


Papilio vanessa Fabricius, 1793, *nomen oblitum*, is a synonym of *Liptena septistrigata* (Bethune-Baker, 1903), *nomen protectum* (Papilionoidea: Lycaenidae: Poritiinae)

Published online: 20 July 2021

DOI: <https://dx.doi.org/10.4314/met.v32i1.8>

Richard I. Vane-Wright^{1,2}  Email: dickvanewright@gmail.com

¹Department of Life Sciences, Natural History Museum, London SW7 5BD, UK.

²Durrell Institute of Conservation and Ecology (DICE), University of Kent, Canterbury CT2 7NR, UK.

Copyright © Lepidopterists' Society of Africa & Richard Vane-Wright

Abstract: The nominal taxon *Papilio vanessa* Fabricius, 1793, for long thought to be an unrecognised species of Riodinidae from the Americas, is shown to be a synonym of the West African lycaenid butterfly *Liptena septistrigata* (Bethune-Baker, 1903), **syn. nov.** *Papilio vanessa* is however a *nomen oblitum*, as it has not been applied to any recognised taxon since 1889. Thus *Liptena septistrigata* has priority so long as this subjective synonymy is considered valid and, within this context, *L. septistrigata* should be treated as a *nomen protectum*.

Key words: William Jones, Dru Drury, new synonymy, Smeathman, Riodinidae, *Leucochimona*.

Citation: Vane-Wright, R.I. 2021. *Papilio vanessa* Fabricius, 1793, *nomen oblitum*, is a synonym of *Liptena septistrigata* (Bethune-Baker, 1903), *nomen protectum* (Papilionoidea: Lycaenidae: Poritiinae). *Metamorphosis* 32: 43–46.

INTRODUCTION

Papilio vanessa Fabricius, 1793

Fabricius (1793, p. 192) based a new species, *Papilio vanessa*, on two paintings made by William Jones of a small, whitish butterfly in the Dru Drury collection, said by Fabricius (but not recorded by Jones) to come from 'America'. At the time of writing, this Jones iconotype has never been published in a conventional format and, as far as the authors are aware, the whereabouts of the original material is unknown – assuming it still exists.

Although Fabricius does not describe it well, his description appears consistent with Jones's figures. The original text is as follows:

Vanessa. 597. P[apilio] D.[anae] alis integerrimis albis: anticis margine exteriori fusco punctoque atro, posticis fusco strigosis. Papilio Vanessa Jon. fig. pict. 6. tab. 35. fig. 4. Habitat in America Mus. Dom. Drury. Magnitudo & statura P. Hecabe. Alae anticae albae margine exteriori late fusco & ante hunc marginem puncto parvo. Subtus albae arcibus aliquot fuscis. Posticae albae, supra strigis fuscis, subtus flavescens.

With some omissions, including the comparison with *Eurema hecabe* (Linnaeus) and the note that Dru Drury's collection was the source, Turton (1806, p. 67) gave the following translation:

Vanessa. 597. Papilio. *Danai*
Wings entire white; upper-pair with a brown exterior margin and black dot; lower-ones with brown streaks.

Received: 10 June 2021

Accepted: 18 July 2021

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/>

Jones Fig. pict. 6. tab. 35. Fig. 4. Inhabits America. Upperwings with a few brown curved lines beneath: lowerwings beneath yellowish.

Papilio vanessa formerly interpreted as an American riodinid

Donovan (1827, pl. 166) published a rather poor copy of Jones' image, and it was almost certainly on this basis, together with the stated provenance of 'America', that Westwood (1851, p. 455) included this species in the genus *Mesosemia* Hübner, 1819 (Riodinidae). Kirby (1871), in his pioneering catalogue of the butterflies, placed it as a doubtful species of *Mesosemia*, while Stichel (1910, p. 31) regarded *Papilio vanessa* as a doubtful species ('species dubia') of *Leucochimona*, a riodinid genus that he had erected in the previous year with *Papilio philemon* Cramer, 1775, as type species (Stichel, 1909, p. 273). *P. philemon* had previously been included in *Mesosemia* (e.g. Westwood, 1852; Kirby, 1871). Since then *P. vanessa* Fabricius has remained 'in limbo', as a very rarely mentioned, doubtful species of *Leucochimona* Stichel.

