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NOTE

The types of *Liptena augusta* Suffert, 1904 and *Liptena subundularis* (Staudinger, 1892) (Papilionoidea: Lycaenidae: Poritiinae)

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Abstract: Designation of a lectotype for *Liptena augusta* Suffert, 1904 and rediscovery of the syntypes of Liptena subundularis (Staudinger, 1892) at the Berlin Museum.

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INTRODUCTION

The bombings of the Second World War led to the destruction of part of the German entomological collections, notably in the museums of Hamburg and Berlin. Many types were among the destroyed specimens, and subsequent authors have often had to designate neotypes [see for example the case of *Liptena amabilis* Schultze in Libert (2018)].

In some cases, however, presumed missing types have been rediscovered, resulting in more or less important changes in the systematics of the concerned taxa. This is the case with *Liptena augusta* Suffert, 1904 and *Liptena subundularis* (Staudinger, 1892), two species whose histories are related, and are examined below.

Liptena augusta Suffert, 1904

The description of *L. augusta* is based on four specimens collected in Cameroon, one male from Lolodorf (*leg. Conradt*) and three females from Bipindi (*leg. Zenker*) (Suffert, 1904).

Stempffer *et al.* (1974: 138) considered that the four syntypes, which had been deposited in the Berlin museum, were "destroyed in the last war", and designated a male neotype from Bitje (illustrated pl. 3, Figs 41 & 44). However, a visit to the Berlin museum made it possible to find the complete type-series, which invalidates this neotype (Code of Zoological Nomenclature, Article 75.8).

Moreover, the four syntypes do not belong to the same species, and a lectotype must be designated. The male from Lolodorf is most probably the specimen illustrated by Druce (1910, pl. III, Figs 2 and 2a); in his commentary, Druce synonymised *augusta* with *alluaudi* Mabille, 1890, but Stempffer (1957: 212) showed that the two species are quite distinct and reinstated *L. augusta* (his reasoning is repeated in Stempffer *et al.*, 1974: 136). The male from Lolodorf is designated as a lectotype (**present designation**); it is illustrated, with the original labels (Fig. 1).

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Lectotype: \circlearrowleft , Lolodorf, S Cameroun, 29.vii.1895, (S. Conradt); genitalia Libert, 120-030; Museum für Naturkunde, Berlin.

Thanks to Viola Richter, of the Berlin Museum, this male could be dissected, and its genitalia (Figs 2A to 2C) are identical to those illustrated by Stempffer, 1957 as Fig. 4. The same figure is used by Stempffer *et. al.*, 1974 (Fig. 18), which suggests that the male dissected by Stempffer is the one designated as a neotype in the same publication; this figure is also reproduced here (Fig. 2D).

The designation of the male from Lolodorf as a lectotype preserves the stability of the nomenclature. It would have been quite different if the choice had been one of the females from Bipindi, since these are actually females of *L. subundularis* (Staudinger, 1892), and it would have been necessary to find a replacement name for *augusta*, all with significant risks of confusion.

This is also why it is propitious that the decision by Schultze (1923: 1179) to synonymyse *augusta* with *subundularis* has fallen into disuse, which is perfectly justified since Schultze overlooked the fact that the male and the females of the typeseries did not belong to the same species. It is however preferable to emphasise it [the same error is found in Stempffer *et. al.* when they contest Schultze's decision (p. 156), but they could not avoid it as they had not seen the type-series of *L. augusta*].

Liptena subundularis (Staudinger, 1892)

Stempffer (1957) attributed the three females from Bipindi to *L. augusta* when he reinstated this species, but they are clearly females of *L. subundularis*.

