

PAPILIO EURYMEDON LUCAS, 1852: A SYNONYM OF
PAPILIO ANTIPODUS DONOVAN, 1805 (PAPILIONIDAE)

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ABSTRACT. The holotype of *Papilio antipodus* Donovan, 1805 has been recognised in the Macleay Museum, Sydney, Australia, and it is considered to be a senior synonym of *Papilio eurymedon* Lucas, 1852 of North America. The histories of these names and of the Donovan specimen are outlined and the nomenclatural problem discussed.

Donovan (1805) illustrated and described *Papilio antipodus* (Fig. 1) with the comment "We have observed this undescribed species only in the cabinet of Mr. Francillon. It was obtained by this gentleman from Dr. White, who resided for some time in New South Wales." There was no mention of any type, and Donovan did not indicate how many specimens were before him. Although the provenance was not stated it was inferred from Donovan's comment to be New South Wales, Australia.

In 1818 Francillon's collection was sold at auction (Chalmers-Hunt, 1976). From an annotated copy of the sale catalogue in the Macleay Museum it is known that Alexander Macleay purchased a considerable proportion of it and he took it to Australia in 1825 with the rest of his vast collection.

Godart (1819) followed Donovan, providing a more detailed description of *P. antipodus* and stating that the species came from New Holland. Boisduval (1832, 1836) also copied Donovan and referred to Godart.

In 1844 Doubleday listed, without comment, *Papilio antipodus* as a junior synonym of *P. turnus* Linn., 1771 (now *P. glaucus* Linn., 1758), a North American species. This synonymy was accepted by Doubleday (1846).

On the death of Alexander Macleay in 1848 the Macleay collections were inherited by his son William Sharp Macleay, who continued to build and study them in collaboration with his cousin, William Macleay.

Early in 1852, both Lucas and Boisduval described *Papilio eurymedon* from California. Later that year Westwood (1852) added it to the list of diurnal Lepidoptera, and Gray (1853) listed it as being in the collections of the British Museum, London.

In June 1863 William Macleay (1864) addressed the Entomological Society of New South Wales saying "that he wished to take the earliest opportunity in his power of pointing out an error in Doubleday and

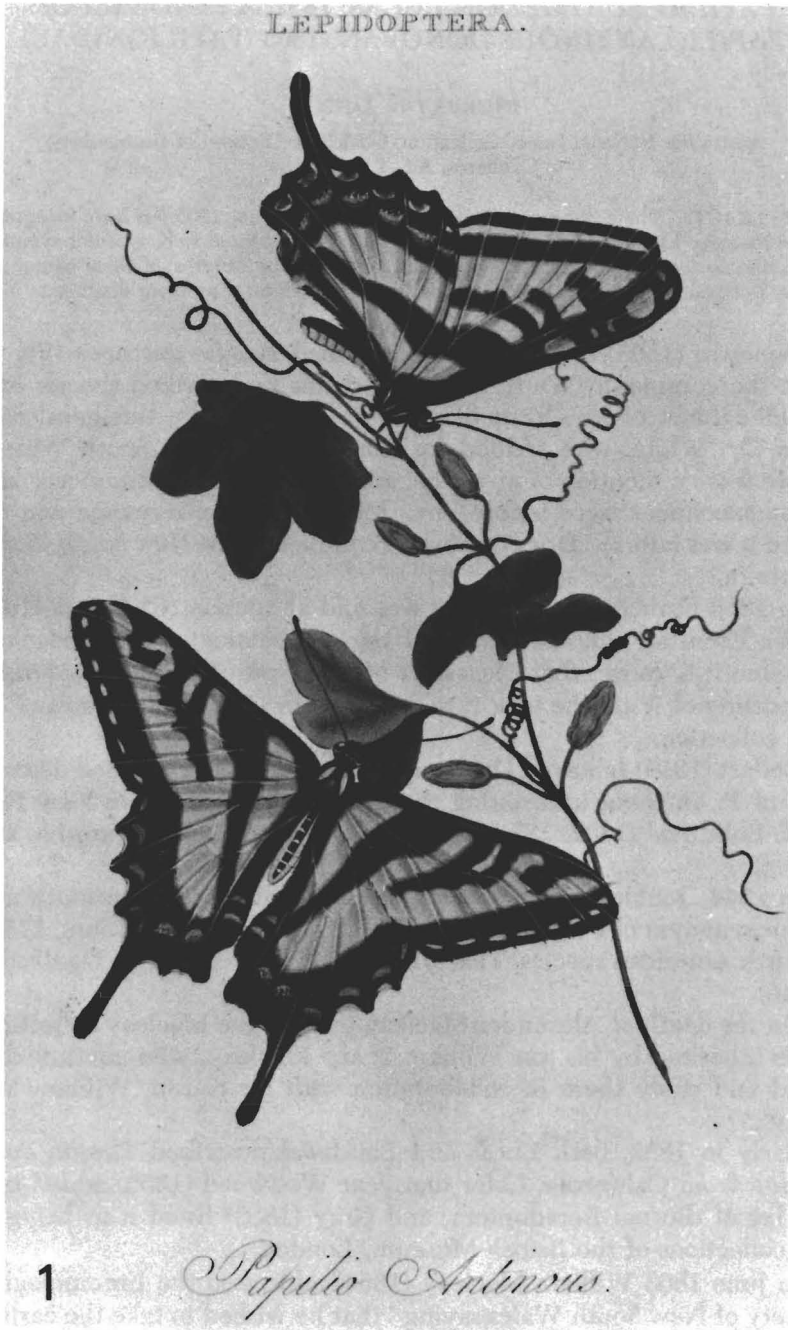


FIG. 1. Donovan's original figure of *Papilio antinous*.

