

# Moth diversity (Lepidoptera) of Shendurney and Ponnudi in Agastyamalai Biosphere Reserve, Kerala, India: an update

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**Abstract:** In 2018, we published a checklist of 282 moths from Shendurney Wildlife Sanctuary and Ponnudi, located in Agastyamalai Biosphere Reserve, Kerala, India (Sondhi *et al.*, 2018). In the 2018 paper, 244 moth species were identified to species level and another 38 to generic level, while 130-140 specimens remained unidentified. In this paper, we identify and add another 79 species to the checklist of Shendurney and Ponnudi. Of these new additions, *Xanthanomus vomeroi* Holloway & Zilli, 2005, is a new genus and species, hitherto unreported from mainland India. *Adrapsa geometroides* (Walker, [1858]) and *Pterocyclophora pictimargo* Hampson, 1893 are recorded from India for the first time. We confirm the validity of a record of *Biston strigaria* (Moore, 1879), by comparing male genitalia with *Biston suppressaria* (Guenée, [1858]). Updates in taxonomy and corrections in identifications of the 2018 paper are also listed. An updated checklist of moths of Shendurney and Ponnudi, listing 353 species, along with museum specimen information is provided as supplementary data.

**Keywords:** biodiversity assessment, biodiversity hotspots, Asian moths, range extensions, Western Ghats.

## INTRODUCTION

The moth diversity of the Western Ghats, one of the 36 global biodiversity hotspots of the world (Myers *et al.*, 2000), is poorly studied. Sondhi *et al.* (2018) published a checklist of 282 moths from Shendurney Wildlife Sanctuary and Ponnudi, located in Agastyamalai Biosphere Reserve, Kerala. With the availability of additional literature, Indian checklists and access to museum material, we have been able to identify numerous additional species within the collections from past surveys of the study area. Additional literature from South India in the last few years includes a partial checklist of moths of Kerala (Valappil 2020) published in a natural history newsletter, Trogon. Das *et al.* (2020) published a checklist of moths of the Western Ghat and Rajan & Shamsudeen (2018) listed 38 geometrids moths of the Malabar region, Kannur in Kerala. Iyer & Kitching (2019) listed a checklist of hawkmoths from Kanyakumari district in Tamil Nadu. Chandra *et al.* (2018), Kirti *et al.* (2019) and Joshi *et al.* (2020) published a checklist of Indian Notodontidae, Geometridae and Drepanidae, respectively. Online records from the Moths of India website (Sondhi *et al.*, 2021) and iNaturalist (2021) provided additional information on moth distributions. In this paper, based on this new information, we present additions to the 2018 checklist of moths of Shendurney and Ponnudi, photographic records, updates in taxonomy and corrections in identifications.

## MATERIALS AND METHODS

Material and methods adopted are outlined in the 2018 paper (Sondhi *et al.*, 2018). The species checklist and species notes are organised based on the phylogenetic arrangement of superfamilies and families proposed by Nieuwerkerken *et al.* (2011) and Kawahara *et al.* (2019). Subfamily and tribal placement for species was based additional published literature (Holloway, 1985; [1994]; 1996;1997; 2003; 2005; 2008; Beccaloni *et al.* 2003; Kononenko & Pinratana, 2013; Chandra *et al.*, 2018; Nuss *et al.*, 2020). We use the following abbreviations: NCBS: National Centre for Biological Sciences, Bengaluru; NHM: Natural History Museum, London; NPC: National Pusa Collection, New Delhi; OD: Original description; TL: Type locality; WLS: Wildlife Sanctuary.

## RESULTS AND DISCUSSION

In this paper, we identify and add another 79 species to the checklist of Shendurney and Ponnudi (Table 1). Of these new additions, *Xanthanomus vomeroi* Holloway & Zilli, 2005, is a genus and species hitherto unreported from mainland India.

The following species were identified only to genus level, misidentified or listed with spelling errors in the 2018 paper (Sondhi *et al.*, 2018):

**Table 1.** Additions to the checklist of moths of Shendurney WLS. 1. Survey Sites: A: Ponnudi, B: Pandimotta C: Rosemala, D: Kattalpara. 2. Months in which individuals were sighted or collected during the survey.

