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OPINION 181

On the type of the genus *Carcharodus* Hübner, [1819], and its synonym *Spilothyrus* Duponchel, 1835 (Class Insecta, Order Lepidoptera), genera based upon an erroneously determined species

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OPINION 181.

ON THE TYPE OF THE GENUS *CARCHARODUS* HÜBNER, [1819], AND ITS SYNONYM *SPILOTHYRUS* DUPONCHEL, 1835 (CLASS INSECTA, ORDER LEPIDOPTERA), GENERA BASED UPON AN ERRONEOUSLY DETERMINED SPECIES.

SUMMARY.—Under suspension of the *Règles Papilio alcae* Esper, [1780], is hereby designated as the type of *Carcharodus* Hübner, [1819], and of its synonym *Spilothyus* Duponchel, 1835 (Class Insecta, Order Lepidoptera).

I.—THE STATEMENT OF THE CASE.

In 1935 Commissioner Francis Hemming prepared for the consideration of the International Commission on Zoological Nomenclature a paper dealing with the interpretation of *Opinion* 65 relating to the determination of the types of genera based upon erroneously determined species, with special reference to certain genera in the Order Lepidoptera (Class Insecta). One of the genera in question was *Carcharodus* Hübner, [1819], and its synonym *Spilothyus* Duponchel, 1835, in the family HESPERIIDAE.

2. The portion of the foregoing paper relating to this genus reads as follows¹ :—

(6) *CARCHARODUS* HÜBNER, [1819],² AND *SPILOTHYRUS* DUPONCHEL, 1835

(A) *Carcharodus* Hübner, [1819]

Hübner, [1819], *Verz. bekannt. Schmett.* (7) : 110
Plötz, 1879, *Ent. Ztg.*, Stettin 40 : 179

68. Hübner placed in this genus three closely allied species (nos. 1189–1191). He gave a short description of the genus so established, but he

¹ The text of the first part of this paper relating to the interpretation of *Opinion* 65 is quoted in full in *Opinion* 168 (pp. 411–430 above). The portions of the second part relating to the types of the other genera discussed are quoted in *Opinions* 169 (pp. 431–442) (*Lycaeides* Hübner), 173 (pp. 483–494 above) (*Agriades* Hübner), 175 (pp. 509–520 above) (*Polyommatus* Latreille), 177 (pp. 533–544 above) (*Euchloë* Hübner), and 179 (pp. 557–568 above) (*Princeps* Hübner).

² At the time when the paper from which this is an extract was written, it was thought (Hemming, 1934, *Gen. Names hol. Butt.* 1 : 16–17) that pp. 65–240 of Hübner's *Verz. bekannt. Schmett.* were published in 1823. That date was accordingly assigned to the present name. The examination of Hübner's surviving manuscripts has since shown that the correct date is 1819 (see Hemming, 1937, *Hübner* 1 : 517 and also *Opinion* 150 (pp. 161–168 in (Section A of) the present volume). This correction has accordingly been made, wherever necessary, in the extract from Commissioner Hemming's application quoted in the present paragraph.

specified no type. The first of the included species to be selected as the type of this genus was species no. 1191, i.e. the species which Hübner called *Carcharodus malvae* Schiffermüller, when in 1879 that species under the name *Papilio alceae* Esper was so selected by Plötz.

69. Hübner's entry for this species in the *Verzeichniss* was as follows :—

1191. C. Malvae Schiff. Verz. Pap. A. 1. Hübner. Pap. 450. 451. Alceae Esp. Pap. 51. 3.

70. There is no doubt whatever regarding the species to which Hübner intended to refer when making the above entry for species no. 1191 in his *Verzeichniss*. Beyond possibility of question it was the "Common Mallow Skipper" now universally attributed to the genus *Carcharodus* Hübner. This is proved by the fact that Hübner gave for this species two references which unquestionably apply to the "Mallow Skipper," namely his own figures of that species under the name *Papilio malvae* (Hübner, [1800-1803],³ *Samml. europ. Schmett.* : pl. Pap. 90 figs. 450-451) and the figure published by Esper under the name *Papilio alceae* (Esper, [1780], *Die Schmett.* 1 (Bd. 2) *Forts. Tagschmett.* : 4 pl. 51 fig. 3♀).

71. There remains the first of the references cited by Hübner in the *Verzeichniss*, namely the name *Papilio malvae* as used in the so-called Vienna Catalogue first published in 1775 and re-issued in a larger edition (under a slightly different title) in the following year. At that time even the common species of European HESPERIIDAE were very imperfectly understood and for some time thereafter authors commonly associated several allied species as "varieties" of some mythical polymorphous species. Denis and Schiffermüller were, as is well known, particularly interested in the larval stages of the Order Lepidoptera and it may therefore certainly be concluded that they assumed that they included the "Common Mallow Skipper" in the species to which they applied the name *Papilio malvae*, though they appear to have included that species also under the new name *Papilio fritillum* [Denis & Schiffermüller], 1775 (*Schmett. Wien* : 159 no. A. 3).⁴ It is certain in any case that Hübner considered that Denis and Schiffermüller had applied the name *Papilio malvae* to the "Common Mallow Skipper."

³ The date here assigned to pl. *Pap.* 90 of Hübner's *Samml. europ. Schmett.* has been corrected for reasons similar to those explained in footnote 2. (See Hemming, 1937, *Hübner* 1 : 229.)

⁴ In July 1942 Commissioner Hemming furnished the following supplementary note :—

Supplementary note on the identity of Papilio fritillum [Denis & Schiffermüller], 1775, and Papilio fritillarius Poda, 1761.

Within the last twelve months, the problem of the identity of *Papilio fritillum* [Denis & Schiffermüller], 1775 (*Schmett. Wien* : 159 no. A. 3) and of *Papilio fritillarius* Poda, 1761 (*Ins. Mus. graec.* : 79 no. 53) (which are undoubtedly only different names for the same species) has been re-examined independently by myself and by Brigadier W. H. Evans, the well-known authority on the family HESPERIIDAE.

We are agreed that these names do not apply (as I had previously thought) to the "Common Mallow Skipper" (i.e. to *Papilio alceae* Esper, [1780]), but are names for the mallow-feeding species of the genus *Pyrgus* Hübner, [1819] (*Verz. bekannt. Schmett.* (7) : 109), commonly known as *Pyrgus carthami* (Hübner, [1808-1813]). The synonymy of the latter species is therefore now seen to be as follows :—

Pyrgus fritillarius (Poda, 1761)

Papilio fritillarius Poda, 1761, *Ins. Mus. graec.* : 79 no. 53 "Graz."
Papilio fritillum [Denis & Schiffermüller], 1775, *Schmett. Wien* : 159 no. A. 3 "Wien."
Papilio carthami Hübner, [1808-1813], *Samml. europ. Schmett.* : pl. 1 Pap. 143, figs. 720♂, 723♂ (nec figs. 721-722) (no locality cited).

A fuller note setting out in detail the synonymy of the various species involved has since been published by Commissioner Hemming (1943, *Bull. zool. Nomencl.* 1 : 68-69). See also footnote 24.

