

Some notes on *Papilio lorquinianus* C. & R. Felder, 1865 (Lepidoptera, Papilionidae) in Papua, Indonesia, with the description of a new subspecies

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Abstract: A new subspecies of *Papilio lorquinianus* C. & R. Felder, 1865 is described from the foothills of the Van Rees Mountains, Papua Province, Indonesia; additionally, a recent capture of *Papilio lorquinianus dewaro* Joicey & Talbot, 1922 is confirmed from the Jamur Lake area of Papua.

Rangkuman: Subspesies baru *Papilio lorquinianus* C. & R. Felder, 1865 dipertelakan dari kaki Pegunungan Van Rees, Provinsi Papua, Indonesia; selanjutnya kehadiran aktual *Papilio lorquinianus dewaro* Joicey & Talbot, 1922 di wilayah Danau Jamur, Papua, dibenarkan.

Keywords: Avona, Doberai Peninsula, Jamur, Mamberamo River, *Papilio lorquinianus avona*, *Papilio lorquinianus dewaro*, *Papilio lorquinianus roxanae*, Wandammen (Wondiboy) Mountains, West Papua Province, Weyland Mountains.

Introduction

Papilio lorquinianus C. & R. Felder, 1865 was originally described from Dodinga, on the north Moluccan island of Halmahera. This species is also present on other islands within Moluccas such as Ternate, Bacan (Batchian), Boano, Ceram, and reportedly Obi, in addition to several localities within West Papua Province (Birdshead). *Papilio lorquinianus* also occurs on the Papuan island of Yapen as ssp. *ochoco* Shimogori, 1997.

Papilio lorquinianus may be separated into two general groupings for study on the basis of wing patterning and geographical distribution. Examples from Moluccas are usually more robustly sized, and possess strongly ornamented colouration and

patterning of the verso wing surfaces; Papuan examples are consistently smaller in size, are poorly ornamented and darker coloured on the verso wing surfaces, and exhibit an increased metallic tendency with respect to the brilliancy of the greenish-blue colouration of the recto wing surfaces.

Three new subspecies of *Papilio lorquinianus* were recently described from West Papua by the senior author (Goode, 2011), indicating that possibilities existed with respect to furthering current knowledge of this butterfly. Upon communicating with the junior author in late 2011, it became apparent that both authors possessed examples of *Papilio lorquinianus* in their respective collections which were captured at Manggasi, a locality situated on the Mamberamo River; this river cuts through the Van Rees Mountains, a comparatively low altitude range situated in the northern sector of Papua Province. Specimens of this butterfly from Manggasi have been compared to examples of other subspecies of *Papilio lorquinianus* from West Papua and Papua Provinces, and are found to constitute a distinctive new Papuan population which is described herein as *Papilio lorquinianus manggasi*.

Depositories

The abbreviations given below have been used throughout the text.

DB - Private collection junior author, South Bend, U.S.A.

MG - Private collection senior author, Tettenhall, United Kingdom

NHM - National History Museum – former British Museum of Natural History (BMNH), London, United Kingdom

Description of *Papilio lorquinianus manggasi* ssp. nov.

(Figs 1-4)

Type material: Holotype ♂, Manggasi, 35 m, Mamberamo River, Van Rees Mountains, Papua Province, Indonesia, I-1988, MG (to be deposited into NHM); paratypes 2 ♂♂, same location as the holotype, DB.

Diagnosis: The colouration on the recto wing surfaces are mixed in tones of chocolate and dark brown, being plainer and less patterned than other West Papuan populations.

Description: Ground colour of the recto surfaces of the wings is flat velvety black; intense greenish-blue metallic colouration fills the median areas of both pairs of wings, extending slightly beyond the forewing cells and intruding slightly into the

subtornal androconial brands; the greenish-blue colouration extends to the postmedian area of the hindwings. The forewings are notably processed toward the tips; the hindwing tails are slightly pinched centrally and filled with a dusting of greenish-blue scales. The verso wing surfaces are mixed in tones of chocolate and dark brown, being less intense and well contrasted than other West Papuan populations, particularly ssp. *pratti* Goode, 2011 (Figs 5-6); the azure blue submarginal lunules bordering the verso hindwing edges are small and lightly edged on their posterior edges with orange-brown.

Female: Unknown.

Length of forewing: 59-61 mm.

Distribution: Presently recorded from Manggasi, Mamberamo River, Papua Province, Indonesia.

Etymology: This subspecies is named after the type locality, Manggasi.

Remarks: *Papilio lorquinianus manggasi* constitutes the north-eastern most population of this species yet recorded in Papua Province; this subspecies possesses a brighter green colouration than other subspecies from the same territory, with perhaps the exception of *Papilio lorquinianus roxanae* Goode, 2011; the wing shape and wing patterning is also slightly modified compared to other recorded populations, but appears closest to *Papilio lorquinianus pratti* Goode, 2011, the higher altitude phenotype from the Wandammen (Wondiwoi) Mountains.

Discussion

The Van Rees and Foja ranges are poorly prospected with respect to their respective insect faunas, and possess slightly reduced altitudinal ranges when compared to the the Jayawijaya and Maoke ranges situated to the south. The geographical population of *Papilio lorquinianus* in closest proximity to subspecies *manggasi* is *dewaro* Joicey and Talbot, 1922 which is recorded from higher altitudes within the Kobowre (Weyland) Mountains; however, the two populations are entirely distinctive from each other.