Sr. No.	Family	Subfamily	Species	Author's name in ICZN format	<sup>1</sup> Survey sites	<sup>2</sup> Months
1	Crambidae	Acentropinae	<i>Paracymoriza albifascialis</i>	Hampson, [1893]	B	vi
2	Crambidae	Acentropinae	<i>Paracymoriza vagalis</i>	(Walker, 1866)	A	v
3	Crambidae	Spilomelinae	<i>Hydriris cf. ornatalis</i>	(Duponchel, 1832)	B	v
4	Crambidae	Spilomelinae	<i>Conogethes cf. evaxalis</i>	(Walker, 1859)	B	v
5	Crambidae	Spilomelinae	<i>Glyphodes pulverulentalis</i>	Hampson, 1896	B	vi
6	Crambidae	Spilomelinae	<i>Palpita annulifer group</i>	Inoue, 1996	A	v
7	Crambidae	Spilomelinae	<i>Syllepte adductalis</i>	(Walker, [1859])	B	vi
8	Crambidae	Spilomelinae	<i>Aetholix flavibasalis</i>	(Guenée, 1854)	B	vi
9	Crambidae	Spilomelinae	<i>Lygropia distorta</i>	(Moore, 1885)	B/C	v, vi
10	Crambidae	Spilomelinae	<i>Herpetogramma luctuosalis</i>	(Guenée, 1854)	C	v
11	Crambidae	Spilomelinae	<i>Pilocrocis milvinalis</i>	(Swinhoe, [1886])	B	vi
12	Drepanidae	Oretinae	<i>Oreta suffusa</i>	Walker, 1855	B	vi
13	Notodontidae	Notodontinae	<i>Notodontella ferrifusa</i>	(Dudgeon, [1898])	C	v
14	Erebidae	Aganainae	<i>Mecodina albobdentata</i>	(Swinhoe, 1895)	A	v
15	Erebidae	Arctiinae	<i>Amata extensa</i>	(Walker, 1866)	B	vi
16	Erebidae	Arctiinae	<i>Teulisna unicornuta</i>	Kirti, Joshi & Singh, 2014	B	vi
17	Erebidae	Boletobinae	<i>Artigisa nigrosignata</i>	Walker, [1863]	B	iv
18	Erebidae	Calpinae	<i>Oraesia argyrosigna</i>	Moore, [1884]	B	vi
19	Erebidae	Calpinae	<i>Plusiodonta coelonota</i>	(Kollar, 1844)	B	v
20	Erebidae	Calpinae	<i>Hemichloridia euprepia</i>	(Hampson, 1902)	B	vi
21	Erebidae	Erebinae	<i>Homodes vivida</i>	Guenée, 1852	A	vi
22	Erebidae	Erebinae	<i>Pterocyclophora pictimargo</i>	Hampson, 1893	B	vi
23	Erebidae	Erebinae	<i>Parallelia rigidistria</i>	(Guenée, 1852)	B	vi
24	Erebidae	Hypeninae	<i>Dichromia pullata</i>	Moore, [1885]	B	vi
25	Erebidae	Hypeninae	<i>Nolasena ferrifervens</i>	Walker, [1858]	A	v
26	Erebidae	Scoliopteryginae	<i>Xanthanomis vomeroi</i>	Holloway & Zilli 2005	A/B	vi
27	Erebidae	Hermiinae	<i>Adrapsa geometroides</i>	(Walker, [1858])	B	vi
28	Erebidae	Hermiinae	<i>Hadennia jutalis</i>	(Walker, [1859])	A/B	v, vi
29	Erebidae	Hermiinae	<i>Oxaenanus brontesalis</i>	(Walker, [1859])	A	v
30	Erebidae	Lymantriinae	<i>Nygma icilia</i>	(Stoll, [1790])	A	iv
31	Eutelidae	Eutelinae	<i>Penicillaria jocosatrix</i>	Guenée, 1852	B	vi
32	Eutelidae	Eutelinae	<i>Penicillaria maculata</i>	Butler, 1889	B	vi
33	Nolidae	Chloephorinae	<i>Maurilia iconica</i>	Walker, [1858]	B	vi
34	Nolidae	Chloephorinae	<i>Maceda mansueta</i>	Walker, [1858]	B	v
35	Nolidae	Chloephorinae	<i>Paracrama dulcissima</i>	(Walker, [1864])	A	vi
36	Nolidae	Chloephorinae	<i>Erizada lichenaria</i>	Walker, 1865	B	v
37	Nolidae	Chloephorinae	<i>Prisciana seminivea</i>	Walker, 1865	A	v
38	Nolidae	Risobinae	<i>Risoba obstructa</i>	Moore, 1881	B	vi
39	Nolidae	Westernanniinae	<i>Negeta contrariata</i>	Walker, 1862	B	vi
40	Noctuidae	Acronictinae	<i>Fascionyctia fasciata</i>	(Moore, [1884])	B	v
41	Noctuidae	Eriopinae	<i>Callopietria rivularis</i>	Walker, [1858]	B	vi
42	Noctuidae	Eustrotiinae	<i>Maliattha separata</i>	Walker, 1863	B	vi
43	Noctuidae	Noctuinae	<i>Yula muscosa</i>	(Hampson, 1891)	B	v
44	Noctuidae	Noctuinae	<i>Spodoptera litura</i>	(Fabricius, 1775)	B	vi
45	Noctuidae	Noctuinae	<i>Trachea auriplena</i>	(Walker, 1857)	A/B	vi
46	Noctuidae	Noctuinae	<i>Leucania yu</i>	Guenée, 1852	A	vi
47	Noctuidae	Plusiinae	<i>Thysanoplusia lectula</i>	(Walker, 1858)	B	vi
48	Geometridae	Desmobathrinae	<i>Noreia ajaia</i>	(Walker, 1859)	B	v, vi
49	Geometridae	Ennominae	<i>Abraxas latizonata</i>	Hampson, 1907	C	vi
50	Geometridae	Ennominae	<i>Abraxas leucostola argyrosticta</i>	Hampson, 1907	B	vi
51	Geometridae	Ennominae	<i>Lomographa inamata</i>	(Walker, 1860)	A	v
52	Geometridae	Ennominae	<i>Amblychia hymenaria</i>	(Guenée, [1858])	C	vi
53	Geometridae	Ennominae	<i>Biston strigaria</i>	(Moore, 1879)	C	v
54	Geometridae	Ennominae	<i>Catoria sublavararia sublavararia</i>	(Guenée, [1858])	B	vi
55	Geometridae	Ennominae	<i>Cleora cf. alienaria</i>	(Walker, 1860)	B	vi
56	Geometridae	Ennominae	<i>Gasterocome polyspathes</i>	Prout, 1934	B	v
57	Geometridae	Ennominae	<i>Menophra nigrifasciata</i>	Hampson, 1891	A	vi
58	Geometridae	Ennominae	<i>Ophthalmitis herbidaria</i>	(Guenée, [1858])	A	xi
59	Geometridae	Ennominae	<i>Petelia cf. distracta</i>	(Walker, 1860)	A	xi
60	Geometridae	Ennominae	<i>Callaera subexpressa</i>	(Walker, 1861)	A	vi
61	Geometridae	Ennominae	<i>Luxiaria hypaphanes</i>	Hampson, 1891	B	v
62	Geometridae	Ennominae	<i>Achrosis cf. alienata</i>	(Walker, 1862)	B	vi
63	Geometridae	Ennominae	<i>Achrosis intexta</i>	(Swinhoe, 1891)	B	vi
64	Geometridae	Ennominae	<i>Omiza cf. miliaria</i>	Swinhoe, 1889	C	v
65	Geometridae	Ennominae	<i>Scardamia cf. metallaria</i>	Guenée, [1858]	B	vi
66	Geometridae	Ennominae	<i>Aplochloa vivillaca</i>	(Walker, 1861)	A/B	v, vi
67	Geometridae	Geometrinae	<i>Argyrocossma inductaria</i>	(Guenée, [1858])	B	v
68	Geometridae	Geometrinae	<i>Chlorochaeta cf. integranota</i>	Hampson, 1893	B	v
69	Geometridae	Geometrinae	<i>Orothalassodes leucospilota</i>	(Moore, [1887])	A/B	vi
70	Geometridae	Geometrinae	<i>Pentheochlora cf. uniformis</i>	(Hampson, 1891)	B	vi
71	Geometridae	Larentiinae	<i>Bosara albitornalis</i>	(Prout, 1958)	B	vi
72	Geometridae	Larentiinae	<i>Pomasia sparsata</i>	Hampson, 1902	B	vi
73	Geometridae	Larentiinae	<i>Acolutha pictaria</i>	(Moore, 1888)	B	vi
74	Geometridae	Larentiinae	<i>Polynesia sunandava</i>	(Walker, 1861)	A	v
75	Geometridae	Larentiinae	<i>Physetobasis annulata</i>	(Hampson, 1891)	B	vi
76	Geometridae	Larentiinae	<i>Ecliptopera muscicolor</i>	(Moore, 1888)	B	vi
77	Geometridae	Sterrhinae	<i>Scopula emissaria</i>	(Walker, 1861)	B	vi
78	Geometridae	Sterrhinae	<i>Perixera absconditaria</i>	(Walker, 1863)	A	v
79	Geometridae	Sterrhinae	<i>Perixera obrinaria</i>	(Guenée, [1858])	A	v

