

Vevicina, as

23021

TO A CONTRACTOR OF CONTRACTOR OF THE CONTRACTOR

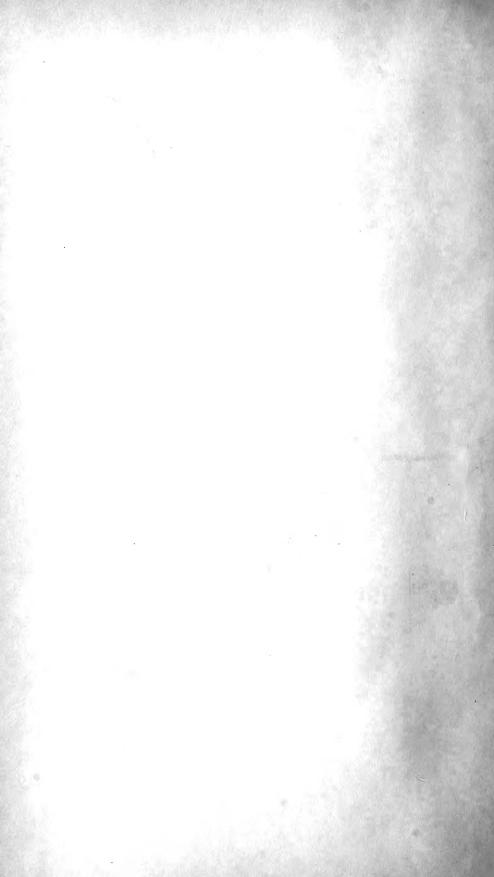
Religious to Construct the Construction of the

2

Control permit it me interesting Control of A. Zill blait. Normalistate . Volta to composit Trace of the Bartons killed All Corpos Galo, Louden S.M.T

1958

(Alto de la mile 74)



OPINIONS AND DECLARATIONS RENDERED BY THE INTERNATIONAL COMMISSION ON ZOOLOGICAL NOMENCLATURE

VOLUME 18

Edited by

FRANCIS HEMMING, C.M.G., C.B.E.
Secretary to the International Commission on Zoological Nomenclature

LONDON:

Printed by Order of the International Trust for Zoological Nomenclature and

Sold on behalf of the International Commission on Zoological Nomenclature by the International Trust at its Publications Office 41, Queen's Gate, London, S.W.7

1958

(All rights reserved)



1958 INTERNATIONAL COMMISSION ON ZOOLOGICAL NOMENCLATURE

COMPOSITION AT THE TIME OF THE ADOPTION OF THE OPINIONS, DECLARATIONS AND DIRECTIONS PUBLISHED IN THE PRESENT VOLUME

The Officers of the Commission

Honorary Life President: Dr. Karl JORDAN (British Museum (Natural History), Zoological Museum, Tring, Herts., England)

President: Professor James Chester Bradley (Cornell University, Ithaca, N.Y., U.S.A.) (12th August 1953)

Vice-President: Senhor Dr. Afranio do Amaral (Sao Paulo, Brazil) (12th August 1953)

Secretary: Mr. Francis Hemming (London, England) (27th July 1948)

В. The Members of the Commission

(Arranged in order of precedence by reference to date of election or of most recent re-election, as prescribed by the International Congress of Zoology)

Professor H. Boschma (Rijksmuseum van Natuurlijke Historie, Leiden, The Netherlands) (1st January 1947)
Senor Dr. Angel Cabrera (La Plata, Argentina) (27th July 1948)
Mr. Francis Hemming (London, England) (27th July 1948) (Secretary)
Dr. Henning Lemche (Universitetets Zoologiske Museum, Copenhagen, Denmark) (27th July 1948)
Professor Teiso Esaki (Kyushu University, Fukuoka, Japan) (17th April 1950)
Professor Pietre Bonnet (Université de Toulouse, France) (9th June 1950)
Mr. Norman Denbigh Riley (British Museum (Natural History), London) (9th June 1950)
Professor Tadeusz Jaczewski (Institute of Zoology, Polish Academy of Sciences Warsaw.

Professor Tadeusz Jaczewski (Institute of Zoology, Polish Academy of Sciences Warsaw, Poland) (15th June 1950)

Polana) (15th June 1950)
Professor Robert Mertens (Natur-Museum u. Forschungs-Institut Senckenberg, Frankfurt a.M., Germany) (5th July 1950)
Professor Erich Martin Hering (Zoologisches Museum der Humboldt-Universität zu Berlin, Germany) (5th July 1950)
Senhor Dr. Afranio do Amaral (S. Paulo, Brazil) (12th August 1953) (Vice-President)
Professor J. R. Dymond (University of Toronto, Toronto, Canada) (12th August 1953)
Professor J. Chester Bradley (Cornell University, Ithaca, N.Y., U.S.A.) (12th August 1953) (Provident)

1953) (President)
Professor Harold E. Vokes (University of Tulane, Department of Geology, New Orleans, Louisiana, U.S.A.) (12th August 1953)
Professor Béla Hankó (Mezőgazdasági Muzeum, Budapest, Hungary) (12th August 1953)
Dr. Norman R. Stoll (Rockefeller Institute for Medical Research, New York, N.Y.,

U.S.A.) (12th August 1953)

Mr. P. C. Sylvester-Bradley (Sheffield University, Sheffield, England) (12th August 1953)

Dr. L. B. Holthuis (Rijksmuseum van Natuurlijke Historie, Leiden, The Netherlands) (12th August 1953)

Dr. K. H. L. Key (Commonwealth Scientific and Industrial Research Organisation, Canberra, A.C.T., Australia) (15th October 1954)
Dr. Alden H. MILLER (Museum of Vertebrate Zoology, University of California, U.S.A.)

(29th October 1954)

Doc. Dr. Ferdinand Prantl (Národni Museum V Praze, Prague, Czechoslovakia) (30th

October 1954)
Professor Dr. Wilhelm Kühnelt (Zoologisches Institut der Universität, Vienna, Austria) (6th November 1954)

Consultation (The Hebrew University, Jerusalem, Israel) (11th November 1954)

Professor F. S. Bodenheimer (The Hebrew University, Jerusalem, Israel) (11th November 1954)

Professor Ernst Mayr (Museum of Comparative Zoology at Harvard College, Cambridge, Massachusetts, U.S.A.) (4th December 1954)

Professor Enrico Tortonese (Museo di Storia Naturale "G. Doria", Genova, Italy) (16th December 1954)

INTERNATIONAL COMMISSION ON ZOOLOGICAL NOMENCLATURE

(continued)

C. The Staff of the Secretariat of the Commission*

Honorary Secretary: Mr. Francis Hemming, C.M.G., C.B.E.

Honorary Personal Assistant to the Secretary: Mrs. M. F. W. Hemming

Honorary Archivist: Mr. Francis J. Griffin, A.L.A.

Consulting Classical Adviser: Professor The Rev. L. W. Grensted, M.A., D.D.

" Official Lists" Section: Miss D. N. Noakes, B.Sc.

"Règles" Section: Mrs. A. F. Wilson, M.A.

Secretariat:

Mrs. J. H. Newman
Mrs. C. Slater
Miss D. Fidler

Indexer: Miss M. Cosh, M.A.

INTERNATIONAL TRUST FOR ZOOLOGICAL NOMENCLATURE*

Managing Director and Secretary: Mr. Francis Hemming, C.M.G., C.B.E.

Publications Officer: Mrs. C. Rosner

Trust Duties Officer: Mrs. J. H. Newman

^{*} The particulars given above relate to the position as it existed on 5th June 1958, the date on which this volume was completed.

FOREWORD

The present volume—the eighteenth in the present Series contains the ninth instalment of Opinions, Declarations and Directions adopted by the International Commission on Zoological Nomenclature since the close of the Fourteenth International Congress of Zoology, Copenhagen, 1953. The present volume contains fifteen Opinions (Opinions 501-515), three Declarations (Declarations 36, 37 and 38) and two Directions (Directions 91 and 95). In addition, during the same period two early volumes (Volumes 2 and 3) have been completed, the whole of fourteen other volumes (Volumes 4 to 17) have been published, the present volume has been completed and units of one further volume (Volume 19) have also been published. Further Parts of Volume 19 are in the press. The volumes in question contain *Opinions* and Declarations adopted by the Commission, either in Paris in 1948 or by postal votes taken at later dates, together with Directions, of which the greater number embody decisions on certain subsidiary matters. In addition, three Sections (Sections C, D and E) of Volume 1, each the equivalent of a complete volume, have been published and further units are in the press. All the units of the above Sections of Volume 1 are devoted to Directions embodying decisions taken by the Commission in the course of the review of the *Opinions* rendered in the period up to the end of 1936 which it was charged by the Thirteenth International Congress of Zoology, Paris, 1948, to undertake. Publication of the units specified above commenced in January 1954 and during the period of nearly four and a half years the total number of units published amounts to 454 (Opinions 324; Declarations, 27: Directions, 103).

2. The immediately preceding volume contained decisions on all the remaining applications originally published in Volume 11 of the *Bulletin of Zoological Nomenclature* with the exception of four, and a start was made in the publication of *Opinions* embodying decisions on applications published in the next succeeding volume (Volume 12) of the *Bulletin*. The present

volume contains twelve Opinions based upon applications originally published in Volume 12 of the Bulletin of Zoological Nomenclature. As a result the number of applications originally published in that Volume in respect of which Opinions have not been rendered has been reduced to six. It is anticipated that the Opinions relating to these cases will be included in the next following Volume of the present Series. In addition the present volume contains one Opinion (Opinion 515) based upon an application in the next succeeding volume (Volume 13) of the Bulletin and two Opinions based upon applications published in earlier volumes. Of these the first (Opinion 501) was based upon an application which appeared in Volume 6 of the Bulletin, while the second (Opinion 504) was based on an application published in Volume 2. The second of these cases had encountered certain difficulties after publication and these had led to the delay which occurred in the settlement of the issues involved. Opinion was concerned with the removal of a long-standing source of confusion in the nomenclature of the Order Lepidoptera (Class Insecta) by the approval of a neotype under the Plenary Powers.

3. Of the three Declarations included in the present volume the first (Declaration 36) contains an initial instalment of the review under Copenhagen Decision 85 of the Gender Rules provisionally laid down by Decision 84, the generic names involved in this case being those having the terminations "-ops" and "-opsis" respectively. The second Declaration (Declaration 37) applies to family-group names the Principle of the "First Reviser" in cases where such names are published in the same work and on the same date. The third Declaration (Declaration 38) applies to the dating of zoological works of a principle laid down in relation to the interpretation of nominal species included in newly-established genera which had been included in the Règles by the Thirteenth International Congress of Zoology, Paris, 1948. In the case considered in Paris it was laid down that, subject to certain safeguards, the author of a generic name is to be assumed to have correctly identified the nominal species placed by him in the genus concerned. In the present case a similar principle was laid down in relation to the acceptance of dates printed on the title pages of works.

- 4. The two *Directions* included in the present volume are both concerned with subsidiary matters arising in connection with *Opinions* previously rendered by the Commission. In *Direction* 91 a family-group name based on the generic name *Tylenchus* Bastian, 1865 (Class Nematoda) is substituted on the *Official List of Family-Group Names* for a name of later date based on the above genus which had been placed on that *List* by the Ruling given in *Direction* 28. The subject matter of *Direction* 95 is of direct interest only to specialists in the Class Trilobita, being concerned with the question whether the important work entitled *Prodrom einer Monographie der böhmischen Trilobiten* published in 1847 should, as indicated in its title, be treated as having been published jointly by Hawle (I.) & Corda (A.J.C.) or whether in the light of the disclaimers subsequently published by Hawle it should be treated as the work of Corda alone.
- 5. The present volume contains 430 pages (T.P.—XVIII, i—xxx, (i)—(xxvi)), 1—356. This volume is somewhat smaller than its immediate predecessors.
- 6. Of the fifteen *Opinions* included in the present volume, two deal simultaneously with names belonging to two different Classes in the Animal Kingdom, thus bringing the total number of cases up to seventeen. Four of the applications relating to these cases were submitted by more than one author and when account is taken of this fact, the total number of applicants is seen to be twenty-two.
- 7. All the applications dealt with in *Opinions* in the present volume were concerned with individual names. Of these sixteen (94 per cent.) involved the use by the Commission of its Plenary Powers.
- 8. Of the seventeen applications relating to individual names dealt with in the *Opinions*, when grouped by reference to the Classes of the Animal Kingdom to which the genera or species

concerned belong, are distributed as shown in the following table. In the same table the applications are arranged so as to distinguish those which involved the use of the Commission's Plenary Powers from those which did not.

TABLE 1

Distribution of applications (a) by Classes of the Animal Kingdom and (b) by whether they involved the use by the Commission of its Plenary Powers

	Number of applications				
Name of Class	Involving the use of the Plenary Powers		Total		
Scyphozoa	1	_	1		
Nematoda	1		1		
Crustacea	4	_	4		
Trilobita	4	summer make	4		
Insecta	3		3		
Cephalopoda	1	<u>. —</u>	1		
Pisces		1	1		
Aves	2	_	2		
Totals	16	1	17		

9. When the twenty-two applicants are arranged by reference to the countries in which they are resident, applications are seen to have been received from the following countries (arranged in alphabetical order):—

Distribution of applicants by country of residence

TABLE 2

Country of Residence	Number of Applicants
Denmark	1
Italy	1
Netherlands	3
New Zealand	1
Sweden	2
United Kingdom	8
United States of	
America	6
Total	22

10. By the Rulings given in the *Opinions* comprised in the present volume, together with the Ruling given in the *Direction* referred to in paragraph 4 above, a total of 164 names have been added to the *Official Lists* and corresponding *Official Indexes*

relating to specific names, generic names, family-group names, and the title of one zoological work was added to the *Official List*. The distribution of these entries is seen to be as follows:—

Additions to the "Official Lists" and "Official Indexes" respectively

TABLE 3

Category	Official Lists	Official Indexes
Specific Names	32	23
Generic Names	24	48
Family-Group Names	15	21
Titles of Works	1	
Totals	72	92

11. The seventeen cases dealing with individual names published in the present volume contain 96 comments from interested specialists. In some instances these comments are joint comments from two or more specialists and in others these comments relate to two or more Classes of the Animal Kingdom. When account is taken of these facts, a total number of 94 specialists contributed comments on cases relating to individual names dealt with in the present volume. In addition, seven specialists commented on the application relating to the status of a zoological work, the application in question being the subject matter of *Direction* 95, referred to in paragraph 4 above,

12. If the comments relating to individual names are grouped according to the Class in the Animal Kingdom to which the genus or species concerned belongs, the distribution of the comments is found to be as follows:—

TABLE 4

Distribution of comments on applications relating to individual names, by Classes of the Animal Kingdom

Name of Class	Number of Comments
Scyphozoa	6
Nematoda	1
Crustacea	20
Trilobita	17
Insecta	27
Cephalopoda	2
Pisces	5
Aves	18
Total	96

13. When the authors of the comments contained in the Opinions published in the present volume are grouped by reference

to their country of residence, the distribution is found to be as follows:—

Distribution of comments relating to individual names, by country of residence of the specialists concerned

TABLE 5

Country of Residence	Number of Comments
Austria	1
Brazil	1
Canada	2
Czechoslovakia	1
Denmark	6
France	2
French West Africa	1
Germany	13
Japan	1
Netherlands	3
New Zealand	5
Poland	1
Spain	2
Sweden	1
Switzerland	1
United Kingdom	16
United States of	
America	37
Total	94

14. As is the case of preceding volumes in this series, the Commission is indebted to Miss Mary Cosh, M.A., for the preparation of the indexes of the present volume. In style and scope these indexes follow exactly the models laid down for earlier volumes.

FRANCIS HEMMING

Secretary to the International Commission on Zoological Nomenclature

28 Park Village East, Regent's Park, LONDON, N.W.1.

5th June 1958.



TABLE OF CONTENTS

Declarations

Page
DECLARATION 36 Determination under Decision 85 of the Fourteenth International Congress of Zoology, Copenhagen, 1953, of the gender to be attributed to generic names having the terminations "-ops" and "-opsis" respectively i—xii
DECLARATION 37 Clarification of the provisions in the <i>Règles</i> regarding the method to be followed in determining the relative precedence to be accorded to any two names for nominal family-group taxa published in the same work and on the same date xiii—xxii
DECLARATION 38 Clarification of the procedure to be adopted determining the authorship to be attributed for the purposes of zoological nomenclature to any given work in cases where the accuracy of the authorship stated in the title has been questioned xxiii—xxx
Directions
DIRECTION 91 Substitution on the Official List of Family-Group Names in Zoology of the name of an earlier nominal family-group taxon based on the generic name Tylenchus Bastian, 1865 (Class Nematoda) than the name entered on the List by the Ruling given in Direction 28 (i)—(viii)
DIRECTION 95 Determination of the authorship to be attributed to the work entitled <i>Prodrom einer Monographie des böhmischen Trilobiten</i> published in 1847 over the names of Hawle (I.) and Corda (A.J.C.) (ix)—(xxvi)

Opinions

· ·	
OPINION 501 Validation under the Plenary Powers of the specific name adippe as published in the combination Papilio adippe in 1775 in the anonymous work by Denis & Schiffermüller commonly known as the Wiener Verzeichniss to be the specific name for the High Brown Fritillary and validation under the same Powers of a neotype for the foregoing nominal species (Class Insecta, Order Lepidoptera)	1
OPINION 502 Validation under the Plenary Powers of the name Lepidurus Leach, 1819 (Class Crustacea, Order Phyllopoda), designation under the same Powers of a type species in harmony with accustomed usage for the nominal genus Triops Schrank, 1803 (Class Crustacea, Order Phyllopoda) and addition of those names and of Apus Scopoli, 1777 (Class Aves), to the Official List of Generic Names in Zoology and matters incidental thereto	65
OPINION 503 Designation under the Plenary Powers of a type species in harmony with existing usage for the generic name <i>Cupido</i> Schrank, 1801 (Class Insecta, Order Lepidoptera) and matters incidental thereto 1	21
OPINION 504 Suppression under the Plenary Powers of the generic name <i>Planites</i> de Haan, 1825 (Class Cephalopoda, Order Ammonoidea)	41
OPINION 505 Validation under the Plenary Powers of the generic names <i>Trinucleus</i> Murchison, 1839 and <i>Tretaspis</i> M°Coy, 1849 (Class Trilobita)	.57
OPINION 506 Grant under the Plenary Powers of	

OPINION 506 Grant under the Plenary Powers of precedence to the specific name *jurtina* Linnaeus, 1758, as published in the combination *Papilio jurtina*, over the name *janira* Linnaeus, 1758, as published in the combination *Papilio janira* (a name published

	Page
in the same work and on the same date) and suppression under the same Powers of the family-group name EPINEPHELIDI Tutt, 1896 (Class Insecta, Order Lepidoptera)	177
OPINION 507 Use of the Plenary Powers to secure that the generic name <i>Panulirus</i> White, 1847 (Class Crustacea, Order Decapoda) shall be the oldest available name for the genus concerned	197
OPINION 508 Use of the Plenary Powers to ensure that the generic name <i>Illaenus</i> Dalman, [1827] (Class Trilobita) shall be the oldest available name for the genus concerned	211
OPINION 509 Use of the Plenary Powers to attribute the name <i>Filaria volvulas</i> to Leuckart (K.G.F.R.), [1892], and to approve the emendation of the foregoing specific name from <i>volvulas</i> to <i>volvulus</i> (Class Nematoda)	227
OPINION 510 Validation under the Plenary Powers of the generic name Asaphus Brongniart, 1822 (Class Trilobita)	239
OPINION 511 Validation under the Plenary Powers of the generic name <i>Maja</i> Lamarck, 1801 (Class Crustacea, Order Decapoda) and designation under the same Powers of a type species for that genus in harmony with established practice	257
OPINION 512 Validation under the Plenary Powers of the generic name Sao Barrande, 1846 (Class Trilobita)	273
OPINION 513 Determination of the species to be accepted respectively as the type species of the genera Cultur and Nasus both of Basilewsky, 1855 (Class Pisces)	291

XVIII

							Page
OPINION 514 the generic Aves)	Validation name <i>Hete</i>	ralocha	Cabar	nis, [18		of	303
Aves)	• •	• •	• •	• •	• •	• •	505
OPINION 515 the generic	Validation name Aur						
(Class Scyp	hozoa)	• •	• •		• •		315
Corrigenda .		• •	••		• •	••	331
Index to author volume and o						ent	332
Subject Index .							335
Particulars of da					_		255
which the pres	sent voiume	was pi	iblished	1	• •	• •	355
Instructions to b	oinders						356

OPINIONS AND DECLARATIONS RENDERED BY THE INTER-NATIONAL COMMISSION ON ZOOLOGICAL NOMENCLATURE

Edited by

FRANCIS HEMMING, C.M.G., C.B.E.

Secretary to the Commission



DECLARATION 36

Determination under Decision 85 of the Fourteenth International Congress of Zoology, Copenhagen, 1953, of the gender to be attributed to generic names having the terminations "-ops" and "-opsis" respectively

LONDON:

Printed by Order of the International Trust for Zoological Nomenclature

and

Sold on behalf of the International Commission on Zoological Nomenclature by the International Trust at its Publications Office 41, Queen's Gate, London, S.W.7

1958

Price Eight Shillings

(All rights reserved)

INTERNATIONAL COMMISSION ON ZOOLOGICAL NOMENCLATURE

COMPOSITION AT THE TIME OF THE ADOPTION OF THE RULING GIVEN IN DECLARATION 36

The Officers of the Commission

Honorary Life President: Dr. Karl Jordan (British Museum (Natural History), Zoological Museum, Tring, Herts., England)

President: Professor James Chester Bradley (Cornell University, Ithaca, N.Y., U.S.A.) (12th August 1953)

Vice-President: Senhor Dr. Afranio do Amaral (Sao Paulo, Brazil) (12th August 1953)

Secretary: Mr. Francis Hemming (London, England) (27th July 1948)

В. The Members of the Commission

(Arranged in order of precedence by reference to date of election or of most recent re-election, as prescribed by the International Congress of Zoology)

Professor H. Boschma (Rijksmuseum van Natuurlijke Historie, Leiden, The Netherlands) (1st January 1947)
Senor Dr. Angel Cabrera (La Plata, Argentina) (27th July 1948)
Mr. Francis Hemming (London, England) (27th July 1948) (Secretary)
Dr. Henning Lemche (Universitetets Zoologiske Museum, Copenhagen, Denmark) (27th

July 1948)
Professor Teiso Esaki (Kyushu University, Fukuoka, Japan) (17th April 1950)

Professor Pierre Bonnet (Université de Toulouse, France) (9th June 1950)

Mr. Norman Denbigh RILEY (British Museum (Natural History), London) (9th June 1950) Professor Tadeusz Jaczewski (Institute of Zoology, Polish Academy of Sciences, Warsaw, Poland) (15th June 1950) Professor Robert Mertens (Natur-Museum u. Forschungs-Institut Senckenberg, Frankfurt

a.M., Germany) (5th July 1950)
essor Erich Martin Hering (Zoologisches Museum der Humboldt-Universität zu Berlin, Germany) (5th July 1950)

Senhor Dr. Afranio do Amaral (S. Paulo, Brazil) (12th August 1953) (Vice-President)
Professor J. R. Dymond (University of Toronto, Toronto, Canada) (12th August 1953)
Professor J. Chester Bradley (Cornell University, Ithaca, N.Y., U.S.A.) (12th August 1953) (President) Professor Harold E. Vokes (University of Tulane, Department of Geology, New Orleans,

Louisiana, U.S.A.) (12th August 1953)

Professor Béla HANKÓ (Mezőgazdasági Muzeum, Budasest, Hungary) (12th August 1953) Dr. Norman R. Stoll (Rockefeller Institute for Medical Research, New York, N.Y., U.S.A.) (12th August 1953)

Mr. P. C. Sylvester-Bradley (Sheffield University, Sheffield, England) (12th August 1953)
Dr. L. B. Holthuis (Rijksmuseum van Natuurlijke Historie, Leiden, The Netherlands) (12th August 1953)

Dr. K. H. L. Key (Commonwealth Scientific and Industrial Research Organisation, Canberra, A.C.T., Australia) (15th October 1954)
Dr. Alden H. Miller (Museum of Vertebrate Zoology, University of California, U.S.A.)

(29th October 1954) Doc. Dr. Ferdinand PRANTL (Národní Museum V Praze, Prague, Czechoslovakia) (30th

October 1954) Professor Dr. Wilhelm Kühnelt (Zoologisches Institut der Universität, Vienna, Austria)

(6th November 1954) Professor F. S. Bodenheimer (The Hebrew University, Jerusalem, Israel) (11th November

1954) Professor Ernst Mayr (Museum of Comparative Zoology at Harvard College, Cambridge, Massachusetts, U.S.A.) (4th December 1954).
 Professor Enrico Tortonese (Museo di Storia Naturale "G. Doria" Genova, Italy)

(16th December 1954)

DECLARATION 36

DETERMINATION UNDER DECISION 85 OF THE FOURTEENTH INTERNATIONAL CONGRESS OF ZOOLOGY, COPENHAGEN, 1953, OF THE GENDER TO BE ATTRIBUTED TO GENERIC NAMES HAVING THE TERMINATIONS "-OPS" AND "-OPSIS" RESPECTIVELY

DECLARATION:—In accordance with the provisions of Decision 85 taken by the Fourteenth International Congress of Zoology, Copenhagen, 1953 (1953, Copenhagen Decisions zool. Nomencl.: 51), it is hereby directed that the following revised Rule be substituted for the Rule provisionally adopted as Rule (7)(b)(iii) in Decision 84 of the above Congress, the Rule relating to the gender to be attributed to generic names having the terminations "-ops" and "-opsis" in those cases where the termination in question is obviously derived from the corresponding Greek word:—

Revised Rule

- (1) The feminine gender is to be attributed to:—
 - (a) generic names having the termination "-opsis";
- (b) generic names having the termination "-ops" in cases where it is clear from the context that the "ops" portion of the name is derived from the Greek word ö\(\psi\) having a short "o" and meaning "a voice";
 - (c) generic names having the termination "-ops" in cases where it is clear from the original description that the "ops" portion of the name is derived from the Greek word öw having a short "o" and meaning "a face".

- (2) Except in the cases specified in (1)(b) and (1)(c) above, the gender to be attributed to a generic name having the termination "-ops" is to be:—
 - (i) whatever is the gender in general use for that name; or
 - (ii) if there is no generally accepted gender, the masculine gender, that being the gender most commonly attributed to the more widely found of the two Greek words concerned, i.e. the word \(\varphi\psi\) having a long "o" and meaning "an eye" or "a face".

I. THE STATEMENT OF THE CASE

The present Declaration has been prepared in part discharge of the obligation placed on the International Commission on Zoological Nomenclature by the Fourteenth International Congress of Zoology, Copenhagen, 1953, by its Decision 85 (1953, Copenhagen Decisions zool. Nomencl.: 51) to review the gender Rules then provisionally adopted by Decision 84 of that Congress before those Rules finally came into operation. The Rule which forms the subject of the present review is Rule 84(7)(b)(iii), under which it was laid down that the gender to be attributed to generic names having the terminations "-ops" and "-opsis", when obviously derived from the corresponding Greek word, is the feminine gender. The immediate cause which led to the review of this particular item in advance of the general review of the provisions laid down in Decision 84 which it had previously been intended to undertake was the submission to the Commission of an application designed to put an end to the long-standing cause of confusion resulting from the use of the generic name Apus both as the name of a genus of birds (the Swifts) and as the name of a genus of the Order Phyllopoda in the Class Crustacea. For an important place was taken in that application by the generic name *Triops* Schrank, 1803, the name widely used in the modern literature for the Phyllopod genus to which the name *Apus* had previously but invalidly been given by Cuvier in 1800, and it was accordingly necessary to determine the gender to be attributed to that name in connection with the proposal submitted by the applicants that, as part of the settlement of the *Apus* problem, it should be placed on the *Official List of Generic Names in Zoology*.¹

2. The emergence of the problem represented by the question of the gender to be attributed to generic names having the termination "-ops" led to further consultations with Professor L. W. Grensted, Consulting Classical Adviser to the Commission. These culminated in the submission to the Commission by the Secretary on 15th March 1957 of the following paper containing a request for the adoption of a *Declaration* reviewing and revising, under Copenhagen Decision 85, the Rule regarding the gender attributable to generic names having the above termination provisionally laid down in Decision 84 of that Congress:—

Proposed adoption of a "Declaration" reviewing under Decision 85 of the Copenhagen (1953) Congress the Rule laid down in Decision 84 of that Congress regarding the gender to be attributed to generic names having the termination "-ops"

By FRANCIS HEMMING, C.M.G., C.B.E.

(Secretary to the International Commission on Zoological Nomenclature)

At Copenhagen in 1953 the Fourteenth International Congress of Zoology (a) incorporated into the Règles a series of Rules for the determination of the gender to be attributed to generic names (1953, Copenhagen Decision zool. Nomencl.: 49—51, Decision 84), and (b) having regard to the inherent difficulties involved in any attempt

The decision since taken on the generic name here referred to has been embodied in *Opinion* 502, which is being published simultaneously with the present *Declaration* as Part 3 of this volume.

to lay down rules of general application in this field, imposed upon the Commission the duty of reviewing the Rules so prescribed before they were finally incorporated into the Règles (1953, loc. cit.: 51, Decision 85). A preliminary survey of the Rules set out in Decision 84 has been carried out by the Professor L. W. Grensted, the Commission's Consulting Classical Adviser, at the request of this Office and this survey has brought to light various matters which will require to be considered by the Commission under the terms of Decision 85 and on which proposals will be submitted in due course. The present paper is concerned with one particular provision which work on an individual name submitted to the Commission has shown to be so loosely worded as to call for immediate clarification. It is the problem so involved which forms the subject of the present paper.

- 2. The Rule here in question is that which appears in the Copenhagen Decision 84 as Rule (7)(b)(iii). This Rule prescribes, *inter alia*, that the following names "are to be treated as feminine in gender":—
- "(iii) Names having the final term "ops" or "opsis" obviously derived from the corresponding Greek word."
- 3. The problem with which the present paper is concerned arises in connection with generic names having the termination "-ops". This problem came to light in connection with the generic name Triops Schrank, 1803 (Class Crustacea, Order Phyllopoda) (Application Z.N.(S.) 1020). This name has always been treated by specialists as being masculine in gender. In the case in question the applicants, believing that this name fell within the scope of Copenhagen Rule (7)(b)(iii) quoted above, concluded that under the normal provisions of the Règles this name should be treated as being feminine in gender. In order, however, to avoid the disturbance in settled practice which the acceptance of this gender would involve, the applicants asked that the Commission should use its Plenary Powers to direct that the masculine gender should be attributed to this generic name. It was while this proposal was still under consideration that the Commission's Consulting Classical Adviser submitted an informal preliminary Report on the Rules embodied in Copenhagen Decision 84. This Report brought to light the serious anomaly in the case of names having the termination "-ops" discussed in the following paragraphs.
- 4. The Classical Adviser's Report discloses the fact that in the case of any generic name having the termination "-ops", the "ops" portion of the word may be derived from any of the following Greek words:—
- (a) the Greek word $\delta \psi$ [short "o"] meaning "a voice":

The gender of this word is feminine.

(b) the Greek word $\delta \psi$ [short "o"], a rare shortened form of "opsis" having the meaning "a face":

The gender of this word is feminine.

- - This word is normally treated as being masculine in gender, but there is one record of its having been treated as a neuter word.
- 5. The particulars given above show that in its present form Rule (7) (b)(iii) adopted by the Copenhagen Congress is incapable of being applied with certainty except in the very rare cases where particulars of the origin of the word "ops" are given in the original description of the generic name. The above particulars show also that, while the attribution of a feminine gender would be appropriate for generic names where it was clearly established that the "-ops" portion of the word was derived either from the Greek word $\delta \psi$ [short "o"] meaning "a voice" or from the Greek word $\delta \psi$ [short "o"] meaning "a face", it would not be appropriate for words formed from the Greek word $\delta \psi$ [long "o"], also meaning "a face", the gender for which has, except in one isolated instance, been treated as being masculine.
- 6. In the circumstances it is suggested that, in conformity with the two-fold principle (a) that current cases are not to be held up through lack of a ruling on the interpretation of any given provision in the Règles and (b) that rulings on questions of a general character should be dealt with in Declarations and not in Opinions dealing primarily with individual nomenclatorial problems, the Commission should now render a Declaration clarifying and rendering workable the rule laid down at Copenhagen in regard to the gender to be attributed to generic names having the termination "-ops". In the proposed revised rule it would be possible to direct that the feminine gender should be automatically attributed to the two clearly defined classes of case where this gender would be correct, namely words having the termination "-ops" (a) where it is clear from the content that the word $\delta \psi$ has the meaning "a voice" (and not the meaning "a face"), and (b) where it was made clear in the original description of the name that the "ops" portion is derived from the Greek word $\delta \psi$ [short "o"] having the meaning "a face". It remains to consider what rule should be adopted for determining the gender to be attributed to names having the termination "-ops" belonging to all other classes. These consist of names the "ops" termination of which is derived from the Greek word $\ddot{\sigma}\psi$ [long "o"] meaning "a face", and possibly a few names based on the Greek word $\ddot{\sigma}\psi$ [short "o"] which cannot be identified as such by reason of the lock of particulars in the original identified as such by reason of the lack of particulars in the original descriptions of the generic names concerned. In these cases it would,

it is suggested, be reasonable to give a ruling that the gender to be accepted shall be whatever is the currently accepted gender—this course being strictly consistent with the position explained in paragraph 4(c) above—and that, where there is no generally accepted gender, the gender to be adopted be the masculine gender, that being the gender commonly attributed to the more widely used of the words "ops" concerned, i.e. the word $\ddot{\omega}\psi$ with a long "o".

- 7. No difficulty arises in connection with generic names having the termination "-opsis", Professor Grensted reporting that such words are feminine both by their general form and because the Greek word $\delta \psi_{1S}$ from which they are derived is feminine in gender.
- 8. The *Declaration* which the Commission is recommended to adopt is therefore as follows:—

Draft "Declaration"

In accordance with the provisions of Decision 85, taken by the Fourteenth International Congress of Zoology, Copenhagen, 1953, it is hereby directed that the following revised Rule be substituted for Rule (7)(b)(iii) in Decision 84 of the above Congress, the Rule which prescribes that the feminine gender be attributed to generic names having the terminations "-ops" and "-opsis" when obviously derived from the corresponding Greek word:—

Suggested Revised Rule

- (a) The feminine gender is to be attributed to :-
 - (1) generic names having the termination "-opsis";
 - (1) generic names having the termination "-ops" where it is clear from the context that the portion of the name consisting of the termination "-ops" has the meaning "a voice";
 - (3) generic names having the termination "-ops" where it is made clear in the original description that the "ops" portion of the name is derived from the Greek word ὄψ [short "o"] meaning "a face".
- (b) In the case of generic names having the termination "-ops"

 (1) where it is not clear from the context that the portion of the name consisting of the word "ops" has the meaning "a face" and (2) where the gender is not determined from the original description under (a)(3) above, the gender to be attributed to the generic name in question shall be the gender

generally in use for that name and, where there is no commonly accepted gender, the gender to be adopted shall be the masculine gender [that being the gender commonly attributed to the more widely found of the two Greek words which, when transliterated appear as "ops" [i.e. the word $\omega \psi$ with a long "o"].

3. Registration of the present application: The earlier consideration of the gender to be attributed to the generic name Triops Schrank, 1803, was conducted on the Registered File numbered Z.N.(S.) 1020, the file concerned with the solution of the Apus problem in which the above name was intimately involved. It was under this Number that the Apus/Triops application was published on 26th June 1956 (Holthuis (L.B.) & Hemming (F.), 1956, Bull. zool. Nomencl. 12:67—85). When later (as has been explained in the first paragraph of the present Declaration) it became clear that the determination of the gender to be attributed to the generic Triops involved an issue of principle affecting the provisions of the Règles, it was decided to open a new File for the general problem so disclosed. The Registered Number allotted to the new File so opened was Z.N.(S.) 1206.

II. THE DECISION TAKEN BY THE INTERNATIONAL COMMISSION ON ZOOLOGICAL NOMENCLATURE

4. Issue of Voting Paper V.P.(57)25: On 15th March 1957 a Voting Paper (V.P.(57)25) was issued in which the Members of the Commission were invited to vote either for, or against, "the proposal relating to the adoption of a *Declaration* reviewing under Decision 85 of the Copenhagen (1953) Congress the Rule laid down in Decision 84 of that Congress regarding the gender to be attributed to generic names having the termination "-ops" as proposed in paragraph 8 of the paper bearing the Registered Number Z.N.(S.) 1206 [i.e. in the paragraph numbered as above in the paper reproduced in paragraph 2 of the present *Declaration*], submitted by the Secretary simultaneously with the present Voting Paper".

- 5. The Prescribed Voting Period: As the foregoing Voting Paper was issued under the Three-Month Rule, the Prescribed Voting Period closed on 15th June 1957.
- 6. Particulars of the Voting on Voting Paper V.P.(57)25: At the close of the Prescribed Voting Period, the state of the voting on Voting Paper V.P.(57)25 was as follows:—
 - (a) Affirmative Votes had been given by the following twenty (20) Commissioners (arranged in the order in which Votes were received):

Vokes; Hering; Boschma; Lemche; Bodenheimer; Prantl; Dymond; Riley; Esaki; Jaczewski; Key; Bonnet; Hemming; Mertens; Sylvester-Bradley; Tortonese; Cabrera; Kühnelt; Stoll; Bradley (J.C.);

(b) Negative Votes, two (2):

Holthuis; do Amaral;

(c) Voting Papers not returned, three (3):

Hankó; Mayr; Miller.²

7. Declaration of Result of Vote: On 16th June 1957, Mr. Hemming, Secretary to the International Commission, acting as Returning Officer for the Vote taken on Voting Paper V.P.(57)25, signed a Certificate that the Votes cast were as set out in paragraph 6 above and declaring that the proposal submitted in the foregoing Voting Paper had been duly adopted and that the decision so taken was the decision of the International Commission in the matter aforesaid.

² After the close of the Prescribed Voting Period a late affirmative Vote was received from Commissioner Miller.

- 8. Certain Minor Clarifications: In the early part of October 1957 Mr. Hemming, in connection with the preparation of the present Declaration, took into consideration the possibility of clarifying the concluding portion of the proposed Rule which had been included with the paper which had been submitted on 15th March 1957 (i.e. the paper reproduced in the second paragraph of the present Declaration) and entered into consultation with the Commission's Consulting Classical Adviser on this subject. As the outcome of these consultations it was agreed between Professor Grensted and Mr. Hemming that it would be of advantage if the second portion of the proposed Rule were to be shortened by the insertion of a direct reference to the second and third of the points specified in the first portion of that Rule in place of the phrases describing those points with which the second portion had opened in the draft submitted. It was agreed also that it would be of advantage if in the reference in the second portion of the proposed Rule an appropriate mention were to be made of the fact that the Greek word ωψ having a long "o" had the meaning "an eye" as well as the meaning "a face", the first of these meanings being undoubtedly the meaning implied, for example, in certain generic names in the Order Decapoda (Class Crustacea), e.g., in the case of the generic name Nephrops [Leach], [1814], a name which had been placed on the Official List of Generic Names in Zoology in 1928 by the Ruling given in Opinion 104 and which was clearly intended to convey the meaning "Kidney-like-Eyed" (the only alternative meaning "Kidney-like-Voiced" being manifestly absurd)3. Accordingly, on 4th November 1957 Mr. Hemming executed a Minute directing that the wording of the Revised Rule which had formed the subject of the vote by the Commission on Voting Paper V.P.(57)25 be clarified, as proposed, in respect of the matters specified above.
- **9. Preparation of the present "Declaration":** On 5th November 1957 Mr. Hemming prepared the present *Declaration* and at the same time signed a Certificate that the terms of that

³ A formal proposal for the determination under the provisions of the present *Declaration* of the gender to be attributed on the *Official List* to the generic name *Nephrops* [Leach], [1814], was submitted to the Commission with Voting Paper V.P.(57)63 on 6th November 1957.

Declaration were in complete accord with those of the proposal approved by the International Commission in its vote on Voting Paper V.P.(57)25.

- 10. The prescribed procedures were duly complied with by the International Commission on Zoological Nomenclature in dealing with the present case, and the present *Declaration* is accordingly hereby rendered in the name of the said International Commission by the under-signed Francis Hemming, Secretary to the International Commission on Zoological Nomenclature, in virtue of all and every the powers conferred upon him in that behalf.
- 11. The present *Declaration* shall be known as *Declaration* Thirty-Six (36) of the International Commission on Zoological Nomenclature.

DONE in London, this Fifth day of November, Nineteen Hundred and Fifty-Seven.

Secretary to the International Commission on Zoological Nomenclature

FRANCIS HEMMING

OPINIONS AND DECLARATIONS RENDERED BY THE INTERNATIONAL COMMISSION ON ZOOLOGICAL NOMENCLATURE

Edited by

FRANCIS HEMMING, C.M.G., C.B.E. Secretary to the Commission

VOLUME 18. Part 4. Pp. xiii xxii

DECLARATION 37 LIBRAR

Clarification of the provisions in the *Règles* regarding the method to be followed in determining the relative precedence to be accorded to any two names for nominal family-group taxa published in the same work and on the same date

LONDON:

Printed by Order of the International Trust for Zoological Nomenclature

and

Sold on behalf of the International Commission on Zoological Nomenclature by the International Trust at its Publications Office 41, Queen's Gate, London, S.W.7

1958

Price Six Shillings and Sixpence

(All rights reserved)

INTERNATIONAL COMMISSION ON ZOOLOGICAL NOMENCLATURE

COMPOSITION AT THE TIME OF THE ADOPTION OF THE RULING GIVEN IN DECLARATION 37

The Officers of the Commission

Honorary Life President: Dr. Karl JORDAN (British Museum (Natural History), Zoological Museum, Tring, Herts, England)

President: Professor James Chester Bradley (Cornell University, Ithaca, N.Y., U.S.A.) (12th August 1953)

Vice-President: Senhor Dr. Afranio do AMARAL (Sao Paulo, Brazil) (12th August 1953)

Secretary: Mr. Francis Hemming (London, England) (27th July 1948)

В. The Members of the Commission

(Arranged in order of precedence by reference to date of election or of most recent re-election, as prescribed by the International Congress of Zoology)

Professor H. Boschma (Rijksmuseum van Natuurlijke Historie, Leiden, The Netherlands) (1st January 1947)

Senor Dr. Angel Cabrera (La Plata, Argentina) (27th July 1948)

Mr. Francis Hemming (London, England) (27th July 1948) (Secretary)
Dr. Henning Lemche (Universitetets Zoologiske Museum, Copenhagen, Denmark) (27th July 1948)

Professor Teiso Esaki (Kyushu University, Fukuoka, Japan) (17th April 1950)
Professor Pierre Bonnet (Université de Toulouse, France) (9th June 1950)
Mr. Norman Denbigh Riley (British Museum (Natural History), London) (9th June 1950) Professor Tadeusz Jaczewski (Institute of Zoology, Polish Academy of Sciences, Warsaw, Poland) (15th June 1950)

Professor Robert Mertens (Natur-Museum u. Forschungs-Institut Senckenberg, Frankfurt a.M., Germany) (5th July 1950)
Professor Erich Martin Hering (Zoologisches Museum der Humboldt-Universität zu Berlin,

Frofessor J. R. Dymond (University of Toronto, Toronto, Canada) (12th August 1953)
Professor J. Chester Bradley (Cornell University, Ithaca, N.Y., U.S.A.) (12th August 1953)

1953) (President)

Professor Harold E. Vokes (University of Tulane, Department of Geology, New Orleans, Louisiana, U.S.A.) (12th August 1953)

Professor Béla Hankó (Mezőgazdasági Muzeum, Budapest, Hungary) (12th August 1953)
Dr. Norman R. Stoll (Rockefeller Institute for Medical Research, New York, N.Y., U.S.A.) (12th August 1953)
Mr. P. C. SYLVESTER-BRADLEY (Sheffield University, Sheffield, England) (12th August 1953)
Dr. L. B. HOLTHUIS (Rijksmuseum van Natuurlijke Historie, Leiden, The Netherlands)

(12th August 1953)
Dr. K. H. L. Key (Commonwealth Scientific and Industrial Research Organisation, Canberra, A.C.T., Australia) (15th October 1954)
Dr. Alden H. Miller (Museum of Vertebrate Zoology, University of California, U.S.A.)

(29th October 1954)

Doc. Dr. Ferdinand PRANTL (Národni Museum v Praze, Prague, Czechoslovakia) (30th October 1954)

Professor Dr. Wilhelm KÜHNELT (Zoologisches Institut der Universität, Vienna, Austria) (6th November 1954) Professor F. S. Bodenheimer (The Hebrew University, Jerusalem, Israel) (11th November

1954)

Professor Ernst Mayr (Museum of Comparative Zoology at Harvard College, Cambridge, Massachusetts, U.S.A.) (4th December 1954)
Professor Enrico Tortonese (Museo di Storia Naturale "G. Doria," Genova, Italy)

(16th December 1954)

DECLARATION 37

CLARIFICATION OF THE PROVISIONS IN THE "REGLES" REGARDING THE METHOD TO BE FOLLOWED IN DETERMINING THE RELATIVE PRECEDENCE TO BE ACCORDED TO ANY TWO NAMES FOR NOMINAL FAMILY-GROUP TAXA PUBLISHED IN THE SAME WORK AND ON THE SAME DATE

DECLARATION:—(1) The relative precedence to be accorded to any two names for nominal family-group taxa published in the same work and on the same date is to be determined in accordance with the "First Reviser" Principle, that is, when two such taxa are united on taxonomic grounds, the name to be used for the combined taxon so recognised is to be whichever of the previously published family-group names is selected for use as such by a "First Reviser" ("selection by a 'First Reviser").

(2) For the purposes of (1) above, the expression "selection by a 'First Reviser'" is to be rigidly construed and such a selection is to be deemed to have been effected only when an author, after citing two or more family-group names published in the same work and on the same date, clearly indicates, by whatever method, (a) that he is of the opinion that the respective type genera of the nominal family-group taxa concerned are referable to a single family-group taxon, and (b) that he is selecting one of the family-group names concerned, to the exclusion of the other name or names, to be the name for the combined family-group taxon so recognised.

I. THE STATEMENT OF THE CASE

The present *Declaration* is concerned with the question of the precedence to be accorded to any two family-group names published in the same book and on the same date, a matter on which there has hitherto been no express provision in the *Règles*. The foregoing problem arose in connection with two family-group names in the Order Lepidoptera (Class Insecta) which were involved in an application for the use by the Commission of the Plenary Powers for the purpose of securing a valid basis for the continued employment of the generic name *Cupido* Schrank, 1801, in its accustomed sense¹. The application on which the present *Declaration* is based, which was submitted to the Commission by the Secretary on 18th June 1956, was as follows:—

Proposed adoption of a "Declaration" to clarify the provisions in the "Règles" regarding the method to be followed in determining the relative precedence to be accorded to any two names for nominal family-group taxa published in the same work and on the same date

By FRANCIS HEMMING, C.M.G., C.B.E.

(Secretary to the International Commission on Zoological Nomenclature)

The purpose of the present application is to ask the International Commission on Zoological Nomenclature to adopt a *Declaration* regarding the method to be followed in determining the relative precedence to be accorded to two or more names for family-group taxa published in the same book and on the same date.

2. The foregoing problem has arisen in connection with the precedence to be accorded to the names for two tribes, EVERIDI and CUPIDINIDI (correction of CUPIDIDI) in the family LYCAENIDAE (Class Insecta, Order Lepidoptera) on which an application (Z.N.(S.) 1138) is being submitted to the Commission for the purpose of securing the continued use of the name Cupido Schrank, 1801, in its accustomed sense². Both the foregoing family-group names were published in

¹ The decision since taken by the International Commission on the application relating to the generic name *Cupido* Schrank, 1801, has now been embodied in *Opinion* 503, which is being published in the immediately following Part of the present volume.

² See Footnote 1,

[1907] in the same Part of Volume 2 of Tutt's Natural History of the British Butterflies (: 327). The name EVERIDI Tutt is in general use for the taxon having Everes Hübner, [1819], as type genus and by some authors (e.g. Lorkovic) this family-group taxon has been elevated to subfamily rank. The genus Cupido Schrank, 1801, is regarded by some authors as typifying a distinct family-group taxon, but by others as being properly placed in the same family-group taxon as Everes Hübner. The question now to be considered is what is the family-group name which should be used by those specialists who consider that the genera Everes Hübner and Cupido Schrank should be separated from other genera at the family-group level but should themselves be placed in the same family-group taxon. Should the name EVERIDI (or EVERINAE) be used for this taxon or should the name CUPIDINIDI (or CUPIDININAE) be used for this taxon?

- 3. The Règles, as adopted by the Fifth International Congress of Zoology, Berlin, 1901, provided in Article 28 that the relative precedence to be accorded to generic names and specific names published in the same book and on the same date was to be determined in accordance with the "First Reviser" Principle. In 1948 the Thirteenth International Congress of Zoology, Paris, substituted the "Page and Line Precedence" Principle as that which should be applied in such cases (1950, Bull. zool. Nomencl. 4: 330-331), but this change did not secure general approval and in 1953 the Fourteenth International Congress of Zoology reversed the decision of the Paris Congress in this matter and re-instated the "First Reviser" Principle (1953, Copenhagen Decisions zool. Nomencl.: 66—67, Decision 123). same time the Copenhagen Congress inserted in the Règles a provision defining the expression "First Reviser" (ibid.: 67, Decision 124), thus largely meeting the point of view of those taxonomists who had till then disliked the "First Reviser" Principle because of the practical difficulties involved in its application through the lack of guidance as to what action an author is required to take in order to qualify himself for recognition as a "First Reviser".
- 4. The possibility that the problem discussed above might arise not only in connection with generic and specific names but also in connection with names published for family-group taxa was overlooked when at Copenhagen in 1953 the provisions in the *Règles* relating to family-group names were revised by the Fourteenth International Congress of Zoology. There is therefore at present no provision in the *Règles* for determining the relative precedence to be accorded to names for family-group taxa published in the same book or paper and on the same date. It is desirable that this omission should now be rectified as quickly as possible, for it is likely that the foregoing problem will be found to arise fairly frequently in view of the fact that, although in many cases family-group names were introduced into the literature singly, there are numerous works containing sections

devoted entirely to questions of suprageneric classification in which considerable numbers of new nominal family-group taxa were introduced in close proximity to one another and where in consequence the problem discussed above has already arisen.

- 5. In view of the decision by the Copenhagen Congress that the best way of dealing with this problem when it arises in connection with the names of genera and species is to apply the "First Reviser" Principle, it would be both illogical and undesirable to apply any other principle for dealing with this problem at the family-group-name level. I therefore recommend that this principle be adopted, its application being made subject to conditions similar to those prescribed by the Copenhagen Congress in relation to the determination of the relative precedence to be accorded to generic or specific names when published in the same book or paper and on the same date.
- 6. I accordingly submit for the consideration of the International Commission the proposal that it adopt a *Declaration* in the following terms:—
 - **DRAFT DECLARATION:** (1) The relative precedence to be accorded to any two names for nominal family-group taxa published in the same work and on the same date shall be determined in accordance with the "First Reviser" Principle, that is, when two such taxa are united on taxonomic grounds, the name to be used for the combined taxon so recognised is to be whichever of the previously published family-group names is selected for use as such by a "First Reviser" ("selection by a 'First Reviser").
 - (2) For the purposes of (1) above the expression "selection by a 'First Reviser'" is to be rigidly construed and such a selection is to be deemed to have been effected only when an author, after citing two or more family-group names published in the same work and on the same date, clearly indicates, by whatever method, (a) that he is of the opinion that the respective type genera of the nominal family-group taxa concerned are referable to a single family-group taxon, and (b) that he is selecting one of the family-group names concerned, to the exclusion of the other name or names, to be the name for the combined family-group taxon so recognised.

II. THE SUBSEQUENT HISTORY OF THE CASE

2. Registration of the present application: Upon the receipt of Mr, Hemming's paper the question of the adoption of a

Declaration in the sense recommended was allotted the Registered No. Z.N.(S.) 1141.

- **3. Publication of the present application:** The present application was sent to the printer on 20th June 1956 and was published on 31st October of the same year in Part 10 of Volume 12 of the *Bulletin of Zoological Nomenclature* (Hemming, 1956, *Bull. zool. Nomencl.* **12:** 264—266).
- **4.** Issue of Public Notices: Public Notice of the possible adoption of a *Declaration* in the sense recommended was given in like manner as though the application involved the possible use by the International Commission on Zoological Nomenclature of its Plenary Powers on 31st October 1956 (a) in Part 10 of Volume 12 of the *Bulletin of Zoological Nomenclature* (the Part in which Mr. Hemming's application was published) and (b) to the other prescribed serial publications. In addition such Notice was given to four general zoological serial publications.
- 5. Comments Received: The publication of the present application elicited two comments, of which one (from Curtis W. Sabrosky) was in support of the action proposed, while the other (from E. Raymond Hall) expressed a preference for the "Page-and-Line Precedence" Principle as contrasted with that of the "First Reviser" advocated in the application submitted in the present case. The communications so received are reproduced in the immediately following paragraphs.
- 6. Support for the "First Reviser" Principle advocated in the present application received from Curtis W. Sabrosky (Entomology Research Branch, U.S. Department of Agriculture, Washington, D.C., U.S.A.): On 7th February 1957, Dr. Curtis W. Sabrosky (Entomology Research Branch, U.S. Department of Agriculture, Washington, D.C., U.S.A.) addressed the following letter to the Office of the Commission in support of the present case:—

I wish to support the proposed *Declaration* on the relative precedence of simultaneously published names (same book and date) for family-

group taxa. Your conclusion is the logical extension of the "First Reviser" Principle as applied to generic and specific names.

7. Objection to the "First Reviser" Principle and advocacy of the "Page-and-Line Precedence" Principle received from E. Raymond Hall (University of Kansas, Lawrence, Kansas, U.S.A.): On 23rd November 1956, Professor E. Raymond Hall (University of Kansas, Lawrence, Kansas, U.S.A.) addressed the following letter to the Office of the Commission in which he expressed his objections to the action proposed in the present case:—

On page 978 of *Science* for November 16, 1956, I note the invitation to register opinion concerning which one of two or more names should be adopted for family-group taxa in an instance where the two or more names are published in the same book on the same date. My recommendation is that precedence be the guide; for example, if three names appear on one page, but each in a different line on that page, the name in the topmost line should be chosen. If more than one name is published in the same line, then the name nearest the left-hand end of the line should be selected on account of its precedent position.

III. THE DECISION TAKEN BY THE INTERNATIONAL COMMISSION ON ZOOLOGICAL NOMENCLATURE

8. Issue of Voting Paper V.P.(57)36: On 15th May 1957 a Voting Paper (V.P.(57)36) was issued in which the Members of the Commission were invited to vote either for, or against, "the proposal relating to the proposed adoption of a *Declaration* extending the 'First Reviser' Rule to family-group names published in the same book and on the same date, as set out in paragraph 6 on pages 265 and 266 of Volume 12 of the *Bulletin of Zoological Nomenclature*" [i.e. in the paragraph numbered as above in the paper reproduced in the first paragraph of the present *Declaration*].

- 9. The Prescribed Voting Period: As the foregoing Voting-Paper was issued under the Three-Month Rule, the Prescribed Voting Period closed on 15th August 1957.
- 10. Particulars of the Voting on Voting Paper V.P.(57)36: At the close of the Prescribed Voting Period, the state of the voting on Voting Paper V.P.(57)36 was as follows:—
 - (a) Affirmative Votes had been given by the following twentytwo (22) Commissioners (arranged in the order in which Votes were received):

Hering; Vokes; Prantl; Lemche; Holthuis; Riley; Dymond; do Amaral; Esaki; Hankó; Stoll; Key; Jaczewski; Mertens; Bodenheimer; Boschma; Bonnet; Hemming; Sylvester-Bradley; Cabrera; Bradley (J.C.); Tortonese;

(b) Negative Votes, one (1):

Miller;

(c) On Leave of Absence, two (2):

Mayr; Kühnelt;

(d) Voting Papers not returned:

None.

11. Declaration of Result of Vote: On 16th August 1957, Mr. Hemming, Secretary to the International Commission, acting as Returning Officer for the Vote taken on Voting Paper

V.P.(57)36, signed a Certificate that the Votes cast were as set out in paragraph 10 above and declaring that the proposal submitted in the foregoing Voting Paper had been duly adopted and that the decision so taken was the decision of the International Commission in the matter aforesaid.

- 12. Preparation of the Ruling given in the present "Declaration": On 6th November 1957, Mr. Hemming prepared the present *Declaration* and at the same time signed a Certificate that the terms of that *Declaration* were in complete accord with those of the proposal approved by the International Commission in its Vote on Voting Paper V.P.(57)36.
- 13. The prescribed procedures were duly complied with by the International Commission on Zoological Nomenclature in dealing with the present case, and the present *Declaration* is accordingly hereby rendered in the name of the said International Commission by the under-signed Francis Hemming, Secretary to the International Commission on Zoological Nomenclature, in virtue of all and every the powers conferred upon him in that behalf.
- **14.** The present *Declaration* shall be known as *Declaration* Thirty-Seven (37) of the International Commission on Zoological Nomenclature.

DONE in London, this Sixth day of November, Nineteen Hundred and Fifty-Seven.

Secretary to the International Commission on Zoological Nomenclature

FRANCIS HEMMING

OPINIONS AND DECLARATIONS RENDERED BY THE INTERNATIONAL COMMISSION ON ZOOLOGICAL NOMENCLATURE

Edited by

FRANCIS HEMMING, C.M.G., C.B.E. Secretary to the Commission

VOLUME 18. Part 13. Pp. xxiii—xxx

DECLARATION 38

Clarification of the procedure to be adopted for determining the authorship to be attributed for the purposes of zoological nomenclature to any given work in cases where the accuracy of the authorship stated in the title



LONDON:

Printed by Order of the International Trust for Zoological Nomenclature

and

Sold on behalf of the International Commission on Zoological Nomenclature by the International Trust at its Publications Office 41, Queen's Gate, London, S.W.7

1958

Price Five Shillings and Sixpence

(All rights reserved)

INTERNATIONAL COMMISSION ON ZOOLOGICAL NOMENCLATURE

COMPOSITION AT THE TIME OF THE ADOPTION OF THE RULING GIVEN IN DECLARATION 38

The Officers of the Commission

Honorary Life President: Dr. Karl Jordan (British Museum (Natural History), Zoological Museum, Tring, Herts., England)

President: Professor James Chester Bradley (Cornell University, Ithaca, N.Y., U.S.A.) (12th August 1953)

Vice-President: Senhor Dr. Afranio do Amaral (Sao Paulo, Brazil) (12th August 1953) Secretary: Mr. Francis HEMMING (London, England) (27th July 1948)

The Members of the Commission

(Arranged in order of precedence by reference to date of election or of most recent re-election, as prescribed by the International Congress of Zoology)

Professor H. Boschma (Rijksmuseum van Natuurlijke Historie, Leiden, The Netherlands) (1st January 1947)
Senor Dr. Angel Cabrera (La Plata, Argentina) (27th July 1948)
Mr. Francis Hemming (London, England) (27th July 1948) (Secretary)
Dr. Henning Lemche (Universiteitets Zoologiske Museum, Copenhagen, Denmark) (27th

July 1948)
Professo Teiso Esaki (Kyushu University, Fukuoka, Japan) (17th April 1950)
Professor Pierre Bonnet (Université de Toulouse, France) (9th June 1950)

Mr. Norman Denbigh RILEY (British Museum (Natural History), London) (9th June 1950) Professor Tadeusz Jaczewski (Institute of Zoology, Polish Academy of Sciences, Warsaw,

Professor Tadeusz Jaczewski (Institute of Zoology, Polish Academy of Sciences, rearsam, Poland) (15th June 1950)

Professor Robert Mertens (Natur-Museum u. Forschungs-Institut Senckenberg, Frankfurt a. M., Germany) (5th July 1950)

Professor Erich Martin Hering (Zoologisches Museum der Humboldt-Universität zu Berlin, Germany) (5th July 1950)

Senhor Dr. Afranio do Amaral (S. Paulo, Brazil) (12th August 1953) (Vice-President) Professor J. R. Dymond (University of Toronto, Toronto, Canada) (12th August 1953) (Pressor J. Chester Bradley (Cornell University, Ithaca, N.Y., U.S.A.) (12th August 1953) (Pressor Harold E. Vokes (University of Tulane, Department of Geology, New Orleans, Louisiana, U.S.A.) (12th August 1953)

Professor Béla Hankó (Mezőgazdasági Muzeum, Budapest, Hungary) (12th August 1953) Dr. Norman R. Stoll (Rockefeller Institute for Medical Research, New York, N.Y.,

Dr. Norman R. Stoll (Rockefeller Institute for Medical Research, New York, N.Y., U.S.A.) (12th August 1953)

Mr. P. C. Sylvester-Bradley (Sheffield University, Sheffield, England) (12th August 1953) Dr. L. B. Holthuis (Rijksmuseum van Natuurlijke Historie, Leiden, The Netherlands) (12th August 1953)

Dr. K. H. L. Key (Commonwealth Scientific and Industrial Research Organisation, Canberra, A.C.T., Australia) (15th October 1954)

Dr. Alden H. Miller (Museum of Vertebrate Zoology, University of California, U.S.A.) (29th October 1954)

Doc. Dr. Ferdinand Prantl (Národni Museum V Praze, Prague, Czechoslovakia) (30th

October 1954) Professor Dr. Wilhelm Kühnelt (Zoologisches Institut der Universität, Vienna, Austria)

(6th November 1954) Professor F. S. Bodenheimer (The Hebrew University, Jerusalem, Israel) (11th November

1954) Professor Ernst Mayr (Museum of Comparative Zoology at Harvard College, Cambridge,

Massachusetts, U.S.A.) (4th December 1954)
Professor Enrico Tortoness (Museo di Storia Naturale "G. Doria", Genova, Italy)
(16th December 1954)

DECLARATION 38

CLARIFICATION OF THE PROCEDURE TO BE ADOPTED FOR DETERMINING THE AUTHORSHIP TO BE ATTRIBUTED FOR THE PURPOSES OF ZOOLOGICAL NOMENCLATURE TO ANY GIVEN WORK IN CASES WHERE THE ACCURACY OF THE AUTHORSHIP STATED IN THE TITLE HAS BEEN QUESTIONED

DECLARATION:—Where a work bears a statement purporting to specify or indicate the name of the author or the names of the authors, that statement is to be deemed to be correct, unless and until evidence is published purporting to show that that statement is incorrect, in which case the issue so raised is to be referred to the International Commission for decision.

I. THE STATEMENT OF THE CASE

In the course of the preparation of the first instalment of the Official Lists for publication in book-form, the question arose as regards the names for certain taxa belonging to the Class Trilobita whether the important work published in 1847 under the title Prodrom einer Monographie der böhmischen Trilobiten should be attributed to Hawle (I.) & Corda (A.J.C.), as stated in the title, or to Corda alone, in view of the statement later published by Hawle disclaiming responsibility for any share in the authorship of the above paper. The point at issue was one

on which no general ruling existed either in the *Règles* or in any later *Declaration* rendered by the Commission. Accordingly, as a preliminary to the submission to the Commission of the question of the authorship to be attributed to the foregoing work, the Secretary on 15th November 1957 prepared the following paper for the consideration of the Commission on the general issue involved:—

Proposed adoption of a "Declaration" clarifying the procedure to be adopted for determining the authorship to be attributed for the purposes of zoological nomenclature to any given work in cases where the accuracy of the authorship stated in the title has been questioned

By FRANCIS HEMMING, C.M.G., C.B.E.,

(Secretary to the International Commission on Zoological Nomenclature)

The purpose of the present paper is to ask the International Commission on Zoological Nomenclature to adopt a *Declaration* clarifying the procedure to be adopted for determining the authorship to be attributed for the purposes of zoological nomenclature to any given work in cases where the accuracy of the authorship stated in the title has been questioned.

2. The foregoing problem arises in connection with the authorship to be attributed to an important work on Trilobites published in 1847 under the title Prodrom einer Monographie der böhmischen Trilobiten on which a request has been received for a Ruling as to the authorship to be attributed for the purposes of zoological nomenclature. Full particulars regarding this case are given in a paper bearing the Registered Number Z.N.(S.)1076 which is being submitted to the Commission with Voting Paper V.P.(O.M.)(57)241 simultaneously with the present paper. It will be sufficient here to note that in this particular case the work was stated on the title to have been written jointly by two authors (Hawle & Corda) but that shortly after publication the first of these authors (Hawle) repudiated having had any share in its production. No express provision exists in the Règles for determining the procedure to be followed in such a case and accordingly under a General Directive issued by the Thirteenth International Congress of Zoology, Paris, 1948 (1950 Bull. zool. Nomencl. 4:135-137) the Commission is required to adopt an interpretative Declaration on the issue of a principle involved con-

¹ The decision taken by the Commission on the Voting Paper here referred to has since been embodied in *Direction* 95, which is now in the press and will be published as Part 19 of the present volume (:(ix)-(xxiv)).

currently with adopting an *Opinion* (or *Direction*) giving a Ruling on the individual case submitted.

3. Although (as explained above) the *Règles* contain no provision on the question of the authorship to be attributed to a work in cases where the authorship attributable is disputed, there is a provision dealing with the closely parallel situation which arises when the accuracy of the date of publication specified in a given work is challenged as being incorrect. The provision in question, which was inserted in the *Règles* by the Paris Congress (1950, *Bull. zool. Nomencl.* 4: 223—224), is as follows:—

Where a work bears a date purporting to specify or to indicate the date of publication, that date is to be deemed to be correct, unless and until evidence is published showing that date to be incorrect, in which case the work or any specified portion thereof is to be deemed to have been published on the latest date (whether earlier or later than the date specified or indicated in the work itself) that is compatible with the evidence so adduced.

4. In approaching the question now to be considered, there will, I am sure, be general agreement that it should be provided (as in the provision quoted in paragraph 3 above) that there should be a preliminary assumption that the authorship of a work stated on its title is correct. It remains to be considered what provision should be prescribed in cases where the accuracy of that preliminary assumption is questioned. It appears to me that at this point the case of a disputed authorship ceases to be analogous to that of a disputed date. In the latter case unimpeachable evidence can often be brought forward to show that the date printed on the title page (or elsewhere) of a given book is incorrect but that such evidence will very seldom be forthcoming in a case of disputed authorship. For this reason the automatic provisions adopted by the Paris Congress for determining disputed dates would not be appropriate. What is required is a provision that any case of disputed authorship be referred to the Commission for decision. In actual fact, such a provision would be substantially in line with the procedure adopted in the case of disagreement as to the date (or dates) to be attributed to a given work (or to parts of such a work), for, although the Règles provide an automatic procedure for settling such cases, that procedure does not always suffice to secure a definite answer and in such cases individual reference to the Commission is necessary and indeed inevitable. Examples of cases where such reference has been found to be necessary are provided by the dates to be attributed (a) to Jacob Hübner's Verzeichniss bekannter Schmettlinge. which formed the subject of a Ruling given in Opinion 150, as supplemented by Direction 4, and (b) to O.G. Costa's Lepidotteri volume in the work entitled Fauna del Regno di Napoli, which formed the subject of a Ruling given in Direction 59.

5. For the reasons set out above I accordingly recommend the International Commission on Zoological Nomenclature, when dealing with the case of the *Prodrom* of 1847 referred to in paragraph 2 above, to adopt a *Declaration* in the following sense:—

Draft "Declaration"

Where a work bears a statement purporting to specify or indicate the name of the author or the names of the authors, that statement is to be deemed to be correct, unless and until evidence is published purporting to show that that statement is incorrect, in which case the issue so raised is to be referred to the International Commission for decision.

2. Registration of the present application: As soon as it became apparent that, before the International Commission could give a Ruling on the question of the authorship to be attributed to the work entitled *Prodrom einer Monographie der böhmischen Trilobiten* published in 1847 and there attributed jointly to Hawle (I.) & Corda (A.J.C.), it would be necessary for it to render a *Declaration* on the question of principle involved, the general issue so disclosed was allotted the Registered Number Z.N.(S.) 1273.

II. THE DECISION TAKEN BY THE INTERNATIONAL COMMISSION ON ZOOLOGICAL NOMENCLATURE

3. Issue of Voting Paper V.P.(O.M.)(57)23: On 26th November 1957 a Voting Paper (V.P.(O.M.)(57)23) was issued in which the Members of the Commission were invited to vote either for, or against, "the proposal relating to the proposed adoption of a *Declaration* clarifying the procedure to be followed in determining the authorship to be attributed to a given zoological work in certain circumstances as set out in paragraph 5 of the paper bearing the Registered Number Z.N.(S.) 1273 [i.e. in the paragraph numbered as above in the paper reproduced in the first paragraph of the present *Declaration*] submitted by the Secretary simultaneously with the present Voting Paper."

- **4.** The Prescribed Voting Period: As the foregoing Voting Paper was issued under the One-Month Rule, the Prescribed Voting Period closed on 26th December 1957.
- 5. Particulars of the Voting on Voting Paper V.P.(O.M.)(57)23: At the close of the Prescribed Voting Period, the state of the voting on Voting Paper V.P.(O.M.)(57)23 was as follows:—
 - (a) Affirmative Votes had been given by the following twenty-two (22) Commissioners (arranged in the order in which Votes were received):

Holthuis; Bonnet; Lemche; Hering; Riley; Prantl; Stoll; Mayr; Boschma; Jaczewski; Tortonese; Mertens; Vokes; do Amaral; Miller; Hemming; Bodenheimer; Cabrera; Dymond; Bradley (J.C.); Kühnelt; Sylvester-Bradley;

(b) Negative Votes:

None:

(c) On Leave of Absence, one (1);

Key;

(d) Voting Papers not returned, two (2):

Esaki²; Hankó.

6. Declaration of Result of Vote: On 27th December 1957, Mr. Hemming, Secretary to the International Commission, acting as Returning Officer for the Vote taken on Voting Paper V.P.(O.M.(57)23, signed a Certificate that the Votes cast were as set out in paragraph 5 above and declaring that the proposal submitted in the foregoing Voting Paper had been duly adopted and that the decision so taken was the decision of the International Commission in the matter aforesaid.

² Shortly after the close of the Prescribed Voting Period information was received that Professor Esaki had died during that period on 14th December, 1957.

- 7. Preparation of the present "Declaration": On 2nd January 1958 Mr. Hemming prepared the present *Declaration* and at the same time signed a Certificate that the terms of that *Declaration* were in complete accord with those of the proposal approved by the International Commission in its Vote on Voting Paper V.P.(O.M.)(57)23.
- 8. Compliance with Prescribed Procedures: The prescribed procedures were duly complied with by the International Commission on Zoological Nomenclature in dealing with the present case, and the present *Declaration* is accordingly hereby rendered in the name of the said International Commission by the under-signed Francis Hemming, Secretary to the International Commission on Zoological Nomenclature, in virtue of all and every the powers conferred upon him in that behalf.
- **9.** "Declaration" Number: The present *Declaration* shall be known as *Declaration* Thirty-Eight (38) of the International Commission on Zoological Nomenclature.

DONE in London, this Second day of January, Nineteen Hundred and Fifty-Eight.

Secretary to the International Commission on Zoological Nomenclature

FRANCIS HEMMING

OPINIONS AND DECLARATIONS RENDERED BY THE INTERNATIONAL COMMISSION ON ZOOLOGICAL NOMENCLATURE

Edited by

FRANCIS HEMMING, C.M.G., C.B.E. Secretary to the Commission

VOLUME 18. Part 7. Pp. (i)—(viii)

DIRECTION 91

Substitution on the Official List of Family-Group Names in Zoology of the name of an earlier nominal family-group taxon based on the generic name Tylenchus Bastian, 1865 (Class Nematoda) than the name entered on the List by the Ruling given in Direction 28

LONDON:

Printed by Order of the International Trust for Zoological Nomenclature

Sold on behalf of the International Commission on Zoological Nomenclature by the International Trust at its Publications Office 41, Queen's Gate, London, S.W.7

1958

Price Five Shillings and Sixpence

(All rights reserved)

INTERNATIONAL COMMISSION ON ZOOLOGICAL NOMENCLATURE

COMPOSITION AT THE TIME OF THE ADOPTION OF THE RULING GIVEN IN DIRECTION 91

The Officers of the Commission

Honorary Life President: Dr. Karl JORDAN (British Museum (Natural History), Zoological Museum, Tring, Herts., England)

President: Professor James Chester Bradley (Cornell University, Ithaca, N.Y., U.S.A.) (12th August 1953)

Vice-President: Senhor Dr. Afranio do Amaral (Sao Paulo, Brazil) (12th August 1953) Secretary: Mr. Francis HEMMING (London, England) (27th July 1948)

The Members of the Commission В.

(Arranged in order of precedence by reference to date of election or of most recent re-election, as prescribed by the International Congress of Zoology)

Professor H. Boschma (Rijksmuseum van Natuurlijke Historie, Leiden, The Netherlands)

(1st January 1947)
Senor Dr. Angel Cabrera (La Plata, Argentina) (27th July 1948)
Mr. Francis Hemming (London, England) (27th July 1948) (Secretary)
Dr. Henning Lemche (Universitetets Zoologiske Museum, Copenhagen, Denmark) (27th July 1948)
Professor Teiso Esaki (Kyushu University, Fukuoka, Japan) (17th April 1950)
Professor Pierre Bonnet (Université de Toulouse, France) (9th June 1950)
Mr. Norman Denbigh Riley (British Museum (Natural History), London) (9th June 1950)

Professor Tadeusz Jaczewski (Institute of Zoology, Polish Academy of Sciences, Warsaw, Poland) (15th June 1950)

Poland) (15th June 1950)
Professor Robert Mertens (Natur-Museum u. Forschungs-Institut Senckenberg, Frankfurt a.M., Germany) (5th July 1950)
Professor Erich Martin Hering (Zoologisches Museum der Humboldt-Universität zu Berlin, Germany) (5th July 1950)
Senhor Dr. Afranio do Amaral (S. Paulo, Brazil) (12th August 1953) (Vice-President)
Professor J. R. Dymond (University of Toronto, Toronto, Canada) (12th August 1953)
Professor J. Chester Bradley (Cornell University, Ithaca, N.Y., U.S.A.) (12th August 1953)

Professor J. Chester Bradley (Cornell University, Ithaca, IV. I., U.S.A.) (12th August 1953) (President)
Professor Harold E. Vokes (University of Tulane, Department of Geology, New Orleans, Louisiana, U.S.A.) 12th August 1953)
Professor Béla Hankó (Mezőgazdasági Muzeum, Budapest, Hungary) (12th August 1953)
Dr. Norman R. Stoll (Rockefeller Institute for Medical Research, New York, N.Y., ISSA) (12th August 1953)

Dr. Norman R. Stoll (Rockefeller Institute for Medical Research, INEW 107K, IN.1., U.S.A.) (12th August 1953)
Mr. P. C. Syllvester-Bradley (Sheffield University, Sheffield, England) (12th August 1953)
Dr. L. B. Holthuis (Rijksmuseum van Natuurlijke Historie, Leiden, The Netherlands) (12th August 1953)
Dr. K. H. L. Key (Commonwealth Scientific and Industrial Research Organisation, Canberra, A.C.T., Australia) (15th October 1954)
Dr. Alden H. Miller (Museum of Vertebrate Zoology, University of California, U.S.A.) (29th October 1954)

(29th October 1954)

Doc. Dr. Ferdinand Prantl (Národni Museum V Praze, Prague, Czechoslovakia) (30th October 1954)

Professor Dr. Wilhelm Kühnelt (Zoologisches Institut der Universität, Vienna, Austria)
(6th November 1954)

Professor F. S. Bodenheimer (The Hebrew University, Jerusalem, Israel) (11th November

1954) Professor Ernst Mayr (Museum of Comparative Zoology at Harvard College, Cambridge, Massachusetts, U.S.A.) (4th December 1954)
Professor Enrico Tortonese (Museo di Storia Naturale "G. Doria", Genova, Italy)

(16th December 1954)

DIRECTION 91

SUBSTITUTION ON THE "OFFICIAL LIST OF FAMILY-GROUP NAMES IN ZOOLOGY" OF THE NAME OF AN EARLIER NOMINAL FAMILY-GROUP TAXON BASED ON THE GENERIC NAME "TYLENCHUS" BASTIAN, 1865 (CLASS NEMATODA) THAN THE NAME ENTERED ON THAT LIST "" BY THE RULING GIVEN IN "DIRECTION" 28

.. RULING:—The family-group name TYLENCHIDAE Orley, 1880 (type genus: Tylenchus Bastian, 1865) (Class Nematoda) (is hereby substituted for the name TYLENCHINAE Marcinowski, 1909, inserted on the Official List of Family-Group Names in Zoology as Name No. 59 by the Ruling given in Direction 28.

I. THE SUBJECT MATTER OF THE PRESENT "DIRECTION"

The purpose of the present Direction is to insert on the Official List of Family-Group Names in Zoology an earlier name based

on the generic name *Tylenchus* Bastian, 1865 (Class Nematoda) than the name based on that generic name placed on the above *Official List* by the Ruling given in *Direction* 28. The decision by the Commission in this case was based on the following paper submitted by the Secretary on 18th October 1957:—

Proposed amendment of the authorship and date attributed to the familygroup name based on the generic name "Tylenchus" Bastian, 1865 (Class Nematoda) on the "Official List of Family-Group Names in Zoology"

By FRANCIS HEMMING, C.M.G., C.B.E.

(Secretary to the International Commission on Zoological Nomenclature)

The purpose of the present note is to draw attention to the discovery of an older reference for a nominal family-group taxon based on the generic name *Tylenchus* Bastian, 1865 (Class Nematoda) than that believed to be the oldest reference at the time when the family-group name in question was placed on the *Official List of Family-Group Names in Zoology*. The facts in regard to this matter are set out in the following paragraphs.

- 2. The generic name Tylenchus Bastian, 1865, was placed on the Official List of Generic Names in Zoology by the Ruling given in Opinion 341. The family-group-name implications involved in connection with the above and other generic names dealt with in the above Opinion and also those dealt with in certain other Opinions included in that volume (Volume 10) of the Opinions and Declarations Series were not dealt with in the individual Opinions concerned but were reserved for further consideration at a later date.
- 3. The family-group-name problems discussed above were discussed in a paper which was submitted to the International Commission by myself as Secretary on 18th April 1955, together with Voting Paper V.P.(O.M.)(55)15. The decisions taken by the Commission on the recommendations then submitted were later embodied in *Direction* 28 which was published on 12th August 1955 as the concluding Part of the above volume of the *Opinions and Declarations* Series.
- 4. The recommendations so submitted were compiled with the assistance of specialists in the groups concerned, the consultant

specialist in the present case being Dr. Ellsworth C. Dougherty (University of California, Department of Physiology, School of Medicine, Berkeley, California, U.S.A.). It was then believed that the first author to establish a nominal family-group taxon based on the generic name Tylenchus Bastian was Marcinowski, by whom the name Tylenchinae was published in 1909. I have since been informed by Dr. Dougherty that he has found the following considerably earlier bibliographical reference for a family-group name based on the foregoing generic name:—Tylenchidae Örley, 1880, Termezetr.Fuz. 4:55, 57, 164, 165. In addition, I have consulted Dr. Benjamin Schwartz (United States Department of Agriculture, Animal Disease and Parasite Research Division, Beltsville, Maryland, U.S.A.) who confirms that according to the records of his Division Örley's paper (of which the Division possesses a photostat copy) was the first in which a family-group name based on the generic name Tylenchus was published by any author.

- 5. In the circumstances it is necessary now to correct the bibliographical reference for the above family-group name which was entered on the *Official List of Family-Group Names in Zoology* by the Ruling given in *Direction* 28 by substituting the entry TYLENCHIDAE Örley, 1880, for the entry TYLENCHINAE Marcinowski, 1909, there inserted on the above *List* as Name No. 59. I recommend that this be now done.
- **2.** Registration of the present application: As soon as the existence of an older family-group name based on the generic name *Tylenchus* Bastian, 1865, came to the notice of the Office of the Commission, the problem so involved was allotted the Registered No. Z.N.(S.) 1257.

II. THE DECISION TAKEN BY THE INTERNATIONAL COMMISSION ON ZOOLOGICAL NOMENCLATURE

3. Issue of Voting Paper V.P.(O.M.)(57)19: On 18th October 1957 a Voting Paper (V.P.(O.M.)(57)19) was issued in which

the Members of the Commission were invited to vote either for, or against, "the proposal relating to the family-group name TYLENCHIDAE Örley, 1880, as set out in paragraph 5 of the paper bearing the Registered No. Z.N.(S.) 1257 [i.e. in the paragraph numbered as above in the paper reproduced in the first paragraph of the present *Direction*] submitted by the Secretary simultaneously with the present Voting Paper".

- **4.** The Prescribed Voting Period: As the foregoing Voting Paper was issued under the One-Month Rule, the Prescribed Voting Period closed on 18th November 1957.
- 5. Particulars of the Voting on Voting Paper V.P.(O.M.)(57)19: At the close of the Prescribed Voting Period, the state of the voting on Voting Paper V.P.(O.M.)(57)19 was as follows:—
 - (a) Affirmative Votes had been given by the following twentythree (23) Commissioners (arranged in the order in which Votes were received):

Holthuis; Mayr; Bonnet; Riley; Stoll; Vokes; Bodenheimer; Lemche; Bradley (J.C.); Hering; Prantl; Dymond; Esaki; Tortonese; do Amaral; Boschma; Hemming; Mertens; Cabrera; Miller; Kühnelt; Sylvester-Bradley; Jaczewski;

(b) Negative Votes:

None;

(c) On Leave of Absence, one (1):

Key;

(d) Voting Papers not returned, one (1):

Hankó.

- 6. Declaration of Result of Vote: On 19th November 1957, Mr. Hemming, Secretary to the International Commission, acting as Returning Officer for the Vote taken on Voting Paper V.P.(O.M.)(57)19, signed a Certificate that the Votes cast were as set out in paragraph 5 above and declaring that the proposal submitted in the foregoing Voting Paper had been duly adopted and that the decision so taken was the decision of the International Commission in the matter aforesaid.
- 7. Preparation of the Ruling given in the present "Direction": On 12th December 1957, Mr. Hemming prepared the Ruling given in the present *Direction* and at the same time signed a Certificate that the terms of that Ruling were in complete accord with those of the proposal approved by the International Commission in its Vote on Voting Paper V.P.(O.M.)(57)19.
- **8.** Original References: The following is the original reference for the name placed on the *Official List of Family-Group Names in Zoology* by the Ruling given in the present *Direction*:

TYLENCHIDAE Örley, 1880, Termezetr. Fuz. 4: 55, 57, 164, 165

9. The prescribed procedures were duly complied with by the International Commission on Zoological Nomenclature in dealing with the present case, and the present *Direction* is accordingly hereby rendered in the name of the said International Commission by the under-signed Francis Hemming, Secretary to the International Commission on Zoological Nomenclature, in virtue of all and every the powers conferred upon him in that behalf.

10. The present *Direction* shall be known as *Direction* Ninety-One (91) of the International Commission on Zoological Nomenclature.

DONE in London, this Twelfth day of December, Nineteen Hundred and Fifty-Seven.

Secretary to the International Commission on Zoological Nomenclature

FRANCIS HEMMING

OPINIONS AND DECLARATIONS RENDERED BY THE INTERNATIONAL COMMISSION ON ZOOLOGICAL NOMENCLATURE

Edited by

FRANCIS HEMMING, C.M.G., C.B.E. Secretary to the Commission

VOLUME 18. Part 19. Pp. (ix)—(xxvi)

DIRECTION 95

Determination of the authorship to be attributed to the work entitled *Prodrom einer Monographie des böhmischen Trilobiten* published in 1847 over the names of Hawle (I.)



LONDON:

Printed by Order of the International Trust for Zoological Nomenclature

and

Sold on behalf of the International Commission on Zoological Nomenclature by the International Trust at its Publications Office 41, Queen's Gate, London, S.W.7

1958

Price Ten Shillings and Sixpence

(All rights reserved)

INTERNATIONAL COMMISSION ON ZOOLOGICAL NOMENCLATURE

COMPOSITION AT THE TIME OF THE ADOPTION OF THE RULING GIVEN IN DIRECTION 95

The Officers of the Commission

Dr. Karl JORDAN (British Museum (Natural History), Honorary Life President: Zoological Museum, Tring, Herts., England)

President: Professor James Chester BRADLEY (Cornell University, Ithaca, N.Y., U.S.A.) (12th August 1953)

Vice-President: Senhor Dr. Afranio do Amaral (Sao Paulo, Brazil) (12th August 1953)

Secretary: Mr. Francis HEMMING (London, England) (27th July 1948)

The Members of the Commission

Arranged in order of precedence by reference to date of election or of most recent re-election, as prescribed by the International Congress of Zoology)

Professor H. Boschma (Rijksmuseum van Natuurlijke Historie, Leiden, The Netherlands) (1st January 1947)

Senor Dr. Angel Cabrera (La Plata, Argentina) (27th July 1948)
Mr. Francis Hemming (London, England) (27th July 1948) (Secretary)
Dr. Henning Lemche (Universitetets Zoologiske Museum, Copenhagen, Denmark) (27th July 1948)

Professor Teiso Esaki (Kyushu University, Fukuoka, Japan) (17th April 1950)

Professor Pierre Bonnet (Université de Toulouse, France) (9th June 1950)
Mr. Norman Denbigh Riley (British Museum (Natural History), London) (9th June 1950)
Professor Tadeusz Jaczewski (Institute of Zoology, Polish Academy of Sciences, Warsaw, Poland) (15th June 1950)
Professor Robert Mertens (Natur-Museum u. Forschungs-Institut Senckenberg, Frankfurt

(16th December 1954)

a.M., Germany) (5th July 1950)

Professor Erich Martin Hering (Zoologisches Museum der Humboldt-Universität zu Berlin, Germany) (5th July 1950)

Senhor Dr. Afranio do Amaral (S. Paulo, Brazil) (12th August 1953) (Vice-President)
Professor J. R. Dymond (University of Toronto, Toronto, Canada) (12th August 1953)
Professor J. Chester Bradley (Cornell University, Ithaca, N. Y., U.S.A.) (12th August 1953) (President)

Professor Harold E. Vokes (University of Tulane, Department of Geology, New Orleans, Louisiana, U.S.A.) (12th August 1953)
Professor Béla Hankó (Mezőgazdasági Muzeum, Budapest, Hungary) (12th August 1953)
Dr. Norman R. Stoll (Rockefeller Institute for Medical Research, New York, N.Y., U.S.A.)

(12th August 1953)
Mr. P. C. Sylvester-Bradley (Sheffield University, Sheffield, England) (12th August 1953)
Dr. L. B. Holthuis (Rijksmuseum van Natuurlijke Historie, Leiden, The Netherlands) (12th August 1953)

Dr. K. H. L. KEY (Commonwealth Scientific and Industrial Research Organisation, Canberra, A.C.T., Australia) (15th October 1954)

Dr. Alden H. MILLER (Museum of Vertebrate Zoology, University of California, California, U.S.A.) (29th October 1954)
Doc. Dr. Ferdinand Prantl (Národni Museum V Praze, Prague, Czechoslovakia) (30th

October 1954)

Professor Dr. Wilhelm Kühnelt (Zoologisches Institut der Universität, Vienna, Austria) (6th November 1954)

Professor F. S. Bodenheimer (The Hebrew University, Jerusalem, Israel) (11th November 1954)

Professor Ernst Mayr (Museum of Comparative Zoology at Harvard College, Cambridge, Massachusetts, U.S.A.) (4th December 1954)
Professor Enrico Tortenese (Museo di Storia Naturale "G. Doria", Genova, Italy)

DIRECTION 95

DETERMINATION OF THE AUTHORSHIP TO BE ATTRIBUTED TO THE WORK ENTITLED "PRODROM EINER MONOGRAPHIE DER BOHMISCHEN TRILOBITEN" PUBLISHED IN 1847 OVER NAMES OF HAWLE (I.) AND CORDA (A.J.C.)

RULING:—(1) It is hereby directed that the work entitled *Prodrom einer Monographie der böhmischen Trilobiten* published in 1847 over the names of Hawle (I.) & Corda (A.J.C.) is to be treated as having been written and published jointly by the above authors

- (2) It is hereby directed that in conformity with (1) above any entry relating to a name published in the foregoing work that may already have been made on an *Official List* or an *Official Index* and there attributed solely to Corda (A.J.C.) be amended so as to attribute the name in question to Hawle (I.) & Corda (A.J.C.) jointly.
- (3) The title of the under-mentioned work is hereby placed on the Official List of Works Approved as Available for Zoological Nomenclature with the Title No. 33:—
 - Hawle (I.) & Corda (A.J.C.), 1847, Prodrom einer Monographie der böhmischen Trilobiten, with an endorsement as to the authorship to be attributed thereto as specified in (1) above.

I. THE SUBJECT MATTER OF THE PRESENT "DIRECTION"

The present *Direction* is concerned with a question which for some years has divided Trilobite specialists and on which a decision was required in connection with the preparations for the forthcoming publication of the *Official Lists* in book-form. This question was whether, as stated in the title, the work entitled *Prodrom einer Monographie der böhmischen Trilobiten* published in 1847 should be treated as the joint work of Hawle (I.) & Corda (A.J.C.) or whether, as later alleged by Hawle, the entire responsibility for this work rested with Corda. The paper on which the decision in this case was taken by the Commission was submitted by the Secretary on 15th November 1957. It was as follows:—

Proposed determination of the question whether the work published in 1847 under the title "Prodrom einer Monographie der böhmischen Trilobiten" should be attributed to "Corda" alone or to "Hawle & Corda" jointly

By FRANCIS HEMMING, C.M.G., C.B.E.

(Secretary to the International Commission on Zoological Nomenclature)

The purpose of the present paper is to obtain from the International Commission on Zoological Nomenclature a Ruling on the question of the authorship to be cited for the purposes of zoological nomenclature for an important work on Trilobites published in 1847 entitled *Prodrom einer Monographie der böhmischen Trilobiten*. This work was published as having been written jointly by Hawle (I.) & Corda (A.J.C.) but shortly after its publication Hawle repudiated having had any share in its production. At the present time Trilobite specialists are divided in opinion as to whether Hawle's disclaimer should be accepted and this work in consequence attributed solely to Corda or whether on the other hand Hawle and Corda should be cited as joint authors.

2. Several Trilobite specialists in correspondence with the Office of the Commission have intimated that they would be glad if the Commission would give a Ruling on the above subject and for this reason alone a decision by the Commission is very desirable, for only by such a decision can uniformity in this matter be restored in palaeontological literature. In addition, from the Commission's own point of view a decision on this question is urgently required, for names published in, or otherwise affected by, the *Prodrom* enter into the *Official Lists* now on the point of being published. It is clearly essential both that all such references should be on a uniform basis and that the attribution to be adopted should be based on a formal decision taken by the International Commission.

3. Following the publication of the *Prodrom*, Hawle vigorously repudiated having had any share in its preparation or publication. This disclaimer was published no less than three times between 1848 and 1852. The latest of these was published by Barrande (J.) in his *Systême Silurien* (:37) and was as follows:—

Suivant sa propre expression, plusieurs fois répétée avec l'accent d'une modeste sincérité, M. Hawle n'est et ne veut paraître aux yeux du public savant, qu'un Collecteur. (Sammler.) Sa collection est un moyen de distraction pour les graves occupations que lui impose sa haute position administrative, et il n'a aucun temps à donner à un travail scientifique quelconque. Il repousse donc toute responsabilité relative aux assertions contenues dans le Prodrôme, sous tous les rapports, soit historiques, soit géologiques, soit paléontologiques. Ainsi, cette responsabilité retombe toute entière sur M. Corda, qui a seul conçu et rédigé l'ouvrage en question. Quels que soient les termes dans lesquels sa coopération a été indiquée dans le Prodrôme, M. Hawle désire qu'on les interprète dans ce seul sens, le seul véritable : qu'il a prêté sa collection.

4. The situation disclosed above raises an issue which is not dealt with expressly in any part of the Règles but it seems reasonable to take the line that the authorship to be attributed to any given zoological book or paper should be determined in accordance with principles similar to those which have been laid down in the analogous case of the date to be attributed for the purposes of zoological nomenclature to any given book or paper. On this latter subject the Thirteenth International Congress of Zoology, Paris, 1948, decided to insert in the Règles a provision as follows: -- "Where a work bears a date purporting to specify or indicate the date of publication, that date is to be deemed to be correct, unless and until evidence is published showing that date to be incorrect, in which case the work or any specified portion thereof is to be deemed to have been published on the latest date (whether earlier or later than the date specified or indicated in the work itself) that is compatible with the evidence so When a novel point of the present kind arises in connection with the consideration of an individual case, the Commission is required to adopt an interpretative Declaration simultaneously with taking a decision on the individual case in question. Under this procedure a proposal for the adoption of a Declaration providing for the determination of the authorship to be attributed to any given work on lines parallel to those already prescribed for determining the date to be attributed to such a work is being submitted to the Commission in a paper bearing the Registered Number Z.N.(S.) 1273, together with Voting Paper V.P.(O.M.)(57)23¹, simultaneously with the submission of the present paper.

- 5. It is necessary now to examine the evidence available on the question as to whether the *Prodrom* should continue to be attributed to Corda (i.e. to Corda in Hawle & Corda) or whether, as more recently proposed, it should be attributed jointly to Hawle & Corda. The evidence available on this subject, supplementary to that provided by the repudiation by Hawle of any responsibility for the *Prodrom* quoted in paragraph 3 above, is set out or otherwise indicated in the two immediately following paragraphs.
- 6. It appears that Hawle's disclaimer of responsibility for any part of the production of the *Prodrom* was accepted by his contemporaries who accordingly attributed the new names in this work to Corda alone. Thereafter, for nearly a century these names were consistently so attributed, it not being until the present decade that a suggestion was put forward that existing practice should be changed and that in future the new names in the *Prodrom* should be treated as having been published by Hawle & Corda jointly. A copy of a letter dated 7th March 1956 received from Professor Dr. Robert Mertens on this subject is attached to the present paper as Appendix 1. The paper by Rudolf and Emma Richter referred to in the concluding paragraph of Professor Mertens's letter is entitled "Corda, alleiniger Autor des Trilobiten-Prodroms und der Fall einer 'Autorschaft wider Willem'". This paper, which was published in 1955 in the serial publication Senckenbergiana, is quite short and is reproduced as Appendix 2 to the present paper.
- 7. The opposite view, namely, that new names in the *Prodrom* ought to be attributed jointly to both Hawle and Corda has been vigorously argued by Prantl and Přibyl in two papers. In the first of these papers published in [1951] and of which an English summary of the Czech text is given in Appendix 3, these authors reject as invalid the repudiation by Hawle of his share with Corda in the authorship of the *Prodrom* and give particulars of reasons of a personal character which they believe influenced Hawle to reject his share in the responsibility for the paper in question. In the second paper (published in 1954) the same authors bring forward particulars to show that, despite the attitude which he later took up, Barrande clearly indicated in the period 1818—1849 that he was aware that Hawle had a share in the actual compilation of the *Prodrom*. An English text of this later paper is given in Appendix 4 annexed hereto.

¹ The decision taken by the International Commission on the above Voting Paper has since been embodied in *Declaration* 38, published on 11th April 1958 as Part 13 of the present volume.

- 8. It will be seen from the documentation now brought forward that there exists no unimpeachable evidence on either side. On the one hand, if Hawle is to be believed, he certainly had no part in the production of the *Prodrom*; on the other hand, the truthfulness of Hawle as a witness in this matter has been impugned and if the allegation so made is well founded, he cannot be absolved from some responsibility. The decision to be taken is thus a matter for individual judgment in the light of the available evidence. If the view is taken that Hawle should be accepted as a credible witness, then the authorship of the *Prodrom* should be attributed to Corda alone; if, however, Hawle's evidence is rejected as unreliable, then the authorship of the above work should be attributed jointly to Hawle & Corda. If the view is taken that the evidence available—and no additional evidence can be expected—is insufficient to enable a definite view to be taken as to the reliability of Hawle's evidence it would be reasonable to conclude that the case for excluding Hawle from part of the responsibility for the production of the *Prodrom* has not been established, and therefore that this is a case where the proper course is to accept the statement printed at the head of this work, namely, that it was written jointly by Hawle and Corda.
- 9. The present is therefore pre-eminently a case where it is the function of the Commission acting in its judicial capacity carefully to weigh the evidence available and, having done so, to take whatever decision it may consider proper. Accordingly, in the Voting Paper (V.P.(O.M.)(57)24) now submitted, the Members of the Commission are invited to vote in favour of one or other of the following alternatives subject in either case to the formal proposal specified in paragraph 10 below:—

Alternative "A"

Having studied the evidence available, I am of the opinion that in the matter of the authorship of the *Prodrom* published in 1847 Hawle should be accepted as a reliable witness and therefore that he ought not to be treated as having shared with Corda the responsibility for the authorship and publication of the above work.

Alternative "B"

Having studied the evidence available, I am not satisfied that in the matter of the authorship of the *Prodrom* Hawle can be accepted as a reliable witness and I consider therefore that this is a case where the authorship stated at the head of the above work should be accepted and in consequence that Hawle and Corda should be accepted as having been its joint authors.

10. In view of the nature of the subject-matter of the present paper it is proposed that, whatever the decision taken by the Commission under the procedure set out in paragraph 9 above, the title of the

Prodrom should be placed on the Official List of Works Approved as Available for Zoological Nomenclature, the entry so made to be endorsed to record the decision taken by the Commission as to the authorship to be attributed thereto. The full bibliographical particulars in regard to this paper are as follows:—

[authorship not yet settled but stated in the work to be "Hawle (I.) & Corda (A.J.C.)"], 1847 "Prodrom einer Monographie der böhmischen Trilobiten "Abh. k. böhm. Ges. Wiss. (5) 5:119—292, pls. I—VII (also issued separately with pagination 3—176, pls. I—VII.)

APPENDIX 1

Copy of a letter dated 7th March 1956 from

Professor Dr. Robert Mertens

(Senckenbergische Naturforschende Gesellschaft, Frankfurt a.M.)

Wegen der Beantwortung Ihrer Anfrage habe ich mich an Herrn Professor Richter gewandt, der ja ein bekannter Spezialist auf dem Gebiete der Trilobiten ist. Er machte mich auf folgende Punkte aufmerksam:

- 1. Aus den unwidersprochenen Protesten von Hawle (in Barrande, 1852) und von Barrande, 1848 und 1852 geht eindeutig hervor, dass Hawle mit der Autorschaft des "Prodroms" nicht in Verbindung gebracht werden darf.
- 2. Die gesamte Literatur hat während mehrerer Generationen ohne Ausnahme nur Corda als den Autor des Prodroms betrachtet.
- 3. Nur infolge eines Irrtums haben in den letzten Jahren einige Autoren in der Tschechoslowakei und auch einige wenige in Nordamerika von einer Autorschaft "Hawle u. Corda" gesprochen. Aber niemand, der die Literatur kennt, wird diesen Ausnahmen folgen.
- 4. Auch der "Treatise on Invertebrate Paleontology", und zwar der Herausgeber Prof. Dr. Moore selber, hat entschieden, dass in diesem Standardwerk nur Corda als der Autor der im "Prodrom" veröffentlichten Gattungen und Arten angeführt werden darf.

In der Anlage finden Sie auf Seite 407—408 die erst kürzlich erschienene Publikation von Rudolf und Emma Richter über Corda als alleinigen Autor des Trilobiten Prodrom.

APPENDIX 2

Corda, alleiniger Autor des Trilobiten-Prodroms und der Fall einer "Autorschaft wider Willen"

RUDOLF & EMMA RICHTER

(paper published in 1955 in Senckenbergiana (36: 407—408) and communicated by Professor Mertens under cover of the letter reproduced in Appendix 1)

"Le seul autor qui ait conçu et exécuté le Podrôme, est M. Corda." Auf diese Feststellung von Barrande (s.u.) muss für die Einheitlichkeit innerhalb des "Treatise" hingewiesen werden. Denn in dem "Prodrom einer Monographie der böhmischen Trilobiten" von "Hawle & Corda" Prag 1847, sind viele, wenn auch grossenteils synonyme Einheiten aufgestellt worden. Unser früherer Hinweis (Senckenbergiana, 29: 107, 1948) ist in einem anderen Zusammenhang erfolgt und daher hier und da übersehen worden.

