Butterflies of the Island Mioswar, Papua, Indonesia

Henk van Mastrigt¹⁾ & Euniche Ramandey²⁾

1)Kelompok Entomologi Papua, Kotakpos 1078, Jayapura 99010, INDONESIA Email: hevamas@yahoo.com.au 2) Jurusan Biologi FMIPA UNCEN, Jayapura 99358, INDONESIA Email: icka_ramday@yahoo.com

Suara Serangga Papua: 4 (3): 65-71

Abstract: An annotated inventory is presented of the Papilionoidea of Mioswar, based on a survey in August 2009.

Rangkuman: Daftar spesies disajikan dari Papilionoidea Pulau Mioswar, berdasarkan suatu survei pada bulan Agustus 2009, dilengkapi dengan sejumlah catatan.

Keywords: Cenderawasih Bay, Inventory.

Abbreviations

KSP - Koleksi Serangga Papua (Collection of Papuan Insects), Jayapura, Indonesia

MTD - Museum für Tierkunde Dresden, in Senckenberg Naturhistorische Sammlungen, Dresden (SNSD), Dresden, Deutschland

Background

In August 2009 Euniche Ramandey, John Kaize and Henk van Mastrigt visited the island Mioswar in the Teluk Cenderwasih (former Geelvink Bay), between Manokwari and the Wondama Peninsula (former Wandammen), in order to make an actual inventory of its butterfly fauna and also to pay special attention to Odonata. Besides these two groups Coleoptera and Plasmida also were collected.

Purpose

With this survey the team would like to present material for a comparison between the actual situation and those of more than a hundred years ago. In our efforts to get data about earlier visits it became clear that the Mysore Island –often used in literature and websites as old name for Mioswar– stands for the islands Supiori and Biak together (former Schouten eilands), and has nothing to do with Mioswar. This leads to the conclusion that no systematic data on butterflies from Mioswar are available, as A. B. Meyer on his trip in 1873, did not reach Mioswar and the results of the Pratt's in 1909 were not published as a whole.

Therefore the authors were forced to revise the purpose and only present the results of the recent survey in August 2009, with some notes.

Results

The results of the survey had two different sides. On one hand the team collected not less than 70 species of Papilionoidea, some interesting Odonata, including an undescribed species, which will be paid attention to, some Coleoptera and quite a few Phasmida of which up till now no data on identification are available, but surely will get attention in a later issue of SUGAPA. On the other hand some important species which the team hoped to get, were not recorded, not only *Ideopsis hewitsonii* which status is endemic on Supiori and Biak, but also some others as *Hypochrysops mioswara*, known as recorded or endemic on Mioswar.



