

Some notes on the distribution of genus *Mynes* Boisduval, 1832 in the Provinces Papua and Papua Barat¹, Indonesia (Lepidoptera: Nymphalidae, Nymphalinae)

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Abstract: The distribution of *Mynes* sp. in Papua is updated with the first records of *Mynes anemone* from Papua Province, Indonesia, collected close to Kwerba, Mamberamo area and in the environment of Ambaidiru at the Island Japen. In addition the female of *Mynes anemone* is described and pictured.

Ikhtisar: Distribusi *Mynes* sp. di Papua diaktualkan dengan penangkapan pertama *Mynes anemone* di Provinsi Papua, Indonesia, yang ditemukan dekat Kwerba, wilayah Mamberamo dan di sekitar Ambaidiru di Pulau Japen. Selanjutnya betina *Mynes anemone* dideskripsi dan digambarkan.

Keywords: Distribution, *Mynes anemone*

Preface

It may seem unusual to publish an article on the genus *Mynes* (Nymphalidae), after many years studying *Delias* (Pieridae). However, *Mynes* specimens are well represented in Koleksi Serangga Papua (KSP) at Jayapura. *Mynes* species often occur in open areas in primary and secondary forest, especially along small creeks, the preferred habitat of many *Delias* species. Because of the similarity of the black and white upperside wing markings, my assistants have collected many specimens during the course of surveying *Delias* populations.

Recent records of *Mynes anemone*, including the hitherto undescribed female, are the main reason for this publication. Additional information is provided on the distribution and taxonomic status of all *Mynes* species in Papua Province, Indonesia.

¹ Former Nederlands Nieuw Guinea, became an Indonesian province in 1963, named Irian Barat; some years later it was renamed to Irian Jaya. In 2000 it became Papua, which now is divided in two provinces Papua Barat (the Birdshead area) and Papua (the eastern part).

Depositories

The abbreviations given below have been used throughout the text.

CI	- Conservation International
ENBP	- East New Britain Province
LIPI	- Lembaga Ilmu dan Pengetahuan Indonesia (The Indonesian Institute of Sciences)
KEP	- Kelompok Entomologi Papua (Entomological Group Papua)
KSP	- Koleksi Serangga Papua (Collection of Papuan Insects), Jayapura
NG	- New Guinea
NP	- Northern Province
PNG	- Papua New Guinea
NIP	- New Ireland Province
RAP	- Rapid Assessment Program
UK	- United Kingdom
UNCEN	- Universitas Cenderawasih at Jayapura
WNBP	- West New Britain Province

Introduction

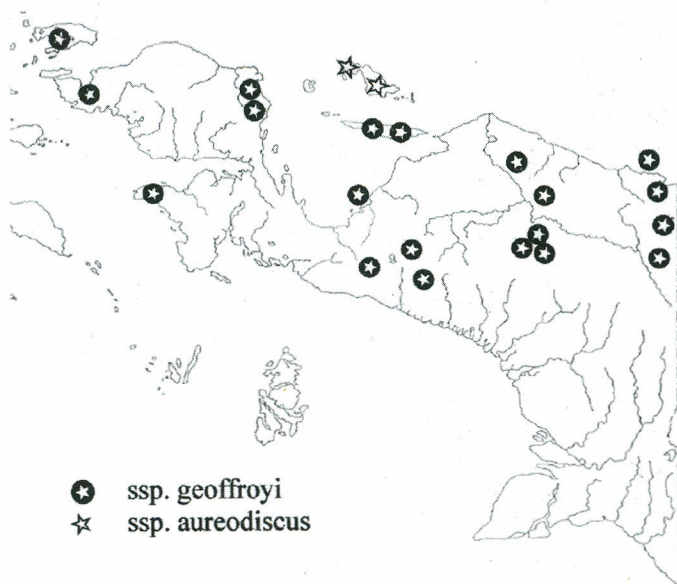
Seven species of the genus *Mynes* Boisduval, 1832 are known from the mainland of New Guinea and its surrounding islands, the Indonesian Provinces Papua and Papua Barat (former Dutch New Guinea) and Papua New Guinea. *M. eucosmetos* Godman & Salvin, 1879 is endemic in the Bismarck Archipelago, excluding the Admiralty Group (0-500 m), *M. katharina* Ribbe, 1898 is endemic to certain parts of the Bismarck Archipelago: New Britain (ENBP and WNBP), New Ireland and New Hanover (NIP) (0-1,000 m); *M. woodfordi* Godman & Salvin, 1888, is only known from the Solomon Islands, including Bougainville (0-1,000 m).

