## Comments and Communications

## Zoological Nomenclature: Decisions Taken by the Fourteenth International Congress of Zoology, Copenhagen, August, 1953

THE Fourteenth International Congress of Zoology. which met at Copenhagen in August, 1953, completed the second stage of the reform of the International Code for Zoological Nomenclature, of which the first stage was carried through by the Thirteenth Congress at Paris in 1948. The crowded days of international congresses and the short duration of such meetings do not lend themselves readily to the detailed discussion of subjects such as zoological nomenclature, in which many of the problems involved are highly complex and, in addition, potentially controversial. For, unless special steps are taken, there is not time for adequate discussion, nor can there be any guarantee that zoologists in those countries which are situated at a distance from the seat of the congress will be properly represented. Moreover, for the discussion of zoological nomenclature, the preliminary circulation of adequate documentation is essential. It was with these considerations in mind that the International Trust for Zoological Nomenclature, the incorporated body which manages the business affairs of the International Commission on Zoological Nomenclature took a series of measures designed to ensure that the Copenhagen Congress should have the best possible chance of achieving success when it came to complete the revision of the International Code. First, the Trust early in 1952 published a special volume (Vol. 7) of the Bulletin of Zoological Nomenclature entirely devoted to the discussion of the major problems of zoological nomenclature which had been deferred by the Paris Congress (1948) for further study and for submission to the Copenhagen Congress. In response to the appeal for advice contained in the foregoing volume, large numbers of comments were received in the course of 1952 from representative zoological institutions and individual specialists both in the Old World and the New. These comments, together with the documents relating to all other matters affecting zoological nomenclature on which proposals had been received, were then published in the Bulletin, two complete volumes (Vols. 8 and 10) being reserved for this purpose. The second phase of the preparations undertaken by the Trust consisted in the organization, with the assistance of a grant from the International Union of Biological Sciences, of a Colloquium on Zoological Nomenclature to meet at Copenhagen a week before the opening of the Congress for the purpose of discussing in detail the documentation collected by the Trust. The invitations to this Colloquium—about 150 in number—were issued by the Trust in March, 1953. These invitations were, in part, addressed to representative zoological institutions which were asked to nominate representatives, and in part, to individual zoologists who were known, through having corresponded with the International Commission, to be interested in zoological nomenclature. In view of the fact that the Rules of Zoological Nomenclature are as important to paleozoologists as to neontologists, a special effort was made to secure the presence at the Colloquium of representatives of paleontological institutions and of individual paleozoologists, this being necessary since normally few paleontologists attend International Zoological Congresses in addition to the International Geological Congresses. As the result of these efforts, the Colloquium, when it assembled, consisted of about fifty members, divided almost equally between the Old World and the New. The largest single representation was from the United States. The Colloquium met every day for a week, and by the eve of the opening of the Congress had completed its examination of the long agenda of seventy items which had been submitted to it, and had reached conclusions on each of those items, with the exception of that relating to the suggested introduction into the Code of an article recognizing the principle of conservation. During the week of the Congress itself, a draft report was prepared, and this was examined at two meetings held on Monday, August 10, jointly with the International Commission and the Section on Nomenclature. At the conclusion of the second of these the report, as amended in discussion, was adopted by the Colloquium and at once submitted to a specially convened meeting of the International Commission. The Commission, which had participated in the discussions of the Colloquium, thereupon approved and adopted the report of the Colloquium, which it annexed as an appendix to its own report to the Congress. The two reports were approved and adopted by the Section on Nomenclature at a meeting held jointly with the Commission and the Colloquium on the morning of Wednesday, August 12, and were unanimously approved and adopted by the Congress in concilium plenum on the same afternoon.

The subjects dealt with by the Congress—and studied initially by the Colloquium—were of two kinds: (1) the reform of the Code of Zoological Nomenclature; (2) the organization of the International Commission and the financial problems confronting the Trust in its task of providing the finance required for maintaining the work of the Commission. The study of the Code was itself twofold in character, the first portion being concerned with certain major problems remitted to the Copenhagen Congress by the Paris Congress of 1948, the second, with a large number of miscellaneous proposals received since the Paris Congress and some of them designed to secure the reversal or modification of individual decisions taken by that Congress.

