

## Records of Lepidoptera from the Malagasy region with description of new species (Lepidoptera: Tortricidae, Noctuidae, Alucitidae, Choreutidae, Euteliidae, Gelechiidae, Blastobasidae, Pterophoridae, Tonzidae, Tineidae, Praydidae, Cosmopterigidae, Batrachedridae).

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**Keywords:** Lepidoptera, Tortricidae, Choreutidae, Alucitidae, Noctuidae, Gelechiidae, Tonzidae, Pterophoridae, Tineidae, Praydidae, Yponomeutidae, Cosmopterigidae, Batrachedridae, Mauritius, Madagascar, Réunion.

### Introduction

Twenty-four species are described as new for science in the families of Tortricidae, Choreutidae, Alucitidae, Noctuidae, Gelechiidae, Tonzidae, Tineidae, Pterophoridae, Praydidae, Yponomeutidae, Cosmopterigidae and Batrachedridae: *Apotoforma smaragdina* n.sp., *Cydia corona* n.sp., *Thaumatotibia rassembi* n.sp. and *Thaumatotibia rochata* n.sp. (Tortricidae), *Tebenna cornua* n.sp. (Choreutidae), *Megalonycta kissa* n.sp. (Noctuidae), *Anarsia dodonaea* n.sp., *Anarsia tremata* n.sp., *Aristotelia bicomis* n.sp., *Faristenia tamarinda* n.sp., *Dichomeris andasibea* n.sp., *Helcystogramma malagasy* n.sp. (Gelechiidae), *Agnathosia nana* n.sp., *Amphixystis guttata* n.sp., *Amphixystis patelia* n.sp., *Erechtias nigrocaputis* n.sp., *Eudarcia oceanica* n.sp. (Tineidae), *Tonza toga* n.sp. (Tonzidae), *Megalorhipida monsa* n.sp. (Pterophoridae), *Prays armynoti* n.sp. (Praydidae), *Kessleria gibeauxia* n.sp., *Xyrosaris canusa* n.sp. (Yponomeutidae), *Pyroderces spix* n.sp. (Cosmopterigidae) and *Batrachedra rainha* n.sp. (Batrachedridae).

36 species are recorded for the first time from Réunion (two also occurring in the Seychelles islands), 2 species for Mayotte, 10 species recorded from Mauritius and 4 new species for Madagascar. New and recent host-plant records for 28 species are communicated.

### Synonyms:

Synonymies are established for: *Cosmetra spiculifera* (Meyrick, 1913) with *Cosmetra anthophaga* Diakonoff, 1977 (syn. nov.), *Amyna acuta* Berio, 1959 with *Amyna incertalis* (Guillermet, 1992) (syn. nov.), *Dichomeris hortulana* (Meyrick, 1918) with *Cymotricha tetraschema* Meyrick, 1931 (syn. nov.) and *Dichomeris ceponoma* Meyrick, 1918 (syn. nov.), *Amphixystis serrata* (Meyrick, 1914) with *Amphixystis maillardella* (Viette, 1957) (syn. nov.) and *Calicotis attiei* (Guillermet, 2011) new.comb. [orig.comb. *Stathmopoda attiei* Guillermet, 2011] with *Calicotis cuspidata* (syn. nov.) Guan & Li, 2015.

Collection site: Most specimens were collected in Réunion, La Possession, alt. 400m. Geographical coordinates 20°55'37"S/55°21'45"E. Other sites of collection are indicated in the text.

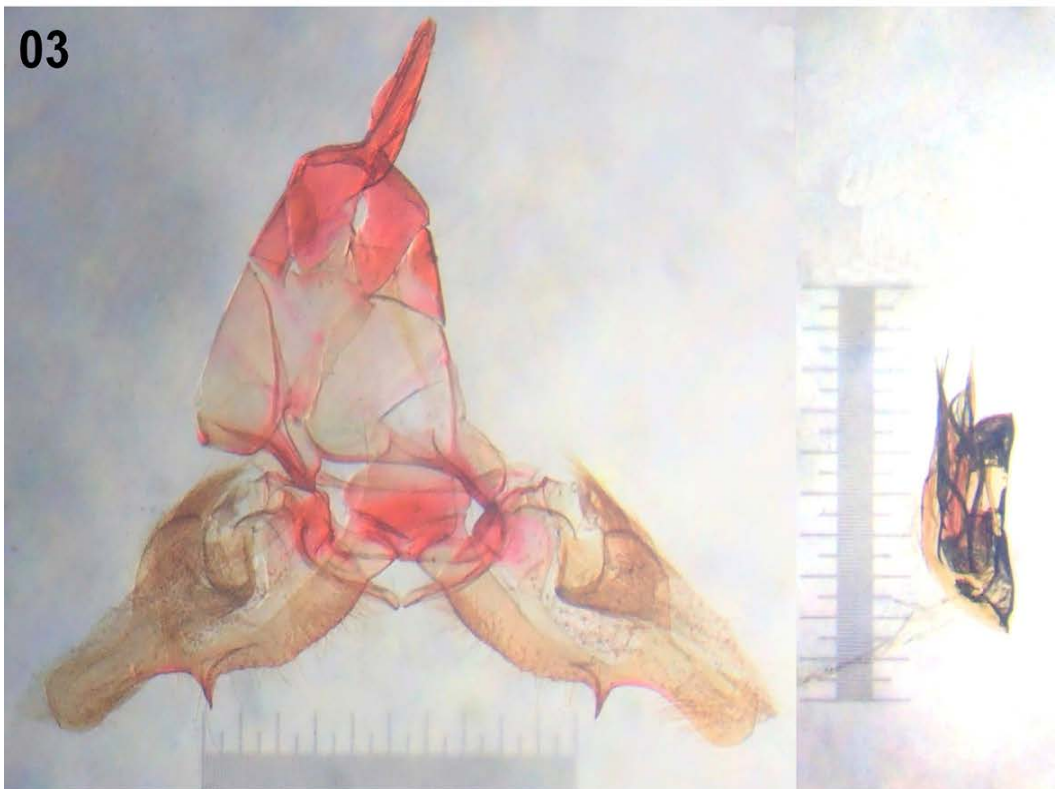
Holotypes: Holotypes will be deposited in the collections of Naturalis Biodiversity Center, Leiden, Netherlands.



01



02



03



04



05

Plate 01: Tortricidae

- 01. - *Apotoforma smaragdina*, adult
- 02. - *Apotoforma smaragdina*, adult

- 03. - *Apotoforma smaragdina*, male genitalia
- 04. - *Bactra stagnicolana*, adult
- 05. - *Bactra stagnicolana*, female genitalia

## Species:

Tortricidae:

***Apotoforma smaragdina*** nov.spec. - Figs. 01-03.

**Description:** Wingspan 19mm. Palpi & head greenish. Antennae beige, emerald greenish at base, 1/2 forewing length, simple. Forewings: dark emerald-greenish with irregular brownish and blackish markings. Elongate-truncate, costa strongly rounded at base, straight posteriorly, termen straight. Hindwings: bronze-beige.

Male genitalia: valvae rounded; dilated with a pointed appendix in the middle of sacculus, pointing downwards. Tegumen large with a longue subscaphium. Aedeagus very short, with a bunch of short and slender sinuate spines.

**Holotype:** male, 24.iv.2015, Réunion, La Possession, alt. 400m, 20°55'37"S/55°21'45"E, leg. M. Bippus in Naturalis Biodiversity Center, Leiden, Netherlands, RMNH No.1108624.

Paratypes: 2 males, 04.i.2020, Réunion, La Possession, alt. 400m, 20°55'37"S/55°21'45"E, leg. M. Bippus in Naturalis Biodiversity Center and 05.i.2020, same locality, in collection M. Bippus.

From my files I found later that I had observed this species also on 12.xii.2013 (same locality, not collected).

**Distribution:** Réunion (TL).

***Bactra stagnicolana*** Zeller, 1852 - Figs. 04-05.

1 female on 14.ii.2018, La Possession, alt.400m and Mauritius, Flic-en-Flac on 13.vi.2016.

**Distribution:** Angola, Congo, Kenya, Malawi, South Africa (TL), Zimbabwe  
Regionally found in: Comoros, Madagascar, Mauritius and Réunion.

***Borboniella allomorpha*** (Meyrick, 1922) - Fig. 06.

Wingspan: 19-25mm

This seems to be a rather variable species and I believe that several of the later described species (Diakonoff, 1957) are its junior synonyms, although the imagos illustrated of the different species by Diakonoff (1957) are insufficient to establish exact synonymies particularly as there is more than just a single valid species involved.

I bred this species from a large variety of plants. Although its larvae looked the same, the imagos that I obtained are rather different in markings. However their genitalia are identical.

**Host plants:** *Claoxylon parviflorum* A.Juss (Euphorbiaceae), *Toddalia asiatica* (L.) Lam. (Rutaceae), *Hubertia ambavilla* Bory (Asteraceae), *Hypericum lanceolatum* Lam. (Clusiaceae) and *Smilax anceps* Willd. (Smilacaceae).

Martiré & Rochat (2006) had already reported this species also feeding on *Antirhea borbonica* J. F. Gmel. (Rubiaceae), *Aphloia theiformis* (Vahl.) Benn. (Flacourtiaceae) and *Hypericum lanceolatum* Lam. (Clusiaceae).

**Distribution:** Réunion (TL).

***Brachiola amblopiis*** (Meyrick, 1911), Figs. 07-09.

Wingspan: 13-14mm

Material examined:

Mauritius: 3 specimens, Blackriver 06.-10.vi.2016 and Flic-en-Flac, 11.vi.2016.

Réunion: 6 specimens, La Possession, alt.400m: 04.viii.2015, 25.iv.2016, 13.v.2016, 20.viii.2016, 13.vii.2018 (male, gen.prep.RE-3579) and 8.ii.2020 (fem.).

**Distribution:** Comoros, Mauritius, Seychelles (Aldabra, Cosmoledo, Silhouette), new for Réunion.

***Coniostola stereoma*** (Meyrick, 1912)- Figs. 10-12.

Wingspan: 9.5-13mm.

In La Réunion I could raise this species from inflorescence of *Pithecellobium dulce* (Roxb.) Benth (Fabaceae) (02.xi.2016, La Possession, alt.100m).

**Host plants:** raised in Africa on several *Acacia* sp. and *Pithecellobium dulce* (Roxb.) Benth (Fabaceae).

**Distribution:** widespread, from continental Africa to Indonesia. Comoros, Madagascar, La Réunion, Seychelles.

***Cosmetra spiculifera*** (Meyrick, 1913) - Figs. 13-15.

syn.nov. *Cosmetra anthophaga* Diakonoff, 1977 (TL: Réunion)

Wingspan: 13mm

The male genitalia of *Cosmetra spiculifera* was illustrated by Razowski & Krüger (2007) while Aarvik (2016) illustrated its imago, male and female genitalia. These are identical to *Cosmetra anthophaga* Diakonoff, 1977 syn. nov. described from Réunion.

This species is also present in Mauritius where one female was collected (Flic-en-Flac, 10-12.vi.2016, gen. prep. Mru-133).

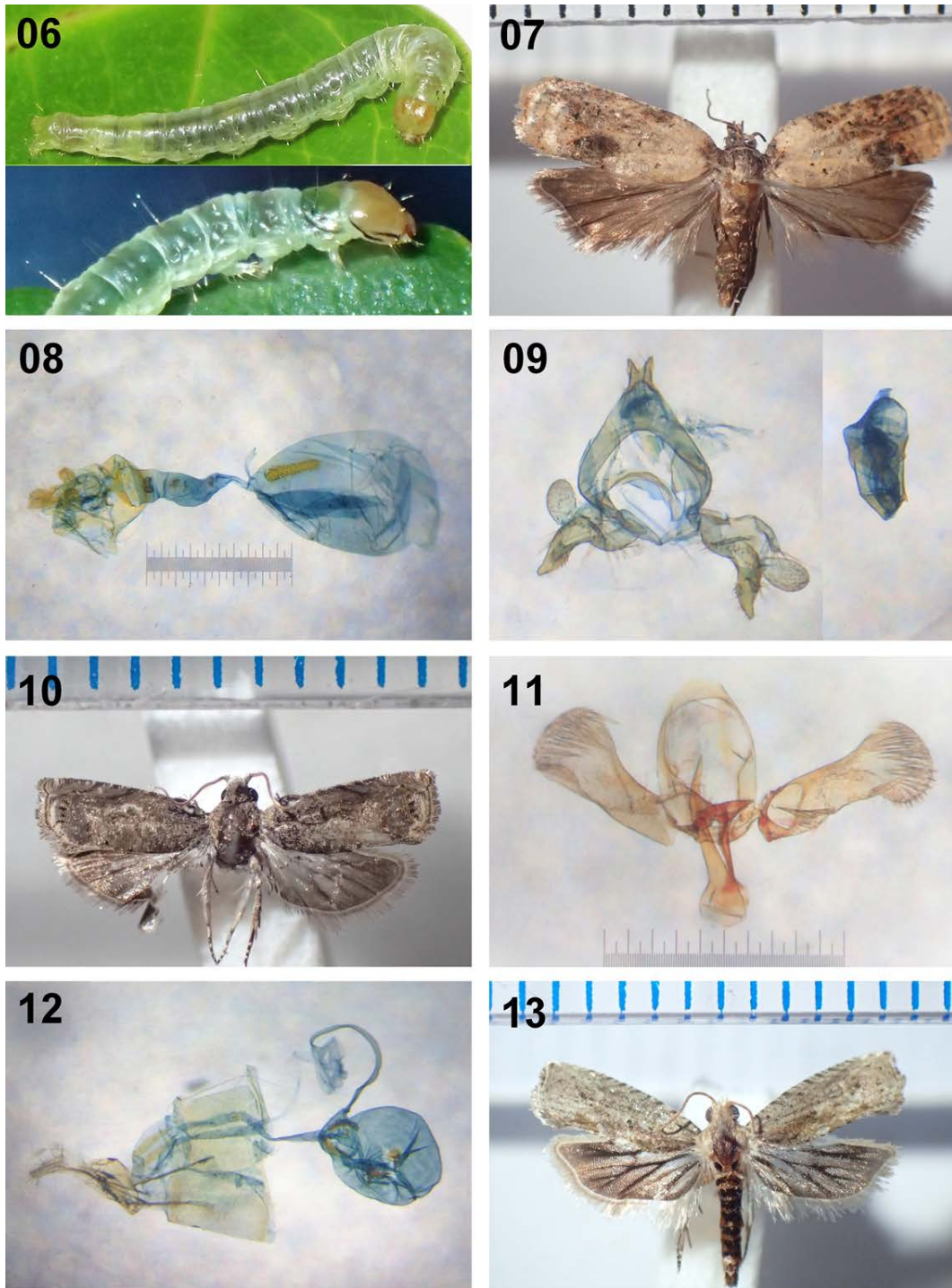


Plate 02: Tortricidae

06. - *Borboniella allomorpha*, larvae

07. - *Brachiola amblopiis*, adult

08. - *Brachiola amblopiis*, female genitalia

09. - *Brachiola amblopiis*, male genitalia

10. - *Coniostola stereoma*, adult

11. - *Coniostola stereoma*, male genitalia

12. - *Coniostola stereoma*, female genitalia

13. - *Cosmetra spiculifera*, adult

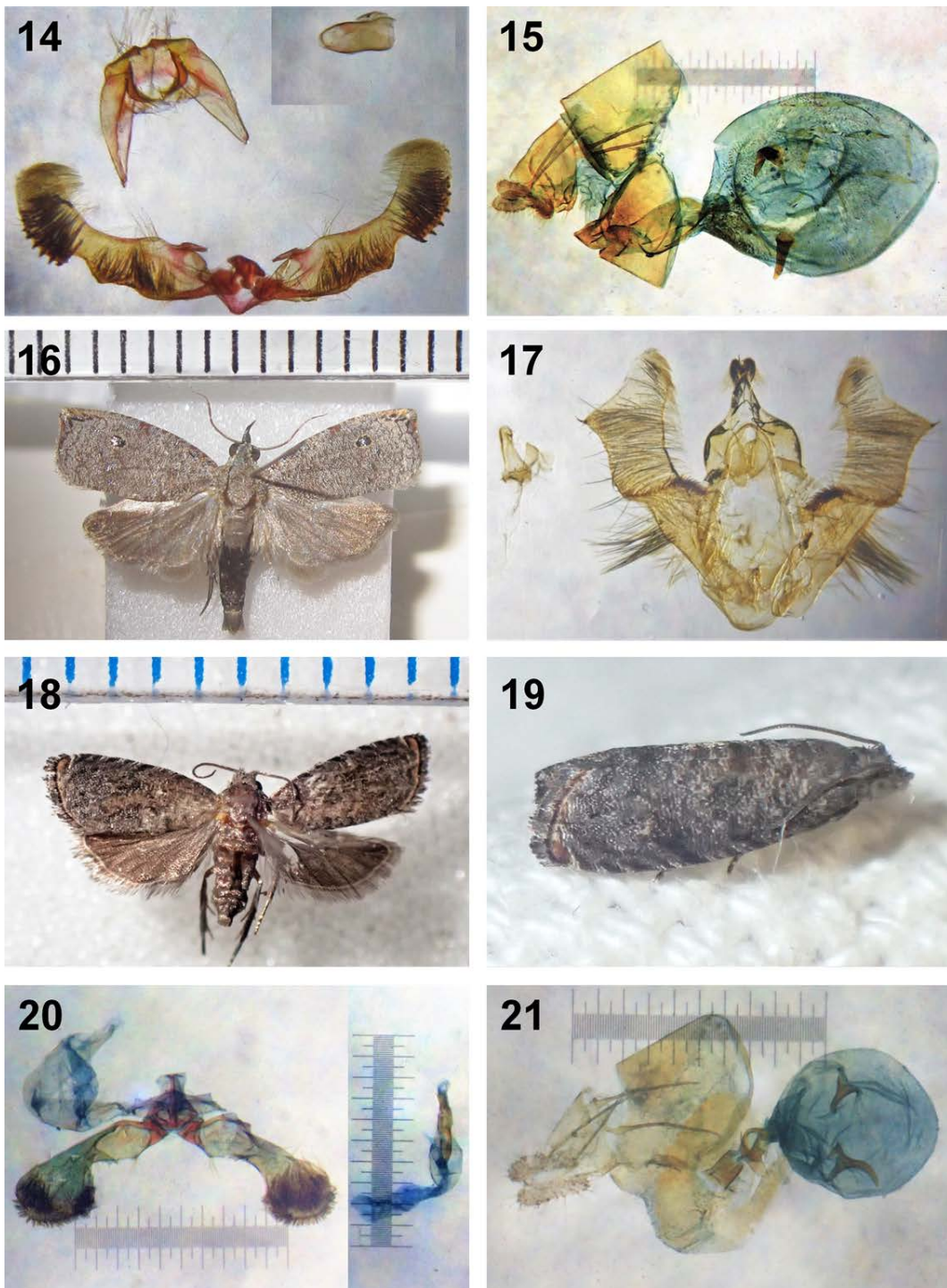


Plate 03: Tortricidae

- 14. - *Cosmetra spiculifera*, male genitalia
- 15. - *Cosmetra spiculifera*, female genitalia
- 16. - *Cosmorrhyncha acrocosma*, adult
- 17. - *Cosmorrhyncha acrocosma*, male genitalia

- 18. - *Cydia corona*, adult
- 19. - *Cydia corona*, adult
- 20. - *Cydia corona*, male genitalia
- 21. - *Cydia corona*, female genitalia

Collection dates (in Réunion, La Possession, alt.400m): 23.iii.2013, 11.xi.2014, 08.i.2015, 25.v.2015, 28.v.2015, 25.i.2016, 08.ii.2016, 01.iii.2016, 08.v.2016, 29.viii.2016, 29.iii.2017, 30.iii.2017, 20.vi.2017, 16.xi.2017, 20.xii.2017, 14.ii.2018, 20.vi.2017, 10.ii.2018, 14.v.2018, 05.i.2020, 15.i.2020 and 18.i.2020.

