

## Notes on *Liptena homeyeri* Dewitz, 1884, with description of a subspecies (Papilionoidea, Lycaenidae, Poritiinae)

Published online: 24 December 2022

DOI: <https://dx.doi.org/10.4314/met.v33i1.14>

Michel Libert 

8, rue Henry Barbet, 7600 Rouen, France. Email: [michelibert@free.fr](mailto:michelibert@free.fr)

Copyright © Lepidopterists' Society of Africa, Michel Libert

**Abstract:** It is shown that *Liptena homeyeri straminea* Stempffer *et al.*, 1974 is a synonym of *Liptena homeyeri* Dewitz, 1884, and subspecies *Liptena homeyeri bimacula* ssp. nov. is described.

**Key words:** Rhopalocera, Liptenini, taxonomy, Afrotropical region, Africa

**Citation:** Libert, M. 2022. Notes on *Liptena homeyeri* Dewitz, 1884, with description of a subspecies (Papilionoidea: Lycaenidae: Poritiinae). *Metamorphosis* 33: 127–129.

Peer reviewed

### INTRODUCTION

From d'Abrera (1980) to Williams (2022), authors follow Stempffer *et al.* (1974), and consider that there are two subspecies of *L. homeyeri*, the nominate one (southern DRC and N Zambia) and subspecies *straminea* Stempffer *et al.*, 1974 (Angola), with "black markings less extensive on both surfaces".

The existence of two subspecies is not questioned in this note, but the rediscovery at the MfN of the holotype of *L. homeyeri* shows that it has reduced drawings. It follows that *straminea* is a synonym of *homeyeri*, and that a new name must be given to the other subspecies, that in which the black markings are more extensive.

### METHODS AND MATERIALS

#### Abbreviations

DRC: Democratic Republic of the Congo

MfN: Museum für Naturkunde, Berlin, Germany.

MNHN: Muséum national d'Histoire naturelle, Paris, France.

MRAC: Musée Royal pour l'Afrique Centrale, Tervuren, Belgique.

NHM: Natural History Museum, London, United Kingdom.

### RESULTS

*Liptena homeyeri homeyeri* Dewitz, 1884 (Figs 2, 3<sup>1</sup>)

*Liptena homeyeri* Dewitz, 1884. Drei neue west-afrikanische Tagschmetterlinge. *Berliner Entomologische Zeitschrift*, 28(1): 188 (illustrated pl. 28, Figs 3, 3A).

*Liptena homeyeri* Dewitz, 1884 s. Aurivillius (1898: 278 ; 1918: 335)

Received: 4 October 2022

Accepted: 15 December 2022

Copyright: This work is licensed under the Creative Commons Attribution-NonCommercial-NoDerivs 4.0 International License.

To view a copy of this license, visit: <http://creativecommons.org/licenses/by-nc-nd/4.0/>

*Liptena homeyeri straminea* Stempffer *et al.* (1974, Figs 100 & 101, the only published illustrations of this subspecies), Mendès *et al.* (2019).

*Liptena homeyeri homeyeri* Dewitz, 1884, s. Stempffer *et al.* (1974: 170 and Figs 98 & 99); d'Abrera (1980, 2009), Berger (1981), Williams (2022).

**Holotype:** (no sex) Quango, Angola (v. *Mechow*), (n° 22637), MfN.

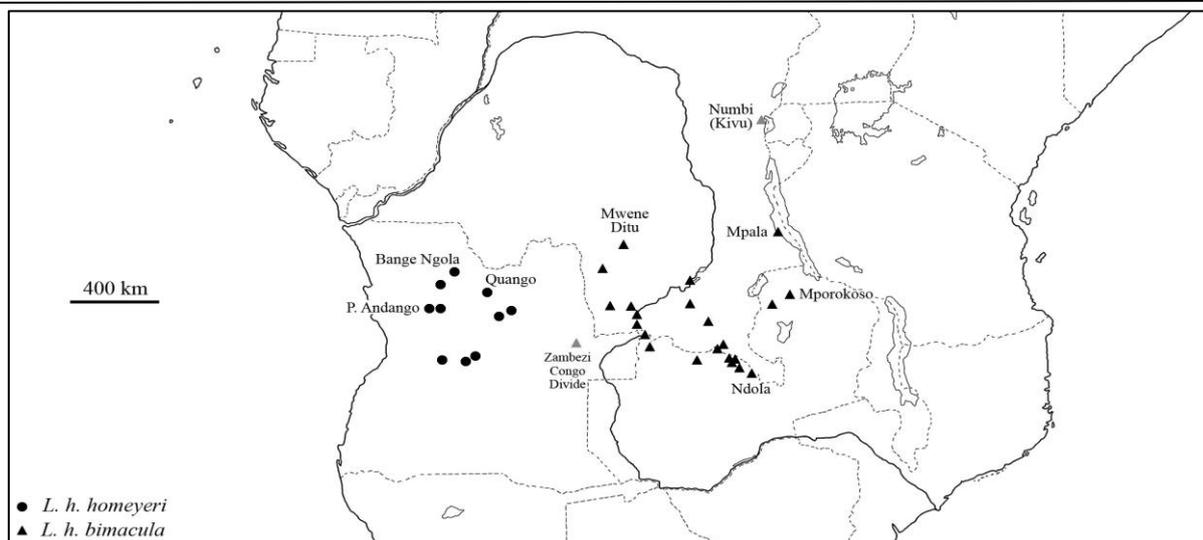
The description of *L. homeyeri* is only accompanied by the indication "Westafrika" and the illustration of a specimen whose sex is not specified. However, the type-locality of the other two species described by Dewitz in the same article is Quango, without further details. Aurivillius, who may have seen the type in Berlin, does indicate Quango (Aurivillius, 1898: 278), but he places this locality in "Congogebiet", which probably explains why he then gives for *L. homeyeri* the distribution "From the south of the Congo to Rhodesia" (Aurivillius, 1918: 335, pl. XIIIi).