*Oreta suffusa* Walker, 1855 was listed as *Oreta* sp. (Sr. no. 25).  
*Anoba pectinata* (Hampson, 1896) was incorrectly identified and should be *Anoba polyspila* (Walker, 1865) (Sr. no. 36).  
*Amata extensa* (Walker, 1866) was listed as *Syntomis* sp. (Sr. no. 64.).  
*Lygniodes vampyurs* (Fabricius, 1794) was listed with a spelling error as *Lygniodes vampyrus* (Fabricius, 1794) (Sr. No. 111).  
*Penicillaria jocosatrix* Guenée, 1852 was listed as *Pencilaria* sp. (Sr. no. 150).  
*Achrosis intexta* (Swinhoe, 1891) was listed as *Achrosis* sp. (Sr. no. 154).  
*Biston strigaria* (Moore, 1879) was incorrectly identified as *Biston suppressaria* (Guenée, [1858]) (Sr. no. 156).  
*Omiza pachiararia* Walker, 1860 was listed with a spelling error as *Omiza pachiarra* Walker, 1860 (Sr. no. 170).  
*Aplochloa vilivaca* (Walker, 1861) was listed as *Argyrocosma* sp. (Sr. no. 182).  
*Argyrocosma inductaria* (Guenée, [1858]) was listed as *Comostola* sp. (Sr. no. 183).  
*Lophophelma ruficosta* Hampson, 1891 was listed with a spelling error as *Lophophlema ruficosta* Hampson, 1891 (Sr. no. 186).  
*Spaniocentra pannosa* (Moore, [1887]) was listed with a spelling error as *Spanniocentra pannosa* (Moore, [1887]) (Sr. No. 194).  
*Abraxas leucostola argyrosticta* Hampson, 1907 was incorrectly identified as *Abraxas sylvata* (Scopoli, 1763) (Sr. no. 196).  
*Callopietria rivularis* Walker, [1858] was listed as *Callopietria* sp. (Sr. no. 208).  
*Hadennia jutalis* (Walker, [1859]) was listed as *Hadennia* sp. (Sr. no. 215).  
*Notodontella ferrifusa* (Dudgeon, [1898]) was listed as *Pantanopsis* sp. (Sr. no. 231).  
*Cyclosia latipennis* (Hampson, 1891) was listed as *Cyclosia papilionaris australinda* (Hampson, 1891) (Sr. no. 281).

Species covered in the 2018 paper with updated nomenclature are listed in Table 2.

## Faunistic updates on moths from Kerala

### Family Crambidae

#### Subfamily Spilomelinae

#### Tribe Margaroniini

*Glyphodes pulverulentalis* Hampson, 1896 Plate 1/5.

*Photographic records:* 04.vi.2014, Ponnudi.

*Distribution:* India: Andhra Pradesh, Karnataka, Nagaland, Jammu

& Kashmir, Punjab (Rahmathulla *et al.*, 2012; Hampson, 1896), Assam (Rose, 2002), Kerala (Ponnudi). Elsewhere: China, Australia, Thailand. There are no previously published records of this species from Kerala.

### Tribe Herpetogrammatini

*Pilocrocis milvinalis* (Swinhoe, [1886]) Plate 1/11.

*Photographic records:* 05.vi.2014, Ponnudi.

*Notes:* This species was described from Pune, Maharashtra by Swinhoe, and is very similar based on habitus to *Omiodes barcalis* (Walker, 1859) described from Borneo. Hampson (1896) treated *P. milvinalis* as junior synonym of *O. barcalis*. Yamanaka (1998) treated the Nepal species as *Pilocrocis barcalis* and then revised this to *Omiodes* Guenée, 1854 (Yamanaka, 2000) based on similarity of the genitalia. Nuss *et al.* (2020) treated *O. milvinalis* and *O. barcalis* as separate species. Until further investigation is possible, we treat the Indian populations of this species as *P. milvinalis*. SS has recorded this species from Arunachal Pradesh, Uttarakhand and Kerala, so it has a wide distribution.

*Distribution:* India: Maharashtra (OD: Pune, Mumbai), Meghalaya, West Bengal, Tamil Nadu (Nilgiris) (Hampson, 1896), Arunachal Pradesh, Uttarakhand, Kerala (Ponnudi). Elsewhere: Nepal (Yamanaka, 2000), Sri Lanka (Hampson, 2000).

### Subfamily Acentropinae

*Paracymoriza albifascialis* Hampson, [1893] Plate 1/1.

*Photographic records:* 01.vi.2014, Pandimotta, female.

*Notes:* Sexually dimorphic, the female has dark forewings, while the male has a broad white medial band (Whitaker & Barlow, 2014).

*Distribution:* India: Tamil Nadu (Nilgiris), Meghalaya (TL: Khasis), Kerala (Shendurney WLS). Elsewhere: Sri Lanka (Kocak & Kemal, 2012), Nepal (Yamanaka, 1998), Indonesia (Java) (Whitaker & Barlow, 2014). There are no previously published records of this species from Kerala.

### Family Drepanidae

#### Subfamily Oretinae

#### Tribe Oretini

*Oreta suffusa* Walker, 1855 Plate 1/12.

*Material examined:* NCBS-QA636, 02.vi.2014, Pandimotta, coll. Yash Sondhi.

*Notes:* Listed as *Oreta* sp. (Sr. no. 25) in Sondhi *et al.* (2018).

*Distribution:* India: South India, Nilgiris (Joshi *et al.*, 2020); Kerala (new record); Elsewhere: Sri Lanka (TL) (Han *et al.*, 2012). There are no previously published records of this species from Kerala.

**Table 2.** List of nomenclatural changes for species included in Sondhi *et al.* (2018).

Sr. No in Sondhi <i>et al.</i> (2018)	Nomenclature in Sondhi <i>et al.</i> (2018).	Revised nomenclature	Remarks/Reference
12	<i>Dichochrois nigrilinealis</i> (Walker, 1866)	<i>Orthospila orissusalis</i> (Walker, 1859)	Nuss <i>et al.</i> (2020)
21	<i>Syngamia violata</i> (Walker, 1859)	<i>Bacotoma violata</i> (Fabricius, 1787)	Nuss <i>et al.</i> (2020)
24	<i>Cyclura castanea</i> (Hampson, 1891)	<i>Neoreta castanea</i> (Hampson, 1891)	Song <i>et al.</i> (2012)
34	<i>Digama marchalii</i> (Guérin-Méneville, 1843)	<i>Sommeria marchalii figurata</i> Moore, 1878	Zwier (2020)
40	<i>Barsine cuneonotata</i> (Walker, 1855)	<i>Ammatho cuneonotata</i> Walker, 1855	Volyntin <i>et al.</i> (2019)
43	<i>Coleta coleta</i> (Stoll, [1781])	<i>Nyctemera coleta</i> (Stoll, [1781])	Sondhi <i>et al.</i> (2021)
54	<i>Mangina astreus</i> (Drury, 1773)	<i>Argina astrea</i> (Drury, 1773)	Sondhi <i>et al.</i> (2021)
151	<i>Penicillaria vitalba</i> Semper, 1900	<i>Targalodes vittalba</i> (Semper, 1900)	Holloway (1985)
173	<i>Parasynegia cf. pardaria</i> (Guenée, [1858])	<i>Borbacha pardaria</i> (Guenée, [1858])	Kirti <i>et al.</i> (2019); Sondhi <i>et al.</i> (2021)
205	<i>Parasa fumosa</i> Swinhoe, 1889	<i>Aergina fumosa</i> (Swinhoe, 1889)	Transferred to <i>Aergina</i> by Solovyev (2014)
238	<i>Actias maenas</i> Doubleday, 1847	<i>Actias keralana</i> Nässig, Naumann & Giusti, 2020	South India populations of <i>Actias maenas</i> described as a new species by Nässig <i>et al.</i> (2020)
253	<i>Theretra castanea</i> Moore, 1872	<i>Rhagastis castanea</i> (Moore, 1872)	Melichar <i>et al.</i> (2018)
264	<i>Ambulyx substrigilis</i> Westwood, 1847	<i>Ambulyx aglaia</i> (Jordan, 1923)	Raised to species status by Melichar <i>et al.</i> (2018). Previously considered a subspecies of <i>A. substrigilis</i> .
281	<i>Cyclosia papilionaris australinda</i> (Hampson, 1891)	<i>Cyclosia latipennis</i> (Hampson, 1891)	Yen (2003)