In Mauritius: 1 female, Flic-en-Flac, 10-12.vi.2016.

Months of the year: i, ii, iii, v, vi, vii, viii, xi, xii.

**Host plant:** inflorescence of *Mangifera indica* L. (Anacardiaceae) (Jean Etienne).

**Distribution:** widespread in continental Africa, Cameroon, Congo, Gabon, Ghana, Nigeria, South Africa (Aarvik, 2016). Regionally: Réunion and Mauritius (new record).

***Cosmorrhyncha acrocosma*** (Meyrick, 1908) - Figs. 16-17.

This species was misidentified in the Mascarenes as *Cosmorrhyncha ocellata* (Mabille, 1900).

Guillermet (2011) reported *Cosmorrhyncha ocellata* but misidentified its genitalia. I followed his identifications for Mauritius and host-plant records from Réunion and Mauritius (Bippus, 2016b) on *Tamarindus indica* L. (Fabaceae) and *Acalypha indica* L. (Euphorbiaceae).

Both publication (Guillermet, 2011 and Bippus, 2016b; Fig.63) illustrate the male genitalia of *Cosmorrhyncha acrocosma* that was earlier illustrated by Aarvik (2004) and not *Cosmorrhyncha ocellata*, as illustrated by Diakonoff, 1959b, Fig.4. Both host-plant records belong to *Cosmorrhyncha acrocosma*.

1 specimen (not otherwise examined) was raised also on *Desmodium intortum* Urb. (Fabaceae), 23.v.2020.

**Host plant:** *Tamarindus indica* L. (Fabaceae), *Acalypha indica* L. (Euphorbiaceae) and *Desmodium intortum* Urb. (Fabaceae).

**Distribution:** Congo, Kenya, Malawi (TL), Mali, Sierra Leone, South Africa, Tanzania (Aarvik, 2004); Réunion and Mauritius (misidentified as *C. ocellata*).

***Cryptophlebia peltastica*** (Meyrick, 1921) - Figs. 22-23.

Wingspan: 21-22mm

Three additional specimen (male) were bred on 17.ix.2016 from larvae in fruits of *Acacia farnesiana* Willd. (Fabaceae) collected in Réunion, La Possession, alt. 100m. I had previously already bred the same species of Lepidoptera from fruits of *Pithecollobium dulce* (Roxb.) Benth. and *Bauhinia monandra* Kurz (Fabaceae) (Bippus, 2016).

This species was also collected at light in Mauritius, 2 specimens in Blackriver, 06-10.vi.2016 and one in Mahébourg, 13.vi.2016 (not otherwise examined).

**Hostplants:** *Acacia farnesiana* Willd., *Pithecollobium dulce* (Roxb.) Benth. and *Bauhinia monandra* Kurz (Fabaceae).

***Cydia corona*** nov. spec. - Figs. 18-21.

**Description:**

Wingspan: 9.5-10.5mm. Head, antennae and thorax dark greyish. Antennae short, about half. Forewings are scattered dark greyish with irrorated blackish that are crowned with a small field of orange or yellowish scales at tornus.

Hindwings are uniformly grey.

Male genitalia (Fig.20): Tegumen weakly sclerified, uncus absent, saccus absent, strongly dilated valvae. Aedeagus moderately broad and long with sclerotisation.

Female genitalia (Fig.21): Ductus bursae short with sclerotisation. Two very large signa, with scobinate hooks in unequal bases.

**Holotype:** female, 21.i.2020 (gen.prep.RE-4080); Réunion, La Possession, 400m; 20°55'37"S/55°21'45"E; leg. M. Bippus in Naturalis Biodiversity Center, Leiden, Netherlands, RMNH No.1108636.

Paratypes: female: 16.i.2020, 17.i.2020 (gen. prep. RE-4060b), 21.i.2020, 21.i.2020 (gen.prep.RE-4095), 22.i.2020, 25.i.2020, 26.i.2020, 04.ii.2020, 06.ii.2020, 15.ii.2020, 22.ii.2020, 19.iii.2020 (same locality) in Naturalis, Netherlands. male: 16.i.2020 (gen. prep. RE-4049), 17.i.2020 (2 specimens, gen. prep.RE-4060a and RE-4060c), 17.i.2020, 19.i.2020 (gen. prep. Re-4100), 21.i.2020, 22.i.2020, 25.i.2020, 27.i.2020, 04.ii.2020, 14.ii.2020, 20.ii.2020, 27.ii.2020, 09.iv.2020 (2pcs), 04.v.2020 (same locality) in Naturalis, Netherlands.

One male, 14.xii.2017 (gen. prep. RE-3446), 1 female, 02.ii.2020 and two undetermined sex from 10.i.2020 and 13.ii.2020 in collection M. Bippus.

**Distribution:** Réunion (TL). Likely to be an introduced species.

***Eccopsis incultana*** (Walker, 1863)

1 male specimen, gen. prep. Mru-134, in Mauritius. Another specimen from Madagascar, Andasibe, 29.xi.2016. Also common in Réunion.

**Distribution:** throughout continental Africa, including Madagascar, Mauritius, Réunion and Seychelles.

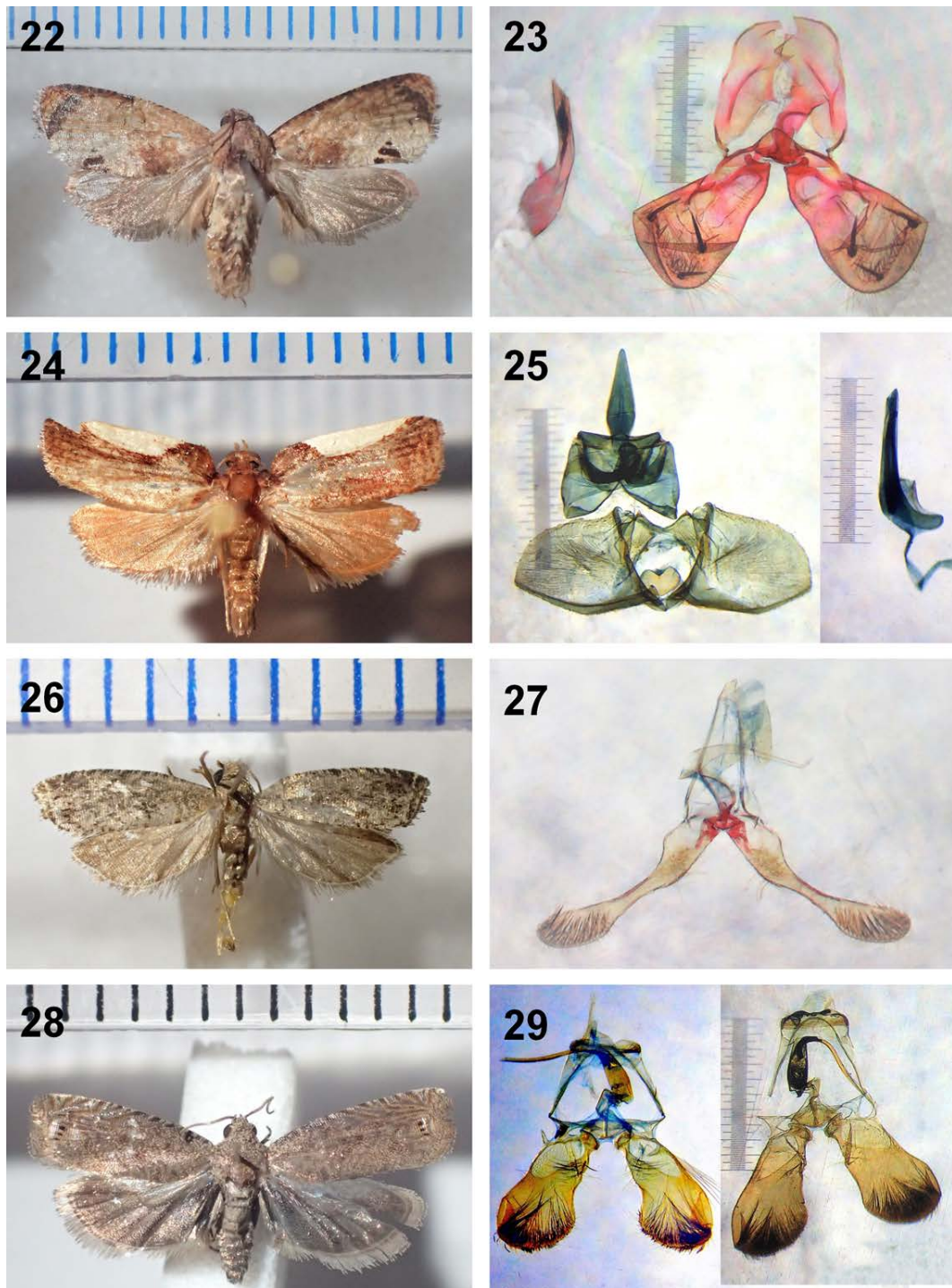


Plate 04:

- 22. - *Cryptophlebia peltastica*, adult
- 23. - *Cryptophlebia peltastica*, male genitalia
- 24. - *Epichoristodes leucocymba*, adult
- 25. - *Epichoristodes leucocymba*, male genitalia

- 26. - *Grapholita siderocosma*, adult
- 27. - *Grapholita siderocosma*, male genitalia
- 28. - *Leguminivora anthracotis*, adult
- 29. - *Leguminivora anthracotis*, male genitalia  
right: Réunion, left: Mauritius

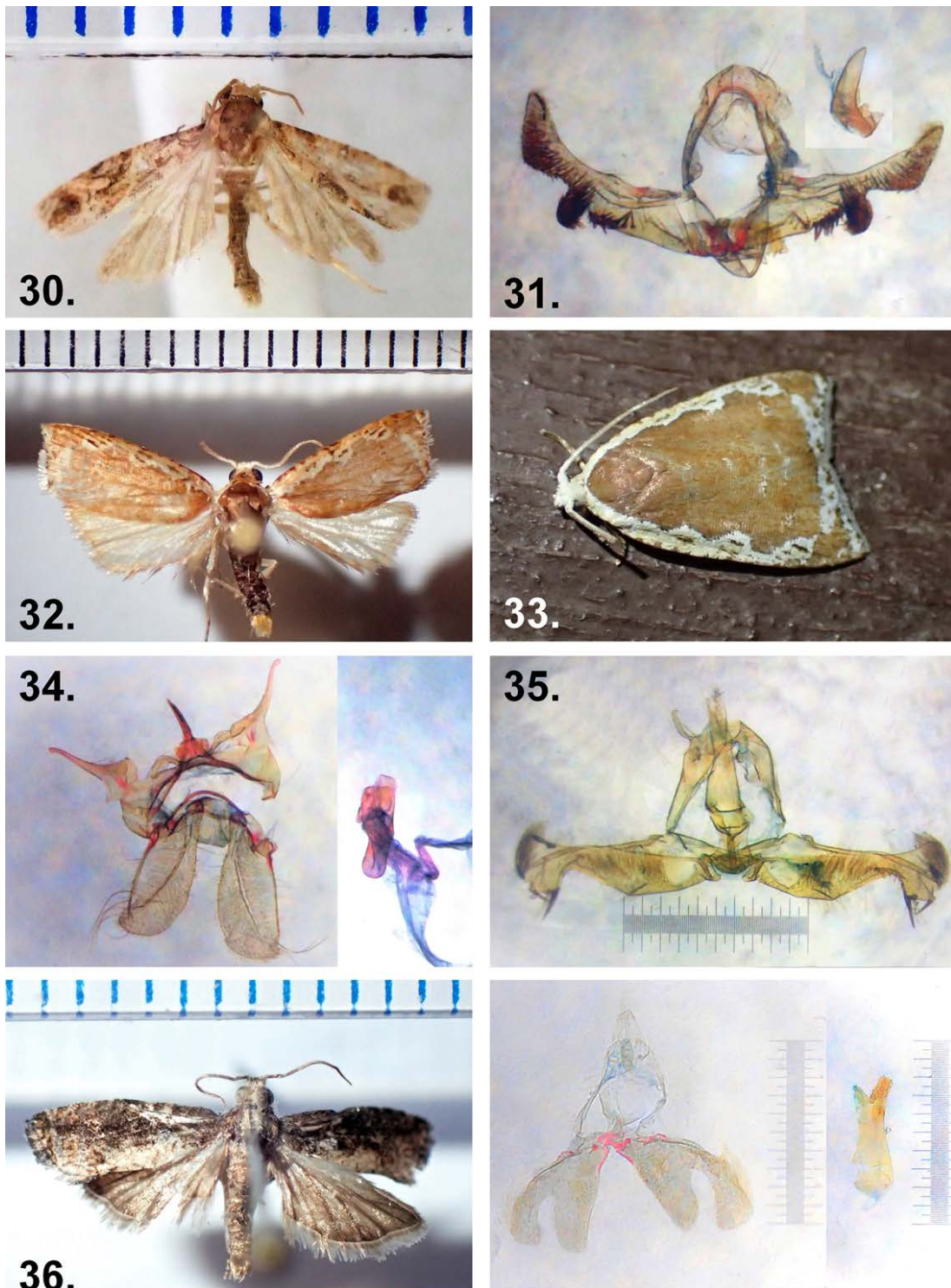


Plate 05:

- 30. - *Lobesia semosa*, adult
- 31. - *Lobesia semosa*, male genitalia
- 32. - *Panegyra cosmophora*, adult
- 33. - *Panegyra cosmophora*, adult

- 34. - *Panegyra cosmophora*, male genitalia
- 35. - *Strepsicrates penechra*, male genitalia
- 36. - *Strepsicrates penechra*, adult
- 37. - *Tetramoera isogramma*, male genitalia



Leif Aarvik (2004; p.89) had reported this species from Rodrigues island that was erroneously attributed as belonging to Chile (as Manuel Rodriguez Island). Though the specimen was collected in the Mascarenes island of Rodrigues, belonging to the Republic of Mauritius. There are other species that were described by Meyrick (1924) from Rodrigues bearing labels by the same collectors and dates (H.P. Thomasset & H.J. Snell Coll. in viii.-xi.1918). For instance, the Choreutidae *Simaethis turilega* Meyrick, 1924 bears this label. The holotype of *S. turilega* and its label are also illustrated on the website of Jadranka Rota: <http://choreutidae.myspecies.info/taxonomy/term/108/media>

***Epichoristodes leucocymba*** (Meyrick, 1912) - Figs. 24-25.

Wingspan: 16mm.

One male specimen was collected in Madagascar, Andasibe, alt.945m, 18°56'51"S/48°25'4", 24.xi.-03.xii.2016.

Distribution: Madagascar (TL).

***Grapholita siderocosma*** Diakonoff, 1978 - Figs. 26-27.

Wingspan: 10mm.

A common species in Réunion that appears to be rather washed. The male is easily distinctive by its long valvae that rear out of its genitalia. Though the females can be mistaken as washed examples of other species.

Distribution: Ethiopia and Réunion (TL).

***Leguminivora anthracotis*** (Meyrick, 1913) - Figs. 28-29.

Wingspan: 9.5-10.5mm

One male on 04.x.2016, gen. prep. RE-2870 (Fig.29, left), was raised from larvae found on *Pithecellobium dulce* (Roxb.) Benth. (Fabaceae) in Réunion, La Possession, alt.100m.