It is likely that Stempffer *et al.* (1974) were not aware of these data, since they used Dewitz's indication ("Westafrika") and include Quango in the list of localities where the subspecies *straminea* was observed.

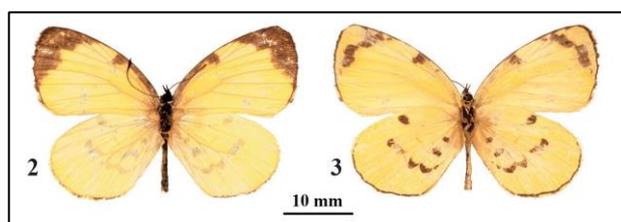
Examination of the holotype of *L. homeyeri* shows it is a female with reduced black markings. It bears a 'Typus' label and three other labels indicating respectively 1) the locality of capture (Quango) and the name of the collector (v. *Mechow*); 2) *Homeyeri* Dwtz.; 3) the reference to the description [*Homeyeri* Dwtz. Berliner ent. Zeit. 1884' and 'XXVIII' (the number of the plate on which *L. homeyeri* is illustrated)]. These indications correspond to the description.

Besides the type, there are also at the MfN three males with a small tag that reads "Westaf. Küste-Pogge". The type-locality is therefore Quango; this name can refer to a river that flows in eastern Angola and forms part of its border with the DRC, as well as to several Angolan localities, one of which is located on the Quango River. The dedication of *Pseudacraea gottbergi* Dewitz, which is described in the

<sup>1</sup> – The male illustrated is a paratype of *L. homeyeri straminea* Stempffer *et al.*, 1974 (MNHN, coll. Stempffer).



**Figure 1** – Distribution of *L. homeyeri* subspecies. Grey dots indicate localities that are problematic for reasons given in the text.



**Figures 2 & 3** – *Liptena homeyeri homereyi* ♂ Cucumbi, Angola: 2 recto; 3 verso (see footnote on p. 127)

same article as *L. homeyeri*, suggests that Quango designates the river, but it is the town that is shown on the map (9°08' S, 18°03' E). The distribution map (Fig. 1), which was made by compiling data from the literature, shows that the nominate subspecies is an Angolan endemic.

The holotype of subspecies *straminea* was a male from Bange Ngola (8°25' S, 16°34' E), about 250 km northwest of Quango, Angola. The description is completed by a list of 36 paratypes, with their capture localities (ten with the type-locality); one paratype is a male from Quango, another is the female allotype of *straminea*. These ten localities are shown on the map; Mendès & Bivar (2019: 184) do mention *L. homeyeri* (ssp. *straminea*), but they do not indicate any locality.

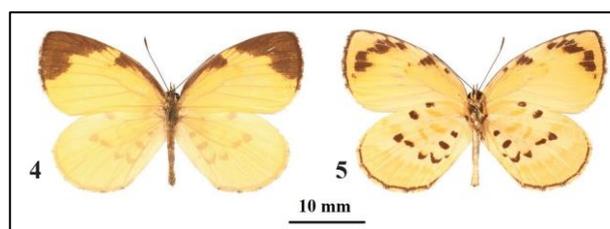
Illustrations of the types of *straminea* Stempffer *et al.* (1974, pl. 6, Figs. 100, 101) show that they are similar to that of *L. homeyeri* and its type-locality is included in the range of *L. homeyeri*. There is therefore no doubt that *straminea* is a synonym of *L. homeyeri* (**syn. nov.**). The eastern subspecies of *L. homeyeri*, which is named *bimacula*, is described below.

***Liptena homeyeri bimacula* ssp. nov.** (Figs 4, 5)

*Liptena homeyeri homereyi* Dewitz, 1884, s. Stempffer *et al.* (1974: 170 and Figs 98, 99) ; d’Abrera (1980, 2009); Berger (1981) ; Heath *et al.* (2002), Mendès *et al.* (2019); Williams (2022).

**Holotype:** ♂ Kafakumba, Katanga, DRC, xi.1937, MNHN.

**Allotype:** ♀ Kolwezi, Katanga, DRC, 20.iii.1963, MNHN.



**Figures 4 & 5** – *Liptena homeyeri bimacula* ssp. nov. Holotype ♂ Kafakumba, Katanga, DRC: 4 recto; 5 verso

**Description**

This subspecies is characterised by the greater extension of black markings. As for the apical area of forewings, the larger extension probably results, at least partly, of the larger size of *bimacula* but, along the costal edge, the black line and its projection are also more marked.