1. *Paracymoriza albifascialis* female



2. *Paracymoriza vagalis*



3. *Hydriris* cf. *ornatalis*



4. *Conogethes evaxalis*



5. *Glyphodes pulverulentalis*



6. *Palpita annulifer* group



7. *Syllepte adductalis*



8. *Aetholix flavibasalis*



9. *Lygropia distorta*



10. *Herpetogramma luctuosalis*



11. *Pilocrocis milvinalis*



12. *Oreta suffusa*  
QA636 UP



12. *Oreta suffusa*  
QA636 UN



13. *Notodontella ferrifusa*  
QA037 UP



13. *Notodontella ferrifusa*  
QA037 UN



14. *Mecodina albondentata*  
PZ310 UP



14. *Mecodina albondentata*  
PZ310 UN



15. *Amata extensa*  
AW074 UP



15. *Amata extensa*  
AW074 UN



16. *Teulisna unicornuta*  
QA590 UP



16. *Teulisna unicornuta*  
QA590 UN



17. *Artigisa nigrosignata*



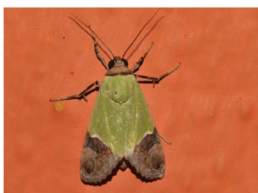
18. *Oraesia argyrosigna*  
QA680 UP



18. *Oraesia argyrosigna*  
QA680 UN



19. *Plusiodonta coelonota*



20. *Hemichloridia euprepia*



21. *Homodes vivida*  
QA671 UP



21. *Homodes vivida*  
QA671 UN



22. *Pterocyclophora pictimargo*  
AG147 UP



22. *Pterocyclophora pictimargo*  
AG147 UN

Plate 1. Moths recorded from Shendurney WLS.



Family **Notodontidae**Subfamily **Notodontinae**

*Notodontella ferrifusa* (Dudgeon, [1898]) Plate 1/13.

*Material examined*: NCBS-QA037, 28.v.2014, Rosemala, coll. Yash Sondhi.

*Notes*: An uncommon species, the identity was confirmed by A. Schintlmeister (pers. comm. Sanjay Sondhi).

*Distribution*: India: Sikkim (TL), NE India, S. India, Andamans (Schintlmeister & Pinratana, 2007; Chandra *et al.*, 2018). Elsewhere: Myanmar, Laos, Indonesia, Thailand (Schintlmeister & Pinratana, 2007). While Schintlmeister & Pinratana (2007) mention "S. India" in its distribution, there are no previously published records from Kerala.

Family **Erebidae**Subfamily **Aganainae**

*Mecodina albobdentata* (Swinhoe, 1895) Plate 1/14.

*Material examined*: NCBS-PZ310, 28.v.2014, Rosemala, coll. Yash Sondhi.

*Notes*: Zahiri *et al.* (2011) transferred *Mecodina* and *Psimada* tentatively to the subfamily Aganainae.

*Distribution*: India: Meghalaya (TL: Cherrapunji), Sikkim (Hampson, 1895), Great Nicobar (Chandra, 1996), Kerala (Shendurney WLS). Elsewhere: Nepal (Haruta, 1994), Taiwan, Ryukyu Is., Vietnam, Thailand, Peninsular Malaysia, Singapore, Sumatra, Borneo, Sulawesi (Holloway, 2005). There are no previously published records of this species from Kerala.

Subfamily **Boletobinae**Tribe **Boletobini**

*Artigisa nigrosignata* Walker, [1863] Plate 1/17.

*Material examined*: NCBS-AG248, 03.vi.2014, Pandimotta, coll. Yash Sondhi.

*Photographic records*: 03.vi.2014, Pandimotta.

*Notes*: *Homoptera catenata* Moore, 1887 from Sri Lanka and *Panilla apicalis* Butler, 1889 from Dharmasala, Himachal Pradesh are junior synonyms.

*Distribution*: India (Himachal Pradesh, Uttarakhand, Kerala) (Sondhi *et al.*, 2021). Elsewhere: Sri Lanka (TL), Thailand, Malaysia, Borneo (Holloway, 2005). There are no previously published records of this species from Kerala.

Subfamily **Calpinae**

*Hemichloridia euprepia* (Hampson, 1902) Plate 1/20.

*Material examined*: NCBS-AG624, 11.vii.2015, Ponmudi, coll. Yash Sondhi.

*Distribution*: India: Tamil Nadu, Sri Lanka (OD) (Sondhi *et al.*, 2021), Kerala (Ponmudi). There are no previously published records of this species from Kerala.

Subfamily **Erebinae**Tribe **Sypnini**

*Pterocyclophora pictimargo* Hampson, 1893 Plate 1/22.

*Material examined*: NCBS-AG147, 05.vi.2014, Ponmudi, coll. Yash Sondhi.

*Distribution*: Kerala (Ponmudi), Karnataka (Sondhi *et al.*, 2021). Elsewhere: Sri Lanka (TL).

Tribe **Poaphilini**

*Parallelia rigidistria* (Guenée, 1852) Plate 2/23.

*Material examined*: NCBS-QA602, 01.vi.2014, Pandimotta, coll. Yash Sondhi.

*Photographic records*: 04.vi.2014, Ponmudi.

*Notes*: Holloway & Miller (2003) provisionally place this species in '*Parallelia*' Hübner, 1818.

*Distribution*: India: "Central India" (TL), Tamil Nadu (Sivasankaran & Ignacimuthu, 2014), Maharashtra, Kerala (Ponmudi). Elsewhere: Bangladesh, Sri Lanka (Hampson, 1894), Thailand, Malay Peninsula, Malaysia (Perak), Cambodia, Vietnam, Taiwan (Kononenko & Pinratana, 2013).

Subfamily **Scoliopteryginae**

*Xanthanomis vomeroi* Holloway & Zilli 2005 Plate 2/26.

*Material examined*: NCBS-AG250, female, 04.vi.2014, Ponmudi, coll. Yash Sondhi, wet and dry samples. NCBS-QA674, female, 03.vi.2014, Pandimotta, coll. Yash Sondhi, wet sample only.

*Photographic records*: 05.vi.2014, Ponmudi.