Two male specimens were also collected in Mauritius, Flic-en-Flac, 11.vi.2016 and Blackriver, 06.-10.vi.2016 (gen. prep. Mru-064, Fig.29, right).

Another male specimen, wingspan 10.5mm, was found in Madagascar, Andasibe, 01.xii.2016 (gen. prep. MG-067).

Host plant: *Pithecellobium dulce* (Roxb.) Benth. (Fabaceae).

Distribution: Nigeria, South Africa (Razowski & Wojtusiak, 2012; Razowski, 2015), new for Madagascar, Mauritius and Réunion.

***Lobesia semosa*** Diakonoff, 1992 - Figs. 30-31.

Wingspan: 9.5-10mm.

5 male specimens were collected in Andasibe, Madagascar, alt.945m, 18°56'51"S/48°25'4", between 24.xi.2016-03.xii.2016.

Distribution: Madagascar (TL).

***Panegyra cosmophora*** Diakonoff, 1960 - Figs. 32.-34.

Wingspan 18mm.

One male, collected in Madagascar, Andasibe, alt.945m, 18°56'51"S/48°25'4" on 30.xi.2016, gen. prep. MG-027 (Fig.34).

Distribution: Madagascar (TL).

***Strepsicrates penechra*** (Diakonoff, 1989) - Figs. 35-36.

Wingspan: 13mm. 3 male specimens were bred from *Psidium guajava* L. (Myrtaceae) in Réunion, La Possession, alt.550m, xi.2014 and 24.i.2015. At light also in 07.ii.2017, 28.iv.2018, 27.ii.2020 (Réunion, La Possession, alt.400m).

Host plant: *Psidium guajava* L. (Myrtaceae).

Distribution: Madagascar (TL) & Réunion.

***Tetramoera isogramma*** (Meyrick, 1908) - Fig. 37.

One male, 03.viii.2018 (gen.prep. RE-3589, Fig.37) from Réunion, La Possession, alt.400m.

Distribution: Congo, Ethiopia, South Africa, Sri Lanka, new for Réunion.

***Tetramoera schistaceana*** (Snellen, 1891) - Fig. 164.

One female (gen.prep.Mru-006; Fig.164) in Mauritius, Mahébourg, 13.vi.2016.

***Thaumatotibia rassembi*** nov.spec. - Figs. 38-40.

Description: Wingspan: 18mm. Head, palpa and antennae ochreous-brownish, short, less than half. Forewings brownish, a little darkened near base. Hindwings: ochreous-brownish.



38.



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43.

Plate 06: Tortricidae

38 & 39. - *Thaumatotibia rassembi*, adult

40. - *Thaumatotibia rassembi*, female genitalia

41. - *Thaumatotibia rochata*, female genitalia

42 & 43. - *Thaumatotibia rochata*, HT, adult

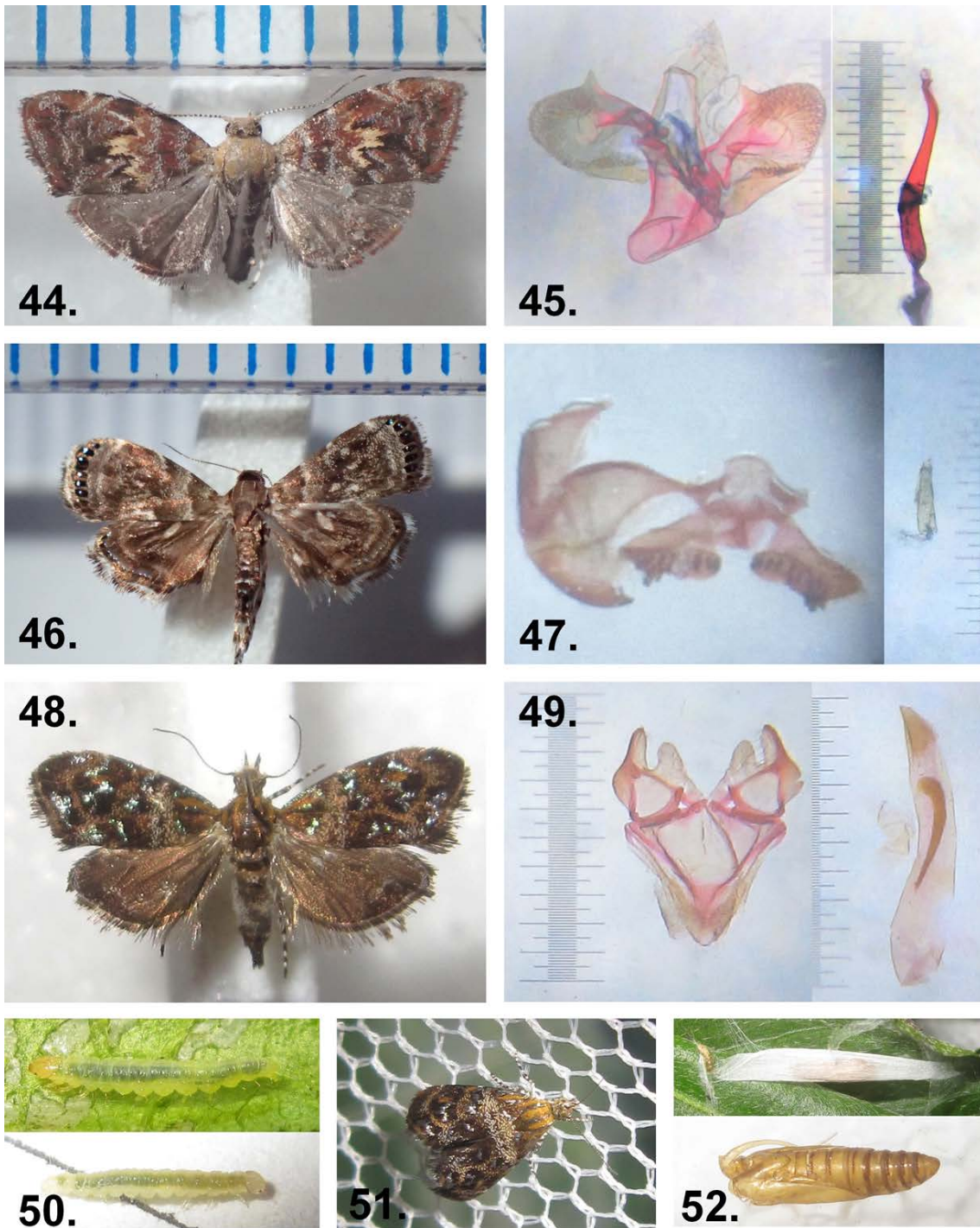


Plate 07: Choreutidae

- 44. - *Anthophila emplecta*, adult
- 45. - *Anthophila emplecta*, male genitalia
- 46. - *Brenthia leptocosma*, adult
- 47. - *Brenthia leptocosma*, male genitalia

- 48. - *Tebenna cornua*, adult
- 49. - *Tebenna cornua*, male genitalia
- 50. - *Tebenna cornua*, larvae
- 51. - *Tebenna cornua*, adult
- 52. - *Tebenna cornua*, pupae

Female genitalia (Fig.40): Two signa: one slender curved horn at base, moderately surrounded by little darkened patch, a second signa longer than first, in the middle of bursae.

Holotype: 1 female, 10.xii.2017, Réunion, La Possession, 400m, 20°55'37"S/55°21'45"E; leg. M. Bippus, gen.prep.RE-3442 in Naturalis Biodiversity Center, Leiden, Netherlands, RMNH No.1108625.

Paratype: 1 female, 21.ii.2017, same locality, gen. prep. RE-3053, in personal collection Bippus.

Distribution: Réunion (TL).

***Thaumatotibia rochata*** nov.spec. - Figs. 41-43.

Description: Wingspan: 21 mm. Head, palpa and antennae: dark greyish. Antennae short, less than half. Forewings: dark greyish, irregularly mixed with blackish. At 2/3 a dull, beige cell-spot in cell.

Hindwings: greyish.

Female genitalia (Fig.41): Ostium widened, broad ductus bursae, two large signa in triangular shape in ovular bursae.

Holotype: 1 female, 09.i.2020, Réunion, La Possession, alt. 400m; 20°55'37"S/55°21'45"E, leg. M. Bippus, gen. prep. RE-4048 in Naturalis Biodiversity Center, Leiden, Netherlands, RMNH No.1108626.

Distribution: Réunion (TL).

Etymology: Named in honour of Mr. Jacques Rochat, Réunion.

Choreutidae:

***Anthophila emplecta*** (Turner, 1942) new comb. - Figs. 44-45.

Orig. comb.: *Choreutis emplecta* Turner, 1942

Wingspan: 11mm. Two males were captured in Réunion, La Possession, alt.400m, 20°55'37"S/55°21'45"E on 21.i.2020 (gen. prep. RE-4080) and 11.iv.2020.

This species seems to exist also in Papua New Guinea but the specimens are not illustrated (www.boldsystems.org).

Distribution: Australia, Papua New Guinea and Réunion (new record).

***Brenthia leptocosma*** Meyrick, 1916 - Figs. 46-47.

Wingspan: 9mm-10mm. This species was bred ex-larvae found on *Ehretia cymosa* (Thonn.) and *Cordia africana* Lam. (Boraginaceae) from November to June (in Réunion). Particularly on the second plant, *Cordia africana*, it is very common. In May-early June I found as many as 50 specimens on *Cordia africana*. On the first host-plant (*Ehretia cymosa*) there seem to be only single specimens. Both hostplants are introduced in the Mascarenes and this species is likely to be found also in continental Africa.

2 specimens were also collected in Mauritius at light in Blackriver, 08.-10.vi.2016.

Host plants: *Ehretia cymosa* (Thonn.) and *Cordia africana* Lam. (Boraginaceae).

Distribution: Mauritius (TL) & Réunion.

***Tebenna cornua*** nov.spec. - Figs. 48-52. Fig.166.

Description: Wingspan: 10mm. Antennae annealed, simple, half of forewing length. Base of forewing and thorax dark yellow with silvery stripes, forewings brownish, irregularly mottled with darker brownish, speckled with silvery and white cells. At tornus darker brownish. Hindwings brownish. The larvae is light greenish.

Male genitalia (Fig.49): Tegumen absent. Valvae with two digits, the second a bit longer than the first, V-shaped vinculum. Aedeagus very impressive, longer than genitalia (120%), with cornuti in the medial section.

Holotype: male, 28.iv.2015, Réunion, La Possession, alt.400m (e.l. *Tithonia diversifolia*), RE-1781D, in Naturalis Biodiversity Center, Leiden, Netherlands, RMNH No.1108627.

Paratypes: 4 male & 1 female (Fig.166), 28.iv.2015 (e.l. *Tithonia diversifolia*), 20.v.2015 (abdomen lost, e.l. *Acanthospermum hispidum*) and 12.ix.2015 (e.l. *Tithonia diversifolia*).

Etymology: Named in the honour of Dr. Séverine Cornu, Le Port. Her skills made this publication possible.

Host plants: *Acanthospermum hispidum* D.C. and *Tithonia diversifolia* (Hemsl.) A. Gray (Asteraceae). Both hostplants are introduced in Réunion.

Distribution: Réunion (TL).



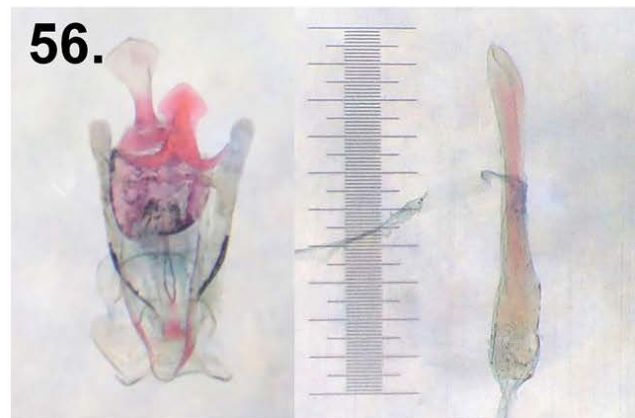
53.



54.



55.



56.



57.



58.

Plate 08:

53. - *Alucita priona*, adult

54. - *Alucita priona*, female genitalia

55. - *Alucita priona*, larvae

56. - *Alucitia priona*, male genitalia

57. - *Megalonycta kissa*, adult

58. - *Megalonycta kissa*, male genitalia

Alucitidae:

***Alucita priona*** nov.spec. - Figs. 53-56.

Description: Wingspan: 15-16mm, forewing length: 6.5-7.5mm.

Head and abdomen beige-ochreous scattered brownish, palpa sharply angled, scattered with brownish. Antennae annealed, simple, little above half. Wings alternating brownish with beige-yellowish, shortly interrupted by a fine whitish streak.

Male genitalia (Fig.56): Tegumen long and dilated, half rounded. Gnathos moderate, terminally widened. Weakly sclerotized & short valve. Very long aedeagus of the length of the entire genitalia.

Female genitalia (Fig.54): Broad U-shaped ostium, moderate ductus bursae, oval bursae, no signa.

Larvae (Fig. 55): The larvae is pinkish and feeds inside the young seeds.

Holotype: male, 19.x.2016, Réunion, La Possession, geom. coordinates 20°55'37"S/55°19'56.5"E, alt.5m, e.l. *Barleria prionitis*, leg. M. Bippus, gen. prep. RE-2895d, in Naturalis Biodiversity Center, Leiden, Netherlands, RMNH No.1108628.

Paratypes: 7 specimens of both sex, 5 specimens (e.l. *Barleria prionitis*), Réunion, La Possession, alt.5m, 20°55'37"S/55°19'56.5"E, 15.-23.x.2016; 2 specimens at light, 27.ix.2016 and 05.i.2017, Réunion, La Possession, 400m in Naturalis Biodiversity Center.

Host plant: *Barleria prionitis* L. (Acanthaceae). The host-plant is introduced in Réunion.

Distribution: Réunion (TL).

Euteliidae:

***Atacira mima*** (Prout A. E., 1925)

4 specimens were taken in Réunion, La Possession, alt.400m on 21.x.2017 (male & female; gen. prep. RE-3402 & RE-3404), 27.xii.2017 and 03.ix.2018.

There is also a specimen collected at Aldabra Atoll, Ile Picard Settlement, 22.iii.1986 by D. Adamski in the collections of the Smithsonian Institution.

Distribution: Eritrea, Oman, Saudi Arabia, South Africa, Tanzania, Yemen. New for Réunion and Seychelles (Aldabra).

***Chlumetia borbonica*** Guillermet, 1992

Larvae of this species was found in Madagascar, Andasibe, 30.xi.2016 on *Eucalyptus robusta* Sm. (Myrtaceae).

Host plants: *Syzygium cumini* (L.) Skeels and *Eucalyptus robusta* Sm. (Myrtaceae).

Distribution: Réunion (TL) and Madagascar.

Noctuidae:

***Amyna acuta*** Berio, 1959

syn.nov.: *Amyna incertalis* (Guillermet, 1992) [orig. comb.: *Illatia incertalis*]

Berio (1959) described *Amyna acuta* illustrating its male genitalia. Orhant (2003) illustrated the male of *Amyna incertalis* (Guillermet, 1992), while Guillermet confused its male genitalia with *Amyna octo* (Guénéée, 1852). These are identical and the species are synonyms.

Distribution: Madagascar (TL) and Réunion.

***Athetis ignava*** (Guenée, 1852)

2 specimens were raised from larvae found on *Acacia mearnsii* De Wild. (Fabaceae) on 29.xii.2015 in Réunion, La Montagne, alt.750m.

Hostplant: *Acacia mearnsii* De Wild. (Fabaceae).

***Argyrogramma signata*** (Fabricius, 1792)

One specimen was raised on *Commelina benghalensis* L. (Commelinaceae) on 10.ix.2016. Does not seem to feed frequently on this plant.

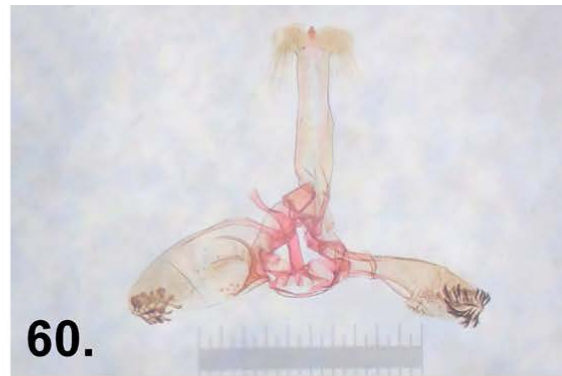
Host plant: *Commelina benghalensis* L. (Commelinaceae).

***Chrysodeixis chalcites*** (Esper, 1798)

One specimen was raised on *Tetradenia riparia* (Hochst.) Codd. (Lamiaceae) on 17.v.2020, 4 specimens on *Ipomoea nil* (L.) Roth (Convolvulaceae) on 06./10./14.ix.2020, 2 specimens on *Impatiens flaccida* Arn (Balsaminaceae) and 1 specimen on *Solanum americanum* Mill. (Solanaceae).



