion, Mauritius, Seychelles: Mahé & Praslin

1 female on Praslin, Anse Boudin, on 08.VII.2014.

Hostplant: in Réunion I bred this species from *Syzygium cumini* (L.) Skeels, *Syzygium jambos* (L.) Alston and *Syzygium cymosum* (Lam.) DC. (Myrtaceae).

Pardasena mangifera (Tams, 1938) n.comb. – Pl.19, Fig. 81-84

Original combination: *Symitha mangifera* Tams, 1938

Seychelles: Mahé and Praslin

1 male from Mahé, 10.VII.2014 (slide SEY-038), 1 female from Praslin, 08.VII.2014 (slide SEY-053). Wingspan: 18 mm.

This species was described by 4 females and had not been retrieved since its description in 1938.

By the male genitalia (Fig.84) this species belongs to the genus *Pardasena* (n.comb). The female has a elongated signa at the bursae (Fig.83).

Hostplant: the type series (4 females) was bred on young mango leaves (*Mangifera indica* L.) by D.V. Fitzgerald in 1938 (Tams, 1938).

Note: Legrand (1966) did not mention this species in his remarkable publication on Seychelles lepidoptera – possibly this species was unknown to him when describing *Pardasena beauvallonensis* Legrand, 1966. He did not publish genitalia images and from his plate the details of the wings are not recognizable. I think it should be interesting to compare both species in a future revision of the genus.

Gelechiidae

Dichomeris acuminata (Staudinger, 1876) – Pl.12, Fig. 53

Two specimen in Praslin, Anse Boudin on 05./08.VII.2014.

Thiotricha tenuis (Walsingham, 1891) – Pl.12, Fig. 54, 55

Seychelles: Aldabra, Cerf, Cosmoledo, Mahé, Praslin, Silhouette

One male on Praslin, Anse Boudin on 08.VII.2014. Winglength: 3.8 mm, wingspan: 8.5mm.

Gelechiidae sp.01 – Pl.23, Fig.98-101

One specimen on Praslin, Anse Boudin, on 06.VII.2014 (Fig.98). Wingspan: 9 mm.

I could not name this small species but I believe it might have a large distribution. I also find it in Réunion where I bred it from *Tamarindus indica* L. (Fabaceae) and *Trema orientalis* (L.) Blume (Cannabaceae). This seems to be an unrecorded species from both countries: Seychelles and Réunion. Its hostplants are widely distributed in the African/Asian countries and this Gelechiidae sp. has certainly a broad distribution.

Brachmia fuscogramma Janse, 1960 – Pl.22, Fig. 95-97

Distribution: Réunion, South Africa, Zimbabwe

This species was described from specimen from South Africa and Zimbabwe and I did not encounter it during my visit to the Seychelles. Though, I would still like to take the opportunity to illustrate it in this paper as I noticed that its imago is identical to *Brachmia brunneolineata* Legrand, 1966 described from the Seychelles.

Unfortunately Legrand did not publish a genitalia illustration of his species and it will be necessary to examine the types to find out if it might be a junior synonym of *Brachmia fuscogramma*.

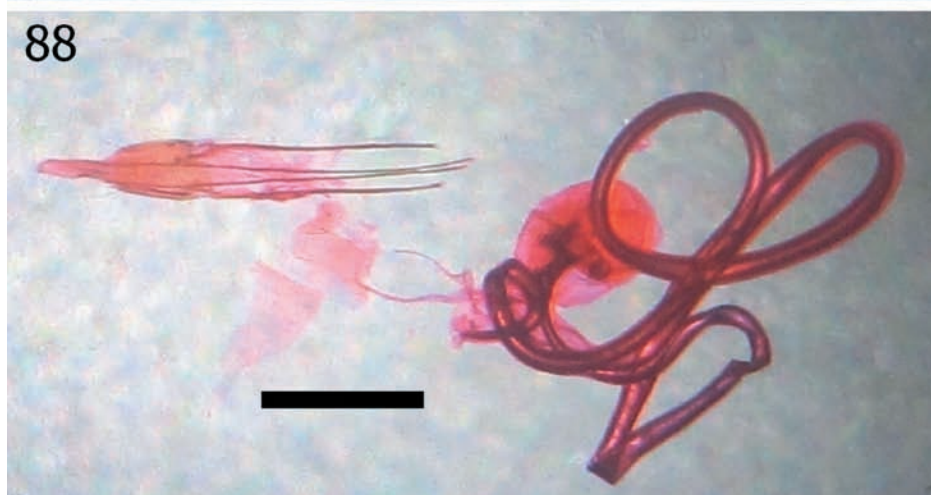
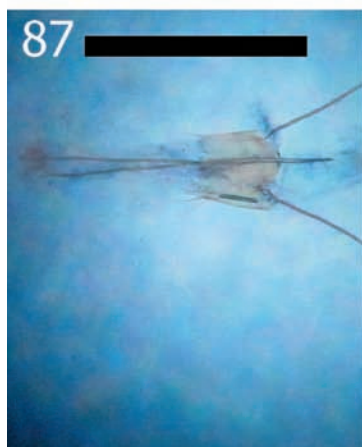