*Notes*: Two female specimens of *Xanthanomis vomeroi* were collected. The species was identified using its original description and re-confirmed by Alberto Zilli (pers. comm. Sanjay Sondhi). The specimen, NCBS-AG250, was dissected and its genitalia (Plate 5) matched that of the female of *X. vomeroi* in the original description. However, given that no males could be collected for comparison of genitalia, and that known range of this species is extralimital to India, we provisionally identify this as *Xanthanomis vomeroi* pending collection of additional material for validation of the species identity.

*Distribution*: India: Kerala (Pandimotta & Ponmudi). Elsewhere: Borneo, Palawan, Sumatra, Peninsular Malaysia, Myanmar (Tenasserim) (Holloway & Zilli, 2005). Seven species of *Xanthanomis* Hampson, 1926 are known globally: *Xanthanomis aurantiaca* Hampson, 1926, *X. eurogramma* Hampson, 1926, *X. fuscifrons* (Walker, [1863]), *X. lilacea* (Bethune-Baker, 1906), *X. steremochla* (Turner, 1926), *X. vomeroi* Holloway & Zilli, 2005 and *X. xanthina* Holloway & Zilli, 2005. Hitherto, the range of this genus was restricted to southeastern Asia and Australia, and this is the first published record of this genus from mainland India, extending its known range. *Xanthanomis fuscifrons* (Walker, [1863]) (erroneously spelt as *Xanthonomis fuscifrons*) was reported by Chandra (1994) from the Nicobar Islands, which remains the only previous record of this genus from India.

Subfamily **Herminiinae**

*Adrapta geometroides* (Walker, [1858]) Plate 2/27.

*Photographic records*: 01.vi.2014, Pandimotta. Female.

*Distribution*: India: Kerala (Shendurney WLS). Elsewhere: Sri Lanka (TL), Sundaland, Moluccas, New Guinea (Holloway, 2008). While Holloway (2008) includes "Indian subregion" as its distribution, there are no other recent published records of this species from India.

Family **Euteliidae**Subfamily **Euteliinae**

*Penicillaria maculata* Butler, 1889 Plate 2/32.

*Photographic records*: 04.vi.2014, Ponmudi.

*Distribution*: Himachal Pradesh (TL), Uttarakhand (Smetacek 2008), Tamil Nadu (Sivasankaran *et al.*, 2010), Arunachal Pradesh (SS record), Kerala (Ponmudi). Elsewhere: Sri Lanka (Koçak & Kemal, 2012), Nepal, Thailand, Vietnam, China, Taiwan (Kononenko & Pinratana, 2005), Hong Kong (Kendrick, 2002). While Kononenko & Pinratana (2005) state that the species distribution includes India, there are no recent published records from Kerala.

Family **Nolidae**Subfamily **Chloephorinae**Tribe **Careini**

*Maurilia iconica* Walker, [1858] Plate 2/33.

*Material examined*: NCBS-AG134, male, 04.vi.2014, Ponmudi, coll. Yash Sondhi.

*Distribution*: India: Arunachal Pradesh, Madhya Pradesh, Tamil Nadu, West Bengal, Uttarakhand (Sondhi *et al.*, 2021), Kerala (Ponmudi).



23. *Parallelia rigidistria*



24. *Dichromia pullata*  
QA075 UP



24. *Dichromia pullata*  
QA075 UN



25. *Nolasea ferrifervens*



26. *Xanthanomis vomeroi*  
AG250 UP female



26. *Xanthanomis vomeroi*  
AG250 UN female



27. *Adrapsa geometroides*  
female



28. *Hadennia jutalis*  
AG183 UP



28. *Hadennia jutalis*  
AG183 UN



29. *Oxaenanus brontesalis*  
PZ312 UP



29. *Oxaenanus brontesalis*  
PZ312 UN



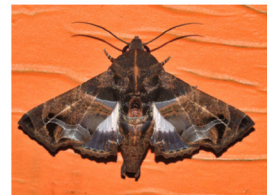
30. *Nygmia icilia*  
AG561 UP



30. *Nygmia icilia*  
AG561 UN



31. *Penicillaria jocosatrix*



32. *Penicillaria maculata*



33. *Maurilia iconica*  
AG134 UP



33. *Maurilia iconica*  
AG134 UN



34. *Maceda mansueta*



35. *Paracrama dulcissima*



36. *Erizada lichenaria*



37. *Ptisciana seminivea*



38. *Risoba obstructa*



39. *Negeta contrariata*  
AG171 UP



39. *Negeta contrariata*  
AG171 UN



40. *Fascionycta fasciata*



41. *Callopietria rivularis*  
QA595 UP



41. *Callopietria rivularis*  
QA595 UN



42. *Maliattha separata*



43. *Yula muscosa*  
PZ214 UP



43. *Yula muscosa*  
PZ214 UN

**Plate 2.** Moths recorded from Shendurney WLS.

Elsewhere: Sri Lanka (TL), Nepal (Yoshimoto, 1993), Indo-Australian tropics from Sri Lanka to Queensland, Samoa, Rarotonga and New Caledonia (Holloway, 2003). Holloway (2003) states the "Indo-Australian tropics" as its distribution, but there are no previously published records from Kerala.

***Ptisciana seminivea*** Walker, 1865 Plate 2/37.

*Photographic records:* 30.v.2014, Rosemala.

*Distribution:* India: Arunachal Pradesh, Maharashtra, Meghalaya, West Bengal (Sondhi *et al.*, 2021), Tamil Nadu (Roonwal *et al.*, 1963), Kerala (Shendurney WLS). Elsewhere: Nepal (Yoshimoto, 1993), Indonesia, Malaysia, Philippines and Sulawesi (Holloway, 2003). Holloway (2003) states that the species distribution is from the "Oriental tropics from the Indian Subregion to Sundaland, the Philippines and Sulawesi", but there are no previously published records from Kerala.

Subfamily **Risobinae**

***Risoba obstructa*** Moore, 1881 Plate 2/38.

*Photographic records:* 05.vi.2014, Ponnudi.

*Distribution:* India: Tamil Nadu (Sivasankaran & Ignacimuthu, 2014), Kerala (Ponnudi). Elsewhere: Sri Lanka (TL), Thailand, Borneo, Java, Philippines, Sulawesi, New Guinea, Queensland, Solomon (Holloway, 2003). While Holloway (2003) states that the species distribution includes India, there are no previously published records from Kerala.

Family **Noctuidae**

Subfamily **Noctuinae**

Tribe **Phlogophorini**

***Yula muscosa*** (Hampson, 1891) Plate 2/43.

*Material examined:* NCBS-PZ214, 31.v.2014, Pandimotta, coll. Yash Sondhi.

*Distribution:* India: Tamil Nadu (TL: Nilgiris), Kerala (Shendurney WLS). Elsewhere: Nepal (Yoshimoto, 1994), Thailand, Indonesia, Vietnam, Philippines (Kononenko & Pinratana, 2013). There are no previously published records of this species from Kerala.