Die Zeitgenossen von Corda (wie Barrande, ebenfalls in Prag, 1848, 1852, 1872; Salter, 1864) und die nächsten Generationen (Novák in Prag, 1890; Hall & Clarke, 1888; Kayser noch 1923) haben ausschliesslich Corda als den Autor anerkannt. Auch Zittel (Geschichte der Geologie, 1899) nennt nur Corda und nimmt Hawle überhaupt nicht unter die Paläontologen auf. Neuere Arbeiten, und anfänglich (1926, 1928) leider auch wir, sprechen von einer Autorschaft "Hawle & Corda", wie sie auf dem Titel gedruckt ist.

Hierbei ist die Erklärung vergessen worden, die Barrande an drei wichtigen Stellen veröffentlicht hat: in N. Jb. Mineral., 1848: 309; in Haidinger's Berichten, 4: 209, 1848, und im Syst. sil. I: 37, 1852. Sein Protest lautet:

"Suivant sa propre expression, plusieurs fois répétée avec l'accent d'une modeste sincérité, M. Hawle n'est et ne veut paraître aux yeux du public savant, qu'un Collecteur. (Sammler.) Sa collection est un moyen de distraction pour les graves occupations que lui impose sa haute position administrative, et il n'a aucun temps à donner à un travail scientifique quelconque. Il repousse donc toute responsabilité relative aux assertions contenues dans le Prodrôme, sous tous les rapports, soit historiques, soit géologiques, soit paléontologiques. Ainsi, cette responsabilité retombe toute entière sur M. Corda, qui a seul conçu et rédigé l'ouvrage en question. Quels que soient les termes dans lesquels sa coopération a été indiquée dans le Prodrôme, M. Hawle désire qu'on les interprète dans ce seul sens, le seul véritable : qu'il a prêté sa collection".

Der "Prodrom" ist in der Nachbarschaft von Barrande entstanden. Da auch andere das Verhältnis von Hawle und Corda kennen mussten, hätte Barrande ohne gewichtige Gründe die Verantwortung für seine und Hawle's Protest gewiss nicht übernommen. Corda, der erst 1849 gestorben ist, hat dem Protest von 1848 nicht widersprochen.

Der Fall hat auch ein allgemeines Interesse, weit über die Nomenklatur hinaus. Denn würde man trotz der sofortigen Proteste des Betroffenen die versuchte suppositio puerorum gelten lassen, so gäbe es für niemanden eine Möglichkeit, seine Autorschaft und Verantwortlichkeit an einem Werk anzufechten, auf dem man zu seiner Überraschung den eignen Namen als Mit-Autor angegeben findet.

APPENDIX 3

A Revision of the Bohemian Representatives of the family "Otarionidae" R. & E. Richter (Trilobitae)
[English version of Czech title]

(Summary of the Czech text)

By FERDINAND PRANTL and ALOIS PŘIBYL

([1951], 1950, Sborník Státního Geologickeho Ústavu Československe Republiky [Sborn. geol. Ust. čsl.] 17:353 (Czech text), 433 (English summary)

Here we wish to remark that also in this paper, just as in the preceding communications, we designate consistently as authors of the species described in the work "Prodrom einer Monographie der böhmischen Trilobiten" of 1847, A.J.C. Corda as well as I. Hawle. We do so notwithstanding the contrary opinion of R. & E. Richter (1948, p. 107; 1949, p. 246; 1950, p. 152), which recognise only A. J. C. Corda as the author of these species; we base our recognition of I. Hawle as co-author on the following facts:

Both I. Hawle and A. J. C. Corda jointly gave their names as authors of the "*Prodrom*", and both thus undertook joint responsibility for this work before the scientific public. Thus it is necessary to consider them co-authors from a formal point of view also in the future, notwithstanding the fact that the scientific share of A. J. C. Corda was indubitably greater than that of I. Hawle. The fact to which R. Richter makes his appeal (1948, 1949) that in a private conversation with J. Barrande (February 11, 1848) I. Hawle denied his co-authorship does not change anything as far as his formal participation is concerned (cf. J. Barrande, 1852, p. 37, letter to H. G. Bronn, February 15, 1848).

We emphasize that I. Hawle made this declaration only after the death of the other author, A. J. C. Corda, undoubtedly for the following reasons: I. Hawle occupied not only a high official position, but had also a high social position, and thus he felt especially keenly Barrande's devastating criticism of the "Prodromus". Moreover, just at the time when he repudiated his co-authorship, he was engaged in negotiations with Barrande for the sale of his collection, for which Barrande offered him a rather large sum of money. Thus a repudiation of his co-authorship would serve the double purpose of removing the stigma of the criticism from himself and at the same time would help him in his efforts to ingratiate himself with Barrande. We need hardly add that our view of I. Hawle's co-authorship is also in keeping with para. 25 of the International Rules of Zoological Nomenclature and especially with the clause on the priority against the author himself, a clause which R. Richter (1948, p. 145) himself added.

APPENDIX 4

Supplementary note by F. Prantl and A. Přibyl

(1954, Rozpravy Ústředního Ústavu Geologického, 18: 121)

We venture still to remark, as we pointed out already earlier (F. Prantl and A. Přibyl, 1950), that we regard both I. Hawle and A. J. C. Corda as the scientific authors of the species described in the work: *Prodrom einer Monographie der böhmischen Trilobiten*, which was published in 1847 under their names. Today we can support our opinion not only by pointing to the reasons which we have advanced previously, but also by an important manuscript gloss by Barrande in the above-mentioned work of I. Hawle and A. J. C. Corda (sig. 39D 15), where below the figuring of the species *H. ungula* on pl. VII, fig. 83 has been added in pencil in Barrande's handwriting: "Le pygidium a été imaginé par M. Corda, malgré les observations du M. Hawle (3. 8. 1848)", and also by a further remark on p. 139: "4 mai 1849 — M. Hawle considère les genera composant les Lichades comme n'en faisant qu'un seul Lichas", and by some others. From what has been said it is evident that J. Barrande at the time when he added these glosses, i.e. in the years 1848—1849, was aware that the authorship of I. Hawle in the work published in 1847 together with A. J. C. Corda was not purely formal as later he himself (J. Barrande, 1853, p. 37) maintained. This fact places also in a different light I. Hawle's declaration of February 11, 1848, mentioned by Barrande and similarly Barrande's letter to H. G. Bronn of February 15, 1848 (J. Barrande, 1852, p. 37). We are thus forced to continue to maintain the opposite opinion of that of R. & E. Richter (1948, p. 107; 1949,

p. 246; 1950, p. 152, etc.), who recognise as author of the species described in the *Prodrom* only A. J. C. Corda.

National Museum, Barrandeum.

Prague, December, 1953

- **2. Registration of the present application:** When in connection with the preparations for the publication of the *Official Lists* and *Official Indexes* in book-form it emerged that by some specialists the work published in 1847 under the title *Prodrom einer Monographie der böhmischen Triolobiten* was treated as having been written solely by Corda (A.J.C.) and not, as stated on the title, jointly by Hawle (I.) & Corda (A.J.C.), the problem so disclosed was allotted the Registered Number Z.N.(S.) 1076.
- 3. Supplementary evidence as to the joint responsibility of Hawle (I.) with Corda (A.J.C.) for the "Prodrom" of 1847 furnished by H. K. Erben (Bonn) through Robert Mertens (Frankfurt a.M., Germany): After the issue of the Voting Paper in the present case but before the close of the Prescribed Voting Period, Professor Dr. Robert Mertens (Senckenbergische Naturforschende Gesellschaft, Frankfurt a.M.) addressed a letter² (on 16th December 1957) to the Office of the Commission, in which, after giving particulars of certain at present unpublished evidence received from Professor Dr. H. K. Erben (Geologisch-palaeontologisches Institut und Museum, Bonn) showing Hawle's responsibility jointly with Corda in the preparation and publication of the "Prodrom" of 1847, expressed the opinion that Hawle's action in denying any share of responsibility for that paper must be regarded as having been a flight from responsibility ("Flucht vor der Verantwortung") and that in consequence he, with Professor Erben, strongly supported the published views of Prantl & Přibyl that Hawle should be treated as having been responsible, jointly with Corda, for its preparation and publication. The following is the text of Professor Mertens's letter :-

When considering the alternative proposals concerning the "Prodrom", we obtained further information from Prof. Dr. H. K. Erben (Geologisch-palaeontologisches Institut und Museum, Bonn, Nussallee

² This letter was signed also by Dr. Otto Kraus of the same Institution.

2). Prof. Erben has studied the case carefully, and he has submitted to us a detailed MS. of an unpublished paper. The conclusion of Prof. Erben is, that the action of Hawle (and Barrande, who supported him) must be interpreted as "Flucht vor der Verantwortung". The arguments of Prantl & Přibyl are deemed to be correct and are strongly supported:

I. Die Annahme einer "Autorschaft wider Willen" stützt sich lediglich auf:

- (i) Hawle's Behauptung vom 11.II.1848. Diese wurde aber nicht von ihm selbst, sondern von einem interessierten Dritten, Barrande veröffentlicht.
- (ii) Barrande's Angabe, Hawle sei lediglich Sammler, aber nicht verantwortlicher Autor. Doch: Barrande hat Hawle nach seinen handschriftlichen Glossen in seinem Handexemplar des "Prodrom" durchaus als mitverantwortlich betrachtet.
- (iii) Das Fehlen einer Gegenäusserung Corda's. Doch: Corda hatte hierzu nur 7 1/2 Monate Zeit, während der er teilweise noch wochenlang von Prag abwesend war und ausserdem mit den Vorbereitungen seiner Reise nach Texas (von der er nicht zurückkehrte) sicher sehr in Anspruch genommen war.

II. Es besteht vielmehr der dringende Verdacht, dass Hawle sich der Verantwortung entziehen wollte :

- (i) Hawle's Protest gegen seine Autorschaft erfolgte mindestens 8 Monate nach Erscheinen des "Prodrom". Dieser Protest erfolgte erst nach der scharfen Kritik des "Prodrom" durch Barrande, unterstützt durch weitere führende Palaeontologen (Murchison, Keyserling, de Verneuil).
- (ii) Hawle's gesellschaftliche Stellung und politische Karriere muss zumindest durch die Kritik am "Prodrom" gefährdet worden sein.
- (iii) Hawle verhandelte zur Zeit seiner Erklärung mit Barrande über den Ankauf seiner (der Hawle'schen) Sammlung; er hatte somit Veranlassung, Barrande hierdurch günstig zu stimmen.
- (iv) Beide Autoren (Hawle & Corda) oder wahrscheinlich sogar Hawle allein waren vom Erzherzog Stephan offiziell beauftragt, den "Prodrom" zu schreiben.
- (v) Barrande war sich trotz des von ihm veröffentlichten Hawle'schen Protestes darüber im Klaren, dass Hawle mit-verantwortlicher Autor war; man vergleiche seine

handschriftlichen Glossen in seinem Handexemplar des "Prodrom".

(vi) Barrande hat in seinem Brief an Corda (13.II.1848) diesem den Protest Hawle's (vom 11.II.1848) nicht mitgeteilt, obwohl er sonst keine Gelegenheit versäumte, Corda Unkorrektheiten vorzuhalten.

In the light of the available evidence and the further informations by Prof. Erben, this case seems no longer to be a matter for individual judgement, and it is hoped that the Commission will adopt the "Alternative B" of the present Voting Paper (V.P.(O.M.)(57)24).

II. THE DECISION TAKEN BY THE INTERNATIONAL COMMISSION ON ZOOLOGICAL NOMENCLATURE

- **4.** Issue of Voting Paper V.P.(O.M.)(57)24: On 26th November, 1957 a Voting Paper (V.P.(O.M.)(57)24) was issued in which the Members or the Commission were invited to vote for one or other of the following alternatives: "Alternative 'A' (adoption of Corda as sole author) or Alternative 'B' (adoption of Hawle & Corda as joint authors) as set out in paragraph 9 of the paper bearing the Registered Number Z.N.(S.) 1076 submitted by the Secretary simultaneously with the present Voting Paper" [i.e. in the paragraph numbered as above in the paper reproduced in the first paragraph of the present *Direction*].
- **5.** The Prescribed Voting Period: As the foregoing Voting Paper was issued under the One-Month Rule, the Prescribed Voting Period closed on 26th December 1957.
- 6. Particulars of the Voting on Voting Paper V.P.(O.M.)(57)24: At the close of the Prescribed Voting Period, the state of the voting on Voting Paper V.P.(O.M.)(57)24 was as follows:—
 - (a) In favour of the acceptance of Corda as sole author (Alternative A), six (6) votes:

Bonnet; Lemche; Hering; Mayr; Bodenheimer; Cabrera;

(b) In favour of the acceptance of Hawle & Corda as joint authors (Alternative B), sixteen (16) votes:

Holthuis; Riley; Prantl; Stoll; Boschma; Tortonese; Vokes; do Amaral; Miller; Hemming; Mertens; Jaczewski; Dymond; Bradley (J.C.); Kühnelt; Sylvester-Bradley;

(c) On Leave of Absence, one (1):

Key;

(d) Voting Papers not returned, two (2):

Hankó; Esaki3.

- 7. Declaration of Result of Vote: On 27th December 1957, Mr. Hemming, Secretary to the International Commission, acting as Returning Officer for the Vote taken on Voting Paper V.P.(O.M.)(57)24, signed a Certificate that the Votes cast were as set out in paragraph 6 above and declaring that the proposal submitted in the foregoing Voting Paper had been duly adopted and that the decision so taken was the decision of the International Commission in the matter aforesaid.
- 8. Preparation of the Ruling given in the present "Direction": On 8th January 1958, Mr. Hemming prepared the Ruling given in the present *Direction* and at the same time signed a Certificate that the terms of that Ruling were in complete accord with those of the proposal approved by the International Commission in its Vote on Voting Paper V.P.(O.M.)(57)24.
- 9. Reference for the Title of a Work: The following is the reference for the title of the work placed on the Official List of

Shortly after the close of the prescribed Voting Period information was received that Professor Esaki had died during that period on 14th December, 1957.

Works Approved as Available for Zoological Nomenclature by the Ruling given in the present Direction:—

- Hawle (I.) & Corda (A.J.C.), 1847, Prodrom einer Monographie der böhmischen Trilobiten, pp. 176, pls. I—VII (also published with a different dedication in 1848 in Abh. K.-böhm. Ges. Wiss. (5) 5: 11—292, pls. I—VII)⁴
- 10. Compliance with Prescribed Procedures: The prescribed procedures were duly complied with by the International Commission on Zoological Nomenclature in dealing with the present case, and the present *Direction* is accordingly hereby rendered in the name of the said International Commission by the undersigned Francis Hemming, Secretary to the International Commission on Zoological Nomenclature, in virtue of all and every the powers conferred upon him in that behalf.
- 11. "Direction" Number: The present *Direction* shall be known as *Direction* Ninety-Five (95) of the International Commission on Zoological Nomenclature.

DONE in London, this Eighth day of January, Nineteen Hundred and Fifty-Eight.

Secretary to the International Commission on Zoological Nomenclature

FRANCIS HEMMING

For particulars regarding the date and method of publication of this work attention is drawn to the statement furnished by Dr. C. J. Stubblefield (Geological Survey and Museum, London) reproduced in the Appendix to the present Direction.

APPENDIX TO "DIRECTION" 95

Particulars regarding the date and method of publication of the work by Hawle (I.) & Corda (A.J.C.) entitled "Prodrom einer Monographie der böhmischen Trilobiten"

By C. J. STUBBLEFIELD

(Geological Survey and Museum, London)

(Enclosure to a letter dated 20th March 1958)

I have before me three copies of the work bearing the above title:

- (1) A copy belonging to the Geological Survey and Museum Library bearing a library acquisition stamp "Received 19 Aug. 1847".
- (2) My own copy autographed by Corda.
- (3) The British Museum (Natural History) Library copy of the complete Abhandlungen der königl. böhm. Gesell. Wissenschaft, V Folge, Band 5, which contains two Abteilunge separately paged. Abt. 2 contains Hawle and Corda's paper as pp. 117—292 with 7 plates and the Abhandlung, unlike (1) and (2) above, bears the date 1848 on its title page.
- 2. Both items (1) and (2) above are paged 1—176 and each carries three pages of dedication to Herrn Herrn Erzherzoge Stephan, kaiserlichen Prinzen von Österreich, königlichen Prinzen von Ungarn und Böhmen, which three pages are not included in the Abhand. version (3) above.
- 3. As far as I can see (1) and (2) are replicas even to the manner of indicating the folio numbers, with one exception namely the title page. In Copy (1) the title page bears no reference to the Abhandlungen and has as its last three lines of print:—

Prag, 1847. J. G. Calve'sche Buchhandlung. Friedrich Tempsky.

In copy (2) this equivalent entry reads:—

Prag, 1847.

In Commission der J. G. Calve'schen Buchhandlung.

and two new lines above this entry have been inserted :-

Aus den Abnahdlungen der königl. böhm. Gesellschaft der Wissenschaften

(V. Folge, Band 5) besonders abgedruckt.

- 4. The Neues Jahrbuch für Mineralogie, Geognosie Geologie und Petrefakten-Kunde published in the relevant years a section dealing with new literature. In the volume for 1848 on p. 796 appears the entry concerning the Abh. könig. böhm. Gesells. Wissenschaft and the data given are stated "1847, 412 SS., 23 Tfln., hgg. 1848" and Hawle and Corda's "Prodrom" is the first of the three papers listed as appearing in this year 1848.
- 5. In the volume for 1847 a review of the "Prodrom" was printed on pp. 753—754 but the work was described as (176 SS. 7 lith. Tafn. Prag. 1847 aus den Abh. d. böhmisch. Gesells. Wissensch. e, v, ...) that is as if the copy seen by the reviewer was a preprint without the Folge number correctly identified and without the appropriate Abh. pagination.
- 6. In conclusion, from the evidence of copy (1) above mentioned, I consider that this "Prodrom" was first issued and distributed as a separate work; that a subsequent decision was taken to include the "Prodrom" in the Abhandlungen of the Bohemian Society and preprints were issued in 1847 (copy (2) mentioned above) and that the Abhandlung part was not itself issued until 1848. I recommend that in the case of this "Prodrom" in the interests of stability that 1847 be considered as the operative date of publication.

OPINIONS AND DECLARATIONS RENDERED BY THE INTERNATIONAL COMMISSION ON ZOOLOGICAL NOMENCLATURE

Edited by

FRANCIS HEMMING, C.M.G., C.B.E.

Secretary to the Commission

VOLUME 18. Part 1. Pp. 1-64, 3 pls., 1 text-fig.

OPINION 501

Validation under the Plenary Powers of the specific name adippe as published in the combination Papilio adippe in 1775 in the anonymous work by Denis & Schiffermüller commonly known as the Wiener Verzeichniss to be the specific name for the High Brown Fritillary and validation under the same Powers of a neotype for the foregoing nominal species (Class Insecta, Order Lepidoptera)

LONDON:

Printed by Order of the International Trust for Zoological Nomenclature

and

Sold on behalf of the International Commission on Zoological Nomenclature by the International Trust at its Publications Office 41, Queen's Gate, London, S.W.7

1958

Price Two Pounds Ten Shillings

(All rights reserved)

INTERNATIONAL COMMISSION ON ZOOLOGICAL NOMENCLATURE

COMPOSITION AT THE TIME OF THE ADOPTION OF THE RULING GIVEN IN OPINION 501

The Officers of the Commission

Honorary Life President: Dr. Karl Jordan (British Museum (Natural History), Zoological Museum, Tring, Herts., England)

President: Professor James Chester Bradley (Cornell University, Ithaca, N.Y., U.S.A) (12th August 1953)

Vice-President: Senhor Dr. Afranio do Amaral (Sao Paulo, Brazil) (12th August 1953)

Secretary: Mr. Francis HEMMING (London, England) (27th July 1948)

The Members of the Commission

(Arranged in order of precedence by reference to date of election or of most recent re-election, as prescribed by the International Congress of Zoology)

Professor H. Boschma (Rijksmuseum van Natuurlijke Historie, Leiden, The Netherlands) (1st January 1947)
Senor Dr. Angel Cabrera (La Plata, Argentina) (27th July 1948)
Mr. Francis Hemming (London, England) (27th July 1948) (Secretary)
Dr. Henning Lemche (Universitetets Zoologiske Museum, Copenhagen, Denmark) (27th

July 1948)
Professor Teiso Esaki (Kyushu University, Fukuoka, Japan) (17th April 1950)
Professor Pierre Bonnet (Université de Toulouse, France) (9th June 1950)
Mr. Norman Denbigh Riley (British Museum (Natural History), London) (9th June 1950)
Professor Tadeusz Jaczewski (Institute of Zoology, Polish Academy of Sciences, Warsaw,

Poland) (15th June 1950)
Professor Robert Merrens (Natur-Museum u. Forschungs-Institut Senckenberg, Frankfurt

Professor Robert Mertens (Natur-Museum u. Forschungs-Institut Senckenberg, Frankfurt a.M., Germany) (5th July 1950)

Professor Erich Martin Hering (Zoologisches Museum der Humboldt-Universität zu Berlin, Germany) (5th July 1950)

Senhor Dr. Afranio do Amaral (S. Paulo, Brazil) (12th August 1953) (Vice-President) Professor J. R. Dymond (University of Toronto, Toronto, Canada) (12th August 1953) Professor J. Chester Bradley (Cornell University, Ithaca, N.Y., U.S.A.) (12th August 1953) (President)

Professor Harold E. Vokes (University of Tulane, Department of Geology, New Orleans, Louisiana, U.S.A.) (12th August 1953)

Professor Béla Hankó (Mezőgazdasági Muzeum, Budapest, Hungary) (12th August 1953)

Dr. Norman R. Stoll (Rockefeller Institute for Medical Research, New York, N.Y., U.S.A.) (12th August 1953)

Mr. P. C. Sylvester-Bradley (Sheffield University, Sheffield, England) (12th August 1953)

Mr. P. C. Sylvester-Bradley (Sheffield University, Sheffield, England) (12th August 1953)
Dr. L. B. Holthus (Rijksmuseum van Natuurlijke Historie, Leiden, The Netherlands (12th August 1953)

Dr. K. H. L. Key (Commonwealth Scientific and Industrial Research Organisation, Canberra, A.C.T., Australia) (15th October 1954)
 Dr. Alden H. Miller (Museum of Vertebrate Zoology, University of California, U.S.A.)

(29th October 1954) Doc. Dr. Ferdinand PRANTL (Národni Museum V Praze, Prague, Czechoslovakia) (30th

October 1954) Professor Dr. Wilhelm Kühnelt (Zoologisches Institut der Universität, Vienna, Austria) (6th November 1954)

Professor F. S. Bodenheimer (The Hebrew University, Jerusalem, Israel) (11th November

1954) Professor Ernst MAYR (Museum of Comparative Zoology at Harvard College, Cambridge, Massachusetts, U.S.A.) (4th December 1954)

Professor Enrico Tortonese (Museo di Storia Naturale "G. Doria", Genova, Italy)

(16th December 1954)

OPINION 501

VALIDATION UNDER THE PLENARY POWERS OF THE SPECIFIC NAME "ADIPPE" AS PUBLISHED IN THE COMBINATION "PAPILIO ADIPPE" IN 1775 IN THE ANONYMOUS WORK BY DENIS & SCHIFFER-MÜLLER COMMONLY KNOWN AS THE "WIENER VERZEICHNISS" TO BE THE SPECIFIC NAME FOR THE HIGH BROWN FRITILLARY AND VALIDATION UNDER THE SAME POWERS OF A NEOTYPE FOR THE FOREGOING NOMINAL SPECIES (CLASS INSECTA, ORDER LEPIDOPTERA)

RULING:—(1) The following action is hereby taken under the Plenary Powers:—

(a) The under-mentioned specific names are hereby suppressed for the purposes both of the Law of Priority and of the Law of Homonymy, save that, in so far as either of the names concerned has been used as the name for an infra-subspecific form, the action now taken is to be interpreted, as regards that class of name, as being limited to suppression for the purposes of the Law of

Priority only and therefore as not affecting the status of those names for the purposes of the Law of Homonymy:—

- (i) cydippe Linnaeus, 1761, as published in the combination Papilio cydippe;
- (ii) adippe Linnaeus, 1767, as published in the combination *Papilio adippe*.
- (b) The under-mentioned specific names are hereby suppressed for the purposes both of the Law of Priority and of the Law of Homonymy:—
 - (i) cydippe, as published in the combination Papilio cydippe, all uses of, subsequent to Linnaeus, 1761, and prior to its use by Linnaeus in 1767 in the Twelfth Edition of the Systema Naturae;
 - (ii) adippe, as published in the combination Papilio adippe, all uses of, subsequent to Linnaeus, 1767, and prior to its use by Denis & Schiffermüller in 1775 in the anonymous work entitled Ankündung eines systematischen Werkes von den Schmetterlinge der Wiener Gegend.
- (c) The under-mentioned specific name is hereby suppressed for the purposes of the Law of Priority but not for those of the Law of Homonymy:—

berecynthia Poda, 1761, as published in the combination Papilio berecynthia.

(d) It is hereby directed that the binomen *Papilio* adippe, as published by Denis & Schiffermüller in 1775 in the anonymously issued work cited in (b)(ii) above is to be treated as being a scientific

name (binominal combination) then published for the first time, and the specific name *adippe* [Denis & Schiffermüller], 1775, so published, is hereby validated.

- (e) The neotype for the nominal species *Papilio adippe* [Denis & Schiffermüller], 1775, designated by Hemming (F.), Riley (N.D.) & Verity (R.) in paragraph 4 of the paper reproduced in the Appendix to the present *Opinion* is hereby validated.
- (2) The under-mentioned generic name is hereby placed on the Official List of Generic Names in Zoology with the Name Number 1244:—

Fabriciana Reuss, 1920 (gender: feminine) (type species, by original designation: Papilio niobe Linnaeus, 1758).

- (3) The under-mentioned specific names are hereby placed on the *Official List of Specific Names in Zoology* with the Name Numbers severally specified below:—
 - (a) adippe [Denis & Schiffermüller], 1775, as published in the combination Papilio adippe, as validated under the Plenary Powers in (1)(a), (1)(b) and (1)(d) above and as interpreted by the validation under the same Powers in (1)(e) above of the neotype there specified, the type locality of the nominal species so named to be entered "Mödling, near Vienna", the locality in which the said neotype was obtained (Name No. 1472);
 - (b) niobe Linnaeus, 1758, as published in the combination Papilio niobe (Name No. 1473) (specific name of type species of Fabriciana Reuss, 1920);

- (c) cydippe Linnaeus, 1767, as published in the combination Papilio cydippe, as validated under the Plenary Powers in (1)(a)(i) and (1)(b)(i) above (Name No. 1474).
- (4) The under-mentioned specific names are hereby placed on the Official Index of Rejected and Invalid Specific Names in Zoology with the Name Numbers severally specified below:—
 - (a) adippe Linnaeus, 1767, as published in the combination *Papilio adippe*, as suppressed under the Plenary Powers in (1)(a)(ii) above (Name No. 492);
 - (b) adippe, as published in the combination Papilio adippe, all uses of, subsequent to Linnaeus, 1767, and prior to that by [Denis & Schiffermüller] in 1775, as suppressed under the Plenary Powers in (1)(b)(ii) above (Name No. 493);
 - (c) berecynthia Poda, 1761, as published in the combination Papilio berecynthia, as suppressed under the Plenary Powers in (1)(c) above (Name No. 494);
 - (d) cydippe Linnaeus, 1761, as published in the combination Papilio cydippe, as suppressed under the Plenary Powers in (1)(a)(i) above (Name No. 495);
 - (e) cydippe, as published in the combination Papilio cydippe, all uses of, subsequent to Linnaeus, 1761, and prior to its use by Linnaeus in 1767, as suppressed under the Plenary Powers in (1)(b)(i) above (Name No. 496).

I. THE STATEMENT OF THE CASE

The present *Opinion* is concerned with the question of the specific name properly applicable to the species of butterfly which at the opening of the present century and for nearly a hundred years previously had been universally known by the name Argynnis adippe (Linnaeus, 1767) and which in England is known as the "High Brown Fritillary". For the reasons explained in the applications submitted in the present case, the name for this species, which has a very wide distribution in the Palaearctic Region, fell into such great confusion that it became evident to specialists in the group concerned that stability could never be restored without the help of the Commission's Plenary Powers. Preliminary consultations in regard to this matter took place between Mr. Francis Hemming (London), Mr. B. C. S. Warren (Winchester), Mr. N. D. Riley (London) and Dr. Roger Verity (Florence, Italy) in 1938 and 1939, and in the first of these years a preliminary notice was given to the Office of the Commission by Mr. Hemming of his intention, with other specialists, to submit an application to the Commission for the settlement of this case on the basis of predominant current usage. In the immediately following period difficulties created by the World War and, later, pressure of work arising from his duties as Secretary to the International Commission made it impossible for Mr. Hemming to proceed with the projected application until 1949 when in conjunction with Mr. Riley and Dr. Verity he formally submitted an application to the Commission on this case. In view of the fact that many species closely allied to that dealt with in this application occur also in the Nearctic Region, Mr. Hemming and his colleagues decided at this point to ascertain the views of American specialists on the action proposed. This led to the submission to the Commission of a parallel supporting application by Mr. L. P. Gray (Lincoln, Maine), Professor Alexander B. Klots (New York City, N.Y.) and Mr. Cyril F. dos Passos (Mendham, New Jersey). The applications so submitted are reproduced in the immediately following paragraphs.

2. Application submitted jointly by Francis Hemming (London), N. D. Riley (British Museum (Natural History), London) and

Roger Verity (Florence, Italy): On 29th November 1949 the following application was submitted to the Commission by Mr. Francis Hemming (London), Mr. N. D. Riley (British Museum (Natural History), London) and Dr. Roger Verity (Florence, Italy)¹:—

Proposed use of the Plenary Powers to determine the trivial name to be applied to the species of the genus "Fabriciana" Reuss, 1920 (Class Insecta, Order Lepidoptera) known in England as the "High Brown Fritillary" and formerly known by the scientific name "Argynnis adippe" (Linnaeus, 1767)

By FRANCIS HEMMING, C.M.G., C.B.E. (London, England),

N. D. RILEY

(Keeper, Department of Entomology, British Museum (Natural History), London),

ROGER VERITY

(Florence, Italy)

The present case is concerned with the nomenclature of two allied species of the genus Fabriciana Reuss, 1920, one of which was for over 150 years known by a trivial name properly applicable to the other. The first of these species to be named is a species which occurs over a wide area in the Palaearctic Region but does not occur in England; this species is referred to as the "Niobe Fritillary" in the present paper. The second species is also widely distributed in the Palaearctic Region but, unlike the "Niobe Fritillary", does occur in England, where it is known as the "High Brown Fritillary", by which name it is referred to in the present paper.

- 2. The facts which have to be noted are the following:—
- (1) In 1758 (Syst. Nat. (ed. 10) 1:481) Linnaeus published a description of a Fritillary with an unsilvered underside, to which he gave the name Papilio niobe. For the locality of this species Linnaeus wrote only "Habitat in Europa". Three years later in 1761 (Faun. svec. (ed. 2):281—282) Linnaeus gave an extended description of this species, on this occasion saying of its locality "Habitat in pratis", i.e. in fields in Sweden, the country alone dealt with in the faunistic account contained in the Fauna svecica. The species Papilio niobe

¹ The concluding paragraph (paragraph 10) referring to the consultations held by the applicants wiln specialists in the United States was added to this application in June 1950, following the receipt of the complementary application submitted by Mr. L. P. Gray, Professor Alexander B. Klots and Mr. Cyril F. dos Passos reproduced in paragraph 3 of the present *Opinion*.

Linnaeus, 1758, has been accepted by all subsequent authors as being the Niobe Fritillary. For the reason explained above, its type locality has been accepted as being "Sweden".

(2) In 1761 (Faun. svec. (ed. 2): 281) Linnaeus published a description of a species of Fritillary with a silvered underside, of which he said the locality was "Habitat in pratis" (i.e. in fields in Sweden), to which he gave the name Papilio cydippe. Six years later Linnaeus himself dealt with this species again, as explained in (4) below. During the intervening period, this name was used by three authors: (1) Scopoli, 1763, Ent. carn.: 162; (2) Brünnich in Pontoppidan, 1763, Danske Atlas 1: 685 no. 26; (3) Müller, 1764, F. Ins. Frid.: 35, no. 328. The species to which this name was applied by Scopoli may have been either the High Brown Fritillary or some form of the Niobe Fritillary, his description not being sufficient to determine this question with certainty. The species to which Brünnich applied the name Papilio cydippe in Bishop Pontoppidan's Danske Atlas was certainly not the High Brown Fritillary and was presumably the Niobe Fritillary in one of its forms. Dr. Tuxen (Universitetets Zoologiske Museum, Copenhagen), whom we have consulted, has expressed the same view (in litt., 14th March 1950); after observing that the only reference to Papilio cydippe in the Danske Atlas is on page 685, where the name appears without any comment except a reference to the Second Edition of the Fauna svecica of Linnaeus, Dr. Tuxen states that the High Brown Fritillary has never been found in Denmark2 and that Brünnich's citation of this species (if in fact this is what Brünnich conceived himself to be doing) must have been due to an error of identification. (We may add at this point that, in view of the statements which have been published that Brünnich gave a figure of *Papilio cydippe* in the above work and our inability to find any such figure in any copy available to us, we asked Dr. Tuxen to look into this matter on our behalf; in his reply (referred to above), Dr. Tuxen informed us that no such figure was to be found either in any of the copies of the

It has since transpired that this statement is incorrect. The question whether the High Brown Fritillary occurs in Denmark formed the subject of correspondence between Mr. N. D. Riley (on behalf of the applicants) and Dr. S. L. Tuxen (Universitetets Zoologiske Museum, Copenhagen) at the time when the present application was in preparation. In making this enquiry, Mr. Riley referred to this species under the specific name cydippe. Dr. Tuxen has since explained (in a letter to Mr. Riley dated 3rd October 1952) that he unfortunately did not recognise the High Brown Fritillary under this name and that it was for this reason that he stated that the species so named did not occur in Denmark. In making this communication, Dr. Tuxen added: "Argynnis adippe is common in Denmark. . . . I have read your paper now, and I find that my incorrect statement is used as an argument for Brünnich's cydippe being niobe, but, as far as I understand it, the conclusion in the paper would have been the same if it had been realised that adippe did occur in Denmark".

Danske Atlas which he has examined in Denmark or in a copy in Norway which he had caused to be specially examined from this point of view. Brünnich's alleged figure of Papilio cydippe in this work may therefore be dismissed as a figment of the imagination. Turning to the third of the authors cited above, Müller (1764), we may certainly conclude, for reasons similar to those explained above in connection with Brünnich's work, that the insect to which Müller applied the name Papilio cydippe was not the High Brown Fritillary and was therefore almost certainly a form of Papilio niobe Linnaeus.

- (3) In 1767 (Syst. Nat. (ed. 12) 1:776) Linnaeus published a description of an entirely different species under the name Papilio cydippe. This species has been recognised by all authors as the Oriental species of the genus Cethosia now known as Cethosia cydippe (Linnaeus, 1767).
- (4) In consequence of having given the name Papilio cydippe to the Oriental Cethosiid, Linnaeus in the same work (1767, Syst. Nat. (ed. 12) 1:786) abandoned the name Papilio cydippe Linnaeus, 1761, for the Swedish Fritillary, renaming that species Papilio adippe. The species so named was recognised as the High Brown Fritillary by all subsequent authors for nearly 150 years (i.e. until Verity 1913), the trivial name adippe Linnaeus, 1767, being used for that species. (There are other cases in which, as here, Linnaeus, on recognising that he was creating a homonym, suppressed the earlier homonym, in order to make way for the later one.)
- (5) In 1913 (J. linn. Soc. Lond. (Zool.) 32:173—191) Verity published a critical account of an examination made by himself of the butterflies contained in the Linnean collection preserved in Burlington House. As regards the species here under consideration Verity noted (:182—183): (a) that the collection contains two males marked "niobe" which correspond exactly with the Linnean description of Papilio niobe and which are examples of the Niobe Fritillary with unsilvered undersides; (b) that the collection contained one Linnean specimen marked "cydippe" which is a female of the silvered under-side form of the Niobe Fritillary. Thus the trivial name cydippe Linnaeus, 1761 (and its substitute name adippe Linnaeus, 1767) apply not, as previously supposed by every worker, to the High Brown Fritillary but to the Niobe Fritillary.
- (6) Verity realised that this discovery deprived the High Brown Fritillary of its long-accustomed trivial name adippe Linnaeus, and accordingly considered what name was properly applicable to that species. In this connection he discussed two early names, namely (a) Papilio berecynthia Poda, 1761 (Ins. Mus. graev.: 75, no. 38), and (b) Papilio syrinx Borkhausen, 1788

(Nat. europ. Schmett. 1:37 no. 9). Verity rejected the first of these names on the ground that Poda's description was too vague to enable a definite identification to be made, and Borkhausen's name syrinx on the ground that it was based on an abnormal pair figured by Esper (pl. 74, figs. 1, 2) of the High Brown Fritillary (treated by Esper as Papilio adippe Linnaeus). Verity thereupon concluded that a new trivial name was needed and published the name Argynnis esperi as a nom. nov. for this species. He added that he took Esper's figures as typical. A few lines earlier he had rightly stigmatised Esper's figs. 1 and 2 on pl. 74 (the type specimens of Borkhausen's syrinx) as abnormal. He did not, however, specify which were the figures of Esper's which he adopted as typical. He has, however, since stated (in litt.) that he had in mind Esper's pl. 18, fig. 1, also his pl. 26, fig. 4, and pl. 43, fig. 2 (a female).

- (7) Verity's paper was the subject of severe criticism in conservative entomological circles and for long was unfortunately neglected, a neglect which is responsible for the fact that today, thirty-nine years after its publication, there still remains the utmost uncertainty and confusion regarding the trivial name which should be applied to the High Brown Fritillary.
- (8) In 1916 the British National Committee on Entomological Nomenclature prepared a Report which was published by the Entomological Society of London, in which the Committee rejected the conclusions reached by Verity but pointed out that the trivial name cydippe Linnaeus, 1761, had been wrongly rejected by Linnaeus, 1767 (on the ground that it was a homonym of the same name published by him in that year -1767— for a different species) and therefore that this name should be reintroduced in place of the familiar name adippe Linnaeus, 1767. The Committee were correct in their conclusions regarding the relative status of the trivial names cydippe Linnaeus, 1761, and adippe Linnaeus, 1767, but unfortunately their conclusions on this matter were totally irrelevant in view of Verity's prior discovery (1913) that both names applied not to the High Brown Fritillary but to the Niobe Fritillary. However, the conclusions of the Committee won a considerable degree of support from workers who were not interested in original descriptions but sought only an authoritative pronouncement as to the name which they should apply to the High Brown Fritillary. In consequence the trivial name cydippe Linnaeus, 1761, won a considerable measure of support and, as a result, the species has frequently since been referred to in the literature under this trivial name.
- (9) Notwithstanding the considerable use of the trivial name cydippe Linnaeus, 1761, for the High Brown Fritillary, this usage has

been largely confined to British workers, the majority of European workers continuing to use the name *adippe* Linnaeus, 1767, which (as we have seen) not only applies to a different species, the Niobe Fritillary—just as the name *cydippe* Linnaeus, 1761, does—but would be an invalid synonym of *cydippe* Linnaeus, 1761, even if both names belonged (as was supposed up to 1913) to the High Brown Fritillary.

- (10) In 1929 Verity reverted to this subject in a further paper (Bull. Soc. ent. France 1929: 277—280), in which he accepted the conclusion that the High Brown Fritillary could not properly be known by the trivial name esperi Verity, 1913 (based, as explained in (6) above, on Esper's figures of adippe Linnaeus) but must be known by whatever was the oldest available trivial name given to any subspecies of the collective species represented by the High Brown Fritillary. Once more, as in 1913, he examined and rejected the claims of the trivial names berecynthia Poda, 1761, and syrinx Borkhausen, 1788. Having reached this stage Verity examined the claims of the trivial name phryxa Bergsträsser (then attributed by him to 1780 but in fact not published until 1783). This name was published in the binominal combination *Papilio phryxa* in vol. 4 of Bergsträsser's *Nomencl. Ins.* (: 27 pl. 82, figs. 1, 2, 3). These figures had been considered in 1864 (Beitr. Schmett. Kunde. 2:69) by Werneburg, who had concluded that all three figures represented the Niobe Fritillary (= Papilio niobe Linnaeus, 1758). Verity, while admitting that Bergsträsser's fig. 3 might represent a niobe claimed that figs. 1 and 2 on Bergsträsser's plate represented the High Brown Fritillary. He accordingly concluded that this was the earliest available trivial name for this species, which in the remainder of the paper he referred to as Argynnis phryxa (Bergsträsser).
- (11) Verity recognised very quickly that the solution proposed in 1929 was unsatisfactory, and in the following year (1930, Ent. Rec. 42:149—152) reverted once more to this subject. On this occasion he advanced the view that, as the trivial name cydippe Linnaeus, 1761, and its synonym adippe Linnaeus, 1767, ĥad been given by Linnaeus to individual forms (of Papilio niobe Linnaeus, 1758), those names possessed no status under the Règles, the lowest category of name there recognised being the trivial name of a subspecies. Under this argument the name adippe Linnaeus, 1767 (as published in the binominal combination Papilio adippe) had no status under the Règles and did not invalidate the later use of the same binominal combination (though a homonym) when first it was published as a specific name. The next such occasion was, he pointed out, in 1775, when Rottemburg (1775, Naturforscher 6:13) applied this name to a species which Verity claimed was

indubitably the High Brown Fritillary. Verity accepted as the trivial name for this collective species the trivial name adippe as from Rottemburg, 1775. Six years later (1936, Ent. Rec. 48 (Suppl.): (83)) Verity once more dealt with this subject, reaffirming the argument advanced in 1930 but adding Schiffermüller to Rottemburg as the valid authority for the name adippe, as applied to the High Brown Fritillary (owing, as he has since informed us, to the fact that Rottemburg's paper in the Naturforscher and Schiffermüller's anonymous catalogue of the butterflies of the Vienna district were both published in the same year and no data were available for determining the relative dates of publication of these works³).

(12) In the meantime—in 1935—an event had occurred which was to lead ultimately to the clarification of the meaning of the Règles on the question of the status of infra-subspecific names, the lack of regulation of which in the Règles had led Verity in 1930 to advance the view that, since (as he claimed) the trivial names cydippe Linnaeus, 1761, and adippe Linnaeus, 1767, though published as the trivial names of species, had been applied to aberrant specimens, i.e. to infra sub-specific forms, they possessed no status in nomenclature and therefore that either name was available nomenclatorially as from the first later date on which it was definitely applied as the name of a species. For at its meeting held in Lisbon in 1935 the International Commission on Zoological Nomenclature had agreed that the whole problem of the status (if any) possessed by, or to be given to, the trivial names of infra-subspecific forms should be studied by the Secretary to the Commission, in consultation with interested specialists, and a Report thereon submitted to the next meeting of the Commission. The Report so prepared was considered by the Commission at its meeting held in Paris in July 1948 and on the basis of recommendations framed by the Commission in the light of that Report, the Thirteenth International Congress of Zoology agreed upon the insertion in the Règles of provisions clarifying the status of such names. Of the decisions then taken, only one need detain us. This was the decision that the criterion to be applied for determining whether a given trivial name was for the purposes of the Règles the trivial name on the one hand of a species or a subspecies or on the other hand the trivial name of an infra-subspecific form was the way in which that name had first been published; a trivial name published as the trivial name of a species or subspecies possessed status as such, though it might be applied by later authors as the name of an infra-subspecific form, if this was judged proper on Even so, however, the name retained taxonomic grounds.

³ This question has since been settled in favour of von Rottemberg's paper by the Ruling given in *Opinion* 516 (now in the press).

- its status as a specific (or, as the case might be, a subspecific) trivial name and accordingly rendered invalid as a homonym the same trivial name if published later as a specific or subspecific trivial name in combination with the same generic name (1950, *Bull. zool. Nomencl.* 4:83—96).
- (13) The decision by the Paris Congress in this matter is of outstanding importance in the present case, destroying, as it does, the argument that the trivial name adippe as from Rottemburg or Schiffermüller could properly be used as the specific trivial name of the High Brown Fritillary, notwithstanding the fact that earlier that trivial name had been published (by Linnaeus) in combination with the same generic name (Papilio) as the trivial name of a form (later claimed to be of only infrasubspecific rank) belonging to a different species (= Papilio niobe Linnaeus, 1758, the Niobe Fritillary).
- 3. In these circumstances we are back again exactly where we were when in 1913 Verity first discovered that the trivial names cydippe Linnaeus, 1761, and adippe Linnaeus, 1767, had been published by Linnaeus not for the High Brown Fritillary but for the Niobe Fritillary. We are under the necessity therefore of considering and, if possible, of determining, what is the oldest trivial name published for any subspecies of the collective species known as the High Brown Fritillary. It is here that we immediately encounter a difficulty which appears to be insuperable. This is the difficulty presented by the trivial name berecynthia Poda, 1761, as published in the binominal combination This nominal species has been identified by Papilio berecvnthia. some authors as representing the High Brown Fritillary, by others as representing the Niobe Fritillary. We are inclined to think that the species in question was the High Brown Fritillary, but whether Poda had before him this species or the Niobe Fritillary must always remain a matter of opinion. In consequence, there can be no stability in the nomenclature of the High Brown Fritillary, so long as the trivial name berecynthia Poda remains an available name, for it will be a constant cause of confusion and instability, so long as it is available to be brought into use by any worker who claims to recognise the High Brown Fritillary in Poda's description of his berecynthia. Confusion in the nomenclature of this species has already caused a great deal of harm and its continuance would be calculated to cause still greater harm, in view of the importance of being able clearly to identify by name this specific unit, owing to the fact that in a series of important papers published during the inter-war years Reuss has shown that a number of distinct species in the Eastern part of the Palaearctic Region (and, in one case also in Europe) have hitherto been confused with the High Brown Fritillary. The solution of the complex taxonomic problem so disclosed will be difficult in any case but will be rendered quite unnecessarily difficult if constant doubt is allowed to persist in regard to the trivial name of the West European (including British) High Brown Fritillary.

- 4. As a first step, it is, in our view and also in that of our friend and colleague Mr. B. C. S. Warren, absolutely essential that the difficulty created by the trivial name berecynthia Poda, 1761, should be cleared out of the path, by the International Commission on Zoological Nomenclature using its Plenary Powers to suppress that name for the purposes of Article 25 of the Règles (i.e. to suppress the availability of this name) but not for the purposes of Article 35 (this name still making it impossible to use the trivial name berecynthia for some other species in the genus in combination with the name of which it was originally published or in the genus (Fabriciana Reuss, 1920) to which the species here under consideration are now assigned). and final step in securing stability in the nomenclature of this group will be for the Commission authoritatively to determine what is the trivial name which should be applied to the High Brown Fritillary. This aspect of the problem is discussed in the following paragraphs. Before passing to this part of our subject, we must note, however, that great confusion would undoubtedly arise if the trivial name adippe Linnaeus, 1767, were to be used to denote infra-subspecific forms of the Niobe Fritillary (Papilio niobe Linnaeus, 1758) after having been used for over 150 years as the specific trivial name of the closely allied High Brown Fritillary. Similar considerations apply to the trivial name cydippe Linnaeus, 1761. Quite apart from any other reason, it is clearly necessary that the trivial names cydippe Linnaeus and adippe Linnaeus should be suppressed by the Commission under its Plenary Powers so as to make it impossible for these trivial names to be used as trivial names for infra-subspecific forms of the Niobe Fritillary.
- 5. In considering the question of the trivial name to be applied to the High Brown Fritillary, we are still confronted with difficulties even if we assume that the initial stumbling block represented by the doubtful trivial name berecynthia Poda, 1761, is removed by the suppression of that name by the Commission under its Plenary Powers for, as we have already seen (paragraph 2(10) above) the next trivial name, phryxa Bergsträsser, 1783, as published in the binominal combination Papilio phryxa, presents doubts similar to those presented by the trivial name berecynthia Poda, 1761, for it cannot be affirmed with absolute certainty that the species so named was in fact the High Brown Fritillary and not the Niobe Fritillary. After careful consideration, we are of the unanimous opinion that, since in any case it will, in our view, be necessary for the Commission to use its Plenary Powers for the purpose of suppressing the trivial name berecynthia Poda, 1761, the best course and indeed the only course capable of providing a final solution of the difficulties in which the nomenclature of this group of butterflies has become so inextricably involved, would be for the Commission at the same time to use its Plenary Powers trivial name, the trivial name, suppress, as a specific adippe Linnaeus, 1767, as published in the binominal combination Papilio adippe in such a way as to render that trivial name (as published in the same binominal combination) a nomenclatorially available name, as published by some author subsequent to Linnaeus, 1767,

and as applied beyond question to the High Brown Fritillary. The adoption of this course offers many important advantages: first, if the author so selected (under the Plenary Powers) to be the accepted author of the trivial name adippe as applied to the High Brown Fritillary published the paper in question prior to 1783, the trivial name adippe would thereupon become without question the oldest available trivial name for the High Brown Fritillary and there would in that event be no need to consider the difficulties arising from the existing doubts as to the identity of the species to which in 1783 Bergsträsser gave the specific name Papilio phryxa; second, the adoption of this course would confer upon the High Brown Fritillary the trivial name by which incorrectly it has been known for over 150 years and by which today it is still called by most authors.

6. If it be granted that the foregoing represents the solution to be sought, it becomes necessary next to consider which use of the trivial name adippe for the High Brown Fritillary should be selected as the use to be adopted (under the Plenary Powers) as the first valid nomenclatorial use of that name for this species. The first desideratum is naturally that the use in question should unequivocally apply to the High Brown Fritillary and to no other species. The second is that the use to be selected is one in which the author concerned gave a clear indication of the locality of the specimens from which his description was drawn up, this being a matter of great importance in the case of a polytypic species such as the present for determining the type locality of the nominotypical subspecies.4 Finally, it would be helpful, other things being equal, if the usage selected were one where the author concerned gave a clearly recognisable figure of the High Brown The first author unequivocally to apply the name Papilio adippe to the High Brown Fritillary and at the same time to give a figure of that species under that name was Esper in the year 1777 (Die Schmett. 1(3): pl. 18, fig. 1δ; 1(5): pl. 26, fig. 4δ [""]; 1(8): pl. 43, fig. 29). Two years later (in 1779), the text relating to this species was published (Die Schmett. 1(9): 232-237), Esper again applying to this species the name Papilio adippe. The discussion given by Esper shows conclusively both that he fully realised the differences between the High Brown Fritillary on the one hand and the Niobe Fritillary (Papilio niobe Linnaeus, 1758) and the Dark Green Fritillary (Papilio aglaja Linnaeus, 1758) on the other hand and also that he was well aware of the nature of the confusion between these species into which most of his predecessors had fallen. At the same time he correctly pointed out that among the then most recent authors there were two who also had correctly appreciated the differences between the three species discussed above. These authors were Rottemburg (1775, Naturforscher 6:13) and the anonymous "Herren

⁴ By a decision taken by the Fourteenth International Congress of Zoology, Copenhagen, 1953 (1953, Copenhagen Decisions zool. Nomencl.: 21, Decision 18) the subspecies which forms the basis of the original description of a polytypic species is in future to be known as the "nominate" subspecies of that species.

Verfasser des Verzeichnisses der Wiener Gegend " (i.e. Schiffermüller & Denis).

- 7. In these circumstances it is plain that the choice lies between (a) the foregoing passage in Esper's great work, (b) the slightly earlier paper by Rottemburg, and (c) the anonymous book by Schiffermüller and Denis (both of which latter were published in the year 1775, the date "1776" commonly attributed to Schiffermüller's book referring to a second impression, published under a slightly different title, one year after the otherwise identical first edition). Esper's book, as also Rottemburg's paper, suffers from the severe disadvantage that no clear type locality is given for this species. The book by Schiffermüller and Denis, which may have actual priority over Rottemburg's paper (a question which, by decision of the International Commission on Zoological Nomenclature, is at present under investigation and is therefore sub judice)⁵ offers the great advantage that, as shown by its title ("Ankündung eines systematischen Werkes von den Schmetterlingen der Wiener Gegend"), we know definitely that the butterflies described therein were taken in the neighbourhood of Vienna. For these reasons we conclude that the use of the name Papilio adippe as a specific name for the High Brown Fritillary which it is desirable should be designated by the International Commission as the first valid use of this name for any species should be that in 1775 by Schiffermüller and Denis on page 177 in the anonymous work Ankündung syst. Werkes Wien. Gegend, where this name was unequivocally used to denote the High Brown Fritillary and where the type locality of the species so named was clearly indicated (by the title of the book in which this name was published). The adoption of this proposal by the International Commission will involve the suppression, under the Plenary Powers, both of the trivial name cydippe Linnaeus, 1761 (as published in the binominal combination Papilio cydippe) and of all uses of the trivial name adippe in combination with the generic name Papilio prior to its use in this manner by Schiffermüller and Denis in The elimination of the name *Papilio cydippe* Linneaus, 1761, as an unwanted synonym of Papilio niobe Linnaeus, 1758, will provide incidentally a welcome opportunity for validating that specific name as applied by Linnaeus in 1767 to the Cethosiid species, which has been so generally known by that name.
- 8. We may now sum up our conclusions by saying that, in our opinion, there is no possibility of resolving the confusion surrounding the nomenclature of the group of species centred around the species Papilio niobe Linnaeus, 1758 (= Fabriciana niobe (Linnaeus, 1758)) and in particular the species known in England as the High Brown Fritillary, unless the International Commission on Zoological Nomenclature uses its Plenary Powers to determine the specific trivial name to be used for the High Brown Fritillary.

⁵ See Footnote 3.

- 9. The specific request which we now submit to the International Commission on Zoological Nomenclature is that it should:—
 - (1) use its Plenary Powers:—
 - (a) to suppress to the extent and for the purposes severally specified below :—
 - (i) in the realm of specific and subspecific names, the following trivial names, both for the purposes of the Law of Priority and for those of the Law of Homonymy:—
 - (A) the trivial name cydippe Linnaeus, 1761, as published in the combination Papilio cydippe;
 - (B) the trivial name *adippe* Linnaeus, 1767, as published in the combination *Papilio adippe*;
 - (c) all uses of the trivial name cydippe in combination with the generic name Papilio Linnaeus, 1758, subsequent to the publication of the name Papilio cydippe Linnaeus, 1761, and prior to the publication of the same combination by Linnaeus in 1767 in the 12th edition of the Systema Naturae;
 - (D) all uses of the trivial name adippe in combination with the generic name Papilio Linnaeus, 1758, subsequent to the publication of the name Papilio adippe Linnaeus, 1767, and prior to the publication by Denis & Schiffermüller in 1775 of the same binominal combination in the anonymous work entitled Ankündung eines systematischen Werkes von den Schmetterlinger der Wiener Gegend;
 - (ii) in the realm of specific and subspecific names the under-mentioned name, for the purposes of the Law of Priority but not for those of the Law of Homonymy:
 - the trivial name berecynthia Poda, 1761, as published in the combination Papilio berecynthia;
 - (iii) in the realm of infra-subspecific names, the undermentioned names for the purposes of the Law of

Priority but not for those of the Law of Homonymy:—

- (A) the trivial name cydippe Linnaeus, 1761, as published in the combination Papilio cydippe;
- (B) the trivial name adippe Linnaeus, 1767, as published in the combination Papilio adippe;
- (b) to validate the under-mentioned specific trivial names in the realm of specific and subspecific names:—
 - (i) the trivial name *adippe*, as published in the combination *Papilio adippe*, by Denis & Schiffermüller in 1775 on page 177 in the anonymous work specified in (a)(i)(D) above;
 - (ii) the trivial name *cydippe* Linnaeus, 1767, as published in the combination *Papilio cydippe*;
- (c) to direct that the specific trivial name *adippe* [Denis & Schiffermüller], 1775, as published in the combination *Papilio adippe*, as validated in (b)(i) above, be applied to the species figured under that name by Esper in 1777 as fig. 1 on pl. 18 of the work entitled *Die Schmetterlinge in Abbildungen nach der Natur*:
- (2) that the under-mentioned trivial names be placed on the Official List of Specific Trivial Names in Zoology:—
 - (a) adippe [Schiffermüller & Denis], 1775, as published in the combination Papilio adippe, as validated in (1)(b)(i), and as defined in (1)(c) and (1)(d) above and with "Wiener Gegend" as its type locality;
 - (b) niobe Linnaeus, 1758, as published in the combination Papilio niobe;
 - (c) cydippe Linnaeus, 1767, as published in the combination Papilio cydippe, as validated in (1)(b)(ii) above;
- (3) that the under-mentioned trivial names be placed on the Official Index of Rejected and Invalid Specific Trivial Names in Zoology:—
 - (a) adippe Linnaeus, 1767, as published in the combination Papilio adippe, as proposed in (1)(a)(i)(B), to be suppressed under the Plenary Powers;

- (b) all uses of the trivial name adippe in combination with the generic name Papilio Linnaeus, 1758, subsequent to the publication of the name Papilio adippe Linnaeus, 1767, and prior to the publication of the name Papilio adippe [Schiffermüller & Denis], 1775 (as validated in (1)(c)(i) above, as proposed in (1)(a)(i)(D) above, to be suppressed under the Plenary Powers;
- (c) berecynthia Poda, 1761, as published in the combination Papilio berecynthia, as proposed, in (1)(a)(ii) above, to be suppressed under the Plenary Powers;
- (d) cydippe Linnaeus, 1761, as published in the combination Papilio cydippe, as proposed, in (1)(a)(i)(A) above, to be suppressed under the Plenary Powers;
- (e) all uses of the trivial name cydippe in combination with the generic name Papilio Linnaeus, 1758, subsequent to the publication of the name Papilio cydippe Linnaeus, 1761, and prior to the publication of the name Papilio cydippe Linnaeus, 1767 (as validated in (1)(b)(ii) above), as proposed in (1)(a)(i)(c) above.
- 10. The species (the High Brown Fritillary) of the genus Fabriciana Reuss, 1920, the trivial name to be applied to which forms the subject of the present application is exclusively Palaearctic in its distribution. The genus to which that species is here assigned belongs, however, to a large group of closely allied genera which occur in every zoo-geographical Region and are particularly strongly represented in the Nearctic Region. When preparing the present application we thought it desirable therefore to confer with leading specialists in the United States who are specially interested in this group. We accordingly consulted Mr. Cyril F. dos Passos (Mendham, New Jersey, U.S.A.), Professor Alexander B. Klots (New York, N.Y., U.S.A.) and Dr. L. P. Grey (Lincoln, Maine, U.S.A.). It is a matter of great satisfaction to us to find that our American colleagues and ourselves are in complete agreement both as to the facts of the present case and as to the action which it is desirable should now be taken to put an end to the intolerable confusion in nomenclature which has for so long hampered the study of the species concerned. We are particularly gratified to learn from our American colleagues that it is their intention themselves to submit an application to the International Commission on lines parallel to those adopted by ourselves in the present paper.
- 3. Application submitted jointly by L. P. Gray (Lincoln, Maine, U.S.A.), Alexander B. Klots (New York City, N.Y., U.S.A.) and Cyril F. dos Passos (Mendham, New Jersey, U.S.A.): On 11th May 1950 the following application was submitted to the

Commission by Mr. L. P. Gray (Lincoln, Maine, U.S.A.), Professor Alexander B. Klots (New York City, N.Y., U.S.A.) and Mr. Cyril F. dos Passos (Mendham, New Jersey, U.S.A.):—

The "niobe/cydippe/adippe" problem (Class Insecta, Order Lepidoptera, Family Nymphalidae with suggestions for its solution

By L. P. GRAY (Lincoln, Maine, U.S.A.),

ALEXANDER B. KLOTS

(The College of the City of New York, New York City, N.Y., U.S.A.),

CYRIL F. DOS PASSOS

(Research Associate, Department of Insects and Spiders, The American Museum of Natural History, New York City, N.Y., U.S.A.)

We have studied the situation hereinafter discussed respecting the proper use of the specific trivial names niobe, cydippe and adippe in the family NYMPHALIDAE (Class Insecta, Order Lepidoptera), and, being unable to find a satisfactory solution of the problem without recourse to the Plenary Powers of the International Commission on Zoological Nomenclature, and having corresponded with Mr. Francis Hemming and Mr. N. D. Riley on the subject and finding them of like opinion, we have prepared for the consideration of the Commission this memorandum setting forth the issues involved and the conclusions reached.

The Facts

- (1) Papilio niobe Linnaeus, 1758, hereinafter referred to as the "Niobe Fritillary" without silver markings on the under-side of the secondaries, and with its type locality in the fields of Sweden, presents no nomenclatorial problem.
- (2) Papilio cydippe Linnaeus, 1761, with silver markings on the under-side of the secondaries, is a synonym of P. niobe. It has long been misdetermined as a different butterfly which is hereinafter referred to as the "High Brown Fritillary".
- (3) Papilio adippe Linnaeus, 1767, is a new name for P. cydippe and a synonym of P. niobe. It has also long been misdetermined as a different butterfly, namely that referred to in the present paper as the "High Brown Fritillary".
- (4) The proper scientific name to apply to the High Brown Fritillary has long been a matter of controversy and misunderstanding, there being several names which may or may not apply to this insect, it being

impossible to determine with certainty their applicability. One of these names, *Papilio berecynthia* Poda, 1761, is based on a description so vague that a definite identification cannot be made.

Conclusion

It is highly desirable that the correct scientific name to apply to the High Brown Fritillary be settled once and for all, and that can best be done by the use by the Commission of its Plenary Powers.

Procedure

To accomplish the foregoing, the following steps are recommended:—
(I) that the Commission use its Plenary Powers:—

- (a) to suppress:
 - (1) the specific trivial name cydippe Linnaeus, 1761, as published in the combination Papilio cydippe, and its objective synonym, the trivial name adippe Linnaeus, 1767, as published in the combination Papilio adippe;
 - (2) all uses of the trivial name adippe in combination with the generic name Papilio Linnaeus, 1758, subsequent to the publication of the name Papilio adippe Linnaeus, 1767, and prior to the use of the same name by [Denis & Schiffermüller] in 1775 in the anonymous work entitled Ankündung eines systematischen Werkes von den Schmetterlingen der Wiener Gegend herausgegeben von einigen Lehrern am k.k. Theresianum, page 177;
 - (3) the use of the trivial names cydippe Linnaeus, 1761, and adippe Linnaeus, 1767, specified in (a)(1) above, not only as specific or subspecific trivial names in the genus to which the species Papilio niobe Linnaeus, 1758, may at any time be referred, but also as infra-subspecific trivial names in that genus;
 - (4) the specific trivial name berecynthia Poda, 1761, as published in the combination Papilio berecynthia, not only as a specific or subspecific trivial name in the genus to which the species Papilio niobe Linnaeus, 1758, may at any time be referred, but also as an infra-subspecific trivial name in that genus;
- (b) to validate the specific trivial name adippe for the "High Brown Fritillary" in the binominal combination Papilio adippe as from the date in 1775 when that name was published by [Denis & Schiffermüller] in the work specified in (a)(2) above, and to declare that that name is

to be applied to the species figured by Esper in 1777, Die Schmetterlinge in Abbildungen nach der Natur mit Beschreibungen, 1(3): pl. 18, fig. 1, and that the locality "Wiener Gegend" is to be taken as the type locality of the nominotypical subspecies of the species so named;

- (II) that the below-mentioned trivial name be placed on the Official List of Specific Trivial Names in Zoology:
 - adippe [Denis & Schiffermüller], 1775, as published in the combination Papilio adippe, as validated and defined in (I)(b) above;
- (III) that the below-mentioned trivial names be placed on the Official Index of Rejected and Invalid Specific Trivial Names in Zoology:—
 - (a) adippe Linnaeus, 1767, as published in the combination *Papilio adippe*;
 - (b) adippe, all uses of, as a specific trivial name in combination with the generic name Papilio, subsequent to Linnaeus, 1767, and prior to [Denis & Schiffermüller], 1775;
 - (c) berecynthia Poda, 1761, as published in the combination Papilio berecynthia;
 - (d) cydippe Linnaeus, 1761, as published in the combination *Papilio cydippe*.

II. THE SUBSEQUENT HISTORY OF THE CASE

- 4. Registration of the present application: Upon the receipt in 1938 of Mr. Hemming's preliminary notification regarding the proposed submission, with other specialists, of an application for the use of the Commission's Plenary Powers for the purpose of stabilising the specific name for the High Brown Fritillary, the Registered Number Z.N.(S.) 79 was allotted to this subject.
- **5.** Issue of Public Notices in 1947: Although in 1947 no substantive application had been received for the use of the Commission's Plenary Powers to stabilise the specific name

adippe Linnaeus, 1767, as published in the combination Papilio adippe, to be the specific name for the High Brown Fritillary, it was judged that in view of the great interest of this subject to lepidopterists it would be helpful if the maximum publicity could be secured at this stage in regard to the action which it was proposed that the Commission should be asked to take in this case. Accordingly, on 14th November 1947 Public Notice of the possible use by the International Commission of its Plenary Powers in the foregoing sense was given under the procedure prescribed by the Ninth International Congress of Zoology, Monaco, 1913. The issue of these Public Notices elicited no objection to the action proposed to be taken under the Plenary Powers.

- **6.** Publication of the present application: For the reasons explained in paragraph 1 of the present *Opinion*, the application by Mr. Hemming and his colleagues was received in the Office of the Commission on 29th November 1949; the application by Mr. Gray and his colleagues was submitted on 11th May 1950. The number of prior applications then awaiting publication made it impossible to send to the printers the two applications involved in the present case until 4th July 1952. Both applications were published on 29th August 1952 in Part 11 of Volume 6 of the *Bulletin of Zoological Nomenclature* (Gray, Klots & dos Passos, 1952, *Bull. zool. Nomencl.* **6**: 323—325; Hemming, Riley & Verity, 1952, *ibid.* **6**: 325—336).
- 7. Issue of Public Notices in 1952: Under the revised procedure prescribed by the Thirteenth International Congress of Zoology, Paris, 1948 (1950, Bull. zool. Nomencl. 4:51—56) Public Notice of the possible use by the International Commission on Zoological Nomenclature of its Plenary Powers in the present case was given on 29th August 1952 (a) in Part 11 of Volume 6 of the Bulletin of Zoological Nomenclature (the part in which the applications referred to above were published) and to the other prescribed serial publications. In addition, such Notice was given to four general zoological serial publications and to eight entomological serials in Europe and America.
- 8. Comments Received: Twenty-one (21) specialists submitted comments on the present case. Of these, eighteen (18) favoured

the use by the Commission of its Plenary Powers to secure that the name adippe should be the oldest available name for the High Brown Fritillary and three (3) were opposed to that course. Of the specialists who favoured the validation of the specific name adippe for the foregoing species, seventeen (17) advocated that (as recommended in the applications submitted to the Commission) this name should be validated as from Denis & Schiffermüller (1775), and one (1) that it should be validated as from Müller (P.L.S.), (1764). Of the three (3) specialists who were opposed to the adippe solution, two (2) advocated the adoption of the specific name phryxa Bergsträsser ([1783]) as the specific name for the High Brown Fritillary, and one (1) the specific name syrinx Borkhausen, 1788. The countries of residence of the twenty-seven (27) specialists (including the applicants) who expressed their views on the present case were as follows:—

(1) Specialists who favoured the "adippe" solution (24 specialists):

Austria	1
Canada	2
England	3
Germany	2
Italy	1
Netherlands	1
Spain	1
Sweden	1
Switzerland	1
U.S.A.	11

(2) Specialists who favoured the "phryxa" solution (2 specialists):

Czechoslovakia 1 France 1

(3) Specialists who favoured the "syrinx" solution (1 specialist):

U.S.A. 1

The comments received from specialists in regard to the present case are reproduced in the immediately following paragraphs.

9. Support for the "adippe" solution received from B. J. Lempke (Amsterdam, The Netherlands): On 28th September 1952 Dr. B. J. Lempke (Amsterdam, The Netherlands) addressed the following letter to the Office of the Commission in support of the present case (Lempke, 1952, Bull. zool. Nomencl. 9:131):—

Thank you very much for the separates that you sent of the papers on the question of the *adippe*-nomenclature recently published in the *Bulletin* (1952, *Bull. zool. Nomencl.* 6: 323—336).

I have carefully read the propositions put forward by you and the other authors, and my conclusion is that it would be a very wise deed of the International Commission if it were to accept the steps recommended. It would save a universally known name and make an end to much trouble.

10. Support for the "adippe" solution received from Felix Bryk (Naturhistoriska Rijksmuseum, Stockholm, Sweden): On 30th September 1952 Dr. Felix Bryk (Naturhistoriska Rijksmuseum, Stockholm, Sweden) addressed a letter to the Office of the Commission in which he enclosed the following statement, giving his support to the present case (Bryk, 1952, Bull. zool. Nomencl. 9:132):—

Es gereicht mir zur besonderen Ehre Ihrem Wunsche entgegenzukommen, indem ich zur von A. B. Klots and Cyril dos Passos vorgeschlagenen Beibehaltung des Tagfalternamens Argynnis adippe (L.) Stellung nehme.

Obwohl ich mir dessen bewusst bin, dass eine Durchschneidung von gordischem Knoten zur Lösung einer strittigen Frage in der Wissenschaft absolut zu verwerfen ist, dass, sohin jener Vorschlag bei eventueller Annahme zu einen Machtspruche führen würde da Linne's Papilio adippe (1767) ein ganz anderes Tier ist, wie das, welches es heute vorstellen soll, so kann ich trotzdem nicht umhin, mich restlos dem Vorschlage der beiden Herren Klots und dos Passos anzuschliessen.

Begründung: Der Synonymenkomplex für cydippe-adippe stellt einen derartigen komplizierten Rattenschwanz von Verworrenem, Labilem, Zweifelhaftem und Unsicherem dar, dass bei eventueller Wahl eines anderen existierenden Namens letzten Endes nur rechthaberische Dialektik den nomenklatorischen Zwist entscheiden könnte. Ich selbst habe in einem Artikel "Warum muss der Linnesche Name für schwedische 'Cydippe' fallen?" (1950, Ent. Tidskr. 71:60—62) skeptisch gefragt, "ob nicht wieder ein anderer Revisionist einen anderen und noch älteren" (Namen als phryxa (Bergstr.)) aus dem Kehrichthaufen abgelegter Synonyme ausgraben wird.

Zum Schlusse möchte ich noch auf die unrichtige Bildung des Namens "Adippe" hinweisen. John L. Heller hat in 1945, *Trans. of the American Philol. Association* 86: 354 (Fussnote 54) über diesen Namen geschrieben: "No such mythological name is known to me. It is probably an arbitrary variant for Cydippe".

11. Support for the "adippe" solution received from B. C. S. Warren (Folkestone, England): On 3rd October 1952, Mr. B. C. S. Warren (Folkestone, England)⁶ addressed the following letter to the Office of the Commission in support of the present case (Warren, 1952, Bull. zool. Nomencl. 9:132):—

Many thanks for your separate on the adippe question (1952, Bull. zool. Nomencl. 6:323—336). I need scarcely say that I am very pleased both that the matter has been taken so far, and at the way in which you suggest dealing with it. The request, as set out in paragraph 9 of your paper in the Bulletin, seems to me not only satisfactory but also the only possible way of dealing with the matter.

12. Support for the "adippe" solution received from William T. M. Forbes (Cornell University, Ithaca, N.Y., U.S.A.): On 7th October 1952 Dr. William T. M. Forbes (Cornell University, Ithaca, N.Y., U.S.A.) addressed the following letter to the Office of the Commission in support of the present case (Forbes, 1952, Bull. zool. Nomencl. 9:133):—

I have received from Mr. C. F. dos Passos the double paper on niobe/adippe, etc., which you wrote me about, a short time ago (Bulletin of Zoological Nomenclature, vol. 6, pp. 323—336).

It is really needless for me to remind you that my opinion is based not on the Code as such, but on what I consider the proper and useful result; rather than, the machinery by which it is arrived at.

I think the proposed ruling would have completely the proper result.

I notice this is one of the rare cases where the "W.V." has really at least a rudimentary description of the species concerned, even though it comes in the form of a footnote on another species.

I question the advisability of establishing the species from one author, but citing a figure by another. At least I think there should be a *clear* indication in the *Opinion* that these two citations actually were by persons in close touch with each other, and may be presumed based on the same material.

⁶ Mr. B. C. S. Warren was living at Winchester at the time when consultations in regard to this case were begun in 1938.

I feel that in the presentation the genus name should be the sound and familiar genus, rather than a rather obscure splinter-genus, really representing only a fairly tangible species group.

I note that in the 1758 Systema Linnaeus undoubtedly included both forms, not merely the unsilvered one, for he writes not "pallido maculatis" as later, but "argenteis obsoletis", and again "maculis argenteis" even though it is only "posticarum 7 marginalibus", indicating much more silver than his later description.

In item (7) I view the word "unfortunately" as unfortunate. One must remember that at that time the Code was followed by very few zoologists, that there was no efficient means of establishing a "nomen conservandum", and that practically all good zoologists considered that where the use of the rules would have an unfortunate result on a well-established name it should be ignored pending revision of the machinery, if not the rules themselves. The action of Verity was not "unfortunate" but would have been almost unanimously viewed as highly proper; as I notice it would be even now by a recent writer in "Nature".

I consider two types of double-naming should be sharply separated; and the word "confusion" used only of a shift (one name for two species), not for plain cases of two names for one species; so I cannot accept the word "confusion" as applying to Poda's berecynthia, which after all has never been used effectively for but one species.

13. Support for the "adippe" solution received from Henry Beuret (Neuewelt, Basle, Switzerland): On 12th October 1952 Dr. Henry Beuret (Neuewelt, Basle, Switzerland) addressed the following letter to the Office of the Commission in support of the present case (Beuret, 1952, Bull. zool. Nomencl. 9:135):—

Je vous remercie cordialement de votre lettre du 20 écoulé accompagnée des pages 323—336 du *Bulletin of Zoological Nomenclature*, Vol. 6 (August, 1952).

Entre-temps, j'ai examiné ce cas en consultant les description originales et les figures citées dans le dit *Bulletin*.

Réflexions faites, je crois que l'on doit accepter les propositions que vous avex exposées aux pages 334—336. Si l'on veut conserver le mon "adippe", ce que me semble désirable, il n'est pas possible de trouver une autre solution. D'autre part, celle que vous proposez a l'advantage de règler aussi une fois pour toutes le cas de Cethosia cydippe L., 1767.

J'ai examiné surtout aussi phryxa Bergsträsser. Contrairement à l'opinion de Mr. Verity je ne crois pas que l'on puisse dire avec

certitude que les figs. 1 et 2, pl. 82 de Bergsträsser représentent le High Brown Fritillary! C'est une raison de plus qui m'engage à recommander l'acceptation de votre solution soit *adippe* Schiffermüller et Denis.

Je vois que vous dites *adippe* "Schiffermüller et Denis" puis *adippe* "Denis et Schiffermüller". Cela arrive aussi chez d'autre auteurs. Personellement j'avais jusqu'ici cité seulement "Schiffermüller".

N'y aurait-il pas lieu de recommander que l'on cite dorénavent "Schiffermüller et Denis" soit Schiffermüller en premier lieu et Denis ensuite? Je crois qu'il n'y a pas de doute que Schiffermüller était le plus important des deux auteurs viennois; on n'a qu'à consulter certains auteurs de la fin du 18 ème siècle et du début du 19 ème siècle pour s'en rendre compte. Il me parait donc logique que Schiffermüller ait la première place. Qu'en dites vous?

14. Support for the "adippe" solution received from Bryant Mather (Jackson, Mississippi, U.S.A.): On 13th October 1952 Dr. Bryant Mather (Jackson, Mississippi U.S.A.) addressed the following letter to the Office of the Commission in support of the present case (Mather, 1952, Bull. zool. Nomencl. 9: 138):—

Through the kindness of Mr. Cyril F. dos Passos I have received copies of reprints of three papers from vol. 6 of the *Bull. zool. Nomencl.* relating to the *niobe/cydippe/adippe* problem (pp. 323—336) and to *Papilio plexippus* (pp. 278—283) (Commission's references Z.N.(S.) 79 and 323).

It is my view that the recommendations contained in these papers are reasonable and, in the absence of compelling arguments to the contrary of which I have no knowledge, merit acceptance. I have no personal prior information on the niobe/cydippe/adippe problem, hence my opinion is based entirely on the statements contained in the two papers dealing with it. In the case of the use of the name plexippus for the North American "Monarch" my views are based on my personal familiarity with the insect itself, my desire to see the nomenclature stabilised, study of the papers that appeared in Science in 1951, and the statements in the reprint of the paper by Mr. dos Passos. I have before me three of the six figures offered for the Commission's choice by Mr. dos Passos. Those included in the works by Klots and Clark have the advantage of giving the locality from which the figured specimen came (Scranton, Pa., and Kendall, N.Y., respectively) while that in the work by Lutz has the advantage of being in color. It is therefore my feeling, as it apparently is that of Mr. dos Passos, that, if it is deemed advisable to refer to a figure, it is relatively immaterial which one of those suggested is cited—with the possible exception of that in the work by Catesby—for the reason stated by Mr. dos Passos.

15. Support for the "adippe" solution received from Ernest L. Bell (Flushing, N.Y., U.S.A.): On 14th October 1952 Dr. Ernest L. Bell (Flushing, N.Y., U.S.A.) addressed the following letter to the Office of the Commission in support of the present case (Bell, 1952, Bull. zool. Nomencl. 9:136):—

I have just received from Mr. Cyril F. dos Passos, separates of his joint paper (with Klots and Grey) and your joint paper (with Riley and Verity) on the *niobe-cydippe-adippe* problem and the suggested solution of it (*Bull. zool. Nomencl.*, vol. 6, pp. 323—336, 1952).

Mr. dos Passos has suggested to me that you would like to have my reaction to the proposed solution of this problem; thus I am writing to say that I am in full agreement with and heartily endorse the procedure proposed to the International Commission as expressed in the papers referred to above.

16. Support for the "adippe" solution received from Eugene Munroe (Department of Agriculture, Division of Entomology, Ottawa, Canada): On 15th October 1952 Professor Eugene Munroe (Department of Agriculture, Division of Entomology, Ottawa, Canada) addressed the following letter to the Office of the Commission in support of the present case (Munroe, 1952, Bull. zool. Nomencl. 9:139—140):—

I have recently received from Mr. C. F. dos Passos of Mendham, N.J., a reprint of pp. 278—283 of Bull. zool. Nomenclature, vol. 6, in which he proposes that the Commission modify its 1948 decision as to the application of the name Papilio plexippus Linnaeus, so as to delete reference to "the American species figured as Danais plexippus by Holland (W.J.), 1931, Butterfly Book as figure 1 on plate 7", substituting the words "the North American 'Monarch' butterfly".

Although I am in agreement with the proposed action as a palliative measure, I do not think it strikes at the root of the problem.

Since I believe that the practice of designating the application of scientific names by reference either to vernacular names or to figures of specimens that have no status or ambiguous status as types is fundamentally wrong and is at variance with the whole type concept, I can give only qualified approval to Mr. dos Passos's proposal, which I could support only as a temporary measure to remove an existing positive evil.

I wish further to draw attention to the extremely sweeping nature of the principle expressed in Paragraph 20 of Mr. dos Passos's submission. In that paragraph Mr. dos Passos appears to claim that,

because the decision to approve lectotypes was not taken until 1948, lectotype designations made prior to that time have no standing.

I do not believe that this principle is implicit in the decision of the Commission recognising lectotypes. Indeed, two considerations argue the reverse:

- (a) The fact that parallel provisions for the selection of types of genera (Article 30) in the absence of an original designation have always been taken to be retroactive.
- (b) The wording of the definition of lectotype (Bull. zool. Nomenclature, 4:186) is such as to include any published selection of a single type specimen from a series of syntypes subsequent to the original validation of the respective name.

If, however, I am wrong and Mr. dos Passos's contention is correct, it will automatically mean that almost all of the large number of "lectotypes" at present designated in literature and collections are from the standpoint of the rules spurious, and that a very large source of taxonomic confusion would be created.

It is with regret that I find myself unable to stand fully behind Mr. dos Passos's proposed solution to the *Papilio plexippus* problem, as there are already more than enough disagreements in the field of nomenclature.

17. Support for the "adippe" solution received from T. N. Freeman (Department of Agriculture, Division of Entomology, Ottawa, Canada): On 16th October 1952 Dr. T. N. Freeman (Department of Agriculture, Division of Entomology, Ottawa, Canada) addressed the following letter to the Office of the Commission in support of the present case (Freeman, 1952, Bull. zool. Nomencl. 9:138):—

I am in receipt of two letters from Mr. Cyril F. dos Passos of Mendham, N.J., who asked me if I would comment on his article in the *Bull. Zool. Nomenclature* which deals with the reconsideration of the case of *Papilio plexippus* Linn. (Z.N.(S.) 332), and also one with the Commission's reference Z.N.(S.) 79, which deals with two papers, one by Grey, Klots and dos Passos on the *niobe-cydippe-adippe* problem.

With regard to the *adippe* problem, I must say that I am in complete accord with the views and facts as outlined by Grey, Klots and dos Passos. I am also in accord with his views as outlined in his article on the *plexippus* problem with the exception that the suggestions would only solve the problem temporarily as outlined by Dr. Munroe of this Unit in his recent letter dated 15th October 1952.

18. Support for the "adippe" solution received from Elli Franz (Senckenbergische Naturforschende Gesellschaft, Frankfurt a. Main, Germany): On 22nd October 1952 Dr. Elli Franz (Senckenbergische Naturforschende Gesellschaft, Frankfurt a. Main, Germany) addressed the following letter to the Office of the Commission in support of the present case (Franz, 1952, Bull. zool. Nomencl. 9: 136):—

In Beantwortung Ihres Briefes, von 20.9.52 teile ich Ihnen mit, dass auch ich Argynnis adippe als gültigen Namen vorschlage.

19. Support for the "adippe" solution received from Ernst Mayr (The American Museum of Natural History, New York, U.S.A.): On 22nd October 1952 Professor Ernst Mayr (The American Museum of Natural History, New York, U.S.A.) addressed the following letter to the Office of the Commission in support of the present case (Mayr, 1952, Bull. zool. Nomencl. 9:137):—

I have been requested by Mr. C. F. dos Passos to "express my reaction to the application" relating to the *adippe* problem submitted under the reference number Z.N.(S.) 79.

After a careful study of *Bull. zool. Nomencl.*, vol. 6, pp. 323—336 I conclude that the petition will permit the best possible solution of this nomenclatorial tangle. The proposed solution will cause the least disturbance of the existing nomenclature, and this is clearly a case where the International Commission should use its Plenary Powers.

20. Support for the "adippe" solution received from Karl P. Schmidt (Chicago Natural History Museum, Chicago, Illinois, U.S.A.): On 5th November 1952 Dr. Karl P. Schmidt (Chicago Natural History Museum, Chicago, Illinois, U.S.A.) addressed the following letter to the Office of the Commission in support of the present case (Schmidt, 1952, Bull. zool. Nomencl. 9:137):—

With reference to the two applications to the Commission regarding the trivial names *niobe*, *cydippe*, and *adippe*, I wish to support the solution of Messrs. Grey, Klots, and dos Passos (Commission's Reference Z.N. (S.) 79).

21. Support for the "adippe" solution received from Ralph L. Chermock (University of Alabama, Alabama, U.S.A.): On 9th

November 1952 Professor Ralph L. Chermock (*University of Alabama*, *Alabama*, *U.S.A.*) addressed a letter to the Office of the Commission commenting on two cases recently published in the *Bulletin of Zoological Nomenclature*. The passage relevant to the present case is as follows:—

I have studied the papers by L. P. Gray, A. B. Klots and C. F. dos Passos, and by F. Hemming and N. D. Riley, which were published in the *Bulletin of Zoological Nomenclature*, vol. 6, pp. 323—336, August, 1952; along with pertinent literature available to me. The solutions to the difficulty are essentially similar, and I am in thorough agreement with them. I urge that the recommendations be approved.

22. Support for the "adippe" solution received from Richard M. Fox (Colorado College, Colorado Springs, Colorado, U.S.A.): On 18th November 1952 Dr. Richard M. Fox (Colorado College, Colorado Springs, Colorado, U.S.A.) sent the following letter to the Office of the Commission in support of the present case:—

Mr. dos Passos has sent me the two papers from the Bulletin of Zoological Nomenclature (Vol. 6, pp. 323—336) anent niobe/cydippe/adippe, the one by Grey, Klots and dos Passos, the other by Hemming, Riley and Verity. Here you find me in concurrence. There cannot be objection to the judicious and considered suppression of a name which stands in the way of clearing confusion—particularly when the name was originally associated with an inadequate description.

23. Support for the "adippe" solution received from N. Shoumatoff (Bedford, New York, U.S.A.): On 20th November 1952 Dr. N. Shoumatoff (Bedford, New York, U.S.A.) addressed the following letter to the Office of the Commission in support of the present case:—

I have read with interest the two papers (Gray, Klots, and dos Passos; Hemming, Riley and Verity) with reference to the "Niobe Fritillary" and the "High Brown Fritillary" as published in the Bulletin of Zoological Nomenclature, Vol. 6 (August 1952) pp. 323—336. I would like to express to you my agreement with the views of the authors of these two papers.

24. Support for the "adippe" solution received from Ramon Agenjo (Instituto Español de Entomologia, Madrid, Spain): On 10th December 1952 Senor Ramon Agenjo (Instituto Español de

Entomologia, Madrid, Spain) addressed the following letter to the Office of the Commission in support of the present case:—

En respuesta a su carta de 20 de Septiembre de 1952 y despues de madure estudio de la cuestion propuesta en su carta, debo significarle mi opinion de lo importante que seria la conservacion del nombre de Argynnis adippe (Linnaeus, 1767) sobre el de Argynnis cydippe (Linnaeus, 1761). Es un claro caso en que debe aplicarse el poder plenario de la suspensión de las Reglas de la Nomenclatura, porque la supresion del nombre de adippe, que es mucho mas popular que el de cydippe, produciria muchos trastornos a los especialistas acostumbrados a manejarlo.

25. Support for the "adippe" solution received from the Wiener Entomologische Gesellschaft, Wien, Austria: On 7th March 1953 Dr. Hans Reisser communicated to the Office of the Commission the following letter of support in the present case on behalf of the Wiener Entomologische Gesellschaft, Wien, Austria (Reisser, 1953, Bull. zool. Nomencl. 8: 101):—

By our member, Mr. Schwingenschuss, we have got your inquiry from 20th September 1952 about the question of nomenclature of the species *Argynnis adippe*. We beg to excuse the delay in answering.

Of course we agree with great pleasure that the name of adippe should be conserved. This case illustrates that the application of the strictest priority and exhumations of obsolete names only produces such a trouble, that it becomes necessary to use the vulgar denominations instead of the scientific ones in order to signify the real species is meant! Our society would prefer the application of Heikertingers "principle of continuity" and we should be very glad, if it would become possible that a resolution of the authorities, treating with nomenclature problems, introduced this principle into practice.

26. Support for the "adippe" solution subject to the attribution of that name to Müller (P.L.S.) (1764) received from Otto Holik (Dresden, Germany): On 14th December 1952 Dr. Otto Holik (Dresden, Germany) addressed a letter to the Office of the Commission in which he enclosed a statement on his views on the adippe problem. The statement so received is as follows:—

Dieses Problem betreffend ist auf ein Buch hinzuweisen, das von einem Zeitgenossen LINNE's geschrieben wurde. In den diese Frage behandelnden Veröffentlichungen im "Bulletin of Zoological Nomenclature" von Mr. Cyril F. dos Passos, Mr. Klots, Mr. Grey (Vol. 6, 1952, p. 323—325) und Mr. Hemming (Vol. 6, 1952, p. 325—336) wird auf dieses Buch nicht Bezug genommen. Es scheint keine grosse

Verbreitung erlangt zu haben. Selbst OCHSENHEIMER erwähnt es nicht, der beinder Abfassung seines 1804 erschienenen Werkes "Die Schmetterlinge von Sachsen" die entomologische Literatur der Linné'schen Zeit ausführlich zitiert und sum Vergleich herangezogen hat. Es handelt sich um das Werk:

MULLER, Ph.L.St., "Des Ritters Carl von Linne, Königl. Schwedischen Leibarzes etc., vollständiges Natursystem der Insecten nach der zwölften lateinischen Ausgabe und nach Anleitung des holländischen Houttuyinischen Werks mit einer ausführlichen Erklärung". Nürnberg 1774 (1. Band, 758, p., 22 Taf.).

Das Werk ist nur acht Jahre nach Linné's "Systema Naturae, ed. XII" erschienen. Die Beschreibungen eines Teiles der Arten sind nicht ausführlicher als bei Linné und nur als Ubersetzungen der Linné'schen kurzen Diagnosen zu werten. Das betrifft wahrscheinlich solche Arten, wo dem Verfasser die erforderlichen Vergleichsstücke fehlten. Wo solche vorhanden waren, sei es in seiner eigenen Sammlung oder in der Sammlung des Hofrates D. RUDOLF, wird er ausführlicher und deutlicher. Den "Papilio Adippe" (High Brown Fritillary) vergleicht er z.B. mit dem "Papilio Aglaja" (Dark Green Fritillary) wie folgt (p. 620):

"211. Der Violenvogel. Papilio Aglaja

Auf der dreyfärbigen Viole wird ein der neujorkischen Art nicht unähnlicher Schmetterling gefunden, welcher oben gelb und schwarz gefleckt, unter aber mit ein und zwanzig Silberflecken besetzt ist, die auf den Hinterflügeln stehen, denn die Vorderflügel haben nur vier verloschene Flecken. Hintenher sieht man auch zwey blinde and zwey rechte Augen mit einem Silberkern".

"212. Die Fleckenreihe. Papilio Adippe

Es ist diese Art der vorigen fast gleich, denn die Flügel sind auch gelb mit schwarzen Flecken, jedoch unten mit drey und zwanzig Silberflecken besetzt, doch so, dass zwischen der letzten und folgenden Reihe noch eine Reihe rostfärbiger Flecken befindlich ist, die in der Mitte einen Silberkern führen, dergleichen man bei der vorigen Art nicht antrifft. Es hält sich diese Art in Europa, besonders in Schweden auf ".

Soweit es sich um die Zeichnung der Unterseite der Hinterflügel handelt, folgt MULLER den Angaben LINNE's. Auch dieser gibt bei Papilio Aglaja an: "subtus maculis 21 argenteis". Bei Papilio Cydippe L. 1761 (= Adippe 1766) heisst es dagegen: "subtus maculis 23 argenteis". MULLER ergänzt aber die Angaben LINNE's in wesentlicher Weise. Durch die Hervorhebung des Unterschiedes zwischen den beiden Arten wird die Art, welche MULLER unter der Bezeichnung "Papilio Adippe" versteht, so genau charakterisiert,

dass kaum ein Zweifel an ihrer Identität mit dem "High Brown Fritillary" bestehen kann. Dass MULLER bei der Abfassung der Beschreibung wirklich den in England "High Brown Fritillary" genannten Falter vor Augen hatte und nicht den Papilio Niobe L. (Niobe Fritillary), geht aus Diagnose hervor, die er von der letzteren Art gibt. Er schildet sie (p. 622) ähnlich wie LINNE:

"215. Der Bastartsilbervogel. Papilio Niobe.

Die Felcken sind unter sehr blass, und ausserdem zeigen sich drey Silberaugen in der Mitte, indem sieben im Rande stehen. Europa".

MULLER bezieht sich in seiner Arbeit nur auf LINNE's "Systema naturae", ed. XII, 1766 (oder 1767?), nicht aber auf die früheren Schriften des gleichen Autors. Das geht daraus hervor, dass er die Artgleichheit von Papilio Niobe L. (1758), Papilio Cydippe L. (1761) und Papilio Adippe L. (1766) nicht erwähnt, wahrscheinlich auch nicht erkannt hat. Sicherlich war er auch der irrigen Auffassung, dass der von ihm beschriebene Papilio Adippe mit dem Papilio Adippe Linnaeus 1766 identisch sei. Er hat also in unbewusster Weise jene Art richtig beschrieben, die bisher mit der Bezeichnung Argynnis (oder Fabriciana) adippe belegt wurde. Daraus geht hervor, dass eigentlich ihm die Autorschaft für diese Art zugesprochen werden müsste.

Sollte die "International Commission on Zoological Nomenclature" die vorstehenden Ausführungen für richtig anerkennen, dann ist als Typenrasse der Argynnis (Fabriciana) adippe Müller die mitteldeutsche Rasse zu bestimmen. MÜLLER (Philipp Ludwig Statiius Müller, nicht O. F. Müller oder C. L. v. Müller) wirkte als Professor der Naturgeschichte in Erlangen (Mittelfranken) und es ist als sicher anzunehmen, dass sein Untersuchungsmaterial aus diesem Gebiete stammte.

Ergänzend sei noch folgendes bemerkt:

Die von MÜLLER bei Beschreibung des Papilio Aglaja erwähnte "neujorkische Art" ist nach der Beschreibung (p. 620) und der Abbildung der Unterseite (Taf. XIX, Fig. 6) Argynnis idalia Drury. Sie wird aber von Müller nicht mit einem Namen belegt, dürfte also auch in dem nicht vorliegenden holländischen Wek von Houttuyin, das MÜLLER als Quelle zitiert. nicht benannt worden sein.

Die Autorschaft LINNE'S für Argynnis (Fabriciana) adippe wird von den älteren deutschen Autoren nicht anerkannt. OCHSEN-HEIMER (l.c., 1804) zitiert in erster Linie Hübner. Linné führt er sowohl bei dieser Art als auch bei Papilio niobe nur mit Fragezeichen (?) unter den Synonyma an.—HEYDENREICH (System. Verz., 1851) spricht die Autorschaft an Argynnis adippe ebenfalls Hübner zu. Als Synonyma gibt er an: Phryxa Bergsträsser, Aspasia Borkhausen,

Liriope Borkhausen, Aspasius Heebst, Adippina Scriba und Berecynthia Poda.—Keferstein (Entomol. Zeitung, Stettin 1851, p. 248) nennt bei A. adippe, niobe und aglaja Ochsenheimer als Autor.—LEDERER (Verhandl. d. Zoolog. botan. Vereins, I., Wien 1852, p. 22) gibt als Autoren Denis und Schiffermüller an (Argynnis adippe SV.), allerdings nach dem erst 1776 erschienenen "Systematischen Verzeichnis (SV) der Schmetterlinge der Wiener Gegend u.s.w." und nicht nach der schon 1775 erschienenen "Ankündigung eines systematischen Werkes von den Schmetterlingen der Wiener Gegend". Lederer befindet sich also, was die Persönlichkeiten der Autoren betrifft, in Ubereinstimmung mit den Verfassern der angeführten Veröffentlichungen im "Bull. of Zoological Nomenclature", Vol. 6, 1952, p. 323—336.

27. Adoption of the specific name "phryxa" Bergstrasser, [1783], for the High Brown Fritillary advocated by Jiří Paclt (Slovak Academy of Sciences, Bratislava, Czechoslovakia): On 29th September 1952 Dr. Jiří Paclt (Slovak Academy of Sciences, Bratislava, Czechoslovakia) addressed the following letter to the Office of the Commission advocating the adoption of the specific name phryxa Bergstrasser, [1783], for the High Brown Fritillary (Paclt, 1952, Bull. zool. Nomencl. 9:131):—

In accordance with a demand received from the Secretary of the International Commission on Zoological Nomenclature, I refer to the two proposals relating to the *niobe|cydippe|adippe* problem published in August 1952 (*Bull. zool. Nomencl.* 6: 323—336).

The authors of the proposals above mentioned recommend that the trivial name adippe [Denis & Schiffermüller], 1775 (as published in the binominal combination Papilio adippe) be placed on the Official List of Specific Trivial Names in Zoology. This specific trivial name is thus proposed to be validated for the "High Brown Fritillary", a species figured by Esper in 1777, Die Schmetterlinge in Abbildungen nach der Natur mit Beschreibungen, 1(3): pl. 18, fig. 1.

Recently the problem of the valid name for the "High Brown Fritillary" has been discussed by several authors. Personally, I came to the conclusion that the only valid name for that species is *Brenthis* (subg. *Fabriciana*) phryxa (Bergstraesser, [1783]); this opinion (published in 1947 in Miscel. ent. 44:98) has been followed by G. Bernardi, C. Herbulot and J. Picard in their "Liste des Grypocères et Rhopalocères de la Faune française conforme aux Règles internationales de la Nomenclature" (1950, Rev. franc. Lépid. 12:332) as well as by R. Schwarz in his standard work on the Lepidoptera of Czechoslovakia (for further details see F. Bryk, 1950, Ent. Tidskr. 71:60—62). Now, at the time of writing this comment I see no reason to change my original opinion.

Owing to the absolutely confused use of the names *adippe* and *cydippe* both in the past and modern literature I think it would be appropriate to abandon every attempt to save at any price a name which never had been used universally, i.e. *adippe*.

28. Adoption of the "phryxa" solution advocated by G. Bernardi (Muséum National d'Histoire Naturelle, Paris): On 29th June 1953 Dr. G. Bernardi (Muséum National d'Histoire Naturelle, Paris) furnished the Office of the Commission with the following statement in which he advocated the adoption of the phryxa solution:—

Je me permets de ne pas approuver entièrement les suggestions de L. P. Gray, A. B. Klots et C. F. dos Passos (1952, *Bull. zool. Nomencl.* 6: 323—325) ainsi que les propositions de F. Hemming, N. D. Riley et R. Verity (1952, *loc. cit.*: 325—336) au sujet du nom trivial spécifique devant être appliqué au "High Brown Fritillary".

- (1) La détermination du nom correct de ce papillon ne justifie pas à mon avis les multiples et complexes suspensions des *Règles internationales de Nomenclature Zoologique* suggérées ou proposées par les auteurs cites ci-dessus. Il est eu effet essentiel de noter que pour conserver au "High Brown Fritillary" le nom "familiar" d'adippe la Commission Internationale de Nomenclature Zoologique devra entre autre:
 - (a) placer sur l'Official Index of Rejected and Invalid Specific Names in Zoology le nom cydippe L., 1767, ce nom est valable pour designer une forme du "High Brown Fritillary" étant accompagné d'une excellente description originale ainsi que du "type". L'un des auteurs déjà cités (Verity, 1913, Linn. Soc. Journ. (Zool) 32:182) a en effet précisemment eu le mérite de démontrer que la "Linnaeus description agrees in every respect with the specimen labelled by him "cydippe" tandis que le specimen "which bears this name in Linnaeus handwriting . . . in every respect is unmistakably of Linnaean origin".
 - (b) enteriner au morjeu d'un artifice de procédure une erreur de synonymie et de taxonomie de Denis et Schiffermüller, 1775 qui emploient le nom adippe L., 1767 (eu fait synonyme de cydippe L., 1761) pour désigner une espèce que Linné n'a jamais décrite.
- (2) Le problème niobe/cydippe/adippe se réduit à mon avis à rechercher quel est le nom le plus ancien valable pour désigner le "High Brown Fritillary" l'intervention de la Commission Internationale de Nomenclature Zoologique devrait être limitée à la décision de placer sur l'Official Index of Rejected and Invalid Specific Names in Zoology les nomina dubia eventuels. L'elimination des nomina dubia, cause

d'instabilité de la nomenclature zoologique, a retenu à juste titre l'attention de la Commission Internationale ainsi que l'a dernierement précisé Hemming (1948, *Int. geol. Congress*, Eighteenth Session 15:7—8). Il me semble toutefois que l'élimination d'un nom en tant que *nomen dubium* n'est pas seuelement une question de nomenclature mais également de taxonomie. Cette élimination ne devrait donc pas être décidée avant l'examen d'une série de "topotype" des differentes espèces aux quelle ce nom pourrait être éventuellement appliqué. Le fait que devers auteurs ont employé un nom dans des sans diffèrents ne prouve pas nécessairement qu'il s'agit d'un *nomen dubium* mais peut signifier simplement que ces auteurs n'ont pas su utiliser complétement les données de la description originale et n'ont pas disposé d'un materiel de comparaison suffisant. Il suffira de rappeler ici le cas de *Lycaudes argyrognomon* Bergstr. dont la nomenclature ne présente plus aucune difficulté pour tous les auteurs modernes depuis Beuret mais que a été longtemps instable.

