Proposal of *Enterobacteraceae* nom. nov. as a Substitute for the Illegitimate but Conserved Name *Enterobacteriaceae* Rahn 1937

Request for an Opinion

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Although the name *Enterobacteriaceae* Rahn 1937 was not formed in accordance with the rules of nomenclature, it was conserved by the Judicial Commission in 1958, with *Escherichia* Castellani and Chalmers 1919 as the type genus. However, the Judicial Commission recently agreed that exceptions to the formation of names of taxa between subclass and genus would not be accepted. Hence, it is here proposed that the Judicial Commission issue an Opinion changing the type genus of this family from *Escherichia* to *Enterobacter* Hormaeche and Edwards 1960 and the family name from *Enterobacteriaceae* to *Enterobacteraceae* nom. nov.

The Judicial Commission of the International Committee on Systematic Bacteriology noted in Minute 29 of its 1973 meetings (8) that the family name *Enterobacteriaceae* Rahn 1937 (9) was not formed in accord with Rule 9 of the recently (1975) revised *International Code of Nomenclature of Bacteria* (7) in that it was not based on the name of the type genus of the family. The reason for this situation is that the family name *Enterobacteriaceae* Rahn had been conserved with type genus *Escherichia* Castellani and Chalmers 1919 (1) in Opinion 15 issued by the Judicial Commission (5) in 1958 as a specific exemption to Rule 9. As indicated in the above-mentioned minute, the Commission indicated that it would be willing to consider a recommendation on this matter.

At the XII International Congress for Microbiology (Munich, 1978), however, the Commission (2) agreed that no exception to Rule 9 of the (1975) revised *International Code of Nomenclature of Bacteria* would be permitted (Minute 9) and that the name *Enterobacteriaceae* should be rejected and the name *Enterobacteraceae* should be conserved and used in place of *Enterobacteriaceae* (Minute 29). This course has the merit of producing a minimal disturbance of existing nomenclature, because for practical purposes the only change is a small difference in spelling, i.e., the omission of the letter "i" from the presently used family name. Such a change is unlikely to cause much difficulty for future bacterial systematists, because it should be no more disturbing than changes produced by emendation of the spelling of names that have been inadvertently spelled incorrectly (e.g., emendation of *Hemophilus* to *Haemophi-*

lus). The change does not affect the first part of the word, and therefore it should seldom disturb the position of the family name in alphabetized lists.

This course seems to lead to less disturbance than the alternative of retaining the present type genus and changing the family name to *Escherichiaceae*. The genus *Enterobacter* appears to be quite typical of the family, and it is very adequately known and defined. It has a well-defined type species, *Enterobacter cloacae* (Jordan 1890) Hormaeche and Edwards 1960, with an accepted neotype strain, CDC 279-56 (= NCTC 10005 = ATCC 13047), proposed by Hormaeche and Edwards (3). The name *Enterobacter* has been conserved (6).

It appears, however, that the family name *Enterobacteraceae* has never been validly published. This name is, therefore, formally proposed here as a new name.

Enterobacteraceae nom. nov.

Gram-negative, rod-shaped cells which are motile and peritrichous or nonmotile. Endospores are not produced. Aerobic, facultatively anaerobic. Grow readily on peptone media; occasionally have special growth requirements. Metabolism is respiratory and fermentative; acid is produced from glucose and other carbohydrates. Most species are catalase positive and oxidase negative and reduce nitrates to nitrites. The guanine-plus-cytosine content of the deoxyribonucleic acid ranges from 35 to 60 mol%.

The type genus is *Enterobacter* Hormaeche and Edwards 1960 (nom. cons.: Opinion 28, Judicial Commission [6]).

An Opinion of the Judicial Commission is

requested on the proposal that the type genus of the family currently named *Enterobacteriaceae* be the genus *Enterobacter* and that the name of this family be *Enterobacteraceae*; the Judicial Commission is therefore requested to override Opinion 15 (1976 revision, *International Code of Nomenclature of Bacteria*, p. 91; Int. Bull. Bacteriol. Nomencl. Taxon. 8:73-74) in favor of this proposal.

REPRINT REQUESTS

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