List of Bacterial Names with Standing in Nomenclature: a Folder Available on the Internet

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There is no official classification of bacteria, but there is an official nomenclature. The new starting date for bacteriological nomenclature is 1 January 1980, when the Approved Lists of Bacterial Names were published in the International Journal of Systematic Bacteriology (11). Despite every care, there were errors in the text of the Approved Lists, and these errors were corrected in the amended edition of the Approved Lists of Bacterial Names (12). Since 1980, on average, 200 new names or new combinations have been validly published every year, and in 1996 alone, more than 335 new names or nomenclatural changes were published. Also, it is sometimes difficult to swiftly find information, despite publication of the Index of the Bacterial and Yeast Nomenclatural Changes (7, 8).

The List of Bacterial Names with Standing in Nomenclature includes, alphabetically and chronologically, the official names of bacteria as published or validated in the International Journal of Systematic Bacteriology. This list encompasses 5,569 taxa (as of 31 December 1996). The citations of names are in the correct format according to the International Code of Nomenclature of Bacteria (5) (Rule 34a, note 1, is not followed because citations would be too long and because basonyms are given) and may differ from the citations used by the original authors. The appearance of a name on this list simply means that the name has been validly published according to the rules of nomenclature and is therefore valid.

The International Committee on Systematic Bacteriology has adopted a policy that "no names will be added to or removed from the Approved Lists of Bacterial Names" (11). "For this reason the Approved Lists of Bacterial Names will remain an independent publication" (10). However, to facilitate the search for information, the 2,336 names which appear on these lists are also included on the List of Bacterial Names with Standing in Nomenclature. (A total of 2,335 names were included in the body of the Approved Lists of Bacterial Names [11]. However, the family name Enterobacteriaceae was inserted in a footnote on page 236, which indicated that the name was sub judice, referring to a proposal by Lapage [4]. In 1981, the Judicial Commission concluded that the family name Enterobacteriaceae Rahn 1937 is valid and should have been incorporated in the body of the Approved Lists of Bacterial Names [2]. A total of 2,337 names were included in the amended edition of The Approved Lists of Bacterial Names [12]; however, the name Eikenella corrordens appeared twice.)

Effective 28 March 1997, the List of Bacterial Names with Standing in Nomenclature will be available through URL:/ftp://ftp.cict.fr/pub/bacterio/.

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If a name appears only on a validation list, the reference for effective publication is given in brackets.


An arrow (→) indicates:

(i) that a taxon is emended (emendavit).

(ii) that one author (or several authors) proposes the transfer of a taxon to another genus (combinatio nova).
Example: Actinomadura flav a Gauze et al. 1974, species. — Type strain: strain ATCC 29533. — Reference: Approved...
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→ Nocardioopsis flava (Gauze et al. 1974) Gauze and Sveshnikova 1985, comb. nov.


(iii) that the rank of a taxon is changed.


(iv) that a taxon is a junior synonym of an another taxon.

Example: Rhodopseudomonas rutala Akiba et al. 1983, sp. nov. — Type strain: strain R1 = ATCC 33872, = NRR 2401 = ATCC 33049. — Reference: Accepted Lists of Bacterial Names. (Note: For the proposal of Rhodopseudomonas album the genus Rhodopseudomonas, it is necessary to substitute a new epithet to produce Strepbacterium luteosporeus because there is a senior homonym, Streptomyces albicus (Rossi Doria 1891) Waksman and Henrici 1943, as used in Approved Lists of Bacterial Names (rules 34a and 41a)).

(v) that an exception to the rules has been allowed by the Judicial Commission of the International Committee on Systematic Bacteriology (“Requests for an opinion” denied or pending are not included).

Example: Citrobacter diversus (Burkely 1932) Werkman and Gillen 1932, species. — Type strain: strain ATCC 27156. — Reference: Approved Lists of Bacterial Names. (Note: For the requests of opinion the rules have been changed to include a proposal of the name Citrobacter diversus Werkman and Gillen 1932. Int. J. Syst. Bacteriol., 1993, 43, 392. — Reference: Approved Lists of Bacterial Names. (Note: For the original name Citrobacter diversus (Burkely 1928) it is necessary to substitute the correct name Citrobacter koseri, Levinea malonatica, and Citrobacter diversus. Request for an opinion. Int. J. Syst. Bacteriol., 1990, 40, 107–108.)

An equals sign (=) means that two taxa are objective synonyms.


= Pectobacterium carnegieana (Standring 1942) Brenner et al. 1973 (AL). — Rule 24b (1): Erwinia carnegieana Standring 1942 (AL) and Pectobacterium carnegieana (Standring 1942) Brenner et al. 1973 (AL) have the same type strain and therefore are objective synonyms.

Basonyms are given to clarify the previous names or histories of individual taxa.


Annotations are made:

(i) to clarify the rules or rationale for some nomenclatural changes.


(ii) to specify that a taxon is a senior synonym of another taxon.

Example: Rhodopseudomonas palustris (Molisch 1907) van Niel 1944, species. — Type strain: strain ATCC 17001. — Reference: Approved Lists of Bacterial Names.

Note: Rhodopseudomonas palustris (Molisch 1907) van Niel 1944 (AL) is a senior synonym of Rhodopseudomonas rutala Akiba et al. 1983. — Reference: HIRAISHI (A.), SANTOS (T.S.), SUGIYAMA (J.) and KOMAGATA (K.): Rhodopseudomonas rutala is a later subjective synonym of Rhodopseudomonas palustris. Int. J. Syst. Bacteriol., 1992, 42, 186–188.

(iii) to mention that spelling has been corrected (corrigendum).


Note: The original spelling Mycobacterium chelonei (sic), has been corrected by Hill et al. 1984. — Reference: HILL (L.R.), SKERMAN (V.B.D.) and SNEATH (P.H.A.): Corrigenda to the Approved Lists of Bacterial Names edited for the International Committee on Systematic Bacteriology. Int. J. Syst. Bacteriol., 1984, 34, 508–511.

(iv) to propose a corrected spelling.


Note: According to rule 61, the original spelling should be changed to Bacteroides tectum.

The infrasubspecific subdivisions (biovars, chemovars, pathovars, phagovars, serovars, etc.) are not covered by the rules of the Bacteriological Code (5) and are not included. When the name of an infrasubspecific subdivision is cited, to
avoid confusion, it is printed in roman type (not italics), starting with a capital letter (6).


Names in quotation marks are not on the Approved Lists of Bacterial Names, have not been validly published since 1 January 1980, and therefore do not have nomenclatural standing.


The category *Candidatus* is a new nomenclatural concept proposed by Murray and Schleifer (9) to record the properties of putative taxa of procaryotes which would have indefinite rank. This category should be used for describing procaryotic entities for which more than a mere sequence is available but for which characteristics required for description according to the *Bacteriological Code* (5) are lacking. The category *Candidatus*, which is not a rank but a status, is not formally recognized in the *Bacteriological Code* (5). However, the Judicial Commission recommended to the International Committee on Systematic Bacteriology that a *Candidatus* list should be established in the International Journal of Systematic Bacteriology (3). Therefore, a list of *Candidatus* taxa appears in an annex.


Abbreviations and addresses of some collections from which type strains are available are included at the end of the list.

The omission of some diacritical signs was dictated by the limitations of the computer.

As says Le Gros, cited by Buchanan (1), “Dans ce genre de travail il est presque impossible de ne pas faire d’erreurs...” Also, I would appreciate factual information concerning any errors or corrections for this list.

REFERENCES


