A faunistic overview of the moth species recorded from Nimbokrang, Papua, Indonesia (Lepidoptera)

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Suara Serangga Papua (SUGAPA digital) 16(1): 10-22 urn: lsid:zoobank.org:pub: E893A609-3E45-4D0F-A87F-00CA343B5D17

Abstract: An attempt is made to start an inventory of the moth fauna of Rhepang forest near Nimbokrang. Among the 135 recorded species, 44 of these can be considered as widely distributed or common, 10 species are considered rare or unexpected. Of these two categories respectively the 15 most common species and 10 rare species are briefly discussed and depicted. This inventory is far from complete, so it should encourage entomologists to do additional research in the near future.

Rangkuman: Suatu upaya dibuat untuk memulai penemuan ngengat di hutan Rhepang dekat Nimbokrang. Diantara 135 spesies yang ditemukan 44 diantaranya termasuk ngengat yang umum dijumpai sedangkan 10 species merupakan spesies jarang atau diluar dugaan ditemukan. Dari dua kategori tersebut berikut ini dideskripsikan secara singkat secara berturut-turut 15 spesies yang umum dijumpai dan 10 spesies yang jarang dijumpai. Penemuan ini masih jauh dari lengkap sehingga diharapkan ahli entomologi melanjutkan penelitian tambahan di masa depan.

Keywords: inventory, moth fauna, Rhepang Muaif forest, Alex Waisimon, conservation

Introduction

Rather near to the roaring of crowded towns like Sentani and Jayapura (district Jayapura, Papua, Indonesia) and a busy airport, there is a refuge of lowland rainforest. Near Nimbokrang village (2°57′ S - 140°09′ E) Alex Waisimon runs an eco-tourism resort in Rhepang forest.

After living abroad for decades working in the tourism industry across several continents, Alex Waisimon returned to his homeland Papua, Indonesia, at 54 years of age, determined to protect the Papuan indigenous forest from illegal logging and wildlife hunting, especially of birds of paradise, cassowaries and tree kangaroos (Alex Waisimon-Rhepang, n.d.). At first, his efforts were met with reluctance by his local community. However, eventually he succeeded in convincing the community group holding the customary rights in the.

Nimbokrang District of the importance of forest conservation, and of the benefits of ecotourism to the village and district. Collaborating with the World Wildlife Fund, the private sector and the regional Government of Papua (*Alex Waisimon-Rhepang*, n.d.), Alex established a birdwatching ecotourism program in May 2015, in the forest of Rhepang



Muaif, called Isyo Hill's Bird Watching (Muamar, 2023). Encompassing 19 hectares of indigenous forest, the ecotourism concept has now expanded to nearby villages. Dozens of locals from 16 tribes are now involved in the ecotourism program development (Muamar, 2023).

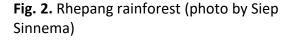
Home to seven of the nine species of birds of paradise found in the District of Nimbokrang, Rhepang Muaif is mainly known for its rich avian biodiversity. However, little is known about the moth fauna of the area.

In 2018 and 2023 collecting events were conducted by the Papua Insects Foundation, and although these were limited efforts, it is still important to report the results as a start of a complete inventory of this interesting place.

Fig. 1. Alex Waisimon (photo by Rob de Vos).

Vegetation and biotopes

The village Rhepang Muaif is situated in a valley at some distance westwards from the western end of the Sentani Lake in the province (Kabupaten) Jayapura. To the north side as well as to the south side are low hills covered by dense natural forests. The hills to the south are known under the name Isyo Hills, a name that is also given to the ecological park and nature reserve that has become well known by bird watchers, because of the occurrence of four types of Birds of Paradise, those being the Lesser Bird of Paradise, Twelve-wired Bird of Paradise, Pale-billed Sicklebill and King Bird of Paradise. Due to the initiative of the local people of the village and inspired by Alex Waisimon about 10.000 ha forest is preserved as a nature area and habitat where the Birds of Paradise can survive.





Rhepang Muaif itself has been developed into a centre of ecotourism and ecological studies that is visited by tourists from all over the world.