72. What it is important at this stage to note is that Denis and Schiffermüller were not—and did not claim to be—the authors of the name *Papilio malvae*. They made it quite clear that they were using the name *Papilio malvae* Linnaeus, 1758. It is therefore necessary now to consider what was the species so named by Linnaeus (1758, *Syst. Nat.* (ed. 10) 1 : 485 no. 167). Many authors in the 18th century identified this species with the “Common Mallow Skipper,” though as early as 1780 Esper had taken the opposite view and had given the name *Papilio alceae* to the “Common Mallow Skipper,” which he regarded as being still without an available name. Esper’s action was endorsed by Fabricius and the Italian de Prunner, but the name *Papilio alceae* Esper did not at that time come into general use. At the beginning of the 19th century Hoffmannsegg (1804, *Mag. f. Insektenk.* (Illiger) 3 : 198), ignoring Esper’s *alceae*, gave the name *Papilio malvarum* to the “Common Mallow Skipper,” basing that name upon the figures (figs. 450, 451) published by Hübner as *Papilio malvae*. In spite of the action of Esper and Hoffmannsegg, the name *Papilio malvae* Linnaeus continued for some time to be commonly applied to the “Common Mallow Skipper,” especially in France, where such leading authors as Godart, Duponchel and Boisduval continued to use this name in this sense as late as the fourth decade of the century. Not long after this, however, Wallengren (1853, *Lep. Rhop. scand.* : 275) advanced powerful arguments to show that the true *Papilio malvae* Linnaeus, 1758, was the small species of the genus *Pyrgus* Hübner, [1819], which Hübner ([1800–1803], *Sammll. europ. Schmett.* : pl. *Pap.* 92 figs. 466–467) had figured as *Papilio alveolus*, i.e. the species which occurs in England and is there known as the “Grizzled Skipper.”⁵ In 1861, this identification of *Papilio malvae* Linnaeus, 1758, was accepted by Staudinger (1861, in Staudinger & Wocke, *Cat. Lep. Europa’s* (1) : 15) and in 1871 this view was endorsed by Kirby (1871, *Syn. Cat. diurn. Lep.* : 614). These two works exercised a tremendous influence on students of the Sub-Order Rhopalocera and since their appearance no one has questioned the accuracy of the identification of *Papilio malvae* Linnaeus, 1758, with the English “Grizzled Skipper.”

73. In a matter of this kind, however, it is necessary to go back to the original sources in order to make sure that no error has been made. I myself therefore re-examined this question when preparing my *Generic Names of the holarctic Butterflies* in connection with the genus *Pyrgus* Hübner, [1819], of which *Papilio malvae* Linnaeus, 1758, is the type (Hemming, 1934, *Gen. Names hol. Butt.* 1 : 165). After the most careful study of the Linnean descriptions, the references cited by Linnaeus for this species and the other available evidence bearing on this subject, I came to the conclusion that there was no doubt in the matter at all and that the “Grizzled Skipper” of British entomologists was certainly the species to which Linnaeus applied the name *Papilio malvae* in 1758. I have since prepared a summary of the evidence which led me to this conclusion and I attach it to the present paper as Appendix 2.⁶

⁵ For the most complete and profusely illustrated modern account of the species referred to here (and throughout the present application and its annexed Appendix) as the “Grizzled Skipper”, see Warren (B. C. S.), “Monograph of the Tribe HESPERIIDI (European species) with revised classification of the subfamily HESPERIINAE (Palearctic species) based on the genital armature of the males” (1926, *Trans. ent. Soc. Lond.* 74 (1) : 72–78, pl. 24, figs. 1, 3–6, 8–11 ♂♂, 7♀, pl. 25 fig. 1 (♂ genitalia)).

⁶ Appendix 1 to the paper from which the above paper is an extract contained examples of genera based upon erroneously determined species. The classes of case so illustrated are enumerated in paragraph 13 of the paper referred to above, which is quoted in the “statement of the case” given in *Opinion* 168 (see page 416 above).

74. The position is, therefore, that both Denis and Schiffermüller in 1775 and Hübner in 1819 made an error of identification when they identified *Papilio malvae* Linnaeus, 1758, with the "Common Mallow Skipper" (= *Papilio alceae* Esper). This error is most unfortunate since it means that the genus *Carcharodus* Hübner, [1819], of which (as shown in paragraph 68 above) *Papilio malvae* Linnaeus, Denis & Schiffermüller, is the type, is a genus based upon an erroneously determined species. If in this case the preliminary assumption enjoined by *Opinion* 65 (namely that Hübner correctly identified the species placed by him in the genus *Carcharodus* at the time when he founded that genus) were to be maintained in the teeth of the evidence to the contrary, the result would be as follows:—

- (i) the type of *Carcharodus* Hübner, [1819], would become the true *Papilio malvae* Linnaeus, 1758, i.e. the species of the genus *Pyrgus* Hübner, [1819], known to British entomologists as the "Grizzled Skipper," notwithstanding the fact:—
 - (a) that the true *Papilio malvae* Linnaeus, 1758, was not included by Hübner in the genus *Carcharodus* Hübner, [1819], but was placed by that author in the genus *Pyrgus* Hübner, [1819] (on p. 109 the page immediately preceding that on which the name *Carcharodus* was printed), where it appeared as species no. 1176 under the name *Pyrgus alveolus* Hübner;
 - (b) that, in selecting the type of the genus *Carcharodus* Hübner, Plötz, by using the specific trivial name *alceae* Esper (cited by Hübner as a synonym of "*C. malvae* Schiff."), indicated in the clearest possible way that he intended the type of this genus to be the "Common Mallow Skipper" and not the "Grizzled Skipper" (= the true *Papilio malvae* Linnaeus, 1758);
- (ii) the generic name *Carcharodus* Hübner, [1819], and also the generic name *Spilothyrsus* Duponchel, 1835 (see paragraph 77 below) would become objective synonyms of the generic name *Pyrgus* Hübner, [1819], since the true *Papilio malvae* Linnaeus, 1758, is the type of the last-named genus (Hemming, 1934, *Gen. Names hol. Butt.* 1:165), while the false *Papilio malvae* Linnaeus, 1758, i.e. the species misidentified by Denis and Schiffermüller and by Hübner, is the type of the two first-named genera;
- (iii) *Papilio alceae* Esper, [1780], and its allies, which for over a hundred years have been referred to the genus *Carcharodus* Hübner, [1819] (except by those relatively few authors who have used the name *Spilothyrsus* Duponchel, 1835), would need to be attributed to the genus *Reverdinus* Ragusa, 1919 (*Nat. sicil.* 23 (7/12): 172), of which *Papilio altheae* Hübner, [1800–1803]⁷ (*Samml. europ. Schmett.*: pl. *Pap.* 90 figs. 452–453♀♀) is the type, having been so selected by Lindsey in 1925 (*Ann. ent. Soc. Amer.* 18: 100).

75. The consequences described above would be an absurdly heavy price to pay for the privilege of maintaining the admittedly erroneous assumption that Hübner correctly identified the species placed by him in the genus *Carcharodus* Hübner. This is, therefore, a clear case where the preliminary assumption enjoined in *Opinion* 65 should be discarded and the second part of that *Opinion* should come into play, that is to say, the case of the generic name *Carcharodus* Hübner, [1819], should be submitted, with full details, to the International Commission on Zoological Nomenclature for decision.

76. I accordingly recommend that the International Commission on Zoological Nomenclature should render an *Opinion* under their plenary powers declaring that the type of *Carcharodus* Hübner, [1819], is the

⁷ For the date assigned to Hübner's pl. *Pap.* 90, see footnote 3.

species referred to in this paper as the "Common Mallow Skipper" (= *Papilio alceae* Esper, [1780]) and not the "Grizzled Skipper" (= the true *Papilio malvae* Linnaeus, 1758). As stated elsewhere (1932, *Trans. ent. Soc. Lond.* 80 : 293-294), I consider that the oldest available name for the "Common Mallow Skipper" is *Papilio fritillarius* Poda, 1761.⁸

(B) *Spilothyrys* Duponchel, 1835

Duponchel, 1835, in Godart, *Hist. nat. Lépid. France Suppl.* 1 (*Diurnes*) : 415
Watson, 1893, *Proc. zool. Soc. Lond.* 1893 : 67

77. Duponchel placed in this genus (on page 416) three species, namely (i) what he regarded as *Papilio malvae* Linnaeus, (ii) *Papilio altheae* Hübner, and (iii) *Papilio lavatherae* Esper (which he misspelt *lavaterae*). These are the same three species as those which Hübner included in the genus *Carcharodus* Hübner, [1819] (paragraph 68 above), if it is assumed that Duponchel identified *Papilio malvae* Linnaeus in the same way as Hübner did in the *Verzeichniss*. That this assumption is correct is immediately evident from an inspection of Duponchel's book, (a) because that book is no more than a supplement to that of Godart in which the "Common Mallow Skipper" and not the "Grizzled Skipper" was identified as *Papilio malvae* Linnaeus, 1758, and (b) because Duponchel (on page 415) placed the "Grizzled Skipper," under the specific trivial name *alveolus* Hübner (paragraph 72 above), in the genus *Syrichthus* Boisduval, 1834.