RESULTS OF CURRENT STUDY

Papilio vanessa re-interpreted as an African lycaenid

Many species of *Leucochimona* are pale with dark fasciae running across the hindwings – and on the basis of the original Jones painting (Fig. 1), this is also true of *Papilio vanessa*. However, in the former the fasciae generally run in an anterior-posterior direction (see https://www.butterfliesofamerica.com/L/t/Leucochimona_a.htm), whereas in *P. vanessa* the several hindwing fasciae ('brown streaks' of Turton, 1806, as above) are roughly transverse or curved parallel to the outer margin (Fig. 1).



Figure 1 – Jones volume 6 plate 35 fig. [4] – *Papilio vanessa* Fabricius, iconotype.



Figure 2 - *Liptena septistrigata* (Bethune-Baker), holotype (female) in NHMUK (upper side above; underside below), with labels and dissected leg; ‘1970–129 S[usan]. J. M[ay].’ refers to a genitalia preparation. D. Cator B.M. 1931-298. Specimen register number NHMUK 014172684. Forewing length: 15.9 mm.

The number of errors regarding the geographical origin of new butterfly taxa committed to print by Fabricius is prodigious (see OUMNH, in press). Rather than an American butterfly, the Jones images are instantly reminiscent of the endemic African lycaenid genus *Liptena* – and are a very good match to the West African *Liptena septistrigata* (Bethune-Baker, 1903) (Figs 2–4).

This species has been illustrated by Stempffer *et al.* (1974), Williams (2021 – see Fig. 3) and, together with the related but distinct species *L. ferrymani* (Grose-Smith & Kirby, 1891), *L. boei* Libert, 1993, and *L. undularis* Hewitson, 1866, by d’Abrera (2009). A fourth presumed close relative, *Liptena priscilla* Larsen, noted by d’Abrera, was described and illustrated by Larsen (1995), but subsequently treated as *L. boei priscilla* by Libert & Collins (2018).



Figure 3 – *Liptena septistrigata* (Bethune-Baker), male (upper side above; underside below), Aburi Botanical Gardens, Ghana, 28.xii.2011, leg. J. Dobson (Williams 2021, p. 34).

Bethune-Baker (1903) described *Pentila septistrigata* from Sierra Leone based on at least three specimens, collected by D. Cator during February, June and July 1901/1902, then in his own collection and that of Cator (the latter included ‘the type’). Both of these collections later passed to the Natural History Museum, London (NHMUK). The label data of the holotype, evidently collected on 15.vi.1902, ex Cator Collection, narrows the type locality to the town or region of Moyamba (Fig. 2). The NHMUK also holds several other specimens of this species collected in Sierra Leone by Cator. However, as only specimens collected in 1901 or 1902 that were originally part of either the Cator or Bethune-Baker collections can be considered paratypes, and no such

specimens are listed by Stempffer *et al.* (1974, p. 155) or are currently to be found in the NHMUK, the author has been unable to recognise any further original type material. In addition to Sierra Leone, the species has also been recorded from Guinea, Ivory Coast, Liberia, Ghana, Togo, Benin, Nigeria and Cameroon (Williams, 2021).

Papilio vanessa* Fabricius is a *nomen oblitum

Dru Drury is well known to have received large quantities of butterflies and other insects from Sierra Leone, amassed by Henry Smeathman (Cockerell, 1922) – and from virtually nowhere else in West Africa. Based on this, the evidence of the Jones iconotype (Fig. 1), and the Bethune-Baker holotype of *Pentila septistrigata* (Fig. 2), there seems little doubt that *Papilio vanessa* Fabricius, 1793, is the senior name for this butterfly. However, *Papilio vanessa*, ‘has not been used as a valid name after 1889’ and, as such, it is deemed to be a *nomen oblitum* (ICZN, 1999, art 23.9). If the subjective synonymy proposed here is accepted, then *Papilio vanessa* should not supplant *Liptena septistrigata* (Bethune-Baker, 1903). In these circumstances the latter should be regarded as a *nomen protectum*, thus giving priority to the junior name over the senior. The name *Papilio vanessa* Fabricius remains available, however, and can be resurrected if it is later considered to represent an otherwise unnamed species separate from *Liptena septistrigata* (ICZN, 1999, art. 23.9.2).



Figure 4 – *Liptena septistrigata* photographed by Adrian Hoskins at Aburi Botanical Gardens, Ghana, 5.v.2017 © www.learnaboutbutterflies.com

***Liptena septistrigata* (Bethune-Baker, 1903)**

Pentila septistrigata Bethune-Baker, 1903: 325. Holotype female [not male: see Stempffer *et al.*, 1974, p. 154], Sierra Leone [Moyamba, 15.vi.1902], leg. D. Cator, Natural History Museum London [examined – Fig. 2] *nomen protectum*.

