'List of Changes in Taxonomic Opinion': making use of the new lists

Codes of nomenclature are primarily concerned with the creation and use of new names and new combinations. The Bacteriological Code (Lapage *et al.*, 1992) is no exception, and there are no mechanisms currently incorporated in the present revision that allow either a taxonomist or other microbiologists to refer to a central register of such important changes in taxonomic opinion, in the same way that new validly published names or combinations are listed in the Notification Lists or in the Validation Lists.

The Editorial Board of the *International Journal of Systematic and Evolutionary Microbiology* (IJSEM) has noted that some important taxonomic opinions (i.e. the creation of synonyms or the emendation of circumscriptions) are published outside the IJSEM. The wealth of journals in circulation now makes it a difficult task to track all changes in taxonomy and nomenclature, unless there is some form of central registry/index. Over the past 25 years prokaryotic systematics has been well served by the Approved Lists of Bacterial Names, as well as the concept of valid publication of a new name or new combination in the *International Journal of Systematic Bacteriology* and its successor, the IJSEM. This principle has also led to the creation of websites that provide unique access to not only the validly published names, but also the literature associated with them and the location of type material. In recent years the IJSEM has introduced the concept of a 'Notification List', which includes not only reference to new names and new combinations appearing in the IJSEM, but also reference to the creation of synonyms or the emendation of the circumscription of existing taxa. The Editorial Board of the IJSEM (minutes of the meeting May 2004, New Orleans, LA, USA) unanimously agreed that it was desirable to extend this principle further to cover changes in taxonomic opinions previously published outside the IJSEM. This should be effected by the creation of a 'List of Changes in

Taxonomic Opinion' (notification of changes in taxonomic opinion previously published outside the IJSEM).

The first list should be included in the January 2005 issue of the IJSEM and subsequent lists should be published once or twice a year. Analogous to the Validation Lists, announcement in a 'List of Changes in Taxonomic Opinion' is primarily the responsibility of the author(s) of the taxonomic opinion. Scientists wishing to have changes in taxonomic opinion included in future lists should send one copy of the pertinent reprint or a photocopy or a PDF file thereof to the IJSEM Editorial Office or to the Lists Editor.

Analogous to the requirements for 'publication' as laid down for new names or new combinations, the requirements of Rule 25a and Rule 25b may be used as the basis for inclusion in the list. Only available printed material (scientific periodicals or books) will be taken into consideration. No other kind of publication will be accepted nor are the following acceptable: (i) communications of taxonomic opinions at a meeting, in minutes of a meeting or in abstracts of papers presented at meetings; (ii) citation of taxonomic opinions in listings or catalogues of collections; (iii) distribution of microfilms, microcards or electronic files available on the Internet; (iv) reports in ephemeral publications, newsletters, newspapers or non-scientific periodicals or books; (v) inclusion of a taxonomic opinion in a published patent application or issued patent.

When creating synonyms authors must follow the Rules of priority (Rules 15, 17, 23a, 23b, 24b, 42, 43, 44, 45, 46, 47a and 47b). Particular attention should be given to Rules 15 and 17, which may have the effect of overruling Rules 42–47. It should also be noted that, when two taxa are considered to be heterotypic synonyms, an unavoidable consequence is the creation of an emended description of the taxon whose name has priority.

When publishing changes in taxonomic opinion it is desirable that these changes be properly documented [cf. Rule 27(2) (De Vos & Trüper, 2000)]. Notably, the synonymous names or emendation of the description should be clearly stated and indicated as such (i.e. pro synonym., emend.). The synonym having priority should be clearly indicated.

It must be stressed that the date of proposed taxonomic changes is the date of the original publication not the date of publication of the list.

It is important to note that, in contrast to bacterial nomenclature, which is regulated by the *International Code of Nomenclature of Bacteria*, there is no 'official' classification of bacteria because taxonomy remains a matter of scientific judgment and general agreement (see Tindall, 1999). **Taxonomic opinions included in the 'List of Changes in Taxonomic Opinion' cannot be considered as validly published nor, in any other way, approved by the International Committee on Systematics of Prokaryotes and its Judicial Commission. The names that are to be used are those that are the 'correct names' (in the sense of Principle 6) in the opinion of the bacteriologist, with a given circumscription, position and rank. A particular name, circumscription, position and rank does not have to be adopted in all circumstances.**

Consequently, the 'List of Changes in Taxonomic Opinion' must be considered as a service to bacteriology and it has no 'official character', other than providing a centralized point for registering/indexing such changes in a way that makes them easily accessible to the scientific community.

In paying attention to the workings and purpose of the 'List of Changes in Taxonomic Opinion', as well as making full use of the mechanisms provided by these lists, it is hoped that this will serve as an additional vehicle for communicating

nomenclatural and taxonomic information to those bacteriologists who need to consult such registries/indexes.

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It is intended that an updated version of the Bacteriological Code will be made available via the Internet before the next IJSEM Congress (San Francisco, 23–28 July 2005): an announcement will be made about this in the IJSEM in due course.

De Vos, P. & Trüper, H. G. (2000). Judicial Commission of the International Committee on Systematic Bacteriology. IXth International (IJSEM) Congress of Bacteriology and Applied Microbiology. Minutes of the meetings, 14, 15 and 18 August 1999, Sydney, Australia. *Int J Syst Evol Microbiol* **50**, 2239–2244.

Lapage, S. P., Sneath, P. H. A., Lessel, E. F., Skerman, V. B. D., Seeliger, H. P. R. & Clark, W. A. (editors) (1992). *International Code of Nomenclature of Bacteria (1990 Revision). Bacteriological Code*. Washington, DC: American Society for Microbiology.

Tindall, B. J. (1999). Misunderstanding the Bacteriological Code. *Int J Syst Bacteriol* **49**, 1313–1316.