78. From the three species placed in the genus *Spilothyrys* by Duponchel, Watson selected the first as the type. In doing so, Watson indicated in the clearest way the species which he intended should be the type of this genus, for he used for this purpose the name *Papilio alceae* Esper.

79. In these circumstances it is evident that whatever decision is taken in regard to the generic name *Carcharodus* Hübner, [1819], must govern also the generic name *Spilothyrys* Duponchel, 1835. I accordingly ask the International Commission on Zoological Nomenclature to include in the proposed *Opinion* a declaration that the "Common Mallow Skipper" and not the "Grizzled Skipper" is the type of *Spilothyrys* Duponchel, 1835. That genus will thereupon become *de jure* what it has always been treated as being since Watson's selection of *Papilio alceae* Esper, [1780] as the type, namely an objective synonym of *Carcharodus* Hübner, [1819].

APPENDIX 2⁹

On the identity of *Papilio malvae* Linnaeus, 1758

By Francis Hemming, C.B.E.

(a) *Introductory*

Papilio malvae Linnaeus, 1758 (*Syst. Nat.* (ed. 10) 1 : 485 no. 167) is now accepted by all authors as being the small species of the genus *Pyrgus* Hübner, [1819] (*Verz. bekannt. Schmett.* (7) : 109) which occurs in England and is there known as the "Grizzled Skipper" (e.g. the species described and figured under the name *Hesperia malvae* (Linnaeus) by South, 1906, *Bull. Brit. Isles* : 184-186 pl. 122 figs. 1-3, 7♂♂, 4-6, 8♀♀).

2. This identification of *Papilio malvae* Linnaeus, 1758, has been universally accepted by all authors at least since 1861 (Staudinger, 1861, in Staudinger & Wocke, *Cat. Lep. Europa's* (1) : 15). In the earlier part of

⁸ This question has since been re-examined by Commissioner Hemming, who has furnished the supplementary note reproduced in footnote 4. A more extended note showing that the oldest available name for the species referred to here as the "Common Mallow Skipper" is *Papilio alceae* Esper, [1780], and not *Papilio fritillarius* Poda, 1761, has been published by Commissioner Hemming, in 1943, *Bull. zool. Nomencl.* 1 : 68-69.

⁹ For a note regarding the document which formed Appendix 1 to the paper from which the above is an extract, see footnote 5.

the 19th century, however, the name *Papilio malvae* Linnaeus, 1758, was identified with the species now usually known as *Carcharodus alceae* (Esper, [1780]) by such leading French authors as Duponchel (1844, *Lat. méth. Lépid. Europe* : 37), Boisduval (1829, *Europ. Lépid. Index méth.* : 26 and 1840, *Genera Index méth. europ. Lépid.* : 35) and Godart (1820, *Lépid. France* 1 : 243; 1823, *Table méth. Lépid. France* : 64; and [1824] *Ency. méth.* 9 (2) (Ins.) : 779). In the second half of the 18th century (when even the common European species of the family HESPERIIDAE were very little understood) this name was widely used for *C. alceae* (Esper) by many German authors.

3. The problem of the type of the genus *Carcharodus* Hübner, [1819] (*Verz. bekannt. Schmett.* (7) : 110) turns on the identity of *Papilio malvae* Linnaeus, 1758, and I have thought it desirable, in submitting proposals in regard to that generic name to the International Commission on Zoological Nomenclature, to summarise in the present note the available evidence in regard to this subject.

(b) *The original description of Papilio malvae Linnaeus, 1758*

4. The description given by Linnaeus in 1758 for *Papilio malvae* is as follows:—

Papilio Plebejus [*printed at the top of the page*]

Malvae. 167. P. P. alis denticulatis divaricatis nigris albo maculatis.

Fn. svec. 749. *It. oel.* 3.

Pet. gaz. t. 36. f. 6.

Merian. eur. 1. t. 48.

Reaum. ins. 1. t. 11. f. 6. 7.

Habitat in Malva, Althaea.

Roes. ins. 1. pap. 2. t. 10

Wilk. pap. 54. t. 2. c. 1.

(c) *General considerations bearing on the identification of Linnean species*

5. Before attempting to interpret Linnaeus's description of *Papilio malvae*, it is necessary to recall the following important considerations which must always be borne in mind when interpreting descriptions in Linnaeus's systematic works:—

- (a) So far as possible Linnaeus always based his descriptions upon actual specimens and on the few occasions when he was unable to do so, he was careful to indicate the fact by placing a cross sign (called by Linnaeus "Signum Crucis") at the end of the description. An example is provided in the 10th edition of the *Syst. Nat.* in the butterflies by the description of *Papilio nestor* (: 463 no. 30). Linnaeus's own description of this convention reads as follows (*Syst. Nat.* (ed. 12) 1 (2) : 1019 *nota*):—

Signo Crucis ubique notavimus animalia nobis nec viva, nec in museis asserata visa, ut Naturae consulti ad ea attentius examinanda incitentur.

- (b) Linnaeus underlined in ink in his copy of the 12th edition of the *Syst. Nat.* the serial number allotted to each species of which he possessed a specimen in his own collection (Verity, 1913, *J. linn. Soc. Lond.* (Zool.) 32 : 174). It is thus possible, when examining the Linnean collection, to ascertain as regards any given species whether Linnaeus possessed a specimen and therefore whether a Linnean specimen should be looked for in that collection.
- (c) Whenever Linnaeus had himself published a description of a given species in one of his pre-binomial works (i.e. in any of his works published prior to 1758), he gave a reference to that work in the 10th edition of the *Syst. Nat.* Such references were invariably placed by Linnaeus immediately after the conclusion of the description. These references were often printed on the same line as the last words of the description; where this was not done, they were invariably printed before, and on a higher line than, references to works by

other authors. Linnaeus clearly intended to indicate by this means that he attached a special degree of importance to these references to his own works. Their importance lies in the fact that they are first-hand references to works written by himself and refer, in the case of Swedish species, to species known to himself and in many cases to species collected by himself. The possibility of misidentifications in such cases is thus reduced to the minimum. Unlike the references discussed in (d) below, these references by Linnaeus to his own works must therefore be regarded as "primary references."

- (d) The references given by Linnaeus in the 10th edition of the *Syst. Nat.* below the "primary references" (if any) are references to plates in works published by other authors prior to 1758, representing, as Linnaeus believed, the species described and named by Linnaeus in that work. Not infrequently, however, the plates so cited represent some species other than that intended by Linnaeus. These errors may sometimes have been due to genuine mistakes on the part of Linnaeus, but some were due to an entirely different cause and one which has been frequently overlooked, namely the fact that some at least of these references were taken by Linnaeus at second-hand from notes communicated to him by correspondents who had access to works (or to parts of works) that were not available to Linnaeus himself. Linnaeus made no secret of his practice of citing references which he had not been able himself to verify and in the 1st edition of the *Fauna svecica* (1746) (last page of the *Ratio Operis*) he expressly invited readers to furnish him with such references from the works of Reaumur, Rajus, Frisch, etc. The passage in question reads: "Qui synonyma plura ex Reaumurii, Raji, Frischii, &c. scriptis mihi communicaverit, rem faciet multo mihi acceptissimam."

