## OPINION 101

Nomenclatorial Status of Danilewsky, "Contribution à l'étude de la microbiose malarique" in Annales de l'Institut Pasteur, 1891, Vol. 5, pages 758-782.

SUMMARY.—The technical Latin designations used by Danilewsky, 1891, Annales de l'Institut Pasteur, Vol. 5 (12), pp. 758-782, are not in harmony with the International Rules of Zoological Nomenclature and are therefore not subject to citation or the Law of Priority on basis of said publication.

STATEMENT OF CASE.—Ernest Hartman, School of Hygiene and Public Health, Johns Hopkins University, Baltimore, has submitted the following case for Opinion:

In looking over the paper of Danilewsky, "Contribution à l'étude de la microbiose malarique" in Annales de l'Institut Pasteur, 1891, Vol. 5, pages 758-782, I am unable to interpret his naming under the present rules of the Commission. I refer this paper to the International Commission on Zoological Nomenclature for an interpretation of the names therein or for elimination as a source of zoological names.

Discussion.—The Contribution under consideration was published at a time when there existed very divergent views regarding the malarial parasites and many articles on this subject were written by persons who were obviously not entirely at home in respect to the prevailing conceptions of genera, species, and varieties, and who were unfamiliar with the principles and practices of zoological nomenclature.

Some of these authors were obviously under the impression that zoological nomenclature consisted in using 1, 2, 3, or 4 Latin names as designations of organisms, but they evidently did not use the words in the sense of the system of nomenclature proposed by Linnaeus and adopted by zoologists and botanists. Furthermore, some of the zoologists who published on this subject either did not consider themselves governed by zoological rules or were unfamiliar with them. The result is that the nomenclature of the parasites of malaria in man and birds represents one of the most confusing chapters in the entire history of zoological nomenclature. To straighten out the difficulties authors familiar with the principles and practices of zoological nomenclature have obviously endeavored to interpret the rules as applied to this field with the utmost consideration for their colleagues who were less familiar with nomenclatorial customs.

The following extract from the Contribution under consideration will serve to give a conception of Danilewsky's viewpoint:

(P. 762) Nous allons passer maintenant à l'étude du microbe de l'infection malarique aiguë. Il doit être distingué de celui de la forme chronique. Tous les microbes de nature animale vivant et se développant à l'intérieur des cellules sont ordinairement appelés cytozoaires, cyto-parasites ou cyto-microbes. Ces noms indiquent le lieu où ils se trouvent. En me conformant à cette nomenclature, j'ai proposé de remplacer la dénomination du plasmodium malarique de l'homme, Haemamaeba, en celle de Cytamaeba. Mais comme chez les oiseaux le même parasite, n'étant pas mobile, n'a pas de caractère amiboïde, ce nom d'amaeba ne peut lui être appliqué. Aussi, et surtout à cause de la propriété fondamentale du microbe de donner des spores, je l'appellerai Cytosporon malariae.¹

(P. 780) Au point de vue de l'hypothèse unitaire de l'infection malarique on pourrait proposer le rapprochement suivant des diverses formes du parasite, sans entrer pour cela dans la discussion de sa place dans le système zoologique:

hominis avium	Polymitus (c)	∫ (d)	Cytosporon avium Haemogregarina avium Laverania hominis
	(Laverania	(e)	Laverania hominis

Thus two generic names are used by Danilewsky on page 762 for what he designates "le même parasite."

The table of designations given on page 780 is subject to various interpretations. Under the most favorable interpretation Danilewsky recognizes one species, *Cytozoon malariae* with 2 varieties or subspecies, *hominis* and *avium*, and attempts to harmonize early names with his nomenclature. Even this interpretation, however, does not leave the reader clear as to the author's intention; possibly he considered earlier names as inappropriate and substituted for them the generic name, *Cytamaeba*; then, considering this latter inappropriate, he appears to have substituted for it *Haemocytosporon* which he contracted to *Cytosporon*.

During the past thirty years the Secretary has repeatedly endeavored to interpret the nomenclature of Danilewsky's Contribution, but is unable to reach a conclusion which he considers in harmony with the rules of any code of nomenclature in effect at present or at date of publication of said Contribution or prior thereto. In conference with other zoologists, the Secretary has learned that they also find the same difficulty in interpreting said Contribution.

The Secretary invites the attention of the Commission to the fact that there is an enormous accumulative economic loss in science result-

<sup>&</sup>lt;sup>1</sup> On ne doit voir dans ce nom provisoire (abrégé de *Haemocytosporon*) aucune allusion à une parenté de ce microbe avec les champignons, les monades ou les mycétozoaires. Sa classification zoologique sera discutée plus loin.

ing from the designations used by some authors, even in papers which represent not only interesting but valuable contributions to our knowledge of biology, physiology, anatomy, etc.; later their colleagues endeavor to show the utmost consideration and broadest possible interpretation of the rules in order to bring as many of these papers as possible into harmony with the rules. The Secretary is persuaded that as an economic measure in the interest of the advancement of science the time is opportune to judge the nomenclatorial status of many of these nomenclatorial confusions from a practical point of view and to relieve systematists from the expensive burden of time necessary in order to interpret or save the nomenclature used by authors who either innocently or purposely do not present their technical names in a reasonably interpretable method—whatever may be the value of their contributions from a standpoint of biology, anatomy, physiology, pathology, etc.

On the principle that it is encumbent upon an author who proposes new names, to familiarize himself with, and reasonably apply the rules of zoological grammar, namely, nomenclature, the Secretary recommends that the Commission adopt the following Opinion in answer to the question raised by Ernest Hartman:

The technical Latin designations used by Danilewsky, 1891, Annales de l'Institut Pasteur, Vol. 5 (12), pp. 758-782, are not in harmony with the International Rules of Zoological Nomenclature and are therefore not subject to citation under the Law of Priority on basis of said publication.

Opinion prepared by Stiles.

Opinion concurred in by thirteen (13) Commissioners: Apstein, Bather, Chapman, Dabbene, Handlirsch, Hartert, Horvath, Jordan (D. S.), Jordan (K.), Loennberg, Neveu-Lemaire, Warren, and Stone.

Opinion dissented from by no Commissioners.

Not voting, three (3) Commissioners: Kolbe, Monticelli, and Stejneger.