Plate 20: Fig. 85 - *Stathmopoda auriferella*; Fig. 86 - *Stathmopoda morellella*; Fig. 87 - *Stathmopoda auriferella* – female genitalia, slide SEY-049; Fig. 88 - *Stathmopoda morellella* – female genitalia

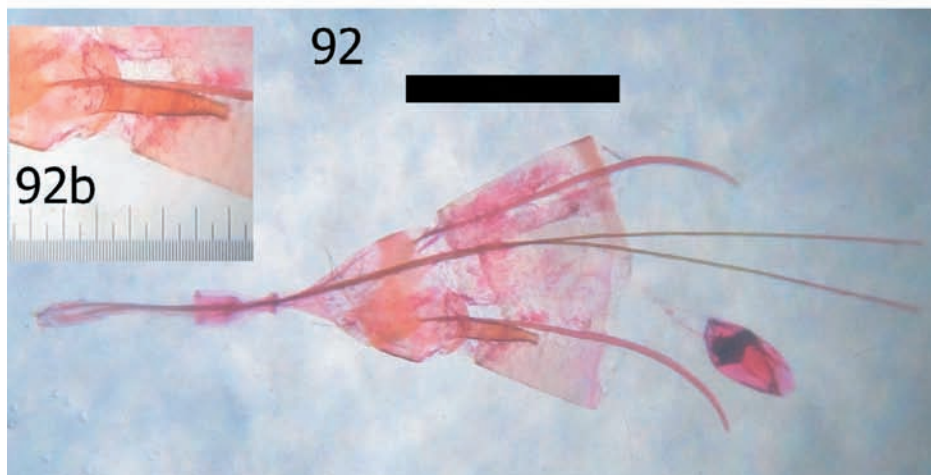
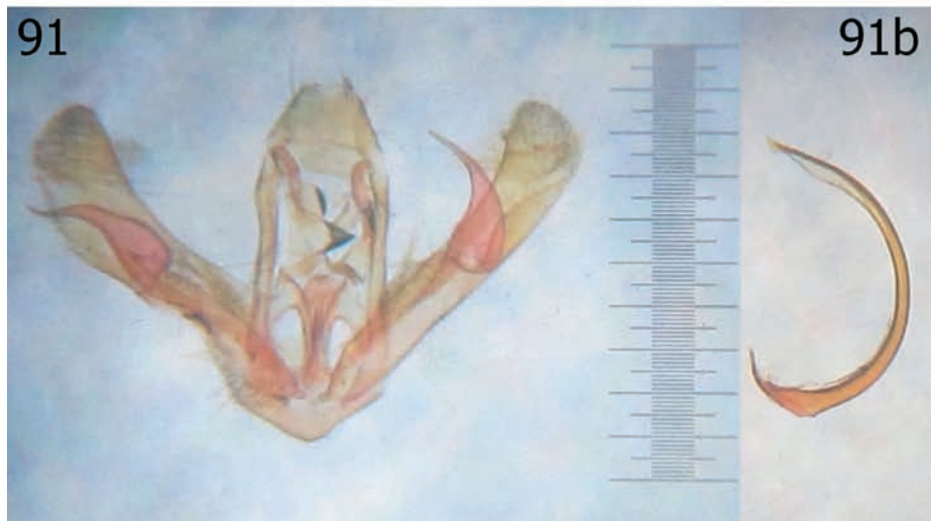