From the mainland of New Guinea four species of the genus *Mynes* have been described, *Mynes geoffroyi* (Guerin-Meneville, 1831), *M. anemone* Vane-Wright, 1976, *M. websteri* Grose-Smith, 1894 and *M. aroensis* Ribbe, 1900.

Distribution

Concerning the distribution of the above mentioned *Mynes* species, Parsons, 1999, noted: "*Mynes geoffroyi* has a very wide distribution, from Waigeo, Biak, mainland NG, various outlying islands in PNG and the east coast of Australia as far south as Ballina, New South Wales on an altitude from 0 to 1,200 m. It usually occurs in marginal secondary forest, especially alongside creeks. However, T. Kinahan (pers.

comm., 1982) noted that, in the Popondetta area (NP), the species often frequented the shade of houses located well away from major areas of forest. *Mynes anemone* is apparently endemic to the East Sepik Province of mainland PNG, on an altitude of 0-300 m in advanced secondary and primary forest and is generally and locally rare. *M. websteri* is endemic in the montane regions of mainland, is rare generally, but may be occasional locally; 300-2,000 m in marginal secondary and primary forest. *Mynes aroensis* is endemic to the central Cordillera of mainland NG, is rare generally, but may be occasional locally; 1,200-2,400 m in mid- to upper montane marginal secondary and primary forest”.

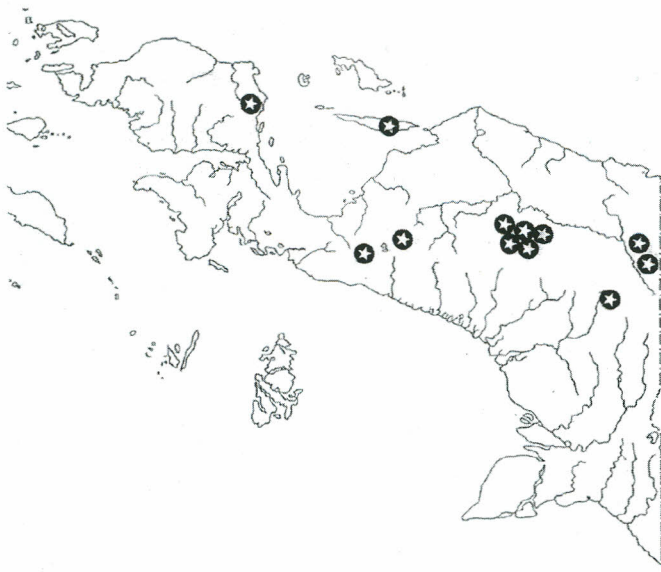


Map 1. Distribution *M. geoffroyi* in Papua, according to material in KSP

According to observations over various years and the present material in KSP the following can be stated.