The description of this species is based on "several" males from Gabon (Ogowe, *leg. Mocquerys*) and one female from Cameroon [Victoria (now Limbe), *leg. Teusz*]. Here again, Stempffer *et al.* (1974: 156) considered that "Staudinger's types of [*L subundularis*] were mostly destroyed in the last war". But they found in the collection of the London Museum a male collected in Ogowe by Mocquerys "which is believed to be one of the original series" and which bears an "Origin" label [like those that Staudinger associated with his typical material], and they designated it as a lectotype. Five of Staudinger's syntypes have also been rediscovered in the Berlin Museum [four males from Ogowe and the female from Victoria).

Figure 1 – Male lectotype of *Liptena augusta* with labels.

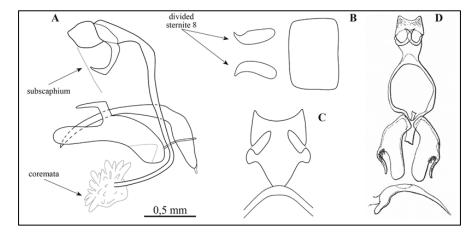


Figure 2 – Male genitalia of δ lectotype of *Liptena augusta* (prép. Libert, 120-030) – **A**: right lateral view; **B**: ventral view of sternites 7 & 8; **C**: dorsal view of uncus. **D**: reproduction of Fig. 4 in Stempffer 1957.

One of the males (the one with the best drawn underside) bears a label indicating that it is illustrated by Grose-Smith (1892 pl. XVIII, Figs 9 & 10). Grose-Smith's publication offers "photographic representations of the type specimens in the (Berlin Museum)", and one could conclude that the male illustrated by Grose-Smith is the type. But the lectotype designated by Stempffer *et al.* (1974) is also a syntype, from the same locality, and it was furthermore dissected by one of the authors (Bennett), and it does not seem justified to reverse this designation.

CONCLUSION

The rediscovery of the type-series of *L. augusta* and *L. subundularis* does not modify the systematics of the group of species to which they belong, but the clarification of their taxonomic status is important for the understanding of related species or groups. Such consequences are even more important in other cases, such as those of *Liptena opaca* (Kirby, 1890) and *Liptena immaculata* Grünberg, 1910 (Libert, 2021).

These results also constitute an illustration of the Principle of Typification of the Zoological Nomenclature Code, Article 61.1, which states that "the fixation of the namebearing type of a nominal taxon provides the objective standard of reference for the application of the name it bears". It follows that the types must be accessible to all researchers, and therefore must be deposited in a reference collection.

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LITERATURE CITED

DRUCE H. H., 1910. Illustrations of African Lycaenidae, being photographic representations of type specimens contained in the Imperial Zoological Museum at Berlin. 34 pp., 8 pls. London.

GROSE-SMITH H., 1897-1902. Rhopalocera exotica, being illustrations of new, rare and unfigured species of butterflies, Vol. 3. London.

LIBERT M., 2018. Nouveaux taxons et synonymes dans le genre *Liptena* Westwood, 1851 (Lepidoptera, Lycaenidae, Poritiinae). *Bulletin de la Société entomologique de France*, **123(3)**: 371–380. https://doi.org/10.32475/bsef_2016

LIBERT M., 2021. Nouveaux taxons et synonymes dans le groupe de *Liptena opaca* (Kirby, 1890) (Lepidoptera, Lycaenidae, Poritiinae). *Bulletin de la Société entomologique de France* (submitted).

SCHULTZE A., 1923, in SCHULTZE A. & AURIVILLIUS C., 1923 – Lepidoptera. III. Teil. Ergebnisse der Zweiten Deutschen Zentral-Afrika Expedition, 1(17): 1113–1242.

STEMPFFER H., 1957. Contribution à l'étude des Lycaenidae de la faune éthiopienne. *Bulletin de l'Institut Français d'Afrique Noire*, série. A, **19(1)**: 209–227.

STEMPFFER 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.

SUFFERT E., 1904. Neue afrikanische Tagfalter aus dem kön. zool. Museum, Berlin, und meiner Sammlung. *Deutsche Entomologische Zeitschrift, Iris*, 17: 12–107.