Case 3320

Papilio sapho Drury, 1782 (currently Heliconius sapho; Insecta, Lepidoptera): proposed conservation of the specific name

Gerardo Lamas
Museo de Historia Natural, Universidad Nacional Mayor de San Marcos, Apartado 14-0434, Lima-14, Peru (e-mail: glamasm@unmsm.edu.pe)

James L.B. Mallet
The Galton Laboratory, Department of Biology, University College London, 4 Stephenson Way, London NW1 2HE, U.K. (e-mail: j.mallet@ucl.ac.uk)

Abstract. The purpose of this application, under Article 23.9.5 of the Code, is to conserve the specific name Papilio sapho Drury, 1782 (currently Heliconius sapho) (Nymphalidae). The name has been in use for more than 220 years, but is a junior primary homonym of Papilio sappho Pallas, 1771 (currently Neptis sappho); the names have been placed in separate genera since 1816. They belong to different subfamilies of brush-footed butterflies, Neptis sappho inhabiting the Palaearctic, Heliconius sapho the Neotropics, and their names are in common and widespread use.

Keywords. Nomenclature; taxonomy; Lepidoptera; Nymphalidae; Heliconius; Ajantis; Heliconius sapho; Neptis sappho; Neotropics; Palaearctic; brush-footed butterflies.

1. Pallas (1771, p. 471) introduced the name Papilio sapho for a Palaearctic species, currently known as Neptis sappho (Nymphalidae, Limenitidinae), distributed from eastern Europe, across Russia and central Asia to Japan.

2. Drury (1782, first page of the Index) introduced the name Papilio sapho for a New World species, supposedly from Jamaica, which he described and illustrated (p. 54, pl. 38, fig. 4). It does not occur in Jamaica, but is widely distributed in southern Mexico, Central America and northwestern South America. It is currently regarded as a member of the genus Heliconius Kluk, 1780 (Nymphalidae, Heliconiinae). Heliconius Kluk was placed on the Official List of Generic Names in Zoology (Opinion 382, January 1956), with type species Papilio charithonia Linnaeus, 1767 by subsequent designation by Hemming (1933, p. 223), although the date of the generic name was wrongly given as 1802. In fact, Paclt (1955) and Bálint et al. (2001) have demonstrated that Heliconius was made available by Kluk in 1780 (p. 82). Papilio sapho Drury is the type species of the genus-group name Ajantis Hübner, 1816 (p. 13) by subsequent designation by Scudder (1875, p. 106). Ajantis Hübner was recorded as a junior synonym of Heliconius Kluk by Neustetter (1929, p. 4).

3. Despite their slightly different spellings, P. sappho Pallas and P. sapho Drury are primary homonyms under Article 58.7 of the Code, which states that names differing in spelling only by the use of single or double consonants are homonyms. Although neither Pallas (1771) nor Drury (1782) provided an etymology for the names they proposed, it is evident that both names are of the same derivation and meaning, referring to the classical poetess Sappho, born at the island of Lesbos in 630 B.C.
(see Seyffert, 1995). Indeed, as early as 1790, Herbst (p. 159) had already spelled Drury’s specific name as Papilio sappho, and called attention to its distinctiveness from Pallas’s species. Interestingly, Fabricius (1793, p. 165) spelled Drury’s name as P. sappho, whereas (p. 246) he cited Pallas’s name as P. sappho.

4. The name Papilio sappho Pallas, 1771 has priority over P. sapho Drury, 1782 and the latter is permanently invalid under Article 57.2 unless conserved by the Commission, which we here propose. Papilio sappho Drury would have to be replaced by its oldest subjective synonym, Heliconia leuca Doubleday, 1847 (p. 102), which has long been regarded as a valid subspecies of Heliconius sappho (Drury) (see Neustetter, 1929). The nominotypical subspecies H. sapho sapho (Drury) has no available and potentially valid synonyms, and a substitute name (nomen novum) would have to be proposed. Such an action would produce considerable confusion and is highly undesirable, as Heliconius sapho is a common species, widely cited in the literature for over 220 years, with numerous biological, systematic, ecological and genetic research papers published on it (e.g. Brown & Benson, 1975; Brown, 1976; Young, 1981; DeVries, 1987; Raguso & Gloster, 1996; Brower & Egan, 1997; Mallet & Joron, 1999; Kapan. 2001; Luis et al., 2003; Gilbert, 2003). Furthermore, Papilio sappho Pallas and P. sapho Drury have long been assigned to widely separate genera in the Nymphalidae, ever since Hübner (1816, p. 13) proposed Ajantis to accommodate P. sapho Drury and two other related species. Neptis sappho (Pallas) belongs to the Limenitidinae, and Heliconius sapho (Drury) to the Heliconiinae.

5. The International Commission on Zoological Nomenclature is accordingly asked:

(1) to use its plenary power to rule that the specific name sapho Drury, 1782, as published in the binomen Papilio sapho, is not invalid by reason of being a junior primary homonym of Papilio sappho Pallas, 1771;

(2) to emend the entry on the Official List of Generic Names in Zoology for Heliconius Kluk to record that the date of publication was 1780 and not 1802;

(3) to place on the Official List of Specific Names in Zoology the following names:
   (a) sappho Pallas, 1771, as published in the binomen Papilio sappho;
   (b) sapho Drury, 1782, as published in the binomen Papilio sapho (ruled in (1) above to be not invalid by reason of being a junior primary homonym of Papilio sappho Pallas, 1771);

(4) to emend the entry on the Official List of Specific Names in Zoology for charithonia Linnaeus, 1767, as published in the binomen Papilio charithonta, to record that it is the type species of Heliconius Kluk, 1780 and not 1802;

(5) to emend the entries for the following names entered on the Official Index of Rejected and Invalid Generic Names in Zoology to record that the date of publication of Heliconius Kluk was 1780 and not 1802:
   (a) Heliconius Lattreille, 1804;
   (b) Heliconia Godart, 1819;
   (c) Apostraphia Hübner, 1816.

References


Drury, D. 1782. Illustrations of Natural History. Wherein are exhibited upwards of two hundred figures of exotic insects. According to their different genera; very few of which have hitherto been figured by any author, being engraved and coloured from nature, with the greatest accuracy, and under the author’s own inspection, on fifty copper-plates. With a particular description of each insect: interspersed with remarks and reflections on the nature and properties of many of them, 3, xxvi, 76, [2] pp., 50 pls. White, London.


Acknowledgement of receipt of this application was published in BZN 61: 134.

Comments on this case are invited for publication (subject to editing) in the Bulletin; they should be sent to the Executive Secretary, I.C.Z.N., Natural History Museum, Cromwell Road, London SW7 5BD, U.K. (e-mail: iczn@nhm.ac.uk).