INTERNATIONAL BULLETIN OF BACTERIOLOGICAL NOMENCLATURE AND TAXONOMY
Volume 6 No. 1 January 15, 1956 pp. 43-46

NOMENCLATURAL NOTES

The International Rules of Zoological Nomenclature

The XIV International Congress of Zoology held in Copenhagen, 1953, approved the content of the Revised International Rules of Zoological Nomenclature, and directed that they be edited for publication. The literature bearing upon the revision of the "Rules" is voluminous and detailed, it is phrased carefully and usually quite legalistically. The zoologists charged their International Commission on Zoological Nomenclature with the task of preparing draft copy for the revision to be finally approved at the Copenhagen Congress of 1953. This Commission held fifteen meetings in Paris in July, 1948, at the time of the XIII International Congress. Practically the entire Volume 4 (parts 1-24, 1950) of their official organ "THE BULLETIN OF ZOOLOGICAL NOMENCLATURE" is given over to the "Official Record of Proceedings of the International Commission on Zoological Nomenclature." Including the excellent index, there are 760 pages. On December 31, 1953, there was published the "Copenhagen Decisions on Zoological Nomenclature of the Règles Internationales de la Nomenclature Zoologique" adopted by the Copenhagen Congress, August, 1953, and edited by Mr. Francis Hemming. At this Congress Mr. Hemming was authorized to proceed with the preparation of the Official Records of the Copenhagen meetings and Prof. J. Chester Bradley, President of the International Commission was invited to prepare the first draft of the revised rules. These rules have not yet (Jan. 15, 1956) been published, so they are not available in final form.

The meaning of the revised rules may be gleaned from the publications noted above, but the pertinent statements are scattered through fifteen hundred pages or more. Fortunately, Dr. W.I. Follett, of the California Academy of Science, has prepared, and the Society of Systematic Zoology in the United States of America has printed and distributed a most helpful brochure. Because of the restrictions placed by the International Zoological Trust upon publication of quotations from their copyrighted publication, the brochure includes in its title "An unofficial interpretation of the International Rules of Zoological Nomenclature" and the cover bears the statement "Issued September 1955. Not published."

The booklet (100 pp.) is paraphrased from the "Bulletin of Zoological Nomenclature" and the "Copenhagen Decisions." The material is well organized, includes a glossary, and has an excellent index. The author states clearly that; "it should not be quoted as an authority for any nomenclatural proposition."

The Glossary is of interest in showing the development of a terminology which has come to differ in many respects from that of Botany and Bacteriology. These differences in use of terms are particularly significant to the microbiologist working with the protozoa, and are of interest to all biologists. Some of the differences are noteworthy:

Binary nomenclature (the binomial nomenclature of the bacteriologist) has been replaced by "binominal nomenclature."

Binomen is introduced as the standard expression to indicate the name of a species, replacing the older designations, species name and specific name. It is the binominal designation which constitutes the scientific name of a species. The wisdom of this rechristening of the species name may well be debated. There is no classic Latin word binomen, but the adjective binominis is defined as "having two names." One is puzzled to find that the name of a species has two names.

Specific name. The Paris (1948) Zoological Congress defined "specific name" as the scientific name of a species. The Copenhagen (1953) Congress as noted above replaced the phrase "specific name" by "binomen." It then redefined "specific name" as the "name" that distinguishes a "nominal species" from the other species of that "nominal" genus. In other words, a specific name is the designation of the second component of the name of a species. The term used for this in bacteriology and botany is specific epithet. The terms specific name and species name are not synonymous in zoology as they are in bacteriology. Most specific epithets (specific names in zoology) are adjectives: there is some element of anomaly in terming a descriptive adjective such as "aureus" a name. There is merit in the appellation of "epithet."

Trivial name. The designation of the second component of the name of a species was fixed by the Paris Zoological Congress as the "trivial name." This was discarded by the Copenhagen Congress and replaced by "specific name." The

term "trivial name" in zoology is a synonym of "specific epithet" in bacteriology. This lack of uniformity in terminology, the use of the same term with different meanings in the several branches of biology, is most confusing and unfortunate. Apparently there has been no effort among the several branches of biology to cooperate in eliminating discordant terminology.

Trinomen is the designation of the name of a subspecies, consisting of the name of the genus followed by the "specific name" (specific epithet) and this in turn by the "subspecific name" (subspecific epithet). The corresponding term in bacteriology is subspecific or subspecies name.

Subspecies is defined as a population (e.g., geographic or ecological) within a species that is to be distinguished from any other such population within the same species.

Opinion and declaration are distinguished. An opinion is a decision by the Commission having to do with the status of a name or book. A declaration is a decision by the Commission which interprets a rule. In the Bacteriological Code both are included in "Opinions."

Infrasubspecific form. A term used to designate any form (subdivision) of a species, other than a subspecies, such as seasonal, sexual and transitional forms, aberrations and minority elements of all kinds within a species. In spite of its length, infrasubspecific may be useful as an over-all term to include in bacteriology the subdivisions of species such as serotype, strain, stage, group, phase, and others.

Nominal. The Zoological Rules recognize the use of the term genus in two senses. In a general sense genus is the name applied to that taxon made up of related species, it designates a definite taxonomic category. A nominal genus is a particular genus which has been characterized and to which a distinctive name has been given. Experience has shown that when used in the rules and recommendations of a code the two related but distinct usages of the word genus should be distinguished. This distinction will be made in the Zoological Rules when published. Similarly, species is the name given to a taxon of a definite rank; a nominal species is one which has been defined and named.

Homonym. A homonym is defined as the same name applied to two or more different units of the same taxonomic category (genus or species); the name of each is a homonym of the other. When two nominal species are given the same

name (binomen) in the same original publication, the binomina (species names) are primary homonyms. When two nominal species, at the time of the publication of their respective names, are placed in different nominal genera and are given the same specific name (specific epithet), and are subsequently placed in the same nominal genus, each binomen (species name) is a secondary homonym of the other.

Clearly many of the definitions and new terminologies to be included in the revised Zoological Rules may well be considered in revision and interpretation of the rules and recommendations of the Bacteriological Code. One may, however, hesitate to accept the dictum that an adjective (albus, achrous) or a noun in the genitive (enteritidis, suis) which appears as the second component of the name of a (nominal) species is to be regarded as a name, as in the expression "specific name" approved for use in zoology. There are some manifest advantages in the continued use by bacteriologists of the grammatically correct phrase, specific epithet.

One may note some inaccuracies in the statements to be included in the revised Zoological Rules. In an appendix termed the "Second Schedule" there is given a table which "indicates the manner in which Greek words should be transliterated." The table includes several errors. In most cases there is no exact transliteration of the Greek word used as an illustration. As an example of an error, the Latin equivalent of the Greek omega (ω) is given as oe. It should be long o (ō).