The hills are covered by a type of tropical forest that was originally widespread in the northern lowlands of Papua, but is declining because of large-scale logging and transforming areas into palm-oil plantations. Research to the botanical diversity of the area has been done in relation to the question what species of trees are important for the ability of Birds of Paradise and the population of the rare Salvadori's Fig-Parrot to survive in the area (Lahallo et al., 2022). This research has resulted in a list of 63 tree species occurring in the area, belonging to 23 tree families. Species with the highest Important Value Index are Intsia bijuga, Areca sp., Syzigium versteegi and Pometia pinnata, of which I.bijuga and P. pinnata are abundant in the area. Trees that are especially important for Birds of Paradise are among others Teijsmanniodendron hollrungii, Macaranga sp. and Ficus benjamina.



Fig. 3. View over the tree tops where Birds of Paradise court in Rhepang Forest (photo by Siep Sinnema)

The high botanical diversity of the reserve is not only of importance for the populations of birds, but also for the occurrence of populations of many species of insects, among which the species of Lepidoptera that are presented in this article. The forest of the reserve itself has for many ages been part of an area of tropical forests that is much bigger than the reserve itself. Due to developments in the surroundings of Rhepang Muaif the reserve threatens to become an island in an area where forests are disappearing due t logging, and transformation to agricultural lands and palm-oil plantations. The question if Rhepang Muaif will be able to maintain its natural richness for the next future is a point of concern.

Material and methods



In 2018 and 2023 we used two different systems to attract moths, both on a white screen: with a 220 Volts 160 Watt ML light bulb, powered by a generator, and with a 15 Watt LepiLED, powered by a 20,000 mAh power bank. Both systems had clearly different results. Compared to the LepiLED the ML light attracted much more specimens and species, but the composition of species was different. Daytime observations of moths were limited, but are also included in the list.

Fig. 4. The screen with ML light bulb used at Nimbokrang. From left to right: Piet Zumkehr, Rob de Vos and Siep Sinnema (photo by Jannie Sinnema-Bloemen)

Results

Until today a total of 135 different moth species could be identified from Nimbokrang, which were recorded in 2018 and 2023, but there are at least 10-15 species which are not described yet. These records have been done in only a few evenings, so it is not at all a thorough monitoring and is only meant to be a base to the knowledge of the moth fauna of this area. Nevertheless some very interesting species have been recorded which will be treated here below.

Doing field research at the Nimbokrang site was made difficult by the mass amount of aggressive ants which were everywhere and also active during the night.

Common and general species: Nimbokrang is lowland area and therefore it was to be expected that many species occurring in this forest will have a wide distribution in New Guinea. A total of 44 species (one-third of all species) can be considered to be wide spread and common. The list of these kind of species will certainly increase with future research.

The 15 most common moths were (in systematical order):

Maruca vitrata (Fabricius, 1787) (Crambidae, Spilomelinae)

Samea castoralis (Walker, 1859) (Crambidae, Spilomelinae)

Eucyclodes albifusa (Warren, 1906) (Geometridae, Geometrinae)

Pingasa lariaria (Walker, 1860) (Geometridae, Geometrinae)

Symmacra solidaria (Guenée, 1858) (Geometridae, Sterrhinae)

Cleora repetita (Butler, 1882) (Geometridae, Ennominae)

Acco albicosta (Hampson, 1914) (Erebidae, Arctiinae)

Chamaita niveata Rothschild, 1913 (Erebidae, Arctiinae)

Darantasia caerulescens Druce, 1898 (Erebidae, Arctiinae) Graphosia polylophota Hampson, 1914 (Erebidae, Arctiinae) Heterallactis chrysopera Hampson, 1914 (Erebidae, Arctiinae) Orieosia hypopolius (Rothschild, 1916) (Erebidae, Arctiinae) *Trischalis iridescens* Rothschild, 1913 (Erebidae, Arctiinae) Pangrapta ochraceum (Bethune-Baker, 1908) (Erebidae, Pangraptinae) Dysaethria quadricaudata (Walker, 1861) (Uraniidae, Epipleminae)