En ce qui concerne problème niobe/cydippe/adippe je n'ai pas d'opinion au sujet du nom berycynthia Poda mais les doutes exprimés au sujet du nom phryxa Bergrtr. dans les propositions signées F. Hemming, N. D. Riley et R. Verity ne me paraissent pas justifiés. Le fait que Werneburg (1864, Beitr. Schmett. Kund Z.: 69) à considéré que les figures de Papilio phryxa Bergstr. réprésentent le "Niobe Fritillary" ne constitue pas à mon avis un argument décisif. Cet auteur a certainement effectué un excellent travail en matierè de nomenclature (reconnaissant par exemple le sens exact des noms hippothoë L., arbitulus de Prunn., televis Bergstr, Lep. LYCAENIDAE) mais il suffira de rappeler avec Beuret (1933, Lamb 33, (6): 136) que l'on utilise actuellement le nom glandon de Prunn. pour désigner un Agriades tandis que Werneburg appliquait ce nom à la \(\text{ } \) d'Everes argiades Pallas. En outre l'un des auteurs de la note référencée Z.N.(S.) 79 (Verity, 1929, Bull. Soc. ent. Fr., 1929: 277—280) à précisemment montré que les figures 1 et 2 de phryxa Bergsträsser "ne laissent aucun doute qu'il s'agisse de l'espèce connue jusqu'ici sous le nom d'adippe". Il a abandonné ce nom (1930, Ent. Rec., 42: 149—152 et 1950, Farf. Ital. 4:190) que par suite d'une interpretation des Règles non conforme aux décisions du Congrès Zoologique de Paris, 1948 et nullement pour un motif taxonomique.

La comparaison de la \mathbb{Q} figurée par Bergsträsser avec les *adippe* Auct. et les *niobe* herse Hufu. du Laboratoire d'Entomologie du Muséum de Paris provenant d'Allemagne septentrionale (mais malheureusement pas, due comté de Hanan) concorde à mon avis avec le point de vue exprimé par Verity (*loc. cit.*). Ou notera entre autre sur les deux figures représentant cette \mathbb{Q} : 1. la réduction du senus basal foucé du dessus des autérieures—2. l'absence d'espace clair pupillé de noir à la base de la cellule au revers des pastérieures. Les \mathbb{Q} allemandes de *niobe* paraissent au contraire caractéres par le

dessus plus ou moins sombre et par la présence d'un espace clair presque toujours pupillé de foucé à la base de la cellule au revers des postêrieures.

En résumé:

- (1) J'ose espérer que la Commission Internationale de Nomenclature Zoologique ne nous obligera pas à entériner en pratique l'erreur de Denis et Schiffermüller. Le fait que cette erreur a été de longue durée et très répandue ne constitue évidemment pas un argument en sa faveur.
- (2) L'emploi du nom *phryxa* Bergstr. ne présente pas à mon avis un danger de "greater confusion than uniformity".

La nomenclature du "High Brown Fritillary" ne mérite donc guére l'emploi des "pleins pouvoir". Ou rappelera ici qu'Hemming lui-même (1942, Proc. Roy. ent. Soc. Lond.11(11): 156) à précisemment montre pour une espèce voisine (Mesoacidalia charlotta Hawaglaja L.) que "the suppression of a well-known name . . . but causing inconvenience is a very different thing from causing greater confusion than uniformity" et que de tels cas ne méritent pas la suspension des Règles. Ou notera du reste que le nom phyrxa Bergstr. tend à remplacer le nom adippe Auct. parmi les auteurs européens depuis le travail de Paclt (1947, Misc. Ent., 1947 69(6): 97) adopté par exemple par Schwartz (Motyle, II) et dans la Liste des Rhopalecères français conforme aux Règles internationales de la Nomenclature (1950, Rev. Franc. Lep., 12: 332). Le rejet du nom phryxa sans sérieux étude taxonomique des Fabriciana du Hanau est donc injustificé.

- 29. Adoption of the specific name "syrinx" Borkhausen, 1788, for the High Brown Fritillary advocated by F. Martin Brown (Colorado Springs, Colorado, U.S.A.): On 11th October 1952 Dr. F. Martin Brown (Colorado Springs, Colorado, U.S.A.) addressed the following letter to the Office of the Commission in which he advocated the adoption of the specific name syrinx Borkhausen, 1788, for the High Brown Fritillary (Brown, 1952, Bull. zool. Nomencl. 9:134):—
- Mr. C. F. dos Passos recently sent to me copies of the papers devoted to Commission's reference Z.N.(S.)79 (Bull. zool. Nomencl., vol. 6, pp. 323—336). I am not familiar enough with the insects in question to voice a valid opinion in this case. A careful reading of the arguments impresses upon me the complexity of the problem. As I understand it this is the problem:

- 1758, Linnaeus called the "Swedish Fritillary" niobe;
- 1761, Linnaeus called the silvered form of the "Swedish Fritillary" *cydippe*;
- 1767, Linnaeus renamed the silvered form of the "Swedish Fritillary" *adippe*; and re-applied *cydippe* to an Oriental Cethosiid.
- adippe has generally been applied to the "High Brown Fritillary" in error.
- Verity's stand that *adippe* Linnaeus, 1767, does not invalidate *adippe* Denis & Schiffermüller, 1775, is invalid because Linnaeus did not recognise *adippe* as an infra-subspecific variant.

So far as alternate names for the "High Brown Fritillary" are concerned, berecynthia Poda, 1791, cannot be recognised with certainty; syrinx Borkhausen, 1788, is an abnormal form figured by Esper; esperi Verity, 1913, was applied to the normal form figured by Esper; phryxa Bergsträsser, 1783, may in part represent niobe and in part the "High Brown Fritillary".

As I see it there are two possibilities that there is a valid name for the "High Brown Fritillary"—phryxa Bergsträsser, 1783, and syrinx Borkhausen, 1788. My personal reaction would be to concentrate upon the identity of these. I should think that the opinions of recognised authorities might settle the question of what species is intended by Bergsträsser on Pl. 82, figs. 1, 2, 3. If these gentlemen consider that none of the three figures represents the "High Brown Fritillary" then the name should be rejected for that species, but only then.

If phryxa is rejected then it must be decided that syrinx Borkhausen applies to the "High Brown Fritillary" since it is the earliest name that can be recognised as applying to the species—even though the type figure is of an aberrant specimen. The name syrinx was published as a binominal. It thus has the status, for nomenclatorial purposes, of a specific name.

While I am in agreement with the idea behind the Official List of Specific Trivial Names in Zoology I am not in agreement with the use of the Plenary Powers for this valuable implement except as a last resource. That the use of syrinx Borkhausen may cause some to be disgruntled should not be considered. We are trying to establish a nomenclatorial system for all time and to do so must be disturbing to some one at each change toward stability. Certainly many of us in America regretted to see some of our "old names" disappear—in Boloria for instance—but we are managing to survive. Unless the thesis of priority is eliminated entirely from the Règles I believe every effort must be made to support it.

30. Supplementary Note by Francis Hemming on the authorship attributed to the application submitted to the work published in 1775 under the title "Ankündung eines systematischen Werkes von den Schmetterlingen der Wiener Gegend": On 17th November 1952 Mr. Francis Hemming (one of the applicants in the present case) submitted the following note setting out the reasons which had influenced Mr. Riley, Dr. Verity and himself in the choice of the method to be adopted in citing the names of the zoologists who were known to be the authors of the work published anonymously in 1775 under the title Ankündung eines systematischen Werkes von den Schmetterlingen der Wiener Gegend (Hemming, 1952, Bull. zool. Nomencl. 9:135):—

In his letter of 12th October 1952 supporting the proposed use of the Plenary Powers to validate the trivial name adippe as published in the combination Papilio adippe in the anonymous work published in Vienna in 1775 under the title Ankündung eines systematischen Werkes von den Schmetterlingen der Wiener Gegend M. Henry Beuret raised the question why, in the application in regard to the foregoing case submitted jointly by Mr. N. D. Riley, Dr. Roger Verity and myself, new names published in the foregoing work were attributed to "Denis & Schiffermüller" and not, as is more commonly done, to "Schiffermüller & Denis".

We considered this question when we were preparing our application to the Commission, and it seemed to us that in a formal document of this kind it would be better if we were to follow the accepted convention for the citation of the names of the authors of a book published anonymously, that is, to cite those names in alphabetical order. Sometimes, as here, the adoption of this convention has the result that it gives the first place to the less important of the authors concerned. It has, however, the advantage that it provides a standard method for the citation of the names of authors of anonymous books that would otherwise be unattainable.

III. THE DECISION TAKEN BY THE INTERNATIONAL COMMISSION ON ZOOLOGICAL NOMENCLATURE

31. Issue of Voting Paper V.P.(54)46: On 24th March 1954 a Voting Paper (V.P.(54)46) was issued in which the Members

of the Commission were invited to vote either for, or against, "the proposal relating to the specific name to be used for the 'High Brown Fritillary' Butterfly, as set out in Points (1) to (3) in paragraph 9 on pp. 334 to 336 in Volume 6 of the Bulletin of Zoological Nomenclature" [i.e. in the paragraph numbered as above in the paper reproduced in paragraph 2 of the present Opinion].

- 32. The Prescribed Voting Period for Voting Paper V.P.(54)46: As the foregoing Voting Paper was issued under the Three-Month Rule, the Prescribed Voting Period closed on 24th June 1954.
- 33. Particulars of the Voting on Voting Paper V.P.(54)46: At the close of the Prescribed Voting Period, the state of the voting on Voting Paper V.P.(54)46 was as follows:—
 - (a) Affirmative Votes had been given by the following nineteen (19) Commissioners (arranged in the order in which Votes were received):

Riley; Holthuis; Lemche; Hering; Vokes; Bonnet; Dymond; Esaki; Boschma; Jaczewski; Hemming; Bradley (J.C.); do Amaral; Hankó; Pearson; Stoll; Cabrera; Sylvester-Bradley; Mertens;

(b) Negative Votes:

None;

(c) Voting Papers not returned:

None.

34. Declaration of Result of Vote on Voting Paper V.P.(54)46: On 26th June 1954, Mr. Hemming, Secretary to the International

Commission, acting as Returning Officer for the Vote taken on Voting Paper V.P.(54)46, signed a Certificate that the Votes cast were as set out in paragraph 33 above and declaring that the proposal submitted in the foregoing Voting Paper had been duly adopted and that the decision so taken was the decision of the International Commission in the matter aforesaid.

35. Designation jointly by Francis Hemming, N. D. Riley and Roger Verity of a neotype for the nominal species "Papilio adippe " [Denis & Schiffermüller], 1775, and submission by those specialists of a request that the neotype so designated be taken as the standard of reference for the interpretation of the foregoing nominal species: In May 1955 a communication was received in the Office of the Commission from the three specialists (Francis Hemming; N. D. Riley; Roger Verity) by whom the application in the present case had been originally submitted, intimating that, having regard to the decision to recognise the concept of neotypes taken, since the submission of their application for the use of the Plenary Powers for the purpose of validating and interpreting the name adippe as the specific name to be used for the butterfly known as the High Brown Fritillary, they were now of the opinion that the best method of securing this end would be by the validation by the Commission under the above Powers of a neotype which they proposed to designate for the nominal species Papilio adippe [Denis & Schiffermüller], 1775. The applicants explained that they were in communication with Dr. Hans Strouhal, the Director of the Naturhistorische Museum at Vienna with a view to obtaining with his assistance a suitable specimen of the High Brown Fritillary taken in the neighbourhood of that city, a specimen of this provenance being, in their opinion, the most suitable for designation as the neotype of the above species, having regard to the fact that, as indicated by the title of the celebrated work by Denis & Schiffermüller as from which they had asked that the name Papilio adippe be validated, that work was concerned solely with the Lepidoptera occurring in the "Wiener Gegend". The applicants indicated that it might be some time before they would be in a position to designate the proposed neotype and they asked that in the circumstances no further action on their original application be taken by the Commission until they had been able to submit their proposed Supplementary Application.

20th August 1957 Mr. Hemming, on behalf of his colleagues and himself addressed a letter to the Office of the Commission (1) stating that a specimen taken at Mödling in the Vienna neighbourhood preserved in the Naturhistorische Museum, which had been lent for description to the British Museum (Natural History), had now been designated to be the neotype of Papilio adippe [Denis & Schiffermüller], 1775, and (2) submitting a Supplementary Application, to which was annexed the document in which the neotype had been designated, asking permission to vary the application which they had originally submitted in this case in such a way as to provide that the nominal species Papilio adippe, validated under the Plenary Powers as the name for the High Brown Fritillary, be interpreted by the neotype now designated instead of, as originally proposed jointly (a) by the designation under the Plenary Powers of the "Wiener Gegend" to be the locality to be taken as the type locality and (b) by reference to the figure of a male specimen published by Esper in 1777 as figure 1 on plate 18 of the work Die Schmetterlinge. In making this proposal, the applicants drew attention to the fact that in essence it differed in no respect from that submitted in their original application but that it was, in their opinion, greatly superior in form, for under it the specimen to be taken as the standard of reference for the nominal species in question would be one actually taken in the Vienna district instead of a specimen taken in Germany—probably in the neighbourhood of Erlangen which under their original proposal would have been the standard specimen so prescribed. The applicants pointed out that the procedure now recommended had the further advantage that it rendered possible the publication of photographs of the upperside and underside of the standard specimen and in addition made it possible to publish photographs of a preparation of the male genitalia of that specimen for comparison with the male genitalia of the nominal species Papilio niobe Linnaeus, 1758, the nearest allied species and the one to which the name Papilio adippe had actually been given by Linnaeus in 1767 and to which that name properly applied up to the time of its suppression under the Plenary Powers as asked for in their original application. Supplementary Application so submitted, together with the annexed description of the neotype designated for Papilio adippe [Denis & Schiffermüller], 1775, and the three accompanying plates, is annexed to the present Opinion as an Appendix.

36. Submission to the Commission of a revised proposal asking that the method to be prescribed for the interpretation of the nominal species "Papilio adippe" [Denis & Schiffermüller], 1775, be by reference to the neotype for that species designated jointly by Francis Hemming, N. D. Riley and Roger Verity: Upon the receipt of the Supplementary Application submitted jointly by Mr. Francis Hemming, Mr. N. D. Riley and Dr. Roger Verity reproduced in the Appendix to the present Opinion, in which those specialists asked that the Commission should prescribe that the nominal species Papilio adippe [Denis & Schiffermüller], 1775, be interpreted by reference to the neotype designated for that species by the applicants instead of (as previously proposed) partly by the designation of the "Wiener Gegend" as the type locality for that species and partly by reference to a specified figured published by Esper in 1777 in the work entitled Die Schmetterlinge, the Secretary prepared on 22nd August 1957 a Report explaining the developments which had occurred in this case since the vote taken by the Commission on Voting Paper V.P.(54)46 and recommending that approval be given to the revised proposals now placed before the Commission. Report so prepared, which was submitted to the Commission on 26th August 1957, was as follows:-

Proposed modification of the form of a part of the decision taken under the Plenary Powers on Voting Paper V.P.(54)46 for the purpose of stabilising the specific name to be used for the species of butterfly known in England as the "High Brown Fritillary"

By FRANCIS HEMMING, C.M.G., C.B.E.

(Secretary to the International Commission on Zoological Nomenclature)

The purpose of the present Report is to place before the International Commission on Zoological Nomenclature a request which has been received from the applicants concerned for a slight modification of the form of the decision on the question of the specific name to be used for the species of butterfly known in England as the "High Brown Fritillary" taken by the Commission in June, 1954 by its Vote on Voting Paper V.P.(54)46.

2. The decision referred to above was taken in the light (a) of an application submitted jointly by Hemming (F.) (London), Riley (N.D.) (London) and Verity (R.) (Florence) (1952, Bull. zool. Nomencl. 6: 325—336) and (b) of an associated application submitted jointly by Gray

- (L.P.) (Lincoln, Maine), Klots (A.B.) (New York) and dos Passos (C.F.) (New York) (1952, ibid. 6: 323—325).
- 3. It will be recalled that the central feature of the problem arising in this case was that for about 150 years (i.e. from 1767 to 1913) the High Brown Fritillary was universally known by the specific name adippe Linnaeus, 1767, but that in 1913, Verity, after examining the Linnean collection in London pointed out that the specific name adippe had been given by Linnaeus not (as had always been believed) to the "High Brown Fritillary" but to a closely allied species, the "Niobe Fritillary", to which in 1758 he had already given the specific name niobe. In the paper referred to above Verity discussed various old names which had been given—or were reputed to have been given—to the High Brown Fritillary and concluded that the nominal species concerned could not be identified with certainty and therefore that there was no available name for this species, to which he then gave the new name *esperi*. Verity's conclusions were not immediately accepted and the name *esperi* Verity had not come into use when in 1916 the British National Committee on Entomological Nomenclature issued a Report in which it rejected those conclusions but pointed out that the name adippe Linnaeus, 1767, was no more than a junior objective synonym of cydippe Linnaeus, 1761, a name which till then was virtually unknown in the literature. Thereupon opened a long period of confusion and doubt. Most workers continued to use the admittedly invalid name adippe Linnaeus, 1767, while others—a constantly dwindling number who accepted the views of the above Committee—used the equally incorrect name cydippe Linnaeus. Those specialists who realised that neither of the above names applied to the High Brown Fritillary were, however, in a great difficulty, for there was no alternative name which could be applied to this species with confidence, the next names in order of priority all being unsatisfactory, it not being possible to be certain that they applied to the High Brown Fritillary and not to the Niobe Fritillary. The names in question were: (a) berecynthia Poda, 1761; (b) phryxa Bergsträsser, [1783]; (c) syrinx Borkhausen, 1788. Each, however, secured some following, thereby adding to the state of confusion regarding the name to be used for this species.
- 4. At the time when the applications referred to in paragraph 2 above were submitted to the International Commission it had become evident that only the most drastic action could provide a stable nomenclature for the High Brown Fritillary which at that time was currently known by no less than five different names (adippe; cydippe; berecynthia; phryxa; syrinx). The recommendation then submitted to the Commission was that by a series of decisions taken under the Plenary Powers it should secure that the oldest available name for this species should be adippe [Denis & Schiffermüller], 1775, a name which had undoubtedly been applied to the High Brown Fritillary, the adoption of which would not only provide a firm basis for the name

for the High Brown Fritillary but would in addition assure to it the specific name by which it had for so long been known and by which it was still most generally called. At the same time the Commission was asked to direct that the nominal species *Papilio adippe* [Denis & Schiffermüller], 1775, so validated, should have as its type locality the "Wiener Gegend", that being the locality from which all the species named by Denis & Schiffermüller in the so-called "Wiener-Verzeichniss" were obtained. Finally, in order to put the identification of the above nominal species on an unassailable basis the Commission was asked to direct that it be identified by reference to a good figure of almost contemporary date published by Esper in 1777 (pl. 18, fig. 1).

- 5. The application so submitted secured a very favourable reception, being supported by 18 out of the 21 specialists who furnished comments on it.
- 6. By its vote on Voting Paper V.P.(54)46 the foregoing and associated proposals were unanimously approved by the entire membership of the International Commission.
- 7. In the supplementary request now received the applicants explain that the form of the decision which they had asked for and which had been granted by the Commission in the foregoing vote had been influenced by the fact that at that time neotypes were not officially recognised in the Règles and that, if such types had then been recognised, they would have asked that the Commission, when defining the nominal species Papilio adippe [Denis & Schiffermüller], 1775, under the Plenary Powers, should do so by approving a neotype consisting of a specimen obtained in the Vienna district. In the circumstances in which the applicants then found themselves, they had not, however, felt free to make such a proposal. It was for this reason that they had adopted a course as nearly equivalent to the designation of a neotype as was practicable at that time—by asking (i) that the "Wiener Gegend" should be designated as the type locality of this species and that its identification should rest upon a figure (Esper's fig. 1 on pl. 18) which not only represented the High Brown Fritillary but which also was considered to represent a specimen of the subspecies occurring in the Vienna district. In their present note the applicants go on to express the view that in the circumstances created by the decision of the Fourteenth International Congress of Zoology, Copenhagen, 1953, to recognise the "neotype" concept it would be more satisfactory if the form of the decision taken by the Commission by its vote on Voting Paper V.P.(54)46 (paragraph 6 above) were modified so as to provide that the nominal species Papilio adippe [Denis & Schiffermüller], 1775, as validated by the above vote, should be defined by reference to a neotype consisting of a specimen obtained in the Vienna district rather than by reference to the specimen figured by Esper, the exact provenance of which is not known. The applicants go on to state that, in their view, there is no reason to doubt that Esper's specimen belongs to the same subspecies as that occurring at Vienna but express

the view that in a matter of this kind it is desirable that no possible element of subjective taxonomic judgment should enter into the form of the decision to be recorded and therefore that it would be better that, as this nominal species is to have the "Wiener Gegend" as its type locality, its identification should rest exclusively upon a specimen obtained in the Vienna district.

- 8. Accordingly, as the result of correspondence between the British Museum (Natural History) and the Naturhistorische Museum, Vienna, the latter institution provided to the British Museum on loan a number of specimens of the High Brown Fritillary obtained in the Vienna district. One of these —a male obtained at Mödling, near Vienna, on 23rd July 1921—is designated as the neotype of Papilio adippe [Denis & Schiffermüller], 1775, in the Supplementary Application now received. At the moment that specimen is still in the British Museum but, as soon as a decision has been taken by the Commission on the Supplementary Application now under consideration, it will be returned to the Naturhistorische Museum at Vienna.⁷ Full particulars are given in the application regarding the labels attached to the neotype and other relevant matters. Finally, there are annexed to the application photographs of the upper- and under-surfaces of the neotype, of preparations of the male genitalia of that specimen with a corresponding photograph of the male genitalia of Papilio niobe Linnaeus, 1758, the closest ally of *Papilio adippe* [Denis & Schiffermüller], 1775, and photographs of preparations of the female genitalia of both these species.
- 9. For the reasons briefly summarised above, the applicants in the Supplementary Application now submitted ask that in the Ruling to be prepared giving effect to the decision taken on Voting Paper V.P.(54)46 the nominal species Papilio adippe [Denis & Schiffermüller], 1775, as validated by the vote so taken, be defined by the neotype designated in the Annexe to the Supplementary Application now submitted—a male specimen belonging to the Naturhistorische Museum, Vienna, taken at Mödling near Vienna on 23rd July 1921—instead of, as previously proposed, jointly (a) by the designation of the "Wiener Gegend" as the type locality and (b) by reference to the figure of a male specimen published by Esper in 1777 as figure 1 on plate 18 of the work entitled Die Schmetterlinge.
- 37. Issue of Voting Paper V.P.(O.M.)(57)14: On 26th August 1957 a Voting Paper (V.P.(O.M.)(57)14) was issued in which the Members of the Commission were invited to vote either for, or against, "the proposal that in one respect the form of the decision in regard to the name *Papilio adippe* [Denis & Schiffermüller],

⁷ The neotype of *Papilio adippe* [Denis & Schiffermüller], 1775, was returned to the Naturhistorische Museum by the British Museum (Natural History) on 15th October 1957.

1775, taken on Voting Paper V.P.(54)46 [the operative portion of which is quoted in paragraph 31 of the present *Opinion*] be modified as recommended in paragraph 9 of the paper bearing the Registered Number Z.N.(S.) 79 submitted by the Secretary simultaneously with the present Voting Paper [i.e. in the paragraph numbered as above in the paper reproduced in paragraph 36 of the present *Opinion*].

- 38. The Prescribed Voting Period for Voting Paper V.P.(O.M.) (57)14: As the foregoing Voting Paper was issued under the One-Month Rule, the Prescribed Voting Period closed on 26th September 1957.
- 39. Particulars of the Voting on Voting Paper V.P.(O.M.)(57)14: At the close of the Prescribed Voting Period, the state of the voting on Voting Paper V.P.(O.M.)(57)14 was as follows:—
 - (a) Affirmative Votes had been given by the following twenty-four (24) Commissioners (arranged in the order in which Votes were received): 8

⁸ In the period between the issue of Voting Paper V.P.(54)46 and that of Voting Paper V.P.(O.M.)(57)14, Dr. Joseph Pearson retired from the Membership of the Commission. During the same period the following zoologists were elected to be Commissioners:—

Dr. L. B. Holthuis (Rijksmuseum van Natuurlijke Historie, Leiden, The Netherlands) (12th August 1953)

Dr. K. H. L. Key (Commonwealth Scientific and Industrial Research Organisation, Canberra, A.C.T., Australia) (15th October 1954)

Dr. Alden H. Miller (Museum of Vertebrate Zoology, University of California, U.S.A.) (29th October 1954)

Doc. Dr. Ferninand Prantl (Národni Museum V Praze, Prague, Czechoslovakia) (30th October 1954)

Professor Dr. Wilhelm Kühnelt (Zoologisches Institut der Universität, Vienna, Austria) (6th November 1954)

Professor F. S. Bodenheimer (The Hebrew University, Jerusalem, Israel) (11th November 1954)

Professor Ernst Mayr (Museum of Comparative Zoology at Harvard College, Cambridge, Massachusetts, U.S.A.) (4th December 1954)

Professor Enrico Tortonese (Museo di Storia Naturale "G. Doria", Genova, Italy) (16th December 1954)

Lemche; Holthuis; Riley; Vokes; Mertens; Miller; Hering; Esaki; Stoll; do Amaral; Hankó; Key; Tortonese; Prantl; Hemming; Cabrera; Dymond; Bradley (J.C.); Jaczewski; Kühnelt; Bodenheimer; Bonnet; Mayr; Boschma;

(b) Negative Votes:

None;

(c) On Leave of Absence, one (1):

Sylvester-Bradley;

(d) Voting Papers not returned:

None.

- **40.** Declaration of Result of Vote on Voting Paper V.P.(O.M.) (57)14: On 27th September 1957, Mr. Hemming, Secretary to the International Commission, acting as Returning Officer for the Vote taken on Voting Paper V.P.(O.M.)(57)14, signed a Certificate that the Votes cast were as set out in paragraph 39 above and declaring that the proposal submitted in the foregoing Voting Paper had been duly adopted and that the decision so taken was the decision of the International Commission in the matter aforesaid.
- 41. Addition of "Fabriciana" Reuss, 1920, to the "Official List of Generic Names in Zoology": On 30th September 1957 the Secretary, on receiving the following letter dated 29th September 1957 from Mr. Hemming on behalf of himself and of the specialists who had joined with him in submitting the present case to the Commission, executed a Minute directing that under the "Completeness-of-Opinions" Rule (1) the generic name

Fabriciana Reuss, 1920, as a name entering into the present case, be placed on the Official List of Generic Names in Zoology and (2) that in the entry to be made on the Official List of Specific Names in Zoology relating to the specific name niobe Linnaeus, 1758, as published in the combination Papilio niobe, a note be added that that name is the specific name of the type species of the genus Fabriciana Reuss, 1920:—

Supplementary application dated 29th September 1957

By FRANCIS HEMMING, C.M.G., C.B.E. (London)

Proposed addition to the "Official List of Generic Names in Zoology" of the generic name "Fabriciana" Reuss, 1920

On behalf of my colleagues and myself I write to express the hope that in the *Opinion* to be rendered by the International Commission in regard to our request for the validation of the name *Papilio adippe* [Denis & Schiffermüller], 1775, as the name for the High Brown Fritillary Butterfly, the Commission will take the opportunity to place on the *Official List of Generic Names in Zoology* the generic name *Fabriciana* Reuss, 1920, the type species of which by original designation is *Papilio niobe* Linnaeus, 1758, a nominal species which, it will be recalled, enters to an important degree into the case which we submitted for decision. We feel that the decision to be taken in this case would be lacking in completeness if no action were to be taken in regard to the above generic name which we should add is now used for the two foregoing species by all specialists, other than those who still accept the old genus *Argynnis* Fabricius, 1807, in its former comprehensive sense.

- 2. The generic name Fabriciana was published by Reuss as a new name twice, first in October 1920 (Ent. Mitt. 9: 192 nota) second in 1922 (Arch. Naturgesch. 87 (1921) A 11: 197). In order to avoid the possibility of confusion, the Commission may think it convenient to cite both the above references in the entry to be made on the Official List of Generic Names in Zoology. Further, we hope that in the entry which we have recommended should be made on the Official List of Specific Names in Zoology in regard to the specific name niobe Linnaeus, 1758 (Papilio) the Commission will add a note that the nominal species so named is the type species of the genus Fabriciana Reuss, 1920.
- **42.** Preparation of the Ruling given in the present "Opinion": On 21st October 1957 Mr. Hemming prepared the Ruling given in the present *Opinion* and at the same time signed a Certificate

that the terms of that Ruling were in complete accord with those of the proposal approved by the International Commission in its Vote on Voting Paper V.P.(54)46, as modified in certain respects by the Vote taken on Voting Paper V.P.(O.M.)(57)14, and as adjusted in one respect by the Minute which, as explained in paragraph 41 was executed by the Secretary on 30th September 1957.

43. Original References: The following are the original references for the names placed on Official Lists or Official Indexes by the Ruling given in the present Opinion:—

adippe, Papilio, Linnaeus, 1767, Syst. Nat. (ed. 12) 1(2): 786

adippe, Papilio, [Denis & Schiffermüller], 1775, Ankündung [sic] syst. Werkes Schmett. Wien. Gegend: 177

berecynthia, Papilio, Poda, 1761, Ins. Mus. graec.: 75

cydippe, Papilio, Linnaeus, 1761, Faun. svec. (ed. 2): 281

cydippe, Papilio, Linnaeus, 1767, Syst. Nat. (ed. 12) 1(2): 776

Fabriciana Reuss, October 1920, Ent. Mitt. 9:192 nota [also published as a new name by Reuss in 1922 (Arch. Naturgesch. 87 (1921) A 11:197)]

niobe, Papilio, Linnaeus, 1758, Syst. nat. (ed. 10) 1:481

- 44. At the time of the submission of the present application the name applicable to the second portion of a binomen was "trivial name". This was altered to "specific name" by the Fourteenth International Congress of Zoology, Copenhagen, 1953, which at the same time made corresponding changes in the titles of the Official List and Official Index of names of this category. These changes in terminology have been incorporated in the Ruling given in the present Opinion.
- **45.** The prescribed procedures were duly complied with by the International Commission on Zoological Nomenclature in dealing with the present case, and the present *Opinion* is

accordingly hereby rendered in the name of the said International Commission by the under-signed Francis Hemming, Secretary to the International Commission on Zoological Nomenclature, in virtue of all and every the powers conferred upon him in that behalf.

46. The present *Opinion* shall be known as *Opinion* Five Hundred and One (501) of the International Commission on Zoological Nomenclature.

DONE in London, this Twenty-First day of October, Nineteen Hundred and Fifty-Seven.

Secretary to the International Commission on Zoological Nomenclature

FRANCIS HEMMING

APPENDIX

Designation of a Neotype for the nominal species "Papilio adippe" [Denis & Schiffermüller], 1775 (Class Insecta, Order Lepidoptera) and request that the International Commission on Zoological Nomenclature should give a direction under the Plenary Powers that the above nominal species be interpreted by the foregoing neotype instead of (as previously proposed) by reference to a previously published figure and a specified type locality

Application supplementary to an application submitted in 1949 for the validation and interpretation under the Plenary Powers of the name "Papilio adippe" [Denis & Schiffermüller], 1775

By FRANCIS HEMMING, C.M.G., C.B.E.

(London)

N. D. RILEY, C.B.E.

(British Museum (Natural History), London)

and

ROGER VERITY

(Florence, Italy)

The purpose of the present application is to ask the International Commission on Zoological Nomenclature to approve a modification of the form of the application which in 1949 we submitted asking for the use of the Plenary Powers to validate the name *Papilio adippe* as from Denis & Schiffermüller, 1775, and to take such other action under those Powers as might be necessary to secure that the specific name *adippe*, attributed and dated as indicated above, should be the oldest available such name for the High Brown Fritillary butterfly.

- 2. At the time when we originally submitted our application in regard to the above name, the Règles contained no provision for the recognition of neotypes and we were accordingly forced to fall back upon other methods in seeking to secure that the interpretation of the nominal species *Papilio adippe* [Denis & Schiffermüller], 1775, when validated, should be firmly anchored to the High Brown Fritillary. The method by which we then recommended that the foregoing object should be secured involved a twofold action by the Commission under its Plenary Powers, namely: (1) a direction that the above nominal species be interpreted by reference to a specified previously published and clearly recognisable figure; (2) the designation of the "Wiener Gegend" to be the locality to be accepted as the type locality of that nominal species. The figure which we recommended should be taken for this purpose was the figure of a male specimen published in 1777 as figure 1 on plate 18 of the work by Esper (E.J.C.) entitled *Die Schmetterlinge in Abbildungen nach der Natur*. The exact provenance of this specimen was not known, though it was certainly taken in Germany, probably, like many of the specimens of common species figured by Esper, in the neighbourhood of Erlangen. In making this recommendation, we recognised that there was a certain incongruity in the request that the standard of reference for the identification of this species should be a figure of a specimen that had not been taken in the locality which it was proposed should be designated as the type locality of the species concerned, but we felt that, having regard to the widespread distribution of this species in a single subspecies in Germany and Austria, the above objection was theoretical rather than practical in kind and was outweighed by the substantial advantage to be secured by linking the specific name adippe [Denis & Schiffermüller] to a good figure in a very well-known work of nearly contemporary date.
- 3. The situation in regard to the present case was, however, completely transformed by the decision by the Fourteenth International Congress of Zoology at its meeting at Copenhagen in 1953 to include provisions in the *Règles* recognising the neotype concept. For, if such a provision had existed at the time when we drew up our original application, we should certainly have designated a Viennese example of the High Brown Fritillary to be the neotype of *Papilio adippe* [Denis & Schiffermüller], 1775,

and, in place of the proposals which we then submitted, should have asked the International Commission under its Plenary Powers to validate the neotype so designated. Such a procedure is, in our opinion, greatly to be preferred to that which alone we were able to adopt in 1949, for it secures that the standard reference specimen shall be one taken in the type locality and belonging therefore unquestionably to the nominate subspecies. the further great advantage that it makes it possible to publish photographs of both the upperside and the underside of the neotype specimen and to provide also photographs of the male genitalia of that specimen. We considered this matter in the early part of 1955 and in view of the fact that at that time no decision had been promulgated by the International Commission on the application which we had originally submitted we came to the conclusion that the best course would be to notify the Office of the Commission that in view of the foregoing decision by the Copenhagen Congress we desired now to modify the form of the proposals which we had submitted for the interpretation of the nominal species Papilio adippe [Denis & Schiffermüller], 1775, by substituting a proposal that that species should be interpreted by reference to a specimen taken in the Vienna district which we were planning to designate as the neotype of this species. A communication in this sense was accordingly addressed to the Office of the Commission on 1st May 1955 by Mr. Hemming on our joint behalf. In this letter Mr. Hemming explained that an effort was being made to obtain on loan from the Naturhistorische Museum at Vienna a specimen of the High Brown Fritillary taken in the neighbourhood of that city for designation as the neotype, and that, as soon as it had been possible to prepare a paper designating the proposed neotype, it was our intention to submit a Supplementary Application asking that the Commission should use its Plenary Powers to validate that neotype in place of the action which we had previously recommended it to take under those Powers for securing that the name adippe [Denis & Schiffermüller], 1775, as published in the combination Papilio adippe, should be the oldest available specific name for the High Brown Fritillary. After explaining that it might be a little time before we were in a position to submit our proposed Supplementary Application to the Commission, Mr. Hemming in the same letter expressed our hope that no further action on this case would be taken by the Commission until that application was in its hands.

- **4.** Through the kindness of Dr. Hans Strouhal, Director of the Naturhistorische Museum at Vienna we have been enabled to make a careful study of a male example of the High Brown Fritillary taken at Mödling in the neighbourhood of Vienna on 23rd July 1921. This specimen, which is described in detail in the Annexe to the present application, appears to us to fulfil all the requirements needed and we now hereby designate it to be the neotype of the nominal species *Papilio adippe* [Denis & Schiffermüller], 1775 (*Ankündung syst. Werkes Schmett. Wien Gegend*: 177).
- 5. In the light of the action described above we now ask the International Commission on Zoological Nomenclature:—
 - (1) to grant permission for the withdrawal of the portion of our original application (Hemming, Riley & Verity, 1952, Bull. zool. Nomencl. 6:325—336) in which we asked (a) that the nominal species Papilio adippe [Denis & Schiffermüller], 1775 (for the validation of the name of which we then asked) be interpreted by reference to the example figured by Esper in 1777 as figure 1 on plate 18 of the work entitled Die Schmetterlinge in Abblidungen nach der Natur and (b) that the locality "Wiener Gegend" be designated as the type locality for the foregoing species;
 - (2) to accept in lieu of the proposals withdrawn under (1) above the proposal that under its Plenary Powers it should validate for the foregoing nominal species the neotype designated in paragraph 4 of the present application, at the same time directing that the locality "Mödling, near Vienna" where the neotype was obtained be treated as the type locality of the nominate subspecies of the nominal species *Papilio adippe* [Denis & Schiffermüller], 1775, when, as requested in our original application, that name is validated under the above Powers to be the name for the species known in England as the High Brown Fritillary.
- 6. In submitting this application, we desire to express our warm thanks to Dr. Hans Strouhal, Director of the Naturhistorische Museum, Wien, for the loan of the specimen of the

High Brown Fritillary taken at Mödling which has enabled us to designate a specimen of this species from the neighbourhood of Vienna to be the neotype of the nominal species Papilio adippe [Denis & Schiffermüller], 1775, which under the decision already taken by the Commission is now to be the oldest available name for the above species. It is in our view particularly appropriate that it should be in the Natural History Museum at Vienna that the neotype in this Viennese species should be preserved. wish also to thank our friend Mr. B. C. S. Warren for suggestions which he was kind enough to make when we were preparing our comparative description of the species Fabriciana adippe [(Denis & Schiffermüller]) and Fabriciana niobe (Linnaeus). Finally, we are happy to have this opportunity of expressing our gratitude to the Trustees of the British Museum (National History), for making available its photographic unit and to the members of the staff of that unit for the photographs by which the present application is illustrated.

ANNEXE

Particulars of the specimen designated in paragraph 4 of the present application to be the Neotype of the nominal species "Papilio adippe" [Denis & Schiffermüller], 1775

Distinguishing Characters: The species at present most commonly known under the incorrect name *Fabriciana adippe* (Linnaeus, 1767), for which the correct name will in future will be *Fabriciana adippe* ([Denis & Schiffermüller], 1775) (*Papilio adippe* [Denis & Schiffermüller], 1775) is so well known at least in the European countries where it occurs that a detailed description is not required in view of the photographs of the upper- and under-surfaces of the neotype now designated which are shown (figs. 1 and 2) on plate 1 annexed to the present paper. Excellent coloured illustrations of this species have been published

in many works concerned with European butterflies, to which reference can easily be made. For example, to mention only a few, the following works may be consulted: (i) Kirby (W.F.), European Butterflies and Moths; (ii) Seitz (A.), Die Grossschmetterlinge der Erde, volume 1 (Die Palaearcktischen Tagfalter); (iii) South (R.), The Butterflies of the British Isles; (iv) Forster (W.) & Wohlfahrt (T.A.), Die Schmetterlinge Mitteleuropas, volume 1 (Tagfalter); (v) Verity (R.), Le Farfalle Diurne d'Italia, volume 4.

- 2. The nearest ally to Fabriciana adippe is Fabriciana niobe (Linnaeus, 1758) (Papilio niobe Linnaeus, 1758), the two species often occurring together. Normally, these two species can be readily separated from one another, both in the field and in the cabinet, alike by their general appearance and, in the case of F. niobe, by its noticeably smaller average size. Occasionally, however, individual examples of F. adippe may be mistaken for F. niobe in the cabinet, especially those in which the silver markings on the underside are lacking and in consequence the resemblance to the commoner (i.e. the unsilvered) form of F. niobe is enhanced.
- 3. The following characters, especially when taken in combination with one another, should, however, suffice at all times to separate the two species from each other:—

(a) Male androconia (forewing upperside):

adippe: concentrated in two rather conspicuous stripes on veins 2 and 3;

niobe: present on veins 2, 3 and 4 but scattered and not formed into obvious stripes.

(b) Forewing, underside (both sexes):

adippe: the chevrons forming an antemarginal row become suddenly much less well-defined above vein 4 towards the apex than below it;

niobe: the chevrons forming an antemarginal row becoming steadily paler and smaller towards the apex without the sudden change in definition at vein 4 found in adippe.

(c) Hindwing, underside, cell (both sexes):

adippe: spot in the cell (see niobe below) usually absent in the male and only seldom present in the female; when present, this spot always small and quite distinct from the basal cell spot;

niobe: a small spot (buff or silver) almost always present in both sexes, this spot lying against the point of origin of vein 7, very variable in size and shape and often coalescing with the basal cell-spot.

(d) Hindwing, underside, central row of large spots (both sexes) :

adippe: disconnected, owing to the reduction in size of spot between veins 4 and 5, this spot normally constituting only a small point;

niobe: forms a connected series, the spot between veins 4and 5 being normally well developed, extending to the veins on either side;

(Note: The characters described in (c) and (d) above are clearly marked in examples with silver spots, but in unsilvered examples become increasingly difficult to detect, as these spots become merged in the general colour of the background.)

- **4.** In addition to the characters enumerated above, the ground colour on the underside and the definition of the markings on that surface also provide useful guides for distinguishing the two species from one another. The ground colour in *adippe* is a rather smooth golden yellow, while in *niobe* it is better described as sandy buff. The pattern of the markings on the underside is more sharply defined in *niobe* than in *adippe*, by reason of the fact that the black outlines of the pale spots which form such a prominent feature in *niobe* are in that species complete and in most cases boldly indicated, whereas in *adippe* these outlines are delicate and seldom wholly surround the pale spots.
- 5. The genitalia in both sexes are very similar in *F. adippe* and *F. niobe*, differing in degree rather than in kind. The genitalia of both sexes are illustrated on plates 2 and 3 annexed to the present paper. On plate 2 are shown the left clasp of the male genitalia of *F. adippe* (fig. 3) and *F. niobe* (fig. 4), these

figures being enlarged by the same amount (\times 23). On plate 3 the two upper figures show the male genitalia viewed laterally, less the left clasp, fig. 5 representing *F. adippe*, fig. 6, *F. niobe*. The two lower figures represent the ventral view of the female genitalia, fig. 7 being that of *F. adippe* and fig. 8 that of *F. niobe*. All the figures on plate 3 are enlarged by the same amount (\times 10). Particular attention may be drawn to the following characters in the male and female genitalia respectively:—

(a) Male genitalia:

In the case of the male genitalia the characters of special value in separating the two species are: (a) the outline of the uncus, when viewed laterally; (b) the shape of the style; (c) the shape of the head of the harpe; (d) the number and relative sizes of the teeth on the reversible portion of the penis; (e) the shape of the extremity of the valua (this being much squarer in adippe than in niobe).

(b) Female genitalia:

In the case of the female genitalia, the chief difference between the two species is found in the region of the ostium bursae which is much more heavily sclerotised in adippe than in niobe. This feature is best seen in an unmounted specimen by pulling back the antevaginal lamella (which acts as a shield or cover to the ostium). When this is done, the more heavily sclerotised ribs of the antrum are much more readily seen in adippe than are the relatively weak ribs in niobe. Moreover, the movable papilliform postvaginal lamella which projects downwards above the actual genital opening is seen to be quite heavily sclerotised in adippe but almost entirely The membranous area which membranous in niobe. divides the eighth sternum in the mid-ventral line is in addition much longer and wider in adippe than in niobe. Only the last feature can be readily seen when the abdomen is cleared and mounted whole in the usual fashion.

- 6. Sex of Neotype: Male.
- 7. Locality of Neotype: Mödling, near Vienna.
- 8. Labels on Neotype: There are three labels affixed to the neotype, of which the first was attached to the specimen in question at the time when it was received on loan from the Naturhistorische Museum at Vienna and the other two have been affixed since the designation of that specimen to be the neotype of *Papilio adippe* [Denis & Schiffermüller], 1775. The labels in question read as follows:—

First label

Coll. J. Kitt Austria inferior Mödling 23.7.1921

Second label

This label consists of a small circular piece of white paper with a red edge with the word "Type" printed in black in the centre. The following additions have been made to this label in black ink: (a) the letters "Neo" have been added above the printed word "Type", thus making it read "Neotype", and (b) the word "Neotype" has been written in in full on the same surface of the label immediately below the printed word "Type".

Third label

Argynnis adippe NEOTYPE ♂ genitalia : See Slide No. N.D.R./A/01 July 1957

9. Label on slide on which the genitalia of the Neotype are mounted: The following label has been affixed to the slide on

which the preparation of the genitalia of the neotype of *Papilio adippe* [Denis & Schiffermüller], 1775, have been mounted:—



Text Fig 1. Facsimile of label on slide on which the male genitalia of the neotype of "Papilio adippe" [Denis & Schiffermüller], 1775 are mounted

- 10. Figures of the Neotype: Photographs of the upperside and underside respectively of the neotype are reproduced on Plate 1 (fig. 1, upperside; fig. 2, underside) annexed to the present paper. A photograph of the left clasp (\times 23) is reproduced as as fig. 3 on plate 2; a photograph of the genitalia as a whole less the clasp shown on Plate 2 is reproduced (\times 10) as fig. 5 on plate 3.
- 11. The Location of the Neotype: The Neotype described above is the property of, and is preserved in the collection of, the Naturhistorische Museum, Wien.

EXPLANATION TO PLATES 1—3

Plate 1

- Papilio adippe [Denis & Schiffermüller], 1775: Neotype, male taken at Mödling, near Vienna (actual size)
- Fig. 1 Upperside
- Fig. 2 Underside

Plate 2

Left clasp of male genitalia (\times 23)

- Fig. 3 Papilio adippe [Denis & Schiffermüller], 1775: Neotype
- Fig. 4 Papilio niobe Linnaeus, 1758 (for comparison)

Plate 3

(All figures \times 10)

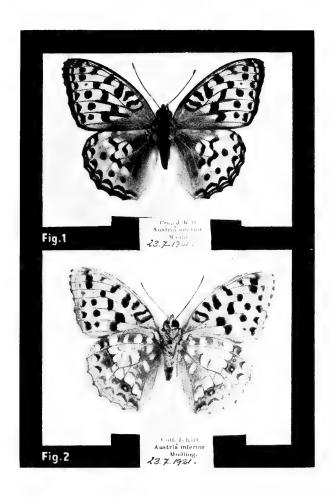
(a) Male genitalia (lateral view)

- Fig. 5 Papilio adippe [Denis & Schiffermüller], 1775: Neotype
- Fig. 6 Papilio niobe Linnaeus, 1758 (same specimen as that of which clasp figured as Fig. 4 on Plate 2)

(b) Female genitalia (dorsal view)

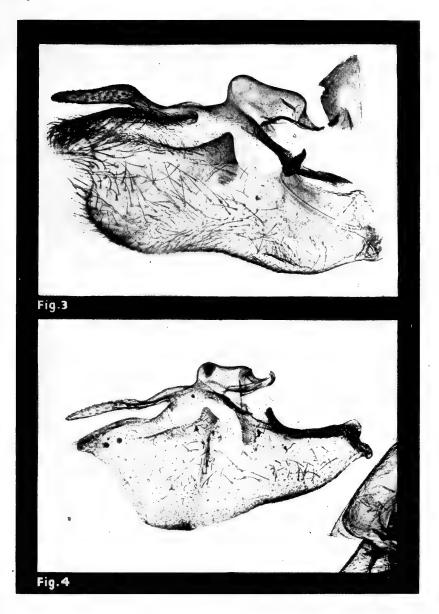
- Fig. 7 Papilio adippe [Denis & Schiffermüller], 1775 (specimen taken in Austria)
- Fig. 8 Papilio niobe Linnaeus, 1758 (for comparison)





Papilio adippe [Denis & Schiffermüller], 1775: Neotype (d. "Mödling, near Vienna") (actual size). Fig. 1, upperside; Fig. 2, underside

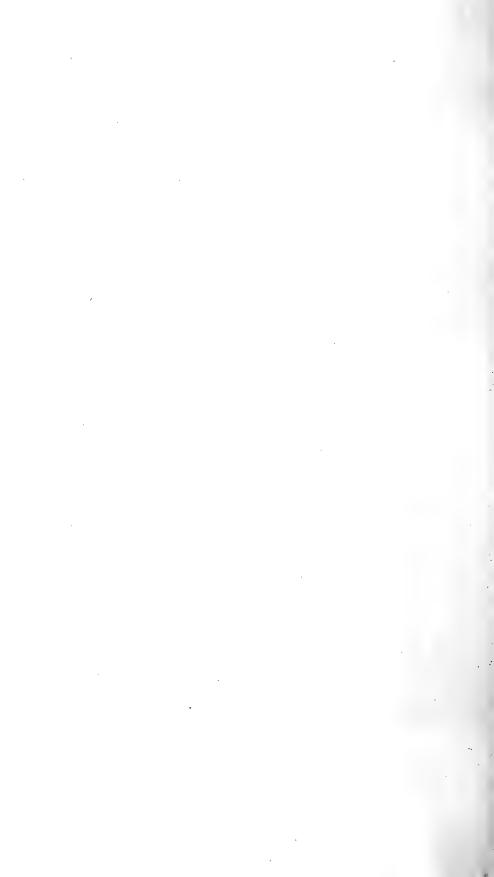


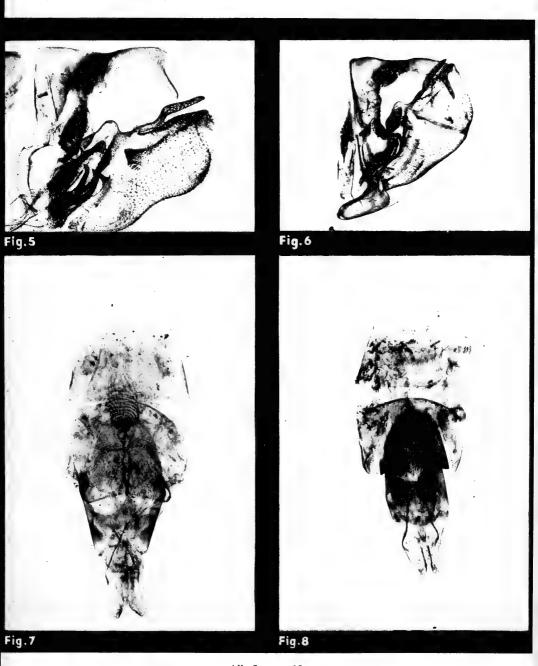


Both figs. \times 23

Fig. 3 Papilio adippe (Denis & Schiffermüller) 1775: Neotype, left clasp of male genitalia (lateral view)

Fig. 4 Papilio niobe Linnaeus 1758: left clasp of male genitalia (lateral view)





All figs. \times 10

- Fig. 5 Papilio adippe [Denis & Schiffermüller], 1775: Neotype, male genitalia (lateral view)
- Fig. 6 Papilio niobe Linnaeus, 1758 : male genitalia (lateral view)
- Fig. 7 Papilio adippe [Denis & Schiffermüller], 1775: female genitalia (dorsal view)
- Fig. 8 Papilio niobe Linnaeus, 1758 : female genitalia (dorsal view)



OPINIONS AND DECLARATIONS RENDERED BY THE INTERNATIONAL COMMISSION ON ZOOLOGICAL NOMENCLATURE

Edited by

FRANCIS HEMMING, C.M.G., C.B.E.

Secretary to the Commission

VOLUME 18. Part 3. Pp. 65-120

FEB 27 11

LIBRAR

OPINION 502

Validation under the Plenary Powers of the generic name Lepidurus Leach, 1819 (Class Crustacea, Order Phyllopoda), designation under the same Powers of a type species in harmony with accustomed usage for the nominal genus Triops Schrank, 1803 (Class Crustacea, Order Phyllopoda) and addition of those names and of Apus Scopoli, 1777 (Class Aves), to the Official List of Generic Names in Zoology and matters incidental thereto

LONDON:

Printed by Order of the International Trust for Zoological Nomenclature

and

Sold on behalf of the International Commission on Zoological Nomenclature by the International Trust at its Publications Office 41, Queen's Gate, London, S.W.7

1958

Price One Pound Seventeen Shillings and Sixpence

(All rights reserved)

INTERNATIONAL COMMISSION ON ZOOLOGICAL NOMENCLATURE

COMPOSITION AT THE TIME OF THE ADOPTION OF THE **RULING GIVEN IN OPINION 502**

The Officers of the Commission

Honorary Life President: Dr. Karl JORDAN (British Museum (Natural History Zoological Museum, Tring, Herts, England).

President: Professor James Chester Bradley (Cornell University, Ithaca, N.Y., U.S.A.) (12th August 1953)

Vice-President: Senhor Dr. Afranio do Amaral (Sao Paulo, Brazil) (12th August 1953) Secretary: Mr. Francis HEMMING (London, England) (27th July 1948.)

B. The Members of the Commission

Arranged in order of precedence by reference to date of election or of most recent re-election.
as prescribed by the International Congress of Zoology)

Professor H. Boschma (Rijksmuseum van Natuurlijke Historie, Leiden, The Netherlands)

(1st January 1947)
Senor Dr. Angel Cabrera (La Plata, Argentina) (27th July 1948)
Mr. Francis Hemming (London, England) (27th July 1948) (Secretary)
Dr. Henning Lemche (Universitetets Zoologiske Museum, Copenhagen, Denmark) (27th July 1948)
Professor Teiso Esaki (Kyushu University, Fukuoka, Japan) (17th April 1950)
Professor Pierre Bonnet (Université de Toulouse, France) (9th June 1950)
Mr. Norman Denbigh Riley (British Museum (Natural History), London) (9th June 1950)
Professor Tadeuse Lackbuski (Institute of Zoology Polish Academy of Sciences Warsaw.

Professor Tadeusz Jaczewski (Institute of Zoology, Polish Academy of Sciences, Warsaw, Poland) (15th June 1950)

a.M., Germany) (5th July 1950)
Professor Erich Martin Hering (Zoologisches Museum der Humboldt-Universität zu Berlin, Germany) (5th July 1950)
Sephor Dr. Afrania da Assault (50) Professor Robert Mertens (Natur-Museum u. Forschungs-Institut Senckenberg, Frankfurt

Senhor Dr. Afranio do Amaral (S. Paulo, Brazil) (12th August 1953) (Vice-President)
Professor J. R. Dymond (University of Toronto, Toronto, Canada) (12th August 1953)
Professor J. Chester Bradley (Cornell University, Ithaca, N.Y., U.S.A.) (12th August

Professor J. Chester Bradley (Cornell University, Ithaca, N.Y., U.S.A.) (12th August 1953) (President)
 Professor Harold E. Vokes, University of Tulane, Department of Geology, New Orleans, Louisiana, U.S.A. (12th August 1953).
 Professor Béla Hankó (Mezőgazdasági Muzeum, Budapest, Hungary) (12th August 1953)
 Dr. Norman R. Stoll (Rockefeller Institute for Medical Research, New York, N.Y., U.S.A.) (12th August 1953)

U.S.A.) (12th August 1953)
Mr. P. C. Sylvester-Bradley (Sheffield University, Sheffield, England) (12th August 1953)
Dr. L. B. Holthus (Rijksmuseum van Natuurlijke Historie, Leiden, The Netherlands) Dr. L. B. HOLTHUIS (Rijksmuseum van Natuurlijke Historie, Leiden, The Netherlands) (12th August 1953)

Dr. K. H. L. Key (Commonwealth Scientific and Industrial Research Organisation, Canberra, A.C.T., Australia) (15th October 1954)

Dr. Alden H. MILLER (Museum of Vertebrate Zoology, University of California, U.S.A.) (29th October 1954)

Doc. Dr. Ferninand Prantl (Národni Museum V Praze, Prague, Czechoslovakia) (30th October 1954)

Professor Dr. Wilhelm Kühnelt (Zoologisches Institut der Universität, Vienna, Austria) (6th November 1954) Professor F. S. Bodenheimer (The Hebrew University, Jerusalem, Israel) (11th November

1954)

Professor Ernst Mayr (Museum of Comparative Zoology at Harvard College, Cambridge, Massachusetts, U.S.A.) (4th December 1954)
Professor Enrico Tortonese (Museo di Storia Naturale "G. Doria", Genova, Italy) (16th December 1954)

OPINION 502

VALIDATION UNDER THE PLENARY POWERS OF THE GENERIC NAME "LEPIDURUS" LEACH, 1819 (CLASS CRUSTACEA, ORDER PHYLLOPODA), DESIGNATION UNDER THE SAME POWERS OF A TYPE SPECIES IN HARMONY WITH ACCUSTOMED USAGE FOR THE NOMINAL GENUS "TRIOPS" SCHRANK, 1803 (CLASS CRUSTACEA, ORDER PHYLLOPODA) AND ADDITION OF THOSE NAMES AND OF "APUS" SCOPOLI, 1777 (CLASS AVES), TO THE "OFFICIAL LIST OF GENERIC NAMES IN ZOOLOGY" AND MATTERS INCIDENTAL THERETO

RULING:—The under-mentioned action is hereby taken under the Plenary Powers:—

- (a) The names of genera in the Class Crustacea (Order Phyllopoda) specified below are hereby suppressed for the purposes of the Law of Priority but not for those of the Law of Homonymy:—
 - (i) Binoculus Müller (O.F.), 1776;
 - (ii) Apos Scopoli, 1777;
 - (iii) Apodium Rafinesque, 1814;
 - (iv) Phyllopus Rafinesque, 1815.
- (b) All designations or selections of type species for the genus *Triops* Schrank, 1803 (Class Crustacea,

Order Phyllopoda) made prior to the present Ruling are hereby set aside and the nominal species *Apus cancriformis* Bosc, [1801—1802], is hereby designated to be the type species of the above genus.

- (c) The under-mentioned family-group names in the Class Aves are hereby suppressed for the purposes of the Law of Priority but not for those of the Law of Homonymy:—
 - (i) CYPSELINAE Bonaparte, 1838 (type genus: Cypselus Illiger, 1811);
 - (ii) MICROPODIDAE Stejneger, 1885 (type genus : *Micropus* Wolf, 1810).
- (2) It is hereby directed that under the provisions of *Declaration* 36 the generic name *Triops* Schrank, 1803, is to be treated as being of the masculine gender.
- (3) The under-mentioned generic names are hereby placed on the *Official List of Generic Names in Zoology* with the Name Numbers severally specified below:—
 - (a) Lepidurus Leach, 1819 (gender: masculine) (type species, by monotypy: Monoculus apus Linnaeus, 1758, as defined by the lectotype selected by Holthuis (L.B.) (1956: 72) (Class Crustacea, Order Phyllopoda) (Name No. 1245);
 - (b) Triops Schrank, 1803 (gender as determined under (2) above: masculine) (type species, by designation under the Plenary Powers in (1)(b) above: Apus cancriformis Bosc, [1801—1802]) (Class Crustacea, Order Phyllopoda) (Name No. 1246);
 - (c) Apus Scopoli, 1777 (gender: masculine) (type species, by monotypy: Hirundo apus Linnaeus, 1758) (Class Aves) (Name No. 1247).

- (4) The under-mentioned specific names are hereby placed on the Official List of Specific Names in Zoology with the Name Numbers severally specified below:—
 - (a) apus Linnaeus, 1758, as published in the combination *Monoculus apus*, as interpreted by the lectotype selected by Holthuis (L.B.) in 1956 (specific name of type species of *Lepidurus* Leach, 1819) (Class Crustacea, Order Phyllopoda) (Name No. 1475);
 - (b) cancriformis Bosc, [1801—1802], as published in the combination Apus cancriformis (specific name of type species of Triops Schrank, 1803) (Class Crustacea, Order Phyllopoda) (Name No. 1476);
 - (c) apus Linnaeus, 1758, as published in the combination *Hirundo apus* (specific name of type species of *Apus* Scopoli, 1777) (Class Aves) (Name No. 1477).
- (5) The under-mentioned generic names are hereby placed on the Official Index of Rejected and Invalid Generic Names in Zoology with the Name Numbers severally specified below:—
 - (a) Apodium Rafinesque, 1814, as suppressed under the Plenary Powers in (1)(a)(iii) above (Name No. 1097);
 - (b) Apos Scopoli, 1777, as suppressed under the Plenary Powers in (1)(a)(ii) above (Name No. 1098);
 - (c) Apus Schaeffer (J.C.), 1756 (invalid because published before the starting point of zoological nomenclature (Name No. 1099);
 - (d) Apus Cuvier (G.L.C.F.D.), [1797—1798] (a nomen nudum) (Name No. 1100);

- (e) Apus Cuvier (G.F.), 1800 (a junior homonym of Apus Scopoli, 1777) (Name No. 1101);
- (f) Apus Latreille, [1802—1803] (a junior homonym of Apus Scopoli, 1777) (Name No. 1102);
- (g) Apus Schoch, 1868 (a junior homonym of Apus Scopoli, 1777) (Name No. 1103);
- (h) Binoculus Geoffroy (E.L.), 1764 (a name published in a work rejected for nomenclatorial purposes by the Ruling given in Opinion 228) (Name No. 1104);
- (i) Binoculus Müller (O.F.), 1776, as suppressed under the Plenary Powers in (1)(a)(i) above (Name No. 1105);
- (j) Brachypus Meyer, 1814 (a junior objective synonym of Apus Scopoli, 1777) (Name No. 1106);
- (k) the under-mentioned names, each of which is a junior homonym of *Brachypus* Meyer, 1814:—
 - (i) Brachypus Swainson, 1824 (Name No. 1107);
 - (ii) Brachypus Meigen, 1824 (Name No. 1108);
 - (iii) *Brachypus* Gray (J.E.), 1825 (Name No. 1109);
 - (iv) Brachypus Schoenherr, 1826 (Name No. 1110);
 - (v) Brachypus Fitzinger, 1826 (Name No. 1111);
 - (vi) Brachypus Guilding, 1828 (Name No. 1112);
- (l) Brevipes [Palmer], 1836 (a junior objective synonym of Apus Scopoli, 1777) (Name No. 1113);
- (m) Cypselus Illiger, 1811 (a junior objective synonym of Apus Scopoli, 1777) (Name No. 1114);

- (n) Micropus Wolf, 1810 (a junior objective synonym of Apus Scopoli, 1777) (Name No. 1115);
- (o) the under-mentioned names, each of which is a junior homonym of *Micropus* Wolf, 1810:—
 - (i) Micropus Hübner, 1818 (Name No. 1116);
 - (ii) Micropus Gray (J.E.), 1831 (Name No. 1117);
 - (iii) Micropus Swainson, [1832] (Name No. 1118);
 - (iv) Micropus Spinola, 1837 (Name No. 1119);
 - (v) Micropus Denny, 1842 (Name No. 1120);
 - (vi) Micropus Kner, 1868 (Name No. 1121);
- (p) Monops Billberg, 1820 (a junior objective synonym of Lepidurus Leach, 1819) (Name No. 1122);
- (q) *Phyllopus* Rafinesque, 1815, as suppressed under the Plenary Powers in (1)(a)(iv) above (Name No. 1123);
- (r) Thriops Ghigi, 1921 (an Erroneous Subsequent Spelling for Triops Schrank, 1803) (Name No. 1124);
- (s) Trinoculus Voigt, 1836 (a junior objective synonym of Lepidurus Leach, 1819) (Name No. 1125);
- (t) Triopes Schrank, 1803 (an Invalid Original Spelling for Triops Schrank, 1803) (Name No. 1126).
- (6) The under-mentioned specific names are hereby placed on the Official Index of Rejected and Invalid Specific Names in Zoology with the Name Numbers severally specified below:—
 - (a) palustris Müller (O.F.), 1776, as published in the combination *Binoculus palustris* (a junior objective

- synonym of apus Linnaeus, 1758, as published in the combination *Monoculus apus*) (Name No. 497);
- (b) cancriformis Lamarck, 1801, as published in the combination Limulus cancriformis (a junior objective synonym of apus Linnaeus, 1758, as published in the combination Monoculus apus) (Name No. 498);
- (c) productus Bosc, [1801—1802], as published in the combination Apus productus (a junior objective synonym of apus Linnaeus, 1758, as published in the combination Monoculus apus) (Name No. 499).
- (7) The under-mentioned family-group names are hereby placed on the *Official List of Family-Group Names in Zoology* with the Name Numbers severally specified below:—
 - (a) TRIOPSIDAE Keilhack, 1909 (type genus: *Triops* Schrank, 1803) (Class Crustacea, Order Phyllopoda) (Name No. 207);
 - (b) APODINAE Hartert, 1897 (type genus: *Apus* Scopoli, 1777) (Class Aves) (Name No. 208).
- (8) The under-mentioned family-group names are hereby placed on the Official Index of Rejected and Invalid Family-Group Names in Zoology with the Name Numbers severally specified below:—
 - (a) APIDAE Burmeister, 1843 (type genus: Apus Cuvier (G.F.), 1800) (an Invalid Original Spelling for APODIDAE) (invalid because name of type genus is a junior homonym of a generic name of older date (Apus Scopoli, 1777) (Class Crustacea, Order Phyllopoda) (Name No. 241);

- (b) APODES Billberg, 1820 (type genus: *Monops* Billberg, 1820) (an Invalid Original Spelling for APODIDAE) (invalid because based not upon the name of the type genus (*Monops*) but upon the specific name (*apus* Linnaeus, 1758, as published in the combination *Monoculus apus*) of the type species of the type genus) (Class Crustacea, Order Phyllopoda) (Name No. 242);
- (c) APODIDAE Agassiz (J.L.R.), 1846 (type genus: Apus Cuvier (G.F.), 1800) (a correction of the Invalid Original Spelling APIDAE and, like it, invalid because the name of the type genus is a junior homonym of a generic name of older date (Apus Scopoli, 1777)) (Class Crustacea, Order Phyllopoda) (Name No. 243);
- (d) APUSIENS Milne Edwards (H.), 1840 (type genus: Apus Cuvier (G.F.), 1800) (invalid because a vernacular (French) word and not a Latinised word) (Name No. 244);
- (e) BINOCULIDAE Fowler, 1912 (type genus: Binoculus Müller (O.F.), 1776) (invalid under Declaration 20 because name of type genus suppressed under the Plenary Powers in (1)(a)(i) above) (Class Crustacea, Order Phyllopoda) (Name No. 245);
- (f) PHYLLOPODIDAE (correction of PHYLLOPIA)
 Rafinesque, 1815 (type genus: Phyllopus
 Rafinesque, 1815) (invalid under Declaration 20
 because name of type genus suppressed under the
 Plenary Powers in (1)(a)(iv) above) (Class
 Crustacea, Order Phyllopoda) (Name No. 246);
- (g) PHYLLOPIA Rafinesque, 1815 (type genus *Phyllopus* Rafinesque, 1815) (an Invalid Original Spelling for PHYLLOPODIDAE) (Class Crustacea, Order Phyllopoda) (Name No. 247);

- (h) APODIDAE Reichenow, 1897 (type genus: Apus Scopoli, 1777) (invalid because published for some purpose other than for use in zoological nomenclature) (Class Aves) (Name No. 248);
- (i) CYPSELINAE Bonaparte, 1838 (type genus: Cypselus Illiger, 1811) (invalid because suppressed for the purposes of the Law of Priority but not for those of the Law of Homonymy under the Plenary Powers in (1)(c)(i) above) (Class Aves) (Name No. 249);
- (j) MICROPODIDAE Stejneger, 1885 (type genus: *Micropus* Wolf, 1810) (invalid because suppressed for the purposes of the Law of Priority but not for those of the Law of Homonymy under the Plenary Powers in (1)(c)(ii) above) (Class Aves) (Name No. 250).

I. THE STATEMENT OF THE CASE

The present *Opinion* is concerned with the problem created by the long-standing confusion created by the use of the generic name *Apus* as the name for a genus of birds (the Swifts) and also as the name for a genus of Phyllopod Crustacea. This question was raised by Dr. L. B. Holthuis (*Rijksmuseum van Natuurlijke Historie*, *Leiden*, *The Netherlands*) in a letter addressed to the Secretary on 20th September 1955. In the ensuing period Dr. Holthuis elaborated the text of an application dealing with the carcinological aspects of this case, while Mr. Hemming, in consultation with ornithologists, examined the repercussions on ornithological nomenclature of the proposals contemplated from the carcinological side by Dr. Holthuis. At the same time the

complex problems involved at the family-group-name level were examined jointly by the foregoing specialists. These consultations led to the submission to the Commission on 8th February 1956 of the following comprehensive application prepared jointly by Dr. Holthuis and Mr. Hemming:—

Proposed use of the Plenary Powers (a) to validate the generic name "Lepidurus" Leach, 1819, and to designate a type species for, and to determine the gender of, "Triops" Schrank, 1803 (Class Crustacea, Order Phyllopoda) and (b) to validate the family name "Apodidae" Hartert, 1897 (Class Aves)

By L. B. HOLTHUIS

(Rijksmuseum van Natuurlijke Historie, Leiden, The Netherlands)

and

FRANCIS HEMMING, C.M.G., C.B.E.

(London)

Introductory

The controversy existing amongst carcinologists as to the correct names that have to be applied to the two Phyllopod genera that by different authors have been indicated as Apos, Apus, Binoculus, Lepidurus or Triops, has caused a considerable instability in the nomenclature of this group. Furthermore this question not only concerns carcinological, but also involves ornithological nomenclature. Therefore a final decision on this problem by the International Commission on Zoological Nomenclature is highly desirable.

2. The following are the references to Crustacean genera dealt with in this proposal:

Apus Schaeffer, 1756, Krebsart. Kiefenfuss: 131 (type species, by selection by E. Desmarest (1858, Chenu's Ency. Hist. nat. (Crust.): 59): Apus cancriformis Bosc [1801—1802] Hist. nat. Crust. 2: 244) (gender: masculine)

Binoculus Geoffroy, 1764, Hist. abrég. Ins. Env. Paris 2:658 (type species, by selection by Fowler (1912, Ann. Rep. New Jersey State Mus. 1911:466): Monoculus apus Linnaeus, 1758, Syst. Nat. (ed. 10) 1:635) (gender: masculine)

Binoculus Müller (O.F.), 1776, Zool. dan. Prodr.: 200 (type species, by selection by Fowler (1912, Ann. Rep. New Jersey State Mus. 1911: 466): Binoculus palustris Müller (O.F.), 1776, Zool. dan. Prodr.: 200 (a junior objective synonym of Monoculus apus Linnaeus, 1758) (gender: masculine)

Apos Scopoli, 1777, Intr. Hist. nat: 404 (type species, by monotypy: Monoculus apus Linnaeus, 1758, Syst. Nat. (ed. 10) 1:635) (gender: masculine)

Apus Cuvier, [1797—1798], Tabl. élém. Hist. nat. Anim.: 700 (nomen nudum)

Apus Cuvier, 1800, Leçons Anat. Comp. 1: tabl. 7 (type species, by absolute tautonomy: Monoculus apus Linnaeus, 1758, Syst. Nat. (ed. 10) 1: 635) (gender: masculine)

Apus Latreille, [1802—1803], Hist. nat. gén. partic. Crust. Ins. 3:16 (type species, by monotypy: Monoculus apus Linnaeus, 1758, Syst. Nat. (ed. 10) 1:635) (gender: masculine)

Triops Schrank, 1803, Fauna boica 3(1): 180, xvii (type species, by monotypy: Binoculus palustris Müller (O.F.), 1776, Zool. dan. Prodr.: 200 (a junior objective synonym of Monoculus apus Linnaeus, 1758) (gender: masculine)

Apodium Rafinesque, 1814, Princip. fond. somiol.: 29 (substitute name for Apus Latreille [1802—1803]) (gender: neuter)

Phyllopus Rafinesque, 1815, Analyse Nature: 99 (a substitute name for Apus Latreille [1802—1803] (gender: masculine)

Lepidurus Leach, 1819, Dict. Sci. nat. 14:539 (types species, by monotypy: Monoculus apus Linnaeus, 1758, Syst. Nat. (ed. 10) 1:635) (gender: masculine)

Monops Billberg, 1820, Enum. Ins. Mus. Billberg.: 132 (type species, by monotypy: Monoculus apus Linnaeus, 1758) (gender: masculine)

Trinoculus Voigt, 1836, Cuvier's Thierreich (ed. 2) 4:275 (a substitute name for Apos Scopoli, 1777 (gender: masculine)

Apus Schoch, 1868, Mikr. Thiere 2: iii, 21 (Class Rotifera)

Proterothriops Ghigi, 1921, Atti Soc. Ital. Sci. nat. 60:163, 166 (type species, by original designation: Apus numidicus Grube, 1865, Arch. Naturgesch. 31:278) (gender: masculine)

History of the genera of Crustacea involved

- 3. Under the name Apus cancriformis Schaeffer, in his pre-Linnean (1756) paper "Der krebsartige Kiefenfuss mit der kurzen und langen Schwanzklappe", gave good descriptions and excellent figures of the two species of Phyllopods with which we are concerned here. One of the species, here for convenience named species "A", was extensively figured by Schaeffer on pls. 1—5 of his work, while he accurately figured the second species, here named species "B", on his pl. 6.
- 4. Linnaeus in the Tenth Edition of his Systema Naturae included both species in his nominal species Monoculus apus, which therefore was a composite species. All subsequent authors of the XVIIIth Century followed Linnaeus in considering "A" and "B" as one species.
- 5. Geoffroy (1764) removed *Monoculus apus* from the genus *Monoculus* and placed it in his new genus *Binoculus*, referring to the species as *Binoculus cauda biseta*. Geoffroy's *Histoire abrégée* of 1764 is not binominal and has been rejected for nomenclatorial purposes by the International Commission in *Opinion* 228 (1954, *Ops. Decls. int. Comm. zool. Nomencl.* 4: 209—220). The next author to use the generic name *Binoculus* was Müller (O.F.) (1776) who placed in it *B. palustris* and *B. piscinus*. *Binoculus palustris* was a new name that Müller, without apparent reason, substituted for *Monoculus apus* Linnaeus. *B. piscinus* is a name for a parasitic Copepod. The oldest valid type selection for *Binoculus* Müller, as far as is known to us, is that by Fowler (1912), who selected *Binoculus palustris* Müller as the type species of that genus. Latreille (1810, *Consid. gén. Ordre nat. Crust. Arachn. Ins.*: 421), it is true, selected *Monoculus argulus* Fabricius, 1793, as the type species of *Binoculus*, but this selection is invalid as *M. argulus* was not included in the original description of *Binoculus* Müller.
- 6. In 1777 Scopoli erected a new genus *Apos*, in the original description of which he only cited one species, *Monoculus apus* Linnaeus, which is therefore the type species by monotypy.
- 7. The name Apus has been treated by some authors (e.g. Neave, 1939, Nomencl. zool. 1:268) as having been published as a generic name by Cuvier in [1797—1798] (Tabl. élém. Hist. nat. Anim.: 454, 700) but an inspection of this work shows that this claim is ill-founded. In the "Table des noms latins" Cuvier on page 700 entered the name Apus with a reference to page 454 in the body of the work. Reference to that page shows, however, that Cuvier there dealt with the present genus

under the name "Les Monocles (Monoculus)". He divided this genus into several sections, the third of which he called "Les Apus". Neave and others who have accepted the generic name Apus from the above work were presumably misled into so doing by the fact that within the section "Les Apus" Cuvier entered one species as "l'apus cancriforme (Monoculus apus Lin.) Limulus apus Müller". first sight the term "apus cancriforme" (which was printed in italics) looks like a properly formed Latin binomen, apart from the fact that the word "apus" is printed with a small letter instead of with a capital. Closer inspection, however, shows clearly that Cuvier used the above term as a vernacular (French) word and that he regarded Monoculus apus Linnaeus (which, as shown above, he cited immediately after the term "apus cancriforme") as being the scientific name for this species. There is therefore nothing on page 454 of Cuvier's book which can be accepted as constituting the introduction of the generic name Apus. Accordingly, the only possible ground on which it might have been claimed that he used the word "Apus" as a generic name in this book is his inclusion of this name in the "Table des noms latins" on page 700. But this claim is now excluded by the ruling given by the International Commission in its Opinion 374 (1955, Ops. Decls. int. Comm. zool. Nomencl. 11(14): 369—378), where it ruled that the name Antirhynchonella published in 1871 in the index to Quenstedt's work Die Brachiopoden but without any corresponding use in the text did not thereby acquire the status of availability. The name Apus Cuvier [1797—1798] published on page 700 of the Tableau élémentaire must therefore be rejected as a nomen nudum.

- 8. The first author to use the name Apus as a generic name for Phyllopods was Cuvier (1800). The type species of this genus is Monoculus apus Linnaeus by absolute tautonymy.
- 9. Bosc [1801—1802] was the first author to recognise "A" and "B" as distinct species; he even (incorrectly) split "A" into two separate species, which he named Apus cancriformis and A. viridis respectively, while to species "B" the new name Apus productus was given. The name Apus viridis by subsequent authors practically always has been placed in the synonymy of A. cancriformis and is of no further importance here.
- 10. In 1803 in Part 1 of Volume 3 of his Fauna boica Schrank introduced the generic name Triops under which he cited only the species Triops palustris (=Binoculus palustris Müller (O.F.), 1776), which is therefore the type species of Triops by monotypy. Triops thereby became a junior objective synonym of Binoculus Müller (O.F.), of Apos Scopoli, and of Apus Cuvier. This generic name was published in two Original Spellings, Triops and Triopes, the former appearing on page 180, the latter on page 251. Schrank's remarks about this genus

afford clear evidence that the spelling *Triopes* was the "result of an inadvertent error". Accordingly under the relevant Decision by the Copenhagen Congress (1953, Copenhagen Decisions zool. Nomencl.: 43—44, Decision 71(1)(a)(ii) the spelling Triops is the Valid Original Spelling for this name. Even if no clear evidence had been provided by Schrank the spelling Triops would still have been the Valid Original Spelling under the second part of the Copenhagen Decision cited above, for this was the spelling used for this name by Schrank himself as "First Subsequent User" in Part 2 of the same volume (: xvii), published at a later date in the same year (1803). It may be noted here that there is an Erroneous Subsequent Spelling of this name, namely Thriops Ghigi, 1921 (Atti Soc. ital. Sci. nat. 60: 160—188).

- 11. Other objective synonyms of the names discussed above are the generic names *Apodium* Rafinesque, 1814, *Phyllopus* Rafinesque,1815, and *Trinoculus* Voigt, 1836, all three being proposed as substitute names for either *Apus* or *Apos*. In addition, in 1820, Billberg introduced the name *Monops* with *Monoculus apus* Linnaeus, as type species by monotypy, without, however, referring to any of the earlier generic names given to this species.
- 12. Leach ([1814], Edinburgh Ency. 7:388) was the first author definitely to restrict the nominal species Monoculus apus Linnaeus, thereby removing its composite character and giving to it the interpretation which has been adopted by all subsequent workers. Five years later Leach (1819) was the first author also to consider species "A" and species "B" as belonging to different genera. For the genus containing species "A" he retained the name Binoculus and gave the name Lepidurus to the genus containing "B". In the remainder of the present section of this application these genera will be referred to as genus "X" and genus "Y" respectively. In the specific nomenclature Leach followed Bosc, referring to the two species as Apus cancriformis and Apus productus respectively.
- 13. Throughout practically the whole of the XIXth century the species "A" and "B" were indicated with the names Apus cancriformis and Lepidurus (or Apus) productus. At the end of that century, however, Hartert (1897, Thierreich 1:83) discovered that the oldest generic name for the Swift (Class Aves, Order Apodiformes) is Apus Scopoli, 1777, and he consequently introduced this name into ornithological nomenclature for the genus that until then was generally known as Micropus Wolf, 1810, or Cypselus Illiger, 1811. From various sides there was a strong opposition against this changing of names. For example, Bell (1900, Ann. Mag. nat. Hist. (7) 5:480) suggested that Apus Schaeffer, 1756, although a pre-Linnean name, should be adopted for the Phyllopod genus, while he furthermore was of the opinion that Apos Scopoli (1777:404) invalidated Apus Scopoli (1777:483). Stebbing (1910, Ann. S. Afr. Mus. 6:484) followed Bell's suggestion

and adopted the name Apus Schaeffer, 1756, for the Crustacean; he furthermore remarked that, if it were necessary to reject Schaeffer's name on nomenclatorial grounds, the name Apos Scopoli, 1777, could be used, leaving Apus Scopoli as a generic name for birds. Stebbing's nomenclature was adopted by several later authors such as Barnard (1929, Ann. S. Afr. Mus. 29: 229) and Linder (1952, Proc. U.S. nat. Mus. 102: 52) while Gurney (1923, Ann. Mag. nat. Hist. (9) 11: 496, 497) continued to use the generic name Apus Latreille [1802—1803], deliberately neglecting the Règles by adopting what he called "the rules of commonsense". The foregoing zoologists employed the name *Apus cancriformis* for species "A" and the name *Lepidurus apus* or *L. productus* for species "B". Some carcinologists, however, abandoned the name *Apus* entirely. The first of these was Keilhack (1909, Zool. Annalen 3: 177) who furthermore argued that the name Apos Scopoli, 1777, could not be used for any genus of Notostracan Phyllopods (a group to which both species "A" and "B" belong) as was suggested by Bell and Stebbing, since Scopoli's diagnosis does does not fit any such genus, but evidently was meant for the genus of Anostracan Phyllopods now known as *Branchipus* Schaeffer, 1766. Keilhack, however, was wrong here. Though Scopoli's short description of Apos may not entirely fit the Notostracan genera, the fact that the only nominal species included in the original description of it is Monoculus apus Linnaeus, makes that species automatically the type species of Scopoli's genus. Most subsequent authors accepted Keilhack's point of view as correct and, to our knowledge, the generic name Apos Scopoli has not been adopted by any later zoologist. Keilhack suggested that the generic name Triops Schrank should be used to replace Apus Cuvier and in this respect he has been followed by several other authors. These authors use the name Triops cancriformis for species "A" and Lepidurus productus or L. apus for species "B". The situation at present is thus such that the generic name Lepidurus Leach is adopted by practically all carcinologists to indicate genus "Y", while for the other genus either the name Apus Schaeffer (or Apus Cuvier), or Triops Schrank is employed. Most authors have the same opinion about the size of these genera, only the Italian author Ghigi (1921, Atti Soc. ital. Sci. nat. 60: 160—188) divided "X" in two distinct genera which he called *Thriops* (an erroneous spelling of *Triops*) Schrank (containing species "A"), and Proterothriops (a new genus).

14. To solve the very intricate problem placed before us we first have to ascertain to which species must be applied the specific name apus Linnaeus, 1758, as published in the combination Monoculus apus. As pointed out above, Bosc [1801—1802] was the first author to split Monoculus apus Linnaeus. Under his Apus cancriformis, Bosc referred to Schaeffer's first two plates and to "Monoculus apus. Fab.", while under A. productus he only referred to Schaeffer's pl. 6 (under A.

viridis a reference to Schaeffer's pl. 5 was given). This seems to indicate that Bose himself thought of A. cancriformis as the typical Monoculus apus. Leach (1819) on the other hand made it clear that he considered Lepidurus productus as a synonym of the typical Monoculus apus. Leach's point of view has been adopted by most subsequent authors, the species Lepidurus productus (Bosc) often being given the name Lepidurus apus (Linnaeus). So far as we know no lectotype has ever been selected for Monoculus apus Linnaeus and the identity of that nominal species consequently is not yet definitively established. order to remedy this undesirable situation the senior author (Holthuis) selects here, in agreement with current usage, as the lectotype of Monoculus apus Linnaeus, 1758 (Syst. Nat. (ed. 10) 1:635) the specimen figured as Figure III on plate VI of Schaeffer's (1756) "Der Krebsartige Kieferfuss". This selection now definitively links the specific name apus Linnaeus, 1758, to species "B". At the same time Holthuis selects as the lectotype of Apus productus Bosc [1801—1802] (Hist. nat. Crust. 2: 244) the same specimen, namely that figured on pl. VI, fig. III, of Schaeffer's "Der Krebsartige Kiefenfuss". Monoculus apus Linnaeus and Apus productus Bosc thereby now have become objective synonyms of one another. Further, as the lectotype of Apus cancriformis Bosc, [1801—1802] (Hist. nat. Crust. 2:244) Holthuis selects the specimen figured as Figure IV on plate I of Schaeffer's "Der Krebsartige Kiefenfuss". By these selections the identity of the above nominal species is now definitely determined.

15. Bosc [1801—1802] is cited by practically all zoologists as the original author of the name Apus cancriformis. Even Sherborn (1924, Index Anim., Pars secund. (5): 1035) considered this to be a new There is, however, an earlier use of the specific name of Bosc's. name cancriformis for one of the two species dealt with here. That name is Limulus cancriformis Lamarck, 1801 (Syst. Anim. sans Vertèbr.: 169). Since Bosc ([1801—1802] Hist. nat. Crust. 2: 243) refers to Lamarck's Syst. Anim. sans Vertèbr., the latter must have been published before the former, so that the specific name cancriformis Lamarck is older than cancriformis Bosc. Since Lamarck's name is given as a substitute name for Monoculus apus Linnaeus, it is identical with Apus productus Bosc and specifically distinct from Apus cancriformis Bosc. As Bosc in his synonymy of Apus cancriformis does not cite Limulus cancriformis Lamarck, we may conclude, as have most authors, that Bosc's name is a new name and not merely a new combination formed with the specific name cancriformis proposed by Lamarck. This is rendered the more probable by the fact that there is an exactly similar case in regard to the specific name productus. One of the three species placed in the genus Limulus by Lamarck (1801, Syst. Anim. sans Vertèbr.: 169) is Limulus productus, which is a new combination formed with the specific name productus as originally proposed by Müller (O.F.), (1785, Entomostr.: 132) in the combination Caligus

This species belongs to the parasitic Copepoda and at present is known under the name Dinematura producta (O. F. Müller). It is of course entirely different from the phyllopod species which Bosc ([1801—1802] Hist. nat. Crust. 2: 244) named Apus productus. Since it is perfectly obvious to anyone that Apus productus Bosc [1801—1802] is a new name and not a new combination of Limulus productus Lamarck, 1801, one is, we believe, justified in considering the name Apus cancriformis Bosc [1801—1802] also as a new name and not as a new combination of Limulus cancriformis Lamarck, 1801. cancriformis Lamarck and Apus cancriformis Bosc are at present placed in different genera and therefore are not homonyms of one another, so that the existence of Lamarck's specific name cancriformis does not endanger that of the specific name cancriformis Bosc. It is requested here that the name cancriformis Lamarck, 1801, as published in the combination Limulus cancriformis, be placed on the Official Index of Rejected and Invalid Specific Names in Zoology, since it is a junior objective synonym of the name apus Linnaeus, 1758, as published in the combination Monoculus apus.

16. We may now direct our attention to the generic names for species "A" and "B". It is clear that Apus Schaeffer, 1756, being a pre-Linnean name, cannot be used unless validated under the Plenary Powers. Binoculus Geoffroy likewise is an unavailable name as it was published in a non-binominal book which has been rejected by the International Commission on Zoological Nomenclature. Apus Cuvier [1797—1798] is a nomen nudum, and Apus Cuvier, 1800, is a junior homonym of Apus Scopoli, 1777; the two former names thus are also unavailable. The generic names Binoculus Müller (O.F.), 1776, Apos Scopoli, 1777, Triops Schrank, 1803, Apodium Rafinesque, 1814, Phyllopus Rafinesque, 1815, Lepidurus Leach, 1819, Monops Billberg, 1820, and Trinoculus Voigt, 1836, all have as their type species either Monoculus apus Linnaeus, 1758, or a species that is objectively identical with it. Therefore the foregoing generic names are objective synonyms of each other. The oldest of these names, Binoculus Müller (O.F.), 1776, consequently is the only available name and if the normal rules were to be applied, that name should be used for genus "Y". The oldest available name for genus "X", as far as is known to us, is Proterothriops Ghigi, 1921. Neither Binoculus nor Proterothriops have been much used by carcinologists and their reintroduction for genera "Y" and "X" respectively would cause a great deal of confusion in the nomenclature of the Phyllopoda.

17. For genus "X" the generic names Apus Schaeffer, or Triops Schrank have been regularly employed; Proterothriops, the nomenclatorially correct name, has been used by a few authors, who employed it for part of the genus only. Many carcinologists would advocate the validation of the name Apus Schaeffer, 1756, under the Plenary Powers, since this name is used in many important publications on Phyllopods,

several of which being of quite recent date. Apart from the serious difficulties which would be involved in a proposal for the validation of a pre-Linnean name, the above solution would have been acceptable, had it not been that since Hartert's (1897) rediscovery of the name Apus Scopoli, 1777, that name has become firmly established in ornithological nomenclature. In modern handbooks and check-lists, such as Peters's (1940 Check-List of Birds of the World 4: 244) this name has been generally adopted. To change the generic name of the Swift back to Micropus Wolf, 1810, or Cypselus Illiger, 1811, would seriously disturb ornithological nomenclature. This consideration alone is, we consider, sufficient to rule out the possibility of using the Plenary Powers to validate Apus as a name for Crustacea.

- 18. Schrank (1803) in the description of the type species of his genus referred to Schaeffer's (1756) plates 1—4 and not to the other plates published by that author. This makes it probable that Schrank's specimens actually belonged to species "A", since that is the only species figured on those plates, species "B" being shown on Schaeffer's pl. 6 only. Schrank therefore incorrectly applied the specific name palustris Müller (O.F.) (which is objectively synonymous with apus Linnaeus and thus belongs to species "B") to his specimens. Triops Schrank, 1803, therefore may be considered as a genus based upon a misidentified type species. This is, in our opinion, a clear case where it would be appropriate in the interests of nomenclatorial stability that the Commission should make use of the provision inserted in the Règles by the Thirteenth International Congress of Zoology, Paris, 1948, for dealing with the names of genera based upon misidentified type species (1950, Bull. zool. Nomencl. 4: 158—159) and therefore under that procedure designate species "A" to be the type species of Triops Schrank in place of species "B". The name Triops would thereupon become available for use in the sense adopted by Keilhack and other authors. Since it is not practicable to validate Apus Schaeffer, 1756, the validation of the name Triops Schrank in the above sense is the best solution.
- 19. Practically all modern carcinologists use the generic name Lepidurus Leach, 1819, to indicate genus "Y". However, as has been pointed out above there are at least four senior generic names that are objective synonyms of Lepidurus, which thus is unavailable nomenclatorially, Binoculus Müller being the correct name for the genus. Since, however, the name Lepidurus is so generally used at present, while Binoculus is highly unfamiliar to zoologists, the use of the Plenary Powers for the validation of the former name seems to be entirely justified. By this action a further confusion and instability in the nomenclature of the Phyllopoda will be prevented.
- 20. At this point it is necessary to draw attention to one further problem on which action under the Plenary Powers will be necessary

as part of any general settlement of outstanding problems in connection with this case. This is concerned with the question of the gender to be assigned to the generic name Triops Schrank, 1803. This name has invariably been treated as being masculine and the abandonment of this practice would lead to serious confusion and inconvenience without securing any benefit whatsoever. Unfortunately, however, under a decision taken by the Copenhagen Congress (1953, Copenhagen Decisions zool. Nomencl.: 50, Decision 84(7)(b)(iii)) generic names having the termination "-ops" are to be treated as being feminine in gender. In the case of the Decapod Crustacea the general practice has been to treat generic names having this termination as being masculine in gender and we consider that this practice should be validated and we have in mind to submit a proposal to the Commission in this sense. It would clearly be most undesirable that the settlement of the Apus problem should be postponed until after this general problem has been submitted to, and settled by, the Commission, for this would inevitably involve a considerable delay. On the other hand, a decision on the particular case of the gender of the generic name Triops must be taken as part of the decision on the present case, for the gender to be attributed to that name must be noted in the entry relating to the name Triops when that generic name is inscribed on the Official List. We accordingly recommend that, as has been proposed in relation to the generic name Nephrops [Leach], [1814], where an exactly similar problem arises (1955, Bull. zool. Nomencl. 11: 260—262), the name Triops Schrank should be treated as a separate case and that the Commission acting under its Plenary Powers should direct that this generic name be treated as being masculine in gender.

Ornithological genera concerned

- 21. The following are the references for the names of the ornithological genera involved in the present case:—
- Apus Scopoli, 1777, Introd. Hist. nat.: 483 (gender: masculine) (type species, by monotypy: Hirundo apus Linnaeus, 1758, Syst. Nat. (ed. 10) 1: 192)
- Micropus Wolf, 1810, in Meyer & Wolf, Taschenb. deuts. Vögelk. 1:280 (type species, by selection by Salvadori (1880, Mem. R. Accad. Sci. Torino (2) 33:534): Hirundo apus Linnaeus, 1758)
- Cypselus Illiger, 1811, Prodr. Syst. Mamm. Av.: 229 (a substitute name for Apus Scopoli, 1777)
- Brachypus Meyer, 1814, Ann. Wetterau. Ges. 3: 333 (a substitute name for Micropus Wolf, 1810)
- Brevipes [Palmer], 1836, Analyst 4:101 (a substitute name for Brachypus Meyer, 1814).

- 22. The generic name Apus Scopoli, 1777, is an available name and is the oldest such name for the Swift. It should therefore now be placed on the Official List of Generic Names in Zoology, the name of its type species, apus Linnaeus, 1758, as published in the combination Hirundo apus, being placed at the same time on the Official List of Specific Names in Zoology. The four other generic names specified in paragraph 8 above are, as is there shown, all junior objective synonyms of Apus Scopoli, 1777, and should therefore be placed on the Official Index of Rejected and Invalid Generic Names in Zoology.
- 23. The following names are all junior homonyms either of *Brachypus* Meyer, 1814, or of *Micropus* Wolf, 1810, and should therefore be placed on the *Official Index of Rejected and Invalid Generic Names in Zoology*:—

Brachypus Swainson, 1824, Zool. J. 1(3): 305

Brachypus Meigen, 1824, Syst. Beschr. europ. zweifl. Ins. 4:34

Brachypus Gray (J.E.), 1825, Ann. Phil. (2) 10: 338

Brachypus Schoenherr, 1826, Curculionid. Disp. meth.: 217

Brachypus Fitzinger, 1826, Neue Classif. Rept.: 20, 50

Brachypus Guilding, 1828, Zool. J 4(14): 167

Micropus Hübner, 1818, Zutr. z. Samml. exot. Schmett. 1:24

Micropus Gray (J.E.), 1831, Zool. Miscell. (1): 20

Micropus Swainson, [1832], in Richardson, Faun. bor.-amer. 2:486

Micropus Spinola, 1837, Essai Genr. Ins. Hémipt.: 218

Micropus Denny, 1842, Monogr. Anoplurorum Brit.: 247

Micropus Kner, 1868, Sitzber. Akad. Wiss. Wien, Math.-Naturw. Kl. 58(1): 29, 322.

Family-Group-Name Problems

24. The family-group-name problems involved in the present case are complicated by reason partly of the unfortunate decision of the Copenhagen (1953) Congress to keep alive family-group names based upon generic names which are junior objective synonyms, or junior subjective synonyms, of generic names of older date, and partly of the fact that the Crustacean and ornithological aspects of the problem involved are brought into direct relation with one another through the existence of homonymous family names. In the immediately following paragraphs particulars are given, first, of the family-group names which have been published for the family of Crustacea with which we

are directly concerned and, second, of the family-group names which have been given to the family of birds containing the Swift. Next, the problems arising in each case are discussed in isolation. Finally, the relation of these names to one another is considered in the light of the unfortunate situation of homonymy which has arisen through the establishment of identical family-group names on the basis on the one hand of the avian genus *Apus* Scopoli, 1777, and on the other hand of the Crustacean genus *Apus* Cuvier. We are indebted to the senior author's colleague Dr. G. C. A. Junge for assistance and advice as regards the avian names involved.

- 25. The following family-group names have been published for the family of Crustacea containing the genera styled in the present paper as Genus "X" and Genus "Y":—
- PHILLOPIA (an Invalid Original Spelling for PHYLLOPODIDAE) Rafinesque, 1815, Analyse Nature: 99 (type genus: Phyllopus Rafinesque, 1815, Analyse Nature: 99)
- APODES (an Invalid Original Spelling for APODIDAE) Billberg, 1820, Enum. Ins. Mus. Billberg.: 132 (type genus: Monops Billberg, 1820)
- APUSIENS Milne Edwards (H.), 1840, *Hist. nat. Crust.* 3: 353 (invalid because a vernacular (French) word and not a Latinised word)
- APIDAE (an Invalid Original Spelling for APODIDAE) Burmeister, 1843, Organisation Trilobiten: table opposite page 38 (type genus: Apus Cuvier, 1800)
- APODIDAE Agassiz (J.L.R.), 1846, Nomencl. zool., Index univ.: 30 (a correction of APIDAE Burmeister, 1843)
- TRIOPSIDAE Keilhack, 1909, Brauer's Süsswasserf. Deutschl. 10:7 (type genus: Triops Schrank, 1803)
- BINOCULIDAE Fowler, 1912, Ann. Rep. New Jersey State Mus. 1911: 466 (type genus: Binoculus Müller (O.F.), 1776)
- 26. The following family-group names have been published for the family of birds containing the genus Apus Scopoli, 1777:—
- CYPSELINAE Bonaparte, 1838, Geogr. comp. List Birds Europe N. Amer.: 8 (type genus: Cypselus Illiger, 1811, a junior objective synonym of Apus Scopoli, 1777)
- MICROPODIDAE Stejneger, 1885, Standard nat. Hist. 4: 437 (type genus: Micropus Wolf, 1810, a junior objective synonym of Apus Scopoli, 1777)
- APODIDAE Reichenow, 1897, Ornith. Monatsber. 5:10 (type genus: Apus Scopoli, 1777) (invalid because published for some purpose other than for use in zoological nomenclature)

APODINAE Hartert, 1897, Das Thierreich 1:80 (type genus: Apus Scopoli, 1777) (known to have been published later than APODIDAE Reichenow because Hartert cited a reference to Reichenow's paper).

27. Of the four family-group names based on different generic names which have been given to the family of Crustacea with which we are here concerned, one name, APODIDAE published as APIDAE by Burmeister in 1843, is already invalid under a decision taken by the Fourteenth International Congress of Zoology, Copenhagen, 1953 (1953, Copenhagen Decisions zool. Nomencl.: 36, Decision 54(1)(b), for it is based upon the name of a genus (Apus Cuvier, 1800) which is a homonym of a previously published name (Apus Scopoli, 1777). In addition, there is, it should be noted, another name APODIDAE (correction of APODES) Billberg, 1820, which is also invalid, having been based by Billberg not upon the name (Monops Billberg) used by him for the type genus but upon the specific name (apus Linnaeus, 1758, as published in the combination Monoculus apus) of the type species of the type genus, an error which gives to the family-group name so published the misleading appearance of having been based as, in fact, Burmeister's later name APIDAE was based—upon the generic name Apus Cuvier, 1800. Two of the remaining names will also be invalid if the Commission accepts the proposals at the genericname level submitted in the present application. For, if the International Commission suppresses the generic names Binoculus Müller (O.F.), 1776, and Phyllopus Rafinesque, 1815, under its Plenary Powers, the family-group names based on those generic names (BINOCULIDAE Fowler, 1912, and PHYLLOPODIDAE (correction of PHYLLOPIA) Rafinesque, 1815) will both thereby also be automatically suppressed under the Ruling given by the Commission in Declaration 20 (1955, Ops. Decls. int. Comm. zool. Nomencl. 10(19): i-viii). The avoidance of the need for using the name PHYLLOPODIDAE is particularly satisfactory, for, so far as we know, no one apart from Rafinesque has ever employed this name, the reintroduction of which after so long an interval would be bound to give rise to confusion. The rejection of the name BINOCULIDAE is also much to be welcomed, for this name has hardly, if at all, been used in carcinological literature. The rejection of the names discussed above will leave the wellestablished name TRIOPSIDAE Keilhack, 1909, based on Triops Schrank, 1803, the oldest available, and indeed the only available, name for this family of Crustacea.

28. The three family-group names in the Class Aves which are involved in the present case are all objective synonyms of one another, the type genus of each having the Swift, *Hirundo apus* Linnaeus, 1758, as its type species. Of these names, the first, CYPSELINAE (type genus: Cypselus Illiger, 1811) was published by Bonaparte in 1838 and the second, MICROPODIDAE (type genus: Micropus Wolf, 1810) by Stejneger in 1885. The third, based upon the generic name Apus Scopoli, 1777,

was first published in 1897, in which year it was published independently by two different authors, namely as APODIDAE by Reichenow and as APODINAE by Hartert. Reichenow's name was the first to be published. as is shown by the fact that in Hartert's paper there is a direct reference to that by Reichenow. We must note here, however, that, although Reichenow published the name APODIDAE, he made it clear that he himself rejected this name and considered that it ought not to be used in zoological nomenclature, writing of it as follows: "Da die Anwendung von Apodidae sich nicht empfehlen dürfte ". Accordingly, under a decision taken by the Copenhagen Congress that a name is not to be treated as having acquired the status of availability if its author makes it clear that it is published by him for some purpose other than for use in zoological nomenclature (1953, Copenhagen Decisions zool. Nomencl.: 63, Decision 114) the name APODIDAE did not acquire the status of availability through being published by Reichenow in the manner described above. The family-group name based on the generic name Apus Scopoli, 1777, is therefore to be attributed to Hartert by whom it was published in conditions which satisfied the requirements of the Règles. We see therefore that the position as regards the three family names discussed above is that the name (APODIDAE) based on the valid name of the type genus (Apus Scopoli) is of later date than either of the other two names (CYPSELINAE; MICROPODIDAE). Up to 1953, however, it would still have been the valid name for this family of birds. However, under a decision taken by the Copenhagen Congress in that year (1953, Copenhagen Decisions zool. Nomencl.: 36, Decision 54(1)(a)) a family-group name based upon a generic name which (as here) is a junior objective synonym of another generic name is nevertheless to be retained. Accordingly, in the absence of remedial action by the Commission the valid name for this family is CYPSELIDAE.

