BACTERIOLOGICAL NOMENCLATURE AND TAXONOMY

CONSERVATION OF THE GENERIC NAME RICKETTSIA AND OF THE SPECIFIC EPITHET PROWAZEKII IN THE SPECIES NAME RICKETTSIA PROWAZEKII

Request for an Opinion.

File no. 39

Cornelius B. Philip, Public Health Service,
Rocky Mountain Laboratory, Hamilton, Montana, U. S. A.

To the Judicial Commission:-

1. Stricheria jürgensi Stempel 1916 (Deutsch. Med. Wchnschr. 42:439-442, 13 April, 1916) was a validly published binomial. The description combined the proposal of a new species and a new genus. This article appeared in an available journal under the title "Ueber einen als Erreger der Fleckfiebers verdächtigen Parasiten der Kleiderlaus" (On a parasite of the clothing louse suspected as the cause of typhus fever). The illustrated context leaves no doubt that the intra-cellular organism reported in the human body louse and presumed to cause typhus fever in man was as adequately described, considering the laboratory methods available at that time, as was the following species. A check of the names previously proposed in botany and in protozoology fails to reveal any prior use. The generic name Stricheria would therefore seem to be legitimate.

2. Rickettsia prowazekii da Rocha Lima (Berliner Klin. Wchnschr. 53:567-569, 22 May 1916) was also a validly published name applied to the same louse-borne pathogen. However, this name is antedated by more than a month by the name Stricheria jürgensi Stempel.

3. The generic name Rickettsia da Rocha Lima and the name of the type species R. prowazekii are quite universally accepted in medical and professional literature. Conversely the earlier name Stricheria Stempel based upon the species S. jürgensi has remained almost unrecognized and unused since its proposal. The strict application of the rule of priority in this situation would do major violence to Principle 1, Chapter 2 of the Code aiming at "fixity of names" and avoidance of throwing "science into confusion". It would also necessitate the replacement of the names of some of the supra-generic categories (higher taxa) such as the names of the family Rickettsiaceae and of the order Rickettsiales. The popular and widely used designation "rickettsiosis" for this group of diseases would doubtfully ever be replaced successfully by "stricherosis" in the medical literature. Usage would seem unquestionably in favor of conservation of Rickettsia as against Stricheria.

4. The specific epithet prowazekii as used by da Rocha Lima in the

species name Rickettsia prowazekii has been almost universally recognized and used in microbiology rather than the older specific epithet jürgensi as proposed by Stempel in Stricheria jürgensi. It is contended that the displacement of the former specific epithet by the latter would cause much needless confusion.

5. The only argument in favor of exercise of priority in this instance would be that Stempel is entitled to recognition as the prior author to describe this important pathogen despite da Rocha Lima's independent and almost simultaneously published description. This is much outweighed by the adverse considerations above.

6. The Judicial Commission of the International Committee on Bacteriological Nomenclature is requested to take such action as may be appropriate to conserve the generic name Rickettsia da Rocha Lima against Stricheria Stempel, and to conserve the specific epithet prowazekii as used in the species name Rickettsia prowazekii da Rocha Lima against the specific epithet jürgensi as first used in the species name Stricheria jürgensi Stempel.

7. There is no question here that Stricheria jürgensi might equally apply to later described extra-cellular rickettsiae in human lice variously considered to be symbionts (R. pediculi Munk and da Rocha Lima 1917) and agents of trench fever (R. quintana Schminke 1917), names which accumulating information indicates are without much doubt synonymous (Bell and Philip, "The Human Rickettsioses", Annual Review of Microbiology, Stanford University Press, 1952 to be published).

Cornelius B. Philip
Hamilton, Montana