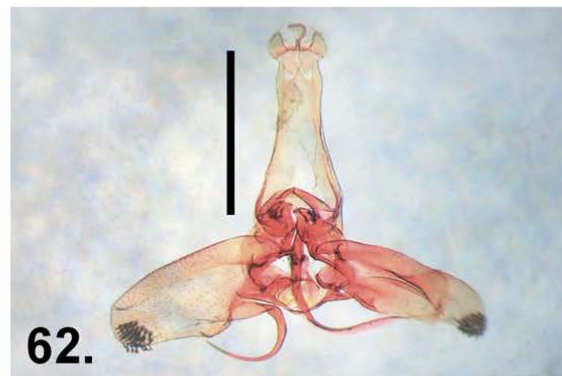
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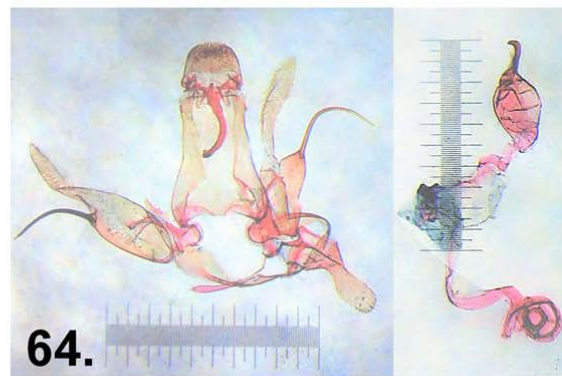
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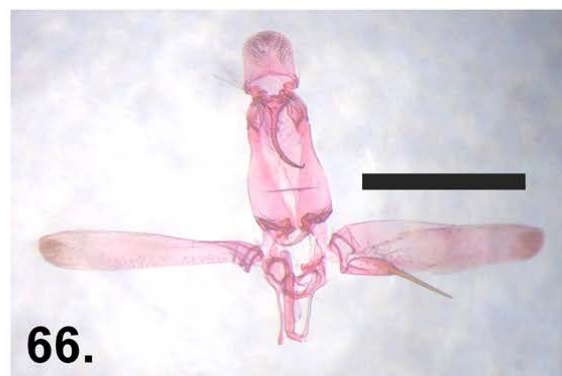
63.



64.



65.



66.

Plate 09: Gelechiidae

59. - *Anarsia citromitra*, adult

60. - *Anarsia citromitra*, male genitalia (aedeagus in-situ)

61. - *Anarsia dodonaea*, adult, HT, female.

62. - *Anarsia dodonaea*, male genitalia (aedeagus in-situ)

63. - *Anarsia tremata*, adult, male

64. - *Anarsia tremata*, male genitalia, right: aedeagus

65. - *Anarsia vinsonella*, adult

66. - *Anarsia vinsonella*, male genitalia (aedeagus in-situ)

**Host plants:** polyphagous, incl. *Tetradenia riparia* (Hochst.) Codd. (Lamiaceae), *Ipomoea nil* (L.) Roth (Convolvulaceae), *Impatiens flaccida* Arn (Balsaminaceae) and *Solanum americanum* Mill. (Solanaceae).

***Megalonycta kissa*** nov. spec. - Figs. 57-58. Fig.165.

A recent publication with an illustration of the genitalia of *Megalonycta mediiovittata* (Rothschild, 1924) by Ádám Kiss (Kiss, 2017) from Madagascar revealed that this species was misidentified in Réunion.

Although the imago is very similar to *Megalonycta mediiovittata* there is an important difference in genitalia, notably its aedeagus, and the new species needs description.

**Description:**

Wingspan: 35 mm, wing length: 15mm. (one specimen smaller: wingspan: 28mm, wing length: 12mm).

Antennae about half of forewing length. Greyish, spotted irregularly with blackish. One larger blackish field at the middle of forewing at costa, an elongated forewing in field at base up to 1/4, another irregularly shaped, larger spot at 3/4, at 2/3rd from costa. An irregular cross-line near apex.

Male genitalia: Long, solid uncus with curved apex, valvae not scarified, elongated oval, saccus rounded. Massive aedeagus, as long as valvae, with cornuti.

**Holotype:** male, 28.iv.2018, Réunion, La Possession, alt.400m, RE-3552, in Naturalis Biodiversity Center, Leiden, Netherlands, RMNH No. 1108639.

Paratypes: 9 males & 1 female (Fig. 165): 10.xi.2013, 03.iv.2014, 19.x.2016 (gen. prep. RE-1080), 03.xi.2016, 13.xii.2016, 20./21./22.i.2020, 26.ii.2020. Female: 06.i.2020 (gen. prep. RE-4039, Fig.165) in Naturalis Biodiversity Center. All specimens were taken in Réunion, La Possession, alt.400m.

**Etymology:** Dedicated to Mr. Ádám Kiss from Hungary.

**Distribution:** Réunion (TL).

**Gelechiidae:**

***Anarsia citromitra*** Meyrick, 1921 - Figs. 59-60; 69.

Wingspan: 9.5-10.5mm

Head, palpa and forewings greyish, irregularly scattered with dark cells. A blackish spot on the middle of costa.

*Anarsia citromitra* is probably the most common *Anarsia* species on the Mascarenes islands.

In Mauritius I collected 7 specimens in Flic-en-Flac, alt.10-15m between 10.-13.vi.2016 and 11 specimens in Blackriver, alt. 20m. 2 males and 2 females from Mauritius were dissected.

On the neighbouring island of Réunion I have collected even more than 50 specimens, with probably still some 20-30 supplementary specimens in my freezer.

12 specimens were raised from larvae on flowers of *Mimosa pudica* L. (e.l.16.xi.2015, 15.ii.2016, 17.xii.2016) that I collected in Réunion, La Possession, alt.550m) and 18 specimens from the inflorescence of *Pithecellobium dulce* (Roxb.) Benth. (e.l. 23.ix.2016, 30.ix.2016, 16.x.2016, 13.xi.2016) that grew in an altitude of 100m.

Specimens taken at light in Réunion, La Possession, alt. 400m were recorded on: 18.xii.2015, 18.viii.2016, 20.viii.2016, 31.viii.2016, 01.ix.2016, 25.ix.2016, 28.ix.2016, 25.x.2016, 09.xi.2016, 25.xi.2016, 06.vi.2017, 22.iv.2018 and 09.i.2019.

Specimens of both sex and from both host plants as well as additional specimens from light had been dissected.

Recorded on wings in the months of: i, ii, iv, viii, ix, x, xi, xii.

**Host plants:** *Mimosa pudica* L. and *Pithecellobium dulce* (Roxb.) Benth. (Fabaceae).

**Distribution:** Mozambique (TL), Kenya, Malawi, Namibia, South Africa, Zimbabwe (Agassiz & Bidzilya, 2016), recorded new for Mauritius and Réunion.

***Anarsia dodonaea*** nov.spec. - Figs. 61-62, 67-68, 74.

**Description:** Wingspan: 10-13.5mm. Head and abdomen light greyish-beige colouration, mottled with fuscous. Forewings: Light greyish-beige colouration, at 1/3 of costa a minute, short streak followed by two larger strikes at 1/2 of costa. Middle of the forewings marked by 3 interrupted, larger stripes, two interrupted stripes at dorsum, the 2nd only indicated. Hindwings light greyish-beige.

Male genitalia: Tegumen narrow, dilating, at uncus inwardly in-curved with a small hook-like gnathos. Asymmetric, broad valvae, with a small zone of raised scales at apex. Right valvae with a long curved appendage. Aedeagus: slim, long and curved.

Female genitalia: with a triangular signa.

**Holotype:** male, 05.xi.2015 (gen. prep. RE-2221), Réunion, La Possession, alt.565m, 20°55'25"S/55°22'45"E in Naturalis Biodiversity Center, Leiden, Netherlands, RMNH No.1108629.

Paratypes: female, 08.x.2015 (gen. prep. RE-2178), 27.x.2015 (female) and 28.xi.2015 (male, RE-2559 wing preparation, Wingspan: 10mm) in Naturalis Biodiversity Center, Netherlands.



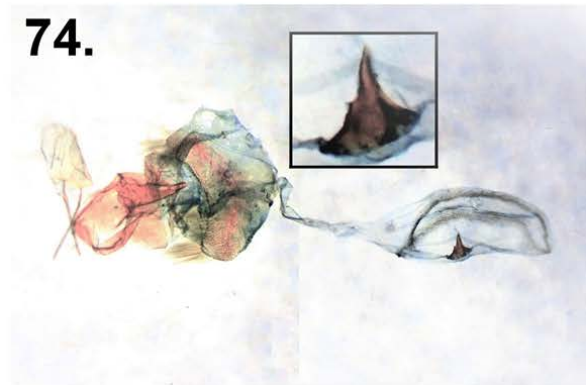
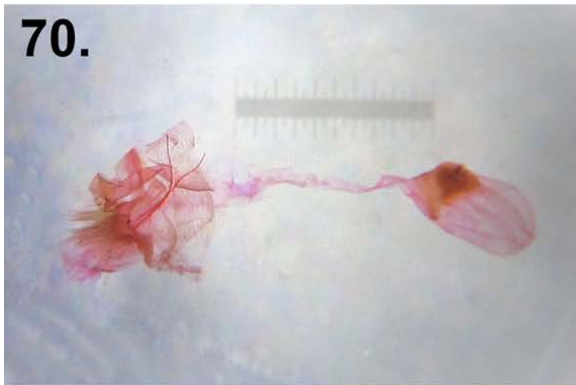
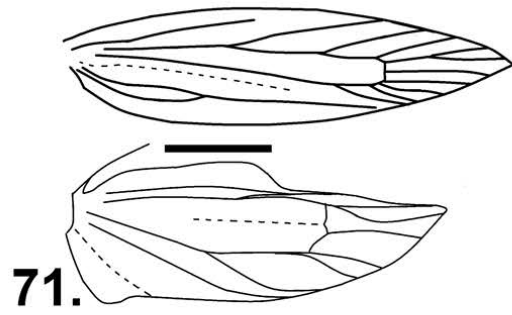
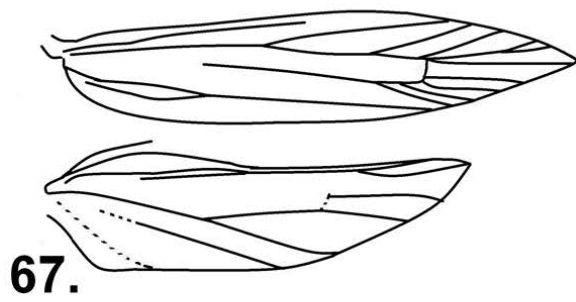


Plate 10: Gelechiidae

67. - *Anarsia dodonaea*, wing venations

68. - *Anarsia dodonaea*, larvae

69. - *Anarsia citromitra*, larvae

70. - *Anarsia tremata*, female genitalia

71. - *Anarsia tremata*, wing venations

72. - *Anarsia tremata*, larvae

73. - *Anarsia tremata*, detail bursae

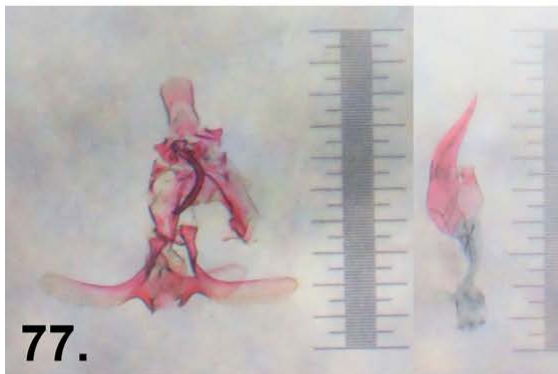
74. - *Anarsia dodonaea*, female genitalia



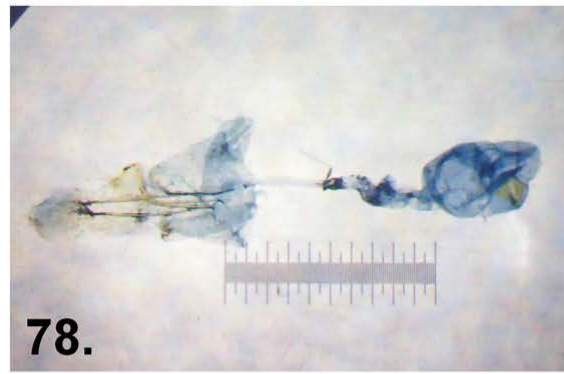
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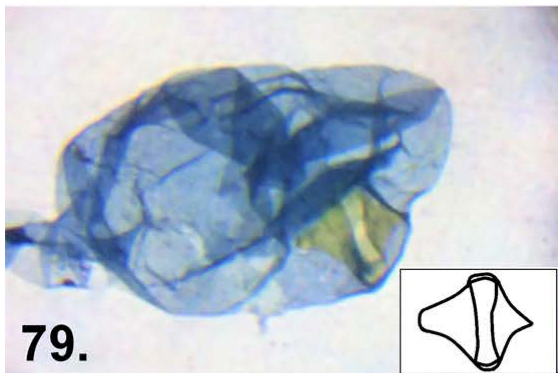
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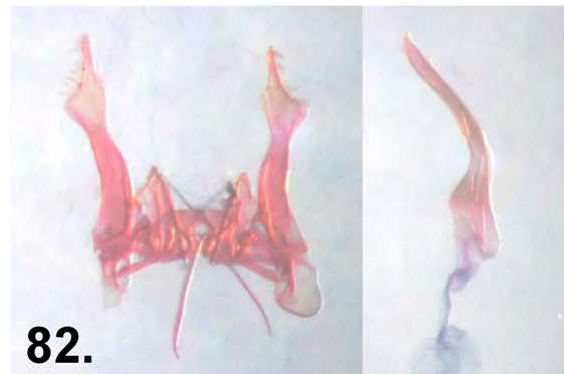
79.



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82.

Plate 11: Gelechiidae

75. - *Aristotelia bicovis*, adult

76. - *Aristotelia bicovis*, adult

77. - *Aristotelia bicovis*, male genitalia

78. - *Aristotelia bicovis*, female genitalia

79. - *Aristotelia bicovis*, detail bursae

80. - *Dactylethrella tetrametra*, adult

81. - *Dactylethrella tetrametra*, male genitalia

82. - *Dactylethrella tetrametra*, male genitalia

**Host plant:** *Dodonaea viscosa* Jacq. (Sapindaceae). All types were raised from larvae.

**Distribution:** Réunion (TL).

***Anarsia tremata*** nov.spec. - Figs. 63-64, 70-73.

**Description:** Wingspan: 11-13mm. Head, palpa, thorax and forewings light brownish-grey. Forewings lightly scattered with a few darker brownish cells.

Male genitalia (Fig.64): Tegumen broad and rounded, long gnathos. Asymmetric valvae, right valvae dilated with a digit form continuation and a long spine. Left valvae with 3 lobes: a digit form lobe, with an annexed broader lobe of half the length, continuing in a long spine, and a third lobe, dilated a base, narrowing at middle.

Aedeagus short, rounded with hook-shaped appendix.

Female genitalia (Fig.70, 73): with an undefined darker zone in the upper half of bursae; without signa.

Parasites: *Eriborus pallipes* (Brullé, 1846) (Ichneumonidae) (identification: Pascal Rousse, France).

**Holotype:** female, 12.vi.2015, Réunion, La Possession alt.400m, e.l. *Trema orientalis* #423a, in Naturalis Biodiversity Center, Leiden, Netherlands, RMNH No.1108630.

Paratypes: 16 specimens of both sex, 25.ii.2015, 21.v.2015, 30.v.2015, 31.v.2015, 08.vi.2015, 16.vi.2015, 20.vi.2015, 26.vi.2015, 12.vii.2015, 22.vii.2015, 16.vii.2015, 18.viii.2015, 27.viii.2015 and 23.ix.2015. All paratypes had been raised e.l. *Trema orientalis* in Réunion, La Possession, alt.400 and 550m.

**Host plant:** *Trema orientalis* (L.) Blume (Ulmaceae). This species of tree was introduced in Réunion.

**Distribution:** Réunion (TL).

***Anarsia vinsonella*** Viette, 1957 - Figs. 65-66.

Wingspan: 12.0 mm-13.0mm.

5 male were collected in Mauritius, Blackriver, 06.-10.vi.2016. Furthermore in Réunion, Sainte-Marie, 06.xii.2015 and La Possession, alt.400m, 11./13.ix.2018.

**Distribution:** Réunion (TL) and Mauritius.

***Aristotelia bicomis*** nov.spec. - Figs. 75-79.

**Description:** Wingspan: 10.5mm, wing length: 4.5mm. Palpa, fuscous, head greyish with fuscous. Antennae fuscous, 3/4 forewing lengths, simple, annealed. Forewings greyish scattered with irregular dark fuscous fields, bordered by dark-ochreous, at 1/5 of dorsum fuscous, 2 fields of a larger, triangular fuscous spot, first from 1/3 costa until 1/2 costa reaching dorsum, second at 3/4 to 4/5 almost reaching dorsum, followed by a neat fuscous streak in cell and a larger fuscous dot at apex.

Similar in forewing pattern to *Aristotelia comis* Meyrick, 1913 from South Africa but smaller in size (10.5mm against 12-15mm for *A. comis*). Both species distinguish notably by the shape of the signa in female.

Male genitalia: Tegumen broad at base, uncus rounded, longue gnathos. Symmetrical valvae and pointed aedeagus, broader at base.

Female genitalia: long ductus bursae, widening at bursae, oval bursae with a rectangular signa at bottom.

**Holotype:** male, 20.iv.2015 (gen.prep.RE-1748), in Naturalis Biodiversity Center, Leiden, Netherlands, RMNH No.1108631.

Paratypes: 17 specimens, both sex dated: 11.v.2015 (female, gen. prep. RE-1816), 10.xi.2015, 27.iv.2016 (male, gen. prep. RE-2619), 11.v.2016, 25.vii.2016 (male, gen. prep. RE-2718), 12.ii.2018, 05.i.2020, 18.i.2020, 10.ii.2020, 15.ii.2020, 25.ii.2020, 03.iii.2020, 26.iii.2020, 31.iii.2020, 07.iv.2020, 04.v.2020 and 22.v.2020 in Naturalis Biodiversity Center.

Months: i, ii, iii, iv, v, vii, xi.