Recently, the junior author obtained a specimen of *Papilio lorquinianus* which was captured on 01-IV-1996 at Jamur, West Papua Province (Figs 7-8); at 90 metres altitude. Jamur is centrally located within the lowlands which comprise the isthmus connecting the Doberai Peninsula to Papua Province. This specimen clearly corresponds in all respects to *Papilio lorquinianus dewaro*, and to our knowledge represents the first confirmed record of this subspecies since the original type specimens were collected by members of the Pratt family within the Kobowre

Mountains in 1920. Of particular note is the marked disparity in altitude between Jamur at 90 metres and the altitudinal data of *dewaro*, indicated on the type labels as being between 914-1,067 metres in elevation.

The description of another distinctive population of *Papilio lorquinianus* from Papua Province further adds to our knowledge of this interesting butterfly within the Indonesian sector of the island of New Guinea, and further clarifies the relationships between currently recognized populations.

Acknowledgements

Blanca Huertas (NHM, London) for her generous assistance with regard to accessing and photographing examples of type specimens and other examples of *Papilio lorquinianus* held within the NHM collection; Roxana Ferllini for proofreading the manuscript.

References:

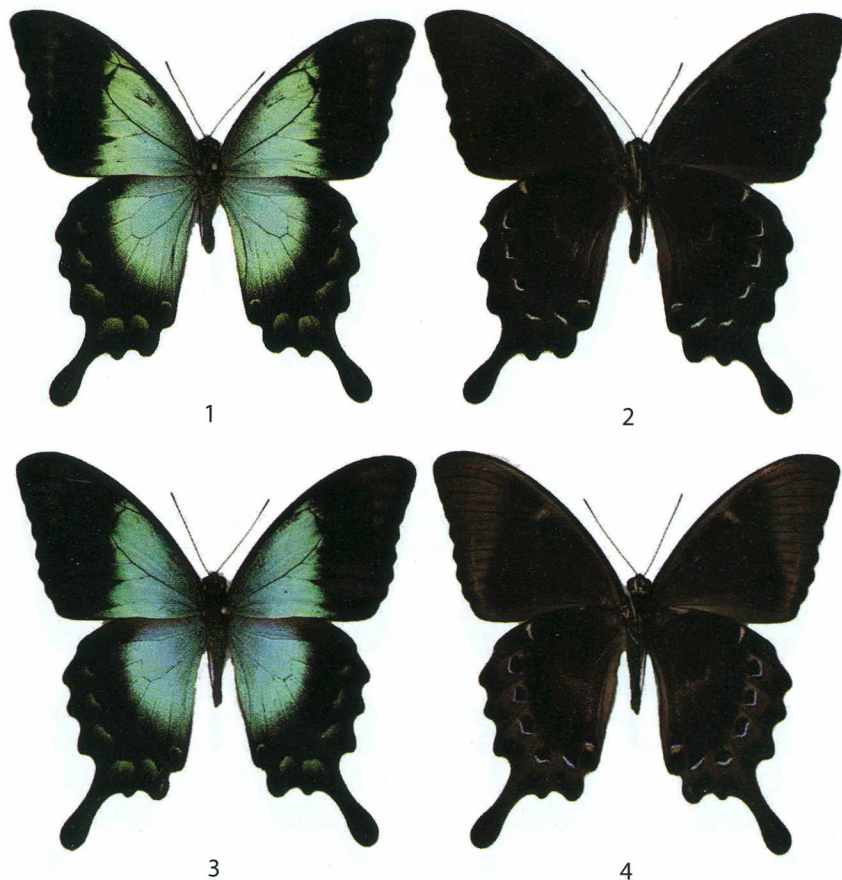
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ERRATA

SUGAPA 6(2) Table 2. (p. 48)

Should be read:

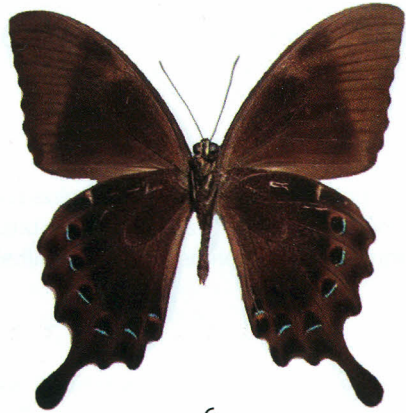
location	former taxa	proposed taxa
1. Foja Mts		<i>beehleri</i>
2. Snow Mts	<i>odilae</i>	<i>odilae</i>
3. Weyland Mts	<i>denigrata</i> TL	<i>nais</i>
4. Homeyo		<i>nais</i>
5. Kanggime		<i>nais</i>



Figs 1-4. *Papilio loquianus manggasi* **ssp. nov.** Paratypes from Manggasi, Papua, Indonesia:
1 & 3. uppersides; 2 & 4. undersides.



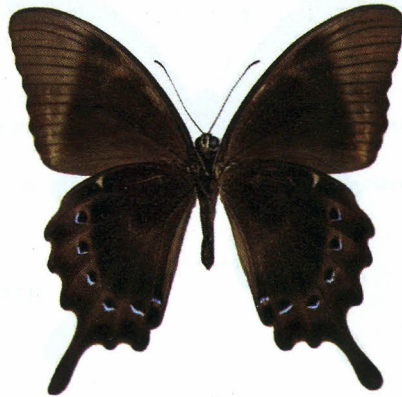
5



6



7



8

Figs 5-6. *Papilio lorquinianus pratti*: 5 upper side; 6. underside.
Figs 7-8. *Papilio lorquinianus dewaro*: 7. upper side; 8. underside.