The two most common, so called pearl moths (Crambidae, Spilomelinae), are *Maruca vitrata* (fig. 5) and Samea castoralis (fig. 6), which both are widely distributed in the Indo-Australian region and are usually very abundant. The first one has even a pantropical distribution and can be a pest on soybean and other leguminous crops. Eucyclodes albifusa (fig. 7) is one of the many emerald moths, and seems to be common in the Nimbokrang forest. Pingasa lariaria (fig. 8) does also belong to the emerald moths, but has an unusual appearance for this subfamily. It is not all true what you think you see, because **Symmacra solidaria** (fig. 9) seems to be a small emerald moth but it's not! It belongs to the Sterrhinae and is rather common. The green colour is only seen in fresh specimens, because it soon fades to grey. As in temperate climate zones, Boarmiini (tribe of Ennominae) are well represented in the tropics. Cleora is a species rich genus, which is abundantly represented by C. repetita (fig. 10) in the Nimbokrang forest where it is very variable in pattern. It is furthermore widely distributed in the Indo-Australian region. Caterpillars feed on gum trees (Myrtaceae), lemon trees (Rutaceae) and avocado (Lauraceae). Striking are the many lichen moths (Erebidae, Arctiinae, Lithosiini), which can be explained by the moist forested biotope of the area. Caterpillars of lichen moths, as the name indicates, live on algae and lichen. Acco albicosta (fig. 11) is a small lichen moth from lowland forests which is rather common at light. A very peculiar appearance on the white sheet is the abundant Chamaita niveata (fig. 12). The moths are almost invisible because the snow-white wings are semi-translucent. Beautiful and very common is Darantasia caerulescens (fig. 13), which is widely distributed in the lowland areas of New Guinea and adjacent islands. Graphosia polylophota (fig. 14 & 15) is the most common representative of the genus. Male and female are sexual dimorph and come both to light, although males are in the majority. There are many small lichen moths with a peculiar banded pattern of yellow and red-brown, which seems a successful warning colour in New Guinea. The many species are sometimes difficult to identify in the field, so most specimens had to be collected to do further research. Even some new species may be discovered among them. It turned out that at one evening at least four similar species occur at the screen. Most abundant during our visits was *Heterallactis chrysopera* (fig. 16), but this may be a local feature and elsewhere it could be different. Orieosia hypopolius (fig. 17) is a small mouse grey species with hardly any pattern, apart from some black dots in the female forewings. Recently a few other species have been discovered in New Guinea, but this one is the most common one and widely distributed on New Guinea. Jewels on the screen are the tiny specimens in the genus Trischalis. Very common was T. iridescens (fig. 18), which has bright yellow forewings with a narrow shiny golden curved line and has a golden head. A sister species of iridescens was also present, T. zahrae De Vos & Van Mastrigt, 2007, which is larger and darker yellow and with a broader line. Another jewel that appeared is T. splendens (see with "rare and unexpected moths"). Pangrapta ochraceum (fig. 19) is not only sexual dimorphic, but also very variable in colour. Males all have a tiny white dot in common on the position of the retinaculum on the forewing, furthermore the wingshape is characteristic and the rather long and straight labial palpae. Epipleminae (Uraniidae) are always well represented with many species. In the Nimbokrang forest **Dysaethria quadricaudata** (fig. 20) seems most abundant.

Rare and unexpected species: A modest number of 10 species found in Nimbokrang can be characterized as rare or unexpected. Some species previously were known from higher altitudes only but still have been recorded from the lowland forest of Nimbokrang. A total of at least ten species were undescribed and will be treated in the near future.

Tonica cyanodoxa Meyrick, 1924 (Depressariidae)

Pacificulla heliocharis (Diakonoff, 1954) (Lecithoceridae)

Darantasia cyanoxantha Hampson, 1914 (Erebidae, Arctiinae)

Darantasia nigrifimbria De Vos, 2019 (Erebidae, Arctiinae)

Macaduma micans Hampson, 1900 (Erebidae, Arctiinae)

Trischalis splendens De Vos & Van Mastrigt, 2007 (Erebidae, Arctiinae)

Cocytia durvillii Boisduval, 1828 (Erebidae, Erebinae)

Pinacia novoguineana Bethune-Baker, 1906 (Erebidae, Herminiinae)

Micromelalopha castanea Rothschild, 1915 (Notodontidae, Pygaerinae)

Eupanacra micholitzi Rothschild & Jordan, 1893 (Sphingidae, Macroglossinae)