Such "secondary references" to the works of other authors stand therefore in a very different position from the "primary references" discussed in (c) above. They are useful in many ways and should be studied with care; they should however be accepted with reserve and, where errors of identification are found in these "secondary references," those errors taken by themselves provide no ground for assuming that Linnaeus himself was guilty of having misidentified a species or of having confused two different species together. Such errors may just as well have been made by some correspondent who had forwarded the reference to Linnaeus, by whom through force of circumstances it had been accepted second-hand without verification.

- (e) In the 10th edition of the *Syst. Nat.* Linnaeus usually cited "secondary references" in double columns. It has been usual to interpret these references as though those in the left-hand column were the 1st, 3rd, 5th, etc., references in the list and those in the right-hand column the 2nd, 4th, 6th, etc., references. A careful comparison of the "secondary references" cited by Linnaeus for a given species (i) in the 10th edition of the *Syst. Nat.*, where these references are in double column, and (ii) in the 12th edition, where they are in a single column, shows, however, that Linnaeus regarded the references in the left-hand column as all preceding those in the right-hand column.
- (d) *Analysis of the references cited by Linnaeus in his original description of Papilio malvae Linnaeus, 1758*

6. In the light of the general considerations indicated in paragraph 5 (c) to (e) above, the references cited by Linnaeus in his original description of *Papilio malvae* Linnaeus, 1758, are seen to be the following:—

(A) "Primary references"

- (1) *Fn. svec.* 749 [a misprint for 794].
- (2) *It. oel.* 3.

(B) "Secondary references"

- (1) *Pet. gaz. t. 36. f. 6.*
- (2) *Merian. eur. 1. t. 48.*
- (3) *Reaum. ins. 1. t. 11. f. 6. 7.*
- (4) *Roes. ins. 1. pap. 2. t. 10.*
- (5) *Wilk. pap. 54. t. 2. c. 1.*

(e) "Primary references" cited by Linnaeus in his original description of *Papilio malvae* Linnaeus, 1758

7. The citation of the 1st edition of the *Fauna svecica* as a "primary reference" shows that the species which Linnaeus was describing was a species known to him as occurring in Sweden.

8. The "primary reference" "*It. oel.*" is an abbreviation of "*Iter oelandicum*," the latinised title of the work published by Linnaeus in Swedish in 1745 under the title "*Öländska och Gothländska Resa på Rikstens högloflige ständers befallning förrättad åhr 1741.*" This work contains an account of the journey to Öland, Gotland and other places in Southern Sweden undertaken by Linnaeus in 1741 at the request of the Swedish Government. This journey was started from Stockholm on 15th May (Old Style) 1741; on the same day the party crossed into the Province of Södermanland. On the following day, 16th May (O.S.) 1741, the party did some collecting at Trosa and it was here that they captured the butterfly to which 17 years later Linnaeus gave the name *Papilio malvae*.

9. Both these "primary references" clearly establish that the insect which in 1758 Linnaeus described as *Papilio malvae* was an insect taken in Sweden.

(f) "Secondary references" cited by Linnaeus in his original description of *Papilio malvae* Linnaeus, 1758

10. *Petiver*. The figure cited represents the "Grizzled Skipper," i.e. the small species of the genus *Pyrgus* Hübner, [1819], now universally identified as *Papilio malvae* Linnaeus, 1758 (see paragraph 1 above).

11. *Merian*. The plate represents the species commonly known as *Carcharodus alceae* (Esper, [1780]).¹⁰

12. *Reaumur*. The figures cited represent *Carcharodus alceae* (Esper, [1780]).

13. *Rösel*. Linnaeus cited plate 10 without giving any figure references and it must therefore be assumed that he treated all the figures on that plate as referring to this species. Two species are represented on this plate. Apart from figures 1 and 2, which represent larvae, and figures 3 and 4, which represent pupae, figures 5 and 6 represent *Carcharodus alceae*

¹⁰ When this paper was originally written, this species (the "Common Mallow Skipper") was referred to at this point by Commissioner Hemming as *Papilio fritillarius* Poda, 1761. As explained in footnote 8, it has now been shown that the above identification was incorrect and that the oldest available name for this species is *Papilio alceae* Esper, [1780]. At the same time Commissioner Hemming has shown that the name *Papilio fritillarius* Poda, 1761, is the oldest available name for the species previously known as *Pyrgus carthami* Hübner, [1808-1813]. In order to avoid further confusion in the use of these names, the name *Carcharodus alceae* (Esper, [1780]) has been substituted here and elsewhere in the "statement of the case" for the name *Carcharodus fritillarius* (Poda, 1761) previously erroneously applied to this species. Similarly, the name *Pyrgus fritillarius* (Poda, 1761) has been substituted for *Pyrgus carthami* (Hübner, [1808-1813]), wherever the latter name appeared in the "statement of the case" as the name for the "Mallow Pyrgus."

(Esper, [1780]), and figure 7 represents *Pyrgus fritillarius* (Poda, 1761), i.e. the species commonly known as *Pyrgus carthami* (Hübner, [1808-1813]).¹¹

14. *Wilkes*. Wilkes merely copied Rösel's figures of *C. alceae* (Esper, [1780]) and *P. fritillarius* (Poda, 1761) (= *P. carthami* (Hübner, [1808-1813])); both are referred to on page 54 of his work (the page referred to by Linnaeus), the former as No. 1, the latter as No. 2.

15. Of the five "secondary references" discussed above, no. (5) (Wilkes) may be ignored as it is nothing but a direct copy from no. (4) (Rösel). As regards the remainder, the position is seen to be as follows:—

- (i) reference no. (1) (Petiver) is to the "Grizzled Skipper," i.e. to the species now universally identified as *Papilio malvae* Linnaeus, 1758 (see paragraph 1 above);
 - (ii) references nos. (2) (Merian), (3) (Reaumur), and part of (4) (Rösel) are to the "Common Mallow Skipper," i.e. to the species commonly known as *Carcharodus alceae* (Esper, [1780]).¹²
 - (iii) part of reference no. (4) (Rösel) is to the "Mallow Pyrgus," i.e. to the species now commonly known as *Pyrgus carthami* (Hübner, [1808-1813]).¹³
- (g) *Evidence afforded by the Linnean diagnoses and descriptions of Papilio malvae Linnaeus, 1758*

16. The earliest diagnosis for this species published by Linnaeus is that which appeared in 1745 in his *Oländska och Göthlandska Resa* ("primary reference no. (2) (see paragraph 8 above). This diagnosis, which was written for the specimen taken by him at Trosa in the Swedish Province of Soedermanland on 16th May (O.S.) 1741, reads as follows:—

Papilio hexapus alis divaricatis denticulatis nigris albo punctatis.

17. The diagnosis given by Linnaeus in 1746 for species no. 794 in the 1st edition of the *Fauna svecica* ("primary reference" no. (1)) is identical with the diagnosis given by Linnaeus in 1745 for the insect taken at Trosa in 1741. On this occasion, Linnaeus added the following fuller description:—

DESCR. Magnitudo Argi 803. *Corpus* totum & alae supra nigro fuscae; *Alae* maculis parvis seu punctis quadratis, albis, numerosi adpersae sunt a parte exteriori, margine quasi dentato, interiacentibus maculis albis. *Corpus* & *Alae* subtus griseo-cinereae; alae ipsae subtus maculis albis difformibus inaequalis magnitudinis. *Antennae* clavatae, supra fuscae, subtus albidae, periolis annulis minimis albis. *Alae* erectae non sunt, sed divaricatae, fere uti Phalaenae quercifolia dicta.