The problem which figures first in the report of the Colloquium and the Section, and on which the largest amount of time was spent, was concerned with the devising of means for promoting stability and uni-

versality in zoological nomenclature. The first measure taken was to introduce a preamble to the Code stressing that the foregoing is one of the principal objects for which the Code exists. Second, provisions were adopted to remove the threat to stability represented by dormant nomina dubia. Third, provisions were inserted in the Code for the restriction and designation of localities for nominal species, the lack of provisions relating to which has, in the past, been a cause of much confusion in the nomenclature of polytypic species. Finally, extensive consideration was given to various proposals for the recognition in the Code of the Principle of Conservation, that is, the introduction of a provision to protect well-established names from the risk of being overthrown by unknown or virtually unknown names of older date. This was the one subject on which no definite decision had been reached by the Colloquium before the opening of the Copenhagen Congress. During the Congress this problem was discussed first at a specially convened plenary session and later at a meeting held jointly between the Section, the International Commission, and the Colloquium at which a restricted scheme was adopted by a large majority. Closely connected with the problem of stability is that of the recognition of neotypes as a category of type specimen, on which provisions were adopted for cases where the original type material of a species has been lost or destroyed. The third and fourth of the principal subjects referred to the Copenhagen meeting were concerned with the naming of units belonging to the Family Group and of units belonging to the Order/Class Group and higher taxonomic categories, respectively. In the case of Family-Group names a comprehensive scheme was introduced in place of the wholly inadequate provisions (Articles 4 and 5) of the present Code. In this scheme room was left for further consideration of the proposals for uniform endings proposed by Stenzel and others, this subject being remitted for decision by the International Commission upon the receipt of a report from a committee of specialists. The main feature of the provisions adopted for the naming of Orders and higher groups was that such names as those for units of lower categories shall be defined by the type method, the type unit adopted being the type genus. The Congress accepted the view that it was now too late to insist upon uniform endings for names belonging to this group and decided that the duty of fixing types for, and of recommending the acceptance of, existing names should be remitted, in the first place, to specialist committees, whose duty it will be to report to the International Commission. The proposals of these committees will then be published in the Bulletin of Zoological Nomenclature, and a prescribed period allowed for the receipt of comments from interested specialists before final decisions are taken by the Commission and the names so approved placed upon "Official Lists." Finally in this sector, the Congress completely revised the provisions (Article 19) relating to the emendation of generic and specific names. The revised provision greatly simplifies the

rules in this matter and reduces the area within which emendations are permissible, this object being attained at the cost of a disregard of considerations of an etymological and similar character. Of the decisions on other problems affecting the Code special mention must be made of the following: (1) Recognition is to be withdrawn at an early prescribed date from names originally published in synonymies, but protection is to be given to such names when already well established. (2) Words are to be added to Proviso (c) to Article 25 providing that, to secure a status of availability, a specific name published after December 31, 1930, must have been accompanied by a statement in which the author of the name attempted to indicate the characters which he regarded as being diagnostic for the species so named. (3) The distribution of microfilms, microcards, and the like is banned as a method of "publishing" new zoological names. (4) The decision taken in Paris on the subject of page precedence is revoked, the First Reviser principle for determining the relative precedence to be accorded to names published in the same book and on the same date being re-established, with a definition of what constitutes selection by a first reviser and a "Recommendation" that, other things being equal, the principle of page precedence should, in future, be followed by authors when acting as first revisers. (5) Provisions have been adopted to prevent irresponsible persons from needlessly invalidating specific names by making them junior secondary homonyms by uniting genera in a manner regarded by specialists in the groups concerned as being unjustified on taxonomic grounds.

Special interest attaches to the adoption by the Copenhagen Congress, on a number of occasions, of a novel device designed at the same time to provide flexibility and to promote stability, while leaving the processes of nomenclature as automatic as possible. The feature of the procedure so adopted is the grant to individual specialists of the right to make exceptions to certain of the rules, in the interests of stability, through the communication to the Commission, for publication in the Bulletin, of notices giving references to papers containing proposals of this kind, such departures from the ordinary rules becoming provisionally effective immediately upon the publication of the notice relating to them. In every case of this kind provision is made for a specified period during which the action referred to in such a notice will be open to challenge by interested specialists. The departure from the ordinary rule will become definitive only if no protest is lodged during the prescribed challenge period; wherever challenges are made, the case will go to the Commission for final decision.