Tonica cyanodoxa (fig. 21) is a beautiful and peculiar moth from lowland forests, typical for the area, but it is rare. The family Lecithoceridae includes some beautiful and brightly coloured species. The orange coloured ones are most conspicuous but little is known about their distribution and biology. Pacificulla heliocharis (fig. 22) was only known by the holotype (Araucaria Camp, Archbold Expedition 1939) and was spotted on a leaf at daytime in 2018, herewith the second specimen known of this species! Because of the abundant occurrence of lichen in the forest It is obvious that among the rare species also lichen moths occur: Darantasia cyanoxantha (fig. 23) and D. nigrifimbria (fig. 24) are generally uncommon but interesting species, because little is known about their distribution. Very peculiar is the record of *Macaduma micans* (fig. 25), which was only known from high altitudes in the Snow Mountains. Another pleasant surprise was the record of the beautiful Trischalis splendens (fig. 26) of which were previously only two specimens known. A conspicuous diurnal moth is the amazing Cocytia durvillii (fig. 27), always found in warm moist lowland forests. Two endemic species in New Guinea are *Pinacia novoguineana* (fig. 28) and Micromelalopha castanea (fig. 29), probably widespread but their distribution is insufficiently known. Strangely enough only two sphingids are recorded from Nimbokrang, Eupanacra micholitzi (fig. 30) and Theretra latreillii, of which the first one is rather rare. It is to be expected that some more (common) species will be discovered soon.

Acknowledgement

First of all the Papua Insects Foundation and the participating members of the Kelompok Entomologi Papua are very grateful to Alex Waisimon, to allow us making this inventory in his territory and for his help during our visit. We also thank the Universitas Cenderawasih, in particular Dr. Oscar O. Wambrauw, SE., MSc.Agr., Rector of the Universitas Cenderawasih, Waena, Papua, Indonesia, for his hospitality and willingness to cooperate with the organisers of the Papua Entomology Survey 2023. We thank "Badan Riset dan Inovasi Nasional" (BRIN) for permission to do research in the area by research permits. The sixth, seventh, eighth and

ninth author are grateful to the Uyttenboogaart-Eliasen Foundation, the Van Groenendael-Krijger Foundation and the Pontium Foundation for financial support of the survey. And last but not least we would like to thank the other team members of the survey: Luc, Josef, Tony, Royce, David, Daniel, Camiel, Pasquale, Tomas, Nicolas, Olivier, Inge and Rinske, who had other (entomological) disciplines in the group, for their friendship, help and great support.

Credits for the photographs of the moths

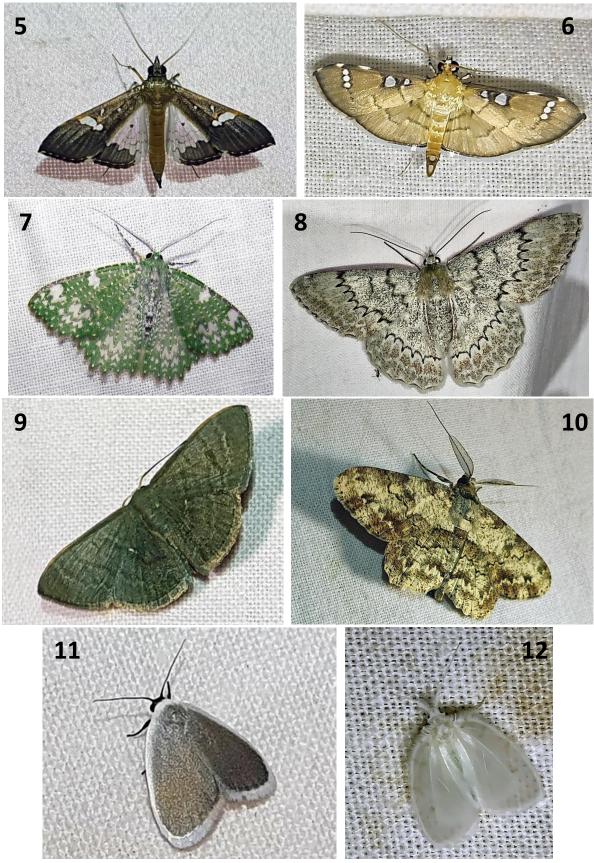
Siep Sinnema – figs 5, 7, 9, 10, 11, 19, 20, 21, 23, 29, 30. Rob de Vos – figs 6, 8, 12, 13, 14, 15, 16, 17, 18, 22, 24, 25, 26, 28. Mehd Halaouate – fig. 27.