**Distribution:** Réunion (TL).

***Dactylethrella tetrametra*** (Meyrick, 1913)- Figs. 80-81.

**Redescription:** Wingspan: 09mm. Head, body and forewings creamish-beige. On the forewings 5 minute spots on costa up to 3/4. Some 7 dark spots distributed irregularly in the fields.

Male genitalia: rounded uncus, valvae spade-like shaped and pointed, saccus by 2 projections. Aedeagus curved with pointed apex, dilated at base.

One male, 10.ii.2018, Réunion, Ste. Suzanne, alt.700m, 20°58'23"S/55°33'58"E, gen. prep. 8505 (Fig.81).

**Distribution:** South Africa (TL) & Réunion.

***Bilobata subsecivella*** (Zeller, 1852) - Figs. 82-84.

Wingspan: 10mm

Examined: 1 male specimen, Mauritius, Mahébourg, alt.20m, 24.iv.2017.

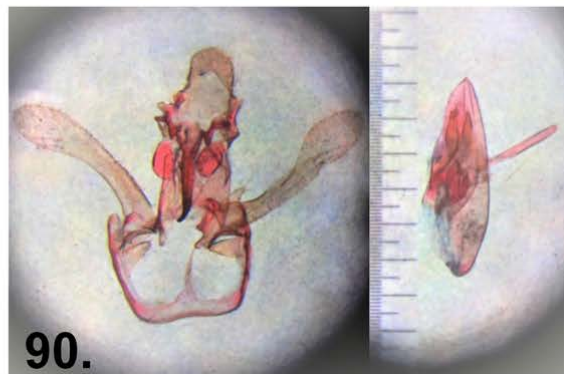
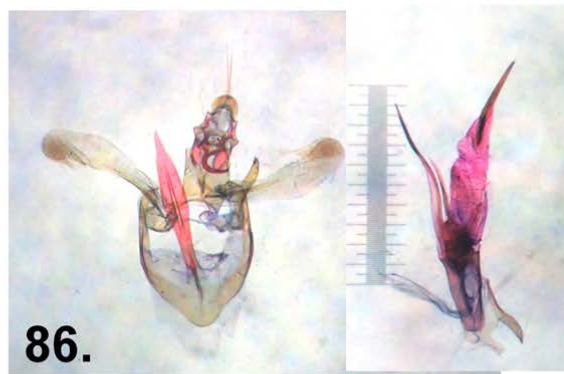


Plate 12: Gelechiidae

83. - *Bilobata subsecivella*, adult

84. - *Bilobata subsecivella*, male genitalia

85. - *Dichomeris acuminata*, adult

86. - *Dichomeris acuminata*, male genitalia

87. - *Dichomeris andasibea*, adult

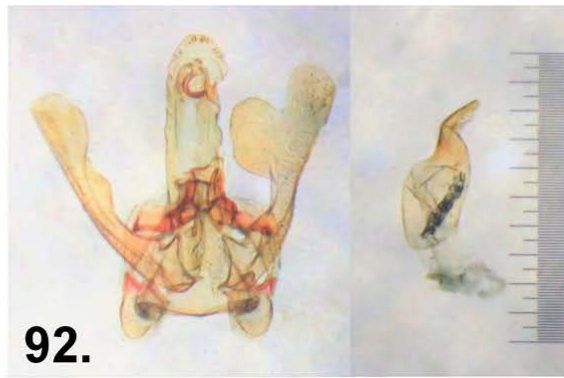
88. - *Dichomeris andasibea*, male genitalia

89. - *Dichomeris hortulana*, adult

90. - *Dichomeris hortulana*, male genitalia



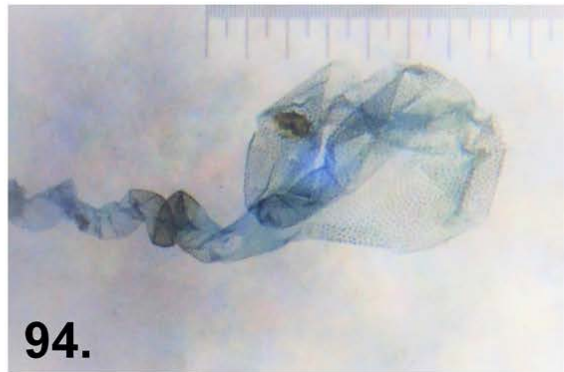
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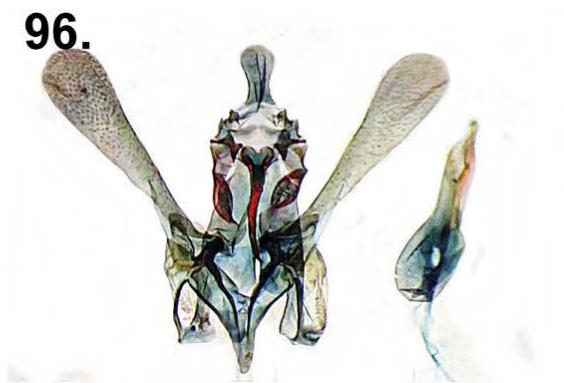
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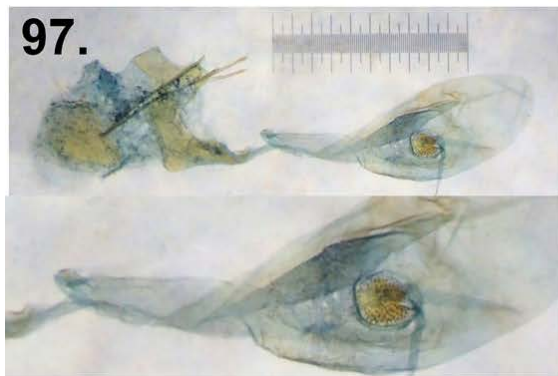
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98.

Plate 13: Gelechiidae

91. - *Faristenia tamarinda*, adult

92. - *Faristenia tamarinda*, male genitalia

93. - *Faristenia tamarinda*, female genitalia

94. - *Faristenia tamarinda*, female genitalia

95. - *Helcystogramma convolvuli*, adult

96. - *Helcystogramma convolvuli*, male genitalia

97. - *Helcystogramma convolvuli*, female genitalia

98. - *Helcystogramma convolvuli*, larvae

This species had to be identified by the male genitalia provided by Philpott (1928, a+b) from New Zealand as *Stomopteryx columbina* Philpott, 1928.

The NHM name index (Beccaloni *et al.*, 2003) lists *Stomopteryx columbina* Philpott, 1928 as a junior synonym of *Bilobata (Stomopteryx) subsecivella* (Zeller, 1852) but unfortunately I could not find any publication on this synonymy nor other publications illustrating its genitalia, except the original publication by Philpott.

The genus *Bilobata* Vari in Vari & Kroon, 1986 is a replacement name for *Biloba* Janse, 1954 (preocc. Stach, 1951). Type species: *Gelechia subsecivella* Zeller, 1852.

ICRISAT (International Crops Research Institute for the Semi-Arid Tropics) report 1986 (p.55) mentions a publication by Fearkin (1973): "*Aproaerema modicella* (Deventer, 1904) is also listed as a pest in Indonesia, under the earlier name of *Stomopteryx subsecivella*". I have not seen the publication of Fearkin and do not know if he illustrated that species or listed it as a junior synonym or not. There have been dozens of publications on *Aproaerema modicella* (Deventer, 1904) particularly by Crop Protection Agencies but nobody seems to have illustrated its genitalia. If the information provided by Fearkin (1973) is correct, not only these two species will need to be placed into synonymy but also the genus *Biloba* Janse, 1954 and its replacement name *Bilobata* Vari, 1986 will become a junior synonym of *Aproaerema* Durrant, 1897. Furthermore *Aproaerema modicella* (Deventer, 1904) would become a junior synonym of *Aproaerema subsecivella* (Zeller, 1852).

***Brachmia septella*** (Zeller, 1852) - not illustrated.

This species was recorded for the first time from Mayotte where it was found by J. Rochat (pers. comm. J. Rochat, 2017).

**Distribution:** Gambia, Malawi, Sierra Leone, South Africa and Tanzania. New for Mayotte.

***Dichomeris acuminata*** (Staudinger, 1876) - Fig. 85-86.

Wingspan: 12.5 mm.

One male on 11.iv.2020 in Réunion, La Possession, alt.400m.

***Dichomeris andasibea*** nov. spec. - Figs. 87-88.

**Description:** Wingspan: 12.5 mm. Antennae 2/3rd forewing length. Head and Forewings uni, light beige-ochreous. Hindwings light beige-ochreous.

Male genitalia: Clubbed valvae, gnathos widened at apex, saccus very wide. Aedeagus broad, long and pointed, with a long cornuti.

**Holotype:** male, 29.xi.2016, Madagascar, Andasibe, alt.945m, geometrical coordinates 18°56'51"S/48°25'4", gen. prep. MG-018, in Naturalis Biodiversity Center, Leiden, Netherlands, RMNH No.1108634.

**Distribution:** Madagascar (TL).

***Dichomeris hortulana*** (Meyrick, 1918) - Figs. 89-90.

Orig. comb.: *Trichotaphe hortulana*, TL: South Africa

Syn. nov.: *Cymotricha tetraschema* Meyrick, 1931, TL: India (Gates, 1969a; Vol. VI, plate 266, Figs.2-2b)

Syn. nov.: *Dichomeris ceponoma* Meyrick, 1918, TL: India (Gates, 1969b; Vol. VII, plate 08, Figs. 3-3b)

Wingspan: 11mm

One male specimen, wingspan 11mm, in Mauritius, Blackriver, alt.55m, 12.vi.2016 (gen.prep.Mru-078). This species was also found in Mayotte during 2017 by J. Rochat (comm. pers. 2017).

**Distribution:** India, South Africa, Seychelles, Mauritius and Mayotte (new records; pers. comm. J. Rochat, 2017).

**Remarks:** This species was illustrated by Gates (1969a,b). He had already noticed the synonymy between *Cymotricha tetraschema* and *Dichomeris ceponoma* (1969b) but it seems to have been ignored by the scientific community.

Janse (1954) illustrated *Dichomeris hortulana (Trichotaphe)* on Plate CLXXXI though his image of the adult moth does not show the particular markings of the wings as his image was printed in black and white. I am therefore very grateful to Mr. James Lawrence & Mr. Peter Webb (South Africa) for providing an image of the holotype of *Trichotaphe hortulana*. These species are shown to be synonyms.

***Faristenia tamarinda*** nov. spec. - Figs. 91-95; 114.

**Description:** Wingspan: 10.5mm. Antennae simple, fine, 2/3 forewing length, fuscous and ringed. Palpi fuscous mixed with beige-whitish. Head & abdomen greyish with some few darker, greyish specks. Forewings: shaded greyish, an irregular, transverse of irregularly shaped blackish spots at 2/5, a larger blackish spot at 2/3 in field, followed by a blackish costal mark at 4/5. Hindwings: greyish.

Male genitalia (Fig.96): Uncus rounded, small gnathos hook, asymmetrical valvae, right valvae waved, left valvae largely bulged in its middle. Short, pointed aedeagus, dilated at its base and a small, hooked tip.

Female genitalia (Figs.97-98): Long, twisted ductus bursae. Oval bursae with one, roundish signa.

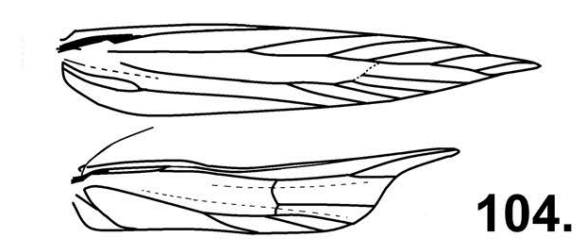
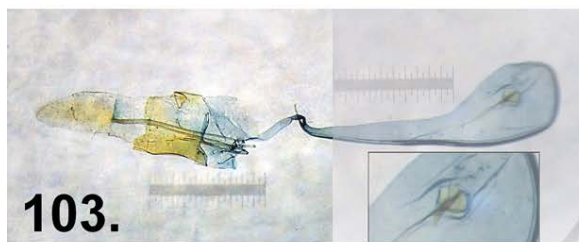
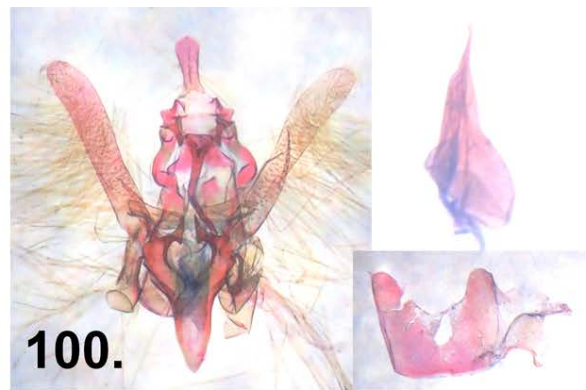


Plate 14: Gelechiidae

- 99. - *Helcystogramma malagasy*, HT, adult
- 100. - *Helcystogramma malagasy*, male genitalia
- 101. - *Sitotroga psacasta* (Meyrick, 1908)
- 102. - *Sitotroga psacasta*, male genitalia

- 103. - *Sitotroga psacasta*, female genitalia
- 104. - *Sitotroga psacasta*, wing venations
- 105. - *Stegasta variana*, adult
- 106. - *Stegasta variana*, male genitalia

**Holotype:** male, 17.i.2020, Réunion, La Possession, alt.400m in Naturalis Biodiversity Center, Leiden, Netherlands, RMNH No.1108638.

**Paratypes:** 17.ix.2013, 12.iii.2015 (e.l. *Trema orientalis*), 17.iii.2015 (e.l. *Tamarindus indica*), 22.iii.2015 (e.l. *Tamarindus indica*), 13.iv.2015 (e.l. *Tamarindus indica*), 13.ix.2017, 13.ii.2016, 19.ii.2018, 09.i.2020, 15.i.2020, 17.i.2020, 18.i.2020, 20.i.2020 (2x), 21.i.2020 (3x), 22.i.2020, 14.ii.2020 in Naturalis Biodiversity Center.

**Host plants:** *Tamarindus indica* L. (Fabaceae) and *Trema orientalis* (L.) Blume (Cannabaceae).

**Distribution:** Réunion (TL) and Seychelles (Praslin). Certainly a species with a larger distribution than presently known.

**Observation:** I illustrated this species already in Bippus (2016a) from Praslin, Seychelles as *Gelechiidae* sp.01 (Bippus, 2016a; Figs. 98-101). It is probably an introduced species but seems to be without description.

***Helcystogramma convolvuli*** (Walsingham, 1908) - Figs. 96-99.

Wingspan: 12mm.

Dates of collection (Réunion): 08.xii.2013, 16.v.2014, 11.iii.2020; 6 specimen e.l. *Ipomoea cairica* on 14.xii.2014, 21.xi.2015 and 23.iv.2016.

**Host plants:** In Réunion its larvae are very abundant on *Ipomoea cairica* (L.) Sweet, though single specimens feed also on *Ipomoea alba* L. (Convolvulaceae). In Mauritius I also found its larvae also on *Ipomoea alba* (09.vi.2016).

**Distribution:** Asia, Africa, Oceania, Middle East, Caribbean and Florida

***Helcystogramma malagasy*** nov.spec. Figs. 99-100.

**Description:** Wingspan 11mm. Antennae simple. Head, abdomen and wings entirely dirty brownish, with a fine indication of a dark-brownish spot in cell at 1/3 and 3/5. Hindwings: light brownish-grey.

Male genitalia: Uncus rounded, tegumen dilated in middle, gnathos long, simple. Saccus pointed. Valvae almost straight, rounded at apex. Short, pointed aedeagus, dilated at its base.

**Holotype:** male, 24.xi.-03.xii.2016, Madagascar, Andasibe, alt.945m, 18°56'51"S/48°25'4"E, gen. prep. MG-038, in Naturalis Biodiversity Center, Leiden, Netherlands, RMNH No.1108635.

**Distribution:** Madagascar.

***Idiophantis valeriae*** Guillermet, 2010 - Figs. 172-173.

5 specimens of both sex were raised from fruits of *Syzygium cymosum* (Lam.) DC. (Myrtaceae) by Séb. Albert in Réunion, St. Philippe, 15.-25.ii.2018 (J. Rochat, pers.comm.2018). One female also in Réunion, Ste. Marie, 05.xii.2015.

**Host plant:** *Syzygium cymosum* (Lam.) DC. (Myrtaceae).

**Distribution:** Réunion (TL).

***Sitotroga psacasta*** (Meyrick, 1908) - Figs. 101-104.

Wingspan: 13mm.

Specimens examined: 25.iv.2015 (Réunion, St. Denis, Colorado); 17.iv.2016, 26.iv.2016 (male, gen. prep. RE-2608), 09.xii.2017, 05./08./11.i.2018, 2 specimens on 22.iv.2018 and 04.iv.2020 (all in Réunion, La Possession, 400m).

Recorded on wings in the months of: i, iv, xii.

**Distribution:** Southern Europe, Namibia, South Africa, Zimbabwe, Solomon Islands (Bradley, 1961), new for Réunion.

***Stegasta variana*** Meyrick, 1904 - Figs. 105-106.

Wingspan: 10mm

One male on 04.01.2020, Réunion, La Possession, alt.400m.

**Distribution:** China, India, Congo, Eritrea, Kenya, Seychelles, South Africa, Zimbabwe, new for Réunion.

***Thiotricha tenuis*** (Walsingham, 1891) - Figs. 107-109.

Wingspan: 10mm

One male in Mauritius (Fig.107-108), Flic-en-Flac, 10.-12.vi.2016, 4 specimens in Réunion, La Possession, 400m, 04./05.i.2020 and 7 specimens on 21.i.2020.