Fig. 1. View from sea

Mioswar Island August 2009

no.	no.	names	no.	no.	names		
		Papilionidae			Nymphalidae		
1	1	Ornithoptera priamus	40	1	Tellervo assarica mioswara		
2	2	Graphium agamemnon	41	2	Ideopsis juventa		
3	3	Graphium codrus	42	3	Danaus affinis		
4	4	Graphium sarpedon	43	4	Euploea phaenareta		
5	5	Graphium eurypylus	44	5	Euploea netscheri		
6	6	Papilio aegeus	45	6	Euploea alcathoe		
7	7	Papilio ambrax	46	7	Euploea wallacei		
8	8	Papilio ulysses	47	8	Taenaris catops		
9	9	Papilio euchenor	48	9	Taenaris bioculatus		
		Pieridae	49	10	Taenaris sp.		
10	1	Eurema hecabe	50	11	Mycalesis duponchelii		
11	2	Eurema puella	51	12	Mycalesis phidon		
12	3	Appias ada	52	13	Mycalesis terminus		
13	4	Appias celestina	53	14	Mycalesis mehadeva		
		Lycaenidae	54	15	Mycalesis aethiops		
14	1	Dicallaneura decorata	55	16	Mycalesis shiva		
15	2	Pseudipsos eone	56	17	Hypocysta isis		
16	3	Philiris harterti	57	18	Melanitis leda		
17	4	Philiris moira	58	19	Elymnias agondas		
18	5	Arhopala herculina	59	20	Charaxes latona		
19	6	Arhopala madytus	60	21	Prothoe australis		
20	7	Arhopala philander	61	22	Cyrestis acilia		
21	8	Arhopala admete	62	23	Lexias aeropa		
22	9	Arhopala thamyras	63	24	Parthenos tigrina		
23	10	Hypolycaena phorbas	64	25	Pantoporia venilia		
24	11	Deudorix littoralis	65	26	Neptis praslini		
25	12	Anthene paraffinis	66	27	Phaedyma shepherdi		
26	13	Nacaduba nerina	67	28	Hypolymnas bolina		
27	14	Nacaduba cyanea	68	29	Hypolymnas deois		
28	15	Erysichton lineata	69	30	Yoma algina		
29	16	Danis danis	70	31	Cethosia cydippe		
30	17	Prosotas gracilis	71	32	Cupha prosope		
31	18	Catopyrops ancyra					
32	19	Jamides bochus					
33	20	Jamides celeno					
34	21	Jamides aetheralis					
35	22	Jamides coritus					
36	23	Catochrysops strabo					
37	24	Pithecops dionisius					
38	25	Everes lacturnus					
39	26	Euchrysops cnejus					

Table 1. Results on Papilionoidae on Mioswar, August 2009

In the last five years students of the Cenderawasih University surveyed islands in the Cenderawasih Bay, with the following results on butterflies:

Name island(s)	km ²	reported by:	Pa	Pi	Ly	Ny	TT
Numfor	391	Mambrasar	9	12	41	28	90
Supiori	659	Warikar	11	7	39	53	110
Biak	2,455	Daawia & Warikar	11	17	45	52	125
Japen	2,424	Wanma	12	7	47	63	129
Kep. Moor/Mamb	or	Kaluwur	13	10	44	41	108

Explatation: Pa = Papilionidae

Pi = Pieridae Ly = Lycaenidae Ny = Nymphalidae

TT = Total number of species

The result of 9 Papilionidae, 4 Pieridae, 26 Lycaenidae and 32 Nymphalidae, in total 71 species, is less than in the above mentioned surveys. However, taking in consideration the vastness of Mioswar Island (< 100 km²), relatively the result is quite good, although the Pieridae are far below the average.

Detailed notes

Generally spoken it can be said that no special species were recorded on Mioswar Island, however some notes will be useful to pay attention to the following notes. Within the Papilionidae the absence of *Troides oblongomaculata* and *Papilio demoleus* were remarkable. The last one –introduced in Papua about 1995– was observed at Rumberpon, an island west of Mioswar, closer to the mainland. The result on Pieridae was really poor. Only three species were collected, a fourth one was only observed *Appias ada*.

Within the Lycaenidae the large numbers of *Arhopala* sp. was very attractive, especially in slightly damaged primary forest. *A. herculina* was well presented with males and females. A male with a silverish border was never seen before. *Danis danis* (or *Danis* sp.) was also present in large numbers, but the varieties found need more study, as it is not impossible it will involve two different species. Finally, the record of *Deudorix littoralis* was the second one after a record from Sentani in 1975.

About the 32 Nymphalidae are no exciting remarks. *Tellervo assarica mioswara* was well presented, especially in secondary forest and at borders between forest and gardens. *Taenaris* sp. is not a new species to science, but (related to) *T. gorgo*, which is a quite rare record. Within the *Mycalesis* it will be some puzzling to separate the females of *M. shiva* and *M. aethiops* which are quite similar.