¹¹ For the most complete and profusely illustrated modern account of the species referred to throughout the "statement of the case" as the "Mallow Pyrgus," i.e. the species of which the oldest available name is *Pyrgus fritillarius* (Poda, 1761) but which is better known by its synonym *Pyrgus carthami* (Hübner, [1808-1813]), see Warren (B. C. S.), "Monograph of the tribe HESPERIID (European species) based on the genital armature of the males" (1926, *Trans. ent. Soc. Lond.* 74 (1) : 64-72, pl. 15, fig. 6 (♂ genitalia), pl. 22, figs. 1-6 ♂♂, pl. 23, figs. 1-6 ♀♀, 7-12 ♂♂).

¹² As will be seen from footnote 8, it has now been ascertained that the name *Carcharodus alceae* (Esper, 1780) is, in fact, the oldest available name for the species referred to throughout the "statement of the case" as the "Common Mallow Skipper."

¹³ As shown in footnote 4, the oldest available name for the "Mallow Pyrgus" is *Pyrgus fritillarius* (Poda, 1761) and not *Pyrgus carthami* (Hübner, [1808-1813]) as commonly believed at the time when the present case was submitted to the International Commission on Zoological Nomenclature.

This description can only apply to the "Grizzled Skipper," i.e. to the *Pyrgus* species now universally identified as *Papilio malvae* Linnaeus, 1758 (see paragraph 1 above).

18. The diagnosis given by Linnaeus for *Papilio malvae* in 1758, when he first published that binominal name is identical with that given in 1745 for the Trosa insect and in 1746 for the same species when it appeared as species no. 794 in the 1st edition of the *Fauna svecica*, except that at the end the word "maculatis" is substituted for the word "punctatis." In this connection, it will be noted that in the longer description published in 1746 Linnaeus had used the words *macula* and *punctum* as alternative descriptions for the small square white markings on the upperside of the wings of this species.

19. Three years later Linnaeus published a further diagnosis and description of this species (Linnaeus, 1761, *Faun. svec.* (ed. 2) : 285 no. 1081). The diagnosis so given is identical with that given in 1745 for the Trosa insect and in 1746 for the same species when it appeared as species no. 794 in the 1st edition of the *Fauna svecica*. The last named work is cited as a "primary reference" ("Fn. 794"). The longer description given by Linnaeus for this species on this occasion is identical with that in the 1st edition of the *Fauna svecica*, except that in the description of the antennae the word "periolis" is omitted.

20. The diagnosis given by Linnaeus for *Papilio malvae* in 1758 could properly be applied either to the "Grizzled Skipper" (paragraph 1 above) or to the "Mallow Pyrgus" i.e. *Pyrgus fritillarius* (Poda, 1761)¹⁴ (= *Pyrgus carthami* (Hübner), [1808-1813]¹⁴). It could not reasonably be regarded as applicable to the "Common Mallow Skipper," i.e. *Carcharodus alceae* (Esper),¹⁴ (a) because the word *niger* is not an appropriate description of the ground colour of the upperside and (b) because the phrase "albo maculatis" is not one which can be held to apply to a species such as this in which the markings on the forewings are insignificant and tend to be confluent, while the hindwings are devoid altogether of such markings. The diagnosis given by Linnaeus for this species in 1758 is (as noted above) identical (except for one word) with that given by Linnaeus in 1746 (*Fauna svecica*) and in 1745 (*Iter oelandicum*) to a specimen of a species taken by himself in Sweden. This locality eliminates from consideration both the "Mallow Pyrgus" and the "Common Mallow Skipper," neither of which occur in that country. The fuller description given for this species in the 1st edition of the *Fauna svecica* in supplement to the brief diagnosis clearly applies only to the "Grizzled Skipper." The same is true also of the corresponding description given by Linnaeus for this species in the 2nd edition of that work (1761).

(h) Evidence afforded by the name selected by Linnaeus for this species and the habitat cited by him for it

21. The trivial name (*malvae*) given by Linnaeus to this species in 1758 may be taken as implying a belief on his part that this species was associated in some way with the mallow (*Malva*). It is perfectly fair to conclude that Linnaeus considered that the mallow was the food-plant for the larva of the species to which he gave the name *Papilio malvae*.

22. Linnaeus gave no indication in 1745 of the habitat of the insect taken at Trosa in 1741, but, when redescribing that species in 1746 (in the 1st edition of the *Fauna svecica*), he gave the indication "Habitat primo vere in Pratis." In 1758, when he first applied the name *Papilio malvae* to this species, Linnaeus substituted for this entry the words "Habitat in Malva, Althaea." Three years later (in 1761 in the 2nd edition of the *Fauna svecica*), Linnaeus dropped this indication and repeated the habitat cited by him for this species in the 1st edition of that work. In the 12th

¹⁴ See footnote 10.

edition of the *Syst. Nat.* (1 (2) : 795 no. 267) published in 1767 Linnaeus again used the formula employed in 1758.¹

23. The "Grizzled Skipper," i.e. the small species of the genus *Pyrgus* Hübner, [1819], now universally identified with *Papilio malvae* Linnaeus, 1758, has no connection whatever with the mallow. On the other hand, the "Common Mallow Skipper" (= *Carcharodus alceae* (Esper, [1780]¹⁵)), figures of which were cited as "secondary references" in Linnaeus's original description of *Papilio malvae* (see paragraph 15(ii) above) is closely associated with the mallow. Its larva feeds upon that plant and the imago is never found far from it. The association of this species with the mallow was known both to Merian ("secondary reference" (2)) and to Rösel ("secondary reference" (4)) and this piece of information may (and probably did) come to Linnaeus from one or other of these sources, for there is no evidence to show that Linnaeus knew *Carcharodus alceae* (Esper)¹⁵ either in nature or in the museum. The third species included among Linnaeus's "secondary references" in his original description of *Papilio malvae*, namely the "Mallow Pyrgus," i.e. *Pyrgus fritillarius* (Poda, 1761) (= *Pyrgus carthami* (Hübner)¹⁶) (paragraph 15(iii) above) is also associated with the mallow, but there is no evidence to show that this fact was known to Linnaeus.

24. The evidence afforded by the trivial name (*malvae*) applied to this species by Linnaeus in 1758 and by the "habitat" assigned to this species on that occasion, taken in conjunction with the "secondary references" (2), (3) and (4) (but not "secondary reference" (1)) suggest that Linnaeus was then describing the "Common Mallow Skipper" (= *Carcharodus alceae* (Esper)¹⁵) and not the "Grizzled Skipper." The same evidence would have pointed also to the possibility that Linnaeus was then describing the "Mallow Pyrgus," i.e. *Pyrgus fritillarius* (Poda) (= *Pyrgus carthami* (Hübner)), which, jointly with *Carcharodus alceae* (Esper),¹⁵ was cited by him in "secondary reference" (4), if there had been any evidence to show that Linnaeus was aware of the connection of the last-named species with the mallow plant.

(i) Evidence afforded by the type locality of *Papilio malvae* Linnaeus, 1758

25. Linnaeus cited no locality for this species when he named it in 1758, but (as shown in paragraph 6 above) he then cited two "primary references" for this species and each of these references is to a description of a Swedish specimen. Both these descriptions are based upon the same specimen, as is shown by the fact that the diagnosis in the two works (the 1st edition of the *Fauna svecica* and the *Iter oelandicum*) is word for word the same. In the earlier (i.e. the last-named) of these works it is stated that the specimen from which the diagnosis was drawn was taken by Linnaeus's party at Trosa in the Swedish Province of Soedermanland on 16th May (O.S.) 1741 (paragraph 8 above). This must therefore be accepted as the type locality of *Papilio malvae* Linnaeus, 1758.

26. Of the three species to figures of which Linnaeus gave "secondary references" in his original description (1758) of *Papilio malvae* under that binominal name, the "Grizzled Skipper" (paragraph 1 above) occurs commonly in Sweden. Neither of the other species, *Carcharodus alceae* (Esper) and *Pyrgus fritillarius* (Poda) (= *Pyrgus carthami* (Hübner)),¹⁵ occurs in that country. The type locality therefore eliminates both these species from further consideration.