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Figs 5-12. Common moths from Nimbokrang. Fig. 5. Maruca vitrata; fig. 6. Samea castoralis; fig. 7. Eucyclodes albifusa; fig. 8. Pingasa lariaria; fig. 9. Symmacra solidaria; fig. 10. Cleora repetita; fig. 11. Acco albicosta; fig. 12. Chamaita niveata.



Figs 13-20. Common moths from Nimbokrang. Fig. 13. Darantasia caerulescens; fig. 14. Graphosia polylophota ♂; fig. 15. G. polylophota ♀; fig. 16. Heterallactis chrysopera; fig. 17. Orieosia hypopolius; fig. 18. Trischalis $iridescens; {\bf fig.~19.}\ Pangrapta\ ochraceum; {\bf fig.~20.}\ Dy saethria\ quadricau data.$





Figs 21-28. Rare moths from Nimbokrang. Fig. 21. *Tonica cyanodoxa*; fig. 22. *Pacificulla heliocharis*; fig. 23. *Darantasia cyanoxantha*; fig. 24. *Darantasia nigrifimbria*; fig. 25. *Macaduma micans*; fig. 26. *Trischalis splendens*; fig. 27. *Cocytia durvillii*; fig. 28. *Pinacia novoguineana*.



Figs 29-30. Rare moths from Nimbokrang. Fig. 29. Micromelalopha castanea; fig. 30. Eupanacra micholitzi.

Table 1. Checklist of the recorded moths in Nimbokrang

family	subfamily	genus	species	author spec	year auth.
Cossidae	Zeuzerinae	Duomitus	ceramica	Walker	1865
Crambidae	Acentropinae	Margarosticha	papuensis	Munroe	1959
Crambidae	Acentropinae	Nymphicula	nigristriata	Hampson	1917
Crambidae	Pyraustinae	Calamochrous	albipunctalis	Kenrick	1907
Crambidae	Pyraustinae	Hyalobathra	phoenicozona	Hampson	1896
Crambidae	Pyraustinae	Pagida	salvalis	Walker	1859
Crambidae	Spilomelinae	Arthroschista	tricoloralis	Pagenstecher	1888
Crambidae	Spilomelinae	Cirrhochrista	brizoalis	Walker	1859
Crambidae	Spilomelinae	Coelorhyncidia	nitidalis	Hampson	1907
Crambidae	Spilomelinae	Cotachena	aluensis	Butler	1887
Crambidae	Spilomelinae	Glyphodes	caesialis	Walker	1859
Crambidae	Spilomelinae	Glyphodes	multilinealis	Kenrick	1907
Crambidae	Spilomelinae	Glyphodes	pulverulentalis	Hampson	1896
Crambidae	Spilomelinae	Herpetogramma	desmioides	Hampson	1899
Crambidae	Spilomelinae	Heterocnephes	scapulalis	Lederer	1863
Crambidae	Spilomelinae	Lipararchis	tranquillalis	Lederer	1863
Crambidae	Spilomelinae	Maruca	vitrata	Fabricius	1787
Crambidae	Spilomelinae	Metoeca	foedalis	Guenée	1854
Crambidae	Spilomelinae	Nevrina	procopia	Stoll	1781
Crambidae	Spilomelinae	Nosophora	flavibasalis	Hampson	1898
Crambidae	Spilomelinae	Pachynoa	xanthochyta	Turner	1933
Crambidae	Spilomelinae	Parotis	caeruleiceps	Hampson	1912
Crambidae	Spilomelinae	Parotis	marginata	Hampson	1893
Crambidae	Spilomelinae	Patania	nigriflava	Swinhoe	1894
Crambidae	Spilomelinae	Pycnarmon	jaguaralis	Guenée	1854
Crambidae	Spilomelinae	Samea	castoralis	Walker	1859
Crambidae	Spilomelinae	Trigonobela	perfenestrata	Butler	1882
Crambidae	Spilomelinae	Tyspanodes	creaghi	Hampson	1898
Depressariidae		Tonica	cyanodoxa	Meyrick	1924
Drepanidae	Drepaninae	Oreta	jaspidea	Warren	1896
Drepanidae	Drepaninae	Tridrepana	lunulata	Butler	1887
Erebidae	Aganainae	Agape	chloropyga	Walker	1854
Erebidae	Aganainae	Asota	heliconia	Linnaeus	1758
Erebidae	Arctiinae	Acco	albicosta	Hampson	1914