29. Having examined separately the family-group name problems which arise in connection with the names to be used for the families of Crustacea and birds involved in the present case, we must now consider the position of the names for these families in relation to the name APODIDAE which has been bestowed upon both. In the case of the family of Crustacea we have seen that the name APODIDAE which is based upon the invalid name Apus Cuvier was formerly widely used by carcinologists. During the last forty-five years, however, it has been largely replaced by the name TRIOPSIDAE following the initiative of Keilhack and later authors. In the case of the family of birds an exactly opposite movement has been in progress, for, whereas formerly the names CYPSELIDAE and MICROPODIDAE were both widely used, the name APODIDAE has been making steady progress and is now used by the majority of authors. This name, for example, is used in Peters's Check-List of Birds of the World, in the Handbook of British Birds and in Roger Tory Peterson's Field Guide to the Birds of Britain and Europe and the same author's Field Guide to the Birds Found East of the Rockies. It is moreover the name which is accepted in the Check-List prepared by the British Ornithologists' Union. At this stage it would clearly be a retrograde step from the point of view of nomenclatorial stability to abandon the name APODIDAE in favour of either CYPSELIDAE or MICROPODIDAE. Prior to the Copenhagen Congress of 1953 the Règles contained no provision regulating the action to be taken in cases where a state of homonymy arose at the family-name level as the result of such names being formed in different groups from generic names which were themselves homonyms of one another, being words having the same stem (thème). This matter was considered by the Copenhagen Congress of 1953 which inserted in the Règles a provision that, where two family-group names were found to be homonyms of one another by reason of being based upon generic names which possess the same stem but are not themselves homonyms of one another, the case is to be referred to the International Commission for decision. The Congress further directed that the Commission was to make a spelling change in one of the names sufficient to bring the condition of homonymy to an end. The decision so taken covers the case where each of two similar but valid generic names (such as Cyprina and Cyprinus) is taken as the base for a family-group name with the result that the two names so formed consist of the same word (in the case cited above, the word CYPRINIDAE). The foregoing decision gives no guidance, however, as to the action which should be taken where as in the present case a family name in current use, such as the name APODIDAE in birds, is a junior homonym of a family name in some other group, which is invalid by reason of the fact that the name of its type genus (in the case of the family APODIDAE in Crustacea, the name Apus Cuvier, 1800) is itself a junior homonym of the name of the type genus (in the case of the family APODIDAE in Aves, the name Apus Scopoli, 1777) of the other family. The omission of the Copenhagen Congress to deal with this class of case was no doubt accidental and it is reasonable to infer that in such a case the correct course is to refer the matter to the Commission for decision.

30. In the present case the position as regards the family of Crustacea concerned is that the name APODIDAE is invalid because (as we have seen in paragraph 27 above) it is based upon a generic name which itself is a junior homonym of another generic name. For this reason and because of the confusion which would arise owing to the wide usage of the name APODIDAE in ornithology, there would clearly be no justification for the re-introduction of this name in carcinology, where moreover the name TRIOPSIDAE must now be regarded as being firmly entrenched. In the case of the family of birds the name APODIDAE is based upon the valid name of the type genus of the family, and is currently the name most commonly used for that family. Further, apart from the doubts as to the treatment to be accorded to homonymous family-group names which then existed, the name

APODIDAE, as being the name based upon the valid name of its type genus, was the valid name for this family up to the time when in 1953 the rules were changed by the Copenhagen Congress. Accordingly, it may be concluded that the interests of nomenclatorial stability in the two groups concerned will be best served by a settlement under which (a) the name TRIOPSIDAE is confirmed as the name for the family of Crustacea formerly known as APODIDAE and (b) the name APODIDAE is accepted as the family name for the family of birds formerly known either as CYPSELIDAE or as MICROPODIDAE. A solution on these lines is accordingly recommended. This solution will involve the suppression by the Commission under its Plenary Powers of the names CYPSELINAE Bonaparte, 1838, and MICROPODIDAE Stejneger, 1885, both of which have priority over APODIDAE Hartert, 1897.

Recommendations

- 31. In the light of the considerations set forth in the present application the International Commission is asked to take the following action for the purpose of restoring order and preventing further confusion in the nomenclature of the groups concerned, namely that it should:—
 - (1) use its Plenary Powers :-
 - (a) to suppress for the purposes of the Law of Priority but not for those of the Law of Homonymy the under-mentioned names of genera, each of which has as its type species either *Monoculus apus* Linnaeus, 1758, or the objectively identical nominal species *Binoculus palustris* Müller (O.F.), 1776:—
 - (i) Binoculus Müller (O.F.), 1776;
 - (ii) Apos Scopoli, 1777;
 - (iii) Apodium Rafinesque, 1814;
 - (iv) Phyllopus Rafinesque, 1815;
 - (b) to suppress for the purposes of the Law of Priority but not for those of the Law of Homonymy the under-mentioned names of family-group taxa in the Class Aves:—
 - (i) CYPSELINAE Bonaparte, 1838;
 - (ii) MICROPODIDAE Stejneger, 1885;

- (c) under the procedure prescribed by the Thirteenth International Congress of Zoology, Paris, 1948, for determining the type species of a genus based upon a misidentified type species, to set aside all type designations or selections for the genus *Triops* Schrank, 1803, made prior to the Ruling now asked for and, having done so, to designate *Apus cancriformis* Bosc, [1801—1802], to be the type species of the foregoing genus;
- (d) to direct that the gender to be attributed to the generic name *Triops* Schrank, 1803, shall in accordance with established practice be the masculine gender;
- (2) take note that under the Ruling given in *Declaration* 20 the undermentioned family-group names will automatically be suppressed for the purposes of the Law of Priority but not for those of the Law of Homonymy in the event of the suppression under the Plenary Powers of the names of the type genera of the taxa respectively concerned as recommended in (1)(a) above:—
 - (a) BINOCULIDAE Fowler, 1912 (type genus: Binoculus Müller (O.F.), 1776);
 - (b) PHILLOPIA (Invalid Original Spelling for PHYLLOPODIDAE) Rafinesque, 1815 (type genus: *Phyllopus* Rafinesque, 1815);
- (3) place the under-mentioned generic names on the Official List of Generic Names in Zoology:—
 - (a) Lepidurus Leach, 1819 (gender: masculine) (type species, by monotypy: Monoculus apus Linnaeus, 1758, as defined by the lectotype selected by Holthuis in the present application) (Class Crustacea);
 - (b) Triops Schrank, 1803 (gender: masculine, as determined under the Plenary Powers under (1)(d) above) (type species, by designation under the Plenary Powers under (1)(c) above: Apus cancriformis Bosc, [1801—1802] (Class Crustacea);
 - (c) Apus Scopoli, 1777 (gender: masculine) (type species, by monotypy: Hirundo apus Linnaeus, 1758) (Class Aves);
- (4) place the under-mentioned specific names on the Official List of Specific Names in Zoology:—
 - (a) apus Linnaeus, 1758, as published in the combination *Monoculus apus*, as defined by the lectotype selected by

- Holthuis in the present application (specific name of type species of *Lepidurus* Leach, 1819) (Class Crustacea);
- (b) cancriformis Bosc, [1801—1802], as published in the combination Apus cancriformis (specific name of type species of Triops Schrank, 1803) (Class Crustacea);
- (c) apus Linnaeus, 1758, as published in the combination *Hirundo apus* (specific name of type species of *Apus* Scopoli, 1777 (Class Aves);
- (5) place the under-mentioned generic names on the Official Index of Rejected and Invalid Generic Names in Zoology:—
 - (a) Apodium Rafinesque, 1814, as suppressed under the Plenary Powers under (1)(a)(iii) above;
 - (b) Apos Scopoli, 1777, as suppressed under the Plenary Powers under (1)(a)(ii) above;
 - (c) Apus Schaeffer, 1756 (invalid because published before the starting point of zoological nomenclature);
 - (d) Apus Cuvier, 1800 (a junior homonym of Apus Scopoli, 1777);
 - (e) Apus Latreille, [1802—1803] (a junior homonym of Apus Scopoli, 1777);
 - (f) Apus Schoch, 1868 (a junior homonym of Apus Scopoli, 1777);
 - (g) Binoculus Geoffroy, 1764 (a name published in a work rejected for nomenclatorial purposes);
 - (h) Binoculus Müller (O.F.), 1776, as suppressed under the Plenary Powers under (1)(a)(i) above;
 - (i) Brachypus Meyer, 1814 (a junior objective synonym of Apus Scopoli, 1777);
 - (j) The under-mentioned names, each of which is a junior homonym of *Brachypus* Meyer, 1814:—
 - (i) Brachypus Swainson, 1824;
 - (ii) Brachypus Meigen, 1824;
 - (iii) Brachypus Gray (J.E.), 1825;
 - (iv) Brachypus Schoenherr, 1826;
 - (v) Brachypus Fitzinger, 1826;
 - (vi) Brachypus Guilding, 1828;

- (k) Brevipes [Palmer], 1836 (a junior objective synonym of Apus Scopoli, 1777);
- (1) Cypselus Illiger, 1811 (a junior objective synonym of Apus Scopoli, 1777);
- (m) *Micropus* Wolf, 1810 (a junior objective synonym of *Apus* Scopoli, 1777);
- (n) The under-mentioned names, each of which is a junior homonym of *Micropus* Wolf, 1810 :—
 - (i) Micropus Hübner, 1818;
 - (ii) Micropus Gray (J.E.), 1831;
 - (iii) Micropus Swainson, [1832];
 - (iv) Micropus Spinola, 1837;
 - (v) Micropus Denny, 1842;
 - (vi) Micropus Kner, 1868;
- (o) Monops Billberg, 1820 (a junior objective synonym of Lepidurus Leach, 1819);
- (p) Phyllopus Rafinesque, 1815, as suppressed under the Plenary Powers under (1)(a)(iv) above;
- (q) Thriops Ghigi, 1921 (an Erroneous Subsequent Spelling for Triops Schrank, 1803);
- (r) Trinoculus Voigt, 1836 (a junior objective synonym of Lepidurus Leach, 1819);
- (s) *Triopes* Schrank, 1803 (an Invalid Original Spelling for *Triops* Schrank, 1803);
- (6) place the under-mentioned specific names on the Official Index of Rejected and Invalid Specific Names in Zoology:—
 - (a) palustris Müller (O.F.), 1776, as published in the combination Binoculus palustris (a junior objective synonym of apus Linnaeus, 1758, as published in the combination Monoculus apus);

- (b) cancriformis Lamarck, 1801, as published in the combination Limulus cancriformis (a junior objective synonym of apus Linnaeus, 1758, as published in the combination Monoculus apus);
- (c) productus Bosc, [1801—1802], as published in the combination Apus productus (a junior objective synonym of apus Linnaeus, 1758, as published in the combination Monoculus apus);
- (7) place the under-mentioned names on the Official List of Family-Group Names in Zoology:—
 - (a) TRIOPSIDAE Keilhack, 1909 (type genus: *Triops* Schrank, 1803, with the type species designated under the above Powers under (1)(c) above) (Class Crustacea);
 - (b) APODINAE Hartert, 1897 (type genus Apus Scopoli, 1777) (Class Aves);
- (8) place the under-mentioned family-group names on the Official Index of Rejected and Invalid Family-Group Names in Zoology:—
 - (a) APIDAE Burmeister, 1843 (type genus: Apus Cuvier, 1800) (an Invalid Original Spelling for APODIDAE) (invalid because based upon a generic name rejected as a junior homonym of an earlier name, namely Apus Scopoli, 1777) (Class Crustacea);
 - (b) APODES Billberg, 1820 (type genus: Monops Billberg, 1820) (an Invalid Original Spelling for APODIDAE) (invalid because based not upon the name of the type genus (Monops) but upon the specific name (apus) Linnaeus, 1758, as published in the combination Monoculus apus) of the type species of the type genus);
 - (c) APODIDAE Agassiz (J.L.R.), 1846 (type genus: Apus Cuvier, 1800) (a correction of the Invalid Original Spelling APIDAE Burmeister, 1843) (invalid because based upon a generic name rejected as a junior homonym of an earlier name, namely Apus Scopoli, 1777) (Class Crustacea);
 - (d) APODIDAE Reichenow, 1897 (type genus: Apus Scopoli, 1777) (invalid because published for some purpose other than for use in zoological nomenclature) (Class Aves);

- (e) APUSIENS Milne Edwards (H.), 1840 (type genus: Apus Cuvier, 1800 (invalid because a vernacular (French) word and not a Latinised word) (Class Crustacea);
- (f) BINOCULIDAE Fowler, 1912 (type genus: Binoculus Müller (O.F.), 1776) (suppressed under the Plenary Powers automatically through the suppression under those Powers of the name of its type genus) (Class Crustacea);
- (g) CYPSELINAE Bonaparte, 1838, as suppressed under the Plenary Powers under (1)(b) above (type genus: Apus Scopoli, 1777) (Class Aves);
- (h) MICROPODIDAE Stejneger, 1885, as suppressed under the Plenary Powers under (1)(b) above (type genus *Micropus* Wolf, 1810) (Class Aves);
- (i) PHILLOPIA Rafinesque, 1815 (type genus: *Phyllopus* Rafinesque, 1815) (an Invalid Original Spelling for PHYLLOPODIDAE) (Class Crustacea).

II. THE SUBSEQUENT HISTORY OF THE CASE

- **2.** Registration of the present application: Upon the receipt of Dr. Holthuis' preliminary communication in September 1955 the problem presented by the divergent uses of the generic name *Apus* was allotted the Registered Number Z.N.(S.) 1020.
- **3. Publication of the present application:** The present application was sent to the printer on 29th February 1956 and was published on 26th June of the same year in Part 3 of Volume 12 of the *Bulletin of Zoological Nomenclature* (Holthuis & Hemming, 1956, *Bull. zool. Nomencl.* **12:** 67—85).
- **4.** Issue of Public Notices: Under the revised procedure prescribed by the Thirteenth International Congress of Zoology,

Paris, 1948 (1950, Bull. zool. Nomencl. 4:51—56), Public Notice of the possible use by the International Commission on Zoological Nomenclature of its Plenary Powers in the present case was given on 26th June 1956 (a) in Part 3 of Volume 12 of the Bulletin of Zoological Nomenclature (the Part in which the application by Dr. Holthuis and Mr. Hemming was published) and (b) to the other prescribed serial publications. In addition such Notice was given to four general zoological serial publications and to twelve ornithological serials in various parts of the world.

- 5. Comments received: The publication of the present application and the issue of Public Notices in regard thereto elicited comments from ten specialists (Denmark, one; Germany, one; The Netherlands, one; United Kingdom, one; U.S.A., six). With one exception all the specialists concerned supported the general object of the present application either from the carcinological, or from the ornithological point of view. Two of the specialists who indicated general support-and also the specialist who expressed opposition to the proposal submitted took exception to a proposal submitted on one point of detail, namely the recommendation that, in order to provide a valid basis for long-established practice the Commission, when dealing with the generic name Triops Schrank, 1803, one of the names involved, should use its Plenary Powers to direct that the gender to be assigned to that name should be the masculine gender instead of the feminine gender prescribed for names having the termination "-ops" by the Copenhagen Congress. The communications discussed above are reproduced in the immediately following paragraphs.
- 6. Support received from Henning Lemche (Universitetets Zoologiske Museum, Copenhagen), subject to a reservation on the question of the gender to be assigned to the generic name "Triops" Schrank, 1803: On 29th June 1956 Dr. Henning Lemche (Universitetets Zoologiske Museum, Copenhagen) addressed the following letter to the Office of the Commission in support of the present case, subject to a reservation on the question of the gender to be assigned to the generic name Triops Schrank, 1803:—

There is a minor point in the application of Holthuis on Apus which—as being a point of principle—I feel it necessary to object to,

viz. the deliberate changing of the gender of generic names in order to suit any little group of specialists which, for some reason, have adopted another gender than usual for names with special endings in some special group.

It is to be remembered that all zoologists are accustomed to the change of gender when a species is transferred to another genus. These changes never give rise to difficulties. So, the inconvenience is very small of changing the gender in the relatively few genera where it has been found that the ending used does not conform to general practice among specialists in most other groups of the animal kingdom.

On the other hand, the general zoologist cannot be oriented about special practices in the taxonomy of every single larger taxon. He will be at a loss when he is to find out what is the correct gender to be used if there is no general conformity, and if he will have to consult some new *Opinion* in every single case.

I don't care much what will be in future the correct gender of *Triops* or any other "-ops" but I think it essential that we do not add to general nomenclatorial confusion by making exceptions from the general Rules in minor cases as, e.g. such of the gender.¹ All too much has already been done along this line, and I am afraid that we cannot continue without looking for the consequences. Perhaps it may even be wiser to revise the cases where exceptions have already been made.

So, I should like to urge that the general problem of the gender of all "-ops's" should be decided upon as a whole or—rather—as part of the general problem whether such endings should be allowed to have different genders in different groups.

In the case of *Triops*, I am opposed to the proposal that the gender of this name should be treated separately, without regard to the general problem involved. So, I propose that the item relative to this point in Holthuis' application be deleted, substituted by a note that the gender of *Triops* is to be decided upon as part of the whole problem of uniformity of the gender of generic names with special endings throughout the animal kingdom.

Support received from Ernst Mayr (Museum of Comparative Zoology at Harvard College, Cambridge, Mass., U.S.A.).: In a

When later it was established that the Rule provisionally adopted by the Copenhagen Congress regarding the gender to be assigned to generic names having the termination "-ops" was incorrect and measures were taken to rectify the deficiency so disclosed (paragraph 17 below), Dr. Lemche (in a letter dated 28th February 1957) withdrew his objection of the attribution of the masculine gender to the generic name *Triops* Schrank, adding the hope "that we are now approaching general agreement in this case".

letter dated 18th July 1956 Professor Ernst Mayr (Museum of Comparative Zoology at Harvard College, Cambridge, Mass., U.S.A.) intimated his support for the present application as follows:—

I congratulate Holthuis and you on this exceptionally thorough and well balanced treatment.

8. Support received from W. Meise (Zoologisches Staatsinstitut und Zoologisches Museum, Hamburg, Germany): On 18th August 1956 Dr. W. Meise (Zoologisches Staatsinstitut und Zoologisches Museum, Hamburg, Germany) addressed the following note of support to the Office of the Commission (Meise, 1956, Bull. zool. Nomencl. 12:288):—

In thanking Dr. Holthuis for a copy of his and your paper on Apus, I should very much like to say that my comment is a full "yes" concerning birds, which I know better than "Apus productus" (as we named the Phyllopod when we caught it alive near Berlin, 30 years ago). It seems to me that this is an ideal case for the Commission, as they have only to fix matters as they are now, and to fit them under the Rules as far as possible.

9. Support received from K. H. Voous (Zoologisch Museum, Amsterdam, Netherlands): On 20th August 1956 Professor K. H. Voous (Zoologisch Museum, Amsterdam, Netherlands) addressed the following note of support to the Office of the Commission (Voous, 1956, Bull. zool. Nomencl. 12:288):—

I take much pleasure in informing you that I am strongly supporting the recommendations made by Dr. L. B. Holthuis and you relative to the use of the generic name Apus Scopoli, 1777 with type species Hirundo apus Linnaeus, 1758 and the family-group name APODINAE (Class Aves) as well as all other recommendations for the use or the rejecting of other avian specific, generic and group names in the Bulletin of Zoological Nomenclature Vol. 12, pages 81—85.

10. Support received from Alan Longhurst (London): On 24th August 1956 Mr. Alan Longhurst (London) addressed the following

letter to the Office of the Commission in support of the present case (Longhurst, 1956, Bull. zool. Nomencl. 12:288):—

You may be aware of my recent systematic review of the Notostraca in *Bull. Brit. Mus.* (nat. Hist.) 3(1): 1—57 in which I have made use of the nomenclature whose usage you are seeking to regulate; I am fully in agreement with your proposals with regard to the nomenclature to be adopted in the Notostraca and deplore the retention of *Apus* Scopoli, 1777, for a genus of Swifts, I am not competent to comment but on the strength of the arguments you advance and on its very widespread acceptance among ornithologists, I would feel that you are correct in its usage.

11. Support received from Walter G. Moore (Loyola University, New Orleans, U.S.A.): The following note dated 14th September 1956 in which Dr. Walter G. Moore (Loyola University, New Orleans, U.S.A.) indicated his support for the proposals submitted in this case was transmitted to the Office of the Commission by Dr. L. B. Holthuis (the senior co-applicant) on 1st October 1956 (Moore, 1956, Bull. zool. Nomencl. 12:314):

I shall be sorry to stop using the name Apus for the Notostracan, but you have presented a very convincing case as to the necessity for such a change.

12. Support received from N. T. Mattox (University of Southern California, Los Angeles, California, U.S.A.): On 18th September 1956 Dr. N. T. Mattox (University of Southern California, Los Angeles, California, U.S.A.) addressed the following letter of support to the Office of the Commission:—

It was with a great deal of interest that I read the recent paper by you and Dr. Holthuis in regard to the names *Lepidurus* Leach, *Triops* Schrank and APODIDAE Hartert.

As one who is interested in the phyllopod-crustacea I heartily agree with the establishment of the generic names *Lepidurus* Leach and *Triops* Schrank and the elimination of the confusion caused by the use of *Apus* in the crustacea.

13. Support received from Ralph W. Dexter (Kent State University, Kent, Ohio, U.S.A.): On 15th November 1956

Professor Ralph W. Dexter (Kent State University, Kent, Ohio, U.S.A.) addressed the following letter to the Office of the Commission in support of the present case:—

I have read carefully the report which Dr. L. B. Holthuis and you published in Volume 12, Part 3 of the *Bulletin of Zoological Nomenclature* and I agree with the recommendations which you gentlemen propose.

It happens by coincidence that I am particularly interested in both phyllopod Crustacea and the group of birds known as Swifts. For many years I have been disturbed over the fact that both groups employ a common generic name (i.e. Apus). Substituting the generic name Triops for Apus and making the corresponding adjustments would correct the situation. It may be of interest to point out a recent monograph on the Notostraca by Alan R. Longhurst (1955, Bulletin of the British Museum of Natural History, Zoology, Vol. 3, No. 1) uses the generic name Triops in place of the formerly recognised generic name of Apus. It is encouraging that specialists themselves are correcting the unfortunate situation which has existed for so long.

14. Support received from Alexander Wetmore (Smithsonian Institution, Washington, D.C., U.S.A.), subject to a reservation on the question of the gender to be assigned to the generic name "Triops" Schrank, 1803: On 21st November Dr. Alexander Wetmore (Smithsonian Institution, Washington, D.C., U.S.A.) sent the following letter to the Office of the Commission in support of the present case, subject to a reservation on the question of the gender to be assigned to the generic name Triops Schrank, 1803:—

Reference is made to a proposal before the International Commission of Zoological Nomenclature relative to certain names to be employed for Crustacea, and particularly to the use of the family name APODIDAE for a group of birds.

While I do not care to enter into discussion of the rather complicated procedures outlined in connection with the crustacean names which do not concern directly my own fields of study, except for one matter mentioned below, I recommend strongly the continuation of APODIDAE as a family name in Aves for the group of swifts. The term APODIDAE was set up originally in direct conformation with the Rules of Nomenclature in force at the time. Further, under those rules it was not in competition with any crustacean name since Apos Scopoli, 1777, was antedated by Binoculus Müller, 1776.

The generic term Apus Scopoli, 1777, in addition to being the base for the family name of the swifts, serves also for the higher categories of classification in this group in the ordinal term Apodiformes, and the suborder Apodi. These, as your submission indicates are now widely established in ornithology. In addition to the official list of the British Ornithologists Union that you cite, these names are employed in the fifth edition of the official check-list of the American Ornithologists Union which is now in press.

Under Recommendation (7)(d), p. 81, it is proposed that the generic name *Triops*, as a word of feminine gender, be declared masculine in accordance with erroneous current practise. Errors in usage of this have not been unusual, and it has come about in a number of cases that workers, myself among them, intent on their problems, have followed such erroneous treatment without critical consideration of the derivation of the name. Any action of the International Commission in such errors would in my opinion be directed toward correction rather than perpetuation by decree. Since correction involves at most the minor matter of a change in one or two letters at the end of a specific or subspecific term, there can be no reasonable basis for claim of resultant confusion or hardship. I recommend as strongly as possible that all such requests be denied.

15. Objection received from Paul Tasch (University of Wichita, Wichita, Kansas, U.S.A.): On 31st July 1956 Professor Paul Tasch (University of Wichita, Wichita, Kansas, U.S.A.) addressed the following letter to the Office of the Commission in which he set out his objections to the present case (Tasch, 1956, Bull. zool. Nomencl. 12: 312—313):—

A recent note by the Commission appearing in Science, 26th December 1955, read: "Lepidurus Leach, 1819 validation; Triops Schrank, 1803—determination of gender and designation of type species for (Class Crustacea, Order Decapoda)".

I should like to discuss the second item. The Order is incorrectly given. The Order should be Notostraca. In addition, I wish to contest the propriety of restoring the name *Triops*. I think *Triops* should be replaced by *Apus* for the following reasons:—

(1) The most cogent argument for validation of the name Apus and rejection of the name Triops has been given by a foremost student of the notostracans, R. Gurney (1923, "Notes on some British and

North African specimens of Apus cancriformis Schaeffer " (Ann. Mag. nat. Hist. (9) 11: 496—502)). The essence of his thesis is:

(a) The name Apus cancriformis has been used for generations. This form has been widely figured in zoological literature. Writers on zoological subjects continue to use this name, whereas systematists have replaced it by Triops.

One of the leading students of notostracans, Folke Linder (1952, "Contributions to the morphology and taxonomy of the Branchiopoda Notostraca, with special reference to the N.A. species" (*Proc. U.S. nat. Mus.* 102: 1—69) wrote: "I fully agree with Gurney and Barnard that the name of *Triops* Schrank, 1803, pp. 180, 251 (sometimes spelled *Triopes* or *Thriops*, ought to be rejected" (footnore, *idem.*: 52).

These views were endorsed by the present writer (1955, J. Paleont. 29(3): 556; 29(6): Paleontologic Notes).

- (b) Until the introduction of the Rules, no ambiguity ever attached to the name *Apus* applied to the branchiopod crustacean.
- (c) Scopoli's original use of the name is itself ambiguous since he applied Apus to the bird that had become known as Cypselus, and on a preceding page applied the name Apos to the anostracan now known as Branchipus. Hence the argument that Apus is occupied applying to a bird is in error since Apos applied to a branchiopod used on an earlier page, actually had priority over Apus. Thus, the transference of the name Apus to a bird is, in fact itself a violation of the Rules.
- (2) Schrank (1803, Fauna Boica. 3: 1—272) used the name Triopes palustris (p. 251) and Triops (p. 180). In the synonymy that Schrank gives (p. 251), it is of interest that he does not cite Scopoli. Rather he lists Limulus palustris Müller and Monoculus apus L. In other words, Schrank did not erect the new name Triops or Triopes in order to replace the Apus of Scopoli. If he did, it is most curious that Scopoli is not mentioned in the synonomy he gives. Yet it is from Scopoli's use of the name Apus that the argument of its being an occupied name arises. This argument was first advanced by Keilhack (1910). Although he used the name Triops in 1909 in a handbook on German Phyllopods, no argument was given at that time for its use. (Cf. Keilhack (L.), 1910, "Zur Nomenklature der deutschen Phyllopoden" (Wurzburg, Zool. Ann. 3: 177—184).)

- (3) Now Keilhack's argument (idem: 181) was that Apos Scopoli is a synonym of Branchipus Schaeffer and that his Apus applied to the bird known by the generic name of Cypselus. Hence, he was satisfied that Apus in any form was a preoccupied name. However, there are several aspects to consider that shed a different light on the matter. If, as argued by Gurney (and agreed in by the present writer) Apos has priority over Apus, then Apus is not an occupied name. Although it is true as Gurney pointed out that it is a homonym by Article 34 of the International Rules, this, in itself, is not the most important desideratum. In addition, Schrank's Triops was invalid at the time it was proposed (1803) because it was not erected to replace Scopoli's genus Apus and the genus which it was erected to replace was not itself invalid at the time. Keilhack's argument in 1910 cannot establish belatedly the validity of the Rules in the year 1803. This would be like living backwards. I feel that we must let each taxonomy be sufficient unto its own day and evaluate it in the context of its times, the contemporary practices, knowledge, misconceptions, etc. Proceeding as Keilhack did, we would rewrite all of history and much of the history of science to bring it up to date.
- (4) Thus there is a multipronged argument against the acceptance of *Triops* and rejection of *Apus*. These can be summarised as follows:—
 - (a) World wide usage in zoological literature of the name Apus with no confusion resulting, up to the time of Keilhack (1910).
 - (b) The contradictory usage by Scopoli of Apos and Apus.
 - (c) The multiple spelling of the name *Triops* by Schrank, and the fact that he did not indicate that he was replacing Scopoli's name *Apos* or *Apus*, rather that he was replacing names not then occupied.
 - (d) No set of Rules should be made retroactive in a way to rewrite the history of actual events. As matters stand, Keilhack, in 1910, is creeping into Schrank's mind, putting words in Schrank's mouth in the year 1803. This impresses the writer as an absurdity.
- (5) In the event that the Commission holds that *Triops* has long since been validated I urge it to reopen the matter. The very question it now is considering, i.e. the gender and type species of *Triops*, better than anything else, indicates the confusion surrounding use of this name. By contrast, no confusion is possible for *Apus* (*A. cancriformis*). No zoologist anywhere in the world would, on reading this last name, think it was a bird or an anostracan. Instantaneous recognition that it was a notostracan would obtain,

- (6) Even though by "letter of the law" reading, Keilhack's argument can be sustained it seems advisable to heed the consensus of some of the world's leading students of the notostracans that *Apus* prevail and *Triops* be rejected.
- (7) In the Branchiopoda section of the *Treatise on Invertebrate Paleontology* (in press), the writer has used the name *Apus* in the unit on Notostraca.
- 16. Review of the question of the gender properly attributable to the generic name "Triops" Schrank, 1803: Following the close at the end of December 1956 of the Prescribed Six-Month Waiting Period following the publication of the present application in the Bulletin of Zoological Nomenclature, the position reached in this case was reviewed by the Secretary early in the year 1957. It was evident that in general the proposals submitted for the settlement of the Apus problem had been warmly welcomed both by carcinologists and by ornithologists and had secured an overwhelming measure of support. The only question still outstanding on which a decision would be needed if the Commission were to give its approval to the proposals submitted was the question of the gender to be attributed to the generic name Triops Schrank, 1803. Of the specialists who had commented on the present case (paragraph 5 above) seven (7) had supported the validation of the masculine gender as the gender to be attributed to the generic name Triops Schrank, but (3) had expressed opposition to this proposal on the ground that, in their view, the gender to be attributed to any given generic name should be the classically correct gender and therefore that no exceptions to the gender rules laid down by the Copenhagen Congress in 1953 ought to be permitted. At that time the status of the gender rules laid down in Copenhagen Decision 84 (1953, Copenhagen Decisions zool. Nomencl.: 49-51) provisional only, the Copenhagen Congress having expressly stipulated by its Decision 85 (loc. cit.: 51) that those Rules should be reviewed by the Commission before coming definitely into operation. Mr. Hemming accordingly took the view that an effort should be made to secure that, when the Commission came to vote on the question of the gender to be attributed to the generic name Triops, it should have before it also the material needed to enable it to review, in accordance with the provisions of Copenhagen Decision 85, the Rule relating

to the gender to be assigned to names having the termination "-ops" provisionally laid down in Copenhagen Decision 84. Mr. Hemming thereupon invited Professor L. W. Grensted. Consulting Classical Adviser to the Commission, to whom the whole question of the appropriateness of the gender Rules laid down in Decision 84 had already been remitted, to submit an Interim Report on the provision relating to the gender to be attributed to "-ops" names included in that Decision in advance of the comprehensive Report which he had been asked to prepare. In response to this request Professor Grensted submitted in February 1957 an Interim Report on the foregoing provision in which it was shown that broadly speaking names having the ending "-ops" should be treated as feminine when derived from the Greek word $\ddot{o}\psi$, i.e. the word with a short "o" meaning "a voice", but that word having the above termination should be treated as masculine in gender when derived from the Greek word $\ddot{\omega}\psi$, i.e. the word with a long "o" having the meaning "an eye" or "a face". The Report submitted by Professor Grensted showed therefore that the Copenhagen Rule on the subject of the gender to be attributed to names having the termination "-ops" was misleading and, in part, incorrect. It was thus apparent that, if Copenhagen Decision 84 were to be revised by the Commission in the manner recommended, the question of the gender to be attributed to the generic name Triops Schrank would become a matter for interpretation and in consequence the objection to the acceptance of the masculine gender for that name on the ground that such an attribution was not in harmony with the Copenhagen Rule which had been advanced by the three specialists referred to in paragraph 5 above would lose its validity, being seen to be wide of the mark.

17. Procedure adopted for obtaining decisions both as to the gender to be attributed to generic names having the termination "-ops" and as to the proposals submitted for the solution of the "Apus" problem: Upon the receipt from Professor Grensted of the Report on the question of the gender to be attributed to generic names having the termination "-ops" described in the preceding paragraph, Mr. Hemming decided that the proper course in the present case would be to submit to the Commission

two papers simultaneously, the first containing proposals for the adoption of a Declaration giving a revised Ruling under Copenhagen Decision 85 as to the gender to be attributed to generic names having the termination "-ops", the second re-stating the proposals previously submitted for the solution of the Apus problem, this latter paper to contain a recommendation for the determination of the gender to be attributed to the generic name Triops Schrank based upon the Ruling which the Commission would be invited to embody in the Declaration, the possible adoption of which would form the subject of the first of this pair of papers. The paper dealing with the proposed Declaration reviewing under Copenhagen Decision 85 the provisional Rule relating to the gender to be attributed to names having the termination "-ops" was prepared by Mr. Hemming towards the close of February 1957 and was submitted to the Commission on 15th March 1957, together with Voting Paper V.P.(57)25. proposal so submitted was approved by the Commission in its vote on the above Voting Paper. The decision so taken has since been embodied in *Declaration* 36.2

18. Withdrawal by the applicants of the proposal that the masculine gender be attributed to the generic name "Triops" Schrank, 1803, by action under the Plenary Powers and substitution therefor of a proposal that that gender be attributed to the above generic name under the provisions of the "Declaration" asked for in the proposal submitted with Voting Paper V.P.(57)25: The Report by the Commission's Consulting Classical Adviser on the question of the gender properly attributable to generic names having the termination "-ops" was communicated to the applicants immediately upon its receipt in the Office of the Commission. On 26th February 1957 Mr. Hemming addressed the following letter to the Office of the Commission, in which, on behalf of Dr. Holthuis and himself, he withdrew the application previously submitted that the masculine gender should be assigned to the generic name Triops Schrank, 1803, by the Commission under its Plenary Powers and substituted therefor a request that the foregoing gender be assigned to that generic name as the gender correctly applicable thereto after the Copenhagen

The *Declaration* here referred to is being published in the immediately preceding Part of the present volume.

Rule concerned had been reviewed by the Commission in the light of the Report submitted by Professor Grensted:—

Submission of a Revised Proposal regarding the method to be adopted for determining the masculine gender as the gender to be attributed to the generic name "Triops" Schrank, 1803 (Class Crustacea)

By L. B. HOLTHUIS and FRANCIS HEMMING

Dr. Holthuis and I have reviewed the question of the method to be adopted in determining the gender to be attributed to the generic name *Triops* Schrank, 1803, in the light of the conclusions on the subject of the gender attributable to generic names having the termination "-ops" prepared by Professor L. W. Grensted, Consulting Classical Adviser to the International Commission, a copy of which was kindly furnished to us for consideration by the Office of the Commission.

- 2. From the Report submitted by Professor Grensted it is now clear that the gender to be attributed to generic names having the termination "-ops" may be either masculine or feminine in gender according to the Greek word from which the "-ops" portion of the name is derived. The Report shows further that, save in one rare situation which does not arise in the case of the name Triops Schrank, the feminine gender attributed to "-ops" names by the Copenhagen Congress is correct only if the "-ops" portion of the name is derived from the Greek word $\delta \psi$ with a short "o" having the meaning "a voice" and that where the "-ops" portion of the name is based upon the Greek word $\delta \psi$ with a long "o" having the meaning "an eye" or "a face", the gender attributable to the name is the masculine gender.
- 3. In the present case it would, in our opinion, be absurd to suppose that the "-ops" portion of the name Triops is derived from a word having the meaning "a voice", such a meaning being entirely inappropriate for the genus of Crustacea concerned. On the other hand, it would be perfectly reasonable on a priori grounds to conclude that the "-ops" portion of the name Triops was derived from a Greek word having the meaning "an eye" and therefore that under the conclusions reached by Professor Grensted the gender attributable to this generic name is the masculine gender. Reference to the original description establishes beyond question that the foregoing presumption as to what Schrank had in mind is well founded, for, after applying the term "Dreyauge Triops" to this taxon, he described it as follows "Augen: oben: zwey nierenförmig, zusammengesezt; das dritte kugelförmig, einfach, kleiner", thus clearly indicating that it was the three-eyed condition of the species comprised in this group to which he wished to draw attention when giving the name Triops to this genus.

- 4. In these circumstances we are of the opinion that in accordance with the classical rules the correct gender for the generic name *Triops* Schrank is the masculine gender and consider that the proper course would be for the Commission to give a Ruling that the above is the correct gender for this generic name, as soon as it has adopted a *Declaration* clarifying and correcting the Copenhagen Rule as to the gender to be attributed to names having the termination "-ops". We accordingly now withdraw our previous recommendation that the masculine gender be assigned to the name *Triops* Schrank, 1803, under the Plenary Powers and in its place we ask that the foregoing gender be attributed to that name as a matter of interpretation of the *Règles* amended as recommended above.
- 19. Submission to the Commission of the proposals put forward in this case as amended by the applicants in regard to the method asked to be adopted for the determination of the gender to be attributed to the generic name "Triops" Schrank, 1803: On 27th February 1957 Mr. Hemming as Secretary completed the following paper giving particulars of the developments which had occurred since the original submission of this case, including the amendment of the nature of the action asked for in connection with the determination of the gender attributable to the generic name *Triops* Schrank, 1803, set out in the supplementary application submitted by the applicants and reproduced in the immediately preceding paragraph of the present *Opinion*:—

The generic name "Apus" as used correctly in the Class Aves and as used incorrectly in the Class Crustacea and associated problems

By FRANCIS HEMMING, C.M.G., C.B.E.

(Secretary to the International Commission on Zoological Nomenclature)

The application with which the present note is concerned was submitted by Holthuis and Hemming and was published in June 1956 (Bull. zool. Nomencl. 12:67—85), its purpose being to secure the help of the International Commission to put an end to the state of confusion arising from the incorrect use of the generic name Apus in the Class Crustacea (Order Phyllopoda) concurrently with its correct use in the Class Ayes.

2. The issues are complicated not only because names for taxa belonging to two different Classes are involved but also because in the

case of the Crustacea portion of the application two genera are involved owing to the fact that the basic nominal species concerned— Monoculus apus Linnaeus, 1758—was a composite, the components of which are regarded as belonging to different genera and have been so regarded for nearly one hundred and forty years. For the first of these genera the name *Triops* Schrank, 1803 has been, and is, in general use except by those workers who have incorrectly used the name Apus for it. The nominal genus Triops Schrank is, however, technically defective as it was based on a misidentified type species. The Commission is asked to remedy this defect by directing under the special procedure introduced by the International Congress of Zoology for this purpose, that the type species of this genus shall be the species (Apus cancriformis Bosc, [1801—1802]) intended by the original author and long accepted as such. The generic name Triops is always treated as being masculine in gender and the Commission is asked to approve this usage. For the second of the Crustacea genera concerned, the name used by practically all modern carcinologists is Lepidurus Leach, 1819. The Commission is asked to validate this usage by suppressing under the Plenary Powers four long-forgotten and virtually unknown names of earlier date. On the ornithological side, the proposal submitted includes only one recommendation involving the use of the Plenary Powers. The object of this proposal is to secure that the family name for the Swifts shall be a name (APODIDAE) based upon the valid generic name (Apus Scopoli, 1777) for this group of birds.

3. Issue of Public Notices: The application submitted in this case involves the possible use of the Commission's Plenary Powers and Public Notice has accordingly been given in the prescribed manner. In addition, such Notice has been given to four serials concerned with general zoology. As regards specialist serials there is no suitable serial in the carcinological field but in the case of birds there are numerous such serials and Notice was issued to twelve in different parts of the world.

[Paragraph 4 of this paper contained the names and addresses of the specialists who had furnished comments on the application submitted in this case. This paragraph is omitted here, the particulars furnished in it having been given in the paragraphs (paragraphs 6 to 15) of the present *Opinion* in which the comments received have been reproduced in full.]

5. Support for the present proposal: Subject to the point of detail discussed in paragraph 6 below, all the specialists who have commented on the proposals have given it their unqualified support with the exception of Professor Tasch who advocates the validation of the name Apus for the Crustacean genus in place of the name Triops Schrank but who does not comment on the repercussions of this proposal on the avian genus Apus as currently and correctly applied to the Swifts.

- 6. Comments received on the question of the gender to be attributed to the generic name "Triops" Schrank, 1803: A word of explanation is needed in regard to one minor aspect of the present case, namely the gender to be attributed to the generic name Triops Schrank, 1803. In the provisions relating to the determination of the gender of generic names adopted by the Copenhagen Congress one of the provisions prescribed that "names having the final term '-ops' or '-opsis' obviously derived from the corresponding Greek word" are to be treated as being feminine in gender (1953, Copenhagen Decisions zool. Nomencl.: 51, Decision 84(7)(b)(iii)). The generic name Triops Schrank has always been treated as being masculine in gender and in the interest of stability in nomenclature the applicants accordingly asked that the Commission, when dealing with this case, should use its Plenary Powers to direct that the gender to be attributed to this generic name should be the masculine gender. Of the ten specialists who commented on this case, seven of the nine who supported the proposals submitted for settling the Apus-case advocate the proposal for maintaining the currently accepted gender for the name Triops Schrank. The one specialist who was opposed to those proposals commented adversely on the proposed stabilisation of the gender of this generic In addition, two zoologists who are not specialists in this particular group—Lemche (Copenhagen) and Wetmore (Washington, D.C.)—raised objection to the proposal submitted in regard to the gender to be attributed to the generic name Triops, the objection so raised being one of a general character based upon the view that in all circumstances, the technically correct gender should be attributed to generic names, these specialists not believing that the principle of stability propounded by the Copenhagen Congress should be held to be applicable to the question of the gender of generic names.
- 7. Report by the Commission's Consulting Classical Adviser on the question of the gender correctly attributable to generic names having the termination "-ops": At the time when the Fourteenth International Congress of Zoology, Copenhagen, 1953, adopted a series of rules for determining the gender to be attributed to generic names (1953, Copenhagen Decisions zool. Nomencl.: 49—51, Decision 84), it recognised the intrinsic difficulties involved in attempting to lay down general rules in this field and by a further decision—recorded as Decision 85 (loc. cit.: 51)—placed on the International Commission the duty of reviewing the gender rules set out in Decision 84 before those rules were incorporated into the Règles. As a preliminary to placing before the Commission the information needed to enable it to discharge the duty so laid upon it by the Copenhagen Congress, I asked Professor L. W. Grensted, the Commission's Consulting Classical Adviser, to examine in detail the rules set out in Copenhagen Decision 84 and

to advise on the question whether any amendments or clarifications were required. In an Interim Report now received on the subject of the gender to be attributed to names having the termination "-ops" Dr. Grensted states (a) that, if the context shows that the "-ops" portion of a given generic name has the meaning "a voice" and not the meaning "a face", it is clear that the name is derived from the Greek word $\delta\psi$ [short "o"], in which case (as laid down in the Copenhagen Rules) its gender would be feminine, but (b) that, if it is clear from the context that "-ops" portion of a given generic name has the meaning "a face", that portion of the name could have been derived either (i) from the Greek word $\delta\psi$ [short "o"], in which case the gender would be feminine or (ii) from the Greek word $\delta\psi$ [long "o"], in which case the most generally used gender for the Greek word in question is the masculine gender, though there is one recorded instance of its having been treated as a neuter word. Of the two Greek words $\delta\psi$ and $\delta\psi$ having the meaning "a face", the word with a short "o" is a rare contracted form of "-opsis", while the word with a long "o", which is much commoner, is a separate noun.

8. Situation created by the Report received from the Consulting Classical Adviser on the question of the gender attributable to generic names having the termination "-ops": The Report received from the Commission's Consulting Classical Adviser has created an entirely new situation, for it is now apparent that Rule (7)(b)(iii) in the Copenhagen Decision 84 is not capable in its present form of providing a definite basis for determining the gender to be attributed to generic names having the termination "-ops", for there are three different Greek words from any one of which such a generic name may have been derived and in consequence the expression "obviously derived from the corresponding Greek word" which appears in the foregoing Rule is inapplicable except in any rare case where the author of a generic name gave its derivation from the Greek. Further, Dr. Grensted's Report shows that the above Rule, if it could be applied, would produce a correct gender in only a limited number of cases, the correct gender for most names consisting of the word "-ops" and having the meaning "a face" being masculine and not feminine (the gender specified in the above Copenhagen Rule). In its present form that Rule is unworkable and virtually meaningless and accordingly any Ruling given in regard to the gender to be accepted for the generic name Triops Schrank would necessarily need to be given as a matter of interpretation. Thus in this case there is no longer any question of the use of the Plenary Powers for the purpose of determining the gender to be attributed to the generic name Triops Schrank, 1803. In consequence, the only objections received against the acceptance of the masculine gender for this generic name, both of which were based upon a dislike on theoretical grounds to the use of the Plenary Powers for the purpose of stabilising the gender to be attributed to generic

names, namely the objections received from the zoologists specified in paragraph 6 above, fall to the ground and are no longer relevant. (The position has been explained to the zoologists concerned.)

- 9. Procedure now proposed to be adopted: Since for the reasons explained above the generic name *Triops* Schrank, 1803, is not "obviously derived" from a Greek noun of feminine gender the provisional Rule relating to the determination of the gender of generic names having the termination "-ops" adopted by the Copenhagen Congress in 1953 (Decision 84(7)(b)(iii) is inapplicable to that name, the determination of the gender of which is, therefore, a matter which lies entirely within the discretion of the International Commission. Now, however, that a serious flaw has been detected in the Copenhagen Rule relating to the determination of the gender of generic names having the above termination, it would be undesirable to leave that Rule in its present unsatisfactory state. Moreover, to do so would run counter to the instruction given to the Commission by the Copenhagen Congress (Decision 85) that the gender rules then provisionally adopted (Decision 84) should be reviewed and, if necessary, amended prior to their being included in the Règles. Accordingly, I am submitting to the Commission concurrently with the present paper a paper bearing the Registered Number Z.N.(S.) 1206, in which I recommend that in pursuance of the instructions given to it under the foregoing Congress Decision it should adopt a Declaration completing and correcting the defective Rule for determining the gender to be attributed to generic names having the termination "-ops" included as Rule (7)(b)(iii) in Decision 84 of the above Congress.³
- 10. Gender proposed to be assigned to the generic name "Triops" Schrank, 1803: It remains to consider the action to be taken for determining the gender of the generic name Triops, Schrank, 1803, now that for the reasons explained above the decision to be taken in this matter is seen to be a matter for the unfettered discretion of the International Commission. The considerations which alone are relevant in this connection are: (1) The virtual certainty that the "-ops" portion of the above generic name is derived from the Greek word $\omega \psi$ [long "o"], meaning "an eye" or "a face". (2) The gender attributed to the foregoing Greek word in all except one recorded case is the masculine gender. (3) The gender always attributed to the generic name Triops Schrank in the literature is the masculine gender. (4) All except two of the specialists who have indicated their support for the proposals submitted in the present case have recommended the definitive adoption of the masculine gender for the above

³ The proposal here referred to was later approved by the International Commission and has since been embodied in *Declaration* 36. See paragraph 17 of the present *Opinion*.

generic name. Further, the two applicants have now withdrawn their original proposal that the Commission should use its Plenary Powers for the purpose of determining the gender of the generic name *Triops* Schrank, 1803, and in place of that proposal recommend that the Commission should give a direction as a matter of interpretation that the gender to be attributed to the generic name *Triops* Schrank, 1803, shall be the masculine gender.

11. Proposal now submitted for vote: The proposal now submitted is that the Commission should approve and adopt the proposals in relation to the *Apus*-problem and associated matters as set out in paragraph 31 of the application as printed on pages 81 to 95 of Part 3 of Volume 12 of the *Bulletin of Zoological Nomenclature*, subject (a) to the withdrawal of the proposal set out in Point (1)(d) (use of the Plenary Powers to determine the gender of the generic name *Triops* Schrank, 1803), a proposal which as explained in paragraph 10 of the present paper has now been withdrawn, and (b) to the incorporation in the application of a proposal that, acting within its own discretion the Commission should direct that the gender to be attributed to the foregoing generic name be the masculine gender.

III. THE DECISION TAKEN BY THE INTERNATIONAL COMMISSION ON ZOOLOGICAL NOMENCLATURE

20. Issue of Voting Paper V.P.(57)24: On 15th March 1957 a Voting Paper (V.P.(57)24) was issued in which the Members of the Commission were invited to vote either for, or against, "the proposal relating to the *Apus*-problem and associated matters as set out in paragraph 11 of the paper bearing the Registered Number Z.N.(S.) 1020 [i.e. in the paragraph numbered as above in the paper reproduced in paragraph 19 of the present *Opinion*] submitted concurrently with the present Voting Paper".

- **21.** The Prescribed Voting Period: As the foregoing Voting Paper was issued under the Three-Month Rule, the Prescribed Voting Period closed on 15th June 1957.
- 22. Particulars of the Voting on Voting Paper V.P.(57)24: At the close of the Prescribed Voting Period, the state of the voting on Voting Paper V.P.(57)24 was as follows:—
- (a) Affirmative Votes had been given by the following twenty-three (23) Commissioners (arranged in the order in which Votes were received):

Mayr; Vokes; Hering; Boschma; Lemche; Bodenheimer; Prantl; Holthuis; Dymond; Riley; Esaki; Jaczewski; do Amaral; Key; Bonnet; Hemming; Mertens; Sylvester-Bradley; Tortonese; Cabrera; Kühnelt; Stoll; Bradley (J.C.);

(b) Negative Votes:

None;

(c) Voting Papers not returned, two (2):

Hankó; Miller.4

23. Declaration of Result of Vote: On 16th June 1957, Mr. Hemming, Secretary to the International Commission, acting as Returning Officer for the Vote taken on Voting Paper V.P.(57)24,

⁴ After the close of the Prescribed Voting Period a late affirmative Vote was received from Commissioner Miller.

signed a Certificate that the Votes cast were as set out in paragraph 22 above and declaring that the proposal submitted in the foregoing Voting Paper had been duly adopted and that the decision so taken was the decision of the International Commission in the matter aforesaid.

24. Insertion of an additional name on the "Official Index of Rejected and Invalid Generic Names in Zoology: On 27th October 1957, Mr. Hemming, as Secretary, executed the following Minute drawing attention to the omission in the application submitted in the present case of a recommendation for the addition of the name Apus Cuvier (G.L.C.F.D.), [1797—1798], to the Official Index of Rejected and Invalid Generic Names in Zoology and directing that this omission be made good in the Ruling to be prepared for the purpose of giving effect to the decision taken by the Commission by its vote on Voting Paper V.P.(57)24:—

Addition of the generic name "Apus" Cuvier (G.L.C.F.D.), [1797—1798] to the "Official Index of Rejected and Invalid Generic Names in Zoology"

By FRANCIS HEMMING, C.M.G., C.B.E.

(Secretary to the International Commission on Zoological Nomenclature)

In the re-examination of the application relating to the Apus problem in connection with the preparation of the Ruling to be included in the Opinion giving effect to the decision taken by the Commission by its vote on Voting Paper V.P.(57)24, it has come to notice that one of the invalid names involved in the above case was not included in the list of generic names there recommended for addition to the Official Index of Rejected and Invalid Generic Names in Zoology. The name concerned is Apus Cuvier (G.L.C.F.D.), [1797—1798] (Tabl. élém. Hist. nat. Anim.: 700).

2. The above name is the subject of an extended discussion in paragraph 7 of the application submitted in this case.⁵ It is there explained that by some authors the name *Apus* has been treated as

⁵ See pp. 77-78 of the present Opinion.

having been first published as a generic name for the Phyllopod genus now to be known as Lepidurus Leach by the elder Cuvier (i.e. by Baron G.L.C.F.D. Cuvier in [1797—1798] in his Tableau élémentaire de l'Histoire naturelle des Animaux. It is shown by the applicants, however, that in the two passages where Cuvier has been credited with having introduced the name Apus as a generic name in the above work, the name Apus does not occur as a generic name on page 454 (the word appearing there only in the form of a reference to its use as a specific name by Linnaeus and later by Müller), while on the second of the two pages (page 700) cited the name Apus, though cited as a generic name, is not accompanied by any "indication". Accordingly, as pointed out by the applicants in the foregoing paragraph (and also in paragraph 2 of the application) the name Apus Cuvier, [1797—1798], as published on page 700, is a nomen nudum, while, as reputed to have been published on page 454, it is a cheironym.

- 3. Under the "Completeness-of-Opinions" Rule the foregoing name, attributed to page 700 but not to page 454 and noted as being a nomen nudum, should, as a name entering into the present case, now be placed on the Official Index of Rejected and Invalid Generic Names in Zoology. Moreover, quite apart from the foregoing Rule, such a disposition of this name would be desirable, in view of the fact that it is cited as a duly published name in so authoritative a work as Neave's Nomenclator Zoologicus and that in consequence a failure to include this name in the Ruling to be given in the comprehensive Opinion now about to be rendered might readily give rise to misunderstanding and unnecessary discussion.
- 4. Accordingly, as Secretary, I hereby direct that in the Ruling to be prepared giving effect to the decision taken by the Commission by its vote on Voting Paper V.P.(57)24, the name Apus Cuvier (G.L.C.F.D.), [1797—1798] (: 700) be included among the names there to be placed on the Official Index of Rejected and Invalid Generic Names in Zoology, the entry so to be made to be endorsed to show that this name was a nomen nudum.
- 25. Preparation of the Ruling given in the present "Opinion": On 5th November 1957, Mr. Hemming prepared the Ruling given in the present *Opinion* and at the same time signed a Certificate that the terms of that Ruling were in complete accord with those of the proposal approved by the International Commission in its Vote on Voting Paper V.P.(57)24, subject to the minor adjustment specified in the Minute executed by the Secretary on 27th October 1957 (the text of which has been reproduced in paragraph 24 of the present *Opinion*).

26. Original References: The following are the original references for the generic and specific names placed on Official Lists and Official Indexes by the Ruling given in the present Opinion:—

Apodium Rafinesque, 1814, Princip. fond. somiol.: 29

Apos Scopoli, 1777, Introd. Hist. nat.: 404.

Apus Schaeffer (J.C.), 1756, Krebsart. Kiefenfuss: 131

Apus Scopoli, 1777, Introd. Hist. nat.: 483

Apus Cuvier (G.L.C.F.D.), [1797—1798], Tabl. élém. Hist. nat. Anim.: 700

Apus Cuvier (G.F.), 1800, Leçons Anat. comp. 1: tabl. 7

Apus Latreille, [1802—1803], Hist. nat. gén. partic. Crust. Ins. 3:16

Apus Schoch, 1868, Mikr. Thiere 2: iii, 21

apus, Hirundo, Linnaeus, 1758, Syst. Nat. (ed. 10) 1:192

apus, Monoculus, Linnaeus, 1758, Syst. Nat. (ed. 10) 1:635

Binoculus Geoffroy (E.L.), 1764, Hist. abrég. Ins. Env. Paris 2:658

Binoculus Müller (O.F.), 1776, Zool. dan. Prodr.: 200

Brachypus Meyer, 1814, An : Wetterau. Ges. gesammte Naturk. 3:333

Brachypus Swainson, 1824 Zool. J. 1(3): 305

Brachypus Meigen, 1824, Syst. Beschr. europ. zweifl. Ins. 4:34

Brachypus Gray (J.E.), 1825, Ann. Phil. (2) 10: 338

Brachypus Schoenherr, 1826, Curculionid. Disp. meth.: 217

Brachypus Fitzinger, 1826, Neue Classif. Rept.: 20, 50

Brachypus Guilding, 1828, Zool. J. 4(14): 167

Brevipes [Palmer], 1836, Analyst 4: 101

cancriformis, Limulus, Lamarck, 1801, Syst. Anim. sans Vertèbr.: 169

cancriformis, Apus, Bosc, [1801—1802], Castel's Buffon, Hist. nat. Crust. 2: 244

Cypselus Illiger, 1811, Prodr. Syst. Mamm. Av.: 229

Lepidurus Leach, 1819, Dict. Sci. nat. 14:539

Micropus Wolf, 1810, in Meyer & Wolf, Taschenb. deuts. Vögelk. 1:280

Micropus Hübner, 1818, Zutr. z. Samml. exot. Schmett. 1:24

Micropus Gray (J.E.), 1831, Zool. Miscell. (1): 20

Micropus Swainson, [1832], in Richardson, Fauna bor.-amer. 2:486

Micropus Spinola, 1837, Essai Genres Ins. Ordre Hémipt.: 218

Micropus Denny, 1842, Monogr. Anoplurorum Brit.: 247

Micropus Kner, 1868, Sitzber. Kais. Akad. Wiss. Wien (Math.-Nat. Cl.) 58(1): 29, 322

Monops Billberg, 1820, Enum. Ins. Mus. Billberg.: 132

palustris, Binoculus, Müller (O.F.), 1776, Zool. dan. Prodr.: 200

Phyllopus Rafinesque, 1815, Analyse Nature: 99

productus, Apus, Bosc, [1801—1802], Castel's Buffon, Hist. nat. Crust. 2:244

Thriops Ghigi, 1921, Atti Soc. ital. Sci. nat. 60: 161-188

Triopes Schrank, 1803, Fauna boic. 3(1): 251

Triops Schrank, 1803, Fauna boic. 3(1): 180

Trinoculus Voigt, 1836, Cuvier's Thierreich (ed. 2) 4:275

- 27. The following is the reference for the lectotype selection specified in the Ruling given in the present *Opinion*:
- For the nominal species Monoculus apus Linnaeus, 1758
- Holthuis (L.B.), 1956, in Holthuis (L.B.) & Hemming (F.), Bull. zool. Nomencl. 12:72, paragraph 14
- 28. The following are the original references for the family-group names placed on the Official List and Official Index of the names of taxa of the family-group category by the Ruling given in the present Opinion:—
- APIDAE Burmeister, 1843, Organisation Trilobiten: table opposite page 38 (Class Crustacea)
- APODES Billberg, 1820, Enum. Ins. Mus. Billberg.: 132 (Class Crustacea)
- APODIDAE Agassiz (J.L.R.), 1846, Nomencl. zool. Index univ.: 30 (Class Crustacea)
- APODIDAE Reichenow, 1897, Ornith. Monatsber. 5: 10 (Class Aves)
- APODINAE Hartert, 1897, Das Thierreich 1:80 (Class Aves)
- APUSIENS Milne Edwards (H.), 1840, *Hist. nat. Crust.* 3: 353 (Class Crustacea)
- BINOCULIDAE Fowler, 1912, Ann. Rep. New Jersey State Mus. 1911: 466 (Class Crustacea)
- CYPSELINAE Bonaparte, 1838, Geogr. comp. List Birds Europe N. Amer.: 8 (Class Aves)
- MICROPODIDAE Stejneger, 1885, Standard nat. Hist. 4:437 (Class Aves)
- PHILLOPIA Rafinesque, 1815 (an Invalid Original Spelling for PHYLLOPODIDAE) (Class Crustacea)
- PHYLLOPODIDAE (correction of PHILLOPIA) Rafinesque, 1815, Analyse Nature: 99 (Class Crustacea)
- TRIOPSIDAE Keilhack, 1909, Brauer's Süsswasserf. Deutschl. 10:7 (Class Crustacea).

- 29. The prescribed procedures were duly complied with by the International Commission on Zoological Nomenclature in dealing with the present case, and the present *Opinion* is accordingly hereby rendered in the name of the said International Commission by the under-signed Francis Hemming, Secretary to the International Commission on Zoological Nomenclature, in virtue of all and every the powers conferred upon him in that behalf.
- 30. The present *Opinion* shall be known as *Opinion* Five Hundred and Two (502) of the International Commission on Zoological Nomenclature.

DONE in London, this Fifth day of November, Nineteen Hundred and Fifty-Seven.

Secretary to the International Commission on Zoological Nomenclature

FRANCIS HEMMING

OPINIONS AND DECLARATIONS RENDERED BY THE INTER-NATIONAL COMMISSION ON ZOOLOGICAL NOMENCLATURE

Edited by

FRANCIS HEMMING, C.M.G., C.B.E. Secretary to the Commission

VOLUME 18. Part 5. Pp. 121-140

OPINION 503

Designation under the Plenary Powers of a type species in harmony with existing usage for the generic name Cupido Schrank, 1801 (Class Insecta, Order Lepidoptera) and matters incidental thereto

LONDON:

Printed by Order of the International Trust for Zoological Nomenclature

and

Sold on behalf of the International Commission on Zoological Nomenclature by the International Trust at its Publications Office 41, Queen's Gate, London, S.W.7

1958

Price Thirteen Shillings and Sixpence

(All rights reserved)

INTERNATIONAL COMMISSION ON ZOOLOGICAL NOMENCLATURE

COMPOSITION AT THE TIME OF THE ADOPTION OF THE **RULING GIVEN IN OPINION 503**

The Officers of the Commission

Honorary Life President: Dr. Karl Jordan (British Museum (Natural History), Zoological Museum, Tring, Herts, England)

President: Professor James Chester Bradley (Cornell University, Ithaca, N.Y., U.S.A.) (12th August 1953)

Vice-President: Senhor Dr. Afranio do Amaral (Sao Paulo, Brazil) (12th August 1953)

Secretary: Mr. Francis Hemming (London, England) (27th July 1948)

The Members of the Commission

(Arranged in order of precedence by reference to date of election or of most recent re-election, as prescribed by the International Congress of Zoology)

Professor H. Boschma (Rijksmuseum van Natuurlijke Historie, Leiden, The Netherlands) (1st January 1947)

CIST January 1947)
Senor Dr. Angel Cabrera (La Plata, Argentina) (27th July 1948)
Mr. Francis Hemming (London, England) (27th July 1948) (Secretary)
Dr. Henning Lemche (Universitetets Zoologiske Museum, Copenhagen, Denmark) (27th.

July 1948) Professor Teiso Esaki (Kyushu University, Fukuoka, Japan) (17th April 1950)

Professor Pierre Bonnet (Université de Toulouse, France) (9th June 1950) Mr. Norman Denbigh Riley (British Museum (Natural History), London) (9th June 1950)

Professor Tadeusz Jaczewski (Institute of Zoology, Polish Academy of Sciences, Warsaw, Poland) (15th June 1950) Professor Robert Mertens (Natur-Museum u. Forschungs-Institut Senckenberg, Frankfurt

a. M., Germany) (5th July 1950)

Professor Erich Martin Hering (Zoologisches Museum der Humboldt-Universität zu Berlin, Germany) (5th July 1950) Senhor Dr. Afranio do Amaral (S. Paulo, Brazil) (12th August 1953) (Vice-President)

Professor J. R. Dymond (University of Toronto, Toronto, Canada) (12th August 1953) (Vice-President) Professor J. Chester Bradley (Cornell University, Ithaca, N.Y., U.S.A.) (12th August 1953) (President)

Professor Béla Hankó (Mezőgazdasági Muzeum, Budapest, Hungary) (12th August 1953)

Dr. Norman R. Stoll (Rockefeller Institute for Medical Research, New York, N.Y., U.S.A.) (12th August 1953)

Mr. P. C. Sylvester-Bradley (Sheffield University, Sheffield, England) (12th August 1953)

Dr. L. B. HOLTHUIS (Rijksmuseum van Natuurlijke Historie, Leiden, The Netherlands) (12th August 1953) (12th August 1953)

Dr. K. H. L. Key (Commonwealth Scientific and Industrial Research Organisation, Canberra, A.C.T., Australia) (15th October 1954)

Dr. Alden H. Miller (Museum of Vertebrate Zoology, University of California, U.S.A.) (29th October 1954)

Doc. Dr. Ferdinand PRANTL (Národni Museum V Praze, Prague, Czechoslovakia) (30th

October 1954) Professor Dr. Wilhelm Kühnelt (Zoologisches Institut der Universität, Vienna, Austria)

(6th November 1954) Professor F. S. Bodenheimer (The Hebrew University, Jerusalem, Israel) (11th November

1954) Professor Ernst Mayr (Museum of Comparative Zoology at Harvard College, Cambridge,

Massachusetts, U.S.A.) (4th December 1954)
Professor Enrico Tortonese (Museo di Storia Naturale, "G. Doria," Genova, Italy) (16th December 1954)

OPINION 503

DESIGNATION UNDER THE PLENARY POWERS OF A TYPE SPECIES IN HARMONY WITH EXISTING USAGE FOR THE GENERIC NAME "CUPIDO" SCHRANK, 1801 (CLASS INSECTA, ORDER LEPIDOPTERA) AND MATTERS INCIDENTAL THERETO

RULING:—(1) Under the Plenary Powers (a) all selections of type species for the nominal genus *Cupido* Schrank, 1801 (Class Insecta, Order Lepidoptera) made prior to the present Ruling are hereby set aside and (b) the nominal species *Papilio minimus* Fuessly, 1775, is hereby designated to be the type species of the foregoing genus.

- (2) The under-mentioned generic names are hereby placed on the *Official List of Generic Names in Zoology* with the Name Numbers severally specified below:—
 - (a) Cupido Schrank, 1801 (gender: masculine) (type species, by designation under the Plenary Powers in (1)(b) above: Papilio minimus Fuessly (J.C.), 1775) (Name No. 1248);
 - (b) Everes Hübner, [1819] (gender: masculine) (type species, by selection by Scudder, [1872]: Papilio amyntas [Denis & Schiffermüller], 1775) (Name No. 1249);
 - (c) Maculinea van Eecke, 1915 (gender: feminine) (type species, by selection by Graves (P.P.) (1928): Papilio alcon [Denis & Schiffermüller], 1775) (Name No. 1250).

- (3) The under-mentioned specific names are hereby placed on the *Official List of Specific Names in Zoology* with the Name Numbers severally specified below:—
 - (a) minimus Fuessly (J.C.), 1775, as published in the combination Papilio minimus (specific name of type species of Cupido Schrank, 1801) (Name No. 1478);
 - (b) argiades Pallas, 1771, as published in the combination *Papilio argiades* (Name No. 1479);
 - (c) alcon [Denis & Schiffermüller], 1775, as published in the combination Papilio alcon (specific name of type species of Maculinea van Eecke, 1915) (Name No. 1480);
 - (d) arion Linnaeus, 1758, as published in the combination *Papilio arion* (Name No. 1481).
- (4) The under-mentioned specific names are hereby placed on the *Official Index of Rejected and Invalid Specific Names in Zoology* with the Name Numbers severally specified below:—
 - (a) puer Schrank, 1801, as published in the combination Papilio puer and as interpreted by the lectotype selected by Hemming (F.) (1956: 268) (a junior objective synonym of minimus Fuessly, 1775, as published in the combination Papilio minimus) (Name No. 500);
 - (b) amyntas [Denis & Schiffermüller], 1775, as published in the combination *Papilio amyntas* (a junior homonym of amyntas Poda, 1761, as published in the combination *Papilio amyntas*) (Name No. 501).
- (5) The under-mentioned family-group names are hereby placed on the Official List of Family-Group Names

in Zoology with the Name Numbers severally specified below:—

- (a) EVERIDI Tutt, [1907] (type genus: Everes Hübner, [1819], a name selected under Declaration 37 by Verity (1943), acting as a First Reviser, to take precedence over the name CUPIDINIDI (correction of CUPIDIDI) Tutt, [1907], a name published in the same work and on the same date) (Name No. 209);
- (b) CUPIDINIDI (correction of CUPIDIDI) Tutt, [1907] (type genus: Cupido Schrank, 1801), a name selected under Declaration 37 by Verity (1943), acting as a First Reviser, to take precedence below the name EVERIDI Tutt, [1907], a name published in the same work and on the same date (for use by any specialist who may consider that the genera Cupido Schrank, 1801, and Everes Hübner, [1819] (the type genus of the family-group taxon EVERIDI Tutt, [1907]) are referable to different family-group taxa) (Name No. 210).
- (6) The under-mentioned family-group name is hereby placed on the Official Index of Rejected and Invalid Family-Group Names in Zoology with the Name Number 251:—

CUPIDIDI Tutt, [1907] (type genus: *Cupido* Schrank, 1801) (an Invalid Original Spelling for CUPIDINIDI).

I. THE STATEMENT OF THE CASE

On 18th June 1956 Mr. Francis Hemming (London) submitted to the International Commission (a) an application for a Declaration determining the relative precedence to be accorded

to any two family-group names published in the same work and on the same date and (b) an application for the use by the Commission of its Plenary Powers to designate a type species in harmony with accustomed usage for the genus *Cupido* Schrank, 1801 (Class Insecta, Order Lepidoptera), an application in which was involved a family-group-name problem which was impossible of settlement pending the adoption by the Commission of a *Declaration* on the subject specified in (a) above. A decision has now been reached by the Commission on the question of principle involved in the first of these applications and that decision has since been embodied in *Declaration* 37.1 The second of the applications referred to above was as follows:—

Proposed use of the Plenary Powers to designate a type species in harmony with current usage for the genus "Cupido" Schrank, 1801 (Class Insecta, Order Lepidoptera) and matters incidental thereto

By FRANCIS HEMMING, C.M.G., C.B.E.

(Secretary to the International Commission on Zoological Nomenclature)

The object of the present application is to ask the International Commission on Zoological Nomenclature to use its Plenary Powers to designate a type species in harmony with current usage for the genus *Cupido* Schrank, 1801 (Class Insecta, Order Lepidoptera) and thus to avoid the serious and extensive name-changing and consequent confusion which would be involved if the normal provisions of the *Règles* were to be applied in the present case. The facts of this case are set out in the following paragraphs.

2. The nominal genus Cupido Schrank, 1801 (Fauna boica 2(1): 153, 206—220) was established for the group of butterflies which Schrank called the "Schildfalter". No nominal species were cited for this genus in the generic diagnosis given on page 153, but later in the descriptive text (: 206—221) Schrank placed in it twenty-four nominal species. These comprised the whole of the species of what is now known as the family LYCAENIDAE known to Schrank as occurring in the area covered by his book. As was inevitable in a book published at this early date Schrank did not designate a type species for this genus. Among the nominal species placed by Schrank in his genus

¹ The *Declaration* here referred to is being published in the immediately preceding part of the present volume.

the following must be noted: Papilio virgaureae Linnaeus, 1758 (Syst. Nat. (ed. 10) 1:484) (Schrank's species No. 1356) (:206); Papilio arion Linnaeus, 1758 (Syst. Nat. (ed. 10) 1:483) (Schrank's species No. 1361) (:209); Cupido puer Schrank nov. sp. (Schrank's species No. 1374) (:215).

- 3. As will be seen later (paragraph 4 below) the name Cupido puer Schrank enters into consideration in connection with the determination of the type species of the genus Cupido Schrank. It is necessary therefore at this stage to pause for a moment to consider the question of the interpretation of this nominal species. This has long been recognised as being a composite species as established by Schrank. As in the case of other species which were—or which he thought were sexually dimorphic, Schrank gave a separate description for each sex, that for what he considered to be the male being so distinguished by the addition of the word "Er" in italic type and in parentheses at the end of the diagnosis, that for what he considered to be the female being similarly distinguished by the addition of the word "Sie.". These diagnoses were followed by a short synonymy. This included the names of three previously established nominal species, namely: (a) names of three previously established nominal species, namely (a) Papilio minimus Fuessly (J.C.), 1775 (Schweiz. Ins.: 31); (b) Papilio tiresias Rottemburg, 1775 (Der Naturforscher 6: 23) (the reference cited being to Schneider's (1787) use of this name); (c) Papilio pseudolus Bergsträsser, [1779] (Ic. Pap. 1: 5, pl. 5, fig. 5, 6° ; id., [1779], Nom. Ins. 3: 5, pl. 50, fig. 5, 6°) (the reference cited being to Borkhausen's (1788) usage of this name). These references were followed by extended descriptions of what Schrank believed to be two varieties (Spielarten) found in each sex. There is agreement that two species were confused by Schrank under the name Cupido puer, these species being those known in England as the Short-tailed Blue and the Small Blue respectively. The description given by Schrank for the male (" Er") and the reference to the nominal species Papilio tiresias Rottemburg apply to the Short-tailed Blue, the oldest available name for which, therefore and the valid name of which, is *Papilio argiades* Pallas, 1771 (Reise versch. Prov. Russ. Reichs 1: 472). The description given by Schrank for the female ("Sie") and the references to the nominal species Papilio minimus Fuessly, 1775, and Papilio pseudolus Bergsträsser, [1779], apply to the Small Blue, the oldest available name for which, and therefore the valid name of which, is the first of those cited by Schrank, namely, Papilio minimus Fuessly, 1775.
- 4. The components of the nominal species Cupido puer Schrank, 1801, have often been discussed in connection with the determination of the type species of the genus Cupido Schrank, 1801, the first author to do so in detail being Kirby (W.F.), in 1870 (J. linn. Soc. Lond. (Zool.) 10:499). Hitherto, however, authors discussing this matter, have always assumed that the composite character of this nominal species was such that it was not possible to secure for it a strictly determinate content. This is due no doubt to the fact that the

discussions on this case took place before 1948 and therefore before the clarification and amplification of Article 31, including the recognition and definition of the concept of "lectotype", by the Thirteenth International Congress of Zoology, Paris, and the further clarification carried out in 1953 by the Fourteenth International Congress of Zoology, Copenhagen (1953, Copenhagen Decisions zool. Nomencl.: 72—78, Decisions 136—150). Equipped with the resources so provided, it is at last possible to determine the interpretation of the nominal species Cupido puer Schrank, 1801, and this I now do by selecting as the lectotype of that nominal species the specimen on which in 1775 Fuessly based his description of Papilio minimus in the work cited by Schrank. As the result of this lectotype selection the specific name puer Schrank, 1801, becomes a junior objective synonym of minimus Fuessly, 1775, and finally disappears in synonymy.

- 5. The first author to attempt to select a type species for the genus Cupido Schrank was Kirby who in 1870 in the paper cited in paragraph 4 above, after explaining the composite character of Schrank's nominal species Cupido puer, stated that: "The true type of Cupido appears to be alsus". At that time the name Cupido Schrank was not in use and Kirby's action was no doubt prompted by a decision on his part to introduce this generic name in his then forthcoming Syn. Cat. diurn. Lep. for the enormous group previously known by the name Lycaena Fabricius, 1807, a name which he sank as a junior synonym of Cupido Schrank (: 345-346). This group comprised almost all the then known species of what is now regarded as the subfamily PLEBEJINAE and many others, a total of 325 nominal species. In 1875 (Proc. amer. Acad. Arts Sci., Boston 10: 149, 293) Scudder rejected Kirby's action of 1870 and selected Papilio arion Linnaeus, 1758, to be the type species of Cupido Schrank. In 1896 (in Allen's Nat. Libr., Hand. Lepid. 1 Butt. 2:85) Kirby reverted to this subject; he still took the view that one of the components of Schrank's Cupido puer should be regarded as the type species of the genus Cupido Schrank, but on this occasion, contrary to what he had said in 1870, he stated that the type species was the species which Schrank had regarded as being the male of Cupido puer, namely, the Short-tailed Blue. Papilio argiades Pallas, 1771. This argument was contested in [1909] (Nat. Hist. Brit. Butts. 3: 101—104) by Tutt who accepted Papilio minimus Fuessly, 1775, as the type species of Cupido Schrank. The generic analyses of the Palaearctic butterflies on modern lines was started by the late T. A. Chapman, whose results were published in Tutt's work. Chapman's prestige and the soundness of his methods commanded immediate attention and for the period of nearly fifty years which has since elapsed there has been virtual unanimity in the usage of Cupido Schrank for the group represented by *Papilio minimus* Fuessly, 1775.
- 6. I have recently begun a re-survey of the generic nomenclature of the butterflies in the light of the decisions on the *Règles* taken in 1948 and 1953 respectively by the Thirteenth and Fourteenth

International Congresses of Zoology (Paris and Copenhagen), the purpose of this examination being to ascertain whether and, if so, in what way it was necessary to modify previously held views on the subject of the type species of these genera. In the present case this survey has shown that under the Règles the type species of Cupido Schrank is not Papilio minimus Fuessly but Papilio arion Linnaeus. This arises from the fact that Kirby's (1870) selection, as the type species of Cupido Schrank, of Papilio alsus [Denis & Schiffermüller] (Ankündung eines syst. Werkes Schmett. Wien. Gegend: 184) (a junior subjective synonym of Papilio minimus Fuessly) is invalid, for although Schrank cited Papilio minimus Fuessly in the synonymy of Cupido puer Schrank, he did not cite Papilio alsus [Denis & Schiffermüller]. The acceptance as the type species of Cupido Schrank of Papilio arion Linnaeus, the first of Schrank's included nominal species to be so selected (by Scudder in 1875) would not only involve a most undesirable overturning of the nomenclatorial practice of half a century, but in addition would lead to serious confusion by introducing into the subfamily PLEBEJINAE a genus (Cupido Schrank) which has not been regarded as belonging to it in living memory. I therefore ask the Commission to validate existing practice by using its Plenary Powers to set aside all existing type selections for the genus Cupido Schrank, 1801, and to designate Papilio minimus Fuessly, 1775, to be the type species of that genus.

7. The acceptance of the foregoing proposal will involve the addition of the generic name Cupido Schrank to the Official List of Generic Names in Zoology and it is desirable that the opportunity should be taken to place on that List two other generic names in well-established use which are to some extent involved in the present case. The first of these names is Maculinea van Eecke, 1915, which would have been sunk as a synonym of Cupido Schrank if Scudder's (1875) selection of Papilio arion Linnaeus had been valid, the second is Everes Hübner, [1819], which would have disappeared in synonymy if Kirby's (1896) selection of Papilio argiades Pallas [the "male" of Cupido puer Schrank, 1801] had been valid. The type species of Maculinea van Eecke, 1915 (Zool. Meded. 1:28) is Papilio alcon [Denis & Schiffermüller] (Ankündung eines syst. Werkes Schmett. Wien. Gegend: 182) by selection by Graves (P.P.), 1928 (Ent. Rec. 40:102). The type species of Everes Hübner, [1819] (Verz. bekannt. Schmett. (5):69) is Papilio amyntas [Denis & Schiffermüller], 1775 (Ankündung eines syst. Werkes Schmett. Wien. Gegend: 185) by selection by Scudder, [1872] (4th Ann. Rep. Peabody Acad. Sci. 1871:56). This name for the type species of the genus Everes Hübner is, however, invalid as it is a junior homonym of Papilio amyntas Poda, 1761 (Mus. Ins. graec.: 79). The oldest available name for this species is Papilio argiades Pallas, 1771 (which, it will be noted, would still have been the oldest name subjectively available for this species, even if the name amyntas [Denis & Schiffermüller], 1775, had not been invalid under the Law of Homonymy.

- 8. There is no junior objective synonym either of the name Cupido Schrank, 1801, defined in the manner recommended in paragraph 6 above. Nor is there any junior objective synonym of Everes Hübner, [1819]. In the case of Maculinea van Eecke, 1915, there is a genus Argus Boisduval, [1832] (Icon. hist. Lépidopt. Europe 1(5/6):49) which has as its type species by selection by Hemming, 1933 (Entomologist 66: 224) the same species (Papilio alcon [Denis & Schiffermüller], 1775) as is the type species of Maculinea van Eecke, The name Argus Boisduval, [1832], is, however, a junior homonym of Argus Bohadsch, 1761. The work in which the latter name was published has been suppressed by the International Commission under its Plenary Powers (Opinion 185) but by a further direction given by the Commission in *Opinion* 429 (now in the press²) this name was kept alive for the purposes of the Law of Homonymy. Accordingly, the name Argus Boisduval, [1832], is invalid as a junior homonym of Argus Bohadsch, 1761, and should now be placed on the Official Index of Rejected and Invalid Generic Names in Zoology.3
- 9. When under the present proposals the foregoing names are placed on the Official List of Generic Names in Zoology, it will be necessary to assign an appropriate gender to each. The name Cupido Schrank, 1801, has been treated by most authors as being masculine in gender, though by some the feminine gender has been assigned to it. On the question of the gender properly applicable to this name Professor L. W. Grensted, the Commission's Consulting Classical Adviser, has reported (in litt., 12th June 1956) as follows:—"Cupido has both genders in classical Latin—as a common noun, meaning 'desire', it is usually, but not always feminine, but as a proper noun, meaning Cupid (very common in Latin), it is masculine. Clearly this was the meaning intended for the butterfly. It must be masculine and Cupido minimus is right". In view of Professor Grensted's report, clearly the gender to be attributed to this generic name is the masculine gender. The word "Everes" is a Latinised version of a Greek adjective and the gender of this generic name is masculine. The gender of the coined word "Maculinea" is feminine.
- 10. It is necessary now to consider the family-group-name problems involved in the present case. Here we have to note first that in 1907 Tutt erected nominal family-group taxa based respectively upon the genus *Everes* Hübner, [1819], and upon the genus *Cupido* Schrank, 1801. The nominal taxa concerned, each of which was regarded as being of tribe rank, were the following: (1) EVERIDI Tutt, [1907] (*Nat.*

² This Opinion was published on 26th October, 1956 (Ops. Decls. int. Comm. zool. Nomencl. 14: 323—338).

³ For the subsequent withdrawal of this proposal as being no longer necessary see paragraph 12 of the present *Opinion*,

Hist. Brit. Butts. 2:327) and (2) CUPIDIDI Tutt, [1907] (ibid. 2:327). Both these names were introduced in a rather casual manner in a discussion of the suprageneric classification of the family LYCAENIDAE (called by Tutt RURALIDAE), but there is no doubt as to the way in which these names were intended to be applied, for in the next volume of the same work Tutt dealt in detail both with the generic name Everes Hübner (Tutt, [1909] (ibid. 3:43—50)) and with the generic name Cupido Schrank (Tutt, [1909] (ibid. 3:101—104)).

- 11. The form (CUPIDIDI) adopted by Tutt when forming a family-group name based on the generic name *Cupido* Schrank is defective for "the stem, for the noun *Cupido*, is '*Cupidin*-' and in consequence CUPIDINIDI is correct" (Grensted, *in litt.*, 12th June, 1956). In these circumstances the defective CUPIDIDI Tutt will need to be rejected as an Invalid Original Spelling.
- 12. At this point we have to note that a novel point affecting the interpretation of the Règles calls for consideration. This is the relative priority to be accorded to the names EVERIDI Tutt and CUPIDINIDI (correction of CUPIDIDI) Tutt. Both were published in the same book and on the same date and accordingly, if these were generic or specific names, the Law of the First Reviser would prevail and whichever of the two names was first definitely selected by a First Reviser would take precedence over the other name. The corresponding problem has never till now arisen at the family-group-name level and there exists at present no method for determining the relative precedence to be accorded to family-group names such as those cited above. To overcome this difficulty I am submitting to the International Commission simultaneously with the present paper an application (Z.N.(S.) 1141) asking for a *Declaration* providing that the Law of the First Reviser shall apply to names for taxa of all ranks within the family-group when published in the same work and on the same date.4 At the present time Everes Hübner is commonly treated as the type genus of a family-group taxon and indeed in 1931 (Act. Soc. ent Jugoslavic. 1930/1931: 125) Lorković elevated this taxon to subfamily rank. The genera Everes Hübner and Cupido Schrank are commonly considered to be closely related to one another and in 1943 (Farfalle diurn. Ital. 2:85) Verity placed Cupido Schrank in the same tribe as Everes, adopting for that tribe the name EVERIDI Tutt and sinking as a synonym of that tribe-name the name CUPIDIDI Tutt. This action complies with the requirements prescribed to qualify the action of an author for recognition as action by a First Reviser. Accordingly under the terms of the proposed *Declaration* referred to above the name EVERIDI Tutt would take precedence over the name CUPIDINIDI Tutt, for authors who regarded the type genera of those taxa as properly

⁴ For the action taken on this application see the first paragraph of the present *Opinion*.

referable to a single family-group taxon. At the same time the name CUPIDINIDI Tutt would remain available for use by authors who regarded the two genera concerned as being referable to different family-group taxa. Both names should now be placed on the *Official List of Family-Group Names in Zoology*, each being endorsed to show the First Reviser action taken by Verity in 1943 as indicated above. The genus *Maculinea* van Eecke, 1915, has not been taken as the type genus for a nominal family-group taxon.

- 13. For the reasons set out in the present application I now ask the International Commission on Zoological Nomenclature:—
 - (1) to use its Plenary Powers :-
 - (a) to set aside all selections of type species for the genus *Cupido* Schrank, 1801, made prior to the Ruling now asked for:
 - (b) to secure the continued use of the above generic name in its accustomed sense by designating the nominal species *Papilio minimus* Fuessly, 1775, to be the type species of the genus so named;
 - (2) to place the under-mentioned generic names on the Official List of Generic Names in Zoology:—
 - (a) Cupido Schrank, 1801 (gender: masculine) (type species, by designation under the Plenary Powers under (1)(b) above: Papilio minimus Fuessly, 1775);
 - (b) Everes Hübner, [1819] (gender: masculine) (type species, by selection by Scudder, [1872]: Papilio amyntas [Denis & Schiffermüller], [1775]);
 - (c) Maculinea van Eecke, 1915 (gender: feminine) (type species, by selection by Graves (P.P.) (1928): Papilio alcon [Denis & Schiffermüller], 1775).
 - (3) to place the under-mentioned specific names on the Official List of Specific Names in Zoology:—
 - (a) minimus Fuessly, 1775, as published in the combination *Papilio minimus* (specific name of type species of *Cupido* Schrank, 1801);
 - (b) argiades Pallas, 1771, as published in the combination Papilio argiades;
 - (c) alcon [Denis & Schiffermüller], 1775, as published in the combination Papilio alcon (specific name of type species of Maculinea van Eecke, 1915);
 - (d) arion Linnaeus, 1758, as published in the combination *Papilio arion*;

- (4) to place the under-mentioned generic name on the Official Index of Rejected and Invalid Generic Names in Zoology:

 Argus Boisduval, [1832] (a junior homonym of Argus Bohadsch, 1761)⁵;
- (5) to place the under-mentioned specific names on the Official Index of Rejected and Invalid Specific Names in Zoology:—
 - (a) puer Schrank, 1801, as published in the combination Cupido puer and as determined by the lectotype selection by Hemming in paragraph 4 of the present application (a junior objective synonym of minimus Fuessly, 1775, as published in the combination Papilio minimus);
 - (b) amyntas [Denis & Schiffermüller,] 1775, as published in the combination Papilio amyntas (specific name of type species of Everes Hübner, [1819] (a junior primary homonym of amyntas Poda, 1761, as published in the combination Papilio amyntas);
- (6) to place the under-mentioned family-group names on the Official List of Family-Group Names in Zoology:—
 - (a) EVERIDI Tutt, [1907] (type genus: Everes Hübner, [1819]) selected under the Declaration asked for in Application Z.N.(S.) 11416 to take precedence over CUPIDINIDI (correction of CUPIDIDI) Tutt, [1907], a name published in the same book and on the same date, by Verity (1943), acting as First Reviser);
 - (b) CUPIDINIDI (correction of CUPIDIDI) Tutt, [1907] (type genus: Cupido Schrank, 1801) (selected under the Declaration asked for in Application Z.N.(S.) 11416 to rank for precedence below the name EVERIDI Tutt, [1907]), a name published in the same book and on the same date, by Verity (1943), acting as First Reviser) (for use by specialists who consider that the genera Cupido Schrank, 1801, and Everes Hübner, [1819] (type genus of the nominal family-group taxon EVERIDI Tutt, [1907]) are referable to different family-group taxa);
- (7) to place the under-mentioned family-group name on the Official Index of Rejected and Invalid Family-Group Names in Zoology:

 CUPIDIDI Tutt, [1907] (type genus: Cupido Schrank, 1801) (an Invalid Original Spelling for CUPIDINIDI).

⁵ See Footnote 3.

⁶ See Footnote 4.

II. THE SUBSEQUENT HISTORY OF THE CASE

- 2. Registration of the present application: Upon the receipt of Mr. Hemming's application the question of the designation under the Plenary Powers of a type species in harmony with accustomed usage for the genus *Cupido* Schrank, 1801 (Class Insecta, Order Lepidoptera) was allotted the Registered Number Z.N.(S.) 1138.
- 3. Publication of the present application: The present application was sent to the printer on 20th June 1956 and was published on 31st October of that year in Part 10 of Volume 12 of the Bulletin of Zoological Nomenclature (Hemming, 1956, Bull. zool. Nomencl. 12: 267—274).
- **4.** Issue of Public Notices: Under the revised procedure prescribed by the Thirteenth International Congress of Zoology, Paris, 1948 (1950, Bull. zool. Nomencl. **4**: 51—56), Public Notice of the possible use by the International Commission on Zoological Nomenclature of its Plenary Powers in the present case was given on 31st October 1956 (a) in Part 10 of Volume 12 of the Bulletin of Zoological Nomenclature and (b) to the other prescribed serial publications. In addition, such Notice was given to four general zoological serial publications and to eight entomological serials in Europe and America.
- **5.** Comments Received: The publication of the present application and the issue of the Public Notices in regard thereto elicited comments from two specialists, both of whom supported the action recommended. The comments so received are reproduced in the immediately following paragraphs.
- 6. Support received from Erich M. Hering (Zoologisches Museum der Humboldt-Universität zu Berlin): On 29th November 1956 there was received in the Office of the Commission the following letter of support for the present case from Professor Erich M. Hering (Zoologisches Museum der Humboldt-Universität zu Berlin) (Hering, 1957, Bull. zool. Nomencl. 13:8):—

In der nur scheinbar einheitlichen Familie der LYCAENIDAE hat in den letzten Jahrzehnten ein Prozess eingesetzt, der die grosse Zahl der

Arten, die vielfach nur \pm willkürlich gruppiert worden waren, in morphologisch und phylatisch begründeten Gattungen zusammenfasst. Ohne Zweifel wird man in Zukunft auch noch mehr die Aufmerksamkeit den supragenerischen Kategorien in dieser Familie zuwenden. Es entspricht dem Geist, wenn auch noch nicht dem Wortlaut der "Copenhagen Decisions", wenn das dort wiederhergestellte Recht des "Ersten Revisors" von den Gattungen auch auf die Kategorien der Familiengruppe-Namen ausgedehnt wird. Unter Berücksichtigung beider Tendenzen verdient der Vorschlag von Mr. Hemming die volle Unterstützung aller Lepidopterologen, um die Stabilität in der Verwendung der Bezeichnungen Cupido und EVERIDI zu gewährleisten.

7. Support received from N. D. Riley (British Museum (Natural History), London): On 14th February 1957 Mr. N. D. Riley (British Museum (Natural History), London) addressed the following letter to the Office of the Commission in support of the present case:—

I had not realised that as the Rules now stand Scudder's selection of arion as the type species of Cupido would prevail over all others. This is so utterly at variance with current use of the name that clearly action is needed. I am very glad, therefore, to be able to support your application to the Commission, which will have the effect of making the type species the one we have always used in that sense, namely minimus Fuessly.

8. No Objection Received: No objection to the action proposed in the present case was received from any source.

III. THE DECISION TAKEN BY THE INTERNATIONAL COMMISSION ON ZOOLOGICAL NOMENCLATURE

9. Issue of Voting Paper V.P.(57)37: On 15th May 1957 a Voting Paper (V.P.(57)37) was issued in which the Members

of the Commission were invited to vote either for, or against, "the proposal relating to the proposed validation of existing practice as regards the type species of the genus *Cupido* Schrank, 1801, as set out in Points (1) to (7) in paragraph 13 on pages 272 to 274 of Volume 12 of the *Bulletin of Zoological Nomenclature*" [i.e. in the paragraph numbered as above in the paper reproduced in the first paragraph of the present *Opinion*].

- **10.** The Prescribed Voting Period: As the foregoing Voting Paper was issued under the Three-Month Rule, the Prescribed Voting Period closed on 15th August 1957.
- 11. Particulars of the Voting on Voting Paper V.P.(57)37: At the close of the Prescribed Voting Period, the state of the voting on Voting Paper V.P.(57)37 was as follows:—
 - (a) Affirmative Votes had been given by the following twenty-three (23) Commissioners (arranged in the order in which Votes were received):

Hering; Vokes; Prantl; Lemche; Holthuis; Riley; Dymond; do Amaral; Esaki; Hankó; Stoll; Key; Mertens; Bodenheimer; Boschma; Bonnet; Hemming; Jaczewski; Sylvester-Bradley; Cabrera; Bradley (J.C.); Tortonese; Miller;

(b) Negative Votes:

None;

(c) On Leave of Absence, two (2):

Mayr; Kühnelt;

(d) Voting Papers not returned:

None.

- 12. Withdrawal of proposal submitted in regard to the generic name "Argus" Boisduval, [1832]: In the course of the routine checking of the present application at the close of the Prescribed Voting Period, it came to light that the generic name Argus Boisduval, [1832], which it had been recommended should be placed on the Official Index of Rejected and Invalid Generic Names in Zoology, had already been placed on that Index as Name Number 734 by the Ruling given in Opinion 429. Accordingly on 15th August 1957 Mr. Hemming, as Secretary, executed a Minute withdrawing from the scope of Voting Paper V.P.(57)37 the proposal submitted in regard to the foregoing name.
- 13. Declaration of Result of Vote: On 16th August 1957, Mr. Hemming, Secretary to the International Commission, acting as Returning Officer for the Vote taken on Voting Paper V.P.(57)37, signed a Certificate that the Votes cast were as set out in paragraph 11 above and declaring that the proposal submitted in the foregoing Voting Paper had been duly adopted and that the decision so taken was the decision of the International Commission in the matter aforesaid.
- 14. Preparation of the Ruling given in the present "Opinion": On 6th November 1957 Mr. Hemming prepared the Ruling given in the present *Opinion* and at the same time signed a Certificate that the terms of that Ruling were in complete accord with those of the proposal approved by the International Commission in its Vote on Voting Paper V.P.(57)37.
- 15. Original References: The following are the original references for the generic and specific names placed on Official

Lists and Official Indexes by the Ruling given in the present Opinion:—

alcon, Papilio, [Denis & Schiffermüller], 1775, Ankündung eines syst. Werkes Schmett. Wien. Gegend: 182

amyntas, Papilio, [Denis & Schiffermüller], 1775, Ankündung eines syst. Werkes Schmett. Wien. Gegend: 185

argiades, Papilio, Pallas, 1771, Reise versch. Prov. Russ. Reichs 1:472

arion, Papilio, Linnaeus, 1758, Syst. Nat. (ed. 10) 1:483

Cupido Schrank, 1801, Fauna boica 2(1): 153

Everes Hübner, [1819], Verz. bekannt. Schmett. (5): 69

Maculinea van Eecke, 1915, Zool. Meded. 1:28

minimus, Papilio, Fuessly (J.C.), 1775, Verz. bekannt. schweiz. Ins.: 31

puer, Papilio, Schrank, 1801, Fauna boica 2(1): 215

16. The following are the references for the selections of type species of nominal genera specified in the Ruling given in the present *Opinion*:—

For *Everes* Hübner, [1819] Scudder, [1872] 4th Ann. Rep. Peabody Acad. Sci. **1871**: 56

: Maculinea van Eecke, Graves (P.P.), 1928, Ent. Rec. 40: 102

17. The following is the reference for the selection of a lectotype for a nominal species specified in the Ruling given in the present *Opinion*:—

For *Cupido puer* Schrank, 1801

Hemming (F.), 1956, *Bull. zool. Nomencl.* **12**: 268, paragraph 4

18. The following are the original references for the family-group names placed by the Ruling given in the present *Opinion* either on the *Official List* or on the *Official Index* of names of taxa of the family-group category:—

CUPIDIDI Tutt, [1907] (an Invalid Original Spelling for CUPIDINIDI)

CUPIDINIDI (correction of CUPIDIDI) Tutt, [1907], Nat. Hist. Brit. Butts. 2: 327

EVERIDI Tutt, [1907], Nat. Hist. Brit. Butts. 2: 327

19. The following is the reference for the selection by a First Reviser from among two family-group names published in the same work and on the same date of one of the names concerned to take precedence over the other specified in the Ruling given in the present *Opinion*:—

For the selection of EVERIDI Tutt, [1907], to take precedence over the name CUPIDINIDI (correction of CUPIDIDI) Tutt, [1907]

Verity (R.), 1943, Farfalle diurn. Ital. 2:85

20. The prescribed procedures were duly complied with by the International Commission on Zoological Nomenclature in dealing with the present case, and the present *Opinion* is accordingly hereby rendered in the name of the said International Commission by the under-signed Francis Hemming, Secretary to the International Commission on Zoological Nomenclature, in

virtue of all and every the powers conferred upon him in that behalf.

21. The present *Opinion* shall be known as *Opinion* Five Hundred and Three (503) of the International Commission on Zoological Nomenclature.

DONE in London, this Sixth day of November, Nineteen Hundred and Fifty-Seven.

Secretary to the International Commission on Zoological Nomenclature

FRANCIS HEMMING

OPINIONS AND DECLARATIONS RENDERED BY THE INTERNATIONAL COMMISSION ON ZOOLOGICAL NOMENCLATURE

Edited by

FRANCIS HEMMING, C.M.G., C.B.E. Secretary to the Commission

VOLUME 18. Part 6. Pp. 141-156

OPINION 504

Suppression under the Plenary Powers of the generic name *Planites* de Haan, 1825 (Class Cephalopoda, Order Ammonoidea)

LONDON:

Printed by Order of the International Trust for Zoological Nomenclature and

Sold on behalf of the International Commission on Zoological Nomenclature by the International Trust at its Publications Office 41, Queen's Gate, London, S.W.7

1958

Price Ten Shillings and Sixpence

(All rights reserved)

INTERNATIONAL COMMISSION ON ZOOLOGICAL NOMENCLATURE

COMPOSITION AT THE TIME OF THE ADOPTION OF THE RULING GIVEN IN OPINION 504

A. The Officers of the Commission

Honorary Life President: Dr. Karl Jordan (British Museum (Natural History) Zoological Museum, Tring, Herts., England).

President: (Vacant).

Vice-President: Senhor Dr. Afranio do Amaral (Sao Paulo, Brazil).

Secretary: Mr. Francis Hemming (London, England).

B. The Members of the Commission

(arranged in order of precedence by reference to date of election or of most recent re-election, as prescribed by the International Congress of Zoology).

Senhor Dr. Afranio do Amaral (S. Paulo, Brazil) (Vice-President) (1st January 1944).

Professor J. R. Dymond (University of Toronto, Toronto, Canada) (1st January 1944).

Professor J. Chester Bradley (Cornell University, Ithaca, N.Y., U.S.A.) (28th March 1944).

Professor Harold E. Vokes (Johns Hopkins University, Baltimore, Maryland, U.S.A.) (23rd April 1944)

Dr. William Thomas Calman (Coulsdon, Surrey, England) (1st January 1947).

Professor Béla Hankó (Békéscsaba, Hungary) (1st January 1947).

Dr. Norman R. Stoll (Rockefeller Institute for Medical Research, New York, N.Y., U.S.A.) (1st January 1947).

Professor H. Boschma (Rijksmuseum van Natuurlijke Historie, Leiden, The Netherlands) (1st January 1947).

Senor Dr. Angel Cabrera (Eva Peron, F.C.N.G.R., Argentina) (27th July 1948).

Mr. Francis Hemming (London, England) (Secretary) (27th July 1948).