Subfamily **Plusiinae**

Tribe **Argyrogrammatini**

***Thysanoplusia lectula*** (Walker, 1858) Plate 3/47.

*Material examined:* NCBS-AG174, 05.vi.2014, Ponnudi, coll. Yash Sondhi.

*Distribution:* India: Karnataka (TL: Canara), Bihar, West Bengal, (Shashank & Sinha, 2020), Kerala (Shendurney WLS). Elsewhere: Sri Lanka (Hampson, 1894), Nepal (Yoshimoto, 1993), Thailand, Vietnam, China, Japan (Kononenko & Pinratana, 2013). There are no previously published records of this species from Kerala.

Family **Geometridae**

Subfamily **Desmobathrinae**

***Noreia ajaia*** (Walker, 1859) Plate 3/48.

*Photographic records:* 31.v.2014 & 01.vi.2014, Pandimotta. Both females.

*Notes:* While the male is ash-grey in the original description, the female, described as *Noreia perdensata* Walker, 1862, as its junior synonym, from Sri Lanka, is pale chocolate-brown.

*Distribution:* India: Tamil Nadu (Travancore), Meghalaya (Khasi Hills), Nagaland (Naga Hills), Kerala (Shendurney WLS). Elsewhere: Sri Lanka (Hampson, 1895), Oriental Region to Sundaland (Holloway, 1996).

Subfamily **Ennominae**

Tribe **Abraxini**

***Abraxas latizonata*** Hampson, 1907 Plate 3/49.

*Photographic records:* 05.vi.2014, Ponnudi. Female.

*Notes:* This little-known species and *Abraxas poliostrata* Hampson, 1907 closely resemble each other. Based on the original description of both these species, our record closely matches *A. latizonata*, but it has not yet been shown, by dissection of genitalia for example, that both taxa are in fact distinct species.

*Distribution:* India: Tamil Nadu (TL: Travancore), Kerala (Ponnudi, Shendurney) (Mathew *et al.*, 2004).

***Abraxas leucostola argyrosticta*** Hampson, 1907 Plate 3/50.

*Material examined:* NCBS-QA686, 03.vi.2014, Pandimotta, coll. Yash Sondhi.

*Notes:* This species was incorrectly identified as *Abraxas sylvata* (Scopoli, 1763) in the previous publication (Sondhi *et al.*, 2018). Notes on how to separate these two species are mentioned at <https://www.mothsofindia.org/#!/sp/357329/Abraxas-leucostola/similiar-species> (Sondhi *et al.*, 2021).

*Distribution:* India: Shevaroy Hills, Tamil Nadu (TL), Karnataka, Maharashtra, Kerala (Kirti *et al.*, 2019). The nominate subspecies was described from Sri Lanka.

Tribe **Boarmiini**

***Biston strigaria*** (Moore, 1879) Plate 3/53.

*Material examined:* NCBS-PZ335, male, 29.v.2014, Rosemala, coll. Yash Sondhi.

*Notes:* The original description of *Biston strigaria* matches our specimen, but *Biston suppressaria* (Guenée, [1858]) and *B. strigaria* are similar based on external markings, displaying only minor differences. *Biston strigaria* is listed as a valid species by Scoble & Hausmann (2007) and was incorrectly identified as *B. suppressaria* in Sondhi *et al.* (2018) and Valappil (2020). In order to ascertain the identity of our specimen, its genitalia were dissected and examined (Plate 6). The male genitalia of the specimen (NCBS-PZ335) and *B. suppressaria* were compared. Jiang *et al.* (2011) illustrate the male genitalia capsule for *B. suppressaria* in Fig. 80 and the aedeagus in Fig. 107. The juxta in the two species is differently shaped, with that of *B. strigaria* being acute and pointed, while in *B. suppressaria* it is less acute and more evenly rounded. The aedeagus (=phallus) of the two species is of similar shape and width. Given that external markings match *B. strigaria* as per its original description and the genitalia is distinct from that of *B. suppressaria*, we confirm the identity of this species as *B. strigaria*. The genitalia of *B. strigaria* are not available for comparison in published literature.

*Distribution:* India: Kerala (Shendurney WLS), Tamil Nadu (Kalakkad Mundanthurai Tiger Reserve) (Iyer *et al.*, 2021). Elsewhere: Sri Lanka (TL). Kirti *et al.* (2019) do not mention this species in their list of *Biston* Leach, 1815 species recorded in India.

***Cleora cf. alienaria*** (Walker, 1860) Plate 3/55.

*Material examined:* NCBS-AG187, female, 07.vi.2014, Ponnudi, coll. Yash Sondhi.

*Notes:* This species was described from Sri Lanka and its description matches the specimen. However, this is a cryptic species, which displays polymorphism and is best separated from its congeners by comparing by genitalia; hence it is identified only provisionally.

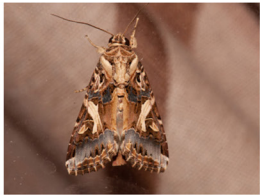
*Distribution:* India: Kerala (Shendurney WLS, Ponnudi), Tamil Nadu (Iyer *et al.*, 2021), Indian subregion (Holloway, [1994]). Elsewhere: Nepal (Sato 1994), Sri Lanka (TL), Indian subregion to Sundaland (Holloway, [1994]).

***Gasterocome polyspathes*** Prout, 1934 Plate 3/56.

*Photographic records:* 31.v.2014, Pandimatta; 04.vi.2014, Ponnudi.

*Notes:* Listed as a valid taxon by Scoble & Hausmann (2007). This species closely resembles the north Indian species, *Gasterocome pannosaria* (Moore, [1868]). *Gasterocome polyspathes* has more





44. *Spodoptera litura*



45. *Trachea auriplena*  
QA067 UP



45. *Trachea auriplena*  
QA067 UN



46. *Leucania yu*



47. *Thysanoplusia lectula*  
AG174 UP



47. *Thysanoplusia lectula*  
AG174 UN



48. *Noreia ajaia* female



49. *Abraxas latizonata*



50. *Abraxas leucostola*  
*argyrosticta* QA686 UP



50. *Abraxas leucostola*  
*argyrosticta* QA686 UN



51. *Lomographa inamata*  
PZ319 UP



51. *Lomographa inamata*  
PZ319 UN



52. *Amblychia hymenaria*  
QA053 UP



52. *Amblychia hymenaria*  
QA053 UN



53. *Biston strigaria*  
PZ335 UP



53. *Biston strigaria*  
PZ335 UN



54. *Catoria sublavararia*  
*sublavararia* AG132 UP



54. *Catoria sublavararia*  
*sublavararia* AG132 UN



55. *Cleora* cf. *alienaria*  
AG187 UP



55. *Cleora* cf. *alienaria*  
AG187 UN



56. *Gasterocome*  
*polyspathes*



57. *Menophra nigrifasciata*  
AG150 UP



57. *Menophra nigrifasciata*  
AG150 UN



58. *Ophthalmitis herbardaria*  
QA065 UP



58. *Ophthalmitis herbardaria*  
QA065 UN



59. *Petelia* cf. *distracta*  
AW067 UP



59. *Petelia* cf. *distracta*  
AW067 UN



60. *Calletaera subexpressa*



61. *Luxiaria hypaphanes*  
female



62. *Achrosis alienata*  
female

**Plate 3.** Moths recorded from Shendurney WLS.



ochre yellow tone than *G. pannosaria*, the black marking from cell to post-discal band is more or less continuous in *G. pannosaria*, but in *G. polyspathes*, it is separated by a sinuous creamy-white line, which make the cell spot appear separate and disconnected.