(j) Evidence afforded by the Linnean collection now in the possession of the Linnean Society of London

27. As shown in paragraph 5(b) above, Linnaeus marked his copy of the 12th edition of the *Syst. Nat.* to show, as regards the Order Lepidoptera,

¹⁵ See footnote 10.

¹⁶ See footnote 10.

¹⁷ The Linnean collection of specimens of the Order Lepidoptera was

which species were represented in his collection. *Papilio malvae* Linnaeus, 1758, was one of the species so marked (Jackson, 1913, *Cat. linn. Spec. Amphib. Ins. Test.* : 30).

28. Verity (1913, *J. linn. Soc. Lond. (Zool.)* 32 : 173-174) has shown that Linnaeus's own specimens in the Linnean collection can with care be distinguished from later additions by Smith by the nature of the pins used and the way in which the wings are set. He has shown also (*ibid.* 32 : 190) that the Linnean collection contains one Linnean specimen of *Papilio malvae* Linnaeus, 1758, and that this specimen is a male of the "Grizzled Skipper," i.e. of the small species of the genus *Pyrgus* Hübner now universally identified as *Papilio malvae* Linnaeus, 1758 (paragraph 1 above). Neither *Carcharodus alceae* (Esper) nor *Pyrgus fritillarius* (Poda) (= *Pyrgus carthami* (Hübner)) is represented in the Linnean collection.

(k) *Analysis of available evidence regarding the identity of Papilio malvae Linnaeus, 1758*

29. The following is an analysis of the available evidence regarding the identity of *Papilio malvae* Linnaeus, 1758, discussed in the preceding paragraphs:—

| Nature of evidence | The "Grizzled Skipper," i.e. the species of the genus <i>Pyrgus</i> Hübner now universally identified as <i>Papilio malvae</i> Linnaeus, 1758 (see paragraph 1) | The "Common Mallow Skipper," i.e. <i>Carcharodus alceae</i> (Esper, [1780]) (see paragraph 11 and footnote 10) | The "Mallow Pyrgus," i.e. <i>Pyrgus fritillarius</i> (Poda, 1761) (= <i>Pyrgus carthami</i> (Hübner, [1808-1813])) (see paragraph 13 and footnote 10) |
|---|---|--|---|
| Evidence provided by the two "primary references" cited by Linnaeus in 1758 : (Both show that <i>Papilio malvae</i> Linnaeus was described from a Swedish specimen and the earlier of the two works (" <i>Iter oelandicum</i> ") shows that the original specimen (i.e. the type) was taken at Trosa in the Swedish Province of Södermanland on 16th May (O.S.) 1741 (paragraphs 7-9 & 25-26) | applicable to this species, because it occurs in Sweden | inapplicable to this species, because it does not occur in Sweden | inapplicable to this species, because it does not occur in Sweden |

evacuated during the war on grounds of security to the Zoological Museum, Tring. While there, the collection was carefully re-examined by Dr. A. Steven Corbet, Assistant Keeper, Department of Entomology, British Museum (Natural History), in conjunction with Mr. W. H. T. Tams, Assistant Keeper in the same Department. This re-examination fully confirmed the conclusions reached by Dr. Roger Verity in 1912, both Dr. Corbet and Mr. Tams being of the opinion : (1) that it is possible by the various means noted by Dr. Verity to distinguish the specimens which were placed in the collection by Linnaeus himself from those added to it after his death, and (2) that the collection in its present state affords "no evidence of the label-changing attributed by many authors to Sir James Edward Smith, M.D., who purchased the Linnean collections on the death of Linnaeus's son and subsequently became the first President of the Linnean Society of London." See Corbet (A. S.), 1942, *Proc. R. ent. Soc. Lond. (B)* 11 : 91-94.

| Nature of evidence | The "Grizzled Skipper," i.e. the species of the genus <i>Pyrgus</i> Hübner now universally identified as <i>Papilio malvae</i> Linnaeus, 1758 (see paragraph 1) | The "Common Mallow Skipper," i.e. <i>Carcharodus alceae</i> (Esper, [1870]) (see paragraph 11 and footnote 10) | The "Mallow Pyrgus," i.e. <i>Pyrgus fritillarius</i> (Poda, 1761) (= <i>Pyrgus carthami</i> (Hübner, [1808-1813])) (see paragraph 13 and footnote 10) |
|---|---|---|---|
| Evidence provided by the four "secondary references" cited by Linnaeus in 1758 (paragraphs 10-15) | reference (1) refers to this species (paragraph 10) | references (2) and (3) and the first part of reference (4) refer to this species (paragraphs 11, 12 and 13) | the second part of reference (4) refers to this species (paragraph 13) |
| The diagnosis published by Linnaeus for this species in 1758 (paragraphs 16-20) | applicable to this species (paragraph 20) | not applicable to this species (paragraph 20) | applicable to this species (paragraph 20) |
| The description attached to the diagnosis by Linnaeus in 1746 in the non-binominal first edition of the <i>Fauna svec.</i> and repeated in 1761 in the binominal second edition of that work (paragraphs 17, 19-20) | applicable to this species (paragraph 20) | not applicable to this species (paragraph 20) | not applicable to this species (paragraph 20) |
| The trivial name " <i>malvae</i> " applied by Linnaeus to this species, indicating its reputed association with the Mallow plant (paragraphs 21, 23-24) | not appropriate for this species (paragraph 23) | appropriate for this species and known to be so by Linnaeus, if he had read either Merian or Rösel, to each of whose works he gave a "secondary reference" (paragraphs 23-24) | appropriate for this species; but there is no evidence to show that Linnaeus was aware of this fact (paragraphs 23-24) |
| The habitat cited by Linnaeus for this species in 1758 (paragraphs 22-24) | not applicable to this species (paragraph 23) | applicable to this species and known to be so by Linnaeus, if he read either Merian or Rösel, to each of whose works he gave a "secondary reference" (paragraphs 23-24) | applicable to this species; but there is no evidence to show that Linnaeus was aware of this fact (paragraphs 23-24) |
| Evidence provided by the Linnean collection preserved in the Museum of the Linnean Society of London (paragraphs 27-28) | a male of this species bearing a Linnean label is preserved in the Linnean collection | no specimen in the Linnean collection (paragraph 28) | no specimen in the Linnean collection (paragraph 28) |

30. The foregoing analysis shows that there are three species to which the name *Papilio malvae* might conceivably have been applied by Linnaeus in 1758, namely:—

- (1) the "Grizzled Skipper," now universally identified with *Papilio malvae* Linnaeus, 1758 (paragraph 1 above);

- (2) the "Common Mallow Skipper," *Carcharodus alceae* (Esper, [1780]) (see paragraph 11 above and footnote 10);
- (3) the "Mallow Pyrgus," *Pyrgus fritillarius* (Poda, 1761) (= *Pyrgus carthami* (Hübner, [1808-1813])).

31. The trivial name given to this species and the habitat assigned to it suggest that the species was either *Carcharodus alceae* (Esper) or *Pyrgus fritillarius* (Poda) (= *Pyrgus carthami* (Hübner))¹⁸ and this conclusion is supported by the fact that figures of both these species were included among the "secondary references" cited by Linnaeus in 1758. The second of these species can however be eliminated from further consideration, since there is no evidence to show that Linnaeus was aware, or could have been aware, of the association of this species with the mallow, since the first record of this observation was made long after Linnaeus's time.