Dr. Joseph Pearson (Tasmanian Museum, Hobart, Tasmania, Australia) (27th July 1948)¹

Dr. Henning Lemche (Universitetets Zoologiske Museum, Copenhagen, Denmark) (27th July 1948)

Professor Teiso Esaki (Kyushu University, Fukuoka, Japan) (17th April 1950).

Professor Pierre Bonnet (Université de Toulouse, France) (9th June 1950).

Mr. Norman Denbigh RILEY (British Museum (Natural History), London) (9th June 1950).

Professor Tadeusz Jaczewski (Department of Systematic Zoology, Warsaw University, Warsaw, Poland) (15th June 1950).

Professor Robert Mertens (Natur-Museum u. Forschungs-Institut Senckenberg, Frankfurt a. M., Germany) (5th July 1950).

Professor Erich Martin Hering (Zoologisches Museum der Humboldt-Universität zu Berlin, Germany) (5th July 1950).

Dr. Joseph Pearson retired from the Membership of the International Commission on 8th October, 1954.

OPINION 504

SUPPRESSION UNDER THE PLENARY POWERS OF THE GENERIC NAME "PLANITES" DE HAAN, 1825 (CLASS CEPHALOPODA, ORDER AMMONOIDEA)

RULING:—(1) The generic name *Planites* de Haan, 1825 (Class Cephalopoda, Order Ammonoidea) is hereby suppressed under the Plenary Powers for the purposes of the Law of Priority but not for those of the Law of Homonymy.

- (2) The under-mentioned generic names are hereby placed on the *Official Index of Rejected and Invalid Generic Names in Zoology* with the Name Numbers severally specified below:—
 - (a) *Planites* de Haan, 1825, as suppressed under the Plenary Powers in (1) above (Name No. 1137);
 - (b) *Biplices* Siemiradzki, 1891 (invalid because not published in the nominative singular) (Name No. 1138).
- (3) The under-mentioned generic name is hereby placed on the *Official List of Generic Names in Zoology* with Name No. 1251:—

Orthosphinctes Schindewolf, 1925 (gender: masculine) (type species, by original designation: Ammonites tiziani Oppel, 1863).

(4) The under-mentioned specific name is hereby placed on the *Official List of Specific Names in Zoology* with the Name No. 1487:—

tiziani Oppel, 1863, as published in the combination Ammonites tiziani (specific name of type species of Orthosphinctes Schindewolf, 1925).

I. THE STATEMENT OF THE CASE

On 28th February 1949, Dr. W. J. Arkell (Sedgwick Museum, Cambridge University) addressed a preliminary communication to the Office of the Commission on the subject of the possible use of the Commission's Plenary Powers for the suppression of the long-neglected generic name Planites de Haan, 1825 (Class Cephalopoda, Order Ammonoidea) in order thereby to prevent the very serious confusion anticipated as being likely if this name were to replace the well-known name Perisphinctes Waagen, 1869. At the time of the receipt of the foregoing communication the whole of the resources of the Office of the Commission were being directed to the preparation and publication of the Official Records of the Session held by the International Commission on Zoological Nomenclature in Paris in 1948 and of the corresponding Sessions then held by the Section on Nomenclature of the Thirteenth International Congress of Zoology. therefore not possible at that time to make any progress with the consideration of proposals relating to individual names on which decisions by the International Commission were desired. In 1950, however, discussions took place between the Secretary and the applicant in regard to certain procedural problems involved in the present case. These were concluded in the autumn of that year, thus clearing the way for the submission to the Commission by Dr. Arkell of the following definitive application on 9th December 1950:—

Proposed use of the Plenary Powers to suppress the name "Planites"
De Haan, 1825, and to determine the use of the name "Nautilus
polygyratus" Reinecke, 1818 (Class Cephalopoda, Order
Ammonoidea) (Jurassic)

By W. J. ARKELL, M.A., D.Sc., F.R.S.

(Sedgwick Museum, Cambridge University, Cambridge)

- 1. The present application is concerned with the problem raised by the generic name *Planites* de Haan, 1825 (: 34). This case has been discussed in my Monograph on the Ammonites of the English Corallian Beds (1936—37: xxxv—xxxvii, lxiv—lxv), where the recommendation was made that the name *Planites* de Haan should be suppressed in order to avoid the chaotic confusion which would otherwise be inevitable. The facts of this case are set out below:—
 - (1) The generic name *Planites* de Haan, 1825 was applied in the first instance to all manner of ammonites from Lower Lias to Portland Stone, belonging to what are now regarded as many different families.
 - (2) In form and vagueness of application this genus ranks with *Ammonites, Ostracites*, *Pectinites*, etc., and for nearly a century this name was ignored by all authors.
 - (3) Buckman (S.) in 1913 (2:iv) revived the name *Planites* de Haan by selecting as the type species of the genus so named the nominal species *Nautilus polygyratus* Reinecke, 1818 (: 73, pl. v, figs. 45—46). This species was believed by Buckman to be the only nominal species originally included by de Haan in *Planites* that had not already been assigned to some other genus. It was, however, a far-fetched selection, for among all the varied species assigned to *Planites* by de Haan, *Nautilus polygyratus* Reinecke was mentioned by him only in connection with *Planites plicatilis* (Sowerby), in the synonymy of which Reinecke's *polygyratus* was cited (de Haan, 1825: 87).
 - (4) The type specimen of the nominal species Nautilus polygyratus Reinecke is lost and the identity of the taxonomic species represented by this nominal species is a matter of uncertainty. There are two interpretations of this nominal species, the first by de Loriol (1877: 61, pl. vii, figs. 1, 1a), which was accepted by Schindewolf (1926: 512) and Spath (1931: 444), the second by Wegele (1929: 47, pl. i, fig. 6). The latter interpretation appears the more probable; Wegele's figure of a supposed chorotype is reproduced in my monograph (1936: pl. C, fig. 5).

- 2. Except from the standpoint of authors who accept an unwarrantable pulverisation of genera, *Nautilus polygyratus* Reinecke, in Wegele's interpretation certainly, and probably also in that of de Loriol, Schindewolf and Spath, belongs to a group at most subgenerically distinct from *Perisphinctes* Waagen, 1869. Thus, under a strict application of the *Règles*, the name *Planites* de Haan, having been published in 1825, would take precedence over the name *Perisphinctes* Waagen, 1869; the latter would thus either fall as a synonym of *Planites* or at best become the name of a subgenus of *Planites*.
- 3. The name *Perisphinctes* Waagen applies to one of the most important of all ammonite genera, of long geological range and of world-wide distribution. This generic name has probably been more widely used in geological literature during the past eighty years than has that of any other cephalopod genus. To discard it on the strength of Buckman's revival of the long forgotten name *Planites* would be monstrous and would certainly lead to widespread confusion. Accordingly I consider that the name *Planites* de Haan, 1825, should be suppressed under the Commission's Plenary Powers. I am of the opinion also that it is desirable that the generic name *Perisphinctes* Waagen, 1869, should be protected as soon as possible by being placed on the *Official List of Generic Names in Zoology*. There is, however, a further problem in connection with this generic name which needs to be cleared up before it can be placed on the *Official List*. I am submitting to the Commission herewith a separate application on this subject.¹
- 4. I consider further that the present opportunity should be taken to determine authoritatively the taxonomic species which is to be accepted as that represented by the nominal species Nautilus polygyratus Reinecke, for the name polygyratus is widely used and extremely well known and it is highly desirable that the present state of confusion and doubt regarding the manner in which this name should be used should be brought to an end with as little further delay as possible. I accordingly recommend that the Commission should make use of the extension of the Plenary Powers granted to it by the Thirteenth International Congress of Zoology in Paris in 1948 for the purpose of determining how the Règles should be applied in cases where it was doubtful to what species a given name should be held to apply (1950, Bull. zool. Nomencl. 4: 324), and should, under the foregoing powers, designate the supposed chorotype figured by Wegele to be the figure by which the nominal species Nautilus polygyratus Reinecke is to be interpreted. So interpreted, N. polygyratus would be referable to the genus Biplices Siemiradzki, 1891 (: 63), if it were not for the fact that that name does not comply with

¹ The name Perisphinctes Waagen, 1869, has since been placed on the Official List of Generic Names in Zoology by the Ruling given in Opinion 303.

the requirements of Article 8 and is, in consequence, invalid; in these circumstances N. polygyratus, defined as suggested above, would be referable to Orthosphinctes Schindewolf, 1925 (: 324), the type species of which by original designation is Ammonites tiziani Oppel, 1863 (:246) (which is also the type species of Biplices Siemiradzki, by selection by Buckman in 1921 (3:31)). In my view, Orthosphinctes Schindewolf is a subgenus of Perisphinctes Waagen. In view of the connection of the generic name Orthosphinctes with the problem discussed in the present application, I suggest that it should be placed on the Official List.

- 5. For the reasons set forth in the present application, I request the International Commission on Zoological Nomenclature:—
 - (1) to use its Plenary Powers:—
 - (a) to suppress the generic name *Planites* de Haan, 1825, for the purposes of the Law of Priority but not for those of the Law of Homonymy;
 - (b) to direct that the trivial name polygyratus Reinecke, 1818 (as published in the combination Nautilus polygyratus) is to be held to apply to the species represented by the specimen from Pappenheim in Franconia figured in 1929 by Wegele (L.) as figure 6 on plate 1 in volume 72 of Palaeontographica in a paper entitled "Stratigraphische und faunistische Untersuchungen im Oberoxford und Unterkimmeridge Mittelfrankens";
 - (2) to place the undermentioned generic names on the Official Index of Rejected and Invalid Generic Names in Zoology:—
 - (a) Planites de Haan, 1825 (as proposed to be suppressed under the Plenary Powers under (1)(a) above);
 - (b) Biplices Siemiradzki, 1891 (invalid because not formed in accordance with the provisions of Article 8);
 - (3) to place the name Orthosphinctes Schindewolf, 1925 (gender of generic name: masculine) (type species, by original designation: Ammonites tiziani Oppel, 1863) on the Official List of Generic Names in Zoology;
 - (4) to place the under-mentioned trivial names on the Official List of Specific Trivial Names in Zoology:—
 - (a) polygyratus Reinecke, 1818 (as published in the combination Nautilus polygyratus) (as proposed to be determined under the Plenary Powers under (1)(b) above);

(b) tiziani Oppel, 1863 (as published in the combination Ammonites tiziani) (type species of Orthosphinctes Schindewolf, 1925).

References:

- Arkell, W. J., 1935—1948. "A Monograph on the Ammonites of the English Corallian Beds" (Palaeontographical Soc.)
- Buckman, S. S., 1909—1930. "Yorkshire Type Ammonites"
 - Haan, G. De, 1825. "Specimen Philosophicum inaugurale, exhibens Monographiam Ammoniteorum et Goniatiteorum . . ."
 - Loriol, P. De, 1876—1878. "Monographie paléontologique des Couches de la Zone à *Ammonites tenuilobatus* de Baden (Argovie)", *Mém. Soc. pal. Suisse* 3—5
 - Oppel, A., 1863. "Über jurassische Cephalopoden", Pal. Mittheil. Mus. Bayer.-Staates 3: 246
 - Reinecke, D. J. C. M., 1818. "Maris protogaei Nautilos et Argonautes . . ."
 - Schindewolf, O. H., 1925. "Entwurf einer Systematik der Perisphincten", Neues Jahrb. für Min. 52 (Beil.): 324
 - —, 1926. "Zur Systematik der Perisphincten", Neues Jahrb. für Min. 55 (Beil.): 495—517
 - Siemiradzki, J. von, 1891. "Fauna Kopalna warstw Oxfordzkichi i Kimerydzkich": 63 (Krakowie)
 - Spath, L. F., 1931. "Revision of the Jurassic Ammonite Fauna of Kachh (Cutch)", Part 4. Pal. indica (n.s.) 9, Mem. 2
 - Waagen, W., 1869. "Die Formenreihe des Ammonites subradiatus". Benecke's Geogn. Pal. Beiträge 2(2): 181—256
 - Wegele, L., 1929. "Stratigraphische und faunistische Untersuchungen im Oberoxford and Unterkimmeridge Mittelfrankens", Palaeontographica 71:119; 72:1

II.—THE SUBSEQUENT HISTORY OF THE CASE

2. Registration of the present application: Upon the receipt of Dr. Arkell's preliminary enquiry in 1949 the question of the

suppression under the Plenary Powers of the generic name *Planites* de Haan, 1825 (Class Cephalopoda, Order Ammonoidea) was allotted the Registered Number Z.N.(S.) 402.

- 3. Publication of the present application: The present application was sent to the printer on 15th December 1950 and was published on 4th May 1951 in Triple-Part Part 6/8 of Volume 2 of the *Bulletin in Zoological Nomenclature* (Arkell, 1951, *Bull. zool. Nomencl.* 2: 194—197).
- **4. Issue of Public Notices:** Under the revised procedure prescribed by the Thirteenth International Congress of Zoology, Paris, 1948 (1950, *Bull. zool. Nomencl.* **4**: 51—56), Public Notice of the possible use by the International Commission on Zoological Nomenclature of its Plenary Powers in the present case was given on 4th May 1951 (a) in Triple-Part 6/8 of the *Bulletin of Zoological Nomenclature* (the part in which Dr. Arkell's application was published) and (b) to the other prescribed publications. In addition, such Notice was given to a number of general zoological serial publications and to certain palaeontological serials in Europe and America.
- 5. Comments Received: During the Prescribed Six-Month Waiting Period following the publication of the present application in the Bulletin of Zoological Nomenclature one comment was received. This was a note of support by Dr. Helmut Hölder (Geologisch-Paläontologisches Institut der Universität Tübingen) which was transmitted to the Office of the Commission by Professor Dr. Robert Mertens (Natur-Museum u. Forschungs-Institut Senckenberg, Frankfurt a.M.) In addition, after the close of the Prescribed Waiting Period, a communication intimating the support, by a majority, of the Joint Committee on Zoological Nomenclature for Paleontology in America was received from Professor G. Winston Sinclair, at that time Chairman of the above Committee. The comments so received are reproduced in the immediately following paragraphs.
- 6. Support by Helmut Hölder (Geologisch-Paläontologisches Institut der Universität Tübingen, Germany): On 28th October

1915 there was received in the Office of the Commission the following note of support from Dr. Helmut Hölder (Geologisch-Pälaontologisches Institut der Universität Tübingen, Germany):—

Den Antragen Arkell's auf Suspension der Regeln sowie den vorgeschlagenen type species ist im Interesse einer Regelung der verworrenen Ammoniten-Nomenklatur und -Taxonomie im allgemeinen zuzustimen. Besonders su begrüssen ist der Schutz der Gattungsnamen Arietites und Perisphinctes gegenüber Ammonites und Planites sowie der Shcutz von Sphaeroceras und Phylloceras.

Ähnlich liegt der Fall bei *Nautilus polygyratus* Reinecke, der nach Annahme von Arkell's Vorschlag etwa als "Perisphinctes polygyratus Rein.-Wegele" zu bezeichen wäre. Referent ist hier allerdings der Ansicht, dass diese stratigraphisch wenig bedeutsame Artbezeichnung als nomen dubium besser ganz zu streichen wäre. Denn gerade die vielfache und vieldeutige Verwendung des Namens scheint seiner genau fixierten Änwending in der küngtigen Literatur hinderlich zu sein.

Die vorgeschlagene Kennzeichnung nachträglicher Fixierung erscheint dort erforderlich, we diese Fixierung einer nomenklatorisch schutzbedürftigen Artbezeichnung gilt, die von ihrem Autor unbestimmt umrissen oder auf eine nicht spezifische bzw. andersspezifische Abbildung gegründet wurde. Wo dagegen eine nachträgliche Fixierung der intentio autoris entspricht, ist solche Kennzeichnung weniger not wendig.

7. Support by the Joint Committee on Zoological Nomenclature for Paleontology in America: On 9th April 1952 there was received a large number of letters commenting on various applications previously published in the Bulletin of Zoological Nomenclature from Professor G. Winston Sinclair (then of the University of Michigan, Ann Arbor, Michigan, U.S.A.) Chairman of the Joint Committee on Zoological Nomenclature for Paleontology in America. Included among these was a letter reporting that the members of the Joint Committee supported the application relating to the name Planites de Haan, 1825, by six votes to five. The foregoing letter was dated 6th February 1952, and its late receipt was apparently due to a decision to defer the despatch to the Commission of the letters containing comments by members

of the Joint Committee until all the letters in question had been prepared. By the date on which this letter was received the Prescribed Waiting Period in respect of the present case had expired but as the Voting Paper on it had not then been prepared, it was possible to include in that Voting Paper a reference to Professor Sinclair's letter:—

The Joint Committee on Zoological Nomenclature for Paleontology in America has considered the proposal in regard to *Planites* de Haan, and I wish to inform you that, being polled, they voted: To support the petition (six):—(1) J. Marvin Weller; (2) Bobb Schaeffer; (3) Bryan Patterson; (4) Katherine V. W. Palmer; (5) John B. Reeside, Jr.; (6) R. C. Moore. To oppose the petition (five):—(1) Don L. Frizzell; (2) A. Myra Keen; (3) Siemon W. Muller; (4) John W. Wells; (5) G. Winston Sinclair.

8. No individual objections received: No objection to the action proposed in the present case was received from individual specialists, the only objection of any kind received being that expressed by the votes cast by the minority of the members of the Joint Committee on Zoological Nomenclature for Paleontology in America, as recorded in the communication from the Joint Committee reproduced in paragraph 7 above.

III.—THE DECISION TAKEN BY THE INTERNATIONAL COMMISSION ON ZOOLOGICAL NOMENCLATURE

9. Issue of Voting Paper V.P.(53)3: On 2nd January 1953, a Voting Paper (V.P.(53)3) was issued in which the Members of the Commission were invited to vote either for, or against, "the proposal relating to the generic name *Planites* de Haan, 1825, as set out in Points (1) to (4) in paragraph 5 on page 106 of Volume 2 of the *Bulletin of Zoological Nomenclature*" [i.e. in the paragraph numbered as above in the paper reproduced in the first paragraph of the present *Opinion*].

- 10. The Prescribed Voting Period: As the foregoing Voting Paper was issued under the Three-Month Rule, the Prescribed Voting Period closed on 2nd April 1953.
- 11. Particulars of the Voting on Voting Paper V.P.(53)3: At the close of the Prescribed Voting Period, the state of the voting on Voting Paper V.P.(53)3 was as follows:—
 - (a) Affirmative Votes had been given by the following twelve (12) Commissioners (arranged in the order in which Votes were received):

Lemche; Hering; Bradley (J.C.); Dymond; Esaki; Bonnet; Riley; do Amaral; Hankó; Cabrera; Hemming; Boschma;

(b) Negative Votes, three (3):

Vokes; Jaczewski; Stoll;

(c) On Leave of Absence, one (1):

Mertens;

(d) Voting Papers not returned, one (1):

Pearson.

12. Declaration of Result of Vote: On 3rd April 1953, Mr. Hemming, Secretary to the International Commission, acting as Returning Officer for the Vote taken on Voting Paper V.P.(53)3,

signed a Certificate that the Votes cast were as set out in paragraph 11 above and declaring that the proposal submitted in the foregoing Voting Paper had been duly adopted and that the decision so taken was the decision of the International Commission in the matter aforesaid.

13. Postponement for further consideration of the problems arising in connection with the name "Nautilus polygyratus" Reinecke, 1818: On 11th December 1957, Mr. Hemming as Secretary executed the following Minute (a) withdrawing for further consideration the problems arising in connection with the interpretation of the nominal species Nautilus polygyratus Reinecke, 1818, and (b) directing that subject to (a) above, the decision in regard to the generic name Planites de Haan, 1825, and associated names taken by the International Commission by its vote on Voting Paper V.P.(53)3 be promulgated forthwith:—

Postponement for further consideration of the proposals relating to the specific name "polygyratus" Reinecke, 1818, as published in the combination "Nautilus polygyratus" submitted by Dr. W. J. Arkell simultaneously with his proposals regarding the generic name "Planites" de Haan, 1825

MINUTE by FRANCIS HEMMING, C.M.G., C.B.E.

(Secretary to the International Commission on Zoological Nomenclature)

Following the close of the Fourteenth International Congress of Zoology, Copenhagen, 1953, consideration was given to the question of preparing an *Opinion* for the purpose of giving effect to the decision taken by the Commission in April of that year by its vote on Voting Paper V.P.(53)3, relating to the generic name *Planites* de Haan, 1825, and to the names of certain other taxa belonging to the Order Ammonoidea of the Class Cephalopoda. In one respect the situation as regards the foregoing case had been altered by the decision taken by the Copenhagen Congress to recognise the concept of neotype, for it now became necessary to consider whether it would be preferable that a neotype should be designated for the nominal species *Nautilus polygyratus* Reinecke, 1818, rather than that, as proposed in the application submitted in this case, the interpretation of that nominal species should be linked with a figure published by Wegele in 1929 based upon a specimen obtained at Pappenheim in Franconia.

- 2. Accordingly, efforts were made by the Office of the Commission, first, to ascertain whether the specimens figured by Wegele were still in existence and, second, to ascertain whether Reinecke's original material was extant. The investigations sounder taken were laborious, involving extensive searches in collections in different parts of Germany where the material in question or part of it might still be preserved. In this connection the grateful thanks of the Commission are to:—Professor Dr. O. Seitz (Amt. für Bodenforschung, Hanover); Dr. R. Dehm (Ludwig-Maximilians Universität München, Institut für Paläontologieund historische Geologie, München); Dr. O. F. Geyer (Geologisch-Paläontologisches Institut der Technischen Hochschule, Stuttgart).
- 3. As a result of the consultations described above, it has now been clearly established (a) that the Reinecke material has been lost, and (b) that the Wegele material was destroyed during the war. In these circumstances there is clearly no possibility of designating a specimen from the first of the above sources to be the lectotype, or from the second of those sources, to be the neotype of the nominal species Nautilus polygyratus Reinecke. On the other hand, there appears to be general agreement that it is desirable that, as the foregoing name has been known in the literature for over a hundred years, steps should be taken as soon as possible to place the interpretation of Reinecke's species upon a firm and unassailable foundation. Discussions as to the possible designation of a specimen from Reinecke's locus typicus are proceeding between the specialists concerned and it is anticipated that in due course proposals on this subject will be submitted to the Commission for consideration.
- 4. In the meantime it is necessary to examine the position as regards the remaining portions of the application submitted by Dr. Arkell, and, in particular, to consider the question of promulgating the decision taken by the Commission in 1953 to use its Plenary Powers to suppress the generic name *Planites* de Haan, a decision, the importance of which has recently been again strongly urged by Dr. Geyer in the consultations described in paragraph 2 of the present Minute. In the original application submitted by Dr. Arkell the *Planites* problem occupied the principal place, that raised by the interpretation of the nominal species *Nautilus polygyratus* Reinecke having been of secondary importance. In these circumstances I am of the opinion, as Secretary, that the promulgation of the Commission's decision on the *Planites* portion of Dr. Arkell's application should no longer be delayed by reason of the difficulties involved in the matter of the interpretation of the nominal species *Nautilus polygyratus* Reinecke. I accordingly hereby direct:—
 - (1) that the proposals relating to the specific name polygyratus Reinecke, 1818, as published in the combination Nautilus polygyratus, included in the application regarding the generic

- name *Planites* de Haan, 1825, be withdrawn for further consideration by specialists in the group concerned, the Registered File Z.N.(S.) 1289 to be opened for this purpose.
- (2) that, subject to (1) above, the decision taken by the Commission by its vote on Voting Paper V.P.(53)3 on the proposal bearing the Registered No. Z.N.(S.) 402, relating to the name *Planites* de Haan and associated names be promulgated in an *Opinion* forthwith.
- 14. Preparation of the Ruling given in the present "Opinion": On 12th December 1957, Mr. Hemming prepared the Ruling given in the present *Opinion* and at the same time signed a Certificate that the terms of that Ruling were in complete accord with those of the proposal approved by the International Commission in its Vote on Voting Paper V.P.(53)3, subject to the omission therefrom of the portion relating to the name *Nautilus polygyratus* Reinecke, 1818, withdrawn from the scope of the said vote for further consideration in accordance with the directions given in the Minute executed by the Secretary on 11th December 1957, the text of which has been reproduced in the immediately preceding paragraph of the present *Opinion*.
- 15. Original References: The following are the original references for the names placed on Official Lists and Official Indexes by the Ruling given in the present Opinion:—
- Biplices Siemiradzki, 1891, Fauna Kopalna warstw Oxfordzkichi i Kimerydzkich: 63
- Orthosphinctes Schindewolf, 1925, N. Jahrb. f. Min. Beil.-Bd. 52 (B): 2, 324
- Planites de Haan, 1825, Specimen phil. Mon. Ammon. Goniat.: 34 tiziani, Ammonites, Oppel, 1863, Pal. Mitt. Mus. Bayer.-Staates 1 (3): 246
- **16.** Family-Group-Name Aspect: No family-group-name problem arises in the present case. The name *Planites* de Haan, 1825, if it had not been suppressed under the Plenary Powers by the Ruling given in the present *Opinion*, would have been a senior subjective synonym of *Perisphinctes* Waagen, 1869 (a name

placed on the Official List of Generic Names in Zoology by the Ruling given in Opinion 303). That genus is the type genus of the family-group taxon perisphinctinae Steinman, 1890, the name of which was placed on Official List of Family-Group Names in Zoology by the Ruling given in Direction 14.

- 17. At the time of the submission of the present application the name applicable to the second portion of a binomen was "trivial name". This was altered to "specific name" by the Fourteenth International Congress of Zoology, Copenhagen, 1953, which at the same time made corresponding changes in the titles of the Official List and Official Index of names of this category. These changes in terminology have been incorporated in the Ruling given in the present Opinion.
- 18. The prescribed procedures were duly complied with by the International Commission on Zoological Nomenclature in dealing with the present case, and the present *Opinion* is accordingly hereby rendered in the name of the said International Commission by the under-signed Francis Hemming, Secretary to the International Commission on Zoological Nomenclature, in virtue of all and every the powers conferred upon him in that behalf.
- 19. The present *Opinion* shall be known as *Opinion* Five Hundred and Four (504) of the International Commission on Zoological Nomenclature.

DONE in London, this Twelfth day of December, Nineteen Hundred and Fifty-Seven.

Secretary to the International Commission on Zoological Nomenclature

FRANCIS HEMMING

OPINIONS AND DECLARATIONS RENDERED BY THE INTERNATIONAL COMMISSION ON ZOOLOGICAL NOMENCLATURE

Edited by

FRANCIS HEMMING, C.M.G., C.B.E. Secretary to the Commission

VOLUME 18. Part 8. Pp 157-176

OPINION 505

Validation under the Plenary Powers of the generic names *Trinucleus* Murchison, 1839 and *Tretaspis* M^cCoy, 1849 (Class Trilobita)

LONDON:

Printed by Order of the International Trust for Zoological Nomenclature

and

Sold on behalf of the International Commission on Zoological Nomenclature by the International Trust at its Publications Office 41, Queen's Gate, London, S.W.7

1958

Price Thirteen Shillings and Sixpence

(All rights reserved)

INTERNATIONAL COMMISSION ON ZOOLOGICAL NOMENCLATURE

COMPOSITION AT THE TIME OF THE ADOPTION OF THE RULING GIVEN IN OPINION 505

The Officers of the Commission

Honorary Life President: Dr. Karl JORDAN (British Museum (Natural History) Zoological Museum, Tring, Herts., England)

President: Professor James Chester Bradley (Cornell University, Ithaca, N.Y., U.S.A., (12th August 1953)

Vice-President: Senhor Dr. Afranio do Amaral (Sao Paulo, Brazil) (12th August 1953)

Secretary: Mr. Francis Hemming (London, England) (27th July 1948)

The Members of the Commission В.

(Arranged in order of precedence by reference to date of election or of most recent re-election, as prescribed by the International Congress of Zoology)

Professor H. Boschma (Rijksmuseum van Natuurlijke Historie, Leiden, The Netherlands) (1st January 1947)
Senor Dr. Angel Cabrera (La Plata, Argentina) (27th July 1948)
Mr. Francis Hemming (London, England) (27th July 1948) (Secretary)
Dr. Henning Lemche (Universitetets Zoologiske Museum, Copenhagen, Denmark) (27th

July 1948)

Professor Teiso Esaki (Kyushu University, Fukuoka, Japan) (17th April 1950)
Professor Pierre Bonnet (Université de Toulouse, France) (9th June 1950)
Mr. Norman Denbigh Riley (British Museum (Natural History), London) (9th June 1950)
Professor Tadeusz Jaczewski (Institute of Zoology, Polish Academy of Sciences, Warsaw, Poland) (15th June 1950) Professor Robert Mertens (Natur-Museum u. Forschungs-Institut Senckenberg, Frankfurt

Professor Robert Merrens (Natur-Museum u. Forschungs-Institut Senckenberg, Frankfuri a.M., Germany) (5th July 1950)

Professor Erich Martin Hering (Zoologisches Museum der Humboldt-Universität zu Berlin, Germany) (5th July 1950)

Senhor Dr. Afranio do Amaral (S. Paulo, Brazil) (12th August 1953) (Vice-President)

Professor J. R. Dymond (University of Toronto, Toronto, Canada) (12th August 1953)

Professor J. Chester Bradley (Cornell University, Ithaca, N.Y., U.S.A.) (12th August 1953)

Professor J. Chester Bradley (Cornell University, Ithaca, N.Y., U.S.A.) (12th August 1953) (President)
Professor Harold E. Vokes (University of Tulane, Department of Geology, New Orleans, Louisiana, U.S.A.) (12th August, 1953)
Professor Béla Hankó (Mezőgazdasági Muzeum, Budapest, Hungary) (12th August 1953)
Dr. Norman R. Stoll (Rockefeller Institute for Medical Research, New York, N.Y., U.S.A.) (12th August 1953)
Mr. P. C. Sylvester-Bradley (Sheffield University, Sheffield, England) (12th August 1953)
Dr. L. B. Holthus (Rijksmuseum van Natuurlijke Historie, Leiden, The Netherlands) (12th August 1953)

(12th August 1953)
Dr. K. H. L. Key (Commonwealth Scientific and Industrial Research Organisation, Canberra, A.C.T., Australia) (15th October 1954)
Dr. Alden H. MILLER (Museum of Vertebrate Zoology, University of California, U.S.A.) (29th October 1954)

Doc. Dr. Ferdinand Prantl (Národni Museum V Praze, Prague, Czechoslovakia) (30th October 1954)

Professor Dr. Wilhelm Kühnelt (Zoologisches Institut der Universität, Vienna, Austria) (6th November 1954)

Professor F. S. Bodenheimer (The Hebrew University, Jerusalem, Israel) (11th November 1954)

Professor Ernst Mayr (Museum of Comparative Zoology at Harvard College, Cambridge, Massachusetts, U.S.A.) (4th December 1954)
Professor Enrico Tortonese (Museo di Storia Naturale "G. Doria", Genova, Italy)

(16th December 1954)

OPINION 505

VALIDATION UNDER THE PLENARY POWERS OF THE GENERIC NAMES "TRINUCLEUS" MURCHISON, 1839, AND "TRETASPIS" M°COY, 1849 (CLASS TRILOBITA)

RULING:—(1) The following action is hereby taken under the Plenary Powers:—

- (a) The under-mentioned generic names are hereby suppressed for the purposes both of the Law of Priority and of the Law of Homonymy:—
 - (i) Trinucleus Link, 1807;
 - (ii) Tretaspis Murchison, 1839;
- (b) The under-mentioned specific name is hereby suppressed for the purposes of the Law of Priority but not for those of the Law of Homonymy:—

tuberculatus Link, 1807, as published in the combination Trinucleus tuberculatus.

- (2) The under-mentioned generic names are hereby placed on the *Official List of Generic Names in Zoology* with the Name Numbers severally specified below:—
 - (a) Trinucleus Murchison, 1839, as validated under the Plenary Powers in (1)(a)(i) above (gender: masculine) (type species, by selection by Vogdes (1890): Trinucleus fimbriatus Murchison, 1839, as defined by the lectotype selected by Stubblefield (C.J.) & Whittington (H.B.) (1956) (Name No. 1252);
 - (b) Tretaspis McCoy, 1849, as validated under the Plenary Powers in (1)(a)(ii) above (gender: feminine) (type species, by selection by Bassler

er of the plants Ma

(R.S.) (1915): Asaphus seticornis Hisinger, 1840) (Name No. 1253).

- (3) The under-mentioned specific names are hereby placed on the *Official List of Specific Names in Zoology* with the Name Numbers severally specified below:—
 - (a) fimbriatus Murchison, 1839, as published in the combination Trinucleus fimbriatus, as defined by the lectotype specified in (2)(a) above (specific name of type species of Trinucleus Murchison, 1839) (Name No. 1490);
 - (b) seticornis Hisinger, 1840, as published in the combination Asaphus seticornis (specific name of type species of Tretaspis McCoy, 1849) (Name No. 1491).
- (4) The under-mentioned generic names are hereby placed on the *Official Index of Rejected and Invalid Generic Names in Zoology* with the Name Numbers severally specified below:—
 - (a) Trinucleus Link, 1807, as suppressed under the Plenary Powers in (1)(a)(i) above (Name No. 1140);
 - (b) Tretaspis Murchison, 1839, as suppressed under the Plenary Powers in (1)(a)(ii) above (Name No. 1141);
 - (c) Edgellia Shaw (A.B.), 1950 (a junior objective synonym of *Trinucleus* Murchison, 1839, as validated under the Plenary Powers in (1)(a)(i) above) (Name No. 1142).
- (5) The under-mentioned specific name is hereby placed on the Official Index of Rejected and Invalid

Specific Names in Zoology with the Name Number 505:—

- tuberculatus Link, 1807, as published in the combination *Trinucleus tuberculatus*, as suppressed under the Plenary Powers in (1)(b) above.
- (6) The under-mentioned family-group names are hereby placed on the *Official List of Family-Group Names in Zoology* with the Name Numbers severally specified below:—
 - (a) TRINUCLEIDAE (correction of TRINUCLEIDES) Hawle (I.) & Corda (A.J.)¹, 1847 (type genus : *Trinucleus* Murchison, 1839) (Name No. 212) ;
 - (b) TRETASPINAE Whittington (H.B.), 1941 (type genus : *Tretaspis* M°Coy, 1849) (Name No. 213).
- (7) The under-mentioned family-group names are hereby placed on the *Official Index of Rejected and Invalid Family-Group Names in Zoology* with the Name Numbers severally specified below:—
 - (a) TRINUCLEEN Emmrich (H.[F.]), 1844 (type genus: Trinucleus Murchison, 1839) (invalid because a vernacular (German) word) (Name No. 253);
 - (b) TRINUCLEIDES Hawle (I.) & Corda (A.J.)¹, 1847 (type genus: *Trinucleus* Murchison, 1839) (an Invalid Original Spelling for TRINUCLEIDAE) (Name No. 254).

For some years there has been disagreement among Trilobite specialists as to whether the "Prodrom" of 1847, in which this name was published, should be attributed to Hawle and Corda jointly (as stated on the title) or to Corda alone (as was later alleged by Hawle to have been the case). The applicants in the present case took the view that Corda should be regarded as sole author. At the time when this *Opinion* was prepared the disputed authorship in this case was under consideration by the Commission which has since rendered a *Direction* (*Direction* 95) in which it has ruled that Hawle and Corda are to be treated as having been joint authors. In the same *Direction* the Commission gave instructions that names published in the "Prodrom" should be so attributed in all cases where names published in it had so far been placed on *Official Lists* or *Official Indexes*. The required corrections have accordingly been made in the Ruling given in the present *Opinion*.

I. THE STATEMENT OF THE CASE

On 19th March 1955 Dr. C. J. Stubblefield (Geological Survey and Museum, London) submitted to the Office of the Commission on his own behalf and on that of Dr. H. B. Whittington (Museum of Comparative Zoology at Harvard College, Cambridge, Massachusetts, U.S.A.) a preliminary communication on the subject of the possible use by the International Commission on Zoological Nomenclature of its Plenary Powers to validate the generic names Trinucleus Murchison, 1839, and Tretaspis McCoy, 1849 (Class Trilobita). This led to the submission to the Commission on 16th January 1956 of the following definitive application:—

Proposed use of the Plenary Powers to validate the generic names "Trinucleus" Murchison, 1839, and "Tretaspis" McCoy, 1849 (Class Trilobita)

By C. J. STUBBLEFIELD, D.Sc., F.R.S.

(Geological Survey and Museum, London)

and

H. B. WHITTINGTON, D.Sc.

(Museum of Comparative Zoology at Harvard College, Cambridge, Massachusetts, U.S.A.)

The purpose of the present application is to ask the International Commission on Zoological Nomenclature to validate the well-known generic name *Trinucleus* (Class Trilobita) as from Murchison, 1839, and the name *Tretaspis* as from McCoy, 1849. For the first of these purposes the use of the Plenary Powers will be needed to suppress the unidentifiable generic name *Trinucleus* Link, 1807, with the specific name *tuberculatus* published by Link in the combination *Trinucleus tuberculatus* on the same occasion. For the second of these purposes the suppression is required of the name *Tretaspis* Murchison, 1839, which, as a junior objective synonym of *Trinucleus* Murchison, 1839, is not required but which at present invalidates the established name *Tretaspis* McCoy, 1849.

2. The name *Trinucleus* was first used by Link (1807: 5) for two trilobite fragments previously illustrated by Walch (1776, Pl. 4, figs. 2, 3). These fragments, which Link named *Trinucleus tuberculatus*,

are considered to be specifically and generically unidentifiable (Shaw and Stubblefield, 1950).

- 3. The next use of the name *Trinucleus* was by Murchison (1839) and the relevant passage with its footnote is quoted below (Murchison, 1839: 217):—
- ... we meet with other forms, including the *Trinucleus*¹, Llhwydd [sic], a genus never observed in the Upper, yet abounding in the Lower Silurian rocks, particularly *T. Caractaci*, Nob., Pl. 23. f. 1 . . .
 - ¹ Fragments and imperfect specimens only of these Trilobites having been published, I was about to name this genus Tretaspis from $\tau \rho \eta \tau \dot{\eta}$ $\dot{\alpha} \sigma \pi \dot{\iota} s$, a shield perforated or deeply sculptured on its margin, for such is the leading generic distinction; when considering that an unquestionable species of this genus was long ago figured by Llhwydd (Lythophyl. Brit. Ichnogr. 1699, p. 97, t. 23) as Trinucleus fimbriatus, I have in obedience to the practice of the best zoologists retained the original name.
 - 4. This passage is interpreted as :-
 - (a) expressing the author's intention to name the genus being discussed *Trinucleus*;
 - (b) rejecting the still-born name Tretaspis Murchison, 1839;
 - (c) quoting, but not as reinforcing by acceptance or adoption of the pre-Linnean species-name *Trinucleus fimbriatus* Lhwyd, 1699.
- 5. Later in the same work Murchison (1839:659—660) states, below the generic heading *Trinucleus* ("a new genus under an old name"), after the description of "*Trinucleus Caractaci* (n.s.)" and following the subheading "*Trinucleus fimbriatus* (n.s.) [Pl. 23], f. 2" and the description of that species, "This is probably the same species figured by Lhwyd [sic], Epist. 1. p. 9. t. 23. I have never found it entire, but the caudal extremity occurring in the same fragment of rock with the buckler, and both agreeing with the fig. of Lhwyd, I have considered them as parts of the same species . . . Loc. near Welsh Pool and Builth".
- 6. The nominal species *Trinucleus fimbriatus* was selected as the type species of the genus *Trinucleus* Murchison by Vogdes in 1890 (: 84). It is important therefore that there should be no doubt as to the identity of the species so named. On the basis of the interpretation given in paragraph 4 above, the name *Trinucleus fimbriatus* is to be regarded as applying to the specimens which Murchison had before him at the time when he published this name, and is not to be treated as a mere re-publication of the pre-Linnean name consisting of the same combination published by Lhwyd in 1699. This is fortunate for two reasons; first, because Lhwyd's specimens cannot now be traced but

were certainly not referable to the same species as Murchison's; second, because a slab from the Murchison Collection, preserved in the Geological Survey Museum in London, registered as Geol. Soc. Coll. 6836, is labelled "Trinucleus fimbriatus. Sil. Syst. pl. 23, fig. 2b & c. Spec. figd. Llandeilo Flags, Gwern y fad [Gwern y fed bach] Nr. Builth. R.I. Murchison Esq". There is no evidence that the writing on the label is that of Murchison; the label was written before 1911, in which year the Geological Society's collection was given to the Geological Survey; but since Murchison was knighted in 1863 it is reasonable to suppose that the label was written before 1863, also that the slab may contain some of Murchison's syntypes of this species. The slab agrees, moreover, with the rock fragment mentioned by Murchison in the note quoted above in paragraph 5 above. Murchison's original illustration [1839: Plate 23, fig. 2] is of a slab containing several fossil fragments of which three were indicated respectively by the artist as a, b and c. The specimen illustrated as fig. 2c is a pygidium [caudal extremity] which was re-identified by Salter [1853: Decade 7, pl. 7, p. 8] as Ampyx nudus Murchison and thus, though forming one of Murchison's syntypes of T. fimbriatus, can no longer be acceptable as a lectotype of that species. As stated earlier, the rock fragment is documented as showing the original of fig. 2b, a fragment of cranidium; doubt exists, however, concerning the identity of the more complete cranidium [buckler] with fig. 2a. There are reasons, nevertheless, for believing that Murchison's illustration of this rock fragment was diagrammatised since the relationship on the slab between the fossils resembling figs. 2a and 2c are approximately as in the illustration but the position of fig. 2b is not as on the slab, nor are the positions of the remaining fossil fragments as they are drawn. Notwithstanding these apparent discrepancies, if the label documentation is correct as far as it concerns fig. 2b and 2c, the more complete cranidium [the buckler] must certainly be a syntype and it is probably the original of fig. 2a which either has been damaged since Murchison's illustration was drawn or the drawing was completed from the additional evidence of another specimen. This more complete cranidium is here selected as the lectotype of Trinucleus fimbriatus Murchison, the interpretation of that species being thus placed on a firmer basis.

7. The name *Trinucleus* has been widely and continuously used since Murchison's day in both palaeontological works and in text books of a more general nature. The family name TRINUCLEIDAE was proposed in 1844 and likewise accepted and widely used. Though some have argued correctly (in personal communications) that the name *Trinucleus* has been used in the past in too wide a sense, the restricted usage of today has been clearly understood for many years (see Raymond, 1913:711; Størmer, 1930). The case for requesting that the name *Trinucleus* Murchison, 1839, be conserved, and the unused name *Trinucleus* Link, 1807, be suppressed, is clear and strong. The substitute name *Edgellia* Shaw (A.B.), 1950 (in Shaw & Stubblefield, *J. Paleont.* 24(5): 624) has not won acceptance and its adoption would

lead to serious disturbance in current practice. At the same time that the name *Trinucleus* Link is suppressed the unidentifiable name *tuberculatus* published by Link in the combination *Trinucleus tuberculatus* on the same occasion should also be suppressed.

- 8. In 1849 (: 410) M°Coy proposed the name *Tretaspis* for a new genus of trilobites, citing two species, the first mentioned of which was *Asaphus seticornis* Hisinger, 1840 (: 3) later selected as the type species by Bassler (1915: 1285). The name *Tretaspis* has been widely used both in Europe and America (Ruedemann, 1901: 41) for many years, especially since Størmer (1930: 55) redescribed the type species in detail. For fifteen or more years Scandinavian geologists have been using the term "*Tretaspis* shales" for rocks in which this genus occurs, rather than the older term "*Trinucleus* shales" ("*Trinucleus*" being used here in a generalised sense). There seems to be an equally strong case, therefore, for requesting that the name *Tretaspis* be conserved as from M°Coy, 1849, by the suppression under the Plenary Powers of the name *Tretaspis* Murchison, 1839, which, as has been explained, has never been used.
- 9. Each of the generic names dealt with in the present application has been taken as the base for a family-group name. The first of the genera concerned is, as has already been noted (paragraph 7 above), the type genus of the universally recognised family TRUNUCLEIDAE. This family-group name is always treated by writers on trilobites as having been first published by Emmrich (H. [F.]) in 1844 (Zur Naturgeschichte der Trilobiten: 17). Emmrich published this name in the form TRINUCLEEN, which has the appearance of being a vernacular (German) word rather than a Latinised word. The next author to give this family-group taxon a name was Corda (A.J.C.)2, 1847 (in Hawle (I.) & Corda (A.J.), Prodrom einer Monogr.: 36), who used the spelling TRINUCLEIDES. The first author to use this family-group name in an indisputably Latin form was Salter (J.W.) who in 1864 (Mon. Brit. Trilobites (Palaeont. Soc.): 2) used the name in the form TRINUCLEIDAE. Other things being equal, the correct course would be to attribute to Salter (1864) the family-group name based on Trinucleus, but in the present case this would lead to exactly the result which it was the object of the Fourteenth International Congress of Zoology, Copenhagen, 1953, to avoid, when it laid down that a family-group name may be accepted as from a date on which it was published in a vernacular form instead of in a Latin form where this is necessary in the interests of stability in nomenclature (1953, Copenhagen Decisions zool. Nomencl.: 35—36, Decision 53(2)). For if the family-group name based upon *Trinucleus* were accepted as ranking only from Salter, 1864, it would fall as a junior subjective synonym of

² See Footnote 1.

CRYPTOLITHIDAE Angelin, 1854 (Palaeont. scand. 1 Crustacea: 64) (type genus: Cryptolithus Green, 1832). In these circumstances the family-group name based on Trinucleus is properly acceptable as from Emmrich, 1844, the author who, as already explained, is always credited with this name by trilobite workers. The second generic name dealt within the present application, Tretaspis McCoy, 1849, has been taken as the base for a subfamily name TRETASPINAE by Whittington (H.B.) in 1941 (J. Paleont. 15: 23).

- 10. For the reasons set forth in the present application it is here asked that the International Commission on Zoological Nomenclature should:—
 - (1) use its Plenary Powers for the purpose of suppressing the undermentioned names to the extent severally shown below:—
 - (a) to be suppressed for the purposes of both the Law of Priority and the Law of Homonymy:—
 - (i) Trinucleus Link, 1807;
 - (ii) Tretaspis Murchison, 1839;
 - (b) to be suppressed for the purposes of the Law of Priority but not for those of the Law of Homonymy: tuberculatus Link, 1807, as published in the combination Trinucleus tuberculatus;
 - (2) place the under-mentioned generic names on the Official List of Generic Names in Zoology:—
 - (a) Trinucleus Murchison, 1839, as validated under the Plenary Powers under (1)(a)(i) above (gender: masculine) (type species, by selection by Vogdes (1890): Trinucleus fimbriatus Murchison, 1839, as defined by the lectotype selected in paragraph 6 of the present application);
 - (b) Tretaspis McCoy, 1849, as validated under the Plenary Powers under (1)(a)(ii) above (gender: feminine) (type species, by selection by Bassler (R.S.) (1915): Asaphus seticornis Hisinger, 1840);
 - (3) place the under-mentioned specific names on the Official List of Specific Names in Zoology:—
 - (a) fimbriatus Murchison, 1839, as published in the combination Trinucleus fimbriatus and as defined by the lectotype specified in (2)(a) above (specific name of type species of Trinucleus Murchison, 1839);
 - (b) seticornis Hisinger, 1840, as published in the combination Asaphus seticornis (specific name of type species of Tretaspis McCoy, 1849);

- (4) place the under-mentioned generic names on the Official Index of Rejected and Invalid Generic Names in Zoology:—
 - (a) the generic names specified respectively in (1)(a)(i) and (1)(a)(ii) above, as there suppressed under the Plenary Powers;
 - (b) Edgellia Shaw (A.B.), 1950 (a junior objective synonym of *Trinucleus* Murchison, 1839, as validated under the Plenary Powers under (1)(a)(i) above);
- (5) place the under-mentioned specific name on the Official Index of Rejected and Invalid Specific Names in Zoology: tuberculatus Link, 1807, as published in the combination Trinucleus tuberculatus, as suppressed under the Plenary Powers under (1)(b) above;
- (6) place the under-mentioned family-group names on the Official List of Family-Group Names in Zoology:—
 - (a) TRINUCLEIDAE (correction of TRINUCLEEN) Emmrich (H.[F.]), 1844 (type genus : *Trinucleus* Murchison, 1839);
 - (b) TRETASPINAE Whittington (H.B.), 1941 (type genus: Tretaspis M°Coy, 1849);
- (7) place on the Official Index of Rejected and Invalid Family-Group Names in Zoology the under-mentioned family-group names, each of which is an Invalid Original Spelling for TRINUCLEIDAE (type genus: Trinucleus Murchison, 1839:—
 - (a) TRINUCLEEN Emmrich (H.), 1844;
 - (b) TRINUCLEIDES Corda (A.J.C.)³, 1847.

References

- Bassler (R.S.), 1915, "Bibliographic Index of American Ordovician and Silurian Fossils", Bull. U.S. nat. Mus. 92
- Corda (A.J.C.)⁴, 1847, in Hawle (I.) & Corda (A.J.C.), Prodrom einer Monographie der böhmischen Trilobiten, Prag
- Emmrich (H.[F.]), 1844, Zur Naturgeschichte der Trilobiten, Meiningen
- Hisinger (W.), 1840, Lethaea Svecica seu Petrificata Sveciae, Supp. 2, Holmiae

³ See Footnote 1.

⁴ See Footnote 1.

- Lhwyd (E.), 1699, Lithophylacii Britannici Ichnographia, London
- Link (D.H.F.), 1807, Beschreibung der Naturalien-Sammlung der Universität zu Rostock, Abth. 4
- M°Coy (F.), 1849, "On the Classification of some British Fossil Crustacea . . .". Ann. Mag. nat. Hist., (2) 4: 392—414
- Murchison (R.I.), 1839, *The Silurian System*, pt. 1:1—576; pt. 2:577—768
 - (There is no evidence that there were different publication dates for these two parts.)
- Raymond (P.E.), 1913, Trilobita in Eastman (C.R.), adaptation of Zittel (K.A. von), *Textbook of Paleontology*, vol. 1, London & New York
- Ruedemann (R.), 1907, "Trenton Conglomerate of Rysedorph Hill, Rensselaer Co., N.W., and its fauna". Bull. N.Y. State Mus. 49: 3—114
- Salter (J.W.), 1853, Figures and Descriptions illustrative of British Organic Remains, Decade VII. Mem. geol. Surv. U.K.
- Shaw (A.B.), and Stubblefield (C.J.), 1950, "Trinucleus Murchison, 1839, as a nomen conservandum". J. Paleont. 24: 624—625
- Størmer (L.), 1930, "Scandinavian Trinucleidae . . . ". Norsk. Vid.-Akad. Oslo. Skr, 1, Math. Nat. Kl., No. 4:1—111
- Vogdes (A.W.), 1890, "A Bibliography of Paleozoic Crustacea from 1698 to 1889". Bull. U.S. geol. Survey., No. 63: 1—177
- Walch (J.E.I.), 1776, "Ein Kleiner Beytrag zur Naturgeschichte der Trilobiten". Der Naturforscher 9: 226—227, Halle

II. THE SUBSEQUENT HISTORY OF THE CASE

2. Registration of the present application: Upon the receipt of Dr. C. J. Stubblefield's preliminary enquiry in 1955 the question of the validation of the generic name *Trinucleus* Murchison, 1839, and *Tretaspis* M°Coy, 1849 (Class *Trilobita*) was allotted the Registered Number Z.N.(S.) 926.

- **3. Publication of the present application:** The present application was sent to the printer on 29th February 1956 and was published on 12th June of the same year in Part 2 of Volume 12 of the *Bulletin of Zoological Nomenclature* (Stubblefield & Whittington, 1956, *Bull. zool. Nomencl.* **12:** 49—54).
- **4.** Issue of Public Notices: Under the revised procedure prescribed by the Thirteenth International Congress of Zoology, Paris, 1948 (1950, Bull. zool. Nomencl. **4**: 51—56), Public Notice of the possible use by the International Commission on Zoological Nomenclature of its Plenary Powers in the present case was given on 12th June 1956 (a) in Part 2 of Volume 12 of the Bulletin of Zoological Nomenclature (the Part in which the application by Dr. Stubblefield and Dr. Whittington was published) and (b) to the other prescribed serial publications. In addition such Notice was given to four general zoological serial publications and to three palaeontological serials in Europe and America.
- 5. Support received from Rudolf and Emma Richter (Forschungs-Institutes und Natur-Museums Senckenberg, Frankfurt a.M., Germany): On 30th July 1956 Dr. Rudolf Richter and Frau Emma Richter (Forschungs-Institutes und Natur-Museums Senckenberg, Frankfurt a.M., Germany) addressed the following letter to the Office of the Commission, commenting on the present and other recently published cases in the Bulletin of Zoological Nomenclature (Richter (R) & Richter (E.), 1956, Bull. zool. Nomencl. 12: 255):—

Für den Fall, dass es den betressenden Anträgen helsen kann, möchten wir Ihnen mutteilen, dass wir sie im Interesse der Stabilitätder Nomenklatur nach-drücklich unterstützen.

Es handelt sich um folgende Anträge: Paradoxides, Asaphus, Trinucleus and Cryptonymus.

6. No Objection Received: No objection to the action proposed in the present case was received from any source.

III. THE DECISION TAKEN BY THE INTERNATIONAL COMMISSION ON ZOOLOGICAL NOMENCLATURE

- 7. Issue of Voting Paper V.P.(57)5: On 22nd January 1957 a Voting Paper (V.P.(57)5) was issued in which the Members of the Commission were invited to vote either for, or against, "the proposal relating to the generic name *Trinucleus* Murchison, 1839, as set out in Points (1) to (7) in paragraph 10 on pages 52 to 54 of Volume 12 of the *Bulletin of Zoological Nomenclature*" [i.e. in the paragraph numbered as above in the paper reproduced in the first paragraph of the present *Opinion*].
- 8. The Prescribed Voting Period: As the foregoing Voting Paper was issued under the Three-Month Rule, the Prescribed Voting Period closed on 22nd April 1957.
- 9. Particulars of the Voting on Voting Paper V.P.(57)5: At the close of the Prescribed Voting Period, the state of the voting on Voting Paper V.P.(57)5 was as follows:—
 - (a) Affirmative Votes had been given by the following twenty-three (23) Commissioners (arranged in the order in which Votes were received):

Hering; Boschma; Holthuis; Prantl; Lemche; Mayr; Dymond; Bodenheimer; Vokes; Sylvester-Bradley; Riley; Esaki; Key; Hemming; Bonnet; Mertens; Jaczewski; Stoll; Cabrera; do Amaral; Kühnelt; Tortonese; Miller;

(b) Negative Votes:

None;

(c) On Leave of Absence, one (1):

Bradley (J.C.);

(d) Prevented from voting by the interruption of postal communications consequent upon political disturbances, one (1):

Hankó;

(e) Voting Papers not returned:

None.

- 10. Declaration of Result of Vote: On 24th April 1957, Mr. Hemming, Secretary to the International Commission, acting as Returning Officer for the Vote taken on Voting Paper V.P.(57)5, signed a Certificate that the Votes cast were as set out in paragraph 9 above and declaring that the proposal submitted in the foregoing Voting Paper had been duly adopted and that the decision so taken was the decision of the International Commission in the matter aforesaid.
- 11. Acceptance of the name "Trinucleides" Hawle & Corda, 1847, as the oldest available family-group name based on the generic name "Trinucleus" Murchison, 1839: Simultaneously with the signature on 24th April 1957 of the Certificate (referred to in paragraph 10 above) regarding the voting on Voting Paper V.P.(57)5, Mr. Hemming executed the following Minute directing for the reasons there stated that in lieu of the name TRINUCLEEN Emmrich, 1844, the name TRINUCLEIDES (an Invalid Original Spelling for TRINUCLEIDAE) Hawle & Corda, 1847 be accepted as the oldest available family-group name for the taxon having the nominal genus *Trinucleus* Murchison, 1839, as type genus:—

Adoption of "Trinucleides" Hawle (I.) & Corda (A.J.), 1847, as the oldest available family-group name based on the generic name "Trinucleus" Murchison, 1839 (Class Trilobita)

MINUTE by FRANCIS HEMMING, C.M.G., C.B.E.

(Secretary to the International Commission on Zoological Nomenclature)

The question of the name to be accepted as the oldest available family-group name based on the generic name *Trinucleus* Murchison,

1839 (Class Trilobita) has this day been reviewed in the light of a question in regard thereto raised by Professor Dr. Tadeusz Jaczewski (Warsaw) when returning his completed Voting Paper (V.P.(57)5) relating to the application submitted jointly by Dr. C. J. Stubblefield and Dr. H. B. Whittington in regard to the above generic name and to the generic name Tretaspis McCoy, 1849.

- 2. In the application submitted in this case Dr. Stubblefield and Dr. Whittington explained that the first two authors to publish familygroup names based on the generic name Trinucleus Murchison, 1839, both employed irregular terminations for the name so introduced, Emmrich (H.[F.]), (1844), using the spelling TRINUCLEEN. Hawle (I.) & Corda (A.J.), (1847), using the spelling TRINUCLEIDES. The applicants added that the first author to use this family-group name in an indisputably Latin form was Salter (J.W.) who in 1864 published this name in the correct form TRINUCLEIDAE. It was explained, however, that serious confusion would result if this name were to be accepted only as from 1864, for in that event it would be a junior subjective synonym of the name CRYPTOLITHIDAE Angelin, 1854. reasons Dr. Stubblefield & Dr. Whittington recommended that in accordance with the principle of stability enjoined by the Fourteenth International Congress of Zoology, Copenhagen, 1953, the important family-group name TRINUCLEIDAE should be accepted as having priority as from the year 1844 when it was published by Emmrich in the defective form TRINUCLEEN.
- 3. In commenting on this aspect of the present application, Professor Jaczewski drew attention to the fact that, although the termination "-es" used for this family-group name by Hawle & Corda when they published it in the form trinucleids" was defective, there could be no doubt that the word so published was a Latinised word, the above termination being one which could not have been used if, like the name trinucleid Emmrich, the name trinucleids Hawle & Corda had been a vernacular name. Professor Jaczewski accordingly concluded that the correct course in the present case would be to accept trinucleidae as having been validly published as a Latin word, though with the defective termination "-es" by Hawle & Corda in 1847, rather than to treat the present as a special case by accepting this name as from Emmrich (1844), whose name trinucleen was undoubtedly a vernacular word.
- 4. I have since discussed this matter with Dr. Stubblefield as the senior author of the present application. Dr. Stubblefield would have preferred that this name should have been accepted as having been validly published by Emmrich (1844), who had always been treated by specialists in the Trilobita as having been the first author to establish a family-group name based on the generic name TRINUCLEUS Murchison. Dr. Stubblefield accepted, however, the view that the

name TRINUCLEIDES, as published by Hawle & Corda in 1847 was a Latinised word and therefore that under the Règles the family-group name TRINUCLEIDAE could be accepted as from the publication in 1847 of the defectively formed version TRINUCLEIDES Hawle & Corda (a name attributed by the applicants in the present case to Corda alone). The acceptance of this name as from Hawle & Corda (1847) would give it priority over the name CRYPTOLITHIDAE Angelin, 1854, and would thus avoid the confusion which would result if that name were to replace the name TRINUCLEIDAE as a senior subjective synonym. The principal object of this part of the original application would thus be secured. In these circumstances Dr. Stubblefield indicated that he did not desire to press his (and Dr. Whittington's) original proposal that the family-group name based on Trinucleus Murchison should be accepted as from TRINUCLEEN Emmrich, 1844, and would be quite satisfied if the Commission were to treat this name as having been first validly published (in the form TRINUCLEIDES) by Hawle & Corda in 1847.

- 5. The point made in this matter by Professor Jaczewski is undoubtedly valid and, as its acceptance would meet the purposes of the application submitted in this case and is moreover acceptable to the applicants, I now, as Secretary, direct that in the *Opinion* to be rendered giving effect to the vote taken by the Commission on Voting Paper V.P.(57)5 the following corrections be made in the portion of the proposal relating to the family-group name based on the generic name *Trinucleus* Murchison, 1839:—
 - (1) the name TRINUCLEEN Emmrich (H.[F.]), 1844, to be placed on the Official Index of Rejected and Invalid Family-Group Names in Zoology as a name which is invalid by reason of being a vernacular (German) word;
 - (2) the name TRINUCLEIDES Hawle (I.) & Corda (A.J.C.), 1847, to be accepted as consisting of a Latinised word and therefore as being an available name, though one published with an irregular termination;
 - (3) the name TRINUCLEIDES Hawle & Corda, 1847, to be placed on the *Official Index* specified in (1) above as an Invalid Original Spelling for TRINUCLEIDAE;
 - (4) the name TRINUCLEIDAE (correction of TRINUCLEIDES) Hawle & Corda, 1847, to be placed on the *Official List of Family-Group Names in Zoology*.
- 6. I should add for purposes of record that in the present Minute the name TRINUCLEIDES as published in 1847 has been treated as having been published jointly by Hawle (I.) and Corda (A.J.C.), as stated on the title, and not by Corda alone, as is considered to have been the case

by some specialists, this appearing to be the correct course, pending a ruling by the Commission that the evidence provided by the title be set aside. This question is, however, at this time before the Commission and accordingly the method of citation here adopted is employed solely as a matter of convenience and is liable to revision,⁵ if such is required, when the Commission reaches a decision on this matter.

- 12. Preparation of the Ruling given in the present "Opinion": On 15th December 1957 Mr. Hemming prepared the Ruling given in the present *Opinion* and at the same time signed a Certificate that the terms of that Ruling were in complete accord with those of the proposal approved by the International Commission in its Vote on Voting Paper V.P.(57)5, subject to the adjustment as respects certain family-group names specified in the Minute executed by the Secretary on 24th April 1957, the text of which has been reproduced in paragragh 11 of the present *Opinion*.
- 13. Original References for Generic and Specific Names: The following are the original references for the generic and specific names placed on *Official Lists* and *Official Indexes* by the Ruling given in the present *Opinion*:—

Edgellia Shaw (A.B.), 1950, in Shaw (A.B.) & Stubblefield (C.J.), J. Paleont. **24**(5): 624

fimbriatus, Trinucleus, Murchison, 1839, Silurian System (2): 660 seticornis, Asaphus, Hisinger, 1840, Lethaea svec., Suppl. 2:3

Tretaspis Murchison, 1839, Silurian System (1): 217, footnote 1

Tretaspis McCoy, 1849, Ann. Mag. nat. Hist. (2) 4:410

Trinucleus Link, 1807, Beschr. nat.-Samml. Univ. Rostock 4:6

Trinucleus Murchison, 1839, Silurian System (2): 649

tuberculatus, Trinucleus, Link, 1807, Beschr. nat.-Samml. Univ. Rostock 4:6

⁵ As explained in Footnote 1 the Commission has now given a Ruling that Hawle and Corda are to be treated as having been joint authors of the "Prodrom" of 1847.

14. References for selections of type species of genera: The following are the references for the selections of type species for genera specified in the Ruling given in the present *Opinion*:—

For *Trinucleus* Murchison, 1839

Vogdes, (A.W.) 1890, Bull. U.S. geol. Survey 63: 84

For Tretaspis McCoy, 1849

Bassler (R.S.), 1915, Bull. U.S. nat. Mus. 92: 1285

15. References for selections of lectotypes for nominal species: The following is the reference for the selection of a lectotype for a nominal species specified in the Ruling given in the present Opinion:—

For *Trinucleus fimbriatus*Murchison, 1839

Stubblefield (C.J.) & Whittington (H.B.), 1956, *Bull. zool. Nomencl.* **12**: 51

16. Family-Group Names: The following are the original references for the family-group names placed by the Ruling given in the present *Opinion* on the *Official List* and *Official Index* of names of taxa of the family-group category:—

TRETASPINAE Whittington (H.B.), 1941, J. Paleont. 15:23

TRINUCLEEN Emmrich (H.[F.]), 1844, Naturgesch. Trilobiten: 16

TRINUCLEIDES Hawle (I.) & Corda (A.J.C.), 6 1847 (an Invalid Original Spelling for TRINUCLEIDAE)

TRINUCLEIDAE (correction of TRINUCLEIDES) Hawle (I.) & Corda (A.J.C.), 1847, *Prodrom Mon. böhm Trilob*.: 36 (also published, probably in 1848, in *Abh. Königl.-böhm. Ges. Wiss* (5) 5:152)

17. The prescribed procedures were duly complied with by the International Commission on Zoological Nomenclature in dealing with the present case, and the present *Opinion* is accordingly hereby rendered in the name of the said International Commission by the under-signed Francis Hemming, Secretary

⁶For the authorship here attributed to this name see Footnote 1.

to the International Commission on Zoological Nomenclature, in virtue of all and every the powers conferred upon him in that behalf.

18. The present *Opinion* shall be known as *Opinion* Five Hundred and Five (505) of the International Commission on Zoological Nomenclature.

DONE in London, this Fifteenth day of December, Nineteen Hundred and Fifty-Seven.

Secretary to the International Commission on Zoological Nomenclature

FRANCIS HEMMING

OPINIONS AND DECLARATIONS RENDERED BY THE INTERNATIONAL COMMISSION ON ZOOLOGICAL NOMENCLATURE

Edited by

FRANCIS HEMMING, C.M.G., C.B.E. Secretary to the Commission

VOLUME 18. Part 9. Pp. 177-196

OPINION 506

Grant under the Plenary Powers of precedence to the specific name jurtina Linnaeus, 1758, as published in the combination Papilio jurtina, over the name janira Linnaeus, 1758, as published in the combination Papilio janira (a name published in the same work and on the same date) and suppression under the same Powers of the family-group name EPINEPHELIDI Putt, 1896 (Class

Insecta, Order Lepidoptera)

MAY 22 1958

LIBRAR'

LONDON:

Printed by Order of the International Trust for Zoological Nomenclature

and

Sold on behalf of the International Commission on Zoological Nomenclature by the International Trust at its Publications Office 41, Queen's Gate, London, S.W.7

1958

Price Thirteen Shillings and Sixpence

(All rights reserved)

INTERNATIONAL COMMISSION ON ZOOLOGICAL NOMENCLATURE

COMPOSITION AT THE TIME OF THE ADOPTION OF THE RULING GIVEN IN OPINION 506

The Officers of the Commission

Honorary Life President: Dr. Karl JORDAN (British Museum (Natural History), Zoological Museum, Tring, Herts, England)

President: Professor James Chester Bradley (Cornell University, Ithaca, N.Y., U.S.A.) (12th August 1953)

Vice-President: Senhor Dr. Afranio do Amaral (Sao Paulo, Brazil) (12th August 1953)

Secretary: Mr. Francis HEMMING (London, England) (27th July 1948)

R. The Members of the Commission

(Arranged in order of precedence by reference to date of election or of most recent re-election, as prescribed by the International Congress of Zoology)

Professor H. Boschma (Rijksmuseum van Natuurlijke Historie, Leiden, The Netherlands) (1st January 1947)

Senor Dr. Angel Cabrera (La Plata, Argentina) (27th July 1948) Mr. Francis Hemming (London, England) (27th July 1948) (Secretary) Dr. Henning Lemche (Universitetets Zoologiske Museum, Copenhagen, Denmark) (27th July 1948)

Professor Teiso Esaki (Kyushu University, Fukuoka, Japan) (17th April 1950) Professor Pietre Bonnet (Université de Toulouse, France) (9th June 1950)

Mr. Norman Denbigh RILEY (British Museum (Natural History), London) (9th June 1950) Professor Tadeusz Jaczewski (Institute of Zoology, Polish Academy of Sciences, Warsaw, Poland) (15th June 1950)

Professor Robert Mertens (Natur-Museum u. Forschungs-Institut Senckenberg, Frankfurt a. M., Germany) (5th July 1950)

Professor Erich Martin Hering (Zoologisches Museum der Humboldt-Universität zu Berlin,

Frofessor J. R. Dymond (University of Toronto, Toronto, Canada) (12th August 1953)
Professor J. Chester Bradley (Cornell University, Ithaca, N.Y., U.S.A.) (12th August 1953)

1953) (President)

Professor Harold E. Vokes (University of Tulane, Department of Geology, New Orleans, Louisiana, U.S.A.) (12th August 1953)
Professor Béla Hankó (Mezőgazdasági Muzeum, Budapest, Hungary) (12th August 1953)

Dr. Norman R. Stoll (Rockefeller Institute for Medical Research, New York, N.Y.,

U.S.A.) (12th August 1953)
Mr. P. C. Sylvester-Bradley (Sheffield University, Sheffield, England) (12th August 1953)
Dr. L. B. Holthus (Rijksmuseum van Natuurlijke Historie, Leiden, The Netherlands) (12th August 1953)

Dr. K. H. L. Key (Commonwealth Scientific and Industrial Research Organisation, Canberra, A.C.T., Australia) (15th October 1954) Canberra, A.C.T., Australia) (15th October 1954)
Dr. Alden H. MILLER (Museum of Vertebrate Zoology, University of California, U.S.A.)

(29th October 1954)

Doc. Dr. Ferdinand PRANTL (Národni Museum V Praze, Prague, Czechoslovakia) (30th October 1954)

Professor Dr. Wilhelm Kühnelt (Zoologisches Institut der Universität, Vienna, Austria) (6th November 1954) Professor F. S. Bodenheimer (The Hebrew University, Jerusalem, Israel) (11th November

Professor Ernst Mayr (Museum of Comparative Zoology at Harvard College, Cambridge, Massachusetts, U.S.A.) (4th December 1954)
Professor Enrico Tortonese (Museo di Storia Naturale "G. Doria," Genova, Italy

(16th December 1954)

OPINION 506

GRANT UNDER THE PLENARY POWERS OF PRECEDENCE TO THE SPECIFIC NAME "JURTINA" LINNAEUS, 1758, AS PUBLISHED IN THE COMBINATION "PAPILIO JURTINA", OVER THE NAME "JANIRA" LINNAEUS, 1758, AS PUBLISHED IN THE COMBINATION "PAPILIO JANIRA" (A NAME PUBLISHED IN THE SAME WORK AND ON THE SAME DATE) AND SUPPRESSION UNDER THE SAME POWERS OF THE FAMILY-GROUP NAME "EPINEPHELIDI" TUTT, 1896 (CLASS INSECTA, ORDER LEPIDOPTERA)

RULING:—(1) The following action is hereby taken under the Plenary Powers:—

- (a) All selections by First Revisers as to the relative precedence to be accorded to the specific name jurtina Linnaeus, 1758, as published in the combination Papilio jurtina, and the specific name janira Linnaeus, 1758, as published in the combination Papilio janira, these being names published in the same work and on the same date, made prior to the present Ruling are hereby set aside, and directions are hereby given that the name jurtina Linnaeus, 1758, as published in the combination Papilio jurtina, is to take precedence over the name janira Linnaeus, 1758, as published in the combination Papilio janira (Class Insecta, Order Lepidoptera).
- (b) The family-group name EPINEPHELIDI Tutt, 1896 (type genus: *Epinephele* Hübner, [1819]) is hereby suppressed for the purposes of the Law of Priority but not for those of the Law of Homonymy.

- (2) It is hereby ruled that in accordance with the provisions of *Declaration* 28 the nominal family-group taxon MANIOLIDI Reuter (E.), 1897, was based upon a misidentified type genus and therefore that the above name possesses no status under either the Law of Priority or the Law of Homonymy.
- (3) The under-mentioned generic names are hereby placed on the *Official List of Generic Names in Zoology* with the Name Numbers severally specified below:—
 - (a) Maniola Schrank, 1801 (gender: feminine) (type species, under Declaration 21, through the selection as such by Scudder (S.H.), (1875), of Maniola lemur Schrank, 1801 (a name which under the lectotype selection made by Hemming (F.), (1956), is a junior objective synonym of Papilio jurtina Linnaeus, 1758): Papilio jurtina Linnaeus, 1758) (Name No. 1254);
 - (b) *Erebia* Dalman, 1816 (gender: feminine) (type species, by original designation: *Papilio ligea* Linnaeus, 1758) (Name No. 1255).
- (4) The under-mentioned specific names are hereby placed on the *Official List of Specific Names in Zoology* with the Name Numbers severally specified below:—
 - (a) jurtina Linnaeus, 1758, as published in the combination Papilio jurtina, a name taking precedence over the name janira Linnaeus, 1758, as published in the combination Papilio janira, under the Ruling given under the Plenary Powers in (1)(a) above (specific name of type species of Maniola Schrank, 1801) (Name No. 1492);

- (b) janira Linnaeus, 1758, as published in the combination Papilio janira, a name ranking for precedence below the name jurtina Linnaeus, 1758, as published in the combination Papilio jurtina under the Ruling given under the Plenary Powers in (1)(a) above (Name No. 1493);
- (c) fortunata Alphéraky, 1889, as published in the combination Epinephele janira var. fortunata (Name No. 1494);
- (d) *ligea* Linnaeus, 1758, as published in the combination *Papilio ligea* (specific name of type species of *Erebia* Dalman, 1816) (Name No. 1495).
- (5) The under-mentioned generic name is hereby placed on the Official Index of Rejected and Invalid Generic Names in Zoology with the Name Number 1143:—

Epigea Hübner, [1819] (a junior objective synonym of Erebia Dalman, 1816).

- (6) The under-mentioned specific name is hereby placed on the Official Index of Rejected and Invalid Specific Names in Zoology with the Name Number 506:
 - lemur Schrank, 1801, as published in the combination Maniola lemur and as defined by the lectotype selection made by Hemming (F.), (1956) (a junior objective synonym of jurtina Linnaeus, 1758, as published in the combination Papilio jurtina).

- (7) The under-mentioned family-group names are hereby placed on the *Official List of Family-Group Names in Zoology* with the Name Numbers severally specified below:—
 - (a) MANIOLIDI Verity, 1953, as validated by the rejection of MANIOLIDI Reuter (E.), 1897, under *Declaration* 28 in (2) above (type genus: *Maniola* Schrank, 1801) (Name No. 214);
 - (b) EREBIINAE Tutt, 1896 (type genus: Erebia Dalman, 1816) (Name No. 215).
- (8) The under-mentioned family-group names are hereby placed on the Official Index of Rejected and Invalid Family-Group Names in Zoology with the Name Numbers severally specified below:—
 - (a) MANIOLIDI Reuter (E.), 1897 (type genus: Maniola Schrank, 1801) (invalid under Declaration 28 under the Ruling given in (2) above, as being the name of a family-group taxon based upon a misidentified type genus) (Name No. 255);
 - (b) EPINEPHELIDI Tutt, 1896 (type genus: *Epinephele* Hübner, [1819]), as suppressed under the Plenary Powers in (8)(b) above (Name No. 256).

I. THE STATEMENT OF THE CASE

On 18th June 1956 Mr. Francis Hemming (London) submitted the following application in which he asked for the use by the Commission of its Plenary Powers to secure (a) that as the specific name for the Common Meadow Brown Butterfly of Europe the specific name jurtina Linnaeus, 1758, as published in the combination Papilio jurtina, should take precedence over the specific name janira Linnaeus, 1758, as published in the combination Papilio janira, these being names published in the same work and on the same date, and (b) that the name MANIOLIDI Verity, 1953, should be the oldest available family-group name for the genus Maniola Schrank, 1801 (Class Insecta, Order Lepidoptera):—

Proposed use of the Plenary Powers (a) to secure that the name "jurtina" Linnaeus, 1758, shall be the oldest available specific name for the species currently known as "Maniola jurtina" (Linnaeus, 1758) and (b) to protect the family-group name "Maniolidi" Verity, 1953 (Class Insecta, Order Lepidoptera)

By FRANCIS HEMMING, C.M.G., C.B.E.

(London)

The principal object of the present application is to ask the International Commission on Zoological Nomenclature to use its Plenary Powers to secure that the name jurtina Linnaeus, 1758, as published in the combination Papilio jurtina, shall be the oldest available name for the species currently known as Maniola jurtina (Linnaeus, 1758) (Class Insecta, Order Lepidoptera). The need for the use of the Plenary Powers in this case arises, as will be seen, from the decision of the Fourteenth International Congress of Zoology, Copenhagen, 1953, to reinstate the "First Reviser" Principle in a revised form in place of the "Principle of Page and Line Precedence" adopted by the preceding Congress in Paris in 1948 for determining the relative precedence to be accorded to names published in the same book and on the same page. A second and important purpose of the present application is to secure that the family-group taxon typified by the above species shall bear a name based on the generic name Maniola Schrank and not upon the name (a) Epinephele Hübner, [1819], a long-rejected junior subjective synonym of Maniola Schrank. relevant particulars of both aspects of the present case are given in the following paragraphs.

2. The Meadow Brown, perhaps the commonest roadside butterfly in Europe, was given two names in 1758 by Linnaeus who, misled by the sexual dimorphism shown in this species, believed that the female represented one species and the male another. The nominal species so established were: (a) Papilio jurtina Linnaeus, 1758 (Syst.

- Nat. (ed. 10) 1:475, no. 104), the habitat for which was given as "in Gramine Europae, Africae"; (b) Papilio janira Linnaeus, 1758 (ibid. 1:475, no. 106), the habitat for which was given as "in Europae sylvis". Of these names jurtina Linnaeus applied to the female, and janira Linnaeus to the male of the species with which we are here concerned.
- 3. Although Linnaeus himself never admitted that the above names applied to a single species, his mistake in this matter was noted by several authors between the publication of the Tenth and Twelfth Editions of the Systema Naturae, e.g. by Scopoli (1763) and Müller (1764), but these authors contented themselves with pointing out that the names jurtina Linnaeus and janira Linnaeus applied to the same species but neither of them took the final step of accepting one of these names and rejecting the other. Neither of these authors can therefore be regarded as having acted as a First Reviser. The first author to do so was Fabricius (J.C.). In his two first works Fabricius accepted both the Linnean nominal species as good species; thus in 1775 (Syst. Ent.: 497—498) he treated janira as Species No. 235 and jurtina as Species No. 236, while in 1781 (Spec. Ins. 2:81) he treated the above nominal species as Species Nos. 358 and 359 respectively. When, however, we come to his next important work, we find that Fabricius had realised that Linnaeus' two names applied to the same taxon (Mantissa Ins. 2:44). On this occasion he accepted the name janira Linnaeus as the name for this species, allotting to it the Species No. 433, and at the same time he rejected the name *jurtina* Linnaeus, stating that it was only a name for the other sex of *janira* Linnaeus, to which he sunk it as a junior synonym. Fabricius' actual comment on jurtina Linnaeus was "Sp. Ins. 2.81.359 [i.e. Papilio janira] pura sexus varietas". The foregoing action by Fabricius complies in every respect with the requirements incorporated in Article 28 by the Copenhagen Congress and accordingly Fabricius is to be accepted as having acted as a First Reviser in the Mantissa of 1787. Accordingly, under the above Article the name janira Linnaeus is to be accorded precedence over the name jurtina Linnaeus.
- 4. Although in Fabricius' day and for more than a hundred years thereafter there was no International Code of Zoological Nomenclature, zoologists in general accepted the idea that in cases of difficulty a First Reviser's choice was binding and for the next seventy years the name janira Linnaeus was almost universally applied to the present species, the name jurtina Linnaeus virtually disappearing from the literature. At the beginning of the second half of the XIXth century the tendency to accept the principle of page and line precedence, which later was to be become so widespread in entomological literature, began to make itself felt and already as early as 1861 Staudinger (O.) in the first edition of his famous Catalogue (1861, in Staudinger (O.) & Wocke (M.), Cat. Lép. Europ. (1): 13), while retaining the name

janira Linnaeus, suggested that jurtina Linnaeus had priority ("nomen anterius, recipiendum?"). Staudinger repeated this observation ten years later in the second edition of his Catalogue (: 31). In the same year (1871) Kirby (W.F.) in his Synonymic Catalogue of Diurnal Lepidoptera (: 77), which for so many years exercised a predominant influence on the nomenclature used for the butterflies, definitely adopted the name jurtina Linnaeus for this species, sinking the name janira Linnaeus as a junior synonym. The same course was followed by Staudinger himself in 1901 in the third edition of his Catalogue (: 62). The influence of these works was so great that for the last seventy or eighty years the name jurtina Linnaeus has completely replaced the name janira Linnaeus as the specific name for this species. In 1913 (J. linn. Soc. Lond., Zool. 32: 184—185) in a review of the syntypes in the Linnaeu collection of butterflies at Burlington House, Verity drew attention to the differences in the descriptions and in the localities given by Linnaeus for janira Linnaeus and jurtina Linnaeus respectively and, as First Reviser, designated North Africa as the Restricted Locality for Papilio jurtina Linnaeus and "Central-Europe" as the restricted locality for Papilio janira Linnaeus. Under this action the name janira Linnaeus became the oldest available name for the Central European subspecies of the Meadow Brown, while the name jurtina Linnaeus became the valid name for the North African subspecies which at that time was confused with the insular subspecies fortunata Alphéraky, 1889 (Epinephele janira var. fortunata Alphéraky, 1889, in Romanoff, Mém. Lépid. 5: 222, pl. 11, fig. 4♀) described from Orotava in Teneriffe in the Canary Islands

- 5. Kirby's action in 1871 would undoubtedly have constituted a valid First Reviser selection of *jurtina* Linnaeus in preference to *janira* Linnaeus if it had not been for the prior selection made in the opposite sense by Fabricius in 1787. In the absence of an international code of zoological nomenclature the action of Fabricius had no binding force in Kirby's day and the importance attaching to it was completely overlooked after the Berlin Congress had embodied the "First Reviser" principle in the Code then adopted. It would, however, cause great confusion and quite unwarranted name-changing if the long overlooked First Reviser selection by Fabricius were now to be adopted. I accordingly ask the International Commission to use its Plenary Powers to set aside the selection made by Fabricius and to direct that the name *jurtina* Linnaeus, 1758 (*Papilio*) be accorded precedence over the name *janira* Linnaeus, 1758 (*Papilio*).
- 6. The species with which we are here concerned is the type species of the genus *Maniola* Schrank, 1801 (Fauna boica 2(1): 152, 170), but there is a minor technical difficulty which requires to be straightened out before the position can be regarded as wholly satisfactory. The nominal genus *Maniola* was established by Schrank to embrace the whole of the species of the family SATYRIDAE known to him as occurring within the area covered by his book and from the species so included

it is evident that, if Schrank had been dealing with the whole European fauna, he would have included all the European SATYRIDAE in his genus Maniola. In this respect Schrank therefore anticipated by nine years the action of Latreille in establishing the genus Satyrus, which has since become the type genus of this family and has been placed on the Official List (Opinion 142). Of the twenty-nine nominal species placed by Schrank in the genus Maniola the tenth (Species No. 1305) was the new nominal species Maniola lemur (: 175). introduced to embrace the nominal species Papilio jurtina Linnaeus, 1758 (Syst. Nat. (ed. 10) 1:475) and Papilio janira Linnaeus, 1758 (ibid. 1:475). As explained in paragraph 3 above, the two Linnean names have long been recognised as applying to the female and male respectively of a single species. The name lemur Schrank has never been used by any subsequent author, having always been treated as a junior subjective synonym of one or other of the above names. Under the clarification of the provisions of Article 31 adopted by the Fourteenth International Congress of Zoology, Copenhagen, 1953 (1953, Copenhagen Decisions zool. Nomencl.: 72—74, Decisions 136—137) it is now possible to give a determinate content to the nominal species Maniola lemur Schrank by selecting a lectotype for it from the material cited by Schrank. This I now do by selecting the specimen on which Linnaeus based his description of *Papilio jurtina* to be the lectotype of Schrank's nominal species Maniola lemur. By this selection the specific name lemur Schrank becomes a junior objective synonym of iurtina Linnaeus, 1758.

7. The type species of Maniola Schrank was selected—though in rather a peculiar manner—by Scudder in 1875 (Proc. amer. Acad. Arts Sci., Boston 10:211). In order to understand the method adopted by that author in this important work, it is necessary to recall (1) that for each nominal genus dealt with he cited the nominal species placed in the genus concerned by its original author but in addition placed in brackets any of those names which in Kirby's Syn. Cat. diurn. Lep. of 1871 had been rejected as a junior synonym of some other name, (2) that in each case where the name of an originally included species was placed in brackets in this way Scudder placed in front of it the name adopted for the species concerned in Kirby's Catalogue. In the case of the genus Maniola Scudder cited the specific name lemur Schrank in brackets and placed in front of it the specific name jurtina Linnaeus, 1758, the name applied to the species concerned in Kirby's Catalogue. Next, Scudder printed the name jurtina in bold-faced type, the method used throughout his paper to denote that the species in question was the type species of the genus concerned. Up till 1948 it was doubtful whether this method of selecting a type species complied with the requirements of Rule (g) in Article 30 of the Règles. that year, however, the Thirteenth International Congress of Zoology, Paris, inserted in the Règles a provision validating the foregoing method of selecting a type species for a genus (1950, Bull. zool. Nomencl.

- 4:179—180, Point 69(3)(b)), the purpose of this decision being to avoid the far-reaching and totally unwarranted confusion which would have followed from the rejection of the large number of type selections previously made in this way. Accordingly, under the foregoing provision Scudder is to be accepted as having made a valid selection of Maniola lemur Schrank, 1801, to be the type species of the genus Maniola Schrank, 1801. At this point we have to recall that under the Commission's recently adopted Declaration 211: "Where one of two or more objectively identical nominal species is designated, indicated or selected as the type species of a genus, that genus shall be cited as having as its type species the oldest established of the nominal species concerned". In the present case the lectotype selection for the nominal species Maniola lemur Schrank, 1801, made in paragraph 6 above has made the nominal species Maniola lemur Schrank, 1801, and Papilio jurtina Linnaeus, 1758, objectively identical with one another, the specific name lemur Schrank having thus become a junior objective synonym (instead of, as hitherto, only a junior subjective synonym) of *jurtina* Linnaeus, 1758. Accordingly, under the provisions of Declaration 21 referred to above the genus Maniola Schrank, 1801, is, through Scudder's action in 1875, to be cited as having as its type species the nominal species *Papilio jurtina* Linnaeus, 1758, and not the objectively identical nominal species of later date *Maniola lemur* Schrank, 1801.
- 8. It is necessary now to consider the family-group-name aspects of the present case. There are two of these. For the first of these for which until recently no guidance was given in the Règles the requisite remedy has now been provided by the Commission through its Declaration 28.2 The second problem arises from a well-intentioned but most unfortunate decision by the Copenhagen Congress of 1953 and the requisite relief in this case is obtainable only by the use by the Commission of its Plenary Powers. The family-group names involved are the following:—
- EREBIINAE Tutt, 1896, Brit. Butts.: 87, 402 (type genus: Erebia Dalman, 1816, K. Vetensk. Akad. Handl., Stockholm 1816 (No. 1): 58)
- EPINEPHELDIDI Tutt, 1896, Brit. Butts.: 87, 376, 402 (type genus: Epinephele Hübner, [1819], Verz. bekannt. Schmett. (4): 59)
- MANIOLIDI Reuter (E.), 1897, Act. Soc. Sci. fenn. 22: 356 (type genus: Maniola Schrank, 1801, Fauna boica 2(1): 152, 170) (based upon an incorrect interpretation of the genus Maniola Schrank, 1801)

This Declaration was published on 19th June 1956 as Part 11 of Vol. 12 of the Opinions and Declarations Series

This Declaration was published on 5th December 1956 as Part 20 of Vol. 14 of the Opinions and Declarations Series.

MANIOLIDI Verity (R.), 1953, Farfalle diurne Italia 5: 228, 237 (type genus: Maniola Schrank, 1801, correctly interpreted).

- 9. It will be convenient to consider first the problem, for which a remedy has been provided by the Commission through its Declaration 28. As shown above the first author to establish a nominal familygroup taxon based upon the generic name Maniola Schrank was Reuter in 1897. It is necessary first to note that in 1871 Kirby (Syn. Cat. diurn. Lep.) without any justification sank the name Erebia Dalman as a junior synonym of *Maniola* Schrank (: 57) and placed in the latter genus (: 66) the nominal species Papilio ligea Linnaeus, 1758 (Syst. Nat. (ed. 10) 1: 473), the type species by original designation of Erebia Dalman, together with all the other species currently regarded as belonging to Dalman's genus. At the same time Kirby placed in the genus Epinephele Hübner the nominal species Papilio jurtina Linnaeus, 1758, which, as shown in paragraph 7 above is the type species of Maniola Schrank, 1801. This was the arrangement followed by Reuter who, after citing *Erebia* Dalman as a junior synonym of *Maniola* Schrank and enumerating the species which he considered to belong to this genus (: 131), erected for it the nominal tribe MANIOLIDI (: 356). Under the Commission's recent Declaration 28 an author establishing a new family-group taxon is to be assumed to have correctly determined the type genus, subject to the condition that, where, in the opinion of later authors, there is evidence in the original publication that the author of a family-group name treated the type genus of the familygroup taxon concerned as having as its type species some nominal species other than that which already was or later became the type species, the case is to be referred to the International Commission for decision. It is further provided in the foregoing Declaration (a) that on the receipt of such an application, it shall be the duty of the Commission to determine whether or not the original author of the family-group name concerned misdetermined the genus selected by him as the type genus of the nominal family-group taxon in question and (b) that, where the Commission rules that the type genus of such a taxon was misdetermined, the family-group name in question is to be rejected as possessing no rights under either the Law of Priority or the Law of Homonymy. In view of the evidence provided by Reuter's paper referred to above, I ask that under the foregoing Declaration the Commission should now rule that the nominal family-group taxon MANIOLIDI Reuter, 1897, was based upon a misdetermined type genus and that that name is therefore to be rejected. Thus, the name MANIOLIDI Reuter, 1897, does not invalidate as a homonym the later name MANIOLIDI Verity, 1953, a name based upon a correct determination of Maniola Schrank, 1801, its type genus.
- 10. The second point which calls for attention arises out of the fact that, as noted in paragraph 9 above, the genus *Maniola* Schrank was formerly commonly known by its junior subjective synonym

Epinephele Hübner, [1819] (type species, by selection by Butler, 1868 (Ent. mon. Mag. 4: 194): Papilio janira Linnaeus, 1758). It was so treated by Tutt when in 1896 he established the nominal tribe EPINEPHELIDI. The name EPINEPHELIDI Tutt, 1896, having priority over the name MANIOLIDI Verity, 1953, becomes under the unfortunate Decision 54(1)(a) of the Copenhagen Congress (1953, Copenhagen Decisions zool. Nomencl.: 36) referred to in paragraph 8 above the valid name for the family-group taxon typified by the genus Maniola Schrank, 1801. Nothing could be more confusing and objectionable than the sudden resurrection at the family-group-name level of the long-discarded generic name Epinephele Hübner, [1819]. In order to avoid this highly undesirable result, the International Commission is asked to use its Plenary Powers to suppress the family-group name EPINEPHELIDI Tutt, 1896. This procedure is recommended in preference to the use of the Plenary Powers to direct that this name should not be used in preference to the name MANIOLIDI Verity, 1953, for, as the type species of the respective type genera of these nominal familygroup taxa are subjectively identified with one another, it is impossible to imagine any circumstances in which the name EPINEPHELIDI Tutt could be required in addition to the name MANIOLIDI Verity.

- 11. Of the generic names discussed in the present application the name *Maniola* Schrank has no junior objective synonyms. In the case of the name *Erebia* Dalman, 1816, there is, however, one junior objective synonym which should now be placed on the *Official Index*. This is the name *Epigea* Hübner, [1819] (*Verz. bekannt. Schmett.* (4): 62), the type species of which, by selection by Hemming, 1933 (*Entomologist* 66: 198), is *Papilio ligea* Linnaeus, 1758, which, as noted in paragraph 9 above, is the type species by original designation of the genus *Erebia* Dalman.
- 12. For the reasons set out in the present application the International Commission on Zoological Nomenclature is asked:—
 - (1) to use its Plenary Powers :-
 - (a) to set aside all selections by First Revisers as to the relative precedence to be accorded respectively to the specific name jurtina Linnaeus, 1758, as published in the combination Papilio jurtina and the specific name janira Linnaeus, 1758, as published in the combination Papilio janira, these being names published in the same work and on the same date, made under Article 28 of the Règles prior to the Ruling now asked for, and, having done so, to direct that the name jurtina Linnaeus, 1758, as published in combination with the generic Papilio, is to take precedence over the name janira Linnaeus, 1758, as published in combination with the same generic name;

- (b) to suppress the family-group name EPINEPHELIDI Tutt, 1896 (type genus: *Epinephele* Hübner, [1819]) for the purposes of the Law of Priority but not for those of the Law of Homonymy;
- (2) under *Declaration* 28 to rule that the nominal family-group taxon MANIOLIDI Reuter, 1897, was based upon a misdetermined type genus and therefore that the above name possesses no status under either the Law of Priority or the Law of Homonymy;
- (3) to place the under-mentioned generic names on the Official List of Generic Names in Zoology:—
 - (a) Maniola Schrank, 1801 (gender: feminine) (type species, under Declaration 21, through the selection by Scudder (1875) of Maniola lemur Schrank, 1801 (which under the lectotype selection made in paragraph 6 of the present application is a junior objective synonym of Papilio jurtina Linnaeus, 1758); Papilio jurtina Linnaeus, 1758);
 - (b) Erebia Dalman, 1816 (gender: feminine) (type species, by original designation: Papilio ligea Linnaeus, 1758);
- (4) to place the under-mentioned specific names on the Official List of Specific Names in Zoology:—
 - (a) jurtina Linnaeus, 1758, as published in the combination Papilio jurtina, a name taking precedence over the name janira Linnaeus, 1758, as published in the combination Papilio janira under the Ruling under the Plenary Powers asked for in (1)(a) above (specific name of type species of Maniola Schrank, 1801);
 - (b) janira Linnaeus, 1758, as published in the combination Papilio janira, a name ranking for precedence below the name jurtina Linnaeus, 1758, as published in the combination Papilio jurtina under the Ruling under the Plenary Powers asked for in (1)(a) above;
 - (c) fortunata Alphéraky, 1889, as published in the combination Epinephele janira var. fortunata;
 - (d) ligea Linnaeus, 1758, as published in the combination Papilio ligea (specific name of type species of Erebia Dalman, 1816);
- (5) to place the under-mentioned generic name on the Official Index of Rejected and Invalid Generic Names in Zoology: Epigea Hübner, [1819] (a junior objective synonym of Erebia Dalman, 1816);

- (6) to place the under-mentioned specific name on the Official Index of Rejected and Invalid Specific Names in Zoology:— lemur Schrank, 1801, as published in the combination Maniola lemur and as defined by the lectotype selection made in paragraph 6 of the present application (a junior objective synonym of jurtina Linnaeus, 1758, as published in the combination Papilio jurtina);
- (7) to place the under-mentioned family-group names on the Official List of Family-Group Names in Zoology:—
 - (a) MANIOLIDI Verity, 1953 (type genus: *Maniola* Schrank, 1801), as validated by the suppression under the Plenary Powers of the name EPINEPHELIDI Tutt, 1896, asked for in (1)(b) above;
 - (b) EREBIINAE Tutt, 1896 (type genus: Erebia Dalman, 1816);
- (8) to place the under-mentioned family-group names on the Official Index of Rejected and Invalid Family-Group Names in Zoology:—
 - (a) MANIOLIDI Reuter (E.), 1897 (type genus: *Maniola* Schrank, 1801) (invalid under the ruling given in (2) above under *Declaration* 28 because based upon an incorrectly determined type genus);
 - (b) EPINEPHELIDI Tutt, 1896 (type genus: *Epinephele* Hübner, [1819]), as suppressed under the Plenary Powers, as asked for under (1)(b) above.

II. THE SUBSEQUENT HISTORY OF THE CASE

- 2. Registration of the present application: Upon the receipt of Mr. Hemming's application the question of the stabilisation of the specific name for the Meadow Brown Butterfly was allotted the Registered Number Z.N.(S.) 1142.
- 3. Publication of the present application: The present application was sent to the printer on 20th June 1956 and was published

on 31st October of the same year in Part 10 of Volume 12 of the Bulletin of Zoological Nomenclature (Hemming, 1956, Bull. zool. Nomencl. 12: 279—286).

- **4.** Issue of Public Notices: Under the revised procedure prescribed by the Thirteenth International Congress of Zoology, Paris, 1948 (1950, Bull. zool. Nomencl. 4:51—56), Public Notice of the possible use by the International Commission on Zoological Nomenclature of its Plenary Powers in the present case was given on 31st October 1956 (a) in Part 10 of Volume 12 of the Bulletin of Zoological Nomenclature (the Part in which Mr. Hemming's application was published) and (b) to the other prescribed serial publications. In addition such Notices was given to four general zoological serial publications and to eight entomological serials in Europe and America.
- 5. Support received from Erich M. Hering (Zoologisches Museum der Humboltd-Universität zu Berlin): On 29th November 1956 there was received in the Office of the Commission the following note from Professor Erich Hering (Zoologisches Museum der Humboldt-Universität zu Berlin) in which he intimated his support for the present case (Hering, 1957, Bull. zool. Nomencl. 13:21):—

Die Mehrzahl der lepidopterologischen Handbücher in deutscher Sprache des letzten halben Jahrhunderts hat die in Frage stehende Art (entgegen der von Fabricius, 1781, vorgenommenen Aktion als "Erster Revisor") als (Maniola) jurtina Linnaeus, 1758, bezeichnet. Da der auf das andere Geschlecht der Art gegründete, seit langem verworfene Name Epinephele Hübner, [1819] keine Aussicht mehr hat, als Genus-Typus supragenerischer Kategorien zu erscheinen, ist es wünschenswert, dass die auf ihn gegründete Bezeichnung EPENEPHELIDI Tutt, 1896, trotz ihrer Prioritätsrechte unterdrückt wird, um Verwirrung zu vermeiden. Im Interesse der Stabilität und Uniformität der Nomenklatur kann der Hemming'sche Vorschlag nur unterstützt werden.

6. Support received from N. D. Riley (British Museum (Natural History), London): On 14th February 1957 Mr. N. D. Riley (British Museum (Natural History), London) addressed the following

letter to the Office of the Commission in support of the present case:—

I am very glad that you have put up a case to the Commission to settle once and for all the argument as to whether our Meadow Brown Butterfly should be called *jurtina* or *janira*. It really is rather remarkable that the matter has never really been definitely settled yet, though we are within twelve months of the two hundredth anniversary of the publication of the names. Your recommendations have my complete approval, but I must say that I rather regret the passing away of the old familiar and eiphonious generic name *Epinephele* in favour of *Maniola*, but that is only a personal feeling. The case is quite clear and has my full support.

7. No Objection Received: No objection to the action proposed in the present case was received from any source.

III. THE DECISION TAKEN BY THE INTERNATIONAL COMMISSION ON ZOOLOGICAL NOMENCLATURE

- **8.** Issue of Voting Paper V.P.(57)39: On 15th May 1957 a Voting Paper (V.P.(57)39) was issued in which the Members of the Commission were invited to vote either for, or against, "the proposal relating to the specific name for the Meadow Brown Butterfly and associated matters as set out in Points (1) to (8) in paragraph 12 on pages 285 and 286 of Volume 12 of the Bulletin of Zoological Nomenclature" [i.e. in the paragraph numbered as above in the paper reproduced in the first paragraph of the present Opinion].
- 9. The Prescribed Voting Period: As the foregoing Voting Paper was issued under the Three-Month Rule, the Prescribed Voting Period closed on 15th August 1957.

- 10. Particulars of the Voting on Voting Paper V.P.(57)39: At the close of the Prescribed Voting Period, the state of the voting on Voting Paper V.P.(57)39 was as follows:—
 - (a) Affirmative Votes had been given by the following twenty-two (22) Commissioners (arranged in the order in which Votes were received):

Hering; Vokes; Lemche; Holthuis; Riley; Dymond; do Amaral; Esaki; Hankó; Stoll; Mertens; Bodenheimer; Boschma; Key; Bonnet; Hemming; Sylvester-Bradley; Jaczewski; Cabrera; Bradley (J.C.); Tortonese; Miller;

(b) Negative Votes, one (1):

Prantl;

(c) On Leave of Absence, two (2):

Mayr; Kühnelt;

(d) Voting Papers not returned:

None.

11. Declaration of Result of Vote: On 16th August 1957, Mr. Hemming, Secretary to the International Commission, acting as Returning Officer for the Vote taken on Voting Paper V.P.(57)39, signed a Certificate that the Votes cast were as set out in paragraph 10 above and declaring that the proposal

submitted in the foregoing Voting Paper had been duly adopted and that the decision so taken was the decision of the International Commission in the matter aforesaid.