This species is variable in wing markings. My specimens from Réunion are much less marked than the excellently marked specimen from Mauritius (Fig.107).

**Host plant:** *Morinda citrifolia* L. (Rubiaceae) in the Seychelles (Gerlach & Matyot, 2006).

**Distribution:** Gambia, Seychelles, South Africa, recorded new for Mauritius and Réunion.

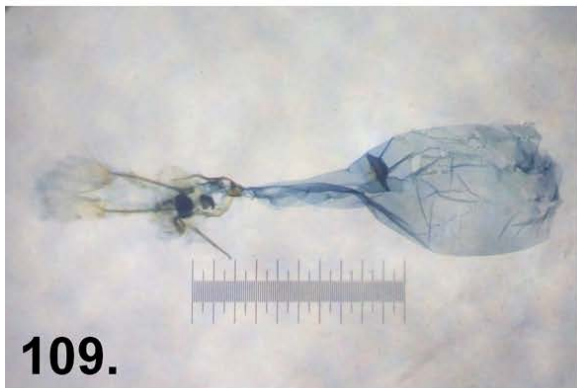




107.



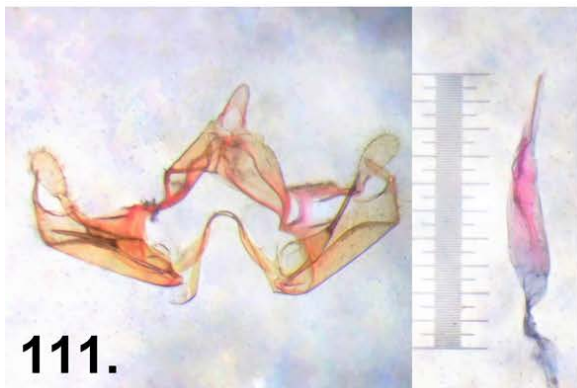
108.



109.



110.

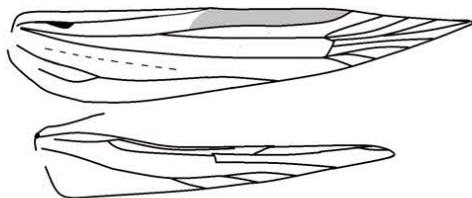


111.



112.

113.



114.

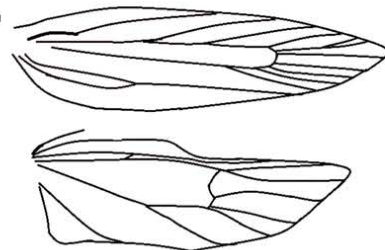


Plate 15:

107. - *Thiotricha tenuis*, adult

108. - *Thiotricha tenuis*, male genitalia

109. - *Thiotricha tenuis*, female genitalia

110. - *Lateantenna inana*, adult

111. - *Lateantenna inana*, male genitalia

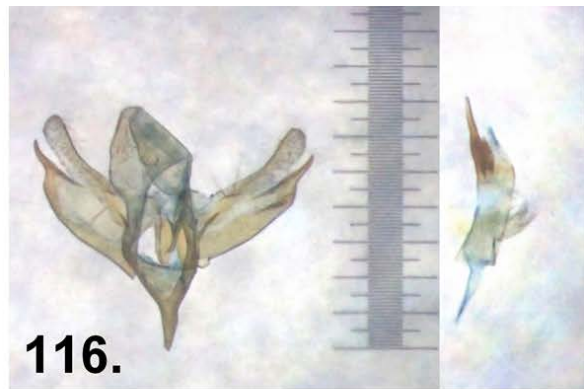
112. - *Lateantenna inana*, female genitalia

113. - *Lateantenna inana*, wing venations

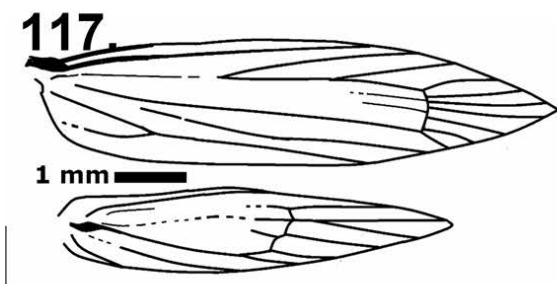
114. - *Faristenia tamarinda*, wing venations



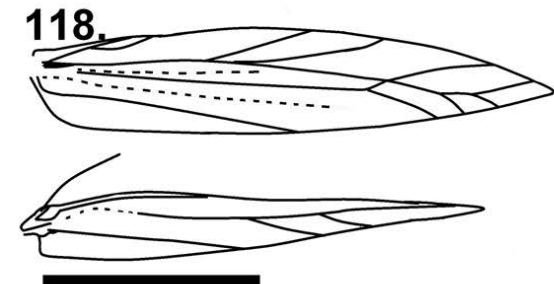
115.



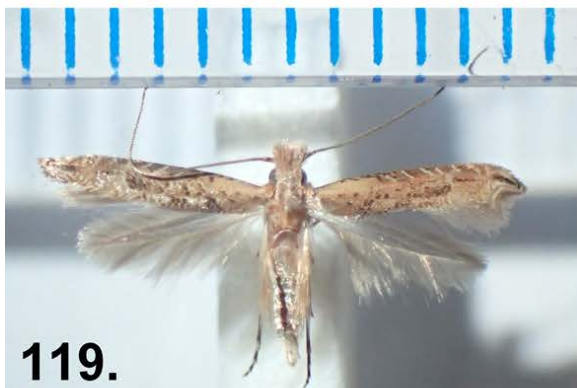
116.



117.



118.



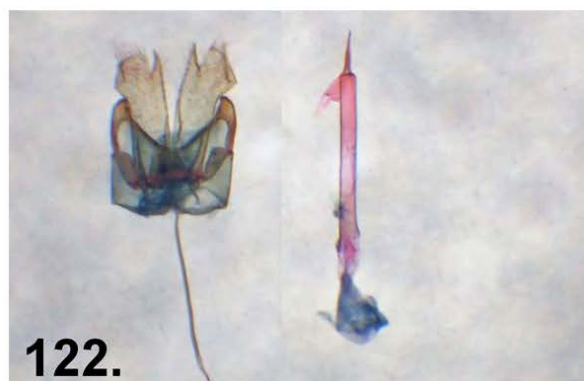
119.



120.



121.



122.

Plate 16: Tineidae

115. - *Agnathosia nana*, adult

116. - *Agnathosia nana*, male genitalia

117. - *Agnathosia nana*, wing venations

118. - *Eudarcia oceanica*, wing venations

119. - *Amphixystis guttata*, adult

120. - *Amphixystis guttata*, male genitalia

121. - *Amphixystis patelia*, adult

122. - *Amphixystis patelia*, male genitalia

Blastobasidae:

**Lateantenna inana** (Butler, 1881) - Figs. 110-113.

Wing length: 5.5mm, Wingspan: 12mm

9 specimens were collected at light in Réunion, La Possession, alt.400 m on the following dates: 17.xi.2015, 13.xii.2015 (female, gen. prep. RE-1571), 24.i.2017 (male, gen.prep.RE-3022), 17.xi.2017, 26.i.2018, 02.ii.2018 (wing prep. RE-3496), 15.v.2018 (male, gen. prep. RE-3546, Fig.111), 13.x.2019 and 19.iv.2020.

Recorded on wings in the month of: i, ii, iv, v, x, xi, xii

Wing venations (Fig.113): Zimmerman (1979) illustrated a supplementary vein on the hindwing from base to dorsum.

I believe that this is correct but my specimen's hindwing was damaged in this area.

**Host plants:** Garden beans (*Phaseolus* sp. (L.) Mill (Fabaceae)), coffee berries (*Coffea* sp. L. - Rubiaceae), dead sugar cane (*Saccharum officinarum* L. - Poaceae), *Dioscorea* (yam - Dioscoreaceae), *Allium sativum* L. (Garlic - Amaryllidaceae) and *Eugenia uniflora* L. (Myrtaceae) (Zimmerman, 1978; Clarke, 1986).

Its host-plant in Reunion remains unknown but there is a *Eugenia uniflora* bush growing at a distance of 15 meters from the site of collection.

**Distribution:** Oahu, Hawaii (Type locality), India, New Britain (Zimmerman, 1979) and French Polynesia (Marqueses) (Clarke, 1986). New to Réunion (new record and also the first record from an African country). Zimmerman (1979) suggested that this is a widely distributed species that had been dispersed by man. Apparently he is right.

Remarks: Many thanks to Dr. David Adamski (Smithsonian, USA) for his help on identification of this species.

Tineidae:

**Agnathosia nana** nov. spec. - Figs. 115-117.

**Description:** Wingspan: variable in size, between 8-15mm. Most specimens have a wingspan between 11-14 mm.

Antennae 2/3 of forewing lengths. Front tufted dirty whitish, thorax whitish with greyish cells.

Forewings light greyish-white, on costa near base a short blackish streak, a blackish dot just behind in cell, 2 interrupted transverse lines, first at 1/3, second at half only indicated, a 3rd transverse line at 5/6th of forewing only indicated.

Hindwings light greyish-white.

Male genitalia (Fig.116): Weakly sclerotized tegumen, gnathos absent, doubled structured valvae, one with digit-form, rounded apex, the other with pointed apex. Pointed saccus. Short, stout aedeagus, pointed apex with cornuti.

**Holotype:** male, 17.i.2015, gen. prep. RE-1458 (Fig. 116), Réunion, La Possession, alt. 400m in Naturalis Biodiversity Center, Netherlands, RMNH. No.1283507.

Paratypes: Both sex, dated: 01./11.xii.2014, 19./27./29.i.2015, 16./19./22..ii.2015, 24.ii.2015 (2x), 02.iii.2015, 14./21.iv.2015, 22.vi.2015, 14.iii.2020, 21.iii.2020, 31.iii.2020 in Naturalis Biodiversity Center.

**Distribution:** Réunion (TL).

**Amphixystis anchiala** (Meyrick, 1909) - Fig.196.

1 male in Madagascar, Andasibe, alt. 945m, 18°56'51"S/48°25'4", 24.xi.-03.xii.2016.

**Distribution:** Madagascar, Nigeria and South Africa

**Amphixystis fragosa** (Meyrick, 1910)

This is the most common *Amphixystis* species in Réunion island. It flies all year in low and medium altitudes.

I collected also 2 specimens in Mauritius (TL), Flic-en- Flac, 11.vi.2016.

Possibly *Amphixystis cymataula* (Meyrick, 1926) from Zimbabwe is a junior synonym but the quality of images that are provided for this species is too poor.

**Distribution:** Mauritius (TL) and Réunion.

**Amphixystis fricata** (Meyrick, 1911) - Figs. 170-171.

1 worn (?) male specimen in Madagascar, Andasibe, alt. 945m, 18°56'51"S/48°25'4", 24.xi.-03.xii.2016.

**Distribution:** Seychelles (Mahé, Silhouette & Aride) and new for Madagascar.

**Amphixystis guttata** nov.spec. - Figs. 119-120.

**Description:** Wingspan: 11mm. Head, front and thorax beige-brownish, antennae greyish in length of forewing.

Forewings brownish, first quarter of costa with brownish strigulae, from 1/4 to apex a broader dark-brownish streak interrupted by whitish streaks. First 1/5 of forewing uniformly brownish, with few darker cells. Followed by a series of dark-brownish spots and a dark-brownish streak in cell. At apex an blackish strigulae surrounded by light-brownish.

Male genitalia (Fig.120): Short, bilobed valvae, inner apex pointed. Saccus very long and pointed. Very long aedeagus, ending in a rolled tip.

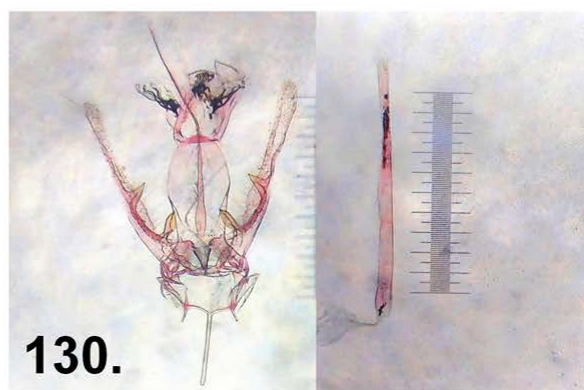
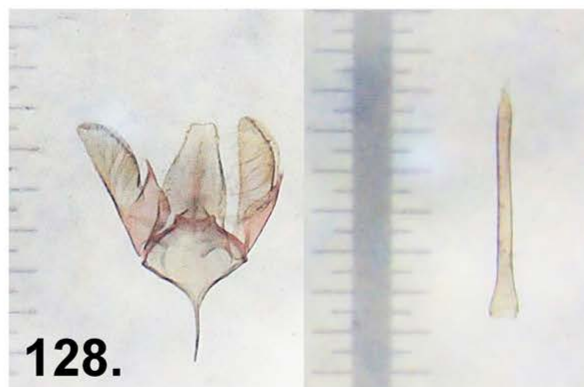
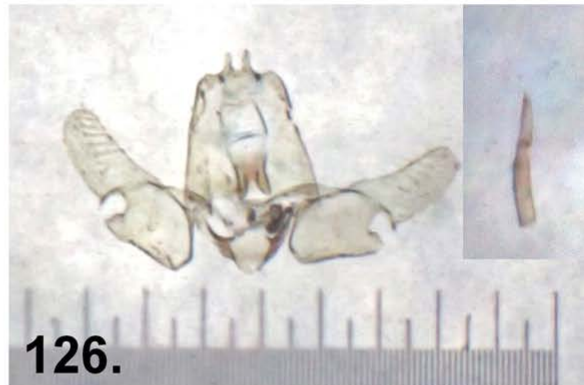
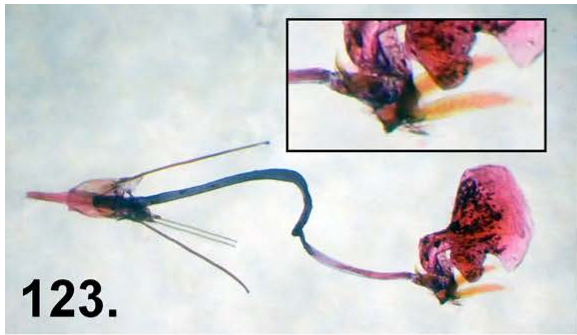


Plate 17:

- 123. - *Amphixystis patelia*, female genitalia
- 124. - *Eudarcia oceanica*, female genitalia
- 125. - *Eudarcia oceanica*, adult
- 126. - *Eudarcia oceanica*, male genitalia

- 127. - *Erechtiastis nigrocaputis*, HT, adult
- 128. - *Erechtiastis nigrocaputis*, HT, male genitalia
- 129. - *Tonza toga*, HT, adult
- 130. - *Tonza toga*, male genitalia

**Holotype:** male, 07.vii.2017, Réunion, La Possession, alt.400m, in Naturalis Biodiversity Center, Leiden, Netherlands, RMNH No.1108640.

**Paratypes:** male: 15.xii.2017, 21.i.2018, 27.ii.2018, 28.ii.2018 and 07.iv.2018 in Naturalis Biodiversity Center.

**Distribution:** Réunion (TL).

***Amphixystis patelia*** nov. spec. - Figs. 121-123.

**Description:** Wingspan: 8'5mm-9.5mm. Palpi greyish-beige with dark fuscous, frons blackish-fuscous, Antennae dark brownish-fuscous, in length of forewing.

Upperside: Forewings and shoulders are dark-greyish-fuscous, with a beige strigulae at 4/5 shortly behind costa, a second strigulae at dorsum at 2/3. Underside of forewing dark fuscous-grey, hindwings greyish. Underside of abdomen brownish-beige, sprinkled with fuscous.

Male genitalia (Fig.122): Short bilobed valvae, outer large and rounded apex, the inner small and pointed apex. Long aedeagus, pointed.

Female genitalia (Fig.123): long ductus bursae, a U-shaped thickening at base of bursae (detail in Fig.123)

**Holotype:** male, 10.ii.2018, Réunion, Ste. Suzanne, alt. 700m (gen. prep. RE-3504), in Naturalis Biodiversity Center, Leiden, Netherlands, RMNH No.1108641.

**Paratypes:** 2 female, 10.ii.2018, Ste. Suzanne, 700m (gen. prep. RE-3510) and 12.i.2018, Réunion, La Possession, 400m in Naturalis Biodiversity Center, 3 male, 12.i.2018, 08.iv.2018 and 21.iii.2020 (abdomen glued), Réunion, La Possession, 400m in Naturalis Biodiversity Center.

1 female, 06.iv.2018, La Possession, 400m (abdomen damaged) in collection Bippus.

**Etymology:** Dedicated to Mr. Haroun Patel, St. André, Réunion.

**Distribution:** Réunion (TL).

***Amphixystis serrata*** (Meyrick, 1914)

**Syn.nov.:** *Amphixystis maillardella* (Viette, 1957) [Orig. comb. *Oinophila maillardella*]

Wingspan: 9.5mm-10mm.

These species are corresponding in genitalia and in imago. Therefore they are synonyms.

**Distribution:** Kenya, Malawi, Mauritius (de Prins & de Prins, 2019) and Réunion.

***Erechtias nigrocaputis*** nov. spec. - Figs. 127-128.

**Description:** Wingspan: 7.5-9mm. Head and scalp black, Antennae beige with brownish, simple. Palpae, thorax and abdomen cream-beige with a few scattered darker cells. Forewings cream-beige, costa dotted with blackish a little above half, at half near costa a prominent, large blackish spot, a smaller blackish streak shortly before apex.