Westwood's Genera of Diurnal Lepidoptera, an error which seemed to have been adopted in all subsequent catalogues of *Papilionidae*. The *Papilio antinous* of Australia, which is figured in 'Donovan's Insects of New Holland', from the unique specimen in the cabinet of W. S. Macleay, Esq., of Elizabeth Bay, is placed by Doubleday and Westwood as a synonym of *Papilio turnus*, a well known American Butterfly. He had not noticed this circumstance until a few days ago, but he had then compared the *P. turnus* with the *P. antinous* in Mr. Macleay's collection, and found, as he had expected, that there was not even a resemblance between the species.

"The *P. antinous* clearly belonged to the *Podalirius* group of *Papiliones*, and would no doubt be found (as our acquaintance with the Northern parts of Australia increased) to be, as originally stated, a New Holland insect."

In this statement William Macleay clearly demonstrates that the nominal species-group taxon was based on a single specimen—"the unique specimen." It is therefore clear that that specimen is the holotype of *Papilio antinous* Donovan, 1805 under Article 73.(a)(ii) of the International Code of Zoological Nomenclature (1985).

William Sharp Macleay died in 1865 and the collections were inherited by William Macleay.

No doubt as a result of William Macleay's comments, Kirby (1871) listed *P. antinous* as being Australian. He also listed *P. eurymedon* from California. Later, in the first Australian catalogue to cover diurnal Lepidoptera, George Masters (1873), an associate of Macleay's, also claimed *antinous* as an Australian species, as did Semper (1878).

In 1887 William Macleay gave the Macleay collections to the University of Sydney where a new building, the Macleay Museum, had been built to receive them.

The second catalogue of Australian diurnal Lepidoptera to be published, Miskin (1891), placed *P. antinous* as "reputed to be Australian, but in support of which the evidence is not conclusive"; this appears to be the last occasion on which the name was used. Waterhouse (1903) made no mention of the name in his catalogue, nor did Bryk (1930), although he did refer to other species described by Donovan in 1805.

In 1969 the C.S.I.R.O. Division of Entomology, as custodian of the Australian National Insect Collection, was asked to locate and hold on permanent loan all the type and similarly important material from the Macleay Museum. Although many types have been recognised and transferred to the Australian National Insect Collection, the search for further types continues. During this search Mr. Ted Edwards drew my attention to a specimen in a drawer of mixed papilionids. This specimen (Fig. 2) bore the label "*Papilio antinous* Don. Australia" clearly written in George Masters' handwriting.



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FIG. 2. The holotype of *Papilio antinous* Donovan, 1805.

Masters was appointed curator of the Macleay collections by William Macleay in 1874 in order that these great collections could be reorganised and brought together. Unfortunately, during this work many specimens were neatly relabelled by Masters and the original labels discarded. This action has caused enormous problems in the recognition of type material; indeed, some types may no longer be recognisable.

There is no such problem with *Papilio antinous*, for it is clearly established (Macleay, 1864) that the unique specimen was in the Macleay collections, and in view of its true identity there is no likelihood of further specimens having been added.

It is therefore my opinion that the single specimen found in the Macleay Museum is the one referred to by William Macleay in 1863 (Macleay, 1864) and is therefore the holotype of *Papilio antinous* Donovan, 1805. Examination of this specimen clearly shows it to be conspecific with the North American *Papilio eurymedon* Lucas, 1852, which name must now be considered a junior synonym under Article 23 of the International Code of Zoological Nomenclature (1985).

However, since the name *Papilio antinous* has not been cited in the literature since 1891, there would appear to be a clear case, under Article 79 of the International Code, to make application to the International Commission of Zoological Nomenclature for its suppression as the established stability of the name *P. eurymedon* would otherwise be threatened. However, the purpose of this paper is to establish the correct identity of *Papilio antinous*, and any application to the Commission should be done by those specialists directly affected by the change of name.

Donovan's figure (Fig. 1) agrees well with the specimen of *P. antinous* (Fig. 2), and the few discrepancies are easily explained by his careless approach to his work, detailed by Westwood (1872) and Waterhouse (1938).

Synonymy

- Papilio antinous* Donovan, 1805: plate 16; Godart, 1819:54; Boisduval, 1832:43 & 1836:331; Kirby, 1871:564; Masters, 1873:2; Semper, 1879:56; Miskin, 1891:83.
Papilio turnus Doubleday (nec Linnaeus, 1771), 1844:16 & 1846:13.
Papilio eurymedon Lucas, 1852:140; Boisduval, 1852:280; Westwood, 1852:529; Gray, 1853:24; Kirby, 1871:565.

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