- 12. Preparation of the Ruling given in the present "Opinion": On 19th December 1957 Mr. Hemming prepared the Ruling given in the present *Opinion* and at the same time signed a Certificate that the terms of that Ruling were in complete accord with those of the proposal approved by the International Commission in its Vote on Voting Paper V.P.(57)39.
- 13. Original References for Generic and Specific Names: The following are the original references for the generic and specific names placed on *Official Lists* and *Official Indexes* by the Ruling given in the present *Opinion*:—

Epigea Hübner, [1819], Verz. bekannt. Schmett. (4): 62

Erebia Dalman, 1816, K. Vetensk.-Akad. Handl., Stockholm 1816 (No. 1): 58

fortunata, Epinephela janira var., Alphéraky, 1889, in Romanoff, Mém. Lépid. 5: 222, pl. 11, fig. 49

janira, Papilio, Linnaeus, 1758, Syst. Nat. (ed. 10) 1:475

jurtina, Papilio, Linnaeus, 1758, Syst. Nat. (ed. 10) 1:475

lemur, Maniola, Schrank, 1801, Fauna boica 2(1): 175

ligea, Papilio, Linnaeus, 1758, Syst. Nat. (ed. 10) 1:473

Maniola Schrank, 1801, Fauna boica 1(2): 152, 170

14. Reference for a lectotype selection: The following is the reference for the lectotype selection for a nominal species specified in the Ruling given in the present *Opinion*:—

For Papilio lemur Schrank, Hemming (F.), 1956, Bull. zool. Nomencl. 12:282

15. Original References for Family-Group Names: The following are the original references for the family-group names placed by the Ruling given in the present *Opinion* on the *Official List* and/or *Official Index* of names of taxa of the family-group:—

EPINEPHELIDI Tutt, 1896, Brit. Butts.: 87, 376, 402

EREBIINAE Tutt, 1896, Brit. Butts.: 87, 402

MANIOLIDI Reuter (E.), 1897, Act. Soc. Sci. fenn. 22:356

MANIOLIDI Verity (R.), 1953, Farfalle diurne Italia 5: 228, 237

- 16. The prescribed procedures were duly complied with by the International Commission on Zoological Nomenclature in dealing with the present case, and the present *Opinion* is accordingly hereby rendered in the name of the said International Commission by the under-signed Francis Hemming, Secretary to the International Commission on Zoological Nomenclature, in virtue of all and every the powers conferred upon him in that behalf.
- 17. The present *Opinion* shall be known as *Opinion* Five Hundred and Six (506) of the International Commission on Zoological Nomenclature.

DONE in London, this Nineteenth day of December, Nineteen Hundred and Fifty-Seven.

Secretary to the International Commission on Zoological Nomenclature

FRANCIS HEMMING

OPINIONS AND DECLARATIONS RENDERED BY THE INTERNATIONAL COMMISSION ON ZOOLOGICAL NOMENCLATURE

Edited by

FRANCIS HEMMING, C.M.G., C.B.E. Secretary to the Commission

VOLUME 18. Part 10. Pp. 197-210

OPINION 507

Use of the Plenary Powers to secure that the generic name *Panulirus* White, 1847 (Class Crustacea, Order Decapoda) shall be the oldest available name for the genus concerned



LONDON:

Printed by Order of the International Trust for Zoological Nomenclature

and

Sold on behalf of the International Commission on Zoological Nomenclature by the International Trust at its Publications Office 41, Queen's Gate, London, S.W.7

1958

Price Nine Shillings and Sixpence

(All rights reserved)

INTERNATIONAL COMMISSION ON ZOOLOGICAL NOMENCLATURE

COMPOSITION AT THE TIME OF THE ADOPTION OF THE RULING GIVEN IN OPINION 507

The Officers of the Commission

Honorary Life President: Dr. Karl JORDAN (British Museum (Natural History), Zoological Museum, Tring, Herts., England)

President: Professor James Chester Bradley (Cornell University, Ithaca, N.Y., U.S.A.) (12th August 1953)

Vice-President: Senhor Dr. Afranio do AMARAL (Sao Paulo, Brazil) (12th August 1953) Secretary: Mr. Francis HEMMING (London, England) (27th July 1948)

The Members of the Commission

(Arranged in order of precedence by reference to date of election or of most recent re-election, as prescribed by the International Congress of Zoology)

Professor H. Boschma (Rijksmuseum van Natuurlijke Historie, Leiden, The Netherlands (Ist January 1947)
Senor Dr. Angel Cabrera (La Plata, Argentina) (27th July 1948)
Mr. Francis Hemming (London, England) (27th July 1948) (Secretary)
Dr. Henning Lemche (Universiteitets Zoologiske Museum, Copenhagen, Denmark) (27th

July 1948)

Professor Teiso Esaki (Kyushu University, Fukuoka, Japan) (17th April 1950)
Professor Pierre Bonnet (Université de Toulouse, France) (9th June 1950)
Mr. Norman Denbigh Riley (British Museum (Natural History), London) (9th June 1950) Professor Tadeusz Jaczewski (Institute of Zoology, Polish Academy of Sciences, Warsaw, Poland) (15th June 1950)

Professor Robert Mertens (Natur-Museum u. Forschungs-Institut Senckenberg, Frankfurt a.M., Germany) (5th July 1950)

Professor Erich Martin Hering (Zoologisches Museum der Humboldt-Universität zu Berlin, Germany) (5th July 1950)

Senhor Dr. Afranio do Amaral (S. Paulo, Brazil) (12th August 1953) (Vice-President) Professor J. R. Dymond (University of Toronto, Toronto, Canada) (12th August 1953) Professor J. Chester Bradley (Cornell University, Ithaca, N.Y., U.S.A.) (12th August

Dr. Norman R. Stoll (Rockefeller Institute for Medical Research, New York, N.Y., U.S.A.) (12th August 1953)
Mr. P. C. Syllvester-Bradley (Sheffield University, Sheffield, England) (12th August 1953)
Dr. L. B. Holthuis (Rijksmuseum van Natuurlijke Historie, Leiden, The Netherlands) (12th August 1953)
Dr. K. H. L. Key (Commonwealth Scientific and Industrial Research Organisation, Canberra, A.C.T., Australia) (15th October 1954)
Dr. Alden H. Miller (Museum of Vertebrate Zoology, University of California, U.S.A.) (29th October 1954)
Doc. Dr. Ferdinand Prantl (Národni Museum V Praze, Prague, Czechoslovakia) (30th October 1954)

October 1954) Professor Dr. Wilhelm Kühnelt (Zoologisches Institut der Universität, Vienna, Austria) (6th November 1954)

Professor F. S. Bodenheimer (The Hebrew University, Jerusalem, Israel) (11th November 1954)

Professor Ernst MAYR (Museum of Comparative Zoology at Harvard College, Cambridge, Massachusetts, U.S.A.) (4th December 1954)
Professor Errico Tortonese (Museo di Storia Naturale "G. Doria", Genova, Italy

(16th December 1954)

OPINION 507

USE OF THE PLENARY POWERS TO SECURE THAT THE GENERIC NAME "PANULIRUS" WHITE, 1847 (CLASS CRUSTACEA, ORDER DECAPODA) SHALL BE THE OLDEST AVAILABLE NAME FOR THE GENUS CONCERNED

RULING:—(1) The under-mentioned names are hereby suppressed for the purposes of the Law of Priority but not for those of the Law of Homonymy:—

- (a) the generic name Phyllosoma Leach, 1818;
- (b) the following specific names:—
 - (i) commune Leach, 1818, as published in the combination *Phyllosoma commune*;
 - (ii) rissonii Desmarest, 1825, as published in the combination Palinurus rissonii.
- (2) The under-mentioned generic name is hereby placed on the *Official List of Generic Names in Zoology* with the Name No. 1256:—
 - Panulirus White, 1847 (gender: masculine) (type species, by selection by Holthuis (L.B.) (1956): Palinurus japonicus Siebold, 1824).
- (3) The under-mentioned specific names are hereby placed on the *Official List of Specific Names in Zoology* with the Name Numbers severally specified below:—
 - (a) japonicus Siebold, 1824, as published in the combination Palinurus japonicus (specific name of type species of Panulirus White, 1847) (Name No. 1496);

- (b) regius de Brito Capello, 1864, as published in the combination *Panulirus regius* (Name No. 1497).
- (4) The under-mentioned generic names are hereby placed on the *Official Index of Rejected and Invalid Generic Names in Zoology* with the Name Numbers severally specified below:—
 - (a) Phyllosoma Leach, 1818, as suppressed under the Plenary Powers in (1)(a) above (Name No. 1144);
 - (b) Senex Pfeffer, 1881 (a junior homonym of Senex Gray (J.E.), [1838] and a junior objective synonym of Panulirus White, 1847) (Name No. 1145).
- (5) The under-mentioned specific names are hereby placed on the Official Index of Rejected and Invalid Specific Names in Zoology with the Name Numbers severally specified below:—
 - (a) commune Leach, 1818, as published in the combination *Phyllosoma commune*, as suppressed under the Plenary Powers in (1)(b)(i) above (Name No. 507);
 - (b) rissonii Desmarest, 1825, as published in the combination Palinurus rissonii, as suppressed under the Plenary Powers in (1)(b)(ii) above (Name No. 508).

I. THE STATEMENT OF THE CASE

On 10th October 1955, Dr. L. B. Holthuis (Rijksmuseum van Natuurlijke Historie, Leiden, The Netherlands) submitted to the

Office of the Commission a preliminary application for the use by the Commission of its Plenary Powers to suppress the generic name *Phyllosoma* Leach, 1818, for the purpose of securing that the well-known generic name *Panulirus* White, 1847 (Class Crustacea, Order Decapoda) should be the oldest available name for the genus in question. Following correspondence with the Office of the Commission this application was revised in certain respects and in its definitive form was submitted to the Commission by Dr. Holthuis on 9th January 1956. The paper so submitted was as follows:—

Proposed use of the Plenary Powers to render the generic name "Panulirus" White, 1847 (Class Crustacea, Order Decapoda) the oldest available name for the genus concerned and matters incidental thereto

By L. B. HOLTHUIS

(Rijksmuseum van Natuurlijke Historie, Leiden, The Netherlands)

The present application relates to the name *Panulirus* White, 1847, which is widely used among carcinologists for a genus of Spiny Lobsters. This name is invalid since it is a junior subjective synonym of the name *Phyllosoma* Leach, 1818, which until now has only been used to indicate larval stages. A strict application of the Law of Priority would result here in considerable confusion, for the prevention of which the International Commission on Zoological Nomenclature is asked to make use of its Plenary Powers.

- 2. The original references to the generic names dealt with here are the following:—
- Panulirus White, 1847, List Crust. Brit. Mus.: 69 (type species, by present selection: Palinurus japonicus Von Siebold, 1824, Hist. nat. Japon.: 15) (gender: masculine)
- Phyllosoma Leach, 1818, J. Phys. Chim. Hist. nat. Arts 86: 306 (type species, by present selection: Phyllosoma commune Leach, 1818, J. Phys. Chim. Hist. nat. Arts 86: 307) (gender: neuter)
- Senex Pfeffer, 1881, Verh. naturwiss. Ver. Hamburg 5: 30 (a substitute name for Panulirus White, 1847) (invalid, because a junior homonym of Senex Gray (J.E.), [1838] (Zool. Voy. Beagle 3(3): 13)) (gender: masculine).

- 3. Till 1847 the Spiny Lobsters were considered to belong to one genus, *Palinurus* Fabricius, 1798. Then White (1847) split this genus into three genera, to one of which he gave the new name *Panulirus*. Practically all subsequent authors who recognised the distinctness of White's genus from *Palinurus* Fabricius adopted the name *Panulirus* for it. Only a few zoologists objected to the name *Panulirus* as, in their opinion, it resembled too much that of *Palinurus*; these authors substituted the name *Senex* Pfeffer, 1881, for *Panulirus* White. *Senex* Pfeffer, however, besides being a junior objective synonym of *Panulirus* White, is a junior homonym of *Senex* Gray, 1838, and thus is invalid for two reasons. *Panulirus* White has been adopted by more than 150 authors, while the name *Senex* for this genus has been used by about 11 authors, at least 5 of which later started to use White's name.
- 4. In 1818, Leach described a new genus of Crustacea which he named Phyllosoma and which later proved to be based on the larval stages of species of PALINURIDAE and SCYLLARIDAE. Leach included four species in his genus for which, as far as is known to me, no type species has ever been indicated. Therefore I select now in accordance with Recommandation (m) in Article 30 of the Règles, as the type species of the genus Phyllosoma Leach, 1818, the nominal species Phyllosoma commune Leach, 1818. This species, as is distinctly shown by Leach's description and figure, is the larval stage of a species of Panulirus. It was reported by Leach from Porto-Praya, Cape Verde Islands, and from off the coast of French Congo (2° 58′ 0″ S, 9° 21′ 22″ E); the latter locality, being the more accurate of the two, is selected here as the restricted type locality of Phyllosoma commune. The only species of Spiny Lobster occurring in this region is the one known under the names of *Panulirus rissonii* (Desmarest, 1825) (= *Palinurus rissonii* Desmarest, 1825, *Consid. gén. Class. Crust.* : 185) or Panulirus regius de Brito Capello, 1864 (Mem. Acad. Sci. Lisboa, Class. Sci. math. phys. nat. (2) 3:5). The species *Panulirus guttatus* (Latreille, 1804), it is true, has been reported several times from the west coast of Africa (cf. Bouvier, 1905, Bull. Mus. océanogr. Monaco 29:1—6, who believed that species to occur at the Cape Verde Islands, Liberia, Dahomey and Sao Thomé). Gruvel (1913, Ann. Inst. océanogr. Paris 3(4):30, 36), however, was able to prove that practically all of these records were based on specimens of P. rissonii. The only certain record of the occurrence of \hat{P} , guttatus in the West African region is that by Dr. Th. Monod, Director of the Institut Français d'Afrique Noire in Dakar, who in a recent letter informed me that one of his collaborators had obtained three specimens of that species from the Cape Verde Islands. Other records of this species are from the east coast of America (Bermuda to Sao Paulo, Brazil) and from the Atlantic Islands of St. Pauls Rocks and Ascension. Gurney (1936, Discov. Rep. 12:405-415) when dealing with the South Atlantic species of Phyllosomas, recognized two forms (named Form A and B by him) which belong to the genus Panulirus. Gurney's

description and figures clearly show that his Form A is identical with *Phyllosoma commune*, while his Form B is different. Gurney arrived at the conclusion, based on abundant material, that his form B probably is the Phyllosoma of the American *P. argus* (Latreille), Form A being that of *Panulirus regius*. When the localities of Gurney's Form A and B are put out on a map, we find that in the samples taken off the West African coast only Form A is represented, except in one sample from near the Cape Verde Islands, which contains both Form A and B. Form B furthermore occurred plentifully near St. Paul's Rocks (often together with Form A) and in several samples taken off the N.E. coast of Brazil. This evidence shows that there can be little doubt that Gurney's identification of Form A with *Panulirus regius* (=*P. rissonii*) is correct, so that the names *Phyllosoma commune* Leach, 1818, *Palinurus rissonii* Desmarest, 1825 and *Panulirus regius* de Brito Capello, 1864, are synonyms. As Dr. Th. Monod has pointed out to me, the distribution of Gurney's Form B makes it probable that this form is the larval stage of *P. guttatus* rather than that of *P. argus*, but this question is not relevant here.

- 5. If the normal provisions of the *Règles* are strictly adhered to in the present case, the generic name *Panulirus* White, 1847, would have to be replaced by the name *Phyllosoma* Leach, 1818, while the specific name *rissonii* Desmarest, 1825 would have to give way to *commune* Leach, 1818. However, *Phyllosoma* at present is hardly ever used as a generic name, but has more or less become a term to indicate larval forms (Phyllosomas or phyllosoma-stages) not only of the genus *Panulirus*, but also of all the genera of the families PALINURIDAE and SCYLLARIDAE. Furthermore, as has already been pointed out, the generic name *Panulirus* White has become deeply rooted in carcinological nomenclature. It is clear therefore that the replacement of this generic name by that of *Phyllosoma* would greatly upset the stability of carcinological nomenclature and the use by the International Commission on Zoological Nomenclature of its Plenary Powers to prevent this confusion seems to be fully justified. The suppression of the generic name *Phyllosoma* of course will not prevent the word "Phyllosoma" from being available as a term to indicate larval forms.
- 6. A second problem which calls for consideration is concerned with the specific name of the West African Spiny Lobster. Until recently the specific name regius de Brito Capello, 1864, was used by the majority of carcinologists. In 1946 (Temminckia 7: 122), however, the present author pointed out that the species, Panulirus regius de Brito Capello, had been described as early as 1825 under the name Palinurus rissonii Desmarest (1825, Consid. gén. Classe Crust.: 185). As Desmarest's name has priority over that given by de Brito Capello, I substituted the former for the latter. So far as is known to me eight authors have dealt with the present species after 1946, five of these continued to use the specific name regius, while three adopted

rissonii. We find therefore that the name rissonii at present is very little used and that there is no reason to preserve it by making use of the Plenary Powers of the International Commission. pointed out already that the oldest name for the species in all probability is *commune* Leach, 1818. Though the evidence that *Phyllosoma* commune Leach, 1818, is identical with Panulirus regius de Brito Capello, 1864, is very convincing, it is not conclusive as long as one of these nominal species has not been reared from the other, and as long as it is not proved that Phyllosoma commune is not the larva of a related species. Furthermore, the name commune has hardly ever been used during the last 100 years, while the authors using it before that time evidently confused several species under it, since it is reported by those authors both from West Africa and the Indo-West Pacific region. For these reasons it seems better to suppress this name altogether. As already pointed out above the name *rissonii* has hardly every been used in carcinological literature, the name *regius* being the one generally adopted by carcinologists. This species is of economic importance for it is caught for food in West Africa and even exported to Europe. The literature dealing with it is, however, not very extensive. I know of only about 35 authors who have dealt with this species. Of these, 25 used the name regius, and six that of Since in Gruvel's (1911, Ann. Inst. océanogr. Paris 3(4)) monograph of the PALINURIDAE as well as in the economic and general papers of that author the name regius always has been used, it seems worth while to preserve this name.

- 7. The genus *Panulirus* White is currently referred to the family PALINURIDAE and accordingly no family-group name problem arises in this case.
- 8. The concrete proposals which I now submit for consideration are that the International Commission on Zoological Nomenclature should:—
 - (1) use its Plenary Powers to suppress the under-mentioned names for the purposes of the Law of Priority but not for those of the Law of Homonymy:—
 - (a) the generic name Phyllosoma Leach, 1818;
 - (b) the following specific names:-
 - (i) commune Leach, 1818, as published in the combination *Phyllosoma commune*;
 - (ii) rissonii Desmarest, 1825, as published in the combination Palinurus rissonii;
 - (2) place the under-mentioned generic name on the Official List of Generic Names in Zoology:—Panulirus White, 1847 (gender:

- masculine) (type species, by selection by Holthuis (in paragraph 2 of the present application): *Palinurus japonicus* von Siebold, 1824);
- (3) place the under-mentioned specific names on the Official List of Specific Names in Zoology:—
 - (a) japonicus von Siebold, 1824, as published in the combination *Palinurus japonicus* (specific name of type species of *Panulirus* White, 1847);
 - (b) regius de Brito Capello, 1864, as published in the combination Panulirus regius;
- (4) place the under-mentioned generic names on the Official Index of Rejected and Invalid Generic Names in Zoology:—
 - (a) Phyllosoma Leach, 1818, as suppressed under the Plenary Powers under (1)(a) above;
 - (b) Senex Pfeffer, 1881 (a junior homonym of Senex Gray (J.E.), [1838], and a junior objective synonym of Panulirus White, 1847);
- (5) place on the Official Index of Rejected and Invalid Specific Names in Zoology the specific names specified above in (1)(b)(i) and (1)(b)(ii) respectively as there suppressed under the Plenary Powers.

II. THE SUBSEQUENT HISTORY OF THE CASE

- 2. Registration of the present application: Upon the receipt of Dr. Holthuis's application, the question of securing that the generic name *Panulirus* White, 1847 (Class Crustacea, Order Decapoda) should be the oldest available name for the genus in question was allotted the Registered No. Z.N.(S.) 1030.
- 3. Publication of the present application: The present application was sent to the printer on 20th February 1956 and was

published on 12th June of the same year in Part 2 of Volume 12 of the *Bulletin of Zoological Nomenclature* (Holthuis, 1956, *Bull. zool. Nomencl.* 12:55—59).

- **4.** Issue of Public Notices: Under the revised procedure prescribed by the Thirteenth International Congress of Zoology, Paris, 1948 (1950, Bull. zool. Nomencl. **4**: 51—56), Public Notice of the possible use by the International Commission on Zoological Nomenclature of its Plenary Powers in the present case was given on 12th June 1956 (a) in Part 2 of Volume 12 of the Bulletin of Zoological Nomenclature (the Part in which Dr. Holthuis's application was published) and (b) to the other prescribed serial publications. In addition, such Notice was given to four general zoological serial publications.
- 5. Support received from Teiso Esaki (Kyushu University, Fukuoka, Japan): On 21st August 1956 there was received in the Office of the Commission the following letter from Professor Teiso Esaki (Kyushu University, Fukuoka, Japan) in which he intimated his support for the present case (Esaki, 1956, Bull. zool. Nomencl. 12: 266):—

I would like to support Dr. Holthuis' application for preserving *Panulirus* White, 1847, by suppressing its senior subjective synonym *Phyllosoma* Leach, 1818. The species of *Panulirus* are important as marine products in Japan, and its type species, *Panulirus japonicus* (von Siebold, 1824), is well known and one of the most appreciated delicacies in this country. For those species the generic name *Panulirus* has been most extensively used in both scientific and economic papers for many years. The name *Phyllosoma* is also popular in textbooks of zoology and fisheries as denoting a special stage of development, but is never used as a generic name. Therefore the preservation of the name *Panulirus* as the generic name of the Japanese Spiny Lobster and allied species is highly desirable in the interest of stability.

6. No objection received: No objection to the action proposed in the present case was received from any source,

III. THE DECISION TAKEN BY THE INTERNATIONAL COMMISSION ON ZOOLOGICAL NOMENCLATURE

- 7. Issue of Voting Paper V.P.(57)6: On 22nd January 1957 a Voting Paper (V.P.(57)6) was issued in which the Members of the Commission were invited to vote either for, or against, "the proposal relating to the generic name *Panulirus* White, 1847, as set out in Points (1) to (5) in paragraph 8 on pages 58 and 59 of Volume 12 of the *Bulletin of Zoological Nomenclature*" [i.e. in the paragraph numbered as above in the paper reproduced in the first paragraph of the present *Opinion*].
- **8.** The Prescribed Voting Period: As the foregoing Voting Paper was issued under the Three-Month Rule, the Prescribed Voting Period closed on 22nd April 1957.
- 9. Particulars of the Voting on Voting Paper V.P.(57)6: At the close of the Prescribed Voting Period, the state of the voting on Voting Paper V.P.(57)6 was as follows:—
 - (a) Affirmative Votes had been given by the following twentythree (23) Commissioners (arranged in the order in which Votes were received):

Hering; Boschma; Holthuis; Prantl; Lemche; Jaczewski; Mayr; Dymond; Bodenheimer; Vokes; Riley; Esaki; Key; Hemming; Bonnet; Mertens¹; Stoll; Cabrera; do Amaral; Kühnelt; Tortonese; Sylvester-Bradley; Miller;

(b) Negative Votes:

None:

¹ Professor Mertens, while voting affirmatively on this Voting Paper, indicated that the approval so given did not extend to the proposal for the suppression under the Plenary Powers of the specific name *rissonii* Desmarest, 1825 (*Palinurus*).

(c) On Leave of Absence, one (1)
Bradley (J.C.);

(d) Prevented from voting by the interruption of postal communications consequent upon political disturbances, one (1):

Hankó;

(e) Voting Papers not returned:

None.

- 10. Declaration of Result of Vote: On 24th April 1957, Mr. Hemming, Secretary to the International Commission, acting as Returning Officer for the Vote taken on Voting Paper V.P.(57)6, signed a Certificate that the Votes cast were as set out in paragraph 9 above and declaring that the proposal submitted in the foregoing Voting Paper had been duly adopted and that the decision so taken was the decision of the International Commission in the matter aforesaid.
- 11. Preparation of the Ruling given in the present "Opinion": On 27th December 1957, Mr. Hemming prepared the Ruling given in the present *Opinion* and at the same time signed a Certificate that the terms of that Ruling were in complete accord with those of the proposal approved by the International Commission in its Vote on Voting Paper V.P.(57)6.

12. Original References: The following are the original references for names placed on *Official Lists* and *Official Indexes* by the Ruling given in the present *Opinion*:—

commune, Phyllosoma, Leach, 1818, J. Phys. Chim. Hist. nat. 86: 307

japonicus, Palinurus, Siebold, 1824, Hist. nat. Japon.: 15

Panulirus White, 1847, List Crust. Brit. Mus.: 69

Phyllosoma Leach, 1818, J. Phys. Chim. Hist. nat. 86: 306

regius, Panulirus, de Brito Capello, 1864, Mem. Acad. Sci. Lisboa, Class. Sci. math. phys. nat. (2) 3:5

rissonii, Palinurus, Desmarest, 1825, Consid. gén. Class. Crust.: 185

Senex Pfeffer, 1881, Verh. naturwiss. Ver. Hamburg 5:30

13. Selection of a type species for a nominal genus: The following is the reference for the selection of a type species for a nominal genus specified in the Ruling given in the present *Opinion*:—

For Panulirus White, 1847

Holthuis (L.B.), 1956, *Bull zool. Nomencl.* **12**: 55

- **14. Family-Group-Name Aspects:** No family-group-name problem arises in the present case, the genus *Panulirus* White being currently placed in the family PALINURIDAE.
- 15. The prescribed procedures were duly complied with by the International Commission on Zoological Nomenclature in dealing with the present case, and the present *Opinion* is accordingly hereby rendered in the name of the said International Commission by the under-signed Francis Hemming, Secretary to the International Commission on Zoological Nomenclature, in virtue of all and every the powers conferred upon him in that behalf.

16. The present *Opinion* shall be known as *Opinion* Five Hundred and Seven (507) of the International Commission on Zoological Nomenclature.

DONE in London, this Twenty-Seventh day of December, Nineteen Hundred and Fifty-Seven.

Secretary to the International Commission on Zoological Nomenclature

FRANCIS HEMMING

OPINIONS AND DECLARATIONS RENDERED BY THE INTER-NATIONAL COMMISSION ON ZOOLOGICAL NOMENCLATURE

Edited by

FRANCIS HEMMING, C.M.G., C.B.E. Secretary to the Commission

VOLUME 18. Part 11. Pp. 211—226

OPINION 508

Use of the Plenary Powers to ensure that the generic name Illaenus Dalman [1827] (Class Trilobita) shall be the oldest available name for the genus concerned



LONDON:

Printed by Order of the International Trust for Zoological Nomenclature

and

Sold on behalf of the International Commission on Zoological Nomenclature by the International Trust at its Publications Office 41, Queen's Gate, London, S.W.7

1958

Price Ten Shillings and Sixpence

(All rights reserved)

INTERNATIONAL COMMISSION ON ZOOLOGICAL NOMENCLATURE

COMPOSITION AT THE TIME OF THE ADOPTION OF THE RULING GIVEN IN OPINION 508

The Officers of the Commission

Honorary Life President: Dr. Karl Jordan (British Museum (Natural History), Zoological Museum, Tring, Herts., England)

President: Professor James Chester Bradley (Cornell University, Ithaca, N.Y., U.S.A.) (12th August 1953)

Vice-President: Senhor Dr. Afranio do Amaral (Sao Paulo, Brazil) (12th August 1953)

Secretary: Mr. Francis Hemming (London, England) (27th July 1948)

The Members of the Commission

(Arranged in order of precedence by reference to date of election or of most recent re-election, as prescribed by the International Congress of Zoology)

Professor H. Boschma (Rijksmuseum van Natuurlijke Historie, Leiden, The Netherlands) (1st January 1947)

Senor Dr. Angel CABRERA (La Plata, Argentina) (27th July 1948)
Mr. Francis HEMMING (London, England) (27th July 1948) (Secretary)
Dr. Henning Lemche (Universitetets Zoologiske Museum, Copenhagen, Denmark) (27th

July 1948)
Professor Teiso Esaki (Kyushu University, Fukuoka, Japan) (17th April 1950)
Professor Pierre Bonnet (Université de Toulouse, France) (9th June 1950)
Mr. Norman Denbigh Riley (British Museum (Natural History), London) (9th June 1950) Professor Tadeusz Jaczewski (Institute of Zoology, Polish Academy of Sciences, Warsaw, Poland) (15th June 1950)

Professor Robert Mertens (Natur-Museum u. Forschungs-Institut Senckenberg, Frankfurt a.M., Germany) (5th July 1950)

Professor Erich Martin Hering (Zoologisches Museum der Humboldt-Universität zu Berlin, Germany) (5th July 1950)

Senhor Dr. Afranio do Amaral (S. Paulo, Brazil) (12th August 1953) (Vice-President) Professor J. R. Dymond (University of Toronto, Toronto, Canada) (12th August 1953) Professor J. Chester Bradley (Cornell University, Ithaca, N.Y., U.S.A.) (12th August 1953) (President)

Professor Harold E. Vokes (University of Tulane, Department of Geology, New Orleans, Louisiana, U.S.A.) (12th August 1953)

Professor Béla HANKÓ (Mezőgazdasági Muzeum, Budapest, Hungary) (12th August 1953) Dr. Norman R. Stoll (Rockefeller Institute for Medical Research, New York, N.Y.

U.S.A.) (12th August 1953)
Mr. P. C. Sylvester-Bradley (Sheffield University, Sheffield, England) (12th August 1953) Dr. L. B. HOLTHUIS (Rijksmuseum van Natuurlijke Historie, Leiden, The Netherlands) (12th August 1953)

Dr. K. H. L. Key (Commonwealth Scientific and Industrial Research Organisation, Canberra, A.C.T., Australia) (15th October 1954)
Dr. Alden H. Miller (Museum of Vertebrate Zoology, University of California, U.S.A.)

(29th October 1954)
Doc. Dr. Ferdinand Prantl (Národní Museum V Praze, Prague, Czechoslovakia) (30th

October 1954) Professor Dr. Wilhelm Kühnelt (Zoologisches Institut der Universität, Vienna, Austria) (6th November 1954)

Professor F. S. Bodenheimer (The Hebrew University, Jerusalem, Israel) (11th November

1954)

Professor Ernst Mayr (Museum of Comparative Zoology at Harvard College, Cambridge, Massachusetts, U.S.A.) (4th December 1954)
Professor Enrico Tortonese (Museo di Storia Naturale "G. Doria", Genova, Italy) (16th December 1954)

OPINION 508

USE OF THE PLENARY POWERS TO ENSURE THAT THE GENERIC NAME "ILLAENUS" DALMAN, [1827] (CLASS TRILOBITA) SHALL BE THE OLDEST AVAILABLE NAME FOR THE GENUS CONCERNED

RULING:—(1) Under the Plenary Powers the generic name *Cryptonymus* Eichwald, 1825 (Class Trilobita) is hereby suppressed for the purposes of the Law of Priority but not for those of the Law of Homonymy.

(2) The under-mentioned generic name is hereby placed on the *Official Index of Rejected and Invalid Generic Names in Zoology* with the Name No. 1146:—

Cryptonymus Eichwald, 1825, as suppressed under the Plenary Powers in (1) above.

- (3) The under-mentioned generic name is hereby placed on the *Official List of Generic Names in Zoology* with the Name No. 1257:—
 - Illaenus Dalman, [1827] (gender: masculine) (type species, by selection by Miller (S.A.) (1889)): Entomostracites crassicauda Wahlenberg, 1821).
- (4) The under-mentioned specific names are hereby placed on the *Official List of Specific Names in Zoology* with the Name Nos. severally specified below:—
 - (a) crassicauda Wahlenberg, 1821, as published in the combination Entomostracites crassicauda (specific name of type species of Illaenus Dalman, [1827]) (Name No. 1498);

- (b) wahlenbergii Eichwald, 1825, as published in the combination Cryptonymus wahlenbergii (Name No. 1499).
- (5) The under-mentioned family-group name is hereby placed on the Official List of Family-Group Names in Zoology with Name No. 216:—
 - ILLAENIDAE (correction by Angelin (N.P.) (1854) of ILLAENIDES) Hawle (I.) & Corda (A.J.C.)¹, 1847 (type genus: *Illaenus* Dalman, [1827]).
- (6) The under-mentioned family-group name is hereby placed on the Official Index of Rejected and Invalid Family-Group Names in Zoology with the Name No. 257:—
 - ILLAENIDES Hawle (I.) & Corda (A.J.C.), 1847 (type genus: *Illaenus* Dalman, [1827]) (an Invalid Original Spelling for ILLAENIDAE).

I. THE STATEMENT OF THE CASE

On 3rd February 1956, Dr. Valdar Jaanusson (*Uppsala Universitetets Paleontologiska Institution*, *Uppsala*, *Sweden*) submitted the following application asking that the Commission

¹ For some years there has been disagreement among Trilobite specialists as to whether the "Prodrom" of 1847, in which this name was published, should be attributed to Hawle & Corda jointly (as stated on the title) or to Corda alone (as was later alleged by Hawle to have been the case). The applicant in the present case took the view that Hawle & Corda should be regarded as joint authors. At the time when this *Opinion* was prepared the disputed authorship in this case was under consideration by the Commission which has since rendered a *Direction* (*Direction* 95) in which it has ruled that Hawle & Corda are to be treated as having been joint authors, thereby confirming the view expressed by the applicant in the present case.

should use its Plenary Powers to suppress the generic name *Cryptonymus* Eichwald, 1825 (Class Trilobita) for the purpose of securing that the generic name *Illaenus* Dalman, [1827], should be the oldest available name for the genus concerned:—

Proposed use of the Plenary Powers to suppress the generic name "Cryptonymus" Eichwald, 1825 (Class Trilobita) for purposes of the Law of Priority but not for those of the Law of Homonymy

By VALDAR JAANUSSON

(Paleontologiska Institutionen, Uppsala Universitet, Sweden)

The object of the present application is to ask the International Commission on Zoological Nomenclature to use its Plenary Powers to suppress the generic name Cryptonymus Eichwald, 1825 (Class Trilobita), thereby avoiding the serious confusion which would inevitably result from the application of the normal provisions of the Règles in this case. It is hoped that it will be possible for the International Commission to give an early decision on the present application, since that decision is urgently required in connection with the preparation of the relevant portion of the forthcoming Treatise on Invertebrate Paleontology. The details relating to this case are set out in the following paragraphs.

- 2. The generic name Cryptonymus was published by Eichwald in 1825 (: 44). The following eight nominal species were included in the genus: Cryptonymus schlotheimii n. sp., C. weissii n. sp., C. panderii n. sp., C. lichtensteinii n. sp., C. rosenbergii n. sp., C. wahlenbergii n. sp., C. rudolphii n. sp., and C. parkinsonii n. sp. The first four of these species belong to the family ASAPHIDAE, in its current delimination, and the last four to the family ILLAENIDAE. None of these eight species has ever been designated as the type species of the genus Cryptonymus.
- 3. The four asaphid species were considered by Fr. Schmidt (1898:3) in connection with his monographic treatment of the east Baltic asaphid trilobites. He found that all these species were unrecognizable if based only on the descriptions and figures by Eichwald (1825) ("keine von diesen lässt sich mit Sicherheit auf eine bestimmte Art zurückführen"). As the original material cannot be traced, these species were considered as nomina dubia by Jaanusson (1953:393).
- 4. The four illaenid species of Eichwald (1825) were discussed by G. Holm (1886) in his monograph on the east Baltic illaenid trilobites.

Again, the original material cannot be traced, but on the basis of Eichwald's descriptions and figures Holm concluded that *Cryptonymus rosenbergii*, *C. rudolphii*, and *C. parkinsonii* could not be identified with certainty, whereas *C. wahlenbergii* Eichwald, 1825, is a senior subjective synonym of the species described by Holm in the same paper as *Illaenus revaliensis* n. sp. (Holm, 1886: 48). Jaanusson (1954: 553) considered the first three species of *Cryptonymus* mentioned above as *nomina dubia*. *Cryptonymus wahlenbergii* was, however, considered by him as a recognizable species and was listed as *Illaenus wahlenbergi* (Eichwald, 1825), *Illaenus revaliensis* Holm, 1886, being treated as a junior subjective synonym of it.

- 5. The generic name *Cryptonymus* was transferred by Eichwald (1840) into an entirely different group of trilobites, the encrinurids, and on the same occasion the species originally included by him (1825) in *Cryptonymus* were placed in the genera *Asaphus* and *Illaenus*. This change of the original concept of the genus is nomenclatorially quite invalid and need not be considered herein.
- 6. In a series of subsequent papers, especially in the paper of 1860, Eichwald redescribed his species of 1825, now usually placed in the genera Asaphus, Niobe, and Illaenus. Regarding Eichwald's redescriptions Fr. Schmidt (1898: 7) stated that "Eichwald hat . . . alle seine alten im Jahre 1825 aufgestellten Arten zu retten und durch neue Beschreibungen und Abbildungen näher zu begründen gesucht. Einen Zusammenhang zwischen den alten und neuen Darstellungen nachzuweisen ist ihm nicht gelungen". In several cases it is fully evident that Eichwald's redescription of one or other of his species of 1825 is based on specimens specifically quite different from those originally figured and described. Holm (1886) also arrived at the same conclusion with respect to the illaenid species of Eichwald, 1825. For this reason the later papers of Eichwald cannot be used to define the nominal species established by him in 1825. Since 1886 the specific names of Cryptonymus—species described in Eichwald 1825 have not been used in the literature except by Jaanusson (1954) who considered the rejection of C. wahlenbergii by Holm (1886) to be nomenclatorially invalid.
- 7. Salter (1866: 147) treated Cryptonymus Eichwald, 1825, as the nominate subgenus of Asaphus and listed Asaphus expansus Linnaeus (=Wahlenberg 1821) and A. raniceps Dalman, [1827], as types. This too is not in accordance with the Règles as (1) the correct name of the nominate subgenus of Asaphus is Asaphus (Asaphus), and (2) none of the species considered by Salter to belong to Cryptonymus was originally included in this genus by Eichwald. Entomostracites expansus Wahl. was, on the contrary, regarded by Eichwald (1825: 42) as belonging to Asaphus.

- 8. The only species originally included in *Cryptonymus* Eichwald, 1825, which is taxonomically recognizable, is *C. wahlenbergii* Eichwald, 1825. If however, this species were to be selected as the type species of the genus *Cryptonymus*, the latter would become a senior subjective synonym of the well-known and widely distributed trilobite generic name *Illaenus* Dalman, [1827], type genus of the family ILLAENIDAE, and this would cause serious confusion both in trilobite taxonomy and in Ordovician stratigraphy. If one of the three other illaenid species originally included in *Cryptonymus* by Eichwald, 1825, but since 1886 generally regarded as *nomina dubia* (although determinable at the generic level), were to be selected as the type species of *Cryptonymus* the result would be similar, but the confusion would be even worse owing to the uncertainty of the characters of the type species. If one of the four unrecognizable *Asaphus* species were to be selected as the type species of *Cryptonymus* Eichwald, 1825, the latter would become a junior subjective synonym of *Asaphus* Brongniart in Brongniart & Desmarest, 1822. As, however, the genus *Asaphus* is now divided into several subgenera, and the subgeneric position of these four species is very uncertain, it would cause serious confusion in the taxonomic subdivision of the genus *Asaphus*.
- 9. For the foregoing reasons it is considered that in the interests of nomenclatorial stability and in order to avoid confusion, it is important that the Commission should suppress the generic name *Cryptonymus* Eichwald, 1825. It is further proposed that the generic name *Illaenus* Dalman, [1827] (: 248) (type species, by subsequent selection by Miller (1889: 550): *Entomostracites crassicauda* Wahlenberg, 1821: 27), the name which will be safeguarded by the action now proposed, should be placed on the *Official List of Generic Names in Zoology*.
- 10. Of the generic names dealt with in the present application the name *Cryptonymus* Eichwald, 1825, has not been taken as the base for a family-group name. As already noted, the generic name *Illaenus* Dalman, [1827], is the type genus of the well-known family ILLAENIDAE. This family-group taxon was established in 1847 by Hawle & Corda (: 51), by whom it was spelled in the incorrect form ILLAENIDES. It was corrected to ILLAENIDAE by Angelin in 1854 (: 41). In its corrected form this name should now be placed on the *Official List of Family-Group Names in Zoology*, the Invalid Original Spelling ILLAENIDES being at the same time placed on the corresponding *Official Index*.
- 11. In view of these facts I ask that the International Commission on Zoological Nomenclature should:—
 - (1) use its Plenary Powers to suppress the generic name Cryptonymus Eichwald, 1825, for the purposes of the Law of Priority but not for those of the Law of Homonymy;

- (2) place the generic name Cryptonymus Eichwald, 1825, as suppressed under the Plenary Powers under (1) above, on the Official Index of Rejected and Invalid Generic Names in Zoology;
- (3) place the generic name *Illaenus* Dalman, [1827] (type species, by subsequent selection by Miller (1889): *Entomostracites crassicauda* Wahlenberg, 1821) on the *Official List of Generic Names in Zoology*;
- (4) place the specific name crassicauda Wahlenberg, 1821, as published in the combination Entomostracites crassicauda (specific name of type species of Illaenus Dalman, [1827]) on the Official List of Specific Names in Zoology;
- (5) place the family-group name ILLAENIDAE (correction of ILLAENIDES) Hawle & Corda, 1847 (type genus: Illaenus Dalman, [1827]) on the Official List of Family-Group Names in Zoology;
- (6) place the family-group name ILLAENIDES Hawle & Corda, 1847 (type genus: *Illaenus* Dalman, [1827]) (an Invalid Original Spelling of ILLAENIDAE) on the *Official Index of Rejected and Invalid Family-Group Names in Zoology*.

References:

- Angelin (N.P.), 1854. *Palaeontologia Scandinavica*, **1**. Crustacea Formationis transitionis, Fasc. II, Lipsiae (Lundae)
- Dalman (J.W.), [1827]. "Om Palaeaderna eller de så kallade trilobiterna", Kongl. Vetensk.-Akad. Handlingar för år 1826, Stockholm
- Eichwald (E.), 1825. Geognostico-zoologica per Ingriam marisque Baltici provincias nec non de Trilobitis observatione, Casani
- ——, 1840. Ueber das silurische Schichtensystem von Ehstland, St. Petersburg
- -----, 1860. Lethaea Rossica ou Paléontologie de la Russie, Premier Volume, Seconde section de l'ancienne Période, Stuttgart
- Hawle (I.) and Corda (A.J.C.), 1847. Prodrom einer Monographie der böhmischen Trilobiten, Prag

- Holm (G.), 1886. Illaeniden; Revision der ostbaltischen silurischen Trilobiten von Fr. Schmidt, Abt. III, *Mémoires de l'Acad. Imp. des Sciences de St.-Pétersbourg*, VII^e Sér., T. 33, No. 8, St.-Pétersbourg
- Jaanusson (V.), 1953. "Untersuchungen über baltoskandische Asaphiden I; Revision der mittelordovizischen Asaphiden des Siljan-Gebeites in Dalarna". Arkiv för Mineralogi och Geologi, Bd. 1, Nr. 14, Stockholm (printed in Uppsala)
- ———, 1954. "Zur Morphologie und Taxonomie der Illaeniden". Arkiv för Mineralogi och Geologi, Bd. 1, nr. 20, Stockholm (printed in Uppsala)
- Miller (S.A.), 1889. North American Geology snd Paleontology for the use of Amateurs, Students and Scientists, Cincinnati
- Salter (J.W.), 1866. A monograph of the British trilobites from the Cambrian, Silurian and Devonian formations, *Palaeontographical Society Monographs*, 1864, London
- Schmidt, Fr., 1898. "Revision der ostbaltischen silurischen Trilobiten", Abt. V, Lief. I, Mémoires de l'Acad. Imp. des Sciences de St.-Pétersbourg, VIII Sér., vol. 6, No. 11, St.-Pétersbourg
- Wahlenberg (G.), (1818) 1821. "Petrificata telluris svecanae". Nova acta Regiae Soc. Sci. Upsaliensis, vol. 8, Upsaliae

II. THE SUBSEQUENT HISTORY OF THE CASE

- **2.** Registration of the present application: Upon the receipt of Dr. Jaanusson's application, the question of securing that the generic name *Illaenus* Dalman, [1827] (Class Trilobita), shall be the oldest available name for the genus concerned was allotted the Registered No. Z.N.(S.) 1068.
- 3. Support received from C. J. Stubblefield (Geological Survey and Museum, London) prior to the publication of the present

application: On 2nd February 1956, prior to the publication of the present application, Dr. C. J. Stubblefield (*Geological Survey and Museum*, *London*) addressed the following letter to the Office of the Commission in which he supported the action proposed by Dr. Jaanusson (Stubblefield, 1956, *Bull. zool. Nomencl.* 12:64):—

I support the application of Dr. V. Jaanusson for the suppression of *Cryptonymus* Eichwald, 1825, for the purposes of the Law of Priority but not for those of the Law of Homonymy because I believe this action to be in the best interests of stability of nomenclature in the Trilobita.

- **4.** Publication of the present application: The present application was sent to the printer on 20th February 1956 and was published on 12th June of the same year in Part 2 of Volume 12 of the Bulletin of Zoological Nomenclature (Jaanusson, 1956, Bull. zool. Nomencl. **12**: 60—64).
- **5.** Issue of Public Notices: Under the revised procedure prescribed by the Thirteenth International Congress of Zoology, Paris, 1948 (1950, Bull. zool. Nomencl. 4:51—56), Public Notice of the possible use by the International Commission on Zoological Nomenclature of its Plenary Powers in the present case was given on 12th June 1956 (a) in Part 2 of Volume 12 of the Bulletin of Zoological Nomenclature (the Part in which Dr. Jaanusson's application was published) and (b) to the other prescribed serial publications. In addition such Notice was given to four general zoological serial publications and to three palaeontological serials in Europe and America.
- 6. Support received: Following the publication of the present application, the action recommended was supported by four specialists. These specialists were resident in the following countries:—Denmark (one); Germany (two); United States (one). The communications so received are reproduced in the immediately following paragraphs.

7. Support received from H. B. Whittington (Museum of Comparative Zoology at Harvard College, Cambridge, Mass., U.S.A.): On 30th July 1956, Dr. H. B. Whittington (Museum of Comparative Zoology at Harvard College, Cambridge, Mass., U.S.A.) addressed the following letter to the Office of the Commission in support of the present and other recently published cases in the Bulletin of Zoological Nomenclature (Whittington, 1956, Bull. zool. Nomencl. 12:253):—

I write to express my support for the following proposals:

Protopeltura, Olenus and Paradoxides, and Cryptonymus.

I believe the actions suggested in each case will be welcome and will promote stability in nomenclature.

8. Support received from Rudolf and Emma Richter (Forschungs-Institutes und Natur-Museums Senckenberg, Frankfurt a.M., Germany): On 30th July 1956, Dr. Rudolf Richter and Frau Emma Richter (Forschungs-Institutes und Natur-Museums Senckenberg, Frankfurt a.M., Germany) addressed the following letter to the Office of the Commission in support of a number of cases concerning names in the Class Trilobita which had been published in the Bulletin of Zoological Nomenclature (Richter (R.) & Richter (E.), 1956, Bull. zool. Nomencl. 12: 255):—

Für den Fall, dass es den betressenden Anträgen helsen kann, möchten wir Ihnen mutteilen, dass wir sie im Interesse der Stabilitätder Nomenklatur nachdrücklich unterstützen.

Es handelt sich um folgende Anträge: Paradoxides Asaphus, Trinucleus and Cryptonymus.

(Cryptonymus) Wir Schliessen uns diesem Antrag im Sinne von Dr. Stubblefield an, wonach der Name Cryptonymus unterdrückt werden soll hinsichtlich der Priorität, nicht aber hinsichtlich der Homonymie.

9. Support received from Christian Poulsen (Universitetets Mineralogisk-Geologiske Institut, Copenhagen): On 5th October 1956, Dr. Christian Poulsen (Universitetets Mineralogisk-Geologiske

Institut, Copenhagen) addressed the following letter to the Office of the Commission in which he supported the action proposed in the present and other cases concerning names in the Class Trilobita which had been published in the Bulletin of Zoological Nomenclature (Poulsen, 1956, Bull. zool. Nomencl. 12:314):—

I heartily support the applications made by Dr. V. Jaanusson regarding the name *Asaphus* Brongniart, 1822 (Class Trilobita), and the name *Cryptonymus* Eichwald, 1825 (Class Trilobita), and I highly recommend the procedure proposed in connection with these applications.

- 10. No Objection Received: No objection to the action proposed in the present case was received from any source.
- 11. Submission of a supplementary proposal relating to the specific name "wahlenbergii" Eichwald, 1825, as published in the combination "Cryptonymus wahlenbergii": Following the publication of the present application, a suggestion was received from two members of the Commission—Dr. Henning Lemche (Copenhagen) and Professor Ernst Mayr (Cambridge, Mass.)—that, in compliance with the "Completeness-of-Opinions" Rule, the Ruling to be given should be extended to cover the specific name wahlenbergii Eichwald, 1825, as published in the combination Cryptonumus wahlenbergii, a name involved in the present case and one which, it was agreed, was the oldest available name for the taxon concerned. It was suggested that for these reasons the foregoing name should be placed on the Official List of Specific Names in Zoology. On receiving the foregoing proposal, Mr. Hemming communicated with Dr. C. J. Stubblefield (Geological Survey and Museum, London) who, as a specialist in the Class Trilobita, had already expressed his views on the present case. Dr. Stubblefield replied that he was in full agreement with the supplementary action suggested. Accordingly, when on 20th December, 1956 Mr. Hemming prepared the Voting Paper (V.P.(57)7) for submission to the Commission on this case, he

added the following note—as Note 5—for the consideration of the Commission:—

5. Supplementary Point: It has been suggested (Lemche; Mayr) that in order to complete the proposals submitted in this case the specific name wahlenbergii Eichwald, 1825, as published in the combination Cryptonymus wahlenbergii, be placed on the Official List of Specific Names in Zoology. Dr. C. J. Stubblefield, of the Geological Survey and Museum, London, the leading specialist in Trilobites in this country, heartily approves of this suggestion.

III. THE DECISION TAKEN BY THE INTERNATIONAL COMMISSION ON ZOOLOGICAL NOMENCLATURE

- 12. Issue of Voting Paper V.P.(57)7: On 22nd January 1957 a Voting Paper (V.P.(57)7) was issued in which the Members of the Commission were invited to vote either for, or against, "the proposal relating to the generic name Cryptonymus Eichwald, 1825, as set out in Points (1) to (6) in paragraph 11 on pages 62 and 63 of Volume 12 of the Bulletin of Zoological Nomenclature [i.e. in the paragraph numbered as above in the paper reproduced in the first paragraph of the present Opinion], subject to the supplementary proposal suggested in Note 5" [the terms of which have been reproduced in paragraph 11 of the present Opinion].
- 13. The Prescribed Voting Period: As the foregoing Voting Paper was issued under the Three-Month Rule, the Prescribed Voting Period closed on 22nd April 1957.

- 14. Particulars of the Voting on Voting Paper V.P.(57)7: At the close of the Prescribed Voting Period, the state of the voting on Voting Paper V.P.(57)7 was as follows:—
 - (a) Affirmative Votes had been given by the following twentythree (23) Commissioners (arranged in the order in which Votes were received):

Hering; Boschma; Holthuis; Prantl; Lemche; Mayr; Dymond; Bodenheimer; Vokes; Riley; Esaki; Key; Hemming; Bonnet; Mertens; Jaczewski; Stoll; Cabrera; do Amaral; Kühnelt; Tortonese; Sylvester-Bradley; Miller;

(b) Negative Votes:

None;

(c) Prevented from voting by the interruption of postal communications consequent upon political disturbances, one (1):

Hankó;

(d) On Leave of Absence, one (1):

Bradley (J.C.);

(e) Voting Papers not returned:

None.

- 15. Declaration of Result of Vote: On 24th April 1957, Mr. Hemming, Secretary to the International Commission, acting as Returning Officer for the Vote taken on Voting Paper V.P.(57)7, signed a Certificate that the Votes cast were as set out in paragraph 14 above and declaring that the proposal submitted in the foregoing Voting Paper had been duly adopted and that the decision so taken was the decision of the International Commission in the matter aforesaid.
- 16. Preparation of the Ruling given in the present "Opinion": On 28th December 1957 Mr. Hemming prepared the Ruling given in the present *Opinion* and at the same time signed a Certificate that the terms of that Ruling were in complete accord with those of the proposal approved by the International Commission in its Vote on Voting Paper V.P.(57)7.
- 17. Original References for Generic and Specific Names: The following are the original references for the generic and specific names placed on *Official Lists* and *Official Indexes* by the Ruling given in the present *Opinion*:—
- crassicauda, Entomostracites, Wahlenberg, 1821, Nova Acta Soc. Sci. upsal. 8:27
- Cryptonymus Eichwald, 1825, Geogn.-zool. Ingriam Mar. balt. Prov. Trilob. Observat.: 44
- Illaenus Dalman, [1827], K. Vetensk.-Akad. Handl., Stockholm 1826 (No. 2): 248
- wahlenbergii, Cryptonymus, Eichwald, 1825, Geogn.-zool. Ingriam Mar. balt. Prov. Trilob. Observ.: 50
- 18. Reference for the selection of a type species for a nominal genus: The following is the reference for the selection of a type species for a nominal species specified in the Ruling given in the present *Opinion*:—
- For Illaenus Dalman, [1827] Miller (S.A.), 1889, N. Amer. Geol. Pal.: 550

- 19. Original References for Family-Group Names: The following are the original references for the family-group names placed by the Ruling given in the present *Opinion* on the *Official List* and *Official Index* of names of taxa of the family-group category:—
- ILLAENIDAE (correction by Angelin (N.P.) (1854, *Palaeont. scand.* 1(2):41) of ILLAENIDES) Hawle (I.) & Corda (A.J.C.),² 1847, *Prodrom Mon. böhm. Trilob.*:41 (also published, probably in 1848, in *Abh. Königl.-böhm. Ges. Wiss.* (5) 5:157)
- ILLAENIDES Hawle (I.) & Corda (A.J.C.),² 1847 (an Invalid Original Spelling for ILLAENIDAE)
- 20. The prescribed procedures were duly complied with by the International Commission on Zoological Nomenclature in dealing with the present case, and the present *Opinion* is accordingly hereby rendered in the name of the said International Commission by the under-signed Francis Hemming, Secretary to the International Commission on Zoological Nomenclature, in virtue of all and every the powers conferred upon him in that behalf.
- 21. The present *Opinion* shall be known as *Opinion* Five Hundred and Eight (508) of the International Commission on Zoological Nomenclature.

DONE in London, this Twenty-Eighth day of December, Nineteen Hundred and Fifty-Seven.

Secretary to the International Commission on Zoological Nomenclature

FRANCIS HEMMING

² For the authorship here attributed to this name see Footnote 1.

OPINIONS AND DECLARATIONS RENDERED BY THE INTERNATIONAL COMMISSION ON ZOOLOGICAL NOMENCLATURE

Edited by

FRANCIS HEMMING, C.M.G., C.B.E.

Secretary to the Commission

VOLUME 18. Part 12. Pp. 227-238

OPINION 509

Use of the Plenary Powers to attribute the name Filaria volvulas to Leuckart (K.G.F.R.), [1892], and to approve the emendation of the foregoing specific name from volvulas to volvulus (Class Nematoda)

MAY 22 1958

LIBRARY

LONDON:

Printed by Order of the International Trust for Zoological Nomenclature

and

Sold on behalf of the International Commission on Zoological Nomenclature by the International Trust at its Publications Office 41, Queen's Gate, London, S.W.7

1958

Price Eight Shillings

(All rights reserved)

INTERNATIONAL COMMISSION ON ZOOLOGICAL NOMENCLATURE

COMPOSITION AT THE TIME OF THE ADOPTION OF THE RULING GIVEN IN OPINION 509

The Officers of the Commission

Honorary Life President: Dr. Karl JORDAN Zoological Museum, Tring, Herts., England) Dr. Karl JORDAN (British Museum (Natural History),

President: Professor James Chester Bradley (Cornell University, Ithaca, N.Y., U.S.A.) (12th August 1953)

Vice-President: Senhor Dr. Afranio do Amaral (Sao Paulo, Brazil) (12th August 1953)

Secretary: Mr. Francis Hemming (London, England) (27th July 1948)

The Members of the Commission

(Arranged in order of precedence by reference to date of election or of most recent re-election, as prescribed by the International Congress of Zoology)

Professor H. Boschma (Rijksmuseum van Natuurlijke Historie, Leiden, The Netherlands) (1st January 1947) Senor Dr. Angel Cabrera (*La Plata, Argentina*) (27th July 1948)

Mr. Francis Hemming (London, England) (27th July 1948) (Secretary)
Dr. Henning Lemche (Universitetets Zoologiske Museum, Copenhagen, Denmark) (27th July 1948)
Professor Teiso Esaki (Kyushu University, Fukuoka, Japan) (17th April 1950)
Professor Pierre Bonnet (Université de Toulouse, France) (9th June 1950)
Mr. Norman Denbigh Riley (British Museum (Natural History), London) (9th June 1950)

Professor Tadeusz Jaczewski (Institute of Zoology, Polish Academy of Sciences, Warsaw, Poland) (15th June 1950)

Polana) (15th June 1950)
Professor Robert Mertens (Natur-Museum u. Forschungs-Institut Senckenberg, Frankfurt a.M., Germany) (5th July 1950)
Professor Erich Martin Hering (Zoologisches Museum der Humboldt-Universität zu Berlin, Germany) (5th July 1950)
Senhor Dr. Afranio do Amaral (S. Paulo, Brazil) (12th August 1953) (Vice-President)
Professor J. R. Dymond (University of Toronto, Toronto, Canada) (12th August 1953)
Professor J. Chester Bradley (Cornell University, Ithaca, N.Y., U.S.A.) (12th August 1953) (President)

1953) (President)

Professor Harold E. Vokes (University of Tulane, Department of Geology, New Orleans, Louisiana, U.S.A.) (12th August 1953)

Professor Béla Hankó (Mezőgazdasági Muzeum, Budapest, Hungary) (12th August 1953) Dr. Norman R. Stoll (Rockefeller Institute for Medical Research, New York, N.Y.,

U.S.A.) (12th August 1953)

Mr. P. C. Sylvesster-Bradley (Sheffield University, Sheffield, England) (12th August 1953)

Dr. L. B. Holthuis (Rijksmuseum van Natuurlijke Historie, Leiden, The Netherlands) (12th August 1953)

Dr. K. H. L. Key (Commonwealth Scientific and Industrial Research Organisation, Canberra, A.C.T., Australia) (15th October 1954)
 Dr. Alden H. Miller (Museum of Vertebrate Zoology, University of California, U.S.A.)

(29th October 1954)

Doc. Dr. Ferninand Prantl (Národni Museum V Praze, Prague, Czechoslovakia) (30th October 1954)

Professor Dr. Wilhelm Kühnelt (Zoologisches Institut der Universität, Vienna, Austria) (6th November 1954)

Professor F. S. Bodenheimer (The Hebrew University, Jerusalem, Israel) (11th November 1954)

Professor Ernst Mayr (Museum of Comparative Zoology at Harvard College, Cambridge, Massachusetts, U.S.A.) (4th December 1954)
Professor Enrico Tortonesse (Museo di Storia Naturale "G. Doria", Genova, Italy) (16th December 1954)

OPINION 509

USE OF THE PLENARY POWERS TO ATTRIBUTE THE NAME "FILARIA VOLVULAS" TO LEUCKART (K.G.F.R.), [1892], AND TO APPROVE THE EMENDATION OF THE FOREGOING SPECIFIC NAME FROM "VOLVULAS" TO "VOLVULUS" (CLASS NEMATODA)

RULING:—(1) The following action is hereby taken under the Plenary Powers:—

- (a) It is hereby directed that the binomen *Filaria* volvulas (Class Nematoda) as published by Manson (P.) in [1892] be attributed to Leuckart (K.G.F.R.).
- (b) The emendation to *volvulus* of the specific name *volvulas* as published in [1892] in the combination *Filaria volvulas* and as attributed in (1) above to Leuckart (K.G.F.R.) is hereby approved.
- (2) The under-mentioned specific name is hereby placed on the Official List of Specific Names in Zoology with the Name Number 1500:
 - volvulus (emend. of volvulas) Leuckart (K.G.F.R.), [1892], as published in the combination Filaria volvulas, the attribution of this name to Leuckart and not to Manson (P.), in a paper by whom it was published being made in accordance with a direction given under the Plenary Powers in (1) above.
- (3) The under-mentioned specific names are hereby placed on the Official Index of Rejected and Invalid

Specific Names in Zoology with the Name Numbers severally specified below:—

- (a) volvulas Leuckart (K.G.F.R.), [1892], as published in the combination Filaria volvulas (an Invalid Original Spelling under the Ruling given under the Plenary Powers in (1) (b) above for volvulus (emend. of volvulas) Leuckart (K.G.F.R.), [1892], as published in the combination Filaria volvulas) (Name No. 509);
- (b) the following Erroneous Subsequent Spellings for volvulus (emend. of volvulas) Leuckart (K.G.F.R.), [1892], as published in the combination Filaria volvulas:—
 - (i) volvulans Railliet, 1893, as published in the combination Filaria volvulans (Name No. 510);
 - (ii) volvulxus Manson (P.), 1893, as published in the combination Filaria volvulxus (Name No. 511).

I. THE STATEMENT OF THE CASE

On 15th November 1954 Dr. Herbert T. Dalmat (U.S. Department of Health, Education and Welfare, Public Health Service, National Institutes of Health, Bethesda, Maryland, U.S.A.) addressed a preliminary communication to the Office of the Commission on the question of the possible use of the Commission's Plenary Powers (a) for the purpose of validating the emendation to volvulus of the specific name volvulas published by Manson in 1892 or 1893 in the combination Filaria volvulas and (b) for the attribution of the above name to Leuckart (K.G.F.R.). The above name was, it was explained, one of

great public health importance, for the species concerned, which was currently known as *Onchocerca volvulus* (Leuckart), was the species responsible for Human Onchocerciasis. The bibliographical and other problems involved in this case proved to be of considerable complexity and led to extensive correspondence between the Secretary and the applicant. The last of these difficulties was however cleared up on 16th December 1955, on which date Dr. Dalmat submitted the following definitive application for the consideration of the Commission:—

Proposed determination under the Plenary Powers, of the authorship of, and of the original reference for, the the name "Filaria volvulus" (Class Nematoda) and proposed validation under the same Powers of the emendation from "volvulas" to "volvulus" of the specific name of this species

By HERBERT T. DALMAT

(Laboratory of Tropical Diseases, National Microbiological Institute, Bethesda, Maryland, U.S.A.)

I wish to present for the decision of the International Commission on Zoological Nomenclature the following case concerning the name "Onchocerca volvulus (Leuckart, 1893) Railliet and Henry, 1910".

2. In the course of preparing a manuscript relative to human onchocerciasis, I was unable to find Leuckart's original description of the filarid worm causing the disease. Most texts and research papers list the species as given in the above title, neglecting to give the source in the respective bibliography. Thus, in the Appendix (: 313) of the "Bibliography of Onchocerciasis", (Publication No. 242 of the Pan-American Sanitary Bureau) published in March, 1950, a reference is given for Leuckart, stating that he is quoted by Manson in an article "Skin Diseases" in Davidson's Textbook of Hygiene and Diseases of Warm Climates (: 963) (no date given). Fantham, Stephens, and Theobald (1916) on page 808 of The Animal Parasites of Man give their reference as follows: "Leuckart, R. (in Manson, P.). Diseases of the skin in tropical climates; Davidson: Hygiene and Diseases of Warm Climates, Edinb., London, 1893, p. 963." In the "Index Catalogue of Medical and Veterinary Zoology (Roundworms)",

published in 1920 in Bulletin No. 114 of the United States Public Health Service Hygienic Laboratory, Stiles and Hassall (: 495) list this same reference as the earliest one for volvulus, while giving a still earlier reference (1892—see below) for the name volvulas, considering this to be an error for volvulus J. H. Sandground in 1934, in Part 2 (: 138) of Strong, Sandground, Bequaert, and Ochoa, "Onchocerciasis with Special Reference to the Central American Form of the Disease" (Contribution No. 6, Dept. Trop. Med. and Inst. Trop. Biol. and Med., Harvard University) states: "Under the name of Filaria volvulus, Leuckart in 1893 presented a brief description of a parasite that occurred in prominent nodules under the skin of natives in the Gold Coast of Equatorial West Africa". This would infer that Leuckart actually published a description but this is not the case. Various other authors give the reference for Leuckart's description as "Leuckart, R., 1893, Die Parasiten des Menschen und die von ihnen herrührenden Krankheiten. Ein Hand und Lehrbuch fur Naturforscher und Aerzte. 2 Aufl. Leipzig". This volume contains no discussion whatsoever of *Filaria volvulus*. Railliet and Henry, in "Les onchocerques, nematodes parasites du tissu conjonctif" (1910, Compt. Rend. Soc. Biol., Paris, 68 (No. 6): 248—251 (250—51)) transferred the species from the genus Filaria Müller to Onchocerca Diesing, but gave no reference to the original description of the species other than the listing as "Onchocerca volvulus (Leuckart, 1893).—Syn.: Filaria volvulus Leuckart, 1893". To settle this problem, a study of the literature was undertaken, and the following information was secured.

3. The parasite was first mentioned in the literature by Sir Patrick Manson in an article entitled: "The geographical distribution, pathological relations, and life history of Filaria sanguinis hominis diurna and of Filaria sanguinis hominis perstans, in connexion with preventive medicine", which appears in the Trans. 7th Internatl. Cong. Hyg. and Demog., London, August 1891, 1 (Sect. 1): 88. The date of this article is somewhat confused. Included on the title page is the year "1891" for the time when the Congress took place; the year "1892" is given as the date of printing and "December 1892" for the date of transmittal. In view of the importance of ascertaining the exact date of publication of Manson's paper containing the name Filaria volvulas, I have made a special investigation of this subject with the help of the Library of Congress. I find that the printing of volume 1 (Section 1) of the Trans. Int. Congr. Hyg. Demogr. was authorised at the end of 1891, but that a fire in the printing office caused a delay with the result that work could not get started until well into 1892. Volumes 1 to 4 (which in library copies are usually bound up together) were published as separate units towards the close of 1892, while the remaining nine volumes of the Congress were not published until 1893. I find also that the numbering of the Congresses does not always correspond with the appropriate Transactions, since at one point there was a change in the numbering system. Thus, the Congress with which we are here concerned may be known either as the seventh or as the ninth of the series. It has been suggested to me by the Library of Congress that the reference for Filaria volvulas in Manson's paper should be given as follows:—Trans. Seventh int. Congr. Hyg. Demogr. London, August 1891 vol. 1, Section 1, p. 88, 1892. Manson's discussion of the parasite in the foregoing paper was based on information and slides sent to him by Leuckart. It cannot be ascertained from the literature whether the spelling volvulas, as used in this paper, was the result of a typographical error or was actually the spelling used by Leuckart or Manson.

- 4. The above "original description" is mentioned by Railliet in the Second Edition of his *Traité de Zoologie médicale et agricole* (: 522) published in 1893, where however he erroneously spelled the name as *Filaria volvulans*. Railliet, however, gave the date of Manson's article as "1893", rather than as "1892", the date given by Stiles and Hassall which is now seen to be correct.
- 5. Manson discussed this parasite again in 1893, this time in his paper entitled "Diseases of the Skin in Tropical Climates" which forms Chapter 24 (: 928—995) of the work *Hygiene and Diseases of Warm Climates* edited by Andrew Davidson. In this paper the name of this parasite appeared (: 963) as *Filaria volvulxus*. This is the reference which is usually cited for the original description of this parasite, the earlier paper in the *Trans. Seventh int. Congr. Hyg. Demogr.* being overlooked.
- 6. In 1896, R. Blanchard, in his "Animaux parasites", published in the *Traité de Pathologie générale* (Bouchard) (2:649—810 (783)), gave a short description of the worm and used the presently accepted spelling of *volvulus*. Labadie-Lagrave and Deguy offered a description of a single female, based on histological preparations, published in an article entitled "Un cas de *Filaria volvulus*", published in the *Archives de Parasitologie*, 2 (No. 3):451—460, 1899. The first extensive description of the adults and embryos of the parasite was given by W. T. Prout in "A filaria found in Sierra Leone. *?Filaria volvulus* (Leuckart)" (1901, *Brit. med. J.* 1901, 1:209—211).
- 7. By common acceptance of all authors subsequent to Manson, this species has been known by the name volvulus and that name has been credited to Leuckart. Great and quite unnecessary confusion would result if this name were to be credited to any other author or if its spelling were to be changed. It is accordingly recommended that a Ruling be given by the Commission that this name in the combination Filaria volvulas be attributed to Leuckart and be treated as having been published by him in 1892 in Manson's paper on Filaria sanguinis hominis diurna and Filaria sanguinis hominis perstans, to which reference has already been made. As has already been explained, this name appeared in the paper referred to above with

the spelling "volvulas" and it is part of the present proposal that this spelling should be replaced by the currently accepted spelling "volvulus". It is recognised that under the decisions in regard to the emendation of names taken by the Fourteenth International Congress of Zoology, Copenhagen, 1953, the use of the Commission's Plenary Powers will be needed in order to validate the spelling "volvulus" as the name for this species. As regards the authorship of this name, it seems likely that, although Manson obtained it from Leuckart, the manner in which it was published by Manson in the paper in question is such that under the *Règles*, it should be attributed to that author and not to Leuckart. It is suggested therefore that, when dealing with this portion of the present application, the Commission should also do so under its Plenary Powers.

- 8. For the reasons set forth above, the International Commission on Zoological Nomenclature is asked:—
 - (1) to use its Plenary Powers :-
 - (a) to direct that the name Filaria volvulas, as published in 1892 in a paper by Manson entitled "The geographical distribution, pathological relations and life history of Filaria sanguinis hominis diurnia and of Filaria sanguinis hominis perstans in connection with preventive medicine" (Trans. Seventh int. Congr. Hyg. Demogr. 1 (Sect. 1): 88) be attributed to Leuckart (K.G.F.R.);
 - (b) to approve the emendation to *volvulus* of the name *volvulus* Leuckart, [1892], as published in the combination *Filaria volvulus*:
 - (2) to place the specific name volvulus (emend. of volvulus) Leuckart, [1892], as published in the combination Filaria volvulus, on the Official List of Specific Names in Zoology, with a note specifying the decisions proposed under (1) above to be taken under the Plenary Powers;
 - (3) to place the undermentioned-specific names on the Official Index of Rejected and Invalid Specific Names in Zoology:—
 - (a) volvulas Leuckart, [1892], as published in the combination Filaria volvulas (an Invalid Original Spelling for volvulus, under the Ruling proposed under (1)(b) above, to be given under the Plenary Powers);
 - (b) volvulans Railliet, 1893, as published in the combination Filaria volvulans (an Erroneous Subsequent Spelling for volvulus (emend. of volvulas) Leuckart, [1892], as published in the combination Filaria volvulas);
 - (c) volvulxus Manson, 1893, as published in the combination Filaria volvulxus (an Erroneous Subsequent Spelling for volvulus (emend. of volvulas) Leuckart, [1892], as published in the combination Filaria volvulas).

II. THE SUBSEQUENT HISTORY OF THE CASE

- **2.** Registration of the present application: Upon the receipt in 1954 of Dr. Dalmat's preliminary application the question of the attribution of the name *Filaria volvulas* (Class Nematoda) to Leuckart, [1892], was allotted the Registered Number **Z.N.(S.)** 877.
- 3. Support received prior to publication from Norman R. Stoll (Rockefeller Institute for Medical Research, New York, U.S.A.): On 1st November 1955, prior to the publication of the present application, Dr. Norman R. Stoll (Rockefeller Institute for Medical Research, New York, U.S.A.) addressed the following letter to the Office of the Commission in support of the present case:—

Onchocerca volvulus being established as the correct name for this nematode of great public health importance represents one type of an almost ideal example for the International Commission to assist in maintaining a stable nomenclature. For over half a century volvulus has been in acceptable usage, growing in familiarity in the language of tropical medicine, and as the seriousness of Onchocerca infection has become realised. The confusion that would result in its being changed would serve no useful purpose. Dalmat's studies of the vicissitudes of the spelling of the species name before 1900, and his request for a Commission ruling, thus give the opportunity of forestalling for the future any such unfortunate result. His request strongly deserves support.

- **4.** Publication of the present application: The present application was sent to the printer on 20th February 1956 and was published on 26th June of the same year in Part 3 of Volume 12 of the Bulletin of Zoological Nomenclature (Dalmat, 1956, Bull. zool. Nomencl. **12**: 86—89).
- **5. Issue of Public Notices:** Under the revised procedure prescribed by the Thirteenth International Congress of Zoology, Paris, 1948 (1950, *Bull. zool. Nomencl.* **4**: 51—56), Public Notice of the possible use by the International Commission on Zoological Nomenclature of its Plenary Powers in the present case was given

on 26th June 1956 (a) in Part 3 of Volume 12 of the *Bulletin of Zoological Nomenclature* (the Part in which Dr. Dalmat's application was published) and (b) to the other prescribed serial publications. In addition such Notice was given to four general zoological serial publications.

6. No Objection Received: No objection to the action proposed in the present case was received from any source.

III. THE DECISION TAKEN BY THE INTERNATIONAL COMMISSION ON ZOOLOGICAL NOMENCLATURE

- 7. Issue of Voting Paper V.P.(57)8: On 22nd January 1957 a Voting Paper (V.P.(57)8) was issued in which the Members of the Commission were invited to vote either for, or against, "the proposal relating to the name Filaria volvulus, as set out in Points (1) to (3) in paragraph 8 of Volume 12 of the Bulletin of Zoological Nomenclature" [i.e. in the paragraph numbered as above in the paper reproduced in the first paragraph of the present Opinion].
- **8.** The Prescribed Voting Period: As the foregoing Voting Paper was issued under the Three-Month Rule, the Prescribed Voting Period closed on 22nd April 1957.
- 9. Particulars of the Voting on Voting Paper V.P.(57)8: At the close of the Prescribed Voting Period, the state of the voting on Voting Paper V.P.(57)8 was as follows:—
 - (a) Affirmative Votes had been given by the following twentythree (23) Commissioners (arranged in the order in which Votes were received):

Hering; Boschma; Holthuis; Prantl; Lemche; Mayr; Dymond; Bodenheimer; Vokes; Riley; Esaki; Key;

Hemming; Bonnet; Mertens; Stoll; Cabrera; do Amaral; Kühnelt; Jaczewski; Tortonese; Sylvester-Bradley; Miller;

(b) Negative Votes:

None;

(c) Prevented from voting by the interruption of postal communications consequent upon political disturbances, one (1):

Hankó;

(d) On Leave of Absence, one (1):

Bradley (J.C.);

(e) Voting Papers not returned:

None.

- 10. Declaration of Result of Vote: On 24th April 1957, Mr. Hemming, Secretary to the International Commission, acting as Returning Officer for the Vote taken on Voting Paper V.P.(57)8, signed a Certificate that the Votes cast were as set out in paragraph 9 above and declaring that the proposal submitted in the foregoing Voting Paper had been duly adopted and that the decision so taken was the decision of the International Commission in the matter aforesaid.
- 11. Preparation of the Ruling given in the present "Opinion": On 1st January 1958 Mr. Hemming prepared the Ruling given in the present *Opinion* and at the same time signed a Certificate that the terms of that Ruling were in complete accord with those of the proposal approved by the International Commission in its Vote on Voting Paper V.P.(57)8.

- 12. Original References: The following are the original references for the specific names placed by the Ruling given in the present *Opinion* on the *Official List* and *Official Index* respectively for the names of taxa belonging to the species category:—
- volvulans, Filaria, Railliet (A.), 1893, Traité Zool. méd. agricole (ed. 2): 522
- volvulas, Filaria, Leuckart (K.G.F.R.), [1892], as published in the combination Filaria volvulas (an Invalid Original Spelling for volvulus (emend. of volvulas) Leuckart, [1892], as published in the combination Filaria volvulas)
- volvulus (emend. of volvulas) Leuckart (K.G.F.R.), [1892], in Manson (P.), Trans. Seventh [9th] int. Congr. Hyg. Demogr. (London 1891) 1 (Sect. 1): 88
- volvulxus, Filaria, Manson (P.), 1893, in Davidson (A.), Hygiene Disease warm Climates: 963
- 13. Compliance with Prescribed Procedures: The prescribed procedures were duly complied with by the International Commission on Zoological Nomenclature in dealing with the present case, and the present *Opinion* is accordingly hereby rendered in the name of the said International Commission by the under-signed Francis Hemming, Secretary to the International Commission on Zoological Nomenclature, in virtue of all and every the powers conferred upon him in that behalf.
- **14.** "Opinion" Number: The present *Opinion* shall be known as *Opinion* Five Hundred and Nine (509) of the International Commission on Zoological Nomenclature.

DONE in London, this First day of January, Nineteen Hundred and Fifty-Eight.

Secretary to the International Commission on Zoological Nomenclature

FRANCIS HEMMING

OPINIONS AND DECLARATIONS RENDERED BY THE INTERNATIONAL COMMISSION ON ZOOLOGICAL NOMENCLATURE

Edited by

FRANCIS HEMMING, C.M.G., C.B.E. Secretary to the Commission

VOLUME 18. Part 14. Pp. 239-256, 1 pl.

OPINION 510

Validation under the Plenary Powers of the generic name Asaphus Brongniart, 1822 (Class Trilobita)

MAY 22 1988

LIBRARY

LONDON:

Printed by Order of the International Trust for Zoological Nomenclature

and

Sold on behalf of the International Commission on Zoological Nomenclature by the International Trust at its Publications Office 41, Queen's Gate, London, S.W.7

1958

Price Thirteen Shillings and Sixpence

(All rights reserved)

INTERNATIONAL COMMISSION ON ZOOLOGICAL NOMENCLATURE

COMPOSITION AT THE TIME OF THE ADOPTION OF THE **RULING GIVEN IN OPINION 510**

The Officers of the Commission

Honorary Life President: Dr. Karl Jordan (British Museum (Natural History), Zoological Museum, Tring, Herts., England)

President: Professor James Chester Bradley (Cornell University, Ithaca, N.Y., U.S.A.) (12th August 1953)

Vice-President: Senhor Dr. Afranio do Amaral (Sao Paulo, Brazil) (12th August 1953) Secretary: Mr. Francis Hemming (London, England) (27th July 1948)

The Members of the Commission

(Arranged in order of precedence by reference to date of election or of most recent re-election. as prescribed by the International Congress of Zoology)

Professor H. Boschma (Rijksmuseum van Natuurlijke Historie, Leiden, The Netherlands) (1st January 1947) Senor Dr. Angel Cabrera (*La Plata*, Argentina) (27th July 1948)

Mr. Francis Hemming (London, England) (27th July 1948) (Secretary)

Dr. Henning Lemche (Universitetets Zoologiske Museum, Copenhagen, Denmark) (27th July 1948)
Professor Teiso Esaki (Kyushu University, Fukuoka, Japan) (17th April 1950)
Professor Pierre Bonnet (Université de Toulouse, France) (9th June 1950)

Mr. Norman Denbigh RILEY (British Museum (Natural History), London) (9th June 1950) Professor Tadeusz Jaczewski (Institute of Zoology, Polish Academy of Sciences, Warsaw, Poland) (15th June 1950)

Professor Erich Martin Hering (Zoologisches Museum der Humboldt-Universität zu

Berlin, Germany) (5th July 1950) Senhor Dr. Afranio do Amaral (S. Paulo, Brazil) (12th August 1953) (Vice-President)

Senhor Dr. Afranio do Amaral (S. Paulo, Brazil) (12th August 1953) (Vice-Presiaent)
 Professor J. R. Dymond (University of Toronto, Toronto, Canada) (12th August 1953)
 Professor J. Chester Bradley (Cornell University, Ithaca, N.Y., U.S.A.) (12th August 1953) (President)
 Professor Harold E. Vokes (University of Tulane, Department of Geology, New Orleans, Louisiana, U.S.A.) (12th August 1953)
 Professor Béla Hankó (Mezőgazdasági Muzeum, Budapest, Hungary) (12th August 1953)
 Dr. Narman B. Stall (Pochefaller Institute for Medical Research, New York, N.Y.

Dr. Norman R. Stoll (Rockefeller Institute for Medical Research, New York, N.Y.,

U.S.A.) (12th August 1953)
Mr. P. C. Sylvester-Bradley (Sheffield University, Sheffield, England) (12th August 1953)
Dr. L. B. Holthus (Rijksmuseum van Natuurlijke Historie, Leiden, The Netherlands)

Dr. L. B. HOLTHUIS (RIJKSMUSEUM van Ivatuurityke Historie, Leuten, The Ivetneriams) (12th August 1953)

Dr. K. H. L. Key (Commonwealth Scientific and Industrial Research Organisation, Canberra, A.C.T., Australia) (15th October 1954)

Dr. Alden H. MILLER (Museum of Vertebrate Zoology, University of California, U.S.A.)

(29th October 1954)

Doc. Dr. Ferdinand Prantl (Národni Museum V Praze, Prague, Czechoslovakia) (30th October 1954)

Professor Dr. Wilhelm Kühnelt (Zoologisches Institut der Universität, Vienna, Austria) (6th November 1954)

Professor F. S. Bodenheimer (The Hebrew University, Jerusalem, Israel) (11th November 1954)

Professor Ernst Mayr (Museum of Comparative Zoology at Harvard College, Cambridge, Massachusetts, U.S.A.) (4th December 1954)
Professor Enrico Tortonese (Museo di Storia Naturale "G. Doria", Genova, Italy)

(16th December 1954)

OPINION 510

VALIDATION UNDER THE PLENARY POWERS OF THE GENERIC NAME "ASAPHUS" BRONGNIART, 1822 (CLASS TRILOBITA)

RULING:—(1) The following action is hereby taken under the Plenary Powers:—

- (a) The generic name Asaphus Brongniart (A.), 1817, is hereby suppressed for the purposes both of the Law of Priority and of the Law of Homonymy.
- (b) The specific name *cornigerus* Schlotheim (E.Fr.v.), 1820, as published in the combination *Trilobites* cornigerus is hereby suppressed for the purposes of the Law of Priority but not for those of the Law of Homonymy.
- (c) All selections of type species for the nominal genus Asaphus Brongniart, 1822, made prior to the present Ruling are hereby set aside and the nominal species Entomostracites expansus Wahlen-

- berg (G.), 1821, as defined by the lectotype selected by Jaanusson (V.)(1956), is hereby designated to be the type species of the foregoing genus.
- (2) The under-mentioned generic name is hereby placed on the *Official List of Generic Names in Zoology* with the Name Number 1258:—
 - Asaphus Brongniart (A.), 1822, as validated under the Plenary Powers in (1)(a) above (gender: masculine) (type species, by designation under the Plenary Powers in (1)(c) above: Entomostracites expansus Wahlenberg (G.), 1821, as defined by the lectotype specified in (1)(c) above).
- (3) The under-mentioned specific name is hereby placed on the *Official List of Specific Names in Zoology* with the Name Number 1501:
 - expansus Wahlenberg (G.), 1821, as published in the combination *Entomostracites expansus*, as defined by the lectotype specified in (1)(c) above (specific name of type species of *Asaphus* Brongniart (A.), 1822).
- (4) The under-mentioned generic name is hereby placed on the Official Index of Rejected and Invalid Generic Names in Zoology with the Name Number 1147:—
 - Asaphus Brongniart (A.), 1817, as suppressed under the Plenary Powers in (1)(a) above.
- (5) The under-mentioned specific names are hereby placed on the Official Index of Rejected and Invalid

Specific Names in Zoology with the Name Numbers severally specified below:—

- (a) expansus Linnaeus, 1768, as published in the combination Entomolithus paradoxus [var.] α expansus (invalid because published in a work suppressed under the Plenary Powers by the Ruling given in Opinion 296) (Name No. 512);
- (b) cornigerus Schlotheim (E.Fr.v.), 1820, as published in the combination *Trilobites cornigerus*, as suppressed under the Plenary Powers in (1)(b) above (Name No. 513).
- (6) The under-mentioned family-group name is hereby placed on the Official List of Family-Group Names in Zoology with the Name Number 217:—

ASAPHIDAE Burmeister (H.), 1843 (type genus: Asaphus Brongniart, 1822).

I. THE STATEMENT OF THE CASE

On 2nd July 1955 Dr. Valdar Jaanusson (Universitetets Paleontologiska Institution, Uppsala, Sweden) submitted to the Office of the Commission a preliminary application designed to secure the validation under the Plenary Powers of the well-known generic name Asaphus Brongniart, 1822 (Class Trilobita). Following correspondence with the Secretary, this application was revised in certain respects and on 21st February 1956 the

following definitive application was submitted by Dr. Jaanusson for the consideration of the International Commission:—

Proposed use of the Plenary Powers to suppress the generic name "Asaphus" as published by Brongniart in Desmarest, 1817, and to designate a type species in harmony with general usage for the genus "Asaphus" Brongniart, 1822 (Class Trilobita)

By VALDAR JAANUSSON

(Universitet Paleontologiska Institution, Uppsala, Sweden)

Plate 4

The object of the present application is to ask the International Commission on Zoological Nomenclature to use its Plenary Powers to suppress the generic name Asaphus as published by Brongniart in Desmarest, 1817, and to designate as the type species of Asaphus Brongniart, 1822, the species generally accepted as such, thereby avoiding the serious confusion which would inevitably result from the application of the normal provisions of the Règles in this case. It is hoped that it will be possible for the International Commission to give an early decision on the present application, since a decision is urgently required in connection with the preparation of the relevant portion of the forthcoming Treatise on Invertebrate Paleontology. The details relating to this case are set out in the following paragraphs.

- 2. The generic name Asaphus was published by Brongniart in Desmarest, 1817 (: 517). The only nominal species included by him in the genus were A. debuchianus n. sp. and A. haussmannii n. sp. According to the current classification the former species is placed in the asaphid genus Ogygiocaris Angelin, 1854, while the latter species is regarded as the type species of Odontochile Hawle & Corda, 1847, and belongs to a group of trilobites generally considered unrelated to the asaphids (Phacopidacea.)
- 3. The genus Asaphus was redescribed by Brongniart in Brongniart & Desmarest, 1822 (: 17—25). In addition to the two species mentioned in paragraph 2 above, the nominal species Trilobites cornigerus Schlotheim, 1820, Trilobus caudatus Brünnich, 1781, and Entomostracites laticauda Wahlenberg, 1821, were on this occasion included in the genus.
- 4. Subsequent writers generally have considered the generic name Asaphus to have been established by Brongniart in 1822, and, in fact,

I do not know in the literature after Brongniart, 1822, any reference to the genus *Asaphus* as established in Desmarest, 1817.

- 5. Although S. A. Miller, 1889 (: 531) selected A. cornigerus (Schlotheim, 1820) as the type, the type species for the genus Asaphus Brongniart, 1822, generally accepted in the literature is Asaphus expansus (Wahlenberg) (Vogdes, 1890: 84; Reed, 1930: 289; Jaanusson, 1953: 391; Balaschova, 1953: 386).
- 6. Neither of the species originally included by Brongniart in Asaphus in 1817 belong to this genus in its universally accepted sense. The selection of one of them as the type species of Asaphus would, therefore, create serious confusion both in trilobite taxonomy and in Lower Ordovician stratigraphy. As the 1817 publication of this generic name has completely escaped the attention of trilobite workers up till now, the suppression of the generic name Asaphus as published by Brongniart in Desmarest in that year would best serve the interests of stability in nomenclature.
- 7. Of the species included by Brongniart in Brongniart & Desmarest, 1822, in the genus Asaphus only Trilobites cornigerus Schlotheim, 1820, belongs to the genus in its accustomed sense, the other species having been transferred to other genera long ago, and, with the exception of *Asaphus debuchianus*, even to other families. As regards Asaphus cornigerus (Schlotheim), Brongniart (1822:18) stated: "Cette espèce semble s'éloigner beaucoup des suivantes et former une division particulière. Elle constituerait à elle seule le genre Asaphe, si des observations ultérieures prouvaient que les autres espèces doivent être réunies soit aux Calymènes, soit aux Ogygies". This can be interpreted as a kind of designation of the type species. The specific name *Trilobites cornigerus* was published by Schlotheim in 1820 (: 38) but already in 1810 (: 1, Pl. 1, figs. 1-3) the species had been described and figured by him without a specific name (*Trilobites* novus). Fr. Schmidt (1898: 2—3; 1901: 2—3) had an opportunity of examining the original specimen figured by Schlotheim in 1810 as figure 1 on Plate 1 in connection with his monographic treatment of the genus Asaphus. At first (1898: 2-3) he was inclined to regard this specimen as conspecific with Asaphus kowalewskii Lawrow, 1856, but after a renewed examination of this specimen he considered it to be too fragmentary for specific determination (1901 : 2—3). He stated (loc. cit.) that "der A. cornigerus Schloth. ist von vorn herein auf zu mangelhaftes Material fundiert und so mangelhaft beschrieben worden dass ich seine Rehabilitierung für nicht zuverlässig halten kann". The other specimens figured by Schlotheim, 1810 on Pl. 1, namely those shown as figs. 2 and 3, were apparently not traceable even at the time when Fr. Schmidt had access to his original material. According to Fr. Schmidt (1898: 3) these figures obviously represent specimens not conspecific with that shown on Schlotheim's Pl. 1,

- fig. 1 ["stellen augenscheinlich andere Asaphiden vor"]. On the basis of Schlotheim's figures alone these specimens are, however, specifically indeterminable. According to information received from Professor W. Gross, Humbolt-Universität, Berlin (in litt. March 22nd, 1952) all the original material of Schlotheim was lost during the recent war. Trilobites cornigerus Schlotheim, 1820, was considered as a nomen dubium by Jaanusson (1953: 393) and as such the nominal species so named is wholly unsuitable for selection as a type species. From the point of view of promoting stability of nomenclature within the genus Asaphus in its accustomed use it would be best to suppress the specific name cornigerus Schlotheim, 1820, as published in the combination Trilobites cornigerus.
- 8. Entomostracites expansus Wahlenberg was considered by Brongniart (1822:18, footnote 1, cf. also:19) as a junior subjective synonym of Asaphus cornigerus (Schlotheim, 1820). He evidently attributed the specific name expansus to Wahlenberg, 1821, and used for this species the older name of Schlotheim (1820). Wahlenberg, 1821, on the other hand, regarded Linnaeus (1768) as the founder of the specific name expansus and listed (: 25) Trilobites novus of Schlotheim, 1810 [= cornigerus Schlotheim, 1820] as a synonym of Entomostracites expansus (Linnaeus, 1768). Wahlenberg's main paper on the trilobites was already printed in 1818, as is evident *inter alia* from the introduction to his "Additamenta" (Wahlenberg 1821: 293) and reprints of this paper were evidently also distributed separately in this year. Under the Règles preprints issued in this way have no status for nomenclatorial purposes (1950, Bull. zool. Nomencl. 4: 146, Point 19(b)). Volume 8 of the Nova acta Regiae Soc. Sci. Upsaliensis which includes both the main trilobite paper of Wahlenberg and also his "Additamenta" was published and distributed first in 1821. According to the Règles both papers date from 1821. The main trilobite paper of Wahlenberg is usually referred to in the literature as "Wahlenberg 1818 (1821)" or "(1818) 1821", and his "Additamenta" as "Wahlenberg 1821". Owing to the fact that the main trilobite paper of Wahlenberg, 1821, was printed prior to the paper of Schlotheim (1820) no mention is made in it of the specific name Trilobites cornigerus Schlotheim, 1820.
- 9. The specific name expansus was used for this trilobite first by Linnaeus (1768: 160) as Entomolithus paradoxus α expansus. In the International Commission's Opinion 296 (1954), however, the Regnum Lapideum of the Twelfth Edition of the Systema Naturae by Linnaeus (1768) has been suppressed for nomenclatorial purposes. The specific name expansus is, therefore, available first from the next description which was given to it, namely that by Wahlenberg, 1821, under the name Entomostracites expansus. Wahlenberg did not illustrate this species but his collection preserved at the Museum of the Palaeontologi-

cal Institute, Uppsala University, includes many specimens of the species generally recognised as Asaphus expansus, and several of these specimens are also accompanied by labels bearing the name "Entomostracites expansus" in Wahlenberg's own handwriting. Naturally, the concept of the species was broader in Wahlenberg's time than it is today, and several other Asaphus species were included by him in Entomostracites expansus. The specimens of the species later generally determined as Asaphus expansus are, however, more numerous in Wahlenberg's collection than are the specimens of other species also included by him in his Entomostracites expansus. In order to preserve the specific name Asaphus expansus for use in harmony with accustomed practice, one of the former specimens should be selected as the lectotype of the nominal species Entomostracites expansus Wahlenberg. 1821, The specimen bearing the Number Ög. 23 is accordingly here selected as the lectotype. On the label accompanying this specimen is written in an unknown hand "Canalen vid Heda, Ljung eller Wreta Kloster", and in Wahlenberg's handwriting "Entom. expansus". The specimen is figured on the plate annexed to the present application. The following labels are attached to the specimen: Heda [= name of the locality] and "Pal. Inst. Uppsala. Wahlenbergs samling. Nr. Ög. 23".

- 10. It must be noted at this point that in 1953 (: 391) Balaschova selected a lectotype for Asaphus expansus, which, following Fr. Schmidt (1898: 19) she attributed to Dalman. The specimen chosen by Balaschova was from Isvos, Volchov, Ingermanland (Leningrad district) which had been figured by Fr. Schmidt in 1901 (pl. 1, fig. 2). Further, as a precautionary measure Balaschova at the same time designated a neotype, also from the Leningrad district. It is necessary to take note here that, although Balaschova attributed the name expansus to Dalman, Dalman himself correctly attributed this name to Wahlenberg. Under the rules laid down by the Copenhagen Congress of 1953 no neotype can be validly selected for any nominal species for which any part of the original type material is extant. As has been shown in paragraph 9 above, numerous specimens of Wahlenberg's are still preserved and accordingly no neotype for expansus Wahlenberg can validly be selected by any author. Similarly, no lectotype for a nominal species can be validly selected except from among the surviving syntypes of the species concerned, and, as the lectotype selected by Balaschova was not one of Wahlenberg's specimens, her lectotype selection is invalid.
- 11. As pointed out in paragraph 5 above, the species accepted as the type species of Asaphus Brongniart, 1822, by all modern authors is Entomostracites expansus Wahlenberg and any disturbance of this practice would lead to serious and quite unjustified confusion. It is accordingly proposed that the Commission should under its Plenary Powers set aside all type selections hitherto made for the genus Asaphus Brongniart, 1822, and that, having done so, it should designate the foregoing species to be the type species of this genus.

- 12. The generic name Asaphus Brongniart, 1822, was taken as the base for a family name Asaphidae by Burmeister in 1843 (: 118). This name should now be placed on the Official List of Family-Group Names in Zoology.
- 13. In the light of the considerations advanced in the present application, the International Commission on Zoological Nomenclature is asked:—
 - (1) to use its Plenary Powers:
 - (a) to suppress the under-mentioned generic name for the purposes both of the Law of Priority and of the Law of Homonymy: Asaphus Brongniart, 1817;
 - (b) to suppress the under-mentioned specific name for the purposes of the Law of Priority but not for those of the Law of Homonymy: cornigerus Schlotheim, 1820, as published in the combination Trilobites cornigerus;
 - (c) to set aside all type selections for the genus Asaphus Brongniart, 1822, made prior to the Ruling now asked for and, having done so, to designate Entomostracites expansus Wahlenberg, 1821, as defined by the lectotype selected in paragraph 9 of the present application, to be the type species of the foregoing genus;
 - (2) to place the under-mentioned generic name on the Official List of Generic Names in Zoology: Asaphus Brongniart, 1822, as validated under the Plenary Powers under (1)(a) above (gender: masculine) (type species, by designation under the Plenary Powers under (1)(c) above: Entomostracites expansus Wahlenberg, 1821, as defined in (1)(c) above);
 - (3) to place the under-mentioned specific name on the Official List of Specific Names in Zoology: expansus Wahlenberg, 1821, as published in the combination Entomostracites expansus and as defined by the lectotype specified in (1)(c) above (specific name of type species of Asaphus Brongniart, 1822);
 - (4) to place the under-mentioned generic name on the Official Index of Rejected and Invalid Generic Names in Zoology: Asaphus Brongniart, 1817, as suppressed under the Plenary Powers under (1)(a) above;
 - (5) to place the under-mentioned specific names on the Official Index of Rejected and Invalid Specific Names in Zoology:—
 - (a) expansus Linnaeus, 1768, as published in the combination Entomolithus paradoxus [var.] α expansus (published in a work rejected for nomenclatorial purposes);

- (b) cornigerus Schlotheim, 1820, as published in the combination *Trilobites cornigerus*, as suppressed under the Plenary Powers under (1)(b) above;
- (6) to place the under-mentioned family group-name on the Official List of Family-Group Names in Zoology: ASAPHIDAE Burmeister, 1843 (type genus: Asaphus Brongniart, 1822).

References

- Balaschova (E.A.), [Title in Russian] transcription of title: K istorii razvitija roda "Asaphus" v ordovike Pribaltiki; German translation of title: Zur Entwicklungsgeschichte der Gattung "Asaphus" im Ordovizium von Vorbalticum, Moscow
- Brongniart (A.) & Desmarest (A.G.), 1822. Histoire naturelle des Crustacés fossiles, sous les rapports zoologiques, et géologiques, Paris
- Burmeister (H.), 1843, Die Organisation der Trilobiten, Berlin (G. Reimer)
- Dalman (J.W.), 1827. Om Palaeaderna eller de så kallade trilobiterna. Kongl. Vetensk. Akad. Handlingar for år 1826. Stockholm
- Desmarest (A.G.), 1817. Nouveau Dictionnaire d'Histoire naturelle, 2nd edition, Vol. 8, Paris
- Jaanusson (V.), 1953. Untersuchungen über baltoskandische Asaphiden I. Revision der mittelordovizischen Asaphiden des Siljan-Gebietes in Dalarna. Arkiv för Mineralogi och Geologi, Bd. 1, Nr. 14, Stockholm (printed in Uppsala)
- Linnaeus (C.), 1768. Systema Naturae, Vol. 3 (Regnum Lapideum), Twelfth edition
- Miller (S.A.), 1889. North American Geology and Paleontology for the use of Amateurs, Students and Scientists, Cincinnati
- Reed (F.R.C.), 1930. A review of the Asaphidae. Ann. Mag. nat. Hist., Ser. 10, Vol. 5, London
- Schlotheim (E.Fr.v.,) 1810. Beschreibung einer seltenen Trilobiten-Art. Leonhard's *Taschenbuch f.d. gesamte Mineralogie*, Bd. 4, Frankfurt a.M.
- —, 1820. Die Petrefactenkunde auf ihrem jetzigen Standpunkte durch die Beschreibung seiner Sammlung versteinerter und fossiler Überreste des Thier- und Pflanzenreichs der Vorwelt erläutert, Gotha
- Schmidt (Fr.), 1898. Revision der ostbaltischen silurischen Trilobiten, Abt. V, Lief. 1. *Mémoires de l'Acad. Imp. des Sciences de St.-Pétersbourg*, VIII Sér., Vol. VI, No. 11, St. Pétersbourg

- ——, 1901. Revision der ostbaltischen silurischen Trilobiten, Abt. V, Lief. II. *Mémoires de l'Acad. imp. des Sciences de St.-Pétersbourg*, VIII Sér., Vol. XII, No. 8, St. Pétersbourg
- Wahlenberg (G.), (1818), 1821. Petrificata telluris Svecanae. Nova acta Regiae Soc. Sci. Upsaliensis, Vol. 8, Upsaliae
- ——, 1821. Additamenta quaedam ad petrificata telluris Svecanae. Nova acta Regiae Soc. Sci. Upsaliensis, Vol. 8, pp. 293—296, Upsaliae
- Vogdes (A.W.), 1890. A bibliography of Paleozoic Crustacea from 1698 to 1889. Including a list of North American species and a systematic arrangement of genera. *Bull. U.S. Geological Survey*, No. 63, Washington

Explanation to Plate 4

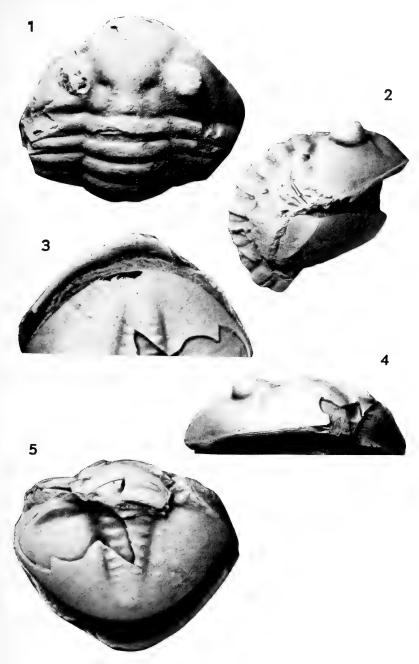
Illustrations of the Lectotype of *Entomostracites expansus* Wahlenberg, 1821 (*Asaphus expansus* (Wahlenberg, 1821)), here selected. Palaeontological Institute, Uppsala University, No. Ög. 23).