Underside brownish scattered with beige cells. Hindwings: light cream-beige.

Male genitalia: Simple tegumen, gnathos absent, valvae costa straight, dorsum rounded with a pointed process. Saccus long and spiniform. Aedeagus long and simple, straight.

**Holotype:** male (Figs. 127-128), 18.i.2017, La Possession, alt. 400m, gen. prep. RE-3007, geographical coordinates: 20°55'37"S/ 55°21'45"E, in Naturalis Biodiversity Center, Leiden, Netherlands, RMNH No.1108637.

**Paratypes:** all females: 22.xii.2015, Ste. Suzanne, alt. 700m; 10.ii.2017, Ste. Suzanne, alt.700m; 17.ii.2017, La Possession, alt.400m and 21.xii.2017, La Possession, alt. 400m, in Naturalis Biodiversity Center.

**Distribution:** Réunion (TL).

***Eudarcia oceanica*** nov. spec. - Fig. 118 (wing venations); Figs. 124-126.

**Description:** Wingspan: 5.8-6.3mm. Antennae simple, greyish, head greyish tufted, forewings whitish-greyish, irregularly sprinkled with blackish cells. Hindwings: light greyish.

There is an important variability in density of the black cells on the forewings. Most specimens are whitish-grey, scattered with blackish over 40-50% (Fig.125) without a standard pattern.

Male genitalia (Fig.126): Uncus bifid, valvae almost as long as uncus high, valvae with a round cavitation. Slim, simple aedeagus, without cornuti.

Female genitalia (Fig.124): Without a clear structure, appears to be a simple loop, without a clearly defined bursae.

**Holotype:** male, 17.ii.2016, (gen. prep. RE-2444, Réunion, La Possession, alt. 400m in Naturalis Biodiversity Center, Netherlands, RMNH.No.1283508.

**Paratypes:** 23 specimens of both sex dated 15.i.2016, 18.ii.2016, 17.iii.2016 (3x), 25.iv.2016, 11.x.2016 (2x), 18.xii.2017, 25.xii.2018, 14.i.2018, 14.ii.2018, 07.iv.2018, 21.i.2020, 25.i.2020, 27.i.2020 (2x), 04.ii.2020, 15.ii.2020 (2x), 21.ii.2020, 02.iii.2020 in Réunion, La Possession, alt.400m in Naturalis Biodiversity Center, Netherlands.

Two specimens were also collected in Mauritius, Blackriver, 06./10.vi.2016. One male dissected, gen. prep. Mru-135.

**Distribution:** Réunion (TL) and Mauritius.

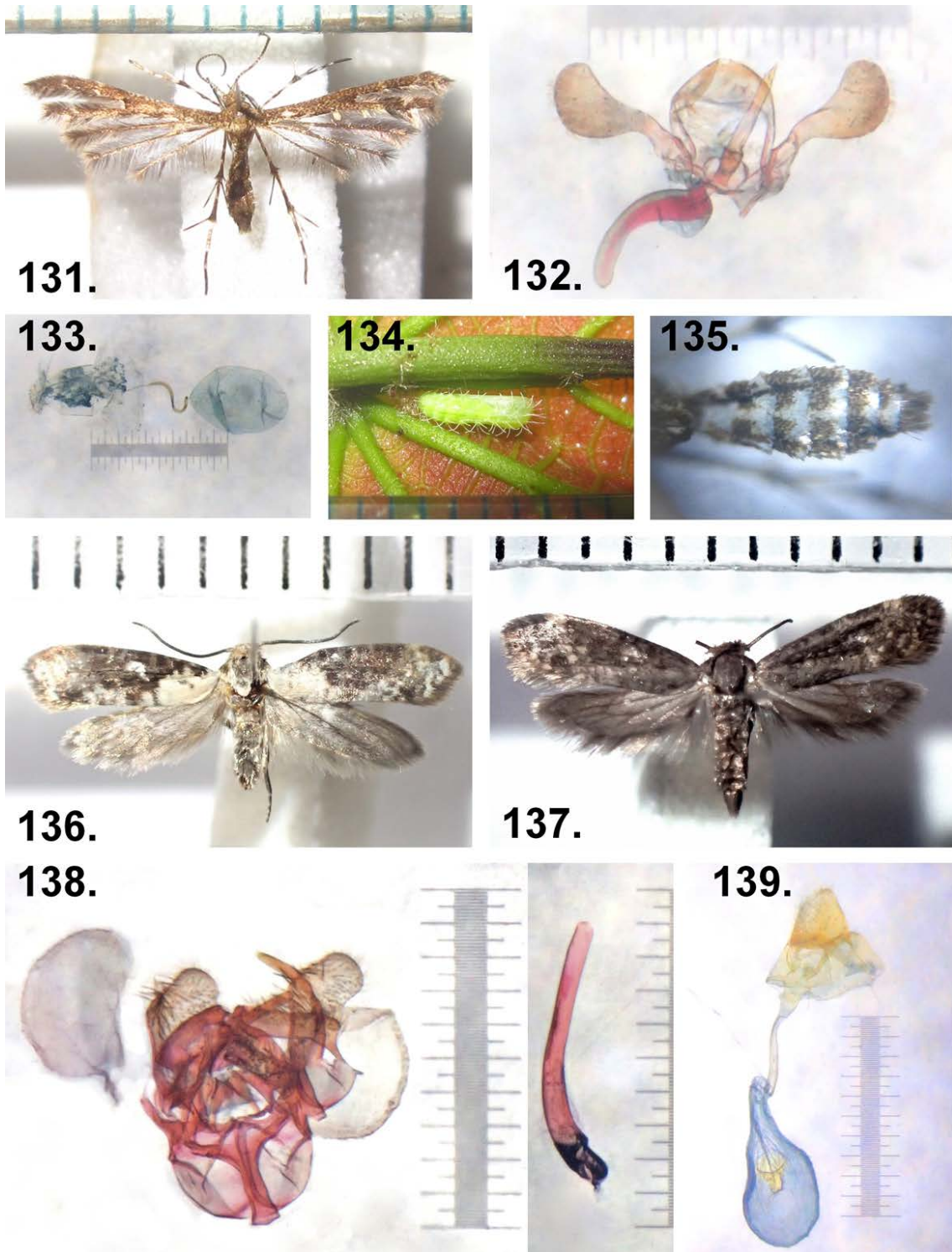


Plate 18:

- 131. - *Megalorrhipida monsa*, adult
- 132. - *Megalorrhipida monsa*, male genitalia
- 133. - *Megalorrhipida monsa*, female genitalia
- 134. - *Megalorrhipida monsa*, larvae
- 135. - *Megalorrhipida monsa*, underside abdomen

- 136. - *Prays armynoti*, male
- 137. - *Prays armynoti*, female
- 138. - *Prays armynoti*, male genitalia
- 139. - *Prays armynoti*, female genitalia

***Opogona transversata*** Bippus, 2016 - Fig. 174.

Supplementary specimens were collected (Réunion, La Possession, 400m):

1 female on 15.v.2018, 6 specimens on 14.ii.2020 (one male, gen. prep. RE-4111, Fig. 174), 1 female on 28.ii.2020, 1 male on 05.iii.2020 and 1 male on 15.iii.2020.

I still would like to illustrate its male genitalia (Fig. 174) and attribute a vernacular name: Yellow-vested moth (English), Gelbwestenmotte (German) and Teigne gilet jaune (French). Personally I find vernacular names rather ridiculous but governmental agencies love to use them.

Some additional specimens will be deposited in the Naturalis Biodiversity Center, Netherlands.

Distribution: Réunion (TL).

Tonzidae:

***Tonza toga*** nov. spec. - Figs. 129-130.

Description: Wingspan: 16mm. Head, thorax and abdomen whitish, Antennae above light, simple. Palpi and base of antennae tinged light straw yellowish. The eyes appear blackish at the dead specimen though they would have been greyish on the living lepidopteran.

Forelegs brownish with straw-yellow femorae, remaining legs straw-yellowish, tibia of the last pair ringed blackish.

Forewings are white, bordered broadly pale straw-yellowish along costa. A light-brown streak, irregularly dotted by dark-brown scales crossing the wing in its middle from base to tornus, continuing narrowly along outer margin to apex. A larger, elongated brown dot at 2/3. 3 smaller dark-brown at 4/5th. Cilia white, tinged brownish between apex and tornus. Hindwings whitish, tinged a little straw yellowish near outer margin at apex. Cilia white.

Male genitalia (Fig.130): Valvae slim, rounded at end, with 2 projections at inner side. One near base, the second at 1/3. Bifurcated uncus on a moderately scarified tegumen, broad saccus with a fine and long projection. Aedeagus long and slim, without cornuti, approx. 1.2mm of length.

Holotype: 1 male, 18.i.2017, Réunion, La Possession, Ravine à Malheur, alt. 400m, Geographical coordinates: 20°55'37"S/55°21'45"E (gen. prep. RE-3012) in Naturalis, Netherlands, RMNH No.1108633.

J. Rochat (pers. comm. 2017) had observed this species also at Plaine des Palmistes, Réunion on 01.xii.2011.

Distribution: Réunion (TL).

Etymology: By its colouration this species remembers to the ancient Roman "toga praetexta" but as I prefer short species names "toga" seems to be a good option.

Pterophoridae:

***Exelastis phlyctaenias*** (Meyrick, 1911) - Figs. 167, 177.

One female specimen was recorded in Mauritius, Blackriver, 10.vi.2016, gen. prep. Mru-067 (Fig.167; new record).

This is also a common species in Réunion.

***Hellinsia imerinae*** (Bigot, 1964) n. comb. [Pterophorus]

Junior synonym: *Oidaematophorus mineti* Gibeaux, 1994 syn. nov

Forewing length: 11mm, wingspan 23-24mm.

2 pupae and 2 caterpillars were collected on *Vernonia appendiculata* Less. (Asteraceae) in Parque Botanique et Zoologique de Tsimbazaza, Antananarivo, Madagascar (18°55'48"S/47°31'34"E) from which were raised 4 specimens (male & female) of *Hellinsia imerinae* in xii.2016. Its female genitalia corresponds to *Oidaematophorus mineti* Gibeaux, 1994 syn. nov. that was described from a female holotype.

I am aware that *Hellinsia imerinae* was already put into synonymy with *Picardia orchatias* (Meyrick, 1908). Though no genitalia images of *P.orchatias* are presently available therefore I stick to *Hellinsia imerinae* which had its genitalia illustrated (Gibeaux, 1994).

Host plant: *Vernonia appendiculata* Less. (Asteraceae).

Distribution: Madagascar (TL).

Remarks: I would like to thank Mr. Romer Rabarijaona (Fianarantsoa) for his help in identification of the host plant and also Mr. Christian Gibeaux (France) for providing one issue of his 1994 publication to me.

***Hellinsia madecasseus*** (Bigot, 1964)

Specimens were raised from larvae on 30.x./01.xi.2014, 10.i.2015, 14.ii.2015, 22.iii.2015, 24.iv.2015, 13.vi.2017 and 12.viii.2017 (all in Réunion, La Possession, alt.400m) on *Acanthospermum hispidum* D.C. and *Tithonia diversifolia* (Hemsl.) A. Gray. Seems to be more abundant on *Tithonia diversifolia* than on *Acanthospermum hispidum*.

Host plants: *Acanthospermum hispidum* D.C. and *Tithonia diversifolia* (Hemsl.) A. Gray (Asteraceae).

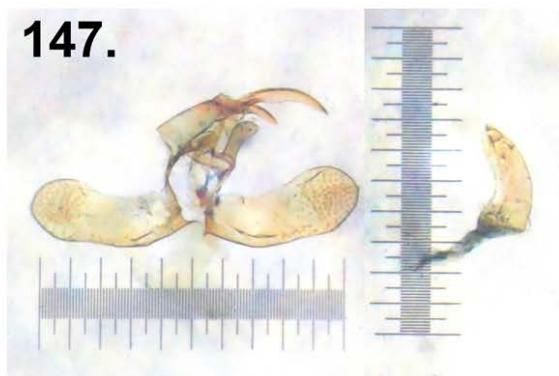
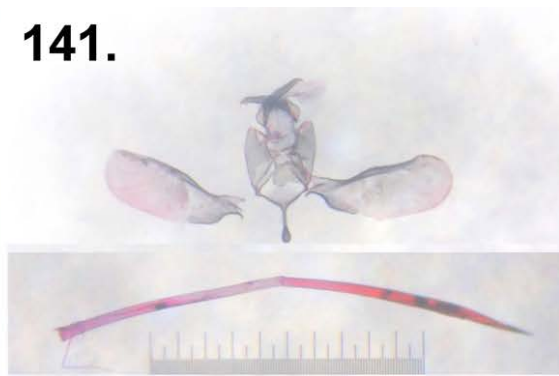


Plate 19: Yponomeutidae

- 140. - *Kessleria gibeauxia*, adult
- 141. - *Kessleria gibeauxia*, male genitalia
- 142. - *Kessleria gibeauxia*, in-situ
- 143. - *Xyrosaris canusa*, in-situ

- 144. - *Xyrosaris canusa*, adult
- 145. - *Xyrosaris canusa*, female genitalia
- 146. - *Gibeauxiella reliqua*, adult
- 147. - *Gibeauxiella reliqua*, male genitalia



***Megalorhipida monsa*** nov. spec. - Figs. 131-135.

Description:

Wingspan: 10.5-11mm. Antennae simple, annulated. Abdomen, body and wings uniformly brownish, at 4/5 and 5/6 of forewing an indication of a whitish-transversal line. Underside of wings uniformly brownish. Underside abdomen & legs: whitish, densely speckled with fuscous, abdomen whitish ringed fuscous (Fig. 135).

Larvae (Fig. 124): The larvae feed on sticky secretions on the underside of young leaves of *Dombeya ciliata* Cordem.. Mostly they were found near the centre of the leaves. Also adults can be found sitting during daytime on the undersides of young leaves of *Dombeya ciliata*.

Male genitalia: tegumen weak, clubbed valvae, straight aedeagus.

Female genitalia: a S-shaped, scarified ductus bursae, ovoid bursae without signa.

Holotype: male, 14.ii.2016, Réunion, La Montagne, alt. 900m, e.l. *Dombeya ciliata*, leg. Maik Bippus, numbered: RE-2420. In Naturalis Biodiversity Center, Netherlands, RMNH No.1108642.

Paratypes: 15 specimens of both sex, collected e.l. *Dombeya ciliata* Cordem. (Sterculiaceae) or as pupae/adults at daytime on *Dombeya ciliata*, in Naturalis, Netherlands (14 of these specimens from Réunion, La Montagne, alt.900m, one specimen from Réunion, St.Paul (Maido), alt. 1670m.).

Dates of paratypes: 09.iv.2015, 12.iv.2015, 28.iv.2015, 04.ii.2016, 06.ii.2016, 19.ii.2016 (2x), 27.ii.2016, 13.iii.2016 (2x), 16.iii.2016, 03.iv.2016 (3x) and 09.iv.2016.

Host-plant: *Dombeya ciliata* Cordem. (Sterculiaceae).

Etymology: derived from mons = mountain, or La Montagne (French).

Distribution: Réunion (TL).

***Platytilia fulva*** Bigot, 1964

2 male, wingspan 16mm, in Madagascar, Andasibe, 02./03.xii.2016.

***Sphenarches anisodactylus*** (Walker, 1864)

The larvae of this species was found very abundantly feeding on flowers of *Cynorkis purpurascens* Thouars. (Orchidaceae). More than 25 specimens were bred on 15.-25.ii.2016 (Réunion, La Montagne, alt. 900m) on this plant. At light also recorded in Mauritius, Bambous, 11.vi.2016.

***Stenoptilodes taprobanes*** (Felder & Rogenhofer, 1875) - Fig. 168.

One female was bred from flowers of *Antirrhinum majus* L. (Plantaginaceae) on 28.x.2016 (Réunion, La Possession, alt. 400m). This species of plant had been recorded already by Zimmerman (1978) from Hawaii.

Another female (Fig. 168, gen. prep. MG-009) was collected at light in Madagascar, Andasibe, 30.xi.2016.

Praydidae:

***Prays armynoti*** nov. spec. - Figs. 136-141.

Description: Wingspan: 11mm. This species is variable in adult morphology. The holotype can be described as being: antennae half of forewing length, simple and stout, greyish. Shoulders greyish with whitish, abdomen greyish. Forewings greyish, with a larger whitish patch at dorsum near shoulder. Some smaller whitish dots at costa above 1/2 and some whitish dots at submarginal termen. Hindwings: greyish.

One specimen from the same larval lot shows to be entirely dark greyish, with minute lighter greyish spot at 4/5 of costa and 2/3 dorsum, and also 2 female specimens that I raised earlier in 2016 on the same hostplant are entirely greyish. I believe therefore that this species is variable in adult morphology.

Male genitalia: valvae long and spiniform, auxiliary valvae moderately rectangular, uncus angulated, broad saccus, aedeagus moderately curved, one minute cornuti.

Female genitalia: one large signa in bursae.

Holotype: 03.xi.2017, male, Réunion, Grand Galet/Col Blanc, 21°18'39"S/55°38'30"S, alt. 700m, e.l. *Toddalia asiatica* (L.) Lam. (Rutaceae), leg. J.Armynot (gen.prep.RE-3460b), in Naturalis Biodiversity Center, RMNH No.1283505.

Paratypes: 3 females, same collection data & collector and 1 female, La Montagne, alt. 900m, RE-2536b, e.l. *Toddalia asiatica*, 27.ii.2016, leg. M. Bippus, in Naturalis Biodiversity Center.

1 female, in private collection Bippus, same data as holotype, gen. prep. RE-3460e.