The rules governing the composition and procedure of the International Commission on Zoological Nomenclature, on which various suggestions had been received, were also carefully examined. In general, the conclusion reached was that the present arrangements are satisfactory and do not call for any change; certain changes were, however, made in the method to be

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followed in seeking nominations of candidates for election to the membership of the Commission. These changes have as their purpose the obtaining of candidates with high qualifications, if necessary, at the expense of the geographical distribution of seats as between one country and another. As regards the financial position, a warning was given to the Congress by the Right Hon. Walter Elliot, the Chairman of the Trust, that it was essential that the zoologists of the world should devise a scheme which would provide the requisite minimum income if they wanted the Commission to continue in existence. The Trust possessed no assured income and had to rely almost exclusively upon the income that it could obtain from the sale of publications to cover not only printing costs but also the unavoidable expenses of the Secretariat of the Commission. Mr. Elliot added that even the income so secured amounted to less than half that which would be required if the Secretariat were organized on a commercial basis and did not enjoy the services provided free of charge by the present Honorary Secretary. The gravity of the position disclosed by Mr. Elliot's statement created a deep impression, and a committee was at once appointed under the chairmanship of Professor R. Spärck, the President of the Congress, to devise a new financial plan.

In accordance with a suggestion made by the Colloquium and endorsed by the International Commission and by the Section on Nomenclature, the Congress

at its final concilium plenum adopted a resolution advising zoologists to guide themselves in their work in the light of the decisions taken in Copenhagen as soon as these were officially published, even though those decisions would not formally come into force until the publication, some time hence, of the revised text of the Code, as amended at Copenhagen. In order to assist zoologists in taking the advice so offered by the Congress, the International Trust, in agreement with the Congress, in arranging for the early publication (probably at the end of December) and at a low price (75 cents) made possible by the diversion to this purpose of a part of the Trust's slender reserves, of the Official Record of the decisions on zoological nomenclature taken by the Congress. As already explained, the document so to be published is the report of the Colloquium which, on the recommendation of the International Commission and of the Section on Nomenclature, was unanimously adopted at the concluding plenary session of the Congress.

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## Book Reviews

Histology. 2nd ed. Arthur Worth Ham. Philadelphia— London: Lippincott, 1953. 866 pp. Illus. + plates. \$10.00.

Histology and related fields have been advancing so rapidly that Dr. Ham felt it necessary to issue a new edition of his widely used textbook only three years after its first appearance. This second edition includes a number of major changes. The sections on histological techniques have been expanded and brought up to date, and electron microscopy has been particularly emphasized. The chapter on the cell has been almost completely rewritten, and other chapters or sections that have undergone considerable revision are those on intercellular substances, the cells of the blood, the connective tissues proper, bone, muscle, nervous tissue, the circulatory system, liver, lung, kidney, pituitary, and adrenal. The inclusion of some 144 new illustrations should prove of great value to the student. The general quality of the illustrations is high. A few photomicrographs, however, are not reproduced with the clarity or contrast that one would desire, giving the impression that they were not made from first-rate preparations.

The author has performed a novel service for beginning students in his four opening chapters. This part of the book, which covers some 40 pages and in-

cludes 27 figures, presents the elements of histological techniques, both ordinary (fixation, embedding, sectioning, staining, mounting) and special (study of fresh tissue, phase microscopy, electron microscopy, etc.) and attempts to orient the student in the use of the microscope and the proper study and interpretation of histological sections. As an attempt at this important and difficult task, these chapters are praiseworthy. If the author appears at times to descend to banality, it must be remembered how untutored most beginning medical students are in the elements of histological techniques and in the use of the microscope.

The main body of the text is eminently readable and authoritative. An effort is made to present the different views on disputed or unsettled problems, which should be stimulating to the good student if disturbing to the mediocre or poor one. As is inevitable in books of this sort, the quality of the chapters varies. The best ones are probably those that represent the particular interests of the author. The references to the literature at the end of each chapter have been carefully selected; they should be of value to other than the beginning student.

I wish to emphasize that Dr. Ham's textbook, which is one of the most recent in the English language, is one of the very best. It deserves, and undoubtedly will continue to enjoy, great popularity.