Mynes geoffroyi is found in nearly all localities from which I collected material over more than thirty years including Fak-Fak, Raja Ampat, Sorong, Manokwari and Arfak Mountains, all in the Birdshead; the Moor and Mambor Islands, Timeepa (1,400 m), Homeyo (1,700 m), Timika, Kwerba, Dabra, Kanggime (1,600 m) Wamena

(1,600 m), Welesi (2,000 m), Sumbole, the Pantai Timur Islands, Jayapura, Ubrub, Borme, and the islands Supiori and Biak, where subspecies *aureodiscus* Joicey & Talbot, 1917 occurs, and on the Island of Japen (0-1,300 m). In Jayapura it often occurs in gardens in the center of town, which confirms the observations by T. Kinahan. It is noted that *M. geoffroyi* often occurs in Papua at elevations greater than 1,200 m above sea level, the maximum altitude in PNG mentioned by Parsons (1999). In the central mountain range it is found at altitudes up to 1,400 m in the Kobowre Mountains, at 1,700 m east from the Wissel lakes (Paniai) and from 1,600 to 2,000 m in the Baliem Valley. See map 1.



Map 2. Distribution *M. websteri* in Papua, according to material in KSP

Mynes websteri is found in nearly all mountainous areas, from 900 m upwards, and is never found in lowland areas. I have recorded the species from the Arfak Mts (1,200-1,400 m), Mapia area (1,400 m) in Kobowre Mts (= Weyland Mts), Homeyo (1,700 m), Kobakma, Kanggime, Bokondini and Sumbole (all between 800-1,400 m), Pass Valley (1,800 m), Langda (1,900 m), Borme (900 m) and Okbibab (1,900 m) in Star Mts and from Ambaidiru (800-1,300 m), Japen Island. See map 2.

Mynes aroensis is – like *M. websteri* – a mid- and upper forest species, and has been found in the central mountain range in various areas including; Mapia, Kobowre Mts (1,400 m), Mulia, Ilu (1,500-1,700 m), Kanggime, Kuyawagi (1,200-1,400 m) Pass Valley (1,800 m), Welesi (2,000 m), Nipsan (1,700 m), Langda (1,900 m), Borme (900 m) and Okbibab (1,900 m). See map 3.



Map 3. Distribution *M. aroensis* in Papua, according to material in KSP

Mynes anemone was previously thought to be endemic in the East Sepik Province. However, the results of recent expeditions have considerably extended the known range of this species. In the LIPI-CI survey to the Mambramo area in November-December 2005, a single specimen was recorded around the Hotice Camp (02°34.5'S; 138°39.10'E), near Kwerba, in the period 25.XI-4.XII.2005. This capture was the first record of *M. anemone* in Papua and in Indonesia and therefore represents an addition to the list of butterflies occurring in Indonesia. Less than a year later, in July 2006, a good series of specimens (5 males, 3 females) was recorded at the Island of Japen, at an altitude between 800 and 1,300 m above sea level, close to the village Ambaidiru (01°45,795'S; 136°09,406'E). Among these were the first records of females of the species. The collecting locations are illustrated on Map 4.



Map 4. Distribution *M. anemone* in Papua, according to material in KSP

Description of *Mynes anemone* female

Material examined: Prov. Papua, Kab. Sarmi, Hotice Camp, 02°34.5'S; 138°39.10'E, near Kwerba, 25.XI-4.XII.2005, CI-RAP, 1 ♂; K. S. P.; Prov. Papua, Kabupaten Yapen, Ambaidiru, 800-1,300 m, 0145,795'S; 136°09,406'E, 8-24.VII.2006, KEP/UNCEN, 5 ♂♂, 3 ♀♀, KSP.

Diagnosis

Upperside and underside of both wings female are more or less the same as male; only slightly elongate and some larger. Average wing length of males is 26 mm: 24 mm for the specimen from Kwerba and 26-27 mm for the specimens from Japen; the average wing length of females is 28.7 mm (28-29).

Male specimens from Kwerba and the Japen Island do not show significant differences from the East Sepik population therefore no new subspecific taxon is proposed.