32. The problem resolves itself therefore into the question whether the species named *Papilio malvae* in 1758 was the "Grizzled Skipper" or *Carcharodus alceae* (Esper).¹⁸ The evidence shows that *Papilio malvae* Linnaeus, 1758, occurs in Sweden; the "Grizzled Skipper" does occur in that country, but *Carcharodus alceae* (Esper)¹⁸ does not. The diagnosis given by Linnaeus in 1758 fits the "Grizzled Skipper" perfectly but only with the greatest difficulty can it be argued that it fits *Carcharodus alceae* (Esper).¹⁸ The longer description given by Linnaeus for this species in 1746 ("primary reference" (1)) is a clear and (judged by the standards of the times) an adequate description of the "Grizzled Skipper" and is entirely inapplicable to *Carcharodus alceae* (Esper).¹⁸ Finally, the Linnean collection contains one of Linnaeus's own specimens labelled "*Papilio malvae*" and this is a specimen of the "Grizzled Skipper"; there is no specimen of *Carcharodus alceae* (Esper)¹⁸ in the Linnean collection.

33. It is impossible to disregard this mass of evidence provided by the writings of Linnaeus and by the evidence of his own collection, even though some (but not all) of the "secondary references" point to an opposite conclusion. In the case of a conflict of this kind, the evidence directly afforded by the author of the species himself must be regarded as having far greater weight than indications derived from references cited by that author to the works of other naturalists especially in the case of an author like Linnaeus who (by his own admission) was forced by circumstances to rely at times for references to such works upon second-hand evidence communicated to him by correspondents (paragraph 5(d) above).

34. The conclusion to be drawn from a survey of all the available evidence is therefore that the universal practice of the last eighty years is undoubtedly correct and that the species described by Linnaeus in 1758 as *Papilio malvae* is the small species of the genus *Pyrgus* Hübner, [1819], known in England as the "Grizzled Skipper" (paragraph 1 above).

II.—THE SUBSEQUENT HISTORY OF THE CASE.

3. The questions raised in Commissioner Hemming's paper were considered by the International Committee on Entomological Nomenclature at their meeting held at Madrid in September 1935 during the Sixth International Congress of Entomology. The International Committee unanimously agreed to recommend the International Commission on Zoological Nomenclature to render

¹⁸ See footnote 10.

an *Opinion* clarifying the meaning of *Opinion* 65 in the manner proposed.¹⁹ Having reached this conclusion on the general question involved, the International Committee examined the particular cases in the Order Lepidoptera submitted in the same paper. The International Committee on Entomological Nomenclature considered that, if (as they had agreed to recommend) the International Commission on Zoological Nomenclature agreed to render an *Opinion* clarifying *Opinion* 65 in the manner proposed in the petition, the only possible course as regards the genus *Carcharodus* Hübner, [1819], and its synonym *Spilothyrus* Duponchel, 1835, would be for the International Commission to render an *Opinion* declaring that *Papilio alceae* Esper, [1780],²⁰ to be the type of both these genera. The International Committee considered also that great advantage would be served if at the same time the International Commission were to make it clear that Hübner and Schiffermüller, on whose judgment in this matter Hübner had relied, were in error in identifying *Papilio alceae* Esper²⁰ with *Papilio malvae* Linnaeus, 1758. The International Committee on Entomological Nomenclature agreed therefore to recommend the International Commission on Zoological Nomenclature to proceed in this way under their plenary powers.

4. The above and other resolutions adopted by the International Committee on Entomological Nomenclature at their meeting held at Madrid were confirmed by the Sixth International Congress of

¹⁹ For a full account of the subsequent history of the portion of this petition relating to the interpretation of *Opinion* 65 and the decision of the International Commission on Zoological Nomenclature thereon, see *Opinion* 168 (pp. 411-430 above).

²⁰ As explained in footnote 10, it was erroneously believed at the time when this case was submitted to the International Commission on Zoological Nomenclature that the oldest available name for the "Common Mallow Skipper" was *Papilio fritillarius* Poda, 1761, whereas it is now known that that name is properly applicable to the species referred to in the present *Opinion* as the "Mallow Pyrgus," i.e. the species hitherto known as *Pyrgus carthami*, (Hübner, [1808-1813]). In consequence, it is now seen that the familiar name *Papilio alceae* Esper, [1780], is the oldest available name for the "Common Mallow Skipper," the species universally accepted as the type of the genus *Carcharodus* Hübner, [1819]. So far as concerns the name of this species, this case was considered by the International Committee on Entomological Nomenclature at its meeting held at Madrid in 1935 on the basis of the premises submitted. Accordingly in formulating their recommendations for the consideration of the International Commission on Zoological Nomenclature, the International Committee on Entomological Nomenclature then accepted the name *Papilio fritillarius* Poda, 1761, as being the oldest available name for the "Common Mallow Skipper." In order to avoid further confusion, this error has been corrected in the record of the conclusions reached by the International Committee on Entomological Nomenclature at Madrid in 1935 set out in paragraph 3 of the present *Opinion*.

III.—THE CONCLUSION REACHED BY THE INTERNATIONAL COMMISSION ON ZOOLOGICAL NOMENCLATURE.

5. When the International Commission on Zoological Nomenclature met at Lisbon immediately after the close of the Sixth International Congress of Entomology in September 1935, they found themselves confronted with a large number of cases involving proposals for the suspension of the *Règles*, in respect of some of which advertisements had not been published or, if published, had not been published for the prescribed period, owing to the illness of Dr. C. W. Stiles, Secretary to the Commission, or for other causes. In these circumstances the Commission decided at their meeting held on the morning of Monday, 16th September 1935 (Lisbon Session, 2nd Meeting, Conclusion 9), that immediate consideration should be given to all cases submitted to the Commission that, in their judgment, had reached the stage at which a decision could properly be taken; that the By-Laws of the Commission should be suspended during the Lisbon Session to such extent as might be necessary to give effect to this decision; and that, in so far as this procedure involved taking decisions "under suspension of the rules" in cases where the prescribed advertisement procedure had not been complied with, the cases in question should be duly advertised as soon as might be practicable after the conclusion of the Lisbon Congress and that no *Opinion* should be rendered and published thereon until after the expiry of a period of one year from the date on which the said advertisement was despatched to the prescribed journals for publication. The case of *Carcharodus* Hübner, [1819] (and its synonym *Spilothyrus* Duponchel, 1835), was among the cases in question and was accordingly dealt with under the above procedure.

6. At the same meeting as that referred to above (Lisbon Session, 2nd Meeting, Conclusion 23), the International Commission on Zoological Nomenclature agreed upon certain clarifications of *Opinion* 65 in regard to the status of genera based upon erroneously determined species (Lisbon Session, 2nd Meeting, Conclusion 23 (a) and (c)).²¹ Having thus cleared the ground regarding the principles involved, the Commission proceeded

²¹ See footnote 19.

to consider the present and certain other cases in the Order Lepidoptera and the resolutions in regard thereto submitted by the International Committee on Entomological Nomenclature. After careful consideration of the present case, the International Commission agreed (Lisbon Session, 2nd Meeting, Conclusion 23 (b) and (c))²² :—

.....
 (b) in the light of (a) above, to suspend the rules in the case of the under-mentioned genera and to declare the types of the genera in question to be the species indicated below :—

Name of genus

Type of genus

.....
 (6) *Carcharodus* Hübner, [1819],²³ *Papilio alceae* Esper, [1780],
Verz. bek. Schmett. (7) : 110 *Die Schmett.* 1 (Bd. 2) *Forts.*
 and *Tagschmett.* : 4 pl. 51 fig. 3♀²⁴
Spilothyrus Duponchel, 1835, (the species misidentified as
in Godart, *Hist. nat. Lépid.* *Papilio malvae* Linnaeus, 1758,
France Suppl. 1 (*Diurnes*) : by Schiffermüller & Denis, 1775,
 415 and by Hübner and Duponchel)

(c) to render *Opinions* in the sense of (a) and (b) above.

7. The foregoing decisions were embodied in paragraph 29 of the report which at their meeting held on the morning of Wednes-

²² Only those portions of Conclusion 23 which relate to the present case are here quoted. For the full text of Conclusion 23, see 1943, *Bull. zool. Nomencl.* 1 : 23-25.