*Distribution*: India: Kerala (Shendurney WLS, Ponnudi); Tamil Nadu (Kalakkad Mundanthurai Tiger Reserve) (Iyer *et al.*, 2021). Elsewhere: Sri Lanka (TL). Kirti *et al.* (2019) only records the north Indian species, *Gasterocome pannosaria* (Moore, [1868]) from India in their checklist of Geometridae from India.

***Ophthalmitis herbidaria*** (Guenée, [1858]) Plate 3/58.

*Material examined*: NCBS-QA065, 01.vi.2014, Pandimotta, coll. Yash Sondhi

*Notes*: Four other species of the genus can be found in S. India and Sri Lanka: *Ophthalmitis diurnaria* (Guenée, [1858]), *O. kalakadaria* Sato, 2014, *O. striatifera* (Hampson, 1902) and *O. caritaria* (Walker, 1860). *Distribution*: India: NW, C. & E. Himalayas, Karnataka (Kirti *et al.*, 2012), Kerala (Shendurney WLS). Elsewhere: Sri Lanka, Nepal, China, Taiwan, Northern Thailand, Sumatra (Sato, 1998; 2014; Jiang *et al.*, 2011; Kirti *et al.*, 2012). There are no previously published records of this species from Kerala.

#### Tribe Caberini

***Petelia cf. distracta*** (Walker, 1860) Plate 3/59.

*Material examined*: NCBS-AW067, 19.xi.2016, Ponnudi, coll. Yash Sondhi.

*Notes*: *Petelia distracta* (Walker, 1860) and *Petelia medardaria* Herrich-Schäffer, 1856 are similar species that have a prominent black spot on the underside of the hindwing. These species are best separated by comparing male genitalia, but based on the wing markings, our individual is provisionally identified by the authors as *P. distracta*.

*Distribution*: India: Punjab (TL), India (Holloway, [1994]), Kerala (Shendurney WLS). Elsewhere: Sundaland, Sulawesi, New Guinea (Holloway, [1994]).

#### Tribe Eutoeini

***Calletera subexpressa*** (Walker, 1861) Plate 3/60.

*Photographic records*: 05.vi.2014, Ponnudi.

*Notes*: Closely matches the description in Jiang *et al.*, 2014. The only similar species in South India and Sri Lanka, *Calletera postvittata* (Walker, 1861), is quite different externally.

*Distribution*: India: NE Himalaya, Kerala (Shendurney WLS), Meghalaya, Maharashtra, Uttarakhand, Karnataka (Sondhi *et al.*, 2021). Elsewhere: Nepal, Philippines, Peninsular Malaysia, Indonesia (Borneo), China (Holloway, [1994]; Jiang *et al.*, 2014). There are no previously published records of this species from Kerala, though there are records from Assam and Kerala in iNaturalist (2021).

***Luxiaria hypaphanes*** Hampson, 1891 Plate 3/51.

*Photographic records*: 31.v.2014. Pandimotta, female.

*Notes*: *Luxiaria fuscaria* Kirti, Goyal & Kaur, 2012 and *Luxiaria ochrearia* Kirti, Goyal & Kaur, 2012 were erroneously reported as new species by Goyal (2010).

*Distribution*: India: Nilgiris (TL), Kerala (Shendurney WLS), Karnataka, Tamil Nadu (Goyal, 2010). There are no previously published records of this species from Kerala.

#### Tribe Hypochrosini

***Achrosis cf. alienata*** (Walker, 1862) Plate 3/52.

*Material examined*: NCBS-QA620, 01.vi.2014, Pandimotta, coll. Yash Sondhi.

*Notes*: Provisionally identified as *Achrosis alienata*. This species closely resembles *A. rondelaria* (Fabricius, 1775), previously considered a synonym of *A. alienata*, but now considered a full

species. *Achrosis rondelaria* is also found in the Western Ghats.

*Distribution*: India: N. India, Deccan, Tamil Nadu (Chennai), all mentioned in OD, Kerala (Shendurney WLS). Elsewhere: Indonesia (Java, Sumatra), Borneo.

***Achrosis intexta*** (Swinhoe, 1891) Plate 4/63.

*Material examined*: NCBS-QA069, 03.vi.2014, Pandimotta, coll. Yash Sondhi.

*Notes*: Listed as *Achrosis* sp. (Sr. no. 154) in Sondhi *et al.* (2018).

*Distribution*: Nagas, Khasis, Karnataka (N. Canara) (Hampson, 1895), Kerala (Shendurney WLS). There are no previously published records of this species from Kerala.

#### Tribe Scardamiini

***Scardamia cf. metallaria*** Guenée, [1858] Plate 4/65.

*Photographic records*: 03.vi.2014, Pandimotta.

*Notes*: Provisionally identified by the authors as *Scardamia cf. metallaria* since a specimen was not collected. A similar species, *Scardamia bractearia* (Walker, 1860), is known from Sri Lanka, but many authors treat this as a synonym or form of *S. metallaria* (Moore, 1884, Hampson, 1895; Beccaloni *et al.*, 2003). *Scardamia iographa* Prout, 1932 is reported from Borneo, and may be conspecific with this species (Holloway, [1994]).

*Distribution*: India: “Central India” (TL), Uttarakhand (Smetacek, 2008), Sikkim, Himachal Pradesh, Maharashtra, Tamil Nadu (Ghosh, 2003), Kerala (Shendurney WLS). Elsewhere: Nepal (Yazaki 1993), Sri Lanka (Moore, 1884), Myanmar, China, Hong Kong (Kendrick, 2003).

#### Subfamily Geometrinae

##### Tribe Hemitheini

***Orothalassodes leucospilota*** (Moore, [1887]) Plate 4/69.

*Material examined*: NCBS-QA655, 03.vi.2014, Pandimotta, coll. Yash Sondhi.

*Notes*: Reported by Valappil (2020) as *Thalassodes leucospilota*, the correct taxonomy is *Orothalassodes leucospilota* (Plotkin & Kawahara, 2020).

*Distribution*: India: Karnataka (Goyal, 2010), Kerala (Valappil, 2020). Elsewhere: Sri Lanka (TL).

***Pentheochlora cf. uniformis*** (Hampson, 1891) Plate 4/70.

*Photographic records*: 01.vi.2014 & 03.vi.2014, both at Pandimotta.

*Notes*: Closely matches the original description, but no specimen was collected; hence provisionally identified by the authors.

*Distribution*: India: Nilgiris (TL), Kerala (Shendurney WLS).

#### Subfamily Larentiinae

##### Tribe Eupitheciini

***Bosara albitornalis*** (Prout, 1958) Plate 4/71.

*Photographic records*: 06.vi.2014, Ponnudi.