All the figures are twice the natural size. The specimen is whitened with ammonium chloride. The photographs are by Mr. N. Hjorth, Palaeontological Institute, Uppsala University. They have not been retouched.

- Fig. 1. Dorsal view of the cephalon and the foremost thoracic segments
 - Fig. 2. Lateral view of the dorsal exoskeleton
 - Fig. 3. Ventral view of the cephalon to show the cephalic doublure
 - Fig. 4. Anterior view of the cephalon
 - Fig. 5. Dorsal view of the pygidium

II. THE SUBSEQUENT HISTORY OF THE CASE

2. Registration of the present application: Upon the receipt of Dr. Jaanusson's application the question of the validation of



Lectotype of Entomostracites expansus Wahlenberg, 1821 (Asaphus expansus (Wahlenberg, 1821)).

For explanation of figs. see opposite page.



the generic name Asaphus Brongniart, 1822 (Class Trilobita) was allotted the Registered Number Z.N.(S.) 636.

- 3. Publication of the present application: The present application was sent to the printer on 29th February 1956 and was published on 26th June of the same year in Part 3 of Volume 12 of the Bulletin of Zoological Nomenclature (Jaanusson, 1956, Bull. zool. Nomencl. 12:90—96).
- **4.** Issue of Public Notices: Under the revised procedure prescribed by the Thirteenth International Congress of Zoology, Paris, 1948 (1950, Bull. zool. Nomencl. **4**: 51—56), Public Notice of the possible use by the International Commission on Zoological Nomenclature of its Plenary Powers in the present case was given on 26th June 1956 (a) in Part 3 of Volume 12 of the Bulletin of Zoological Nomenclature (the Part in which Dr. Jaanusson's application was published) and (b) to the other prescribed serial publications. In addition, such Notice was given to four general zoological serial publications and to three palaeontological serials in Europe and America.
- 5. Support Received: The action recommended in the present case was supported by four specialists. These specialists were resident in the following countries:—Denmark (one); Germany (two); United Kingdom (one). The communications so received are reproduced in the immediately following paragraphs.
- 6. Support received from Rudolf and Emma Richter (Forschungs-Institutes und Natur-Museums Senckenberg, Frankfurt a.M., Germany: On 30th July 1956 Dr. Rudolf Richter and Frau Emma Richter (Forschungs-Institutes und Natur-Museums Senckenberg, Frankfurt a.M., Germany) addressed the following letter to the Office of the Commission in support of a number of cases concerning names in the Class Trilobita which had been published

in the Bulletin of Zoological Nomenclature (Richter (R.) & Richter (E.), 1956, Bull. zool. Nomencl 212: 255):—

Für den Fall, dass es den betressenden Anträgen helsen kann, möchten wir Ihnen mutteilen, dass wir sie im Interesse der Stabilität der Nomenklatur nachdrücklich unterstützen.

Es handelt sich um folgende Anträge: Paradoxides, Asaphus, Trinucleus and Cryptonymus.

7. Support received from Christian Poulsen (Universitetets Mineralogisk-Geologiske Institut, Copenhagen): On 5th October 1956 Dr. Christian Poulsen (Universitetets Mineralogisk-Geologiske Institut, Copenhagen) addressed the following letter to the Office of the Commission in which he supported the action proposed in the present case and in other cases concerning names in the Class Trilobita which had been published in the Bulletin of Zoological Nomenclature (Poulsen, 1956, Bull. zool. Nomencl. 12:314):—

I heartily support the applications made by Dr. V. Jaanusson regarding the name *Asaphus* Brongniart, 1822 (Class Trilobita), and the name *Cryptonymus* Eichwald, 1825 (Class Trilobita), and I highly recommend the procedure proposed in connection with these applications.

8. Support received from C. J. Stubblefield (Geological Survey and Museum, London): On 5th October 1956 Dr. C. J. Stubblefield (Geological Survey and Museum, London) addressed the following letter to the Office of the Commission in which he supported the present and another recently-published application by Dr. Jaanusson (Stubblefield, 1956, Bull. zool. Nomencl. 12:314):—

I support Dr. Jaanusson's proposal that the well-known name Asaphus Brongniart, 1822, be validated and that Cryptonymus Eichwald, 1825, be suppressed for purposes of the Law of Priority but not for those of the Law of Homonymy. I consider both proposals would legalise current usage and would be in the interests of nomenclatorial stability.

9. No Objection Received: No objection to the action proposed in the present case was received from any source.

III. THE DECISION TAKEN BY THE INTERNATIONAL COMMISSION ON ZOOLOGICAL NOMENCLATURE

- 10. Issue of Voting Paper V.P.(57)9: On 22nd January 1957 a Voting Paper (V.P.(57)9) was issued in which the Members of the Commission were invited to vote either for, or against, "the proposal relating to the generic name Asaphus Brongniart, 1822, as set out in Points (1) to (6) in paragraph 13 on page 94 of Volume 12 of the Bulletin of Zoological Nomenclature" [i.e. in the paragraph numbered as above in the paper reproduced in the first paragraph of the present Opinion].
- 11. The Prescribed Voting Period: As the foregoing Voting Paper was issued under the Three-Month Rule, the Prescribed Voting Period closed on 22nd April 1957.
- 12. Particulars of the Voting on Voting Paper V.P.(57)9: At the close of the Prescribed Voting Period, the state of the voting on Voting Paper V.P.(57)9 was as follows:—
 - (a) Affirmative Votes had been given by the following twentythree (23) Commissioners (arranged in the order in which Votes were received):

Hering; Boschma; Holthuis; Prantl; Lemche; Mayr; Dymond; Bodenheimer; Vokes; Riley; Esaki; Key; Hemming; Bonnet; Mertens; Jaczewski; Stoll; Cabrera; do Amaral; Kühnelt; Tortonese; Sylvester-Bradley; Miller;

(b) Negative Votes:

None;

(c) Prevented from Voting by the interruption of postal communications consequent upon political disturbances, one (1):

Hankó;

(d) On Leave of Absence, one (1):

Bradley (J.C.);

(e) Voting Papers not returned:

None

- 13. Declaration of Result of Vote: On 24th April 1957, Mr. Hemming, Secretary to the International Commission, acting as Returning Officer for the Vote taken on Voting Paper V.P.(57)9, signed a Certificate that the Votes cast were as set out in paragraph 12 above and declaring that the proposal submitted in the foregoing Voting Paper had been duly adopted and that the decision so taken was the decision of the International Commission in the matter aforesaid.
- 14. Preparation of the Ruling given in the present "Opinion": On 3rd January 1958 Mr. Hemming prepared the Ruling given in the present *Opinion* and at the same time signed a Certificate that the terms of that Ruling were in complete accord with those of the proposal approved by the International Commission in its Vote on Voting Paper V.P.(57)9.
- 15. Original References for Generic and Specific Names: The following are the original references for the generic and specific

- names placed on Official Lists and Official Indexes by the Ruling given in the present Opinion:—
- Asaphus Brongniart (A.), 1817, in Desmarest (A.G.), Nouv. Dict. Hist. nat. (ed. 2) 8:517
- Asaphus Brongniart (A.), 1822, in Brongniart (A.) & Desmarest (A.G.), Hist. nat. Crust. foss.: 17—25
- cornigerus, Trilobites, Schlotheim (E.Fr.v.), 1820, Die Petrefactenk. : 38
- expansus, Entomolithus paradoxus [var]. α, Linnaeus, 1768, Syst. Nat. (ed. 12) 3:160
- expansus, Entomostracites, Wahlenberg (G.), 1821, Nova Acta Soc. Sci. upsal. 8:25
- 16. Reference for the selection of a lectotype for a nominal species: The following is the reference for the selection of a lectotype for a nominal species specified in the Ruling given in the present *Opinion*:—

For Entomostracites expansus Wahlenberg (G.), 1821

Jaanusson (V.), 1956, *Bull. zool. Nomencl.* **12**: 93

- 17. Original Reference for a Family-Group Name: The following is the original reference for the family-group name placed on the Official List of Family-Group Names in Zoology by the Ruling given in the present Opinion:—
- ASAPHIDAE Burmeister (H.), 1843, Die Organisation der Trilobiten: 118
- 18. Compliance with Prescribed Procedures: The prescribed procedures were duly complied with by the International Commission on Zoological Nomenclature in dealing with the present case, and the present *Opinion* is accordingly hereby rendered in the name of the said International Commission by the undersigned Francis Hemming, Secretary to the International Com-

mission on Zoological Nomenclature, in virtue of all and every the powers conferred upon him in that behalf.

19. "Opinion" Number: The present *Opinion* shall be known as *Opinion* Five Hundred and Ten (510) of the International Commission on Zoological Nomenclature.

DONE in London, this Third day of January, Nineteen Hundred and Fifty-Eight.

Secretary to the International Commission on Zoological Nomenclature

FRANCIS HEMMING

OPINIONS AND DECLARATIONS RENDERED BY THE INTERNATIONAL COMMISSION ON ZOOLOGICAL NOMENCLATURE

Edited by

FRANCIS HEMMING, C.M.G., C.B.E. Secretary to the Commission

VOLUME 18. Part 15. Pp. 257-272

OPINION 511

Validation under the Plenary Powers of the generic name *Maja* Lamarck, 1801 (Class Crustacea, Order Decapoda) and designation under the same Powers of a type species for that genus in harmony with established



LONDON:

Printed by Order of the International Trust for Zoological Nomenclature

and

Sold on behalf of the International Commission on Zoological Nomenclature by the International Trust at its Publications Office 41, Queen's Gate, London, S.W.7

1958

Price Ten Shillings and Sixpence

(All rights reserved)

INTERNATIONAL COMMISSION ON ZOOLOGICAL NOMENCLATURE

COMPOSITION AT THE TIME OF THE ADOPTION OF THE RULING GIVEN IN OPINION 511

The Officers of the Commission

Honorary Life President: Dr. Karl JORDAN (British Museum (Natural History Zoological Museum, Tring, Herts, England).

President: Professor James Chester Bradley (Cornell University, Ithaca, N.Y., U.S.A. (12th August 1953)

Vice-President: Senhor Dr. Afranio do AMARAL (Sao Paulo, Brazil) (12th August 1953) Secretary: Mr. Francis HEMMING (London, England) (27th July 1948.)

The Members of the Commission

Arranged in order of precedence by reference to date of election or of most recent re-election as prescribed by the International Congress of Zoology)

Professor H. Boschma (Rijksmuseum van Natuurlijke Historie, Leiden, The Netherlands) (1st January 1947) Senor Dr. Angel Cabrera (La Plata, Argentina) (27th July 1948)

Mr. Francis Hemming (London, England) (27th July 1948) (Secretary)
Dr. Henning Lemche (Universitetets Zoologiske Museum, Copenhagen, Denmark) (27th July 1948)
Professo Teiso Esaki (Kyushu University, Fukuoka, Japan) (17th April 1950)
Professor Pierre Bonnet (Université de Toulouse, France) (9th June 1950)

Mr. Norman Denbigh RILEY (British Museum (Natural History), London) (9th June 1950) Professor Tadeusz Jaczewski (Institute of Zoology, Polish Academy of Sciences, Warsaw, Poland) (15th June 1950) Professor Robert Mertens (Natur-Museum u. Forschungs-Institut Senckenberg, Frankfurt

a.M., Germany) (5th July 1950)

Professor Erich Martin Hering (Zoologisches Museum der Humboldt-Universität zu Berlin, Germany) (5th July 1950)

Senhor Dr. Afranio do Amaral (S. Paulo, Brazil) (12th August 1953) (Vice-President) Professor J. R. Dymond (University of Toronto, Toronto, Canada) (12th August 1953) Professor J. Chester Bradley (Cornell University, Ithaca, N.Y., U.S.A.) (12th August

1953) (President)
Professor Harold E. Vokes, University of Tulane, Department of Geology, New Orleans,

Louisiana, U.S.A. (12th August 1953).

Professor Béla Hankó (Mezőgazdasági Muzeum, Budapest, Hungary) (12th August 1953)

Dr. Norman R. Stoll (Rockefeller Institute for Medical Research, New York, N.Y.,

U.S.A.) (12th August 1953)
Mr. P. C. Sylvester-Bradley (Sheffield University, Sheffield, England) (12th August 1953)
Dr. L. B. Holthus (Rijksmuseum van Natuurlijke Historie, Leiden, The Netherlands) (12th August 1953)

Dr. K. H. L. Key (Commonwealth Scientific and Industrial Research Organisation, Canberra, A.C.T., Australia) (15th October 1954)

Dr. Alden H. MILLER (Museum of Vertebrate Zoology, University of California, U.S.A.) (29th October 1954)

Dr. Ferrinand Phanty (Národní Museum V. Praga Prague, Czechoslovakia) (30th

Doc. Dr. Ferninand Prantl (Národni Museum V Praze, Prague, Czechoslovakia) (30th

October 1954) Professor Dr. Wilhelm Kühnelt (Zoologisches Institut der Universität, Vienna, Austria)

(6th November 1954) Professor F. S. Bodenheimer (The Hebrew University, Jerusalem, Israel) (11th November

1954)

Professor Ernst Mayr (Museum of Comparative Zoology at Harvard College, Cambridge, Massachusetts, U.S.A.) (4th December 1954)
Professor Enrico Tortonese (Museo di Storia Naturale "G. Doria", Genova, Italy) (16th December 1954)

OPINION 511

VALIDATION UNDER THE PLENARY POWERS OF THE GENERIC NAME "MAJA" LAMARCK, 1801 (CLASS CRUSTACEA, ORDER DECAPODA) AND DESIGNATION UNDER THE SAME POWERS OF A TYPE SPECIES FOR THAT GENUS IN HARMONY WITH ESTABLISHED PRACTICE

RULING:—(1) The following action is hereby taken under the Plenary Powers:—

- (a) The generic name *Maia* Brisson, 1760 (Class Aves) is hereby suppressed for the purposes both of the Law of Priority and of the Law of Homonymy.
- (b) All designations or selections of type species for the nominal genus *Maja* Lamarck, 1801 (Class Crustacea, Order Decapoda) made prior to the present Ruling are hereby set aside and the nominal species *Cancer squinado* Herbst, 1788, is hereby designated to be the type species of the foregoing genus.
- (2) The under-mentioned generic names are hereby placed on the *Official List of Generic Names in Zoology* with the Name Numbers severally specified below:—
 - (a) Lithodes Latreille, 1806 (gender: masculine) (type species, by monotypy: Cancer maja Linnaeus, 1758) (Name No. 1259);
 - (b) Maja Lamarck, 1801 (gender: feminine) (type species, by designation under the Plenary Powers in (1)(b) above: Cancer squinado Herbst, 1788) (Name No. 1260).

- (3) The under-mentioned specific names are hereby placed on the *Official List of Specific Names in Zoology* with the Name Numbers severally specified below:—
 - (a) maja Linnaeus, 1758, as published in the combination Cancer maja (specific name of type species of Lithodes Latreille, 1806) (Name No. 1502);
 - (b) squinado Herbst, 1788, as published in the combination Cancer squinado (specific name of type species of Maja Lamarck, 1801) (Name No. 1503).
- (4) The under-mentioned generic names are hereby placed on the Official Index of Rejected and Invalid Generic Names in Zoology with the Name Numbers severally specified below:—
 - (a) Maia Brisson, 1760, as suppressed under the Plenary Powers in (1)(a) above (Name No. 1148);
 - (b) Maia Lamarck, 1801 (an Invalid Original Spelling for Maja Lamarck, 1801) (Name No. 1149);
 - (c) Mamaia Stebbing, 1904 (a junior objective synonym of Maja Lamarck, 1801) (Name No. 1150).
- (5) The under-mentioned specific names are hereby placed on the *Official Index of Rejected and Invalid Specific Names in Zoology* with the Name Numbers severally specified below:—
 - (a) arctica Latreille, 1806 as published in the combination Lithodes arctica (a junior objective synonym of maja Linnaeus, 1758, as published in the combination Cancer maja) (Name No. 514);

- (b) eriocheles Lamarck, 1801, as published in the combination Maja eriocheles (a junior objective synonym of maja Linnaeus, 1758, as published in the combination Cancer maja) (Name No. 515).
- (6) The under-mentioned family-group names are hereby placed on the *Official List of Family-Group Names in Zoology* with the Name Numbers severally specified below:—
 - (a) LITHODIDAE (correction of LITHODIADAE) Samouelle, 1819 (type genus: *Lithodes* Latreille, 1806) (Name No. 218);
 - (b) MAJIDAE (correction of MAÏADAE) Samouelle, 1819 (type genus: *Maja* Lamarck, 1801) (Name No. 219).
- (7) The under-mentioned family-group names are hereby placed on the *Official Index of Rejected and Invalid Family-Group Names in Zoology* with the Name Numbers severally specified below:—
 - (a) LITHODIADAE Samouelle, 1819 (type genus: Lithodes Latreille, 1806) (an Invalid Original Spelling for LITHODIDAE) (Name No. 258);
 - (b) MAÏADAE Samouelle, 1819 (type genus: *Maja* Lamarck, 1801) (an Invalid Original Spelling for MAJIDAE) (Name No. 259).

I. THE STATEMENT OF THE CASE

On 17th February 1956 Dr. L. B. Holthuis (Rijksmuseum van Natuurlijke Historie, Leiden, The Netherlands) submitted the following application in which he asked the International Commission to take certain action under the Plenary Powers in order

to preserve the generic name *Maja* Lamarck, 1801 (Class Crustacea, Order Decapoda) for use in its accustomed sense:—

Proposed use of the Plenary Powers to validate the generic name "Maja" Lamarck, 1801 (Class Crustacea, Order Decapoda), and to designate a type species for this genus in harmony with current usage

By L. B. HOLTHUIS

(Rijksmuseum van Natuurlijke Historie, Leiden, The Netherlands)

The present application concerns a well known and widely used name for a genus of crabs, which under the normal provisions of the International Rules of Zoological Nomenclature would have to be rejected, since it is invalid for two reasons. The use by the International Commission on Zoological Nomenclature of its Plenary Powers is requested in this case in order to make this name an available name and to prevent in this way a quite unnecessary piece of confusion.

2. When erecting the genus Maja, Lamarck (1801, Syst. Anim. sans Vertèbr.: 154) divided it in two sections. The first of these sections was identified by him with the genus Inachus Fabricius, 1798, the second with Parthenope Fabricius, 1798. In the second section Lamarck placed one species: Maja longimana (= Cancer longimanus Linnaeus, 1758, the type species of the genus *Parthenope Weber*, 1795). The first section of Lamarck's genus *Maja* also contained a single species, which he named Maja eriocheles (: 154). This name according to the references given by Lamarck was evidently intended as a substitute name for Cancer maja Linnaeus (1758, Syst. Nat. (ed. 10) 1:629), though the latter species was not mentioned by name. Lamarck gave the following references "Olivier, no. 105. Seba Mus. 3, t. 22, f. 1. Herbst. Cancr. p. 219, t. 15, f. 87". Both Olivier (1791, Ency. méth. Hist. nat. Ins. 6: 175) under no. 105, and Herbst (1788, Versuch Naturgesch. Krabben Krebse 1(7): 219, pl. 15, fig. 87) dealt with Lithodes maja (L.), which was called Cancer maja by them. Seba (1761, Locupl. Rerum Nat. Thesaur. 3: 56, pl. 22, fig. 1) described and figured the same species under the (non-binominal) name Cancer spinosus, maximus, orientalis. During the Thirteenth International Congress of Zoology at Paris the decision was taken that where "a genus was established with no designated or indicated type species and one of the included nominal species had at that time either as its valid name or as a synonym a specific trivial name consisting of the same word as the generic name . . . it is immaterial for the purposes of Rule (d) in Article 30 whether the tautonymous specific . . . name was or was not cited in the original publication of the generic name" (1950, Bull. zool. Nomencl. 4:154). In accordance with this decision Maja eriocheles Lamarck, 1801, is at present the type species by absolute tautonymy of the genus Maja Lamarck, 1801. The nominal species Maja eriocheles Lamarck, 1801, and Cancer maja Linnaeus, 1758, are objectively identical with one another and the name eriocheles Lamarck is invalid as a junior objective synonym of maja Linnaeus. The nominal species Cancer maja Linnaeus was renamed Lithodes arctica by Latreille in 1806 (Gen. Crust. Ins. 1:40), when that author established the genus Lithodes Latreille, 1806 (:39). No other nominal species was placed in this genus by Latreille and accordingly the nominal species Lithodes arctica Latreille would have been its type species by monotypy, if it had not been for the fact that this nominal species is (as explained above) objectively identical with the older nominal species Cancer maja Linnaeus, 1758. In these circumstances the provisions of Declaration 21¹ apply in this case and the type species of this genus by monotypy is therefore Cancer maja Linnaeus and not the later-established nominal species Lithodes arctica Latreille. It will be seen therefore that the nominal genera Maja Lamarck, 1801, and Lithodes Latreille, 1806, are objectively identical with one another and that the name Lithodes Latreille is invalid as a junior objective synonym of Maja Lamarck.

- 3. The species Cancer squinado Herbst (1788, Versuch Naturgesch. Krabben Krebse 1(7): 214) is generally indicated as the type species of the genus Maja Lamarck, though neither this species nor any of the species considered to be congeneric with it, was actually included by Lamarck, 1801, in his genus Maja. It is clear therefore that, unless the International Commission takes action under its Plenary Powers, the name Maja cannot be used in the sense in which it is at present generally employed.
- 4. The second reason why Maja Lamarck, 1801, is an unavailable name is that it is a junior homonym of Maia Brisson (1760, Ornithologie 3:212). The latter name, given to a genus of birds, belongs to the much discussed group of generic names introduced by Brisson in his 1760 Ornithologia sive Synopsis methodica sistens Avium Divisionem in Ordines, a book which has been validated under the Plenary Powers of the International Commission on Zoological Nomenclature at the Thirteenth International Congress of Zoology held in Paris in 1948 (cf. Direction 16 published in 1955, Ops. Decls. int. Comm. Zool. Nomencl. 1(c): 81—88).
- 5. The generic name *Maja* Lamarck, 1801, has been generally adopted in carcinological literature for about 150 years for the genus containing *Cancer squinado* Herbst, 1788. This genus occurs in European seas as well as in those of the Indo-West Pacific region. As is shown by the large number of vernacular names (e.g., Spinous Spider-crab, Araignée de mer, Meerspinne, Cabras, Grancevola, etc.)

^{1 1956,} Ops. Decls. int. Comm. zool. Nomencl. 12: i-viii

the species of this genus are well known, this being mainly due to the fact that they grow to a considerable size and are edible. The importance of the genus furthermore is shown by the fact that it is the type genus of the very large family MAJIDAE.

- 6. Only two authors have attempted to replace the generic name Maja Lamarck, 1801. The first of these was Stebbing (1904, Spolia zeylan. 2(5): 2) who proposed the new name Mamaia as a substitute name, Stebbing's reasons were given by him in 1908 (Mar. Invest. S. Afr. 4: 22, 23): "The genus Maja, with the alternative spelling Maia, was established by Lamarck in 1801 . . . nominally to include the two genera which Fabricius had called Inachus and Parthenope . . . As both *Inachus* and *Parthenope* are still valid, *Maia* on its author's own showing has no standing place, and by no stretching of accepted rules can it be applied to a genus which is distinct from both of them". Rathbun (1897, Proc. biol. Soc. Wash. 11: 160) had already pointed out that Maia Brisson, 1760, was older than Maja Lamarck, 1801, but she took no action at that time. In 1904 (Proc. biol. Soc. Wash. 17: 171) the same author advanced reasons identical with those of Stebbing ("If a later name be so defined as to be equal in extent to two or more previously published genera, it must be cancelled in toto") and rejected Lamarck's name, accepting Stebbing's Mamaia as a substitute. One year later, however, Rathbun (1905, Proc. biol. Soc. Wash. 18:73) pointed out that the name Paramaija De Haan (1837, Fauna japon., Crust. (3): pl. 24) was a senoir subjective synonym of Mamaia Stebbing and consequently should be adopted. Stebbing (1905, Proc. biol. Soc. Wash. 18: 157—160) tried to show that since the name Paramaija was published on a plate only, it had no standing and that consequently the name Mamaia was the only available name for the genus in question. Notwithstanding this extensive discussion showing that the name Maja Lamarck was invalid, most carcinologists continued to use that name, only very few following either Rathbun or Stebbing.
- 7. Opinion 10 (1910, Smithson. Publ. 1938: 15, 16; reissue in 1945; Ops. Decls. int. Comm. zool. Nomencl. 1(19): 171—178) showed that the main presumption on which Stebbing and Rathbun had based their rejection of the name Maja Lamarck was false. This led Rathbun (1925, Bull. U.S. nat. Mus. 129: 10) to restore Lamarck's name, but Stebbing continued to use the name Mamaia. As far as I know, Barnard in his 1950 monograph of the South African Decapoda (Ann. S. Afr. Mus. 38: 58, 59) is the only author who follows Stebbing, while in the papers of practically all other carcinologists the name Maja Lamarck is employed, e.g., in Bouvier's (1940, Faune de France 37: 319) treatment of the Decapoda Reptantia of France, in Zariquiey's (1946, Publ. Biol. Medit. Inst. Esp. Est. Medit. 2: 168) handbook of the Spanish Mediterranean Decapoda, in Sakai's 1938 Studies on the Crabs of Japan (3: 296), and in Balss's (1929, Denkschr. Akad. Wiss. Wien 102: 16, 17) important paper on the classification of the

Oxyrhyncha. In fact the rejection of this name would greatly upset carcinological nomenclature, while its validation would mean an important step towards the stabilization of nomenclature in this group.

- 8. The generic name Maia Brisson, 1760, is not at present in regular use. It is not even mentioned, for example, in most Nomenclators or, when mentioned, is indicated there in parentheses only. The acceptance of this name would cause a severe confusion as it would have to replace either the generic name Lonchura Sykes, 1832, or Munia Hodgson, 1836, both of which are of long standing and at present are used by most ornithologists (information kindly furnished by Dr. G. C. A. Junge, curator of birds of the Rijksmuseum van Natuurlijke Historie, Leiden, The Netherlands). The suppression of the generic name Maia Brisson, 1760, therefore will be in the interest of the stability of both ornithological and carcinological nomenclature.
- 9. There is some diversity in the spelling adopted for the generic name Maja Lamarck, 1801, the spelling variants Maia and Maïa being often found in the literature. On p. 154 of Lamarck's original work the Latin name is three times given as Maja, the French vernacular name being spelled Maia (p. 154) and Maïa (p. 418 and in the table facing p. 143). The spelling Maïa however, also occurs on p. 428 in the Latin index ("Table des noms latins"). The latter spelling of the Latin name probably is a lapsus, but this does not alter the fact that there now are two different original spellings: Maja and Maïa. The First Subsequent User of the generic name was Bosc (1801—1802, Hist. nat. Crust. 1: 245) who employed the spelling Maja consistently for both the Latin and the vernacular name, the word Maja being used more than 100 times in his book. There can therefore be no doubt that Maja is the Valid Original Spelling of the generic name discussed here.
- 10. The action that is here proposed in connection with the generic name Maja Lamarck, 1801, has the further advantage that it makes the generic name Lithodes Latreille, 1806, an available name. Since this latter name is the oldest available name for its genus and is universally employed by carcinologists, it is desirable that the present opportunity should be taken to place it on the Official List of Generic Names in Zoology.
- 11. The nominal genus Maja Lamarck, 1801, is, as has already been noted (paragraph 5) the type genus of the large family MAJIDAE. This nominal family was established in 1819 (Entomologists' useful Compendium: 88) by Samouelle, who, however, misspelled the name as

MAIADAE. This spelling was corrected to MAJIDAE by Richters in 1880 (Möbius's Beitr. Meeresf. Maurit. Seych.: 141). The genus Lithodes Latreille, 1806, is also the type genus of a family, namely the family LITHODIDAE. This nominal family was also established in 1819 by Samouelle (ibid.: 90), who misspelled the name LITHODIADAE. This spelling was corrected to LITHODIDAE by Dana in 1853 (U.S. Explor. Exped. 13(2): 1430).

- 12. The concrete proposals which I now submit for consideration are that the International Commission on Zoological Nomenclature should:—
 - (1) use its Plenary Powers :—
 - (a) to suppress both for the purposes of the Law of Homonymy and for those of the Law of Priority the generic name *Maia* Brisson, 1760 (Class Aves) for the purposes of validating the generic name *Maja* Lamarck, 1801 (Class Crustacea);
 - (b) to set aside all designations or selections of type species for the genus *Maja* Lamarck, 1801, made prior to the Ruling now asked for and, having done so, to designate *Cancer squinado* Herbst, 1788, as the type of that genus;
 - (2) place the under-mentioned names on the Official List of Generic Names in Zoology:—
 - (a) Lithodes Latreille, 1806 (gender: masculine) (type species by monotypy: Cancer maja Linnaeus, 1758);
 - (b) Maja Lamarck, 1801 (gender: feminine) (type species by designation under the Plenary Powers under (1)(b) above: Cancer squinado Herbst, 1788);
 - (3) place on the Official List of Specific Names in Zoology the undermentioned names:—
 - (a) maja Linnaeus, 1758, as published in the combination Cancer maja;
 - (b) squinado Herbst, 1788, as published in the combination Cancer squinado;

- (4) place on the Official Index of Rejected and Invalid Generic Names in Zoology the under-mentioned names:—
 - (a) Maia Brisson, 1760, as suppressed under (1)(a) above;
 - (b) Mata Lamarck, 1801 (an Invalid Original Spelling of the generic name Maja Lamarck, 1801);
 - (c) Mamaia Stebbing, 1904 (a junior objective synonym of Maja Lamarck, 1801);
- (5) place on the Official Index of Rejected and Invalid Specific Names in Zoology the under-mentioned names:—
 - (a) arctica Latreille, 1806 (Gen. Crust. Ins. 1:40) as published in the combination Lithodes arctica (a substitute name for, and thereby a junior objective synonym of, maja Linnaeus, 1758, as published in the combination Cancer maja);
 - (b) eriocheles Lamarck, 1801, as published in the combination Maja eriocheles (a substitute name for, and thereby a junior objective synonym of, maja Linnaeus, 1758, as published in the combination Cancer maja);
- (6) place on the Official List of Family-Group Names in Zoology the under-mentioned names:—
 - (a) LITHODIDAE (correction of LITHODIADAE) Samouelle, 1819 (type genus: *Lithodes* Latreille, 1806);
 - (b) MAJIDAE (correction of MAIADAE) Samouelle, 1819 (type genus: *Maja* Lamarck, 1801).
- (7) place on the Official Index of Rejected and Invalid Family-Group Names in Zoology:—
 - (a) LITHODIADAE Samouelle, 1819 (an Invalid Original Spelling for LITHODIDAE);
 - (b) MAIADAE Samouelle, 1819 (an Invalid Original Spelling for MAJDAE).

13. The recommendations submitted in the present application have been the subject of consultations with, and are supported by, the following specialists: (a) Dr. J. Forest (Muséum National d'Histoire Naturelle, Paris); (b) Dr. I. Gordon (British Museum (Natural History), London); (c) Dr. Th. Monod (Institut d'Afrique Noire, Dakar); (d) Dr. R. Zariquiey (Barcelona, Spain).

II. THE SUBSEQUENT HISTORY OF THE CASE

- 2. Registration of the present application: Upon the receipt of Dr. Holthuis' application the question of the validation of the generic name *Maja* Lamarck, 1801 (Class Crustacea, Order Decapoda), was allotted the Registered Number Z.N.(S.) 1074.
- **3.** Publication of the present application: The present application was sent to the printer on 29th February 1956 and was published on 20th July of the same year in Part 4 of Volume 12 of the Bulletin of Zoological Nomenclature (Holthuis, 1956, Bull. zool. Nomencl. **12**: 123—128).
- **4.** Issue of Public Notices: Under the revised procedure prescribed by the Thirteenth International Congress of Zoology, Paris, 1948 (1950, Bull. zool. Nomencl. **4**: 51—56), Public Notice of the possible use by the International Commission on Zoological Nomenclature of its Plenary Powers in the present case was given on 20th July 1956 (a) in Part 4 of Volume 12 of the Bulletin of Zoological Nomenclature (the Part in which Dr. Holthuis' application was published) and (b) to the other prescribed serial publications. In addition such Notice was given to four general zoological serial publications.
- 5. Support received from four specialists: During the preparation of the present application Dr. Holthuis (as explained in paragraph 13 of the paper submitted) consulted with the following specialists, each of whom intimated support for the action proposed:—(a) J. Forest (Muséum National d'Histoire

Naturelle, Paris); (b) Dr. I. Gordon (British Museum (Natural History), London); (c) Dr. Th. Monod (Institut d'Afrique Noire, Dakar); (d) Dr. R. Zariquiey (Barcelona, Spain).

6. No Objection Received: No objection to the action proposed in the present case was received from any source.

III. THE DECISION TAKEN BY THE INTERNATIONAL COMMISSION ON ZOOLOGICAL NOMENCLATURE

- 7. Issue of Voting Paper V.P.(57)14: On 15th February 1957 a Voting Paper (V.P.(57)14) was issued in which the Members of the Commission were invited to vote either for, or against, "the proposal relating to the generic name *Maja* Lamarck, 1801, and associated problems as set out in Points (1) to (7) in paragraph 12 on pages 127 to 128 in Volume 12 of the *Bulletin of Zoological Nomenclature*" [i.e. in the paragraph numbered as above in the paper reproduced in the first paragraph of the present *Opinion*.]
- **8.** The Prescribed Voting Period: As the foregoing Voting Paper was issued under the Three-Month Rule, the Prescribed Voting Period closed on 15th May 1957.
- 9. Particulars of the Voting on Voting Paper V.P.(57)14: At the close of the Prescribed Voting Period, the state of the voting on Voting Paper V.P.(57)14 was as follows:—
 - (a) Affirmative Votes had been given by the following twentythree (23) Commissioners (arranged in the order in which Votes were received:

Boschma; Mayr; Lemche; Hering; Prantl; Holthuis; Jaczewski; Bonnet; Mertens; Dymond; Vokes; Bodenheimer; Bradley (J.C.); Key; Riley; Stoll; Esaki; do Amaral; Hemming; Kühnelt; Tortonese; Sylvester-Bradley; Miller;

(b) Negative Votes, one (1)	
Cabrera;	

(c) Prevented from voting by the interruption of postal communications consequent upon political disturbances, one (1):

Hankó;

(d) Voting Papers not returned:

None.

- 10. Declaration of Result of Vote: On 16th May 1957, Mr. Hemming, Secretary to the International Commission, acting as Returning Officer for the Vote taken on Voting Paper V.P.(57)14, signed a Certificate that the Votes cast were as set out in paragraph 9 above and declaring that the proposal submitted in the foregoing Voting Paper had been duly adopted and that the decision so taken was the decision of the International Commission in the matter aforesaid.
- 11. Preparation of the Ruling given in the present "Opinion": On 4th January 1958 Mr. Hemming prepared the Ruling given in the present *Opinion* and at the same time signed a Certificate that the terms of that Ruling were in complete accord with those of the proposal approved by the International Commission in its Vote on Voting Paper V.P.(57)14.
- 12. Original References for Generic and Specific Names: The following are the original references for the generic and specific

names placed on Official Lists and Official Indexes by the Ruling given in the present Opinion:—

arctica, Lithodes, Latreille, 1806, Gen. Crust. Ins. 1:40

eriocheles, Maja, Lamarck, 1801, Syst. Anim. sans Vertèbr.: 154

Lithodes Latreille, 1806, Gen. Crust. Ins. 1:39

Maia Brisson, 1760, Ornithologia 3:212

Maia Lamarck, 1801, Syst. Anim. sans Vertèbr.: 428

Maja Lamarck, 1801, Syst. Anim. sans Vertèbr.: 154

maja, Cancer, Linnaeus, 1758, Syst. Nat. (ed. 10) 1:629

Mamaia Stebbing, 1904, Spolia zeylan. 2 (5): 2

squinado, Cancer, Herbst, 1788, Versuch Naturgesch. Krabben Krebse 1 (7): 214

- 13. Original References for Family-Group Names: The following are the original references for the family-group names placed by the Ruling given in the present *Opinion* on the *Official List* and *Official Index* respectively for names of taxa belonging to the family-group category:—.
- LITHODIADAE Samouelle, 1819 (an Invalid Original Spelling for LITHODIDAE)
- LITHODIDAE (correction of LITHODIADAE) Samouelle, 1819, Entom. useful Compendium.: 90
- MAIADAE Samouelle, 1819 (an Invalid Original Spelling for MAJIDAE)
- MAJIDAE (correction of MAIADAE) Samouelle, 1819, Entom. useful Compendium.: 88
- 14. Compliance with Prescribed Procedures: The prescribed procedures were duly complied with by the International Commission on Zoological Nomenclature in dealing with the present case, and the present *Opinion* is accordingly hereby rendered in

the name of the said International Commission by the undersigned Francis Hemming, Secretary to the International Commission on Zoological Nomenclature, in virtue of all and every the powers conferred upon him in that behalf.

15. "Opinion" Number: The present *Opinion* shall be known as *Opinion* Five Hundred and Eleven (511) of the International Commission on Zoological Nomenclature.

DONE in London, this Fourth day of January, Nineteen Hundred and Fifty-Eight.

Secretary to the International Commission on Zoological Nomenclature

FRANCIS HEMMING

OPINIONS AND DECLARATIONS RENDERED BY THE INTERNATIONAL COMMISSION ON ZOOLOGICAL NOMENCLATURE

Edited by

FRANCIS HEMMING, C.M.G., C.B.E. Secretary to the Commission

VOLUME 18. Part 16. Pp. 273-290

OPINION 512

Validation under the Plenary Powers of the generic name Sao Barrande, 1846 (Class Trilobita)



LONDON:

Printed by Order of the International Trust for Zoological Nomenclature

and

Sold on behalf of the International Commission on Zoological Nomenclature by the International Trust at its Publications Office 41, Queen's Gate, London, S.W.7

1958

Price Twelve Shillings

(All rights reserved)

INTERNATIONAL COMMISSION ON ZOOLOGICAL NOMENCLATURE

COMPOSITION AT THE TIME OF THE ADOPTION OF THE RULING GIVEN IN OPINION 512

The Officers of the Commission

Honorary Life President: Dr. Karl JORDAN (British Museum (Natural History), Zoological Museum, Tring, Herts., England)

President: Professor James Chester Bradley (Cornell University, Ithaca, N.Y., U.S.A.) (12th August 1953)

Vice-President: Senhor Dr. Afranio do Amaral (Sao Paulo, Brazil) (12th August 1953) Secretary: Mr. Francis HEMMING (London, England) (27th July 1948)

The Members of the Commission

(Arranged in order of precedence by reference to date of election or of most recent re-election, as prescribed by the International Congress of Zoology)

Professor H. Boschma (Rijksmuseum van Natuurlijke Historie, Leiden, The Netherlands) (1st January 1947)

Senor Dr. Angel Cabrera (La Plata, Argentina) (27th July 1948) Mr. Francis Hemming (London, England) (27th July 1948) (Secretary)

Dr. Henning Lemche (Universitetets Zoologiske Museum, Copenhagen, Denmark) (27th July 1948)

Professor Teiso Esaki (Kyushu University, Fukuoka, Japan) (17th April 1950)
Professor Pierre Bonnet (Université de Toulouse, France) (9th June 1950)
Mr. Norman Denbigh Riley (British Museum (Natural History), London) (9th June 1950) Professor Tadeusz Jaczewski (Institute of Zoology, Polish Academy of Sciences, Warsaw,

Poland) (15th June 1950)
Professor Robert Mertens (Natur-Museum u. Forschungs-Institut Senckenberg, Frankfurt a. M., Germany) (5th July 1950)
Professor Erich Martin Hering (Zoologisches Museum der Humboldt-Universität zu Berlin, Germany) (5th July 1950)

Senhor Dr. Afranio do Amaral (S. Paulo, Brazil) (12th August 1953) (Vice-President)
Professor J. R. Dymond (University of Toronto, Toronto, Canada) (12th August 1953)
Professor J. Chester Bradley (Cornell University, Ithaca, N.Y., U.S.A.) (12th August 1953) (President)
Professor Harold E. VOKES (University of Tulane, Department of Geology, New Orleans,

Louisiana, U.S.A.) (12th August 1953)
Professor Béla Hankó (Mezőgazdasági Muzeum, Budapest, Hungary) (12th August 1953)
Dr. Norman R. Stoll (Rockefeller Institute for Medical Research, New York, N.Y., U.S.A.) (12th August 1953)

U.S.A.) (12th August 1953)

Mr. P. C. SYLVESTER-BRADLEY (Sheffield University, Sheffield, England) (12th August 1953)

Dr. L. B. HOLTHUIS (Rijksmuseum van Natuurlijke Historie, Leiden, The Netherlands) (12th August 1953)

Dr. K. H. L. KEY (Commonwealth Scientific and Industrial Research Organisation, Canberra, A.C.T., Australia) (15th October 1954)

Dr. Alden H. MILLER (Museum of Vertebrate Zoology, University of California, U.S.A.) (29th October 1954)

Doc. Dr. Ferdinand Prantl (Národni Museum v Praze, Prague, Czechoslovakia) (30th

October 1954)
Professor Dr. Wilhelm Kühnelt (Zoologisches Institut der Universität, Vienna, Austria)

(6th November 1954) Professor F. S. Bodenheimer (The Hebrew University, Jerusalem, Israel) (11th November

1954)

Professor Ernst Mayr (Museum of Comparative Zoology at Harvard College, Cambridge, Massachusetts, U.S.A.) (4th December 1954)
Professor Enrico Tortonese (Museo di Storia Naturale "G. Doria", Genova, Italy) (16th December 1954)

OPINION 512

VALIDATION UNDER THE PLENARY POWERS OF THE GENERIC NAME "SAO" BARRANDE, 1846 (CLASS TRILOBITA)

RULING:—(1) The following action is hereby taken under the Plenary Powers:—

- (a) The generic name Sao Billberg, 1820 (Class Crustacea, Order Stomatopoda), is hereby suppressed for the purposes both of the Law of Priority and of the Law of Homonymy.
- (b) The emendation to *Ellipsocephalus* of the generic name *Elleipsocephalus* Zenker, 1833 (Class Trilobita) is hereby approved.
- (2) The under-mentioned generic names are hereby placed on the *Official List of Generic Names in Zoology* with the Name Numbers severally specified below:—
 - (a) Sao Barrande, 1846, as validated under the Plenary Powers in (1)(a) above, a name having precedence over Monadina Barrande, 1846, by the "First Reviser" selection made by Poulsen (C.) (1956) (gender: feminine) (type species, by monotypy: Sao hirsuta Barrande, 1846 (Class Trilobita) (Name No. 1261);
 - (b) Ellipsocephalus (emend. under the Plenary Powers in (1)(b) above of Elleipsocephalus) Zenker, 1833,

- (gender: masculine) (type species, by monotypy: *Elleipsocephalus* [sic] ambiguus Zenker, 1833) (Class Trilobita) (Name No. 1262);
- (c) Pyrunculus Pilsbry, 1895 (gender: masculine) (type species, by original designation: Bulla (Atya) pyriformis Adams (A.), 1850) (Class Gastropoda) (Name No. 1263).
- (3) The under-mentioned specific names are hereby placed on the *Official List of Specific Names in Zoology* with the Name Numbers severally specified below:—
 - (a) hirsuta Barrande, 1846, as published in the combination Sao hirsuta (specific name of type species of Sao Barrande, 1846) (Name No. 1504);
 - (b) hoffii Schlotheim, 1823, as published in the combination Trilobites hoffii (Name No. 1505);
 - (c) pyriformis Adams (A.), 1850, as published in the combination Bulla (Atya) pyriformis (specific name of type species of Pyrunculus Pilsbry, 1895) (Name No. 1506).
- (4) The under-mentioned generic names are hereby placed on the *Official Index of Rejected and Invalid Generic Names in Zoology* with the Name Numbers severally specified below:—
 - (a) Sao Billberg, 1820, as suppressed under the Plenary Powers in (1)(a) above (Name No. 1151);
 - (b) Sao Adams (H.), 1854 (a junior homonym of Sao Barrande, 1846) (Name No. 1152);
 - (c) Elleipsocephalus Zenker, 1833 (ruled under the Plenary Powers in (1)(b) above to be an Invalid

- Original Spelling for *Ellipsocephalus*) (Name No. 1153);
- (d) *Staurogmus* Hawle (I.) & Corda (A.J.C.)¹, 1847 (a junior objective synonym of *Sao* Barrande, 1846) Name No. 1154).
- (5) The under-mentioned specific name is hereby placed on the *Official Index of Rejected and Invalid Specific Names in Zoology* with the Name No. 516:
 - muricatus Hawle (I.) & Corda (A.J.C.)¹, 1847, as published in the combination *Staurogmus muricatus* (a junior objective synonym of *hirsuta* Barrande, 1846, as published in the combination *Sao hirsuta*).
- (6) The under-mentioned family-group names are hereby placed on the *Official List of Family-Group Names in Zoology* with the Name Numbers severally specified below:—
 - (a) SAOIDAE Hupé, 1953 (type genus : Sao Barrande, 1846) (Name No. 220);
 - (b) ELLIPSOCEPHALIDAE Matthew (G.F.), 1887 (type genus *Ellipsocephalus* (emend. of *Elleipsocephalus*) Zenker, 1833) (Name No. 221).

¹ For some years there has been disagreement among Trilobite specialists as to whether the "Prodrom" of 1847, in which this name was published, should be attributed to Hawle & Corda jointly (as stated on the title) or to Corda alone (as was later alleged by Hawle to have been the case). The applicant in the present case took the view that Corda should be regarded as sole author. At the time when this *Opinion* was prepared the disputed authorship in this case was under consideration by the Commission which has since rendered a *Direction* (*Direction* 95) in which it has ruled that Hawle & Corda are to be treated as having been joint authors. In the same *Direction* the Commission gave instructions that names published in the "Prodrom" should be so attributed in all cases where names published in it had so far been placed on *Official Lists* or *Official Indexes*. The required corrections have accordingly been made in the Ruling given in the present *Opinion*.

- (7) The under-mentioned family-group names are hereby placed on the *Official Index of Rejected and Invalid Family-Group Names in Zoology* with the Name Numbers severally specified below:—
 - (a) SAOIDAE (correction of SAONIDES) Billberg, 1820 (type genus: Sao Billberg, 1820) (automatically suppressed under the Plenary Powers through Declaration 20 consequent upon the suppression under those Powers in (1)(a) above of the generic name Sao Billberg, 1820) (Name No. 260);
 - (b) SAONIDES Billberg, 1820 (type genus *Sao* Billberg, 1820) (an Invalid Original Spelling for SAOIDAE) (Name No. 261).

I. THE STATEMENT OF THE CASE

On 24th March 1952 Professor Christian Poulsen (Universitetets Mineralogisk-Geologiske Institut, Mineralogisk Museum, Copenhagen, Denmark) addressed a communication to the Office of the Commission in which he drew attention to a paper entitled "Nomina Conservanda: Antrag auf Aufhebung der "Regeln" zu Gunsten von Sao Barrande 1846", in which Professor Rudolf Richter had in 1941 (Senckenbergiana 23: 291—293) advocated the grant by the International Commission under its Plenary Powers of protection to the generic name Sao Barrande, 1846, the name of a well-known genus in the Class Trilobita, which was technically invalid as being a junior homonym of the longforgotten and never-used name Sao Billberg, 1820, in the Class Crustacea. In the foregoing communication Professor Poulsen expressed the hope that it would be possible for the Commission to take action in the sense that had been recommended by Professor Richter in the paper referred to above. As the result of further correspondence, Professor Poulsen undertook himself to submit an application to the Commission on this subject, but intimated that he would be grateful if, in view of his preoccupation with other duties, Dr. C. J. Stubblefield (Geological Survey and Museum, London), in conjunction with the Secretary, would assist by investigating the detailed issues involved. Work on this basis was begun towards the close of 1955. Later, the assistance of Dr. L. B. Holthuis (Rijksmuseum van Natuurlijke Historie, Leiden, The Netherlands) was sought by the Secretary on the questions relating to the names of Crustacea involved in this case by reason of the fact that the name Sao Billberg, which it was the object of the application should be suppressed by the Commission under its Plenary Powers in favour of the Trilobite name Sao Barrande, was the name of a nominal genus belonging to the Order Stomatopoda. These investigations were completed in the spring of 1956 and on 13th April of that year the following application was submitted to the Commission by Professor Poulsen:—

Proposed validation under the Plenary Powers of the generic name "Sao" Barrande, 1846 (Class Trilobita)

By CHRISTIAN POULSEN

(Universitetets Mineralogisk-Geologiske Institut, Mineralogisk Museum, Copenhagen, Denmark)

The purpose of the present application is to ask the International Commission on Zoological Nomenclature to use its Plenary Powers for the purpose of validating the long-familiar generic name Sao Barrande, 1846 (Class Trilobita). That this generic name is technically invalid has long been known, but owing to the special importance of this genus no attempt has ever been made to replace it by some other name. Nor is the project that the Commission should be asked to validate the name Sao Barrande a new one, for already during the recent war Rudolf Richter in a paper entitled "Nomina conservanda: Antrag auf Aufhebung der 'Regeln' zu Gunsten von Sao Barrande 1846" (1941, Senckenbergiana 23:291—293) recommended the adoption of this course.

2. The age of the genus Sao Barrande is Middle Cambrian and the genus is of exceptional importance since it represents the most classical case of the developmental history of a trilobite species. The work on trilobites published in 1852 (Syst. Silur. Bohême) in which Barrande published his conclusions in regard to this genus was a pioneer study of its kind and was based upon material which was exceptional both for its state of preservation and for its completeness from the early protaspid stage to the adult. The figures given by Barrande are widely reproduced in general text-books both of zoology and palaeontology. It would be little short of a disaster if this historic name were

to be cast aside for the sake of some narrow nomenclatorial technicality. The history of this case is set out in the following paragraphs.

- 3. The nominal genus Sao was established by Barrande in 1846 (Not. prél. Silur.: 13) with the species Sao hirsuta Barrande, 1846 (ibid.: 13) as type species by monotypy. At this early date Barrande did not fully appreciate the character of this species and in the same paper he described other specimens of it under the new generic and specific names Monadina distincta (: 19), while to another specimen he gave a third new specific name nanus (: 12), placing the species so named in the genus Ellipsocephalus (emend. of Elleipsocephalus) Zenker, 1833 (Beitr. Nat. Urwelt: 51).
- 4. The status of Sao Barrande is not adversely affected by the existence of the older name Elleipsocephalus Zenker, 1833, for the type species of that genus does not even belong to the same family as the genus Sao. The type species by monotypy of this genus is Elleipsocephalus ambiguus Zenker (: 51), which ever since Emmrich (1839, De Trilobitis: 44) has been subjectively identified with Trilobites hoffii Schlotheim, 1823 (Petrefactenk. Nachtr. 2: 30). Emmrich (: 17) was the first author also to emend to Ellipsocephalus the defective original spelling Elleipsocephalus and this emendation completely replaced the original spelling. As part of the general settlement now proposed this generic name in its emended spelling should be placed on the Official List of Generic Names in Zoology. This genus is the type genus of the well-established family ELLIPSOCEPHALIDAE Matthew (G.F.),1887 (Trans.R. Soc. Canada 5 (sect. 4): 128). This name should now be placed on the Official List of Family-Group Names in Zoology.
- 5. The generic name *Monadina* applied by Barrande to a specimen of *S. hirsuta* Barrande at the same time that the nominal genus *Sao* was established (paragraph 3 above) is a subjective synonym of the latter name. Accordingly, as the names *Sao* and *Monadina* were published in the same book and on the same date, the relative precedence to be accorded to them is, under the *Règles* (1953, *Copenhagen Decisions zool. Nomencl.*: 66—67, Decisions 123—124) through the application of the "First Reviser" Rule. The name *Monadina* was treated by Barrande in 1852 as a junior synonym of *Sao* and it has been similarly treated by subsequent authors. It is not clear, however, that Barrande's action constituted a formal choice in favour of *Sao* as against *Monadina* under the foregoing Rule. Accordingly, in order to set at rest any possible doubts on this subject, I here select the name *Sao* under the "First Reviser" Rule to take precedence over the name *Monadina*.
- 6. The next author to deal with the species to which Barrande in 1846 had given the name Sao hirsuta was Corda in Hawle & Corda in 1847² in his paper entitled Prodrom einer Monographie der böhmischen

² See Footnote 1.

- Trilobiten (: 1—116). In this paper Corda completely misunderstood the material before him and erected no less than ten new nominal genera and eighteen new nominal species on the basis of specimens of Barrande's hirsuta. With two exceptions these names are subjective synonyms only and as such do not fall within the scope of the present application. The two exceptions are:—(1) Staurogmus Corda, 1847 (ibid.: 28), a substitute name for Sao Barrande, 1846; (2) muricatus Corda, 1847 (ibid.: 28), as published in the combination Staurogmus muricatus, a substitute name for hirsuta Barrande, 1846, as published in the combination Sao hirsuta.
- 7. Up till 1955 the genus Sao Barrande was placed in various families, including the family SOLENOPLEURIDAE and the family PTYCHOPARIIDAE. In the most recent treatment of this group Hupé in his Classification des Trilobites (Ann. Paléont. 41:130) has however erected the family-group taxon SAOIDAE for this taxon.³
- 8. The technical defect which at present renders the name Sao Barrande, 1846, invalid is that that name is a junior homonym of Sao Billberg, 1820 (Enum. Ins. Mus. Billberg.: 135). Reference to the copy of this rare work in the library of the British Museum (Natural History) shows that Sao Billberg is the name of a monotypical genus having as its type species by monotypy the nominal species Cancer mantis Linnaeus, 1758 (Syst. Nat. (ed. 10) 1:633) (Class Crustacea, Order Stomatopoda). By the Ruling given by the Commission under its Plenary Powers in *Opinion* 186 (1945, *Ops. Decs. int. Comm. zool.* Nomencl. 3:53-64) the above species was designated as the type species of the genus Squilla Fabricius, 1787, of which therefore the name Sao Billberg, 1820, is a junior objective synonym. It will thus be seen that from the point of view of carcinologists there cannot be the slightest objection to the suppression of the name Sao Billberg by the Commission under its Plenary Powers, while, as already explained, such action would be of the greatest possible value to workers on Trilobites. The generic name Squilla Fabricius, 1787, was placed on the Official List of Generic Names in Zoology by the Ruling given in Opinion 186, while the name mantis Linnaeus, 1758, as published in the combination Cancer mantis was placed on the Official List of Specific Names in Zoology by the Ruling given in Direction 1 (1954, Ops. Decls. int. Comm. zool. Nomencl. 3(30): 401—416). No action therefore requires to be taken in regard to either of these names.
- 9. It must be noted also that Billberg placed his genus Sao in a suprageneric taxon of family-group rank (the category concerned being styled by Billberg as a "Natio"), to which he gave the name saonides.

³ At a later stage Dr. C. J. Stubblefield reported that he had ascertained that Hupé had erected a nominal family-group taxon based on the name Sao Barrande two years earlier than had been previously believed, i.e., in 1953 (in Piveteau (J.), Traité de Paléont. 3:193).

Until recently the existence of a family-group name based upon the generic name Sao Billberg in Crustacea would have given rise to a troublesome problem of homonymy in relation to the family-group name in Trilobita based upon the generic name Sao Barrande. Fortunately, however, no difficulty need be anticipated under this head, for under a Declaration (Declaration 20) recently adopted by the Commission (1955, Ops. Decls. int. Comm. zool. Nomencl. 10(19: i—viii) it has been ruled that, where the name of a genus which is the type genus of a taxon of the family-group is suppressed by the Commission under its Plenary Powers, the decision so taken is to apply equally to the family-group name based on the generic name in question. Accordingly, if the Commission grants the present application for the suppression of the generic name Sao Billberg, that decision will automatically carry with it a decision similarly to suppress the family-group name SAOIDAE (correction of SAONIDES) Billberg, 1820.

- 10. In addition to the senior homonym Sao Billberg, 1820, discussed in the immediately preceding paragraph, there is also a junior homonym Sao Adams (H.), 1854 (Gen. rec. Moll. 2:21), a name applied to a genus of Mollusca (Class Gastropoda). This name was replaced by the name Pyrunculus by Pilsbry in 1895 (in Tryon & Pilsbry, Man. Conch. (1) 15:181, 229). The type species of this genus by original designation is Bulla (Atya) pyriformis Adams (A.), 1850 (Thes. Conch. 2:589). As part of the general settlement of the Sao problem now proposed, the name Sao Adams should be placed on the Official Index of Rejected and Invalid Generic Names in Zoology and the other names mentioned above should be placed on the appropriate Official Lists. Neither Sao Adams nor Pyrunculus Pilsbry have been taken as the base for a family-group name, the genus being currently placed in the family RETUSIDAE.
- 11. For the reasons set forth in the present application the International Commission on Zoological Nomenclature is asked:—
 - (1) to use its Plenary Powers :-
 - (a) to suppress the generic name Sao Billberg, 1820 (Class Crustacea, Order Stomatopoda) for the purposes both of the Law of Priority and of the Law of Homonymy;
 - (b) to approve the emendation *Ellipsocephalus* (published by Emmrich (H.F.) in 1839 and since generally adopted) of the generic name *Elleipsocephalus* Zenker, 1833 (Class Trilobita);
 - (2) to place the under-mentioned generic names on the Official List of Generic Names in Zoology:—
 - (a) Sao Barrande, 1846, as validated under the Plenary Powers under (1)(a) above (gender: feminine) (type species, by monotypy: Sao hirsuta Barrande, 1846) (Class Trilobita);

- (b) Ellipsocephalus (emend. under the Plenary Powers under (1)(b) above of Elleipsocephalus) Zenker, 1833 (gender: masculine) (type species, by monotypy: Ellipsocephalus (emend. of Elleipsocephalus) ambiguus Zenker, 1833) [Note not for the inclusion in the "Official List": The name ambiguus Zenker, 1833, as published in the above combination is currently regarded as a junior subjective synonym of hoffii Schlotheim, 1823, as published in the combination Trilobites hoffii.] (Class Trilobita);
- (c) Pyrunculus Pilsbry, 1895 (gender: masculine) (type species, by original designation: Bulla (Atya) pyriformis Adams (A.), 1850 [Note: The name Pyrunculus Pilsbry is a nom. nov. pro the invalid name Sao Adams, 1854, referred to in (4)(2) below.] (Class Gastropoda);
- (3) to place the under-mentioned specific names on the Official List of Specific Names in Zoology:—
 - (a) hirsuta Barrande, 1846, as published in the combination Sao hirsuta (specific name of type species of Sao Barrande, 1846);
 - (b) hoffii Schlotheim, 1823, as published in the combination *Trilobites hoffii*;
 - (c) pyriformis Adams (A.), 1850, as published in the combination Bulla (Atya) pyriformis (specific name of type species of Pyrunculus Pilsbry, 1895);
- (4) to place the under-mentioned generic names on the Official Index of Rejected and Invalid Generic Names in Zoology:—
 - (a) Sao Billberg, 1820, as suppressed under the Plenary Powers under (1)(a) above;
 - (b) Sao Adams (H.), 1854 (a junior homonym of Sao Barrande, 1846);
 - (c) Elleipsocephalus Zenker, 1833 (an Invalid Original Spelling for Ellipsocephalus rejected under the Plenary Powers under (1)(b) above);
 - (d) Staurogmus Corda in Hawle & Corda, 18474 (a junior objective synonym of Sao Barrande, 1846);
- (5) to place the under-mentioned specific name on the Official Index of Rejected and Invalid Specific Names in Zoology:—muricatus Corda in Hawle & Corda, 1847, as published in the combination Staurogmus muricatus (a junior objective synonym of

⁴ See Footnote 1.

hirsuta Barrande, 1846, as published in the combination Sao hirsuta);

- (6) to place the under-mentioned family-group names on the Official List of Family-Group Names in Zoology:—
 - (a) SAOIDAE Hupé, 1955⁵ (type genus: Sao Barrande, 1846);
 - (b) ELLIPSOCEPHALIDAE Matthew (G.F.), 1887 (type genus: Ellipsocephalus (emend. of Elleipsocephalus) Zenker, 1833);
- (7) to place the under-mentioned family-group names on the Official Index of Rejected and Invalid Family-Group Names in Zoology:—
 - (a) SAOIDAE (correction of SAONIDES) Billberg, 1820 (type genus: Sao Billberg, 1820) (automatically suppressed under the Plenary Powers through Declaration 20 consequent upon the suppression under the above Powers of the generic name Sao Billberg, 1820, under (1)(a) above);
 - (b) SAONIDES Billberg, 1820 (type genus: Sao Billberg, 1820) (an Invalid Original Spelling for SAOIDAE).

II. THE SUBSEQUENT HISTORY OF THE CASE

- **2.** Registration of the present application: Upon the receipt in 1952 of Professor Poulsen's preliminary communication the question of the validation of the generic name *Sao* Barrande, 1846 (Class Trilobita), was allotted the Registered Number Z.N.(S.) 666.
- **3. Publication of the present application:** The present application was sent to the printer on 20th April 1956 and was published on 20th July 1956 in Part 5 of Volume 12 of the *Bulletin of Zoological Nomenclature* (Poulsen, 1956, *Bull. zool. Nomencl.* **12:** 131—135).

⁵ For a correction of the date (and reference attributable to this name see footnote 3.

- **4. Issue of Public Notices:** Under the revised procedure prescribed by the Thirteenth International Congress of Zoology, Paris, 1948 (1950, *Bull. zool. Nomencl.* **4**: 51—56), Public Notice of the possible use by the International Commission on Zoological Nomenclature of its Plenary Powers in the present case was given on 20th July 1956 (a) in Part 5 of Volume 12 of the *Bulletin of Zoological Nomenclature* (the Part in which Professor Poulsen's application was published) and (b) to the other prescribed serial publications. In addition, such Notice was given to four general zoological serial publications and to three palaeontological serials in Europe and America.
- 5. Support Received: The present application was (as explained in the first paragraph of the present Opinion) originally suggested by Professor Rudolf Richter (Senckenbergische Naturforschender Gesellschaft, Senckenberg, Frankfurt a.M., Germany). It was supported also by the two specialists who co-operated with Professor Poulsen in its preparation, namely Dr. C. J. Stubblefield (Geological Survey and Museum, London) from the Trilobite side and Dr. L. B. Holthuis (Rijksmuseum van Natuurlijke Historie, Leiden, The Netherlands) from the Crustacea side. After the publication of Professor Poulsen's paper, the former of the above specialists submitted a separate note of support. In the same period a letter of support was received also from Dr. H. B. Whittington (Museum of Comparative Zoology at Harvard College, Massachusetts, U.S.A.). The communications so received from Dr. Stubblefield and Dr. Whittington are reproduced in the immediately following paragraphs.
- 6. Support received from C. J. Stubblefield (Geological Survey and Museum, London): On 17th August 1956 Dr. C. J. Stubblefield (Geological Survey and Museum, London) addressed the following note of support to the Office of the Commission (Stubblefield, 1956, Bull. zool. Nomencl. 12: 256):—

In the interests of nomenclatorial stability I support the proposal that the well-known generic names *Sao* Barrande, 1846, and *Ellipsocephalus* Zenker, 1833, be validated in accordance with current usage.

7. Support received from H. B. Whittington (Museum of Comparative Zoology at Harvard College, Cambridge, Mass., U.S.A.): On 28th September 1956 Dr. H. B. Whittington (Museum of Comparative Zoology at Harvard College, Cambridge, Mass., U.S.A.) addressed the following note to the Office of the Commission in support of the present case (Whittington, 1956, Bull. zool. Nomencl. 11: 361):—

I heartily support the application made by Professor C. Poulsen regarding the name Sao Barrande, 1846 (Class Trilobita) and related matters.

8. No Objection Received: No objection to the action proposed in the present case was received from any source.

III. THE DECISION TAKEN BY THE INTERNATIONAL COMMISSION ON ZOOLOGICAL NOMENCLATURE

- 9. Issue of Voting Paper V.P.(57)15: On 15th February 1957 a Voting Paper (V.P.(57)15) was issued in which the Members of the Commission were invited to vote either for, or against, "the proposal relating to the generic name Sao Barrande, 1846 (Class Trilobita), as set out in Points (1) to (7) in paragraph 11 on pages 134 to 135 of Volume 12 of the Bulletin of Zoological Nomenclature" [i.e. in the paragraph numbered as above in the paper reproduced in the first paragraph of the present Opinion].
- 10. The Prescribed Voting Period: As the foregoing Voting Paper was issued under the Three-Month Rule, the Prescribed Voting Period closed on 15th May 1957.
- 11. Particulars of the Voting on Voting Paper V.P.(57)15: At the close of the Prescribed Voting Period, the

state of the voting on Voting Paper V.P.(57)15 was as follows:—

(a) Affirmative Votes had been given by the following twenty-four (24) Commissioners (arranged in the order in which Votes were received):

Boschma; Mayr; Lemche; Hering; Prantl; Holthuis; Bonnet; Mertens; Dymond; Vokes; Bodenheimer; Bradley (J.C.); Key; Riley; Stoll; Esaki; do Amaral; Hemming; Kühnelt; Cabrera; Jaczewski; Tortonese; Sylvester-Bradley; Mıller;

(b) Negative Votes:

None;

(c) Prevented from voting by the interruption of postal communications consequent upon political disturbances, one (1):

Hankó;

(d) Voting Papers not returned:

None.

12. Declaration of Result of Vote: On 16th May 1957, Mr. Hemming, Secretary to the International Commission, acting as Returning Officer for the Vote taken on Voting Paper V.P.(57)15, signed a Certificate that the Votes cast were as set out in paragraph 11 above and declaring that the proposal submitted in the foregoing Voting Paper had been duly adopted and that the decision so taken was the decision of the International Commission in the matter aforesaid.

- 13. Preparation of the Ruling given in the present "Opinion": On 4th January 1958 Mr. Hemming prepared the Ruling given in the present *Opinion* and at the same time signed a Certificate that the terms of that Ruling were in complete accord with those of the proposal approved by the International Commission in its Vote on Voting Paper V.P.(57)15.
- 14. Original References for Generic and Specific Names: The following are the original references for the generic and specific names placed on *Official Lists* and *Official Indexes* by the Ruling given in the present *Opinion*:—
- Elleipsocephalus Zenker, 1833 (an Invalid Original spelling for Ellipsocephalus)
- Ellipsocephalus (emend. of Elleipsocephalus) Zenker, 1833, Beitr. Nat. Urwelt: 51
- hirsuta, Sao, Barrande, 1846, Not. prélim. Syst. silur. Trilob. Bohême: 13
- hoffii, Trilobites, Schlotheim, 1823, Die Petrefactenk, Nachtr. 2:30
- muricatus, Staurogmus, Hawle (I.) & Corda (A.J.C.), 6 1847, Prodrom Mon. böhm. Trilob.: 28 (also published in 1848 in Abh. Königl.-böhm. Ges. Wiss. (5) 5: 144)
- pyriformis, Bulla (Atya), Adams (A.), 1850, Thes. Conch. 2:589 Pyrunculus Pilsbry, 1895, in Tryon & Pilsbry, Man. Conch. (1) 15:181, 229
- Sao Billberg, 1820, Enum. Ins. Mus. Billberg: 135
- Sao Barrande, 1846, Not. prélim. Syst. silur. Trilob. Bohême: 13 Sao Adams (H.), 1854, Gen. rec. Moll. 2: 21
- Staurogmus Hawle (I.) & Corda (A.J.C.), 6 1847, Prodrom Mon. böhm. Trilob.: 28 [For a note on the reference here cited see muricatus, Staurogmus, above.]
- 15. Reference for a "First Reviser" selection giving precedence to one of two subjective synonyms published in the same work and

⁶ See footnote 1

on the same date: The following is the reference for a "First Reviser" selection giving precedence to one of two subjective synonyms published in the same work and on the same date specified in the Ruling given in the present *Opinion*:—

For Sao Barrande, 1846, "First Reviser" selection in favour of, over Monadina Barrande, 1846 Poulsen (C.), 1956, *Bull.* zool. Nomencl. 12: 132

16. Original References for Family-Group Names: The following are the original references for the family-group names placed by the Ruling given in the present *Opinion* on the *Official List* and the *Official Index* respectively for the names of taxa of the family-group category:—

ELLIPSOCEPHALIDAE Matthew (G.F.), 1887, Trans. R. Soc. Canada 5 (Sect. 4): 128

SAOIDAE (correction of SAONIDES) Billberg, 1820, Enum. Ins. Mus. Billberg.: 135

SAOIDAE Hupé, 1953, in Piveteau (J.), Traité Paléont. 3: 1937

SAONIDES Billberg, 1820 (an Invalid Original Spelling for SAOIDAE).

17. Nominal genera involved in the present case on which no nominal family-group taxa have been established: Neither the nominal genus *Sao* Adams (H.), 1854, nor its nominal replacement genus *Pyrunculus* Pilsbry, 1895, referred to in the present *Opinion* has been taken as the type genus of a nominal family-group taxon. The genus in question is currently placed in the family RETUSIDAE.

18. Compliance with Prescribed Procedures: The prescribed procedures were duly complied with by the International Commission on Zoological Nomenclature in dealing with the present case, and the present *Opinion* is accordingly hereby rendered in the name of the said International Commission by the under-signed

⁷ For the substitution of the reference for that cited in the application submitted in this case see Footnote 3.

Francis Hemming, Secretary to the International Commission on Zoological Nomenclature, in virtue of all and every the powers conferred upon him in that behalf.

19. "Opinion" Number: The present Opinion shall be known as Opinion Five Hundred and Twelve (512) of the International Commission on Zoological Nomenclature.

DONE in London, this Fourth day of January, Nineteen Hundred and Fifty-Eight.

Secretary to the International Commission on Zoological Nomenclature

FRANCIS HEMMING

OPINIONS AND DECLARATIONS RENDERED BY THE INTERNATIONAL COMMISSION ON ZOOLOGICAL NOMENCLATURE

Edited by

FRANCIS HEMMING, C.M.G., C.B.E. Secretary to the Commission

VOLUME 18. Part 17. Pp 291-302

OPINION 513

Determination of the species to be accepted respectively as the type species of the genera *Culter* and *Nasus* both of Basilewsky, 1855 (Class Pisces)



LONDON:

Printed by Order of the International Trust for Zoological Nomenclature

and

Sold on behalf of the International Commission on Zoological Nomenclature by the International Trust at its Publications Office 41, Queen's Gate, London, S.W.7

1958

Price Eight Shillings

(All rights reserved)

INTERNATIONAL COMMISSION ON ZOOLOGICAL NOMENCLATURE

COMPOSITION AT THE TIME OF THE ADOPTION OF THE **RULING GIVEN IN OPINION 513**

The Officers of the Commission

Honorary Life President: orary Life President: Dr. Karl Jordan (British Museum (Natural History), Zoological Museum, Tring, Herts., England)

President: Professor James Chester Bradley (Cornell University, Ithaca, N.Y., U.S.A) (12th August 1953)

Vice-President: Senhor Dr. Afranio do Amaral (Sao Paulo, Brazil) (12th August 1953)

Secretary: Mr. Francis HEMMING (London, England) (27th July 1948)

The Members of the Commission

(Arranged in order of precedence by reference to date of election or of most recent re-election, as prescribed by the International Congress of Zoology)

Professor H. Boschma (Rijksmuseum van Natuurlijke Historie, Leiden, The Netherlands) (1st January 1947) Senor Dr. Angel Cabrera (*La Plata, Argentina*) (27th July 1948)

Mr. Francis Hemming (London, England) (27th July 1948) (Secretary)
Dr. Henning Lemche (Universitetets Zoologiske Museum, Copenhagen, Denmark) (27th July 1948)

Professor Teiso Esaki (Kyushu University, Fukuoka, Japan) (17th April 1950) Professor Pierre Bonnet (Université de Toulouse, France) (9th June 1950)

Mr. Norman Denbigh RILEY (British Museum (Natural History), London) (9th June 1950)

Professor Tadeusz Jaczewski (Institute of Zoology, Polish Academy of Sciences, Warsaw, Poland) (15th June 1950)

Professor Robert Mertens (Natur-Museum u. Forschungs-Institut Senckenberg, Frankfurt a.M., Germany) (5th July 1950)

Professor Erich Martin Hering (Zoologisches Museum der Humboldt-Universität zu Berlin, Germany) (5th July 1950)

Senhor Dr. Afranio do Amaral (S. Paulo, Brazil) (12th August 1953) (Vice-President) Professor J. R. Dymond (University of Toronto, Toronto, Canada) (12th August 1953) Professor J. Chester Bradley (Cornell University, Ithaca, N.Y., U.S.A.) (12th August

1953) (President)
Professor Harold E. Vokes (University of Tulane, Department of Geology, New Orleans, Louisiana, U.S.A.) (12th August 1953)
Professor Béla Hankó (Mezőgazdasági Muzeum, Budapest, Hungary) (12th August 1953)
Dr. Norman R. Stoll (Rockefeller Institute for Medical Research, New York, N.Y.,

U.S.A.) (12th August 1953)

Mr. P. C. Sylvester-Bradley (Sheffield University, Sheffield, England) (12th August 1953)

Dr. L. B. Holthuis (Rijksmuseum van Natuurlijke Historie, Leiden, The Netherlands (12th August 1953)

Dr. K. H. L. Key (Commonwealth Scientific and Industrial Research Organisation, Canberra, A.C.T., Australia) (15th October 1954)
 Dr. Alden H. MILLER (Museum of Vertebrate Zoology, University of California, U.S.A.)

(29th October 1954)

Doc. Dr. Ferdinand Prantl (Národni Museum V Praze, Prague, Czechoslovakia) (30th

October 1954)

Professor Dr. Wilhelm Kühnelt (Zoologisches Institut der Universität, Vienna, Austria) (6th November 1954) Professor F. S. Bodenheimer (The Hebrew University, Jerusalem, Israel) (11th November

1954)

Professor Ernst Mayr (Museum of Comparative Zoology at Harvard College, Cambridge, Massachusetts, U.S.A.) (4th December 1954)
Professor Enrico Tortonese (Museo di Storia Naturale "G. Doria", Genova Italy)

(16th December 1954)

OPINION 513

DETERMINATION OF THE SPECIES TO BE ACCEPTED RESPECTIVELY AS THE TYPE SPECIES OF THE GENERA "CULTER" AND "NASUS", BOTH OF BASILEWSKY, 1855 (CLASS PISCES)

RULING:—(1) It is hereby ruled:—

- (a) that the type species of the genus *Culter* Basilewsky, 1855 (Class Pisces), was determined by selection under Rule (g) in Article 30 by Bleeker (P.) (1863), when he so selected the nominal species *Culter alburnus* Basilewsky, 1855;
- (b) that the type species of the genus Nasus Basilewsky, 1855 (Class Pisces), was determined at the time of the publication of that name by absolute tautonymy under Rule (d) in Article 30 as being Cyprinus nasus Linnaeus, 1758.
- (2) The under-mentioned generic names are hereby placed on the *Official List of Generic Names in Zoology* with the Name Numbers severally specified below:—
 - (a) Culter Basilewsky, 1855 (gender: masculine) (type species, by selection by Bleeker (P.) (1863), as ruled in (1)(a) above: Culter alburnus Basilewsky, 1855) (Name No. 1264);
 - (b) Nasus Basilewsky, 1855 (gender: masculine) (type species, by absolute tautonymy, as ruled in (1)(b) above: Cyprinus nasus Linnaeus, 1758) (Name No. 1265).

- (3) The under-mentioned specific names are hereby placed on the *Official List of Specific Names in Zoology* with the Name Numbers severally specified below:—
 - (a) alburnus Basilewsky, 1855, as published in the combination Culter alburnus (specific name of type species of Culter Basilewsky, 1855) (Name No. 1507);
 - (b) nasus Linnaeus, 1758, as published in the combination Cyprinus nasus (specific name of type species of Nasus Basilewsky, 1855) (Name No. 1508).

I. THE STATEMENT OF THE CASE

On 7th March 1956 Professor George S. Myers (Natural History Museum, Stanford University, Stanford, California, U.S.A.), who some years previously had communicated to the Office of the Commission a copy of a paper entitled "Ichthyological Notes" (Myers, 1940, Copeia 1940: 199—201) in which he had discussed the question of the species to be accepted as the type species of the nominal genera Culter Basilewsky, 1855, and Nasus Basilewsky, 1855 (Class Pisces), submitted the following application to the Commission asking for Rulings in regard to the above matters:—

Request for a Ruling as to the species to be accepted as the type species of the genera "Culter" and "Nasus" Basilewsky, 1855 (Class Pisces)

By GEORGE S. MYERS

(Natural History Museum, Stanford University, Stanford, California, U.S.A.)

The purpose of the present application is to ask the International Commission to give a ruling on the question of the species to be accepted as the type species of the genera *Culter Basilewsky*, 1855

and Nasus Basilewsky, 1855 (Class Pisces). The facts of this case are set out briefly in the following paragraphs.

- 2. The genus Culter Basilewsky, 1855 (Nouv. Mém. Soc. imp. Nat. Moscou 10:236) was established for six new nominal species to which Basilewsky gave the names alburnus (:236), erythropterus, mongolicus, pekinensis, exiquus and leucisculus. Basilewsky did not specify any of these species as the type species of this genus, but in a line by itself directly below the generic name and before mentioning any of the new species included in this genus, he wrote "(Cypr. cultratus Linn.)". The first author to select a type species under Rule (g) in Article 30 was Bleeker who in 1863 (Atlas ichthyol. Indes orient. néerland. 3:33) so selected Culter alburnus Basilewsky, 1855.
- 3. Bleeker's type selection was accepted by all subsequent authors up to 1938, though Jordan (1919, Genera of Fishes 2: 262), in accepting alburnus as the type species, added the comment:—"Basilewsky plainly intended to make his type Cyprinus cultratus". In 1938, however, Dr. Hugh M. Smith (J. Wash. Acad. Sci. 28(9): 407—411) advanced the view that Basilewsky himself designated Cyprinus cultratus Linnaeus, 1758 (Syst. Nat. (ed. 10)1: 326) as the type species of the genus Culter at the time when he first published that generic name. Dr. Smith put forward this thesis as follows:—

In setting up *Culter alburnus* as the type of *Culter*, Bleeker and various writers who agreed with him in this course entirely ignored the fact that Basilewsky himself adopted or considered *Cyprinus cultratus* as the type of *Culter*. No other interpretation can be placed on the circumstances that, immediately after the first use of the word *Culter*, Basilewsky devoted a whole line to the words "Cypr. cultratus Linn.". The case is clearly covered by the International Rules of Zoological Nomenclature, reference being made particularly to article 30, paragraph g, reading:

"If an author, in publishing a genus with more than one valid species, fails to designate or to indicate its type, any subsequent author may select the type."

That Basilewsky did select a type species by "indication" seems to be fully established by the international rules and the opinions thereunder, and Bleeker's action was void.

4. Smith's reference to Rule (g) in Article 30 is clearly beside the mark, for that Rule refers only to the selection of a type species of a genus for which no type species was designated or indicated by the original author at the time of the first publication of the generic name concerned. If any case is to be advanced in favour of the view that Basilewsky designated a type species for the genus *Culter*, it must be an argument founded upon the interpretation of Rule (a) in Article

30, the Rule relating to the original designation of a type species by the author of a generic name. In the case of the selection of a type species by a subsequent author under Rule (g) there is a supplementary provision which was omitted by Smith in the extract quoted in his paper which is, however, very relevant in the present case. This provision reads as follows: "The meaning of the expression 'select the type' is to be rigidly construed. Mention of a species as an illustration or example of a genus does not constitute a selection of a type." Rule (a) (type species by original designation) does not contain a supplementary provision of this kind, but it has been the practice of zoologists to assume that the expression "designate" a type as used in Rule (a) should be construed as rigidly as the expression "select" a type as used in Rule (g). This principle seems to me to be correct and I notice that a proposal that this principle should be expressly written into Rule (a) has recently been submitted to the Commission (Hemming, 1954, Bull. zool. Nomencl. 9: 188—190).

- 5. I think it quite clear therefore that Smith's attempt to bring forward Cyprinus cultratus Linnaeus as the type species of Culter Basilewsky was incorrect and that the valid type species of this genus is Culter alburnus Basilewsky, the species so selected by Bleeker in 1863. If Smith's conclusions had been correct, the generic name Culter Basilewsky would have fallen as a junior synonym of Pelecus Agassiz, [1836] (Mém. Soc. Sci. nat. Neuchatel 1:39). This would have been very unfortunate, for the name Culter has been used by all workers on Chinese fishes, e.g. Günther, Bleeker, Kner, Sauvage & Dabry, Berg, Nichols, Rendahl, Chu and others.
- 6. The generic name Nasus Basilewsky, 1855 (: 234) was published in a manner very similar to that in which the name Culter was introduced in the same paper, for, in addition to species expressly included in this genus—in this case, the single new species Nasus dahuricus— Basilewsky devoted the line immediately following the generic name Nasus to the entry " (Cypr. nasus Linn.)". It is very doubtful whether Basilewsky recognised—or was even aware of—the principle embodied nearly fifty years later in Rule (d) in Article 30 under which, where no type species is designated or indicated by monotypy for a genus and where one of the included species bears a specific name consisting of the same word as the generic name, the species bearing that name becomes the type species of the genus by absolute tautonymy. However, as Cyprinus nasus Linnaeus, 1758 (Syst. Nat. (ed. 10) 1: 325) was certainly included by Basilewsky in his genus Nasus and as Basilewsky (i) did not expressly designate a type species, (ii) did not include in the genus a species bearing the specific name typus or typicus and (iii) included more than one species in the genus, Rule (d) (type species by absolute tautonymy) applies automatically in this case, thus making Cyprinus nasus Linnaeus the type species. In this case no difficulty arises, for this species is currently accepted as the type species of Nasus Basilewsky.

- 7. No family-group-name problem arises in the present case, the genera concerned being currently referred to the family CYPRINIDAE.
- 8. In order finally to dispose of this matter, I now ask the International Commission:—
 - (1) to rule that the type species of the genus *Culter* Basilewsky, 1855, was first validly determined when in 1863 Bleeker selected *Culter alburnus* Basilewsky, 1855, to be the type species of this genus (selection made under Rule (g) in Article 30);
 - (2) to place the under-mentioned generic names on the Official List of Generic Names in Zoology:—
 - (a) Culter Basilewsky, 1855 (gender: masculine) (type species, by selection by Bleeker (1863): Culter alburnus Basilewsky, 1855);
 - (b) Nasus Basilewsky, 1855 (gender: masculine) (type species, by absolute tautonymy: Cyprinus nasus Linnaeus, 1758);
 - (3) to place the under-mentioned specific names on the Official List of Specific Names in Zoology:—
 - (a) alburnus Basilewsky, 1855, as published in the combination Culter alburnus (specific name of type species of Culter Basilewsky, 1855);
 - (b) nasus Linnaeus, 1758, as published in the combination *Cyprinus nasus* (specific name of type species of *Nasus* Basilewsky, 1855).

II. THE SUBSEQUENT HISTORY OF THE CASE

- 2. Registration of the present application: Upon the receipt of Professor Myers's preliminary communication in regard to the question of the species to be accepted as type species of the genera *Culter* Basilewsky, 1855, and *Nasus* Basilewsky, 1855, respectively, the problem so involved was allotted the Registered Number Z.N.(S.) 273.
- 3. Publication of the present application: The present application was sent to the printer on 20th April 1956 and was published on 20th July of that year in Part 5 of Volume 12 of the *Bulletin of Zoological Nomenclature* (Myers, 1956, *Bull. zool. Nomencl.* 12 136—138).

- 4. Support Received: During the Prescribed Six-Month Waiting Period following the publication of the present application in the Bulletin of Zoological Nomenclature a letter of support for the action proposed was received from Miss Ethelwynn Trewavas (British Museum (Natural History), London). Some months after the close of the above period and therefore after the submission to the Commission of a Voting Paper on the present case a letter (dated 16th July 1957) was received from Dr. W. I. Follett (California Academy of Sciences, San Francisco, California, U.S.A.) in which, as Chairman of the Committee on Zoological Nomenclature of the American Society of Ichthyologists and Herpetologists, he intimated his support and that of three other members of the Committee for the action recommended in the present case. The communications so received are reproduced in the immediately following paragraphs.
- 5. Support received from Miss Ethelwynn Trewavas (British Museum (Natural History), London): On 20th August 1956 Miss Ethelwynn Trewavas (British Museum (Natural History), London) addressed the following letter to the Office of the Commission in support of the present case (Trewavas, 1956, Bull. zool. Nomencl. 12: 274):—

I think that Basilewsky indicated, in as clear a manner as possible in 1855, that he intended *Cyprinus cultratus* Linnaeus and *Cyprinus nasus* Linnaeus to be the respective type species of these genera. The only difference between the two cases is that it is convenient in the interests of stability to obey the rules in the case of *Nasus* and to invoke the Plenary Powers to suspend the rules in the case of *Culter* and I therefore support Dr. Myers's application.

This provides, I think an interesting test-case of the Commission's policy with regard to the weight to be given to the demands of stability.

6. Support received from the Committee on Zoological Nomenclature of the American Society of Ichthyologists and Herpetologists: On 16th July 1957 Dr. W. I. Follett, Chairman of the Committee on Zoological Nomenclature of the American Society of Ichthyologists and Herpetologists forwarded to the Office of the Commission the views of those members of that Committee

who had commented on the present case. The communication so received was as follows:—

I can now report that a majority of the members of this committee approve Professor Myers's request. Their comments are as follows:—

Robert R. Miller (University of Michigan, Ann Arbor):

The application is concisely and logically presented and is supported by recent actions of the Commission. Essentially the same view was presented for the genus *Culter* by Myers in 1940 (*Copeia* (No. 3): 199—201). I found myself in agreement with Myers's analysis then and still do. The application thus has my full approval.

James A. Peters (Brown University, Providence, Rhode Island):

This hardly calls for comment by me, since the opinion of the Commission has apparently eliminated the argument by placing full support on Dr. Myers's arguments. It might be desirable for our committee to express support of the concept of rigid interpretation of the expression "designation of a type species,", since obviously this is a desirable situation.

Hobart M. Smith (University of Illinois, Urbana):

On the basis solely of information given in Myers's article and in your letter, an approval of all requests by Myers seems fully justified.

W. I. Follett (California Academy of Sciences, San Francisco):

I approve of all subdivisions of Professor Myers's request as published. In my letter to the committee (October 8, 1956), I expressed the following considerations as seeming to fortify Professor Myers' position with regard to the genus *Culter*:

(1) He states (op cit.: 137) that it has been the practice of zoologists to assume that the expression "designate" a type, as used in Article 30 (a), should be construed as rigidly as the expression "select" a type, as used in Article 30(g). Fortunately since Professor Myers submitted his manuscript, this very point has been decided by the International Commission, in Declaration 22, which provides that "For the purposes of Rule (a) in Article 30 the expression 'designate a type species' is to be rigidly construed and is not to be held to cover a designation made in an ambiguous or qualified manner" (Opinions and Declarations Rendered by the International Commission on Zoological Nomenclature 12: xi).

- (2) Smith's argument, disapproved by Myers (loc. cit.), to the effect that Basilewsky did designate a type species by "indication" would appear eliminated by 1950, Bull. zool. Nomencl. 4:79, Conclusion 69 (2), which confines the use of the words "indicate" and "indication" to subdivisions (b), (c) and (d) of Article 30.
- 7. No Objection Received: No objection to the action proposed in the present case was received from any source.

III. THE DECISION TAKEN BY THE INTERNATIONAL COMMISSION ON ZOOLOGICAL NOMENCLATURE

- 8. Issue of Voting Paper V.P.(57)16: On 14th February 1957 a Voting Paper (V.P.(57)16) was issued in which the Members of the Commission were invited to vote either for, or against, "the proposal relating to the generic name *Culter* Basilewsky, 1855, and associated problems, as set out in Points (1) to (3) in paragraph 8 on page 138 of Volume 12 of the *Bulletin of Zoological Nomenclature*" [i.e. in the paragraph numbered as above in the paper reproduced in the first paragraph of the present *Opinion*].
- **9.** The Prescribed Voting Period: As the foregoing Voting Paper was issued under the Three-Month Rule, the Prescribed Voting Period closed on 14th May 1957.
- 10. Particulars of the Voting on Voting Paper V.P.(57)16: At the close of the Prescribed Voting Period, the state of the voting on Voting Paper V.P.(57)16 was as follows:—
 - (a) Affirmative Votes had been given by the following twenty-four (24) Commissioners (arranged in the order in which Votes were received):

Boschma; Mayr; Lemche; Hering; Prantl; Holthuis; Bonnet; Mertens; Dymond; Vokes; Bodenheimer; Bradley (J.C.); Key; Riley; Stoll; Esaki; do Amaral; Hemming; Kühnelt; Cabrera; Jaczewski; Tortonese; Sylvester-Bradley; Miller;

(b) Negative Votes:

None;

(c) Prevented from voting by the interruption of postal communications consequent upon political disturbances, one (1):

Hankó;

(d) Voting Papers not returned:

None.

- 11. Declaration of Result of Vote: On 16th May 1957, Mr. Hemming, Secretary to the International Commission, acting as Returning Officer for the Vote taken on Voting Paper V.P.(57)16, signed a Certificate that the Votes cast were as set out in paragraph 10 above and declaring that the proposal submitted in the foregoing Voting Paper had been duly adopted and that the decision so taken was the decision of the International Commission in the matter aforesaid.
- 12. Preparation of the Ruling given in the present "Opinion": On 5th January 1958 Mr. Hemming prepared the Ruling given in the present *Opinion* and at the same time signed a Certificate that the terms of that Ruling were in complete accord with those of the proposal approved by the International Commission in its Vote on Voting Paper V.P.(57)16.
- 13. Original References: The following are the original references for the generic and specific names placed on Official Lists and Official Indexes by the Ruling given in the present Opinion:—

alburnus, Culter, Basilewsky, 1855, Nouv. Mém. Soc. imp. Nat. Moscou 10: 236

Culter Basilewsky, 1855, Nouv. Mém. Soc. imp. Nat. Moscou 10: 236

Nasus Basilewsky, 1855, Nouv. Mém. Soc. imp. Nat. Moscou 10: 234

nasus, Cyprinus, Linnaeus, 1758, Syst. Nat. (ed. 10) 1:325

14. Selection of a type species for a nominal genus: The following is the reference for the selection of a type species for a nominal genus specified in the Ruling given in the present Opinion:—

For Culter Basilewsky, Bleeker (P.), 1863, Atlas ichthyol. Indes orient. néerland. 3:33

- **15.** Family-Group-Name Aspects: No family-group name problem arises in the present case, for both the genera concerned are currently placed in the family CYPRINIDAE.
- 16. Compliance with Prescribed Procedures: The prescribed procedures were duly complied with by the International Commission on Zoological Nomenclature in dealing with the present case, and the present *Opinion* is accordingly hereby rendered in the name of the said International Commission by the under-signed Francis Hemming, Secretary to the International Commission on Zoological Nomenclature, in virtue of all and every the powers conferred upon him in that behalf.
- 17. "Opinion" Number: The present *Opinion* shall be known as *Opinion* Five Hundred and Thirteen (513) of the International Commission on Zoological Nomenclature.

DONE in London, this Fifth day of January, Nineteen Hundred and Fifty-Eight.

Secretary to the International Commission on Zoological Nomenclature

FRANCIS HEMMING

OPINIONS AND DECLARATIONS RENDERED BY THE INTERNATIONAL COMMISSION ON ZOOLOGICAL NOMENCLATURE

Edited by

FRANCIS HEMMING, C.M.G., C.B.E. Secretary to the Commission

VOLUME 18. Part 18. Pp. 303-314

OPINION 514

Validation under the Plenary Powers of the generic name *Heteralocha* Cabanis, [1851] (Class Aves)



LONDON:

Printed by Order of the International Trust for Zoological Nomenclature and

Sold on behalf of the International Commission on Zoological Nomenclature by the International Trust at its Publications Office 41, Queen's Gate, London, S.W.7

1958

Price Eight Shillings

(All rights reserved)

INTERNATIONAL COMMISSION ON ZOOLOGICAL NOMENCLATURE

COMPOSITION AT THE TIME OF THE ADOPTION OF THE **RULING GIVEN IN OPINION 514**

The Officers of the Commission

Honorary Life President: Dr. Karl JORDAN (British Museum (Natural History), Zoological Museum, Tring. Herts., England)

President: Professor James Chester Bradley (Cornell University, Ithaca, N.Y., U.S.A.) (12th August 1953)

Vice-President: Senhor Dr. Afranio do Amaral (Sao Paulo, Brazil) (12th August 1953 Secretary: Mr. Francis Hemming (London, England) (27th July 1948)

The Members of the Commission

(Arranged in order of precedence by reference to date of election or of most recent re-election, as prescribed by the International Congress of Zoology)

Professor H. Boschma (Rijksmuseum van Natuurlijke Historie, Leiden, The Netherlands) (Ist January 1947)
Senor Dr. Angel Cabrera (La Plata, Argentina) (27th July 1948)

Mr. Francis Hemming (London, England) (27th July 1948) (Secretary)
Dr. Henning Lemche (Universitetets Zoologiske Museum, Copenhagen, Denmark) (27th

July 1948)
Professor Teiso Esaki (Kyushu University, Fukuoka, Japan) (17th April 1950)

Professor Pierre Bonnet (Université de Toulouse, France) (9th June 1950)
Mr. Norman Denbigh RILEY (British Museum (Natural History), London) (9th June 1950)
Professor Tadeusz Jaczewski (Institute of Zoology, Polish Academy of Sciences, Warsaw, Poland) (15th June 1950) Professor Robert Mertens (Natur-Museum u. Forschungs-Institut Senckenberg, Frankfurt

a.M., Germany) (5th July 1950)

Professor Erich Martin Herring (Zoologisches Museum der Humboldt-Universität zu Berlin, Germany) (5th July 1950)

Sephor Dr. Afrania da Assarti (50)

Senhor Dr. Afranio do Amaral (S. Paulo, Brazil) (12th August 1953) (Vice-President) Professor J. R. Dymond (University of Toronto, Toronto, Canada) (12th August 1953) Professor J. Chester Bradley (Cornell University, Ithaca, N.Y., U.S.A.) (12th August

Professor J. Chester Dradle; (Connection 1953) (President)
Professor Harold E. Vokes (University of Tulane, Department of Geology, New Orleans, Louistana, U.S.A.) (12th August 1953)
Professor Béla Hankó (Mezőgazdasági Muzeum, Budapest, Hungary) (12th August 1953)
Professor Béla Hankó (Mezőgazdasági Muzeum, Budapest, Hungary) (12th August 1953) Dr. Norman R. STOLL (Rockefeller Institute for Medical Research, New York, N.Y., U.S.A.) (12th August 1953)

Mr. P. C. Sylvester-Bradley (Sheffield University, Sheffield, England) (12th August 1953) Dr. L. B. Holthus (Rijksmuseum van Natuurlijke Historie, Leiden, The Netherlands) (12th August 1953)

Dr. K. H. L. Key (Commonwealth Scientific and Industrial Research Organisation, Canberra, A.C.T., Australia) (15th October 1954)
Dr. Alden H. Miller (Museum of Vertebrate Zoology, University of California, U.S.A.)

(29th October 1954)
Doc. Dr. Ferdinand Prantl (Národni Museum V Praze, Prague, Czechoslovakia) (30th

October 1954)
Professor Dr. Wilhelm Kühnelt (Zoologisches Institut der Universität, Vienna, Austria)
(6th November 1954)

Professor F. S. Bodenheimer (The Hebrew University, Jerusalem, Israel) (11th November 1954)

Professor Ernst Mayr (Museum of Comparative Zoology at Harvard College, Cambridge, Massachusetts, U.S.A.) (4th December 1954)
Professor Enrico Tortonese (Museo di Storia Naturale "G. Doria", Genova, Italy) (16th December 1954)

OPINION 514

VALIDATION UNDER THE PLENARY POWERS OF THE GENERIC NAME "HETERALOCHA" CABANIS, [1851] (CLASS AVES)

- **RULING**:—(1) The generic name *Neomorpha* Gould, 1837 (Class Aves), is hereby suppressed under the Plenary Powers for the purposes of the Law of Priority but not for those of the Law of Homonymy.
- (2) The under-mentioned generic name is hereby placed on the *Official List of Generic Names in Zoology* with the Name No. 1266:—
 - Heteralocha Cabanis, [1851], as validated under the Plenary Powers in (1) above (gender: feminine) (type species, by original designation: Neomorpha acutirostris Gould, 1837).
- (3) The under-mentioned specific name is hereby placed on the *Official List of Specific Names in Zoology* with the Name No. 1509:
 - acutirostris Gould, 1837, as published in the combination Neomorpha acutirostris (specific name of type species of Heteralocha Cabanis, [1851]).
- (4) The under-mentioned generic name is hereby placed on the Official Index of Rejected and Invalid Generic Names in Zoology with the Name No. 1155:—
 - Neomorpha Gould, 1837, as suppressed under the Plenary Powers in (1) above.

I. THE STATEMENT OF THE CASE

On 3rd October 1952 Dr. C. A. Fleming (Department of Scientific and Industrial Research, Geological Survey Office, Wellington, New Zealand) addressed a preliminary communication to the Office of the Commission on the question of the possible use of the Plenary Powers for the purpose of validating the generic name Heteralocha Cabanis, [1851], the name currently in use for a New Zealand bird noted for the extreme sexual dimorphism of its bill. Various circumstances combined for some time to prevent any progress being made with this case but as the result of correspondence between the Secretary and the applicant in the winter of 1955/1956 the following definitive application was submitted to the Commission by Dr. Fleming on 2nd March 1956:—

Proposed validation of the generic name "Heteralocha" Cabanis, [1851], for the New Zealand Huia (Class Aves)

By C. A. FLEMING

(Department of Scientific and Industrial Research, Wellington, New Zealand)

The purpose of the present application is to ask the International Commission on Zoological Nomenclature to use its Plenary Powers to conserve the generic name *Heteralocha* Cabanis, [1851], for the New Zealand Huia (Class Aves). The facts of this case are set out in the following paragraphs.

2. Gould published the generic name Neomorpha twice in the year 1837. The first of these occasions was in January of that year (Syn. Birds Austr. (1): pl. xi), the second in the month of June (Proc. zool. Soc. Lond. 4 (48): 144). In the Synopsis he applied this name to two new nominal species which he named Neomorpha acutirostris and Neomorpha crassirostris respectively. It was soon discovered that these nominal species represented the female and male respectively of the Huia, a New Zealand bird noted for the extreme sexual dimorphism of its bill. This species is now known by the specific name acutirostris Gould, the names crassirostris Gould, 1837 and gouldi Gould, 1841, ex Gray, being treated as junior synonyms.

- 3. In 1851 Cabanis proposed the new generic name *Heteralocha* (Cabanis, [1851], *in* Cabanis & Heine, *Mus. Hein.* 1:218) as a substitute for *Neomorpha* Gould, 1837, at the same time designating *Neomorpha acutirostris* Gould as type species.
- 4. Most subsequent authors have erroneously considered *Neomorpha* Gould, 1837, to be a junior homonym of *Neomorphus* Gloger, 1827 (*Notizen* (Froriep) 16: 278), and the name *Heteralocha acutirostris* (Gould, 1837) has been in general use for the Huia since 1865 not only in ornithological literature but also in general works on biology.
- 5. Under Article 34 of the *Règles* as amended by the Fourteenth International Congress of Zoology, Copenhagen 1953 (1953, *Copenhagen Decisions zool. Nomencl.*: 78, Decision 152) the names *Neomorpha* Gould and *Neomorphus* Gloger are not homonyms of one another and in consequence the first of these names should now replace the name *Heteralocha* Cabanis. The name for the Huia would thus revert to *Neomorpha acutirostris* Gould.
- 6. It is submitted that the application of the normal provisions of the *Règles* would result in an undesirable change in the name of a well-known bird, which ought to be avoided. The name *Neomorpha* was used by Gould, Gray and others from 1837 to 1855 and in the present century by Mathews & Iredale (1913, *Ibis* 1913: 451). *Heteralocha*, on the other hand, has been used in successive revisions of the New Zealand avifauna by Buller (1865; 1872; 1882; 1888; 1905), Finsch (1872; 1874; 1888), Bowdler-Sharpe (1875), Oliver (1930) and Mathews (1930; 1946). The name *Heteralocha* has also been widely used in general works.
- 7. As convenor of the Checklist Committee of the Ornithological Society of New Zealand, I am authorised to record the unanimous opinion of the Committee that stability in nomenclature would be better served by the retention of the name *Heteralocha* than by the re-introduction of the name *Neomorpha*.
- 8. No family-group-name problem arises in the present case, the genus *Heterolocha* Cabanis being placed either in the family CALLAEIDAE or in the family PHILESTURNIDAE.
- 9. In the light of the considerations set out in the present paper, I apply to the International Commission on Zoological Nomenclature:—
 - (1) to use its Plenary Powers to suppress the under-mentioned generic name for the purposes of the Law of Priority but not for those of the Law of Homonymy:—Neomorpha Gould, 1837;

- (2) to place the under-mentioned generic name on the Official List of Generic Names in Zoology:—Heteralocha Cabanis, [1851] (gender: feminine) (type species, by original designation: Neomorpha acutirostris Gould, 1837);
- (3) to place the under-mentioned specific name on the Official List of Specific Names in Zoology:—acutirostris Gould, 1837, as published in the combination Neomorpha acutirostris (specific name of type species of Heteralocha Cabanis, [1851]);
- (4) to place on the Official Index of Rejected and Invalid Generic Names in Zoology the generic name specified in (1) above as there suppressed under the Plenary Powers.