Erebidae	Arctiinae	Byrsia	dotata	Walker	1865
Erebidae	Arctiinae	Chamaita	niveata	Rothschild	1913
Erebidae	Arctiinae	Chrysallactis	aureorubra	Hampson	1900
Erebidae	Arctiinae	Chrysomesia	barbicostata	Hampson	1903
Erebidae	Arctiinae	Cyme	miltochristaemorpha	Rothschild	
Erebidae	Arctiinae	Cyme	phryctopa	Meyrick	1889
Erebidae	Arctiinae	Cyme	pyraula	Meyrick	1886
Erebidae	Arctiinae	Cyme	sexualis	Felder	1864
Erebidae	Arctiinae	Cyme	suavis	Pagenstecher	1886
Erebidae	Arctiinae	, Darantasia	caerulescens	Druce	1898
Erebidae	Arctiinae	Darantasia	cyanoxantha	Hampson	1914
Erebidae	Arctiinae	Darantasia	nigrifimbria	De Vos	2019
Erebidae	Arctiinae	Garudinodes	trizona	Hampson	1911
Erebidae	Arctiinae	Graphosia	polylophota	Hampson	1914
Erebidae	Arctiinae	Gymnasura	pallida	Rothschild	1913
Erebidae	Arctiinae	Heterallactis	chrysopera	Hampson	1914
Erebidae	Arctiinae	Integrivalvia	decussa	Bethune-Baker	1910
Erebidae	Arctiinae	Lambula	laniafera	Hampson	1900
Erebidae	Arctiinae	Macaduma	bipunctata	Bethune-Baker	1904
Erebidae	Arctiinae	Macaduma	foliacea	Rothschild	1912
Erebidae	Arctiinae	Macaduma	micans	Hampson	1900
Erebidae	Arctiinae	Neoscaptia	flavicaput	Rothschild	
Erebidae	Arctiinae	Nishada		Walker	1912 1864
	Arctiinae		impervia	Rothschild	
Erebidae		Orieosia	hypopolius		1916
Erebidae	Arctiinae	Parascaptia	biplagata	Bethune-Baker	1908
Erebidae	Arctiinae	Scoliacma	suzannae	De Vos	2008
Erebidae	Arctiinae	Stenoscaptia	fovealis	Hampson	1903
Erebidae	Arctiinae	Stictane	bipunctata	Gaede	1925
Erebidae	Arctiinae	Teulisna	bipunctata	Walker	1866
Erebidae	Arctiinae	Trischalis	splendens	De Vos & Van Mastrigt	2007
Erebidae	Arctiinae	Trischalis	subaurana	Walker	1863
Erebidae	Arctiinae	Trischalis	iridescens	Rothschild	1913
Erebidae	Arctiinae	Trischalis	zahrae	De Vos & Van Mastrigt	2007
Erebidae	Boletobiinae	Attonda	adspersa	Felder & Rogenhofer	1874
Erebidae	Boletobiinae	Metaemene	atrigutta	Walker	1862
Erebidae	Boletobiinae	Prolophota	acutiangulatalis	Rothschild	1915
Erebidae	Calpinae	Eudocima	phalonia	Linnaeus	1763
Erebidae	Erebinae	Cocytia	durvillii	Boisduval	1828
Erebidae	Erebinae	Erygia	precedens	Walker	1857
Erebidae	Erebinae	Mocis	trifasciata	Stephens	1830
Erebidae	Erebinae	Thyas	miniacea	Felder	1874
Erebidae	Erebinae	Trigonodes	hyppasia	Cramer	1779
Erebidae	Herminiinae	Adrapsa	geometroides	Walker	1858
Erebidae	Herminiinae	Insolentipalpus	phaeocrota	Hampson	m.s.
Erebidae	Herminiinae	Pinacia	novoguineana	Bethune-Baker	1906
Erebidae	Herminiinae	Simplicia	concisalis	Walker	[1866]
Erebidae	Hypeninae	Hypena	laesalis	Walker	1859
Erebidae	Pangraptinae	Episparis	angulatilinea	Bethune-Baker	1906
Erebidae	Pangraptinae	Focillodes	uncinata	Pagenstecher	1900
Erebidae	Pangraptinae	Pangrapta	ochraceum	Bethune-Baker	1908
Geometridae	Desmobathrinae	Ozola	hollowayi	Scoble & Sommerer	1988
Geometridae	Ennominae	Capasa	pseudoincensata	Walker	[1863]
Geometridae	Ennominae	Cleora	repetita	Butler	1882
Geometridae	Ennominae	Ectropis	bhurmitra	Walker	1860