Plate 21: Fig. 89 - *Erechthias* sp. nr. *molynta*; Fig. 90 - *Erechthias* sp. nr. *molynta*; Fig. 91 - *Erechthias* sp. nr. *molynta* – male genitalia 91b: aedeagus; Fig. 92 - *Erechthias* sp. nr. *molynta* – female genitalia 92b: ostium



Plate 22: Fig. 93 - *Cryptophlebia peltastica*; Fig. 94 - *Thaumatovalva limbata*; Fig. 95 - *Brachmia fuscogramma* – Réunion; Fig. 96 - *Brachmia fuscogramma* – Réunion; Fig. 97 - *Brachmia fuscogramma* – male genitalia. 97b: aedeagus

98



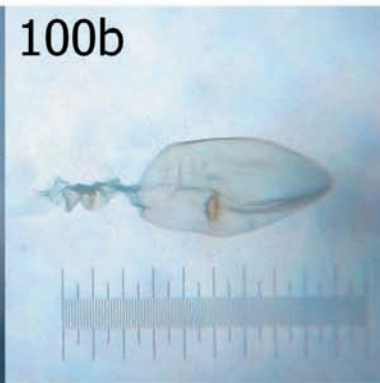
99



100



100b



101b



101



Plate 23: Fig. 98 - *Gelechiidae* sp.01; Fig. 99 - *Gelechiidae* sp.01; Fig.100- *Gelechiidae* sp.01 – female genitalia. 100b: bursae; Fig. 101- *Gelechiidae* sp.01 – male genitalia. 101b: aedeagus

The illustrated specimen (Fig.95-97) provides from La Réunion, La Possession, alt.400m where it seems to be rare. The only specimen (male, slide RE-1872, wingspan:10.5 mm) was captured on 11.VI.2015.

Stathmopodidae

Stathmopoda auriferella (Walker, 1864) – Pl.20, Fig.85, 87

Seychelles : Mahé, Praslin, Silhouette

Several specimens were observed on Praslin on 04-05.VII. and 08.VII.2014. Wingspan 10.5 mm. This seems to be a common species.

Stathmopoda morellela Legrand, 1966 – Pl.20, Fig.86, 88

Endemic to the Seychelles: Mahé, Praslin & Silhouette

1 female from Praslin, Anse Boudin on 04.VII.2014. Wingspan: 19 mm.

Tineidae

Erechthias sp. nr. molynta (Meyrick, 1911) – Pl.21, Fig.89-92

3 specimens on Mahé, Ma Constance, 09-10.VII.2014. Wingspan: 17 mm.

From the male genitalia (Fig.91) the illustrated species seems to be an *Erechthias* but I could not attribute it surely to a species. From the original description and the drawing published by Gerlach & Matyot (2006) it might correspond to *Erechthias molynta* in size and coloration.

Note : the darker field on the female bursae (Fig.92) is an air bubble in the slide.

Tortricidae

Cryptophlebia peltastica (Meyrick, 1921)

1 specimen collected on Praslin, Anse Boudin on 05.VII.2014

Hostplant: In Réunion I bred this species from fruits of *Pithecellobium dulce* (Roxb.) and *Bauhinia monandra* Kurz (Fabaceae).

Dudua aprobola (Meyrick, 1886) – Pl.22, Fig.93

Seychelles: Aride, Curieuse, Mahé, Praslin, Silhouette

1 male, 1 female on Praslin, Anse Boudin on 08.VII.2014.

Hostplant: In Réunion I bred this species from *Syzygium jambos* (L.) Alston (Myrtaceae), *Mangifera indica* L. (Anacardiaceae) and *Trema orientalis* (L.) Blume (Cannabaceae).

Thaumatovalva limbata (Diakonoff, 1969) – Pl.22, Fig.94

Distribution: Kenya & Seychelles: Aldabra, Cosmoledo, Mahé, Praslin

1 specimen collected on Praslin, Anse Boudin on 07.VII.2014

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