II. THE SUBSEQUENT HISTORY OF THE CASE

- **2.** Registration of the present application: Upon the receipt of Dr. Fleming's preliminary communication, the question of the possible use of the Plenary Powers to validate the generic name *Heteralocha* Cabanis, [1851], was allotted the Registered Number Z.N.(S.) 720.
- 3. Support received prior to publication: At the time of the communication to the office of the Commission of the preliminary statement referred to in the first paragraph of the present *Opinion* Dr. Fleming addressed a note on this subject to the serial publication *Ibis*. This led to the communication to the Office of the Commission of notes of support for the action proposed from six ornithologists (New Zealand, five; U.S.A., one). The communications so received are reproduced in the immediately following paragraphs.
- 4. Support received from Ernst Mayr (Museum of Comparative Zoology at Harvard College, Cambridge, Mass., U.S.A.): On 27th October 1952 Professor Ernst Mayr (Museum of Comparative Zoology at Harvard College, Cambridge, Mass., U.S.A.) addressed the following letter of support to the Office of the Commission (Mayr, 1956, Bull. zool. Nomencl. 12:141):

I believe that the Ornithological Society of New Zealand has submitted a petition to the International Commission to place the name *Heteralocha* on the *Official List* of valid names, and to place the name *Neomorpha* on the *Official Index* of rejected names.

I wholeheartedly endorse this proposal. The name *Heteralocha* has been used for nearly a century not only in the ornithological literature, but in the biological as well. This is the genus with the remarkable sexual dimorphism of bill structure, and for this unique property it has been illustrated in numerous text-books, and treatises on evolution and ecology. Discarding the well-known name *Heteralocha* would only lead to confusion.

5. Support received from E. G. Turbott (Auckland War Memorial Museum, Newmarket, New Zealand): On 5th March 1956 Dr. E. G. Turbott (Auckland War Memorial Museum, Newmarket, New Zealand) addressed the following note of support to the Office of the Commission (Turbott, 1956, Bull. zool. Nomencl. 12:141):—

I should like to record my support for the application of Fleming that the Commission should use its Plenary Powers to set aside the generic name *Neomorpha* Gould, 1837, in favour of the name *Heteralocha* Cabanis, [1851], for the New Zealand bird known as the Huia. *Heteralocha* has now been in general use for some 90 years.

6. Support received from R. B. Sibson (King's College, Auckland, New Zealand): On 6th March 1956 Dr. R. B. Sibson (King's College, Auckland, New Zealand) addressed the following note of support to the Office of the Commission (Sibson, 1956, Bull. zool. Nomencl. 12:141):—

I should like to record my support for the application of Fleming that the Commission should use its Plenary Powers to set aside the generic name *Neomorpha* Gould, 1837, in favour of the name *Heteralocha* Cabanis, [1851], for the New Zealand bird known as the Huia.

Dr. Fleming is especially qualified to speak on this matter. He is an authority on the taxonomy of New Zealand birds and was convener of the New Zealand Checklist Committee.

7. Support received from B. J. Marples (Otago University, New Zealand): On 6th March 1956 Professor B. J. Marples (Otago University, New Zealand) addressed the following note of support to the Office of the Commission (Marples, 1956, Bull. zool. Nomencl. 12: 142):—

I should like to record my support for the application of Fleming that the Commission should use its Plenary Powers to set aside the generic name *Neomorpha* Gould, 1837, in favour of the name *Heteralocha* Cabanis, [1851], for the New Zealand bird known as the Huia.

8. Support received from W. R. B. Oliver (Seatoun, Wellington, New Zealand): On 12th March 1956 Mr. W. R. B. Oliver (Seatoun, Wellington, New Zealand) addressed the following letter of support to the Office of the Commission (Oliver, 1956, Bull. zool. Nomencl. 12: 142):—

I should like to record my support for the application of Fleming that the Commission should use its Plenary Powers to set aside the generic name *Neomorpha* Gould, 1837, in favour of the name *Heteralocha* Cabanis, [1851], for the New Zealand bird known as the Huia.

As the name *Heteralocha* has been in general use for about 100 years it would cause a good deal of confusion to supersede it by *Neomorpha*. I have adopted *Heteralocha* in the last edition (1955) of my book on *New Zealand Birds*.

9. Support received from R. A. Falla (Dominion Museum, Wellington, New Zealand): On 12th March 1956 Dr. R. A. Falla (Dominion Museum, Wellington, New Zealand) addressed the following note to the Office of the Commission in support of the present case (Falla, 1956, Bull. zool. Nomencl. 12: 142):—

I should like to record my support for the application of Fleming that the Commission should use its Plenary Powers to set aside the generic name *Neomorpha* Gould, 1837, in favour of the name *Heteralocha* Cabanis, [1851], for the New Zealand bird known as the Huia.

10. Publication of the present application: The present application was sent to the printer on 20th April 1956 and was published on 20th July of that year in Part 5 of Volume 12 of the *Bulletin*

of Zoological Nomenclature (Fleming, 1956, Bull. zool. Nomencl. 12:139—140). The seven communications in support of the present application received prior to its publication were published simultaneously therewith on the pages severally specified in paragraphs 3 to 9 above.

- 11. Issue of Public Notices: Under the revised procedure prescribed by the Thirteenth International Congress of Zoology, Paris, 1948 (1950, Bull. zool. Nomencl. 4:51—56), Public Notice of the possible use by the International Commission on Zoological Nomenclature of its Plenary Powers in the present case was given on 20th July 1956 (a) in Part 5 of Volume 12 of the Bulletin of Zoological Nomenclature (the Part in which Dr. Fleming's application was published) and (b) to the other prescribed serial publications. In addition, such Notice was given to four general zoological serial publications and to twelve ornithological serials in various parts of the world.
- 12. Support received after publication from Dean Amadon (The American Museum of Natural History, New York): After publication the comments previously received on this case (paragraphs 4—9 above) were supplemented by one further communication. This was the following letter dated 21st August 1956 in which Dr. Dean Amadon (The American Museum of Natural History, New York) intimated his support for the action recommended by Dr. Fleming (Amadon, 1956, Bull. zool. Nomencl. 12:318):—

I am writing to express my approval of two applications to stabilize certain names in ornithology now before the Commission. One of these, submitted by Dr. C. A. Fleming, seeks to retain the generic name *Heteralocha* for the unique New Zealand Bird commonly known as *huia*. I agree with Dr. Fleming and those who have supported his motion that this species of bird is so often mentioned in general biological literature that it would be extremely unfortunate if the scientific name were changed. For this reason if for no other, the name *Heteralocha* should be retained.

13. No Objection Received: No objection to the action proposed in the present case was received from any source.

III. THE DECISION TAKEN BY THE INTERNATIONAL COMMISSION ON ZOOLOGICAL NOMENCLATURE

- **14.** Issue of Voting Paper V.P.(57)17: On 15th February 1957 a Voting Paper (V.P.(57)17) was issued in which the Members of the Commission were invited to vote either for, or against, "the proposal relating to the generic name *Heteralocha* Cabanis, [1851] (Class Aves), as set out in Points (1) to (4) in paragraph 9 on page 140 of Volume 12 of the *Bulletin of Zoological Nomenclature*" [i.e. in the paragraph numbered as above in the application reproduced in the first paragraph of the present *Opinion*].
- **15.** The Prescribed Voting Period: As the foregoing Voting Paper was issued under the Three-Month Rule, the Prescribed Voting Period closed on 15th May 1957.
- 16. Particulars of the Voting on Voting Paper V.P.(57)17: At the close of the Prescribed Voting Period, the state of the voting on Voting Paper V.P.(57)17 was as follows:—
 - (a) Affirmative Votes had been given by the following twenty-three (23) Commissioners (arranged in the order in which Votes were received):

Boschma; Mayr; Lemche; Hering; Prantl; Holthuis; Bonnet; Mertens; Dymond; Vokes; Bodenheimer; Bradley (J.C.); Key; Riley; Stoll; Esaki; do Amaral; Hemming; Kühnelt; Jaczewski; Tortonese; Sylvester-Bradley; Miller;

- (b) Negative Votes, one (1): Cabrera;
- (c) Prevented from voting by the interruption of postal communications consequent upon political disturbances, one (1):

Hankó;

(d) Voting Papers not returned:

None.

- 17. Declaration of Result of Vote: On 16th May 1957, Mr. Hemming, Secretary to the International Commission, acting as Returning Officer for the Vote taken on Voting Paper V.P.(57)17, signed a Certificate that the Votes cast were as set out in paragraph 16 above and declaring that the proposal submitted in the foregoing Voting Paper and been duly adopted and that the decision so taken was the decision of the International Commission in the matter aforesaid.
- 18. Preparation of the Ruling given in the present "Opinion": On 5th January 1958 Mr. Hemming prepared the Ruling given in the present *Opinion* and at the same time signed a Certificate that the terms of that Ruling were in complete accord with those of the proposal approved by the International Commission in its Vote on Voting Paper V.P.(57)17.
- 19. Original References: The following are the original references for the generic and specific names placed on Official Lists and Official Indexes by the Ruling given in the present Opinion:—
- acutirostris, Neomorpha, Gould, January 1837, Syn. Birds Austr. (1): pl. xi [also id., June 1837, Proc. zool. Soc. Lond. 4 (48): 144]
- Heteralocha Cabanis, [1851], in Cabanis & Heine, Mus. Hein. 1:218
- Neomorpha Gould, January 1837, Syn. Birds Austr. (1): pl. xi [also id., June 1837, Proc. zool. Soc. Lond. 4 (48): 144]
- **20. Family-Group-Name Aspects:** No family-group-name problem arises in the present case, the genus *Heteralocha* Cabanis being currently placed in the family PHILESTURNIDAE.
- 21. Compliance with Prescribed Procedures: The prescribed procedures were duly complied with by the International Commission on Zoological Nomenclature in dealing with the

present case, and the present *Opinion* is accordingly hereby rendered in the name of the said International Commission by the under-signed Francis Hemming, Secretary to the International Commission on Zoological Nomenclature, in virtue of all and every the powers conferred upon him in that behalf.

22. "Opinion" Number: The present *Opinion* shall be known as *Opinion* Five Hundred and Fourteen (514) of the International Commission on Zoological Nomenclature.

DONE in London, this Fifth day of January, Nineteen Hundred and Fifty-Eight.

Secretary to the International Commission on Zoological Nomenclature

FRANCIS HEMMING

OPINIONS AND DECLARATIONS RENDERED BY THE INTERNATIONAL COMMISSION ON ZOOLOGICAL NOMENCLATURE

Edited by

FRANCIS HEMMING, C.M.G., C.B.E. Secretary to the Commission

VOLUME 18. Part 20. Pp. 315-328

OPINION 515

Validation under the Plenary Powers of the generic name Aurelia as from Lamarck, 1816 (Class Scyphozoa)



LONDON:

Printed by Order of the International Trust for Zoological Nomenclature and

anu

Sold on behalf of the International Commission on Zoological Nomenclature by the International Trust at its Publications Office 41, Queen's Gate, London, S.W.7

1958

Price Nine Shillings and Sixpence

(All rights reserved)

INTERNATIONAL COMMISSION ON ZOOLOGICAL NOMENCLATURE

COMPOSITION AT THE TIME OF THE ADOPTION OF THE **RULING GIVEN IN OPINION 515**

The Officers of the Commission

Honorary Life President: Dr. Karl JORDAN (British Museum (Natural History). Zoological Museum, Tring, Herts., England)

President: Professor James Chester Bradley (Cornell University, Ithaca, N.Y., U.S.A.) (12th August 1953)

Vice-President: Senhor Dr. Afranio do AMARAL (Sao Paulo, Brazil) (12th August 1953) Secretary: Mr. Francis Hemming (London, England) (27th July 1948)

The Members of the Commission В.

(Arranged in order of precedence by reference to date of election or of most recent re-election, as prescribed by the International Congress of Zoology)

Professor H. Boschma (Rijksmuseum van Natuurlijke Historie, Leiden, The Netherlands) (1st January 1947)
Senor Dr. Angel Cabrera (La Plata, Argentina) (27th July 1948)
Mr. Francis Hemming (London, England) (27th July 1948) (Secretary)

Dr. Henning Lemche (Universitetets Zoologiske Museum, Copenhagen, Denmark) (27th July 1948)
Professor Teiso Esaki (Kyushu University, Fukuoka, Japan) (17th April 1950)
Professor Pierre Bonnet (Université de Toulouse, France) (9th June 1950)
Mr. Norman Denbigh Riley (British Museum (Natural History), London) (9th June 1950)

Professor Tadeusz Jaczewski (Institute of Zoology, Polish Academy of Sciences, Warsaw, Poland) (15th June 1950)
Professor Robert Merrens (Natur-Museum u. Forschungs-Institut Senckenberg, Frankfurt

a.M., Germany) (5th July 1950)
Professor Erich Martin Hering (Zoologisches Museum der Humboldt-Universität zu Berlin, Germany) (5th July 1950)
Sephor Dr. Afrons de Astrono de States (2000)

Berlin, Germany) (5th July 1950)
Senhor Dr. Afranio do Amaral (S. Paulo, Brazil) (12th August 1953) (Vice-President)
Professor J. R. Dymond (University of Toronto, Toronto, Canada) (12th August 1953)
Professor J. Chester Bradley (Cornell University, Ithaca, N.Y., U.S.A.) (12th August 1953) (President)
Professor Harold E. Vokes (University of Tulane, Department of Geology, New Orleans, Louisiana, U.S.A.) (12th August 1953)
Professor Béla Hankó (Mezőgazdasági Muzeum, Budapest, Hungary) (12th August 1953)
Dr. Norman R. Stoll (Rockefeller Institute for Medical Research, New York, N.Y., U.S.A.) (12th August 1953)

U.S.A.) (12th August 1953)

Mr. P. C. Sylvester-Bradley (Sheffield University, Sheffield, England) (12th August 1953)
Dr. L. B. Holthuis (Rijksmuseum van Natuurlijke Historie, Leiden, The Netherlands) (12th August 1953)

Dr. K. H. L. Key (Commonwealth Scientific and Industrial Research Organisation, Canberra, A.C.T., Australia) (15th October 1954)
 Dr. Alden H. Miller (Museum of Vertebrate Zoology, University of California, U.S.A.)

(29th October 1954)
Doc. Dr. Ferdinand Prantl (Národni Museum V Praze, Prague, Czechoslovakia) (30th

October 1954)
Professor Dr. Wilhelm Kühnelt (Zoologisches Institut der Universität, Vienna, Austria) (6th November 1954)

(The Helsen University Jerusalem, Israel) (11th November

Professor F. S. Bodenheimer (The Hebrew University, Jerusalem, Israel) (11th November 1954)

Professor Ernst Mayr (Museum of Comparative Zoology at Harvard College, Cambridge, Massachusetts, U.S.A.) (4th December 1954)
Professor Enrico Tortonese (Museo di Storia Naturale "G. Doria", Genova, Italy)

(16th December 1954)

OPINION 515

VALIDATION UNDER THE PLENARY POWERS OF THE GENERIC NAME "AURELIA" AS FROM LAMARCK, 1816 (CLASS SCYPHOZOA)

RULING:—(1) The following action is hereby taken under the Plenary Powers:—

- (a) The generic name Aurellia Péron & Lesueur, [1810], is hereby suppressed for the purposes of the Law of Priority but not for those of the Law of Homonymy.
- (b) The generic name Aurelia is hereby validated as from Lamarck, 1816, with Medusa aurita Linnaeus, 1758, as type species.
- (2) The under-mentioned generic name is hereby placed on the *Official List of Generic Names in Zoology* with the Name No. 1268:—
 - Aurelia Lamarck, 1816, as validated under the Plenary Powers in (1)(b) above (gender: feminine) (type species, by designation under the Plenary Powers in (1)(b) above: Medusa aurita Linnaeus, 1758)
- (3) The under-mentioned specific name is hereby placed on the *Official List of Specific Names in Zoology* with the Name No. 1512:
 - aurita Linnaeus, 1758, as published in the combination Medusa aurita (specific name of type species of Aurelia Lamarck, 1816)

- (4) The under-mentioned generic name is hereby placed on the Official Index of Rejected and Invalid Generic Names in Zoology with the Name No. 1157:—
 - Aurellia Péron & Lesueur, [1810], as suppressed under the Plenary Powers in (1)(a) above
- (5) The under-mentioned specific name is hereby placed on the *Official Index of Rejected and Invalid Specific Names in Zoology* with the Name No. 519:
 - rosea Péron & Lesueur, [1810], as published in the combination Aurellia rosea (a junior objective synonym of aurita Linnaeus, 1758, as published in the combination Medusa aurita)
- (6) The under-mentioned family-group name is hereby placed on the Official List of Family-Group Names in Zoology with the Name No. 222:—
 - AURELIIDAE (correction of AURELIDAE) Agassiz (J.L.R.), 1862 (type genus : Aurelia Lamarck, 1816)
- (7) The under-mentioned family-group name is hereby placed on the Official Index of Rejected and Invalid Family-Group Names in Zoology with the Name No. 262:—
 - AURELIDAE Agassiz (J.L.R.), 1862 (type genus *Aurelia* Lamarck, 1816) (an Invalid Original Spelling for AURELIDAE)

I. THE STATEMENT OF THE CASE

On 18th October 1955, Dr. W. J. Rees (British Museum (Natural History), London) addressed a preliminary enquiry to the Office

of the Commission on the question of the possible use of the Plenary Powers for the purpose of preserving the well-known generic name Aurelia Lamarck, 1816 (Class Scyphozoa) which had recently been rejected by certain workers in favour of the previously overlooked name Aurellia Péron & Lesueur, [1810]. Following correspondence between the Secretary and Dr. Rees and after consultation also with Professor L. W. Grensted, Consulting Classical Adviser to the International Commission, the following definitive application was submitted by Dr. Rees on 17th January 1956:—

Proposed validation under the Plenary Powers of the generic name "Aurelia" Lamarck, 1816 (Class Scyphozoa)

By W. J. REES, D.Sc.

(British Museum (Natural History), London)

The object of the present application is to ask the International Commission to use its Plenary Powers to validate the generic name Aurelia Lamarck, 1816. This name is known to every zoologist and the genus so named appears in every textbook as a typical genus. The need for preventing the disappearance of this name on technical nomenclatorial grounds is therefore self-evident. The facts of this case are set out briefly in the following paragraphs.

- 2. In 1816 (Hist. nat. Anim. sans Vertèbr. 2:512—514) Lamarck published the generic name Aurelia, placing eight nominal species in the genus so named. The third of these species, which Lamarck called by the vernacular (French) name "Aurélie rose" and by the Latin name Aurelia aurita (= Medusa aurita Linnaeus, 1758, Syst. Nat. (ed. 10) 1:660), the Common Jellyfish of European waters. This species is always treated as being representative of this genus.
- 3. The difficulty in connection with this name is that, as Lamarck himself clearly shows, it was not published by him as a new name, being only a variant spelling with a single "1" for the name Aurellia (with a double "1") published by Péron & Lesueur six years earlier ([1810], Ann. Mus. Hist. nat. Paris 14(83): 357). The third of the species placed by these authors in this genus was given by them the Latin name Aurellia rosea and the vernacular (French) name "Aurellie rose" (: 358). This species was stated to be the same as "Medusa aurita Müller, Zool. Dan. Icon. tab. LXXVI, fig. 1—3, et tabl.

LXXVII, fig. 1—5 (1780)", i.e. Medusa aurita Linnaeus, 1758. This generic name lay dormant and neglected for exactly one hundred years, for it was not until 1910 (Medusae of the World 3: 604, 618) that Mayer drew attention to it and substituted it for Aurelia Lamarck, 1816.

- 4. Since, as explained in the preceding paragraph, there is nomenclatorially no such generic name as Aurelia Lamarck as contrasted with Aurelia Péron & Lesueur, Lamarck's variant Aurelia does not possess a type species and no type species can be assigned to it unless and until the name Aurelia is validated by the Commission under its Plenary Powers. The obvious choice as the type species of Aurelia is Medusa aurita Linnaeus, the species for which this name is always used.
- 5. The change in the spelling of this generic name from the longestablished Aurelia to the barbarous and long-neglected Aurellia—as also the change in the attribution of this name from Lamarck to Péron & Lesueur—was fully justified under the normal provisions of the Règles and, as such, it has been followed in the last year or two by a few workers who were anxious to comply with the Règles but who did not realise that in a case such as the present it is both possible and desirable to seek relief through applying to the International Commission for the use of its Plenary Powers to preserve a well-known and longestablished name. Fortunately, in the present case no harm has been done by the delay in bringing this matter to the attention of the Commission, for despite Mayer's paper the spelling Aurelia has held its own, as also has the attribution of this name to Lamarck. very desirable that this name should be placed beyond the reach of further ambiguity and it is for this reason that the International Commission is now asked to suppress the name Aurellia Péron & Lesueur for the purposes of the Law of Priority, though not for those of the Law of Homonymy, thus validating the name Aurelia Lamarck.
- 6. Mayer in his *Medusae of the World* treated this genus as the type genus of a family-group taxon Aurelinae, which he treated as a subfamily of the family ulmaridae. The above family name dates back to Agassiz (J.L.R.) (1862, *Contrib. nat. Hist. U.S.A.*, Monogr. 2 (Part 3): v, 80, 159), by whom it was used in the form Aurelidae (i.e. as the name for a taxon of full family rank).
- 7. In correspondence on this subject Mr. Hemming took the view that the spelling AURELIDAE was defective, the correct spelling being AURELIDAE (or AURELINAE, according to the view taken as to the status of the family-group taxon so named). In order to dispose of any doubts on this subject Professor L. W. Grensted, the Consulting Classical Adviser to the International Commission, was asked to

furnish a Report on the question of the correct form for this name. The Report, dated 10th January 1956, furnished by Professor Grensted in response to the foregoing invitation, was as follows:—

The word aurelia is the feminine form of an old Italian word aurelia and was originally used for what is now a chrysalis $(=\chi_{\rho\nu\sigma\alpha}\lambda\lambda i_s)$. There are classical names (e.g. Marcus Aurelius) behind this word but it is not itself a classical Latin word. In any case it would be feminine in gender. The subfamily name cannot be anything except AURELIINAE. It is a perfectly normal case of a first declension noun in "-ia".

- 8. It is evident in the circumstances that the form in which this family-group name should now be placed on the *Official List* is the corrected form and that the Invalid Original Spelling AURELIDAE must be placed on the *Official Index of Rejected and Invalid Names in Zoology*.
- 9. For the reasons set out in the present application, the International Commission on Zoological Nomenclature is asked:—
 - (1) to use its Plenary Powers:—
 - (a) to suppress the generic name Aurellia Péron & Lesueur, [1810], for the purposes of the Law of Priority but not for those of the Law of Homonymy;
 - (b) to validate the generic name Aurelia as from Lamarck, 1816 with Medusa aurita Linnaeus, 1758, as type species;
 - (2) to place the under-mentioned generic name on the Official List of Generic Names in Zoology: Aurelia Lamarck, 1816, as validated under the Plenary Powers under (1)(b) above (gender: feminine) (type species, by designation under the Plenary Powers under (1)(b) above): Medusa aurita Linnaeus, 1758;
 - (3) to place the under-mentioned specific name on the Official List of Specific Names in Zoology: aurita Linnaeus, 1758, as published in the combination Medusa aurita (specific name of type species of Aurelia Lamarck, 1816);
 - (4) to place on the Official Index of Rejected and Invalid Generic Names in Zoology the generic name specified in (1)(a) above as there suppressed under the Plenary Powers;
 - (5) to place the under-mentioned specific name on the Official Index of Rejected and Invalid Specific Names in Zoology: rosea Péron & Lesueur, [1810], as published in the combination Aurellia rosea (a junior objective synonym of aurita Linnaeus, 1758, as published in the combination Medusa aurita);

- (6) to place the under-mentioned family-group name on the Official List of Family-Group Names in Zoology: AURELIDAE (correction of AURELIDAE) Agassiz (J.L.R.), 1862 (type genus: Aurelia Lamarck, 1816);
- (7) to place the under-mentioned family-group name on the Official Index of Rejected and Invalid Family-Group Names in Zoology:
 AURELIDAE Agassiz (J.L.R.), 1862 (an Invalid Original Spelling for AURELIDAE).

II. THE SUBSEQUENT HISTORY OF THE CASE

- **2.** Registration of the present application: Upon the receipt of Dr. Rees's preliminary enquiry, the question of the possible validation of the generic name *Aurelia* as from Lamarck, 1816 (Class Scyphozoa) was allotted the Registered No. Z.N.(S.) 1032.
- **3.** Publication of the present application: The present application was sent to the printer on 23rd October 1956 and was published on 25th January 1957 in Part 1 of Volume 13 of the *Bulletin of Zoological Nomenclature* (Rees, 1957, *Bull. zool. Nomencl.* **13**: 26—28).
- **4.** Issue of Public Notices: Under the revised procedure prescribed by the Thirteenth International Congress of Zoology, Paris, 1948 (1950, Bull. zool. Nomencl. **4**: 51—56), Public Notice of the possible use by the International Commission on Zoological Nomenclature of its Plenary Powers in the present case was given on 25th January 1957 (a) in Part 1 of Volume 13 of the Bulletin of Zoological Nomenclature (the Part in which Dr. Rees's application was published) and (b) to the other prescribed serial publications. In addition, such Notice was given to four general zoological serial publications.
- 5. Comments Received: The publication of the present application and the issue of Public Notices in regard thereto elicited communications from five specialists (Brazil, one; Denmark,

one; United Kingdom, two; U.S.A., one) all of whom intimated their support for the action proposed in this case. In addition, shortly before publication, one of the specialists who had recently reintroduced the spelling *Aurellia* in place of that of *Aurelia* addressed a letter to the Office of the Commission in which he explained that he had done so partly because he had thought it best to follow Mayer (1910) by whom the above spelling had been used and partly because he believed that this spelling was correct. The communications so received are reproduced in the immediately following paragraphs.

6. Support from P. L. Kramp (Zoologisk Museum, Copenhagen): On 21st March 1957, Dr. Rees transmitted the following note of support, dated 13th March, from Dr. P. L. Kramp (Zoologisk Museum, Copenhagen) (Kramp, 1957, Bull. zool. Nomencl. 13: 153):—

I quite agree with you in this matter and hope that the Plenary Powers will be used.

7. Support from F. S. Russell (Marine Biological Association of the United Kingdom, Plymouth): On 21st March 1957, Dr. Rees transmitted the following note of support, dated 5th March 1957, from Dr. F. S. Russell (Marine Biological Association of the United Kingdom, Plymouth) (Russell, 1957, Bull. zool. Nomencl. 13: 103):—

I have received from Dr. W. J. Rees a reprint of his proposal for the validation of the generic name Aurelia Lamarck. I have made a special study of medusae now for a great many years, and I should like to support very strongly Dr. Rees's proposal that the name Aurellia Péron & Lesueur should be suppressed, with the resulting alterations of the spelling of the family name.

8. Support received from James Horan (Marine Laboratory, Aberdeen): On 1st April 1957, Dr. James Horan (Marine Laboratory, Aberdeen) addressed the following note of support to the Office of the Commission (Horan, 1957, Bull. zool. Nomencl. 13:153):—

I write to give my emphatic support to the application submitted by Dr. W. J. Rees to validate the generic name Aurelia Lamarck, 1816.

9. Support received from C. Hand (Department of Zoology, University of California, U.S.A.): On 9th April 1957, Dr. C. Hand (Department of Zoology, University of California, U.S.A.) addressed the following letter of support to the Office of the Commission (Hand, 1957, Bull. zool. Nomencl. 13:153):—

I would like to urge the adoption of the suggestion put forth by Dr. Rees. This seems completely desirable to me since to return to the Aurellia of Péron and Lesueur is to return to an ill-formed name which, it appears, Lamarck properly corrected. That the type species be the Medusa aurita of Linnaeus seems obvious. Also since the two generic names Aurellia and Aurelia are so similar, it is more proper certainly to use the best formed of the pair, since it will only be the specialist who concerns himself here anyhow. To insist upon the application of the Law of Priority will necessitate the use of a very unfamiliar name for the well-known aurita. I therefore recommend the Commission to accept the arguments of Dr. Rees and use its Plenary Powers as he has suggested in items 1 to 7 of part 9 on page 28.

10. Support received from M. Vannucci (Instituto Oceanografico, Universidade de Sao Paulo, Brasil): On 29th April 1957, Dr. M. Vannucci (Instituto Oceanografico, Universidade de Sao Paulo, Brasil) addressed the following letter of support to the Office of the Commission (Vannucci, 1957, Bull. zool. Nomencl. 13: 199):—

It seems to me advisable to validate the name Aurelia Lamarck, 1816, and suppress Aurellia Péron & Lesueur, [1810]; the generic name Aurelia Lamarck, 1816, and the specific name aurita Linnaeus, 1758, as in the combination Medusa aurita, should be placed on the Official Lists of Generic and Specific Names in Zoology, respectively; the generic name Aurellia should be rejected; the specific name rosea Péron & Lesueur, [1810], as in the combination Aurellia rosea, should be considered a synonym of A. aurita Linnaeus, 1758, as in the abovementioned combination Medusa aurita; the family-group name to be placed on the Official List of Family-Group Names in Zoology should be AURELIIDAE Agassiz, 1862; type genus: Aurelia Lamarck, 1816; the family-group name AURELIDAE should be rejected.

11. Comment by G. A. Horridge (Gatty Marine Laboratory, The University, St. Andrews, Scotland): On 28th November 1956, Dr. G. A. Horridge (Gatty Marine Laboratory, The University,

St. Andrews, Scotland) sent the following comment to the Office of the Commission in regard to the present case:—

It is quite possible that my recent publications using the "II" Aurellia have had some influence on the initiation of an application for the acceptance of the above name in its accustomed form with a single "1". Accordingly, I should like to make known my reasons for using the original "II" spelling. These were twofold. First in his comprehensive Medusae of the World A. G. Mayer, (1910) shows the synonymy and the history of the genus and concludes that the double "II" form (Péron & Lesueur, [1810]) stands in precedence to the single form of Lamarck, 1816. Secondly, Bullock (Journal of Comp. Cell. Physiol. for 1943) uses Aurellia and he has a footnote which says that a personal communication from Bigelow confirms the double "II" form as correct. There are also other recent authors who follow Mayer's work rather than those of the nineteenth century scholars Haekel and Lamarck, e.g. Verwey (1942, Arch. néerl. Zool. 6); and also Maaden (H. van der) (1942, Arch. néerl. Zool. 6).

When it became necessary to decide on one form or the other it seemed that the tide was turning towards the original and double "ll" form as set out by Mayer in the most recent monograph. The use of the word "outlandish" does not seem justified although most textbooks use the single "l" form derived from nineteenth century workers who followed Lamarck.

III. THE DECISION TAKEN BY THE INTERNATIONAL COMMISSION ON ZOOLOGICAL NOMENCLATURE

- 12. Issue of Voting Paper V.P.(57)50: On 31st July 1957, a Voting Paper (V.P.(57)50) was issued in which the Members of the Commission were invited to vote either for, or against, "the proposal relating to the generic name Aurelia Lamarck, 1816, as set out in Points (1) to (7) in paragraph 9 on page 28 of Volume 13 of the Bulletin of Zoological Nomenclature" [i.e. in the paragraph numbered as above in the paper reproduced in the first paragraph of the present Opinion].
- 13. The Prescribed Voting Period: As the foregoing Voting Paper was issued under the Three-Month Rule, the Prescribed Voting Period closed on 31st October, 1957.

- 14. Particulars of the Voting on Voting Paper V.P.(57)50: At the close of the Prescribed Voting Period, the state of the voting on Voting Paper V.P.(57)50 was as follows:—
 - (a) Affirmative Votes had been given by the following twentyfour (24) Commissioners (arranged in the order in which Votes were received):

Bodenheimer; Holthuis; Mayr; Hering; Mertens; Lemche; Hankó; Key; Vokes; Dymond; Riley; Bradley (J.C.); Esaki; do Amaral; Prantl; Hemming; Jaczewski; Kühnelt; Bonnet; Boschma; Sylvester-Bradley; Tortonese; Cabrera; Miller;

(b) Negative Votes, one (1):

Stoll:

(c) Voting Papers not returned:

None.

- 15. Declaration of Result of Vote: On 1st November 1957, Mr. Hemming, Secretary to the International Commission, acting as Returning Officer for the Vote taken on Voting Paper V.P.(57)50, signed a Certificate that the Votes cast were as set out in paragraph 14 above and declaring that the proposal submitted in the foregoing Voting Paper had been duly adopted and that the decision so taken was the decision of the International Commission in the matter aforesaid.
- 16. Preparation of the Ruling given in the present "Opinion": On 9th January 1958, Mr. Hemming prepared the Ruling given

in the present *Opinion* and at the same time signed a Certificate that the terms of that Ruling were in complete accord with those of the proposal approved by the International Commission in its Vote on Voting Paper V.P.(57)50.

17. Original references for generic and specific names: The following are the original references for the generic and specific names placed on *Official Lists* and *Official Indexes* by the Ruling given in the present *Opinion*:

Aurelia Lamarck, 1816, Hist. nat. Anim. sans Vertèbr. 2:512-514

Aurellia Péron & Lesueur, [1810], Ann. Mus. Hist. nat., Paris 14(83): 357

aurita, Medusa, Linnaeus, 1758, Syst. Nat. (ed. 10) 1:660

rosea, Aurellia, Péron & Lesueur, [1810], Ann. Mus. Hist. nat., Paris 14(83): 358

18. Original References for Family-Group Names: The following are the original references for the family-group names placed by the Ruling given in the present *Opinion* on the *Official List* and *Official Index* respectively for taxa belonging to the family-group category:—

AURELIDAE Agassiz (J.L.R.), 1862 (an Invalid Original Spelling for AURELIDAE)

AURELIIDAE (correction of AURELIDAE) Agassiz (J.L.R.), 1862, Contrib. nat. Hist. U.S.A., Mon. 2 (Part 3): v, 80, 150

19. Compliance with Prescribed Procedures: The prescribed procedures were duly complied with by the International Commission on Zoological Nomenclature in dealing with the present case, and the present *Opinion* is accordingly hereby rendered in the name of the said International Commission by the undersigned Francis Hemming, Secretary to the International Com-

mission on Zoological Nomenclature, in virtue of all and every the powers conferred upon him in that behalf.

20. "Opinion" Number: The present *Opinion* shall be known as *Opinion* Five Hundred and Fifteen (515) of the International Commission on Zoological Nomenclature.

DONE in London, this Ninth day of January, Nineteen Hundred and Fifty-Eight.

Secretary to the International Commission on Zoological Nomenclature

FRANCIS HEMMING

OPINIONS AND DECLARATIONS RENDERED BY THE INTERNATIONAL COMMISSION ON ZOOLOGICAL NOMENCLATURE

Edited by

FRANCIS HEMMING, C.M.G., C.B.E.

VOLUME 18. Part 21. (Concluding Part)



LONDON:

Printed by Order of the International Trust for Zoological Nomenclature

and

Sold on behalf of the International Commission on Zoological Nomenclature by the International Trust at its Publications Office 41, Queen's Gate, London, S.W.7

1958

Price One Pound Nine Shillings

(All rights reserved)



OPINIONS AND DECLARATIONS RENDERED BY THE INTERNATIONAL COMMISSION ON ZOOLOGICAL NOMENCLATURE

Edited by

FRANCIS HEMMING, C.M.G., C.B.E.

VOLUME 18. Part 21. Pp. 329—356 (also published with this Part: T.P.—XVIII)

CONTENTS

Corrigenda; Authors' and Subject Indexes; Particulars of the dates of publication of the several Parts in which the present volume was published; Instructions to Binders.

Also published with this Part; Title Page, Foreword; Table of Contents

LONDON:

Printed by Order of the International Trust for Zoological Nomenclature

and

Sold on behalf of the International Commission on Zoological Nomenclature by the International Trust at its Publications Office 41, Queen's Gate, London, S.W.7

1958

Price One Pound, Nine Shillings

(All rights reserved)

INTERNATIONAL COMMISSION ON ZOOLOGICAL NOMENCLATURE

COMPOSITION AT THE TIME OF THE ADOPTION OF THE OPINIONS, DECLARATIONS AND DIRECTIONS PUBLISHED IN THE PRESENT VOLUME

The Officers of the Commission

Honorary Life President: Dr. Karl Jordan (British Museum (Natural History), Zoological Museum, Tring, Herts., England)

President: Professor James Chester Bradley (Cornell University, Ithaca, N.Y., U.S.A.) (12th August 1953)

Vice-President: Senhor Dr. Afranio do AMARAL (Sao Paulo, Brazil) (12th August 1953)

Secretary: Mr. Francis HEMMING (London, England) (27th July 1948)

The Members of the Commission B.

(Arranged in order of precedence by reference to date of election or of most recent re-election, as prescribed by the International Congress of Zoology)

Professor H. Boschma (Rijksmuseum van Natuurlijke Historie, Leiden, The Netherlands) (1st January 1947)
Senor Dr. Angel Cabrera (La Plata, Argentina) (27th July 1948)
Mr. Francis Hemming (London, England) (27th July 1948) (Secretary)
Dr. Henning Lemche (Universitetets Zoologiske Museum, Copenhagen, Denmark) (27th

July 1948)
Professor Teiso Esaki (Kyushu University, Fukuoka, Japan) (17th April 1950)
Professor Pierre Bonner (Université de Toulouse, France) (9th June 1950)
Mr. Norman Denbigh Riley (British Museum (Natural History), London) (9th June 1950)
Professor Tadeusz Jaczewski (Institute of Zoology, Polish Academy of Sciences, Warsaw, Poland) (15th June 1950)

Professor Erich Martin Hering (Zoologisches Museum der Humboldt-Universität zu Berlin, Germany) (5th July 1950)

Senhor Dr. Afranio do Amaral (S. Paulo, Brazil) (12th August 1953) (Vice-President) Professor J. R. Dymond (University of Toronto, Toronto, Canada) (12th August 1953) Professor J. Chester Bradley (Cornell University, Ithaca, N.Y., U.S.A.) (12th August

Professor J. Chester Bradley (Cornell University, Ithaca, N.Y., U.S.A.) (12th August 1953) (President)
Professor Harold E. Vokes (University of Tulane, Department of Geology, New Orleans, Louisiana, U.S.A.) (12th August 1953)
Professor Béla Hankó (Mezőgazdasági Muzeum, Budapest, Hungary) (12th August 1953)
Dr. Norman R. Stoll (Rockefeller Institute for Medical Research, New York, N.Y., U.S.A.) (12th August 1953)
Mr. P. C. Sylvester-Bradley (Sheffield University, Sheffield, England) (12th August 1953)

Dr. L. B. Holthuis (Rijksmuseum van Natuurlijke Historie, Leiden, The Netherlands) (12th August 1953)

Dr. K. H. L. Key (Commonwealth Scientific and Industrial Research Organisation, Canberra, A.C.T., Australia) (15th October 1954)

Dr. Alden H. MILLER (Museum of Vertebrate Zoology, University of California, U.S.A.) (29th October 1954)

Dr. Ferdinand PRANTL (Národni Museum V Praze, Prague, Czechoslovakia) (30th October 1954)

Professor Dr. Wilhelm Kühnelt (Zoologisches Institut der Universität, Vienna, Austria) (6th November 1954)

Professor F. S. Bodenheimer (The Hebrew University, Jerusalem, Israel) (11th November 1954)

Professor Ernst Mayr (Museum of Comparative Zoology at Harvard College, Cambridge, Massachusetts, U.S.A.) (4th December 1954)
Professor Enrico Tortonese (Museo di Storia Naturale "G. Doria", Genova, Italy)

(16th December 1954)

Volume 18 331

Corrigenda

page 62. Line 15: substitute "eversible" for "reversible"

page 149. Line 8: substitute "2" for "2"

page 174. Paragraph 13, line 12: substitute "659" for "649"

page 199. Ruling (1), first line: Insert "Under the Plenary Powers" before "the"

page (iii). Ruling, line 3: delete bracket before "is"

INDEX TO AUTHORS OF APPLICATIONS DEALT WITH IN THE PRESENT VOLUME AND OF COMMENTS ON THOSE APPLICATIONS

Agenjo, R	Page 34	Page Follett, W. I 299—300
Amadon, D	311	Forbes, W. T. M 27—28
Arkell, W. J.	145—148	Forest, J 268
Bell, E. L.	30	Fox, R. M 33
Bernardi, G	38—40	Franz, E 32
Beuret, H	28—29	Freeman, T. N 31
Brown, F. M.	40—41	Frizzell, D. L 151
Bryk, F.	26—27	
		Gordon, I 269
Chermock, R. L.	33	Gray, L. P 21—23
Dalmat, H. T.	231—234	4
Dexter, R. W.	100	Hall, E. R xx
dos Passos, C. F.	21—23	Hand, C 324
		Hemming, F. (iv)—(v), (xii)—
Erben, H. K.	(xx)—(xxii)	(xvi), 8—20, 42, 46—49, 52, 55—64,
Esaki, T.	206	75—95, 107—108, 108—113, 115—116,
		126—133, 153—155,
Falla, R. A	310	171—174, 183—191, 223, v—ix, xvi—xviii,
Fleming, C. A.	306—308	xxvi—xxviii

	Page	Page
Hering, E. M.		Mather, B 29
Hölder, H	150	Mattox, N. T 99
Holik, O	34—37	Mayr, E 32, 98, 309
Holthuis, L. B.	75—95, 107— 201—205, 262—	Meise, W 98
268, 285		Mertens, R. (xvi), (xx)—(xxii)
Horan, J	323	Miller, R. R 299
Horridge, G. A.	325	Monod, Th 269
Ichthyologists and Herpetologists, Committee on Zoological Nomenclature of the American Society of, 299—300		Moore, R. C 151
		Moore, W. G 99
		Muller, S. W 151
,	-	Munroe, E 30—31
Jaanusson, V.	215—219, 244—250	Myers, G. S 294—297
Keen, A. Myra	151	Oliver, W. R. B 310
Klots, A. B	21—23	Oliver, W. R. B.
Kramp, P. L.	323	Paclt, J 37—38
Lemche, H.	96—97	Palaeontology in America, Joint Committee on
Lempke, B. J.	26	Zoological Nomenclature for
Longhurst, A.	99	Palmer, Katherine V. W 151
Marples, B. J.	,. 310	Patterson, B 151

Peters, J. A	Page 299	Smith, Hobart M Page 299
Poulsen, C. 222,	252, 279—284	Stoll, N. R 235
Prantl, F	(xviii)—(xx)	Stubblefield, C. J 162—168, 220, 252, 285,
Přibyl, A	(xviii)—(xx)	(xxv)—(xxvi)
Rees, W. J	319—322	Tasch, P 101—104
Reeside, J. B., Jr.	151	Trewavas, Ethelwyn 298
Reisser, H	34	Turbott, E. G 309
Richter, Emma	169, 221, 252,	
Richter, Emma	(xvii)—(xviii)	Vannucci, M 324
Richter, R	169, 221, 252,	Verity, R 8—20, 55—64
	(xvii)—(xviii)	Voous, K. H 98
Riley, N. D 8	8—20, 55—64,	
	135, 193	Warren, B. C. S 27
Russell, F. S.	323	Weller, J. M 151
		Wells, J. W 151
Sabrosky, C. W.	xix—xx	Water and A 100 101
Schaeffer, B	151	Wetmore, A 100—101
	22	Whittington, H. B 162—168,
Schmidt, K. P.	32	221, 286
Shoumatoff, N.	33	Wiener Entomologische Gesellschaft 34
Sibson, R. B.	309	Gostillonati or
Sinclair, G. W.	151	Zariquiey, R 269

SUBJECT INDEX

	Page
acutirostris Gould, 1837, as published in the combination Neomorpha acutirostris (Class Aves), placed on the Official List of Specific Names in Zoology with Name No. 1509	205
No. 1509	305
adippe Linnaeus, 1767, as published in the combination Papilio adippe (Class Insecta, Order Lepidoptera), suppression of, under the Plenary Powers, for the purposes both of the Law of Priority and of the Law of Homonymy, except for use as an infra-subspecific name, as regards which, suppression limited to the purposes of the Law of Priority	34
placed on the Official Index of Rejected and Invalid Specific Names in Zoology with Name No. 492	6
adippe, as published in the combination Papilio adippe (Class Insecta, Order Lepidoptera), all uses of, subsequent to Linnaeus, 1767, and prior to Denis & Schiffermüller, 1775, suppression of, under the Plenary Powers, for the purposes both of the Law of Priority and of the Law of Homonymy	4
placed on the Official Index of Rejected and Invalid Specific Names in Zoology with Name No. 493	6
adippe [Denis & Schiffermüller], 1775, as published in the combination Papilio adippe (Class Insecta, Order Lepidoptera), validation of, under the Plenary Powers	5
validation, under the Plenary Powers, of neotype designated for, by Hemming (F.), Riley (N.D). and Verity (R.) (1958)	5
placed on the Official List of Specific Names in Zoology with Name No. 1472	5
alburnus Basilewsky, 1855, Culter (Class Pisces), acceptance of selection by Bleeker (P.) (1863), to be the type species of Culter Basilewsky, 1855	293
placed on the Official List of Specific Names in Zoology with Name No. 1507	294
alcon [Denis & Schiffermüller], 1775, as published in the combination Papilio alcon (Class Insecta, Order Lepidoptera), placed on the Official List of Specific Names in Zoology with Name No. 1480	124
amyntas [Denis & Schiffermüller], 1775, as published in the combination Papilio amyntas (a junior homonym of amyntas Poda, 1761, as published in the combination Papilio amyntas), placed on the Official Index of Rejected and Invalid Specific Names in Zoology with Name No. 501	124
APIDAE Burmeister, 1843 (an Invalid Original Spelling for APODIDAE), placed on the Official Index of Rejected and Invalid Family-Group Names in Zoology with	

	Page
APODES Billberg, 1820 (an Invalid Original Spelling for APODIDAE), placed on the Official Index of Rejected and Invalid Family-Group Names in Zoology with Name No. 242	73
APODIDAE Agassiz (J.L.R.), 1846 (invalid because name of type genus is a junior homonym of a generic name of older date), placed on the Official Index of Rejected and Invalid Family-Group Names in Zoology with Name No. 243	73
APODIDAE Reichenow, 1897 (invalid because published for some purpose other than for use in zoological nomenclature), placed on the Official Index of Rejected and Invalid Family-Group Names in Zoology with Name No. 248	74
APODINAE Hartert, 1897 (Class Aves), placed on the Official List of Family-Group Names in Zoology with Name No. 208, with Apus Scopoli, 1777, as type genus	72
Apodium Rafinesque, 1814 (Class Crustacea, Order Phyllopoda), suppression of, under the Plenary Powers, for the purposes of the Law of Priority but not for those of the Law of Homonymy	67
placed on the Official Index of Rejected and Invalid Generic Names in Zoology with Name No. 1097	69
Apos Scopoli, 1777 (Class Crustacea, Order Phyllopoda), suppression of, under the Plenary Powers, for the purposes of the Law of Priority but not for those of the Law of Homonymy	67
placed on the Official Index of Rejected and Invalid Generic Names in Zoology with Name No. 1098	69
Apus Schaeffer (J.C.), 1756 (invalid because published before the starting point of zoological nomenclature), placed on the Official Index of Rejected and Invalid Generic Names in Zoology with Name No. 1099	69
Apus Scopoli, 1777 (Class Aves), placed on the Official List of Generic Names in Zoology with Name No. 1247, with Hirundo apus Linnaeus, 1758, as type species	68
gender of name	68
Apus Cuvier (G.L.C.F.D.), [1797—1798] (a nomen nudum), placed on the Official Index of Rejected and Invalid Generic Names in Zoology with Name No. 1100	69
Apus Cuvier (G.F.), 1800 (a junior homonym of Apus Scopoli, 1777), placed on the Official Index of Rejected and Invalid Generic Names in Zoology with Name No. 1101	70
Apus Latreille, [1802—1803] (a junior homonym of Apus Scopoli, 1777), placed on the Official Index of Rejected and Invalid Generic Names in Zoology with Name No. 1102	70
Apus Schoch, 1868 (a junior homonym of Apus Scopoli, 1777), placed on the Official Index of Rejected and Invalid Generic Names in Zoology with Name No. 1103	70
apus Linnaeus, 1758, as published in the combination Monoculus apus, as interpreted by lectotype selected by Holthuis (L.B.) (1956) (Class Crustacea, Order Phyllopoda), placed on the Official List of Specific Names in Zoology with Name No. 1475	69

	Page
apus Linnaeus, 1758, as published in the combination Hirundo apus (Class Aves), placed on the Official List of Specific Names in Zoology with Name No. 1477	69
APUSIENS Milne Edwards (H.), 1840 (invalid because a vernacular (French) word and not a Latinized word), placed on the Official Index of Rejected and Invalid Family-Group Names in Zoology with Name No. 244	73
arctica Latreille, 1806, as published in the combination Lithodes arctica (a junior objective synonym of maja Linnaeus, 1758, as published in the combination Cancer maja), placed on the Official Index of Rejected and Invalid Specific Names in Zoology with Name No. 514	260
argiades Pallas, 1771, as published in the combination Papilio argiades (Class Insecta, Order Lepidoptera), placed on the Official List of Specific Names in Zoology with Name No. 1479	124
arion Linnaeus, 1758, as published in the combination Papilio arion (Class Insecta, Order Lepidoptera), placed on the Official List of Specific Names in Zoology with Name No. 1481	. 124
ASAPHIDAE Burmeister (H.), 1843 (Class Trilobita), placed on the Official List of Family-Group Names in Zoology with Name No. 217, with Asaphus Brongniart, 1822, as type genus	243
Asaphus Brongniart (A.), 1817 (Class Trilobita), suppression of, under the Plenary Powers, for the purposes both of the Law of Priority and of the Law of Homonymy	241
placed on the Official Index of Rejected and Invalid Generic Names in Zoology with Name No. 1147	242
Asaphus Brongniart (A.), 1822 (Class Trilobita), validation of, under the Plenary Powers	241
all previous type selections for, set aside under the Plenary Powers, and <i>Entomostracites expansus</i> Wahlenberg (G.), 1821, as defined by lectotype selected by Jaanusson (V.) (1956), designated to be the type species of	-242
gender of name	242
placed on the Official List of Generic Names in Zoology with Name No. 1258	242
Aurelia as from Lamarck, 1816 (Class Scyphozoa), validation of, under the Plenary Powers, and designation under the same Powers of Medusa aurita Linnaeus, 1758, as type species of	317
gender of name	317
placed on the Official List of Generic Names in Zoology with Name No. 1268	317
AURELIDAE Agassiz (J.L.R.), 1862 (an Invalid Original Spelling for AURELIDAE), placed on the Official Index of Rejected and Invalid Family-Group Names in Zoology with Name No. 262	318
AURELIIDAE (correction of AURELIDAE) Agassiz (J.L.R.), 1862 (Class Scyphozoa), placed on the Official List of Family-Group Names in Zoology with Name No. 222, with Aurelia Lamarck, 1816, as type genus	318

	Page
Aurellia Péron & Lesueur, [1810] (Class Scyphozoa), suppression of, under the Plenary Powers, for the purposes of the Law of Priority but not for those of the Law of Homonymy	317
placed on the Official Index of Rejected and Invalid Generic Names in Zoology with Name No. 1157	318
aurita Linnaeus, 1758, Medusa (Class Scyphozoa), designation of, under the Plenary Powers to be the type species of Aurelia Lamarck, 1816	317
placed on the Official List of Specific Names in Zoology with Name No. 1512	317
berecynthia Poda, 1761, as published in the combination Papilio berecynthia (Class Insecta, Order Lepidoptera), suppression of, under the Plenary Powers, for the purposes of the Law of Priority but not for those of the Law of Homonymy	4
placed on the Official Index of Rejected and Invalid Specific Names in Zoology with Name No. 494	6
Biplices Siemiradzki, 1891 (invalid because not published in the nominative singular), placed on the Official Index of Rejected and Invalid Generic Names in Zoology with Name No. 1138	143
BINOCULIDAE Fowler, 1912 (invalid because name of type genus suppressed under the Plenary Powers), placed on the Official Index of Rejected and Invalid Family-Group Names in Zoology with Name No. 245	73
Binoculus Geoffroy (E.L.), 1764 (a name published in a work rejected for nomenclatorial purposes), placed on the Official Index of Rejected and Invalid Generic Names in Zoology with Name No. 1104	70
Binoculus Müller (O.F.), 1776 (Class Crustacea, Order Phyllopoda), suppression of, under the Plenary Powers, for the purposes of the Law of Priority but not for those of the Law of Homonymy	67
placed on the Official Index of Rejected and Invalid Generic Names in Zoology with Name No. 1105	70
Brachypus Meyer, 1814 (a junior objective synonym of Apus Scopoli, 1777), placed on the Official Index of Rejected and Invalid Generic Names in Zoology with Name No. 1106	70
Brachypus Meigen, 1824 (a junior homonym of Brachypus Meyer, 1814), placed on the Official Index of Rejected and Invalid Generic Names in Zoology with Name No. 1108	70
Brachypus Swainson, 1824 (a junior homonym of Brachypus Meyer, 1814), placed on the Official Index of Rejected and Invalid Generic Names in Zoology with Name No. 1107	70
Brachypus Gray (J.E.), 1825 (a junior homonym of Brachypus Meyer, 1814), placed on the Official Index of Rejected and Invalid Generic Names in Zoology with Name No. 1109	70
Brachypus Fitzinger, 1826 (a junior homonym of Brachypus Meyer, 1814), placed on the Official Index of Rejected and Invalid Generic Names in Zoology with Name No. 1111	70

	Page
Brachypus Schoenherr, 1826 (a junior homonym of Brachypus Meyer, 1814), placed on the Official Index of Rejected and Invalid Generic Names in Zoology with Name No. 1110	70
Brachypus Guilding, 1828 (a junior homonym of Brachypus Meyer, 1814), placed on the Official Index of Rejected and Invalid Generic Names in Zoology with Name No. 1112	70
Brevipes [Palmer], 1836 (a junior objective synonym of Apus Scopoli, 1777), placed on the Official Index of Rejected and Invalid Generic Names in Zoology with Name No. 1113	70
cancriformis Lamarck, 1801, as published in the combination Limulus cancriformis (a junior objective synonym of apus Linnaeus, 1758, as published in the combination Monoculus apus), placed on the Official Index of Rejected and Invalid Specific Names in Zoology with Name No. 498	72
cancriformis Bosc, [1801—1802], Apus (Class Crustacea, Order Phyllopoda), designation of, under the Plenary Powers, to be the type species of Triops Schrank, 1803	67 — 68
placed on the Official List of Specific Names in Zoology with Name No. 1476	69
commune Leach, 1818, as published in the combination <i>Phyllosoma commune</i> (Class Crustacea, Order Decapoda), suppression of, under the Plenary Powers, for the purposes of the Law of Priority but not for those of the Law of Homonymy	199
placed on the Official Index of Rejected and Invalid Specific Names in Zoology with Name No. 507	200
cornigerus Schlotheim (E.Fr.v.), 1820, as published in the combination Trilobites cornigerus (Class Trilobita), suppression of, under the Plenary Powers, for the purposes of the Law of Priority but not for those of the Law of Homonymy	241
placed on the Official Index of Rejected and Invalid Specific Names in Zoology with Name No. 513	243
crassicauda Wahlenberg, 1821, as published in the combination Entomostracites crassicauda (Class Trilobita), placed on the Official List of Specific Names in Zoology with Name No. 1498	213
Cryptonymus Eichwald, 1825 (Class Trilobita), suppression of, under the Plenary Powers, for the purposes of the Law of Priority but not for those of the Law of Homonymy	213
placed on the Official Index of Rejected and Invalid Generic Names in Zoology with Name No. 1146	213
Culter Basilewsky, 1855 (Class Pisces), acceptance of selection by Bleeker (P.), (1863), of Culter alburnus Basilewsky, 1855, to be type species of	293
gender of name	293
placed on the Official List of Generic Names in Zoology with Name No. 1264	293

	Page
CUPIDIDI Tutt, [1907] (an Invalid Original Spelling for CUPIDINIDI), placed on the Official Index of Rejected and Invalid Family-Group Names in Zoology with Name No. 251	125
CUPIDINIDI (correction of CUPIDIDI) Tutt, [1907] (Class Insecta, Order Lepidoptera), placed on the Official List of Family-Group Names in Zoology with Name No. 210, with Cupido Schrank, 1801, as type genus (a name selected by Verity (1943) as First Reviser to take precedence below EVERIDI Tutt, [1907], a name published in the same work and on the same date) (for use by any specialist who may consider the genera Cupido Schrank, 1801, and Everes Hübner, [1819], referable to different family taxa)	125
Cupido Schrank, 1801 (Class Insecta, Order Lepidoptera), all previous type selections for, set aside under the Plenary Powers, and Papilio minimus Fuessly (J.C.), 1775, designated to be the type species of	123
gender of name	123
placed on the Official List of Generic Names in Zoology with Name No. 1248	123
cydippe Linnaeus, 1761, as published in the combination Papilio cydippe (Class Insecta, Order Lepidoptera), suppression of, under the Plenary Powers, for the purposes both of the Law of Priority and of the Law of Homonymy, except for use as an infra-subspecific name as regards which suppression is limited to the purposes of the Law of Priority	34
placed on the Official Index of Rejected and Invalid Specific Names in Zoology with Name No. 495	6
cydippe, as published in the combination Papilio cydippe (Class Insecta, Order Lepidoptera), all uses of, subsequent to Linnaeus, 1761, and prior to Linnaeus, 1767, suppression of, under the Plenary Powers, for the purposes both of the Law of Priority and of the Law of Homonymy	4
placed on the Official Index of Rejected and Invalid Specific Names in Zoology with Name No. 496	6
cydippe Linnaeus, 1767, as published in the combination Papilio cydippe (Class Insecta, Order Lepidoptera), validation of, under the Plenary Powers	4, 6
placed on the Official List of Specific Names in Zoology with Name No. 1474	6
CYPSELINAE Bonaparte, 1838 (Class Aves), suppression of, under the Plenary Powers, for the purposes of the Law of Priority but not for those of the Law of Homonymy	68
placed on the Official Index of Rejected and Invalid Family-Group Names in Zoology with Name No. 249	74
Cypselus Illiger, 1811 (a junior objective synonym of Apus Scopoli, 1777), placed on the Official Index of Rejected and Invalid Generic Names in Zoology with Name No. 1114	70
Declarations containing interpretations of provisions in the Règles, see Règles Internationales de la Nomenclature Zoologique	

	Page
Edgellia Shaw (A.B.), 1950 (a junior objective synonym of Trinucleus Murchison, 1839), placed on the Official Index of Rejected and Invalid Generic Names in Zoology with Name No. 1142	160
Elleipsocephalus Zenker, 1833 (Class Trilobita), validation, under the Plenary Powers, of emendation of, to Ellipsocephalus	275
placed on the Official Index of Rejected and Invalid Generic Names in Zoology with Name No. 1153	276
ELLIPSOCEPHALIDAE Matthew (G.F.), 1887 (Class Trilobita), placed on the Official List of Family-Group Names in Zoology with Name No. 221, with Ellipsocephalus (emend. of Elleipsocephalus) Zenker, 1833, aw type genus	277
Ellipsocephalus, emendation to, of Elleipsocephalus Zenker, 1833 (Class Trilobita), validation of, under the Plenary Powers	275
gender of name	276
placed on the Official List of Generic Names in Zoology with Name No. 1262, with Elleipsocephalus [sic] ambiguus Zenker, 1833, as type species 27.	5—276
Epigea Hübner, [1819] (a junior objective synonym of Erebia Dalman, 1816), placed on the Official Index of Rejected and Invalid Generic Names in Zoology with Name No. 1143	181
EPINEPHELIDI Tutt, 1896 (Class Insecta, Order Lepidoptera), suppression of, under the Plenary Powers, for the purposes of the Law of Priority but not for those of the Law of Homonymy	179
placed on the Official Index of Rejected and Invalid Family-Group Names in Zoology with Name No. 256	182
Erebia Dalman, 1816 (Class Insecta, Order Lepidoptera), placed on the Official List of Generic Names in Zoology with Name No. 1255, with Papilio ligea Linnaeus, 1758, as type species	180
gender of name	180
EREBIINAE Tutt, 1896 (Class Insecta, Order Lepidoptera), placed on the Official List of Family-Group Names in Zoology with Name No. 215, with Erebia Dalman, 1816, as type genus	182
eriocheles Lamarck, 1801, as published in the combination Maja eriocheles (a junior objective synonym of maja Linnaeus, 1758, as published in the combination Cancer maja), placed on the Official Index of Rejected and Invalid Specific Names in Zoology with Name No. 515	261
Everes Hübner, [1819] (Class Insecta, Order Lepidoptera), placed on the Official List of Generic Names in Zoology with Name No. 1249, with Papilio amyntas [Denis & Schiffermüller], 1775, as type species	123
senden of nome	123

	Page
EVERIDI Tutt, [1907] (Class Insecta, Order Lepidoptera), placed on the Official List of Family-Group Names in Zoology with Name No. 209, with Everes Hübner, [1819], as type genus (a name selected by Verity (1943) as First Reviser to take precedence over CUPIDINIDI (correction of CUPIDIDI) Tutt, [1907], a name published in the same work and on the same date)	125
expansus Linnaeus, 1768, as published in the combination Entomolithus paradoxus [var.] α expansus (invalid because published in a work suppressed under the Plenary Powers), placed on the Official Index of Rejected and Invalid Specific Names in Zoology with Name No. 512	243
expansus Wahlenberg (G.), 1821, Entomostracites (Class Trilobita), designation of, under the Plenary Powers, to be the type species of Asaphus Brongniart (A.), 1821	 242
definition of, by lectotype selected by Jaanusson (V.), (1956)	242
placed on the Official List of Specific Names in Zoology with Name No. 1501	242
Fabriciana Reuss, 1920 (Class Insecta, Order Lepidoptera), placed on the Official List of Generic Names in Zoology with Name No. 1244, with Papilio niobe Linnaeus, 1758, as type species	5
gender of name	5
fimbriatus Murchison, 1839, as published in the combination Trinucleus fimbriatus (Class Trilobita), definition of, by reference to lectotype selected by Stubblefield (C.J.) & Whittington (H.B.), (1956)	159
placed on the Official List of Specific Names in Zoology with Name No. 1490	160
fortunata Alphéraky, 1889, as published in the combination <i>Epinephele janira</i> var. fortunata (Class Insecta, Order Lepidoptera), placed on the Official List of Specific Names in Zoology with Name No. 1494	181
Hawle (I.) & Corda (A.J.C.), 1847, Prodrom einer Monographie der böhmischen Trilobiten, ruled to be treated as having been written and published jointly by those authors	(xi)
entries concerning names published in, on an <i>Official List</i> or <i>Official Index</i> , and attributed solely to Corda (A.J.C.), to be amended to attribute such names to Hawle (I.) & Corda (A.J.C.)	(xi)
addition of title of, on the Official List of Works Approved as Available for Zoological Nomenclature with Title No. 33	(xi)
Heteralocha Cabanis, [1851] (Class Aves), validation of, under the Plenary Powers	305
gender of name	305
placed on the Official List of Generic Names in Zoology with Name No. 1266, with Neomorpha acutirostris Gould, 1837, as type species	305
hirsuta Barrande, 1846, as published in the combination Sao hirsuta (Class Trilobita), placed on the Official List of Specific Names in Zoology with Name No. 1504	276

	Page
hoffii Schlotheim, 1823, as published in the combination Trilobites hoffii (Class Trilobita), placed on the Official List of Specific Names in Zoology with Name No. 1505	276
1505	270
Transport (connection by Angelia (NJD) (1954) of connection by Angelia (NJD)	
ILLAENIDAE (correction by Angelin (N.P.), (1854), of ILLAENIDES) Hawle (I.) & Corda (A.J.C.), 1847 (Class Trilobita), placed on the Official List of Family-Group Names in Zoology with Name No. 216, with Illaenus Dalman, [1827], as type genus	214
ILLAENIDES Hawle (I.) & Corda (A.J.C.), 1847 (an Invalid Original Spelling for ILLAENIDAE), placed on the Official Index of Rejected and Invalid Family-Group Names in Zoology with Name No. 257	214
Illaenus Dalman, [1827] (Class Trilobita), placed on the Official List of Generic Names in Zoology with Name No. 1257, with Entomostracites crassicauda Wahlenberg, 1821, as type species	213
gender of name	213
Solder of Manie	213
janira Linnaeus, 1758, as published in the combination Papilio janira (Class Insecta, Order Lepidoptera), setting aside, under the Plenary Powers, of all selections of by First Revisers giving precedence to over jurtina Linnaeus, 1758, as published in the combination Papilio jurtina, a name published in the same work and on the same date, and ruled, under those Powers, to take precedence below that name	179
placed on the Official List of Specific Names in Zoology with Name No. 1493	181
placed on the Official List of Specific Names in Zoology with Ivalic 140, 1475	101
japonicus Siebold, 1824, as published in the combination Palinurus japonicus (Class Crustacea, Order Decapoda), placed on the Official List of Specific Names in Zoology with Name No. 1496	199
jurtina Linnaeus, 1758, as published in the combination Papilio jurtina (Class Insecta, Order Lepidoptera), setting aside, under the Plenary Powers, of all selections by First Revisers as to relative precedence of, in relation to janira Linnaeus, 1758, as published in the combination Papilio janira, a name published in the same work and on the same date, and grant under those Powers of precedence to, over	
that name	179
placed on the Official List of Specific Names in Zoology with Name No. 1492	180
lemur Schrank, 1801, as published in the combination Maniola lemur and as defined by lectotype selection by Hemming (F.), (1956) (a junior objective synonym of jurtina Linnaeus, 1758, as published in the combination Papilio jurtina), placed on the Official Index of Rejected and Invalid Specific Names in Zoology with	101
Name No. 506	181
Lepidurus Leach, 1819 (Class Crustacea, Order Phyllopoda), placed on the Official List of Generic Names in Zoology with Name No. 1245, with Monoculus apus Linnaeus, 1758, as defined by lectotype selected by Holthuis (L.B.), (1956), as	
type species	68
gender of name	68

	Page
ligea Linnaeus, 1758, as published in the combination Papilio ligea (Class Insecta, Order Lepidoptera), placed on the Official List of Specific Names in Zoology with Name No. 1495	181
Lithodes Latreille, 1806 (Class Crustacea, Order Decapoda), placed on the Official List of Generic Names in Zoology with Name No. 1259, with Cancer maja Linnaeus, 1758, as type species	259
gender of name	259
LITHODIADAE Samouelle, 1819 (an Invalid Original Spelling for LITHODIDAE), placed on the Official Index of Rejected and Invalid Family-Group Names in Zoology with Name No. 258	261
LITHODIDAE (correction of LITHODIADAE) Samouelle, 1819 (Class Crustacea, Order Decapoda), placed on the Official List of Family-Group Names in Zoology with Name No. 218, with Lithodes Latreille, 1806, as type genus	261
Maculinea van Eecke, 1915 (Class Insecta, Order Lepidoptera), placed on the Official List of Generic Names in Zoology with Name No. 1250, with Papilio alcon [Denis & Schiffermüller], 1775, as type species	123
gender of name	123
Maia Brisson, 1760 (Class Aves), suppression of, under the Plenary Powers, for the purposes both of the Law of Priority and of the Law of Homonymy	259
placed on the Official Index of Rejected and Invalid Generic Names in Zoology with Name No. 1148	260
Maia Lamarck, 1801 (an Invalid Original Spelling for Maja Lamarck, 1801), placed on the Official Index of Rejected and Invalid Generic Names in Zoology with Name No. 1149	260
MAÏADAE Samouelle, 1819 (an Invalid Original Spelling for MAJIDAE), placed on the Official Index of Rejected and Invalid Family-Group Names in Zoology with Name No. 259	261
Maja Lamarck, 1801 (Class Crustacea, Order Decapoda), all previous designations or type selections for, set aside under the Plenary Powers, and Cancer squinado Herbst, 1788, designated to be the type species of	259
gender of name	259
placed on the Official List of Generic Names in Zoology with Name No. 1260	259
maja Linnaeus, 1758, as published in the combination Cancer maja (Class Crustacea, Order Decapoda), placed on the Official List of Specific Names in Zoology with Name No. 1502	260
MAJIDAE (correction of MAÏADAE) Samouelle, 1819 (Class Crustacea, Order Decapoda), placed on the Official List of Family-Group Names in Zoology with Name No. 219, with Maja Lamarck, 1801, as type genus	261
Mamaia Stebbing, 1904 (a junior objective synonym of Maja Lamarck, 1801), placed on the Official Index of Rejected and Invalid Generic Names in Zoology with Name No. 1150	260

	Page
Maniola Schrank, 1801 (Class Insecta, Order Lepidoptera), placed on the Official List of Generic Names in Zoology with Name No. 1254, with Papilio jurtina Linnaeus, 1758, as type species	180
gender of name	180
MANIOLIDI Reuter (E.), 1897 (Class Insecta, Order Lepidoptera), ruled to be based on a misidentified type genus and therefore under <i>Declaration</i> 28 to possess no status in zoological nomenclature	180
placed on the Official Index of Rejected and Invalid Family-Group Names in Zoology with Name No. 255	182
MANIOLIDI Verity, 1953 (Class Insecta, Order Lepidoptera), acceptance of, under Declaration 28	30, 182
placed on the Official List of Family-Group Names in Zoology with Name No. 214, with Maniola Schrank, 1801, as type genus	182
MICROPODIDAE Stejneger, 1885 (Class Aves), suppression of, under the Plenary Powers, for the purposes of the Law of Priority but not for those of the Law of Homonymy	68
placed on the Official Index of Rejected and Invalid Family-Group Names in Zoology with Name No. 250	74
Micropus Wolf, 1810 (a junior objective synonym of Apus Scopoli, 1777), placed on the Official Index of Rejected and Invalid Generic Names in Zoology with Name No. 1115	71
Micropus Hübner, 1818 (a junior homonym of Micropus Wolf, 1810), placed on the Official Index of Rejected and Invalid Generic Names in Zoology with Name No. 1116	71
Micropus Gray (J.E.), 1831 (a junior homonym of Micropus Wolf, 1810), placed on the Official Index of Rejected and Invalid Generic Names in Zoology with Name No. 1117	
Micropus Swainson, [1832] (a junior homonym of Micropus Wolf, 1810), placed on the Official Index of Rejected and Invalid Generic Names in Zoology with Name No. 1118	
Micropus Spinola, 1837 (a junior homonym of Micropus Wolf, 1810), placed on the Official Index of Rejected and Invalid Generic Names in Zoology with Name No. 1119	
Micropus Denny, 1842 (a junior homonym of Micropus Wolf, 1810), placed on the Official Index of Rejected and Invalid Generic Names in Zoology with Name No. 1120	71
Micropus Kner, 1868 (a junior homonym of Micropus Wolf, 1810), placed on the Official Index of Rejected and Invalid Generic Names in Zoology with Name No.	71

		Page
minimus Fuessly (J.C.), 1775, Papilio (Class Insecta, Order Lepidoptera), desi of, under the Plenary Powers, to be the type species of Cupido Schrank, 1	gnation 801	123
placed on the Official List of Specific Names in Zoology with Name No. 14	478	124
Monops Billberg, 1820 (a junior objective synonym of Lepidurus Leach, 1819), on the Official Index of Rejected and Invalid Generic Names in Zoolog Name No. 1122		71
muricatus Hawle (I.) & Corda (A.J.C.), 1847, as published in the comb Staurogmus muricatus (a junior objective synonym of hirsuta Barrande, 1 published in the combination Sao hirsuta), placed on the Official Index of 1 and Invalid Specific Names in Zoology with Name No. 516	1846, as	277
Nasus Basilewsky, 1855 (Class Pisces), acceptance of Cyprinus nasus Li 1758, as type species, by absolute tautonymy	nnaeus,	293
gender of name		293
placed on the Official List of Generic Names in Zoology with Name No. 12	265	293
Farmer of the company of the control		
nasus Linnaeus, 1758, Cyprinus (Class Pisces), acceptance of, as type spe Nasus Basilewsky, 1855, by absolute tautonymy	ecies of	293
placed on the Official List of Specific Names in Zoology with Name No. 15	508	294
Neomorpha Gould, 1837 (Class Aves), suppression of, under the Plenary Pow the purposes of the Law of Priority but not for those of the Law of Homon placed on the Official Index of Rejected and Invalid Generic Names in	ymý	305
with Name No. 1155		305
niobe Linnaeus, 1758, as published in the combination Papilio niobe (Class Order Lepidoptera), placed on the Official List of Specific Names in Zoolo Name No. 1473		5
Official Index of Rejected and Invalid Family-Group Names in Zoology, names on:	s placed	
APIDAE Burmeister, 1843		72
APODES Billberg, 1820		73
APODIDAE Agassiz (J.L.R.), 1846		73 74
APODIDAE Reichenow, 1897		73
AURELIDAE Agassiz (J.L.R.), 1862		318
BINOCULIDAE Fowler, 1912		73
CUPIDIDI Tutt, [1907]		125
CYPSELINAE Bonaparte, 1838		74 182
ILLAENIDES Hawle (I.) & Corda (A.J.C.), 1847		214
LITHODIADAE Samouelle, 1819		261
MAÏADAE Samouelle, 1819	,	261
MANIOLIDI Reuter (E.), 1897		182
MICROPODIDAE Stejneger, 1885	• • •	74 73

HYLLOPODIDAE (correction of I	DUVITO	C (ATC	afines	1110 11	215			
AOIDAE (correction of SAONIDE				1uc, 1				
AONIDES Billberg, 1820					• • •			
RINUCLEEN Emmrich (H.[F.]),	1844							
RINUCLEIDES Hawle, (I.) & Co			1847					
120, 120, 120, 120, 120, 120, 120, 120,								
cial Index of Rejected and Inv	alid G	eneric .	Names	in Zo	oology,	names	placed	on:
podium Rafinesque, 1814							٠	
pos Scopoli, 1777								
pus Schaeffer (J.C.), 1756								
pus Cuvier (G.L.C.F.D.), [179	97—17	98]						
pus Cuvier (G.F.), 1800								
pus Latreille, [1802—1803]								
pus Schoch, 1868								
saphus Brongniart (A.), 1817								
urellia Péron & Lesueur, [181							• • •	
iplices Siemiradzki, 1891	- 73							
inoculus Geoffroy (E.L.), 1764	1							
inoculus Müller (O.F.), 1776								
rachypus Meyer, 1814	• •							
rachypus Meigen, 1814	• •			4.4				
	• •	• •	• •	• •	• •	• •		• •
trachypus Swainson, 1824	• •	• •				• •	• •	• •
rachypus Gray (J.E.), 1825	• •		• •		• •	• •	• •	• •
rachypus Fitzinger, 1826	• •		• •			• •	• •	
rachypus Schoenherr, 1826	• •	• •	• •		• •	• •	• •	
rachypus Guilding, 1828	• •		• •			• •		• •
revipes [Palmer], 1836	• •	• •	• •					• •
ryptonymus Eichwald, 1825			• •					• •
Sypselus Illiger, 1811								
dgellia Shaw (A.B.), 1950								
Illeipsocephlus Zenker, 1833								
pigea Hübner, [1819]								
Iaia Brisson, 1770								
Iaia Lamarck, 1801								
Iamaia Stebbing, 1904								
dicropus Wolf, 1810								
dicropus Hübner, 1818								
Aicropus Gray (J.E.), 1831								
Aicropus Swainson, [1832]								
Aicropus Spinola, 1837								
Aicropus Denny, 1842								
#: I/ 10/0		• •		• •				
	• •	• •		• •				• •
	• •	• •		• •			• •	
	• •				• •			• •
hyllopus Rafinesque, 1815	• •							• •
hyllosoma Leach, 1818								
anites de Haan, 1825								
ao Billberg, 1820								
ao Adams (H.), 1854								
enex Pfeffer, 1881								
aurogmus Hawle (I.) & Cord			347					
			• •					
retaspis Murchison, 1839				• •				
rinoculus Voigt, 1836								
	• •				• •			• •
rinucleus Link, 1807						• •		
riopes Schrank, 1803								

								Page
Official Index of Rejected and Invalid S								
adippe Linnaeus, 1767, Papilio adippe, all uses of, subsequent to Lin	 nnaeus,	 1767, a	 ınd pri	or to	 Denis	& Scl	niffer-	6
adippe, all uses of, subsequent to Linmüller, 1775, Papilio amyntas [Denis & Schiffermüller], 17 arctica Latreille, 1806, Lithodes berecynthia Poda, 1761, Papilio cancriformis Lamarck, 1801, Limulus commune Leach, 1818, Phyllosoma cornigerus Schlotheim (E.Fr.v.), 1820 cydippe Linnaeus, 1761, Papilio cydippe, all uses of, subsequent to I	 775. Pan	 vilio	• •	• •	• •	• •		6 124
arctica Latreille, 1806, Lithodes		• •						260
berecynthia Poda, 1761, Papilio								6
cancriformis Lamarck, 1801, Limulus	• • •	• •	• •	• •	• •		• •	72
commune Leach, 1818, Phyllosoma	Tuilah	itan	• •	• •	• •		• •	200 243
cyding Linnaeus 1761 Panilio	i, iruoo	ites		• •	• •			6
cydippe, all uses of, subsequent to I	Linnaeus	s. 1761	and p	rior to	Linn	aeus.	1767.	
Papulo								6
Papilio eriocheles Lamarck, 1801, Maja expansus Linnaeus, 1768, Entomolith, lemur Schrank, 1801, Maniola muricatus Hawle (1) & Corda (A.I.C.								261
expansus Linnaeus, 1768, Entomolith	us parad	loxus [\	ar.] α	• •				243
lemur Schrank, 1801, Maniola muricatus Hawle (I.) & Corda (A.J.C palustris Müller (O.F.), 1776, Binocuproductus Bosc, [1801—1802], Apus puer Schrank, 1801, Papilio rissonii Desmarest, 1825, Palinurus rosea Péron & Lesueur, [1810], Aure tuberculatus Link, 1807, Trinucleus volvulans Railliet, 1893, Filaria volvulas Leuckart (K.G.F.R.), [1892] volvulxus Manson (P.), 1893, Filaria	1047	Ctann		• •	• •	• •	• •	181 277
nalustris Müller (O.F.) 1776 Ringen), 1047 luc	, Staure	ogmus	• •	• •	• •		1—72
productus Bosc. [1801—1802]. Apus					• •			72
puer Schrank, 1801, Papilio								124
rissonii Desmarest, 1825, Palinurus								200
rosea Péron & Lesueur, [1810], Aure	llia							318
tuberculatus Link, 1807, Trinucleus	• •	• •	• •			• •	• • • • • • • • • • • • • • • • • • • •	161
volvulans Railliet, 1893, Filaria	F:1:-	••	• •	• •	• •			230
volvulus Manson (P.), 1893, Filaria	, Filaria	:			• •			230 230
voivuixus manson (1.), 1075, 1 tturtu	••	• •	• •	• •	• •	• •	• •	250
Official List of Family-Group Names in	Zoology	, name	s place	d on:				
APODINAE Hartert, 1897 ASAPHIDAE Burmeister (H.), 1843 AURELIIDAE (correction of AURELIDAE CUPIDINIDI (correction of CUPIDIDI) T ELLIPSOCEPHALIDAE Matthew (G.F.), EREBIINAE Tutt, 1896 EVERIDI Tutt, [1907] ILLAENIDAE (correction of ILLAENIDES LITHODIDAE (correction of LITHODIDAE)		• •	• •			• •	• •	72
ASAPHIDAE Burmeister (H.), 1843		 - (T.T. 1	 D \ 10		• •	• •	• •	243
AURELIDAE (correction of AURELIDAE) Agassi	IZ (J.L.) 071	K.), 18	62	• •	• •	• •	318 125
FIT IPSOCEPHALIDAE Matthew (G.F.)	1887	07]			• •	•	• •	277
EREBIINAE Tutt. 1896								182
EVERIDI Tutt, [1907]								125
ILLAENIDAE (correction of ILLAENIDES) Hawle	(I.) &	Corda	(A.J.	C.), 18	347		214
LITHODIDAE (correction of LITHODIAD	AE) San	iouelle,	1819	• •	• •	• •		261
MAJIDAE (correction of MAIADAE) Sam	nouelle,	1819	• •	• •	• •	• •	• •	261
MAJIDAE (correction of MAÏADAE) Sam MANIOLIDI Verity, 1953	• •	• •	• •	• •	• •	• •	• •	182 277
TRETASPINAE Whittington (H B) 194	.1						• •	161
TRINUCLEIDAE (correction of TRINUCL	EIDES) I	Tawle (i.) & (Corda	(A.J.C	.), 18	47	161
TRIOPSIDAE Keilhack, 1909								72
TRIOPSIDAE Keilhack, 1909 TYLENCHIDAE Örley, 1880								(iii)
Official List of Family-Group Names in	Zoology	, name	s remo	ved fr	om:			
TYLENCHINAE Marcinowski, 1909								(iii)
								` ,
Official List of Generic Names in Zoolo								
Apus Scopoli, 1777	• •	• •	• •	• •		• •		68
Asaphus Brongniart (A.), 1822		• •	• •	• •	• •	• •	• •	242
Aurella as from Lamarck, 1816	• •	• •	• •	• •	• •	• •		31/
Apus Scopoli, 1777 Asaphus Brongniart (A.), 1822 Aurelia as from Lamarck, 1816 Culter Basilewsky, 1855 Cupido Schrank, 1801 Ellipsocephalus (emend. of Elleipsoce	• •	• •	• •					242 317 293 123
Ellipsocephalus (emend of Elleipsoce	nhalus)	 Zenker	1833				275-	-276
Enchia Dolmon 1816	piiuius)		, 1055		• •		2,5	190

									Page
Official List of Generic Names i	n Zoolo	gy, nam	es pla	ced or	ı (conta	d.):			
Everes Hübner, [1819] Fabriciana Reuss, 1920	• •	• •	• •	• •	• •		• •	• •	123 5
				• •	• •				305
Illaenus Dalman, [1827]									213
Lepidurus Leach, 1819									68
Lithodes Latreille, 1806				• •					259
Maculinea van Eecke, 1915									123
Maja Lamarck, 1801									259
Maniola Schrank, 1801									180
Nasus Basilewsky, 1855	: :		• •						293
Orthosphinctes Schindewolf,	1925					• •	• •	• •	143
Panuliris White, 1847		• •	• •	• •					199 276
Pyrunculus Pilsbry, 1895	• •	• •			• •	• •	• •	• •	275
Sao Barrande, 1846 Tretaspis McCoy, 1849 Trinucleus Murchison, 1839	• •		• •	• •		• •	• •	159-	-160
Trinuclaus Murchison 1830	• •	• •							159
Triops Schrank, 1803	• •			• •					68
Triops Belliulik, 1005	••	••	• •	• • •	• •	• •			
0.00 - 1.11 - 6.50 - 16. N	7 1		1-						
Official List of Specific Names is				cea or					204
acutirostris Gould, 1837, Neo			• •	• •	• •	• •	• •	• •	305
adippe [Denis & Schiffermülle				• •	• •	• •	• •	• •	294
alburnus Basilewsky, 1855, Cu alcon [Denis & Schiffermüller	iller 1 1775	Panilio	• •	• •	• •	• •			124
apus Linnaeus, 1758, Monocu	luc	1 ирии		• •					69
apus Linnaeus, 1758, Mirundo	ius	• •							69
argiades Pallas, 1771, Papilio									124
arion Linnaeus, 1758, Pavilio									124
argiades Pallas, 1771, Papilio arion Linnaeus, 1758, Papilio aurita Linnaeus, 1758, Medus	a								317
cancriformis Bosc, [1801—180)2], Apu	t.S							69
cancriformis Bosc, [1801—180 crassicauda Wahlenberg, 1821 cydippe Linnaeus, 1767, Papil	, Enton	nostracii	es	• •					213
cydippe Linnaeus, 1767, Papil	io								2.40
expansus wallenderg (G.), 10	041, <i>Em</i>	omosira	iches	• •	• •	• •	• •	• •	242
fimbriatus Murchison, 1839, 7	Trinuclei	us	• •			• •		• •	160
fortunata Alphéraky, 1889, E				• •		• •	• •	• •	181 276
hirsuta Barrande, 1846, Sao		• •	• •		• •		• •	• •	276
hoffii Schlotheim, 1823, Trilob		• •	• •	• •	• •	• •	• •	• •	181
janira Linnaeus, 1758, Papilio		• •	• •	• •	• •	• •		• •	199
japonicus Siebold, 1824, Palin jurtina Linnaeus, 1758, Papili	^			• •	• •	• •			180
ligea Linnaeus, 1758, Papilio		• •							181
maja Linnaeus, 1758, Cancer									260
minimus Fuessly (J.C.), 1775,	Papilio								124
nasus Linnaeus, 1758, Cyprina	us								294
niobe Linnaeus, 1758, Papilio									5
pyriformis Adams (A.), 1850,	Bulla (4tya)							276
regius de Brito Capello, 1864.	, Panuli	rus							200
seticornis Hisinger, 1840, Asa	phus	• •							160
squinado Herbst, 1788, Cance	r				• •				260
seticornis Hisinger, 1840, Asa squinado Herbst, 1788, Cance tiziani Oppel, 1863, Ammonit volvulus Leuckart (K.G.F.R.)	es	a a						• •	144
volvulus Leuckart (K.G.F.R.)	, [1892]	, Filaria					• •	• •	229
wahlenbergii Eichwald, 1825,	Cryptor	iymus	• •	• •	• •	* *	• •	• •	214
Official List of Works Approve work placed on:	d as Av	ailable .	for Z	oologi	cal Noi	menclat	ure, tit	le of	
Hawle (I.) & Corda (A.J.C.)	, 1847.	Prodroi	n eine	er Moi	nograpi	hie der	böhmis	chen	
Trilobiten	•••		• •	• •	• •		• •		(xi

	Page
Orthosphinctes Schindewolf, 1925 (Class Cephalopoda, Order Ammonoidea), placed on the Official List of Generic Names in Zoology with Name No. 1251, with Ammonites tiziani Oppel, 1863, as type species	143
gender of name	143
palustris Müller (O.F.), 1776, as published in the combination Binoculus palustris (a junior objective synonym of apus Linnaeus, 1758, as published in the combination Monoculus apus), placed on the Official Index of Rejected and Invalid Specific Names in Zoology with Name No. 497	ı
Panuliris White, 1847 (Class Crustacea, Order Decapoda), placed on the Official List of Generic Names in Zoology with Name No. 1256, with Palinurus japonicus Siebold, 1824, as type species	<i>l</i> s . 199
gender of name	. 199
PHYLLOPIA Rafinesque, 1815 (an Invalid Original Spelling for PHYLLOPODIDAE) placed on the Official Index of Rejected and Invalid Family-Group Names in Zoology with Name No. 247	1
PHYLLOPODIDAE (correction of PHYLLOPIA) Rafinesque, 1815 (Class Crustacea Order Phyllopoda) (invalid because name of type genus suppressed under the Plenary Powers), placed on the Official Index of Rejected and Invalid Family-Group Names in Zoology with Name No. 246	9
Phyllopus Rafinesque, 1815 (Class Crustacea, Order Phyllopoda), suppression of under the Plenary Powers, for the purposes of the Law of Priority but not for those of the Law of Homonymy	67
placed on the Official Index of Rejected and Invalid Generic Names in Zoology with Name No. 1123	. 71
Phyllosoma Leach, 1818 (Class Crustacea, Order Decapoda), suppression of, under the Plenary Powers, for the purposes of the Law of Priority but not for those of the Law of Homonymy	
placed on the Official Index of Rejected and Invalid Generic Names in Zoology with Name No. 1144	
Planites de Haan, 1825 (Class Cephalopoda, Order Ammonoidea,) suppression of under the Plenary Powers, for the purposes of the Law of Priority but not for those of the Law of Homonymy	; r . 143
placed on the Official Index of Rejected and Invalid Generic Names in Zoology with Name No. 1137	
productus Bosc, [1801—1802], as published in the combination Apus productus (a junior objective synonym of Apus Linnaeus, 1758, as published in the combination Monoculus apus), placed on the Official Index of Rejected and Invalid Specific Names in Zoology with Name No. 499	n

	Page
puer Schrank, 1801, as published in the combination Papilio puer and as interpreted by the lectotype selected by Hemming (F.), (1956) (a junior objective synonym of minimus Fuessly (J.C.), 1775, as published in the combination Papilio minimus), placed on the Official Index of Rejected and Invalid Specific Names in Zoology with Name No. 500	124
pyriformis Adams (A.), 1850, as published in the combination Bulla (Atya) pyriformis (Class Gastropoda), placed on the Official List of Specific Names in Zoology with Name No. 1506	276
Pyrunculus Pilsbry, 1895 (Class Gastropoda), placed on the Official List of Generic Names in Zoology with Name No. 1263, with Bulla (Atya) pyriformis Adams	
(A.), 1850, as type species	276
gender of name	276
regius de Brito Capello, 1864, as published in the combination Panulirus regius (Class Crustacea, Order Decapoda), placed on the Official List of Specific Names in Zoology with Name No. 1497	200
Règles Internationales de la Nomenclature Zoologique, interpretation of provisions in :	
Article 4: determination of relative precedence to be accorded to any two names for nominal family-group taxa published in the same work and on the same date to be in accordance with "First Reviser" Principle, the term "selection by a 'First Reviser'" to be rigidly construed	xv
Article 14: revision of Rule provisionally adopted relating to gender to be attributed to generic names with terminations "-ops" and "-opsis", where those terminations are obviously derived from the corresponding Greek word	iii—iv
Article 22: determination of authorship to be attributed for purposes of zoological nomenclature to works whose stated authorship has been questioned	xxvi
rissonii Desmarest, 1825, as published in the combination Palinurus rissonii (Class Crustacea, Order Decapoda), suppression of, under the Plenary Powers, for the purposes of the Law of Priority but not for those of the Law of Homonymy	199
placed on the Official Index of Rejected and Invalid Specific Names in Zoology with Name No. 508	200
rosea Péron & Lesueur, [1810], as published in the combination Aurellia rosea (a junior objective synonym of aurita Linnaeus, 1758, as published in the combination Medusa aurita), placed on the Official Index of Rejected and Invalid Specific Names in Zoology with Name No. 519	318
Sao Billberg, 1820 (Class Crustacea, Order Stomatopoda), suppression of, under the Plenary Powers, for the purposes both of the Law of Priority and of the Law of Homonymy	275
placed on the Official Index of Rejected and Invalid Generic Names in Zoology	276

	Page
Sao Barrande, 1846 (Class Trilobita), validation of, under the Plenary Powers	275
gender of name	275
placed on the Official List of Generic Names in Zoology with Name No. 1261, with Sao hirsuta Barrande, 1846, as type species	275
Sao Adams (H.), 1854 (a junior homonym of Sao Barrande, 1846), placed on the Official Index of Rejected and Invalid Generic Names in Zoology with Name No. 1152	276
SAOIDAE (correction of saoNiDes) Billberg, 1820 (suppressed under Declaration 20), placed on the Official Index of Rejected and Invalid Family-Group Names in Zoology with Name No. 260	278
SAOIDAE Hupé, 1953 (Class Trilobita), placed on the Official List of Family-Group Names in Zoology with Name No. 220, with Sao Barrande, 1846, as type genus	277
SAONIDES Billberg, 1820 (an Invalid Original Spelling for SAOIDAE), placed on the Official Index of Rejected and Invalid Family-Group Names in Zoology with Name No. 261	278
Senex Pfeffer, 1881 (a junior homonym of Senex Gray (J.E.), [1838], and a junior objective synonym of Panulirus White, 1847), placed on the Official Index of Rejected and Invalid Generic Names in Zoology with Name No. 1145	200
seticornis Hisinger, 1840, as published in the combination Asaphus seticornis (Class Trilobita), placed on the Official List of Specific Names in Zoology with Name No. 1491	160
squinado Herbst, 1788, Cancer (Class Crustacea, Order Decapoda), designation of, under the Plenary Powers, to be the type species of Maja Lamarck, 1801	259
placed on the Official List of Specific Names in Zoology with Name No. 1503	260
Staurogmus Hawle (I.) & Corda (A.J.C.), 1847 (a junior objective synonym of Sao Barrande, 1846), placed on the Official Index of Rejected and Invalid Generic Names in Zoology with Name No. 1154	277
Thriops Ghigi, 1921 (an Erroneous Subsequent Spelling for Triops Schrank, 1803), placed on the Official Index of Rejected and Invalid Generic Names in Zoology with Name No. 1124	71
tiziani Oppel, 1863, as published in the combination Ammonites tiziani (Class Cephalopoda, Order Ammonoidea), placed on the Official List of Specific Names in Zoology with Name No. 1487	144
TRETASPINAE Whittington (H.B.), 1941 (Class Trilobita), placed on the Official List of Family-Group Names in Zoology with Name No. 213, with Tretaspis McCov 1849 as type genus	161

	-
Tretaspis Murchison, 1839 (Class Trilobita), suppression of, under the Plenary Powers, for the purposes both of the Law of Priority and of the Law of Homonymy	<i>Page</i> 159
placed on the Official Index of Rejected and Invalid Generic Names in Zoology with Name No. 1141	160
Tretaspis McCoy, 1849 (Class Trilobita), validation of, under the Plenary Powers	159
gender of name	159
placed on the Official List of Generic Names in Zoology with Name No. 1253, with Asaphus seticornis Hisinger, 1840, as type species)— 160
Trinoculus Voigt, 1836 (a junior objective synonym of Lepidurus Leach, 1819), placed on the Official Index of Rejected and Invalid Generic Names in Zoology with Name No. 1125	71
TRINUCLEEN Emmrich (H.[F.]), 1844 (invalid because a vernacular (German) word), placed on the Official Index of Rejected and Invalid Family-Group Names in Zoology with Name No. 253	161
TRINUCLEIDAE (correction of TRINUCLEIDES) Hawle (I.) & Corda (A.J.C.), 1847 (Class Trilobita), placed on the Official List of Family-Group Names in Zoology with Name No. 212, with Trinucleus Murchison, 1839, as type genus	161
TRINUCLEIDES Hawle (I.) & Corda (A.J.C.), 1847 (an Invalid Original Spelling for TRINUCLEIDAE), placed on the Official Index of Rejected and Invalid Family-Group Names in Zoology with Name No. 254	161
Trinucleus Link, 1807 (Class Trilobita), suppression of, under the Plenary Powers, for the purposes both of the Law of Priority and of the Law of Homonymy	159
placed on the Official Index of Rejected and Invalid Generic Name in Zoology with Name No. 1140	160
Trinucleus Murchison, 1839 (Class Trilobita), validation of, under the Plenary Powers	159
gender of name	159
placed on the Official List of Generic Names in Zoology with Name No. 1252, with Trinucleus fimbriatus Murchison, 1839, as type species	159
Triopes Schrank, 1803 (an Invalid Original Spelling for Triops Schrank, 1803), placed on the Official Index of Rejected and Invalid Generic Names in Zoology with Name No. 1126	71
Triops Schrank, 1803 (Class Crustacea, Order Phyllopoda), all previous type selections for, set aside under the Plenary Powers, and Apus cancriformis Bosc, [1801—1802], designated to be the type species of	7—68
determination of gender of name	68
placed on the Official List of Generic Names in Zoology with Name No. 1246	68
TRIOPSIDAE Keilhack, 1909 (Class Crustacea, Order Phyllopoda), placed on the Official List of Family-Group Names in Zoology with Name No. 207, with Triops	72

	Page
tuberculatus Link, 1807, as published in the combination Trinucleus tuberculatus (Class Trilobita), suppression of, under the Plenary Powers	159
placed on the Official Index of Rejected and Invalid Specific Names in Zoology with Name No. 505	161
TYLENCHIDAE Örley, 1880 (Class Nematoda), substitution of, for TYLENCHINAE Marcinowski, 1909, on the Official List of Family-Group Names in Zoology as Name No. 59	(iii)
TYLENCHINAE Marcinowski, 1909 (Class Nematoda), substitution for, by TYLENCHIDAE Örley, 1880, on the Official List of Family-Group Names in Zoology as Name No. 59	(iii)
volvulans Railliet, 1893, as published in the combination Filaria volvulans (an Erroneous Subsequent Spelling for volvulus (emend. of volvulas) Leuckart (K.G.F.R.), [1892], as published in the combination Filaria volvulas), placed on the Official Index of Rejected and Invalid Specific Names in Zoology with Name No. 510	230
volvulas as published in Manson (P.), [1892], in the combination Filaria volvulas (Class Nematoda), attribution of, under the Plenary Powers, to Leuckart (K.G.F.R.)	229
placed on the Official Index of Rejected and Invalid Specific Names in Zoology with Name No. 509	230
volvulus, emendation to, of volvulas Leuckart (K.G.F.R.), [1892], as published in the combination Filaria volvulas, validation of, under the Plenary Powers	229
placed on the Official List of Specific Names in Zoology with Name No. 1500	229
volvulxus Manson (P.), 1893, as published in the combination Filaria volvulxus (an Erroneous Subsequent Spelling for volvulus (emend. of volvulas) Leuckart (K.G.F.R.), [1892], as published in the combination Filaria volvulas), placed on the Official Index of Rejected and Invalid Specific Names in Zoology with Name No. 511	230
wahlenbergii Eichwald, 1825, as published in the combination Cryptonymus wahlenbergii (Class Trilobita), placed on the Official List of Specific Names in Zoology with Name No. 1499	214

Volume 18 355

PARTICULARS OF DATES OF PUBLICATION OF THE SEVERAL PARTS IN WHICH THE PRESENT VOLUME WAS PUBLISHED

Part No.	Page Nos.	Contents of Part	Date of Publication
1	164	Opinion 501	24th January 1958
2	i—xii	Declaration 36	24th January 1958
3	65—120	Opinion 502	24th January 1958
4	xiii—xxii	Declaration 37	24th January 1958
5	121—140	Opinion 503	3rd March 1958
6	141—156	Opinion 504	28th March 1958
7	(i)—(viii)	Direction 91	28th March 1958
8	157—176	Opinion 505	28th March 1958
9	177—196	Opinion 506	11th April 1958
10	197—210	Opinion 507	11th April 1958
11	211—226	Opinion 508	11th April 1958
12	227—238	Opinion 509	11th April 1958
13	xxiii—xxx	Declaration 38	11th April 1958
14	239—256	Opinion 510	2nd May 1958
15	257—272	Opinion 511	2nd May 1958
16	273—290	Opinion 512	2nd May 1958
17	291—302	Opinion 513	2nd May 1958
18	303—314	Opinion 514	2nd May 1958
19	(ix)(xxvi)	Direction 95	2nd May 1958
20	315—328	Opinion 515	2nd May 1958
21	329—356 T.P.—XVIII	Indexes, Foreword, Table of Contents	$\left\{ e \right\}$ 29th October 1958

INSTRUCTIONS TO BINDERS

The present volume should be bound up as follows:—T.P.—XVIII, i—xxx, (i)—(xxvi), 1—356, coloured wrapper (cover) to Part 21.

Note: The wrappers (covers) to the Parts of which this volume is composed form, with the exception of the coloured wrapper (cover) issued with Part 21, an integral part of those Parts, being included for purposes of pagination. These wrappers should therefore be bound up in the position in which they were issued. The brown wrapper (cover) to Part 21 should be bound in at the end of the volume.