Final remarks

The visit to Mioswar Island is the first visit after a long period (about one hundred years), so the data obtained could be useful information. On the other hand it is obvious that the results of this survey are far from complete as the period was only seven days, the surveyed areas were very restricted because of the difficult infrastructure and the impervious dense forest and the weather circumstances were far from ideal. A survey of 2-4 weeks with visits to more areas will be a good purpose to get a better idea of the biodiversity on this island.

Acknowledgements

The authors want to express their thanks to Balai Taman Nasional Teluk Cenderawasih (BTNTC) which gave the permission and was facilitating our survey. Also many thanks to John Kaize, the third member of our team, for his accompany and help. Last but not least many thanks to the government and the local people of Mioswar who received the team and showed their hospitality during its stay.

References

- Ackery, P.R. 1987. The danaid genus *Tellervo* Lepidoptera Nymphalidae)—a cladistic approach Zoological Journal of the Linnean Society **89**: 203-274.
- Daawia & E.L. Warikar. 2008. Perbandingan Keragaman Kupu-kupu Famili Nymphalidae di Lereng Selatan dan Utara Gunung Bonsupiori – SUGAPA VII (Jan-Mar 2008): 8-11.
- Daawia & E.L. Warikar. 2008. Studi Perbandingan Keragaman Kupu-kupu Superfamili Papilionoidea di Pulau Supiori, Pulau Biak dan Kepulauan Padaido SUGAPA VII (Jan-Mar 2008): 12-14.
- D'Abrera, B. 1990. Butterflies of the Australian Region, 3rd ed.: 1-416. ISBM 0 9593639 1 2. Hillhouse, Melbourne & London.
- Kawulur, H. 2005. Keanekaragaman Superfamili Papilionoidea di Kepulauan Moor-Mambor, Kabupaten Nabire. Tesis untuk memenuhi persyaratan penyelesaian pendidikan S2 di Universitas Sam Ratulangi, Manado, Sulawesi Utara (not published).
- Kawulur, H. 2008. Penelitian Papilionoidea di Kepulauan Moor dan Mambor, Kabupaten Nabire – SUGAPA VII (Januari-Maret 2008): 9-11.
- Kirsch, Th. 1877. Beitrag zur Kenntniss der Lepidopteren-Fauna von Neu Guinea Mitteilungen aus dem Zoologischen Museum in Dresden 1(2): 102-133, Tafel III-V.
- Mambrasar, R.H. 2006. Keragaman Kupu-kupu Superfamili Papilionoidea di Pulau Numfor, Kabupaten Biak-Numfor: i-xv, 1-100. Skripsi diajukan kepada Universitas Cenderawasih untuk memenuhi salah satu persyaratan dalam menyelesaikan program Sarjana Biologi (not published).

Meyer, A.B. 1875. Auszüge auf den auf einer Neu Guinea-Reise im Jahre 1873 geführtes Tagebüchern von Adolf Bernhard Meyer als Erläuterung zu den Karten der Geelvink-Bai und des MacCluer Golfes. Dresden. p. 1-20.

Wanma, B. 2007. Magang di Kampung Ambaidiru, Serui – SUGAPA IV (April-Juni 2007): 3-6 Warikar, E.L. 2004. Keragaman kupu-kupu Superfamili Papilionoidea di sebelah Selatan Lereng Gunung Bonsupiori Pulau Supiori, Kabupaten Supiori: i-xv, 1-102. Skripsi diajukan kepada Universitas Cenderawasih untuk memenuhi salah satu persyaratan dalam menyelesaikan program Sarjana Biologi (not published).



Fig. 2. A nice grasshopper



Fig. 3. Arhopala thamyras on leaf



Fig. 4. A beach area



Fig. 5. A hilly site

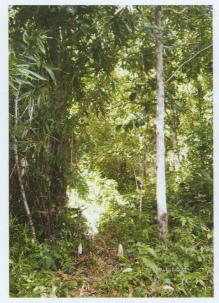


Fig. 6. Entrance to forest from beach



Fig. 7. The two authors in the field