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Geometridae	Ennominae	Fascellina	papuensis	Warren	1898
Geometridae	Ennominae	Racotis	maculata	Lucas	1890
Geometridae	Geometrinae	Aeolochroma	prasina	Warren	1896
Geometridae	Geometrinae	Albinospila	syntyche	Prout	1913
Geometridae	Geometrinae	Eucyclodes	absona	Warren	1896
Geometridae	Geometrinae	Eucyclodes	albifusa	Warren	1906
Geometridae	Geometrinae	Idiochlora	celataria	Walker	1866
Geometridae	Geometrinae	Maxates	orthodesma	Lower	1894
Geometridae	Geometrinae	Pingasa	angulifera	Warren	1896
Geometridae	Geometrinae	Pingasa	lariaria	Pagenstecher	1900
Geometridae	Geometrinae	Thalassodes	dorsilinea	Warren	1903
Geometridae	Geometrinae	Thalassodes	dorsipunctata	Warren	1903
Geometridae	Sterrhinae		· ·	Warren	1896
		Antitrygodes	parvimacula		
Geometridae	Sterrhinae	Symmacra	solidaria	Guenée	1858
Lacturidae		Anticrates	metreta	Turner	1903
Lacturidae		Lactura	anaemoptila	Diakonoff	1955
Lecithoceridae	Crocanthinae	Aprosoesta	cyclopsana	Park _	2011
Lecithoceridae	Crocanthinae	Crocanthes	pancala	Turner	1919
Lecithoceridae	Crocanthinae	Gonaepa	pyrochorda	Meyrick	1910
Lecithoceridae	Crocanthinae	Pacificulla	Heliocharis	Diakonoff	1954
Lecithoceridae	Lecithocerinae	Lecithocera	fascitiala	Park	2012
Lecithoceridae	Lecithocerinae	Lecithocera	staurophora	Meyrick	1931
Limacodidae		Hydroclada	kenricki	Bethune-Baker	1904
Limacodidae		Thosea	monoloncha	Meyrick	1889
Noctuidae	Noctuinae	Spodoptera	picta	Guérin-Méneville	1831
Nolidae	Westermanniinae	Urbona	tamsi	Van Eecke	1924
Notodontidae	Dicranurinae	Cascera	bella	Bethune-Baker	1904
Notodontidae	Notodontinae	Schoutenia	undulata	Rothschild	1917
Notodontidae	Pygaerinae	Micromelalopha	castanea	Rothschild	1915
Notodontidae	Scranciinae	Archigargetta	amydra	Turner	1903
Notodontidae	Scranciinae	Gargettiana	punctatissima	Bethune-Baker	1916
Notodontidae	Scranciinae	Ortholomia	moluccana	Felder	1861
Pyralidae	Epipaschiinae	Orthaga	phaeopteralis	Lower	1902
Pyralidae	Epipaschiinae	Macalla	nyctichroalis	Hampson	1916
Pyralidae	Dyralinae	Sacada	albioculalis	Hampson	1017
Sphingidae	Pyralinae	Jacada	aibioculalis	панцузин	1917
Spriirigiuae	•	Eupanacra	micholitzi	Hampson Rothschild & Jordan	1893
Sphingidae Sphingidae	Macroglossinae			Rothschild & Jordan	1893
Sphingidae	•	Eupanacra	micholitzi latreillii	Rothschild & Jordan MacLeay	1893 1827
Sphingidae Thyrididae	Macroglossinae Macroglossinae Siculodinae	Eupanacra Theretra Addaea	micholitzi latreillii syndesma	Rothschild & Jordan MacLeay Meyrick	1893 1827 1894
Sphingidae Thyrididae Thyrididae	Macroglossinae Macroglossinae Siculodinae Striglininae	Eupanacra Theretra Addaea Aglaopus	micholitzi latreillii syndesma carycina	Rothschild & Jordan MacLeay	1893 1827 1894 1915
Sphingidae Thyrididae Thyrididae Thyrididae	Macroglossinae Macroglossinae Siculodinae Striglininae Striglininae	Eupanacra Theretra Addaea Aglaopus Aglaopus	micholitzi latreillii syndesma carycina decussata	Rothschild & Jordan MacLeay Meyrick Turner Moore	1893 1827 1894 1915 1883