Description of female

Forewing is more elongate and more rounded in apex than on male. Upperside greyish black with two small, round, white subapical dots, an elongate and oval white spots close to base and three larger white spots respectively in top of discal cell, in postmedian area close to costa and in subterminal area of cell M3. Hindwing with widening at M3, upperside greyish black with large white band from inner margin to subapical area with grey veins, followed by vague white spot close to apical border; a white spot along middle of costa; a series of greyish terminal and tornal spots, becoming more elongate close to tornus. Ground colour of underside both wings brownish black, not as dark as on male. Forewing with same spots as on upperside; in addition a white dot in base, an elongate white spot along radius, two small white spots subapically from postmedian spot, a row of seven thin costal, apical and terminal lines from R1 to CuA1, followed by two larger ones to tornus; with greyish to yellow coloration. Hindwing as upperside, but veins in white band less visible; five white spots along costa from base to apex; from lower grey part four rows of white spots and lines, varying in size, including a large yellow one with black dot in CuA1, separate from termen by brownish black line. Length for forewing: 28-29 mm (av. 28.7 mm).

List of Mynes species and subspecies from Papua, Indonesia

1. *M. geoffroyi* (Guérin-Méneville, 1831)

Figs. 1-8

Guérin-Méneville described *Nymphalis Geoffroyi* from Dutch New Guinea (= Papua, Indonesia) without mentioning district or locality. Various subspecies from inside and outside Papua are declared as synonyms, including from Papua: *doryca* Butler, 1873 from Dorey and *turturilla* Fruhstorfer, 1902 from Waigeo. Fruhstorfer, (1902, 1905) treated *M. guerini* besides *M. geoffroyi*. However, he later corrected this error in his contribution in Seitz (1912-1915) and mentioned *guerini* as synonym of *geoffroyi*. Fruhstorfer's yellow form *geoffroyi dertona* type is the male for his '*guerini*' *hesychia* dark form type female.

Besides *geoffroyi* (in Papua generally) only a single subspecies is known from Papua, Indonesia: *aureodiscus* Joicey & Talbot, 1917 from the Islands Supiori and Biak.

2. *M. websteri* Grose-Smith, 1894

Figs. 9-12

No subspecies *M. websteri* have been described from Papua, Indonesia. Two subspecies described from PNG, are declared to be synonyms by Parsons (1999).

3. *M. aroensis* Ribbe, 1900

Figs. 13-16

This species was originally described as *M. websteri* var. *aroensis* from the Aroa River in south east PNG. Joicey & Talbot (1922) described *M. halli* from the Menoo River, Kobowre Mts in Papua. D'Abrera (1971, 1977 and 1990) still mentioned *M. halli* from Kobowre Mts and Owgarrar River. However, Parsons (1999) treated it as a synonym of *aroensis*.

4. *M. anemone* Vane-Wright, 1976

Figs. 17-20

No subspecies *M. anemone* have been described. The specimens from Kwerba and the Japen Island do not show subspecific differences.

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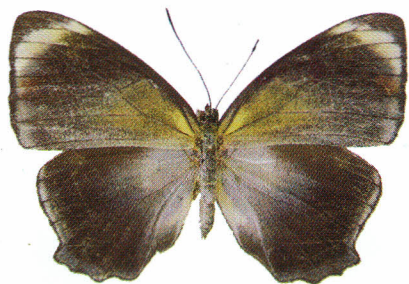
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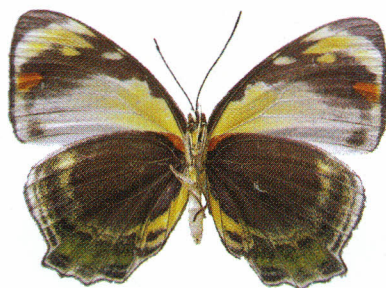


Figs. 1-4. *Mynes geoffroyi geoffroyi*. 1. ♂ upperside; 2. idem underside; 3. ♀ upperside; 4. idem underside.