On the hindwing underside, the presence of an additional black spot in space 8, along the costal edge, is diagnostic (hence the name given to this subspecies); Stempffer *et al.* (1974: 171) obviously noticed the difference, as they wrote that there is only one spot in all the specimens of *L. h. straminea*.

**Distribution**

Most specimens were collected in southern DRC and northern Zambia. Regarding DRC, Berger (1981: 242) indicates (for *L. h. homeyeri*) “Kivu, Sankuru, Lualaba (common) and Haut Shaba (very common)”, which reflects the MRAC collection. In Kapanga, where long series of many butterfly species were collected, only six specimens were caught and, northwards, a single specimen was observed in Sankuru (Mwene Ditu, NE of Kapanga). The presence of *L. homeyeri* in Kivu is surprising, but one specimen has a handwritten label indicating ‘Kivu: Numbi’. This locality situated south of Goma is very far from the rest of the range (about 600 km north of M’Pala), and it is doubtful that *L. homeyeri* is really established in this high altitude region (‘Numbi’ is represented by a grey triangle on Fig. 1).

Stempffer *et al.* also mention many localities in the south

of DRC, but few could be located. They place M'Pala in Tanzania, whereas this locality is in the DRC, on the western shore of Lake Tanganyika, and *L. homeyeri* does not occur in Tanzania [Kielland (1990) does not mention it], but the indication 'Tanzania' is taken over by Berger.

Regarding Zambia, localities are those given by Stempffer *et al.* [1974: 171 (for Rhodesia)] and by Heath *et al.* (2002: 86) – Ndola in the south and Mporokoso in the east represent the limits of the distribution of ssp. *bimacula*. It is very likely absent from Malawi, since Gifford (1965) does not mention *L. homeyeri*, and Steve Collins (pers. com.) has confirmed it has not been observed there recently.

Westward, the limit is in eastern Angola, where Barns collected five males that Stempffer *et al.* attributed to the nominate subspecies in “Zambezi-Congo Divide; Province of Moxico”. This locality, which is not mentioned by Crawford-Cabral & Mesquitela (1989), could not be located precisely (grey dot on the map, approx. 11°30'S, 21°30' E).

## LITERATURE CITED

- AURIVILLIUS, C. 1898–99. Rhopalocera Aethiopica. Die Tagfalter des Aethiopischen Faunengebietes: eine Systematische-Geographische Studie. *Kunliga Svenska Vetenskapsakademiens Handlingar*, **31(5)**: 1–561, 6 pl.
- AURIVILLIUS, C. 1918. Genre *Liptena*, in SEITZ, (traduction française): *Les Macrolépidoptères du Globe*, IVème partie : *Les Macrolépidoptères de la Faune Ethiopienne* **13**: *Diurnes Ethiopiens*.
- BERGER, L.A. 1981. *Les papillons du Zaïre*. Weissenbruch, Bruxelles, 543 pp., 213 plates.
- CRAWFORD-CABRAL, J. & MESQUITELA, L.M. 1989. *Índice toponímico das colheitas zoológicas em Angola. Estudos, ensaios e documentos* **151**: 1–206. Instituto de Investigação científica tropical, Lisboa.
- D'ABRERA, B. 1980. *Butterflies of the Afrotropical Region*. Lansdowne, Melbourne, 593 pp.
- D'ABRERA, B. 2009. *Butterflies of the Afrotropical Region*. (New and revised edition). *Part III, Lycaenidae, Riodinidae*. Hill House, Melbourne, London, 260 pp.
- GIFFORD, D. 1965. *A list of the butterflies of Malawi*. 151 pp., 9 pl. Blantyre.
- HEATH, A., NEWPORT, M.A. & HANCOCK, D. 2002. *The Butterflies of Zambia*. 137 pp. ABRI and Lepidopterist's Society of Africa.
- KIELLAND, I. 1990. *Butterflies of Tanzania*, Hill House, Melbourne, 363 pp.
- MENDES, L.F., BIVAR-DE-SOUZA, A. & WILLIAMS, M.C. 2019. *The Butterflies and Skippers (Lepidoptera: Papilionoidea) of Angola: an updated checklist*. In: Huntley, B.J., Russo, V., Lages, F. & Ferrand, N. (Eds). 2019: 167–203. *Biodiversity of Angola. Science & Conservation: A Modern Synthesis*. Springer Open.
- STEMPFER, H., BENNETT, N.H. & MAY, S.J., 1974. A Revision of some groups of *Liptena* Westwood (Lepidoptera: Lycaenidae). *Bulletin of the British Museum (Natural History)* (Entomology). **30(2)**: 109–181, 6 pl.
- WILLIAMS, M.C. 2022. Afrotropical Butterflies: Genus *Liptena*.

<https://metamorphosis.org.za/articlesPDF/1171/215%20Genus%20Liptena%20Westwood.pdf>.