Amendments to the International Rules of Zoological Nomenclature.

(Reprinted from Nature, 7th January, 1928, pp. 12-13.)

"Upon unanimous recommendation by the International Commission on Zoological Nomenclature, the International Zoological Congress which met at Budapest, Hungary, September, 4-9, 1927, adopted a very important amendment to Article 25 (Law of Priority) which makes this Article, as amended, read as follows (*italicised type represents the amendments*; Roman type represents the old wording):

Article 25.—The valid name of a genus or species can be only that name under which it was first designated on the condition:

- (a) That (prior to January 1, 1931) this name was published and accompanied by an indication, or a definition, or a description; and
- (b) That the author has applied the principles of binary nomenclature.
- (c) But no generic name nor specific name published after December 31, 1930, shall have any status of availability (hence also of validity) under the Rules, unless and until it is published either

(1) With a summary of characters (seu diagnosis; seu definition seu condensed description) which differentiate or distinguish the genus or the species from other genera or species.

(2) Or with a definite bibliographic reference to such summary of characters (seu diagnoses; seu definition; seu condensed description). And further,

(3) In the case of a generic name, with the definite unambiguous designation of the type species (seu genotype; seu auto-genotype; seu orthotype).

The purpose of this amendment is to inhibit two of the most important factors which heretofore have produced confusion in scientific names. The date, Jan. 1, 1931, was selected (instead of making the amendment immediately effective) in order to give authors ample opportunity to accommodate themselves to the new rule.

The Commission unanimously adopted the following resolution:

- (a) It is requested that an author who publishes a name as new shall definitely state that it is new, that this be stated in only one (i.e., in the first) publication, and that the date of publication be not added to the name in its first publication.
- (b) It is requested that an author who quotes a generic name, or a specific name, or a subspecific name, shall add at least once the author and year of publication of the quoted name or a full bibliographic reference.

The foregoing resolution was adopted in order to inhibit the confusion which has frequently resulted from the fact that authors have occasionally published a given name as 'new' in two to five or more different articles of different dates—up to five years in exceptional cases."

(Signed) C. W. Stiles, Secretary to Commission.

United States Public Health Service, Washington, D.C.

Cause of Fishiness in Dairy Products.

(Extract from Nature, 3rd March, 1928.)

The action of Fenton's reagent (hydrogen peroxide in the presence of small amounts of ferrous salt) on lecithins in alcoholic solution causes the oxidation of the choline and amino-ethyl alcohol portions to tri-methylamine and methylamine respectively (together

with some ammonia).

The olein of butterfat, owing to its unsaturation, easily absorbs oxygen to form a labile peroxide, the absorption being strongly catalyzed by compounds of heavy metals, especially copper. The peroxide thus formed is an active oxidizing agent in fatty media and is also a catalyst to more advanced oxidation. Leeithin is intimately associated with the fat peroxide in the fat phase of dairy products, and its nitrogenous base portion is oxidized through the agencies of the fat peroxide and the catalytic activity of the metallic (copper) componds present, forming volatile bases possessing a fishy odour. That is, the reaction involved is a modified Fenton reaction in the fat phase. These volatile bases (tri-methylamine mostly) together with the easily hydrolysable salts of these bases with free fatty acids (butyric and oleic), are the causes of fishy flavours and smells in dairy products.

The importance of small amounts of metallic compounds, copper especially, in strongly catalyzing the oxidation must be realized, since, without metallic contamination, the formation of labile peroxide would be slow, and, since rancidity is a precursor to fishiness, that degree of rancidity necessary for fishiness to develop would not have been reached during the normal storage of products free from metallic contamination. In the examination of all products which were fishy, copper in appreciable quantity has been found to

be present.

That such oxidation is possible in butterfat also demonstrates the need of enquiry into the fate of fat-soluble vitamins during the development of rancidity.

(Signed) W. L. Davies. A. T. R. Mettick.

The National Institute for Research in Dairying, University of Reading, February 7th.