Host plant: *Toddalia asiatica* (L.) Lam. (Rutaceae).

Distribution: Réunion (TL).

Etymology: Dedicated to the finder of this species, Mr. Jean Armynot, France.

Yponomeutidae:

***Kessleria gibeauxia*** nov.spec. - Figs. 140-142.

**Description:** Wingspan: 10mm. Head & palpaes beige mixed with ochreous-brownish, antennae almost as long as forewings (85-90%). Forewings ochreous-brownish mixed with greyish, a small blackish spot on dorsum at half, a second small blackish spot on 4/5th shortly before dorsum.

**Male genitalia:** Broad valvae, digit-form saccus with rounded apex. Very long (approx 1.4mm) and slim aedeagus, straight, with cornuti at apex. Two coremata on the eighth abdominal segment.

**Holotype:** male, 25.iv.2015, St. Denis (Colorado), alt.700m, 20°54'35"S/55°25'22" E, gen. prep. RE-1773, in Naturalis Biodiversity Center, Netherlands, RMNH No.1283504.

**Paratypes:** 3 specimens (male) from Takamaka, 09.i.2016 and 1 male (gen. prep. RE-4382), Sainte-Suzanne, 700m on 10.ii.2018 in Naturalis Biodiversity Center.

1 additional specimen from the same place/date was moisture damaged and is retained in my personal collection.

On 25.i.2014 and 04.i.2020 I also observed this species in La Possession, alt. 400m but both specimens escaped.

**Distribution:** Réunion (TL).

**Etymology:** Named in honour of Mr. Christian Gibeaux. Also for thanking him for having sent me a copy of his publication from 1994 on Pterophoridae.

***Swammerdamia villiersi*** Gibeaux, 1984 - Figs.148-149.

1 female in Madagascar, Andasibe, 30.xi.2016. Seems to be a common species in Andasibe. I collected 3 specimens during my stay at Andasibe.

**Distribution:** Madagascar (TL).

***Xyrosaris canusa*** nov.spec. - Figs. 143-145.

**Description:** Wingspan: 15mm. Head and palpaes greyish, mixed with a few darker greyish-blackish scales.

Forewings greyish, a few darker greyish cells along costa, two small blackish cell-spots, one at 2/5th and the second at 2/3rd in cell. On the paratype a small, dark greyish-blackish zone at dorsum at half.

**Female genitalia** (Fig.145): ductus bursae 3x as long as bursae diameter, roundish bursae with one signa.

**Holotype:** female, 02.ii.2020, Réunion, La Possession, alt. 400m, in Naturalis Biodiversity Center, Netherlands, RMNH1283503.

**Paratype:** male, 15.i.2017 (abdomen lost), same locality, in Naturalis Biodiversity Center.

**Distribution:** Réunion (TL).

Cosmopterigidae:

***Anatrachyntis simplex*** (Walsingham, 1891) - Figs. 150-153.

Wingspan: 9.5-10.0mm.

In Réunion the larvae of this species can be found in huge quantities on *Typha domingensis* Pers. (Typhaceae) (in cattails). There are up to 20-40 larvae in a cattail.

**Host plant:** *Typha domingensis* Pers. (Typhaceae) (Fig. 152).

***Anatrachyntis rileyi*** (Walshingham, 1882) - Figs. 154-155.

Wingspan: 9-11mm.

4 specimens were found in Mauritius, Bambous, 12.vi.2016 (gen. prep. Mru-080) and Mahébourg, 24.iv.2017 (male & female, gen. prep. Mru-130 and Mru-131).

**Distribution:** Antilles, Hawaii, South America, Australia, new for Mauritius and also first record from an Africa country.

***Calicotis attiei*** (Guillermet, 2011) new.comb. [orig. comb. *Stathmopoda attiei* Guillermet, 2011]

Syn.nov.: *Calicotis cuspidata* Guan & Li, 2015 (TL: China).

Wingspan: 9 mm.

From genitalia and habitus this species belongs to the genus *Calicotis* Meyrick, 1889 new. comb..

This species had been re-described as *Calicotis cuspidata* Guan & Li, 2015 from China though I expect it to have a much wider distribution.

For its genitalia I refer to Guan & Li (2015) or its original publication. Having dissected more than 10 males it shows to absorb very badly colourants. I cannot figure it as well as Guan & Li (2015) did.

*Calicotis attiei* was bred from 3 different species of introduced ferns, including *Phymatosorus scolopendria* (Burm.f.) Pic. (Polypodiaceae). It feeds on the spores and can be found in huge quantities.

Some 12-15 specimen bred from larvae had been added to the collections of Naturalis Biodiversity Center in 2016.

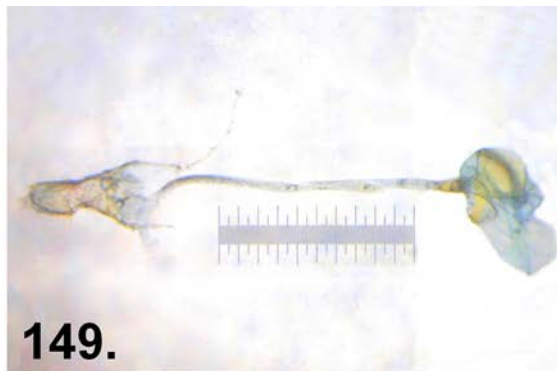


Plate 20:

- 148. - *Swammerdamia villiersi*, adult
- 149. - *Swammerdamia villiersi*, female genitalia
- 150. - *Anatrachyntis simplex*, adult
- 151. - *Anatrachyntis simplex*, male genitalia

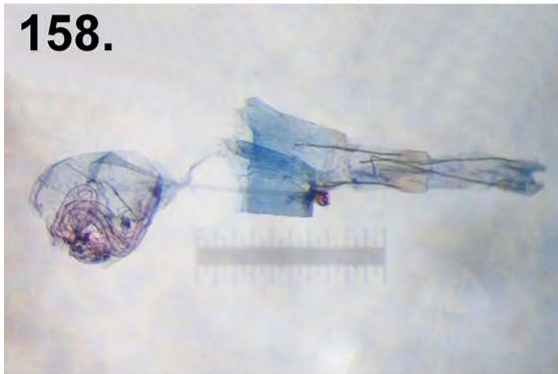
- 152. - *Typha domingensis* (host-plant)
- 153. - *Anatrachyntis simplex*, larvae
- 154. - *Anatrachyntis rileyi*, adult
- 155. - *Anatrachyntis rileyi*, male genitalia



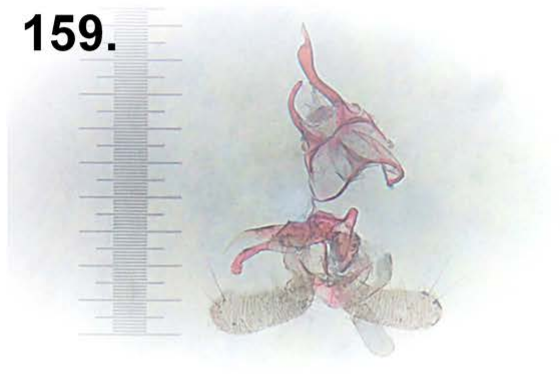
156.



157.



158.



159.



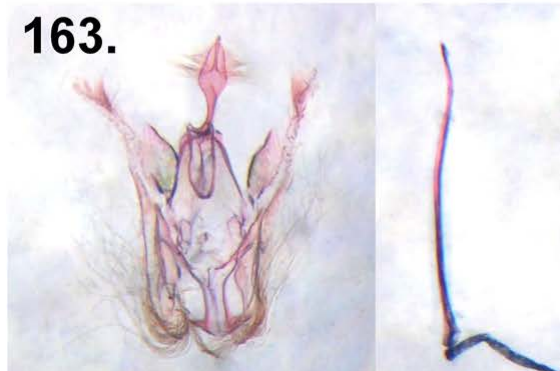
160.



161.



162.



163.

Plate 21:

- 156. - *Pyroderces spix*, adult
- 157. - *Pyroderces spix*, adult
- 158. - *Pyroderces spix*, female genitalia
- 159. - *Pyroderces spix*, male genitalia

- 160. - *Batrachedra rainha*, adult
- 161. - *Batrachedra rainha*, adult
- 162. - *Batrachedra rainha*, larvae
- 163. - *Batrachedra rainha*, male genitalia

**Host plants:** polyphagous on ferns' spores, including *Phymatosorus scolopendria* (Burm.f.) Pic. (Polypodiaceae).

**Distribution:** Réunion (TL) and China.

**Remarks:** I have to thank Mr. Sjaak Kusters for his hint to look for larvae on fern spores; I found it the same day in my garden.

***Gibeauxiella reliqua*** (Gibeaux, 1986) - Figs.146-147.

**Wingspan:** 9.5 mm. 5 specimens at Madagascar, Andasibe, 24.xi.-03.xii.2016, gen. prep. MG-014 (male).

This find disturbs me a little: this species was described from France but it seems to be a rather common species in Madagascar, in a completely different habitat. I wonder if the type specimen was correctly labelled? Mr. Gibeaux was working also on Malagasy Lepidoptera at the time of description.

**Distribution:** France (?) and Madagascar.

**Remarks:** I wish to thank Mr. Sergej Sinev & Mr. Sjaak Koster for help & documentation.

***Pyroderces spix*** nov.spec. - Figs.156-159.

**Description:** Wingspan: 10mm. Antennae about 3/4, head & palpaie whitish, eyes red. Forewings brownish, with a white stripe of 1/3 of forewing width along dorsum from base to apex.

2 blackish spots at 1/4 and 1/2, about 1/3 from dorsum. 2 smaller blackish spots shortly before half and at 3/4 at 1/3 from costa. Cilia greyish, hindwings greyish.

**Male genitalia** (Fig. 159): Doubled, asymmetric uncus, saccus absent, rectangular valvae, with two auxiliary valvae.

**Female genitalia** (Fig. 158): ductus bursae fine, in length of diameter of bursae. Bursae round, without visible signa.

**Holotype:** male, 29.vii.2017, Réunion, La Possession, alt.400m in Naturalis Biodiversity Center, Netherlands, RMNH 1108632.

**Paratypes:** 09.vi.2018 (female), Réunion, La Possession, alt. 400m at Naturalis Biodiversity Center, 08.x.2016, 20.i.2018, 21.i.2018 in my collection.

**Distribution:** Réunion (TL).

Batrachedridae:

***Batrachedra cf.arenosella*** (Walker, 1864) - Figs. 175-176.

**Wingspan:** 10mm. 4 specimens were collected in Mauritius, Blackriver on 11.vi.2016 and Mahébourg (Garden of National History Museum), alt. 20m, on 13.vi.2016. 1 male and female dissected (gen. prep. Mru-027 & Mru-028). Also a common species in Réunion. The Mauritian specimen had a longer aedeagus than illustrated by Guillermet (2011) from Réunion.

***Batrachedra rainha*** nov.spec. - Figs. 160-163.

**Description:** Wingspan 11mm. Palpaie black annealed, head ochreous brownish, tuff dirty beige, forewings ochreous-brownish scattered with blackish scales, more densely along costa and dorsum. One blackish mark in cell at 1/3.

**Male genitalia** (Fig. 163): Large, spade like uncus, narrow at base. Elongated, bifurcated valvae. One valvae long & narrow, with setae on apex, the other one short, pointed and dilated in the middle. Long and narrow aedeagus.

**Holotype:** male, 03.vii.2016, gen. prep. RE-2686, Réunion, La Possession, alt.200m, e.l. *Roystonea* (?) *regia*, in Naturalis Biodiversity Center, Netherlands, RMNH 1283506.

**Paratype:** female, 04.vii.2016, gen. prep. RE-2735, same collection data, in collection M. Bippus.

**Hostplant:** *Roystonea* (?) *regia* (Kunth) O.F. Cook (Arecaceae).

Some doubts on the host plant persist: there are two introduced *Roystonea* species in Réunion. I believe its host plant is *Roystonea regia* but do not know the exact differences between the species.

**Distribution:** Réunion (TL) - introduced.

Images of the species that are not illustrated in this publication will be put into the disposition of De Prins & De Prins (2019) [www.afromoths.net](http://www.afromoths.net).

**Acknowledgements:** I would like to thank: David Adamski (USA), Jean Armynot & Jaques Rochat (Réunion), James Lawrence & Peter Webb (South Africa), Sergej Sinev (Russia), Kyu-Tek Park (Korea), Pascal Rousse & Christian Gibeaux (France), N.Romer Rabarijaona (Madagascar), Leif Aarvik (Norway), Josef Razowski (Poland), Klaus Sattler & David Lees (UK), Oleksey Bidzilya (Ukraine), Ole Karlsholt (Denmark), Reinhard Gaedicke (Germany), Sjaak Koster and Cees Gielis (Netherlands). They sent me documentations, advice or helped me in other ways.

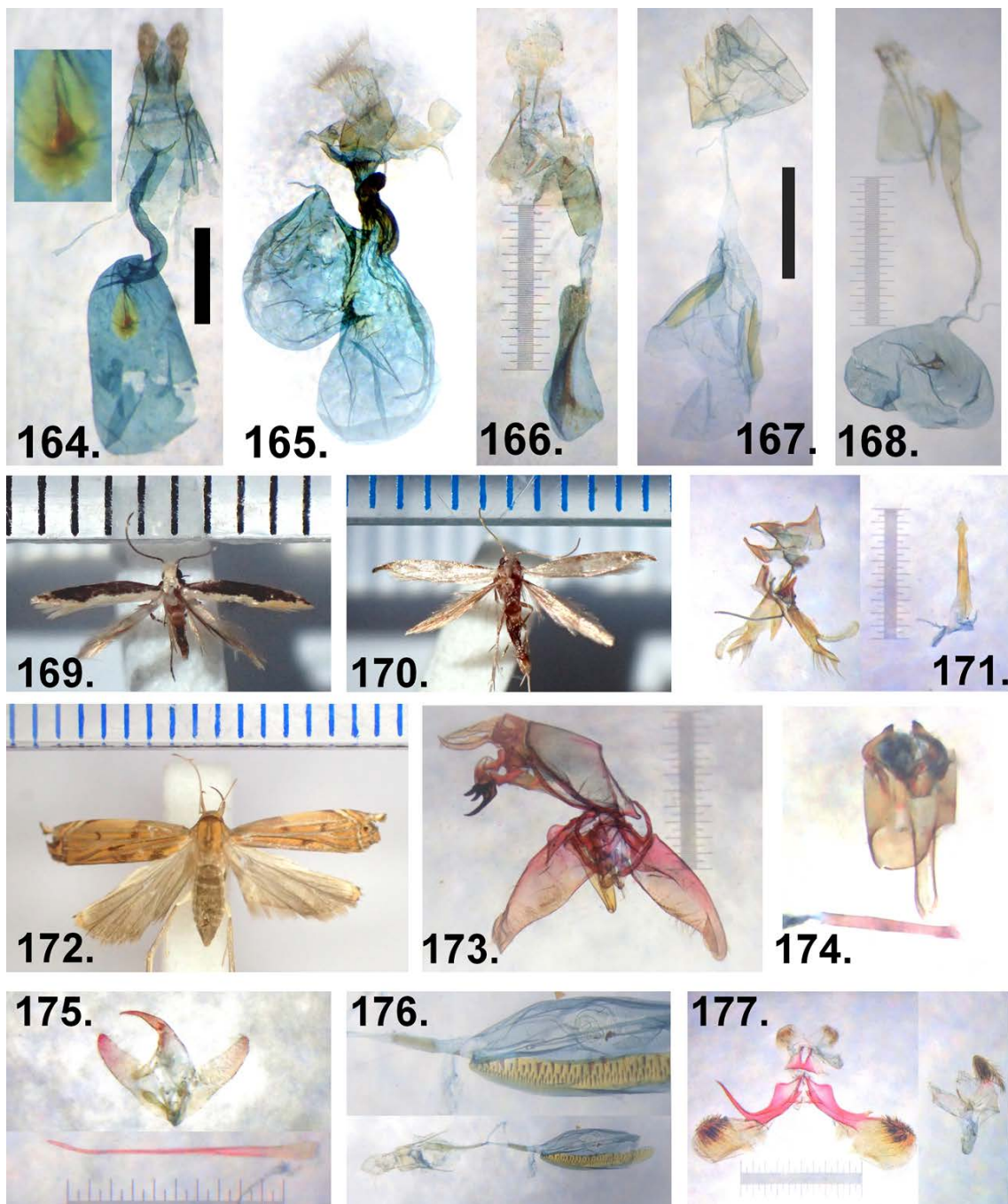


Plate 22:

- 164. - *Tetramoera schistaceana*, female genitalia
- 165. - *Megalonocyta kissa*, female genitalia
- 166. - *Tebenna cornua*, female genitalia
- 167. - *Exelastis phlyctaenias*, female genitalia
- 168. - *Stenoptilodes taprobanes*, female genitalia
- 169. - *Amphixystis anchiala*, adult
- 170. - *Amphixystis fricata*, adult

- 171. - *Amphixystis fricata*, male genitalia
- 172. - *Idiophantis valeriae*, adult
- 173. - *Idiophantis valeriae*, male genitalia (aed.in-situ)
- 174. - *Opogona transversata*, male genitalia
- 175. - *Batrachedra arenosella*, male genitalia (Mauritius)
- 176. - *Batrachedra arenosella*, female (Mauritius)
- 177. - *Exelastis phlyctaenias*, male genitalia

**Disclaimer:** This publication did not receive any subvention or contribution from European Regional Development Fund (FEDER - Recherche, Développement Technologique, Innovation, 1.02 Soutien à l'observation et à la connaissance de la biodiversité et des milieux), nor from any other governmental agency.

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