Sphingidae Thyrididae Thyrididae Thyrididae Thyrididae	Macroglossinae Macroglossinae Siculodinae Striglininae Striglininae Striglininae	Eupanacra Theretra Addaea Aglaopus Aglaopus Aglaopus	micholitzi latreillii syndesma carycina decussata scintillans	Rothschild & Jordan MacLeay Meyrick Turner Moore Warren	1893 1827 1894 1915 1883 1905
Sphingidae Thyrididae Thyrididae Thyrididae Thyrididae Thyrididae	Macroglossinae Macroglossinae Siculodinae Striglininae Striglininae Striglininae Striglininae	Eupanacra Theretra Addaea Aglaopus Aglaopus Aglaopus Banisia	micholitzi latreillii syndesma carycina decussata scintillans fenestrifera	Rothschild & Jordan MacLeay Meyrick Turner Moore Warren Walker	1893 1827 1894 1915 1883 1905 1863
Sphingidae Thyrididae Thyrididae Thyrididae Thyrididae Thyrididae Thyrididae	Macroglossinae Macroglossinae Siculodinae Striglininae Striglininae Striglininae Striglininae Striglininae	Eupanacra Theretra Addaea Aglaopus Aglaopus Aglaopus Banisia Striglina	micholitzi latreillii syndesma carycina decussata scintillans fenestrifera cinnamomea	Rothschild & Jordan MacLeay Meyrick Turner Moore Warren Walker Rothschild	1893 1827 1894 1915 1883 1905 1863 1915
Sphingidae Thyrididae Thyrididae Thyrididae Thyrididae Thyrididae Thyrididae Thyrididae Tortricidae	Macroglossinae Macroglossinae Siculodinae Striglininae Striglininae Striglininae Striglininae Striglininae Olethreutinae	Eupanacra Theretra Addaea Aglaopus Aglaopus Aglaopus Banisia Striglina Procoronis	micholitzi latreillii syndesma carycina decussata scintillans fenestrifera cinnamomea swinhoeiana	Rothschild & Jordan MacLeay Meyrick Turner Moore Warren Walker Rothschild Walsingham	1893 1827 1894 1915 1883 1905 1863 1915 1890
Sphingidae Thyrididae Thyrididae Thyrididae Thyrididae Thyrididae Thyrididae Tortricidae Uraniidae	Macroglossinae Macroglossinae Siculodinae Striglininae Striglininae Striglininae Striglininae Striglininae Olethreutinae Epipleminae	Eupanacra Theretra Addaea Aglaopus Aglaopus Aglaopus Banisia Striglina Procoronis Dysaethria	micholitzi latreillii syndesma carycina decussata scintillans fenestrifera cinnamomea swinhoeiana lilacina	Rothschild & Jordan MacLeay Meyrick Turner Moore Warren Walker Rothschild Walsingham Moore	1893 1827 1894 1915 1883 1905 1863 1915 1890 1887
Sphingidae Thyrididae Thyrididae Thyrididae Thyrididae Thyrididae Thyrididae Thyrididae Tortricidae	Macroglossinae Macroglossinae Siculodinae Striglininae Striglininae Striglininae Striglininae Striglininae Olethreutinae	Eupanacra Theretra Addaea Aglaopus Aglaopus Aglaopus Banisia Striglina Procoronis	micholitzi latreillii syndesma carycina decussata scintillans fenestrifera cinnamomea swinhoeiana	Rothschild & Jordan MacLeay Meyrick Turner Moore Warren Walker Rothschild Walsingham	1893 1827 1894 1915 1883 1905 1863 1915 1890