²³ See footnote 2.

²⁴ For the reasons explained in footnote 20, the name assigned to the "Common Mallow Skipper" at the time when this case was brought before the International Commission on Zoological Nomenclature at their meeting held at Lisbon in 1935 was *Papilio fritillarius* Poda, 1761, that name being then (erroneously) believed to be the oldest available name for this species. At the same time, the International Commission realised that they were handicapped on that occasion both by the small amount of time available for discussion and by the lack of works of reference; they accordingly decided that after the close of the Lisbon Congress when the necessary works of reference would be available the whole of the references included in the report which they then submitted to the Twelfth International Congress of Zoology should be examined and any necessary corrections made before their report was officially published (Lisbon Session, 5th Meeting, Conclusion 1(c)) (see 1943, *Bull. zool. Nomencl.* 1 : 44). It was in the discharge of the duty so imposed that Commissioner Hemming found that the identification of *Papilio fritillarius* Poda, 1761, with the "Common Mallow Skipper" was erroneous and that in consequence the oldest available name for that species was the well-known name *Papilio alceae* Esper, [1780]. In accordance with the decision taken by the International Commission at Lisbon, this correction was thereupon made both in the report submitted by the Commission to the Twelfth International Congress of Zoology (see 1943, *Bull. zool. Nomencl.* 1 : 62) and in the *Official Record of Proceedings* of the Commission at their Lisbon Session (see 1943, *ibid.* 1 : 25). At the same time, a full explanatory note was published setting out the corrected synonymy of the species concerned (see 1943, *ibid.* 1 : 68-69).

day, 18th September 1935 (Lisbon Session, 5th Meeting, Conclusion 6), the Commission unanimously agreed to submit to the Twelfth International Congress of Zoology. That report was unanimously approved by the Section on Nomenclature at its joint meeting with the International Commission held on the afternoon of the same day. It was thereupon submitted to the Twelfth International Congress of Zoology by which it was unanimously approved and adopted at the Concilium Plenum held on the afternoon of Saturday, 21st September 1935, the last day of the Congress.

8. In accordance with the decision taken by the Commission at Lisbon in regard to their procedure at that Session (paragraph 5 above), this case was duly advertised in 1936 in two or more of the journals specified in the Resolution adopted by the Ninth International Congress of Zoology at its meeting held at Monaco in March 1913, by which the said International Congress conferred upon the International Commission on Zoological Nomenclature plenary powers to suspend the *Règles* as applied to any given case where, in the judgment of the Commission, the strict application of the *Règles* would clearly result in greater confusion than uniformity. In the period that has elapsed since the advertisement in the said journals of the proposed suspension of the *Règles* in the present case, no communication of any kind has been addressed to the International Commission objecting to the issue of an *Opinion* in the terms proposed.

9. The present *Opinion* was concurred in by the twelve (12) Commissioners and Alternates present at the Lisbon Session of the International Commission, namely:—

Commissioners:—Calman; Hemming; Jordan; Pellegrin; Peters; and Stejneger.

Alternates:—do Amaral *vice* Cabrera; Ohshima *vice* Esaki; Bradley *vice* Stone; Beier *vice* Handlirsch; Arndt *vice* Richter; and Mortensen *vice* Apstein.

10. The present *Opinion* was dissented from by no Commissioner or Alternate at the Lisbon Session. Nor since that Session has any Commissioner who was neither present on that occasion nor represented thereat by an Alternate indicated disagreement with the conclusions then reached by the Commission in this matter.

11. The following five (5) Commissioners who were not present at Lisbon nor represented thereat by Alternates did not vote on the present *Opinion*:—

Bolivar y Pieltain; Chapman; Fantham; Silvestri; and Stiles.

12. At the time when the vote was taken on the present *Opinion*, there was one (1) vacancy in the Commission consequent upon the death of Commissioner Horváth.

IV.—AUTHORITY FOR THE ISSUE OF THE PRESENT *OPINION*.

WHEREAS the Ninth International Congress of Zoology at its meeting held at Monaco in March 1913 adopted a Resolution conferring upon the International Commission on Zoological Nomenclature plenary power to suspend the *Règles* as applied to any given case where, in the judgment of the Commission, the strict application of the *Règles* would clearly result in greater confusion than uniformity, provided that not less than one year's notice of the possible suspension of the *Règles* as applied to the said case should be given in two or more of five journals specified in the said Resolution, and provided that the vote in the Commission was unanimously in favour of the proposed suspension of the *Règles*; and

WHEREAS the suspension of the *Règles* is required to give valid force to the provisions of the present *Opinion* as set out in the summary thereof; and

WHEREAS not less than one year's notice of the possible suspension of the *Règles* as applied to the present case has been given to two or more of the journals specified in the Resolution adopted by the Ninth International Congress of Zoology at its meeting held at Monaco in March 1913; and

WHEREAS the vote in the Commission at their Lisbon Session was unanimously in favour of the issue of an *Opinion* in the terms of the present *Opinion*;

NOW, THEREFORE,

I, FRANCIS HEMMING, Secretary to the International Commission on Zoological Nomenclature, acting in virtue of all and every the powers conferred upon me by reason of holding the said Office of Secretary to the International Commission, hereby announce the said *Opinion* on behalf of the International Commission, acting for the International Congress of Zoology, and direct that it be rendered and printed as *Opinion* Number One Hundred and Eighty One (*Opinion* 181) of the said Commission.

In faith whereof I, the undersigned FRANCIS HEMMING, Secretary to the International Commission on Zoological Nomenclature, have signed the present *Opinion*.

DONE in London, this first day of December, Nineteen Hundred and Forty Three, in a single copy, which shall remain deposited in the archives of the International Commission on Zoological Nomenclature.

*Secretary to the International Commission
on Zoological Nomenclature.*

FRANCIS HEMMING

APPEAL FOR FUNDS

The International Trust for Zoological Nomenclature earnestly appeal to all institutions and individuals interested in the development of zoological nomenclature to contribute, according to their means, to the Special (Publications) Fund established for financing the publication of the International Commission on Zoological Nomenclature. Additional donations are urgently needed to enable the Trust to secure that there shall be no interruption in the Publications Programme of the International Commission.

Already since the ending of the war, there has been a noticeable increase in the rate at which new applications have been received by the International Commission from zoologists. The Commission welcome this development and intend to do everything in their power to deal promptly with all such applications, but, if they are to succeed in so doing, they will need to receive active assistance from all institutions and individual zoologists who are in a position to contribute towards the funds of the Commission.

Contributions of any amount, however small, will be most gratefully received and should be sent to the International Trust at their Publications Office, 41, Queen's Gate, London, S.W.7. All such contributions should be made payable to the "International Trust for Zoological Nomenclature or Order" and crossed "Account payee. Coutts & Co."

SIGNED ON BEHALF OF THE INTERNATIONAL
COMMISSION ON ZOOLOGICAL NOMENCLATURE

FRANCIS HEMMING

*Secretary to the International Trust for
Zoological Nomenclature.*

International Trust for
Zoological Nomenclature,
Publications Office,
41, Queen's Gate, LONDON, S.W.7.

1st February, 1947

**OPINIONS AND DECLARATIONS RENDERED BY
THE INTERNATIONAL COMMISSION ON ZOOLOGICAL
NOMENCLATURE**

Index to Section B of Volume 2

NOTICE TO SUBSCRIBERS

Part 52 containing the indexes and title page for Section B of Volume 2 of the work *Opinions and Declarations rendered by the International Commission on Zoological Nomenclature* will be published as soon as possible.

FRANCIS HEMMING

*Secretary to the International Commission
on Zoological Nomenclature*

Secretariat of the Commission,
at the British Museum (Natural History),
Cromwell Road, LONDON, S.W.7.

1st February, 1947.