*Notes*: Listed as a subspecies of *Chloroclystis infusata* by Prout (1958), proposed as a separate species, *Bosara albitornalis*, by Holloway (1997) and species status confirmed by Galsworthy (1999).

*Distribution*: India: Tamil Nadu (Travancore), Goa (Karwar), Karnataka (Belgaum), Kerala (Ponnudi). Elsewhere: Sri Lanka (Prout, 1958). Galsworthy (1999) mentions S. India and Sri Lanka as its distribution, but there are no previously published records from Kerala.

***Pomasia sparsata*** Hampson, 1902 Plate 4/72.

*Photographic records*: 01.vi.2014, Pandimotta.

*Distribution*: India: Tamil Nadu (Travancore: TL), Kerala (Shendurney WLS). There are no previously published records of this species from Kerala; so far the only published record is from its type locality.

63. *Achrosis intexta*  
QA679 UP63. *Achrosis intexta*  
QA679 UN64. *Omiza cf. miliaria*  
PZ345 UP male64. *Omiza cf. miliaria*  
PZ345 UN male65. *Scardamia metallaria*66. *Aplochlora vivilaca*  
QA614 UP66. *Aplochlora vivilaca*  
QA614 UN67. *Argyrocosma inductaria*68. *Comibaena cf. integranota*69. *Orothalassodes leucospilota*70. *Pentheochlora cf. uniformis*71. *Bosara albitornalis*72. *Pomasia sparsata*73. *Acolutha pictaria*74. *Polynesia sunandava*  
PZ303 UP74. *Polynesia sunandava*  
PZ303 UN75. *Physetobasis annulata*  
QA675 UP75. *Physetobasis annulata*  
QA675 UN76. *Ecliptopera muscicolor*77. *Scopula emissaria*78. *Perixera absconditaria*  
PZ323 UP78. *Perixera absconditaria*  
PZ323 UN79. *Perixera orbinaria*  
PZ359 UP79. *Perixera orbinaria*  
PZ359 UN**Plate 4.** Moths recorded from Shendurney WLS.

***Physetobasis annulata*** (Hampson, 1891) Plate 4/75.

*Material examined:* NCBS-QA675, 03.vi.2014, Pandimotta, coll. Yash Sondhi.

*Distribution:* Tamil Nadu (TL: Nilgiris), Kerala (Shendurney WLS). There are no previously published records of this species from Kerala.

**Tribe Asthenini**

***Acolutha pictaria*** (Moore, 1888) Plate 4/73.

*Photographic records:* 01.vi.2014, Pandimotta.

*Distribution:* Assam, Arunachal Pradesh, Nagaland (Sondhi et al.,

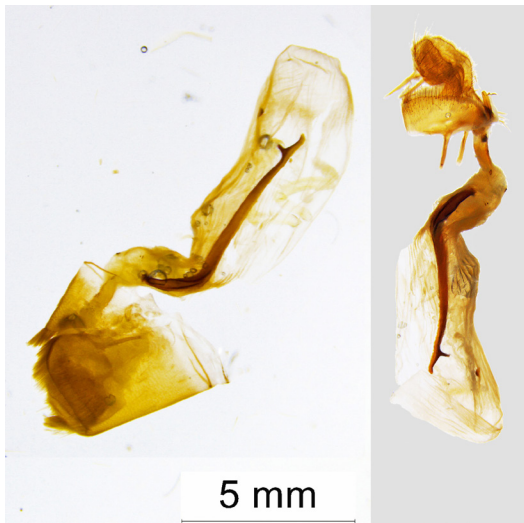
2021), Sikkim, Meghalaya (Hampson, 1895), Kerala (Shendurney WLS). Elsewhere: Sri Lanka (Hampson, 1895), Nepal (Yazaki, 2000), Tibet to Hong Kong, Sundaland, Wallacea, New Guinea and the Bismarcks (Holloway, 1997). There are no peer-reviewed, published records of this species from Kerala and South India, although there are a few records of this species in iNaturalist (2021) from Kerala.

**Tribe Cidariini**

***Ecliptopera muscicolor*** (Moore, 1888) Plate 4/76.

*Photographic records:* 01.vi.2014, Pandimotta.





**Plate 5.** Genitalia of *Xanthanomys vomeroi*, NCBS-AG250, female.



**Plate 6.** Genitalia of *Biston strigaria*, NCBS-PZ335, male (left to right): aedeagus, genital capsule (viewed dorsally and ventrally).

*Notes:* *Ecliptopera dissecta* Moore, [1887], *Ecliptopera oblongata* Guenee, 1858 *Ecliptopera muscicolor* (Moore, 1888) and *Ecliptopera subnubila* Prout, 1940 are the four species of *Ecliptopera* Warren, 1894 that can be found in South India and Sri Lanka (Koçak & Kemal, 2012; Kirti *et al.*, 2019). Valappil (2020) reported *E. rectilinea* Warren, 1894 from Kerala, but this species is found in north India and *E. dissecta* is the southern species. Kirti *et al.* (2019) lists *E. subapicalis* (Hampson, 1891) from the Nilgiris, but this is a junior synonym of *E. muscicolor* (Beccaloni *et al.*, 2003; Scoble & Hausmann, 2007; Plotkin & Kawahara, 2020).

*Distribution:* India: Tamil Nadu (TL: Nilgiris), Kerala (Shendurney WLS). There are no previously published records of this species from Kerala.

#### Subfamily Sterrhinae

##### Tribe Scopulini

*Scopula emissaria* (Walker, 1861) Plate 4/77.

*Photographic records:* 31.v.2014, Pandimotta.

*Distribution:* India: Himachal Pradesh (Hampson, 1895), Punjab (Rose, 2001), Sikkim (Ghosh, 2003), West Bengal, Assam, Gujarat, Maharashtra, Uttarakhand (Sondhi *et al.*, 2021), Kerala (Shendurney WLS). Elsewhere: Sri Lanka (Koçak & Kemal, 2012). There are no previously published records of this species from Kerala.

##### Tribe Cosymbiini

*Perixera absconditaria* (Walker, 1863) Plate 4/79.

*Material examined:* NCBS-PZ323, 27.v.2014, Rosemala, coll. Yash Sondhi.

*Distribution:* India: Nilgiris, Khasis (Hampson, 1895), Kerala (Shendurney WLS). Elsewhere: Sri Lanka (Hampson, 1895). There are no previously published records of this species from Kerala.

## CONCLUSION

With the additional data in this paper, the checklist of moths of Shendurney and Ponnudi now contains 353 species. An updated checklist of the moths of Shendurney and Ponnudi, along with locality, month of record and museum specimen numbers of identified species, is included as supplementary data at [http://mothsofindia.org/media/SondhiEtal\\_MothsOfShendurney\\_2021\\_Checklist.xlsx](http://mothsofindia.org/media/SondhiEtal_MothsOfShendurney_2021_Checklist.xlsx). At least another 60-70

specimens still need to be identified, demonstrating how poorly studied is this faunal group in India.

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