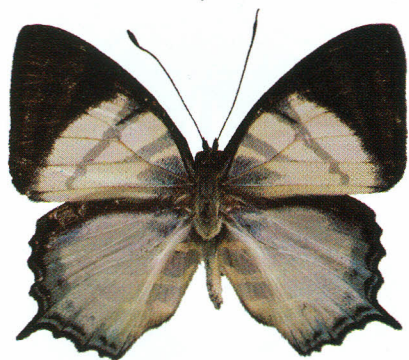
Figs. 5-6. *Mynes geoffroyi aureodiscus*. 5. ♂ upperside; 6. idem underside.



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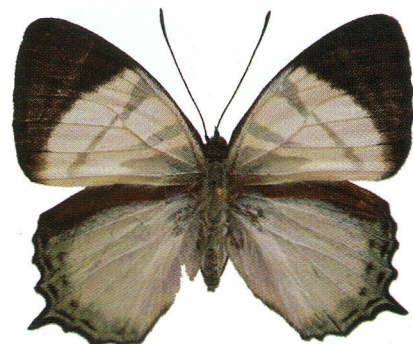
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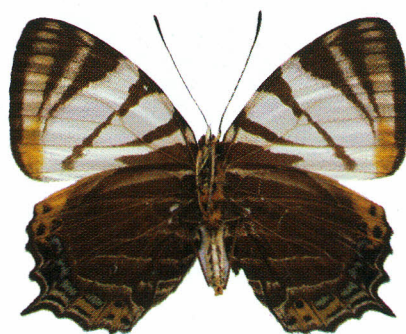
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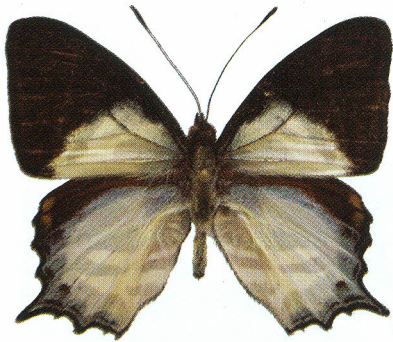


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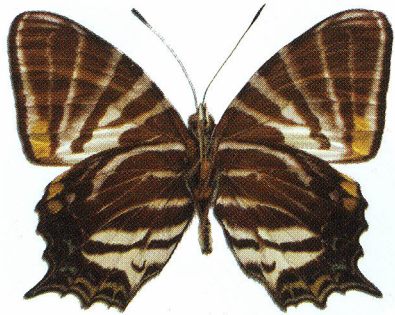


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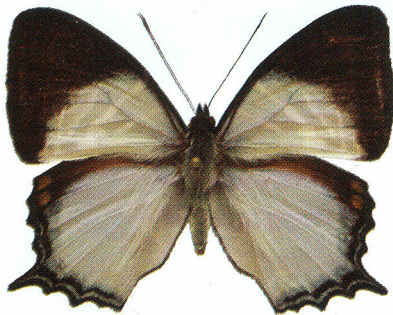
Figs. 7-8. *Mynes geoffroyi aureodiscus*. 7. ♀ upperside; 8. idem underside.
Figs. 9-12. *Mynes websteri*. 9. ♂ upperside; 10. idem underside;
11. ♀ upperside; 12. idem underside.



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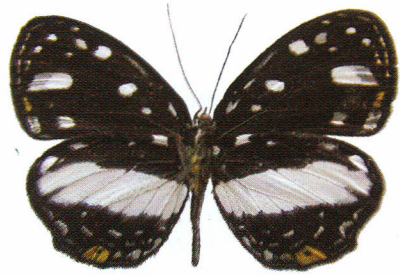


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Figs. 13-16. *Mynes aroensis*. 13. ♂ upperside; 14. idem underside; 15. ♀ upperside; 16. idem underside



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Figs. 17-20. *Mynes anemone*. 17. ♂ upperside; 18. idem underside. 19. ♀ upperside; 20. idem underside