Papilio vanessa Fabricius, 1793: 192. Unstated number of syntypes, ‘America’ [Sierra Leone], leg. H. Smeathman?, Dru Drury Collection [whereabouts of type material unknown; very possibly lost]. Identity based on the

William Jones iconotype (Fig. 1; OUMNH, 2021, p. 516). **syn. nov., *nomen oblitum***

Liptena septistrigata (Bethune-Baker); Aurivillius, 1918, p. 335.

With publication of all of Jones’ *Icones*, after well over 200 years of waiting (OUMNH, 2021), the identities of a few more *nomina oblita* will become apparent. Wherever possible, I suggest they should be dealt with in a similar way to the above case (cf. Robbins & Lamas, 2006).

ACKNOWLEDGEMENTS

My grateful thanks are due to Oxford University Museum of Natural History and Isabel Jessop (Thames & Hudson) for Fig. 1. Blanca Huertas (NHMUK) very kindly made the images for Fig. 2. Mark Williams and Adrian Hoskins generously supplied original images for Figs 3 & 4, respectively. RIVW also wishes to thank Steve Collins for encouragement, J. McCaffrey for literature, and the late Colin Patterson for presentation of a copy of Turton’s *Lepidoptera*.

LITERATURE CITED

- AURIVILLIUS, [P.O.]C. 1918–20. 12. Genus: *Liptena* Hew., pp. 329–339. In: Seitz, A. [ed.] *The Macrolepidoptera of the World* (2)13, the African Rhopalocera [English translation]. Alfred Kernen, Stuttgart.
- BETHUNE-BAKER, G.T. 1903. On new species of Lycaenidae from West Africa. *Annals and Magazine of Natural History* (7) 12: 324–334.
- COCKERELL, T.D.A. 1922. Dru Drury, an eighteenth century entomologist. *The Scientific Monthly* 14(1): 67–82.
- DONOVAN, E. 1826–27. *The Naturalist’s Repository, or monthly miscellany of exotic natural history*. Volume 5: pp. [iv] + [98], pls 145–180. Simpkin & Marshall, London.
- FABRICIUS, J.C. 1793. *Entomologia systematica emendata et aucta*. Volume 3, part 1. C.G. Proft, Hafniae [Copenhagen]. [vi] + 487.
- ICZN 1999. *International Code of Zoological Nomenclature* (4th edn). International Commission on Zoological Nomenclature, London. xxix + 306 pp.
- KIRBY, W.F. 1871. *A Synonymic Catalogue of Diurnal Lepidoptera*. Van Voorst, London. vii + 690 pp.
- OUMNH 2021 [in press]. *Iconotypes. A compendium of butterflies & moths. Jones’ Icones complete*. Thames & Hudson, London. 688 pp.
- LAMAS, G. & ROBBINS, R.K. 2006. Stabilizing the nomenclature of Fabrician names of North American hairstreaks (Lycaenidae: Theclinae: Eumaeini). *Journal of the Lepidopterists’ Society* 60(2): 86–91.
- LARSEN, T.B. 1995. *Liptena priscilla* a new liptenid butterfly from Nigeria (Lepidoptera: Lycaenidae). *Entomologist’s Record and Journal of Variation* 107: 29–32.
- LIBERT, M. & COLLINS, S.C. 2018. Three new species of *Liptena* Westwood, [1851] (Lepidoptera: Lycaenidae: Poritiinae). *Metamorphosis* 29(2): 118–125.

- 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**: 107–181, 6 pls.
- STICHEL, H. 1909. Vorarbeiten zu einer Revision der Riodinidae Grote (Erycinidae Swains.) (Lep. Rhop.). *Berliner entomologische Zeitschrift* **53(3/4)**: 254–275.
- STICHEL, H. 1910. Fam. Riodinidae. Allgemeines. Subfam. Riodinidae. *Genera Insectorum* (**112A**): pp. 1–238, 23 pls.
- TURTON, W. 1806. *A General System of Nature. Animal Kingdom volume 3. Insects part 2. Order 3. Lepidoptera*. Lackington, Allen, & Co, London. Frontispiece, 376 pp.
- WESTWOOD, J.O. 1850–52. *The genera of diurnal Lepidoptera*. Volume 2. Longman, Brown, Green & Longman, London, pp. [1]. [2], 255–534, pls 53–80 + [1].
- WILLIAMS, M.C. 2021. 295. Genus *Liptena* Westwood, [1851].
<https://www.metamorphosis.org.za/articlesPDF/1171/295%20Genus%20Liptena%20Westwood.pdf>
[accessed 22.v.2021]