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) and is available on the Internet (URL: ftp://ftp.cict.fr/pub/bacterio/). The folder (3.3 Mo) contains the following four files: "README": 26 Ko, "bacterAG.rtf": 1081 Ko, "bacterHR.rtf": 1140 Ko, and "bacterSZ.rtf": 757 Ko (the last file includes a "List of Candidatus" and a "List of Abbreviations for Some Culture Collections"). Publication on the Internet should allow an update every 3 months.

For every taxon, the nomenclatural type and a complete reference are given.


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 flava Gauze et al. 1974, species. — Type strain: strain ATCC 29533. — Reference: Approved...
Lists of Bacterial Names.

→ Nocardia flavus (Gauze et al. 1974) Gauze and Sveshnikova 1985, comb. nov.

→ Saccharothrix flavus (Gauze et al. 1974) Grund and Kroppenstedt 1990, comb. nov.

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


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


→ Rhodopseudomonas palustris (Molisch 1907) van Niel 1944 (AL). — Reference: GRUND (E.) and STACKEBRANDT (E.): Unification of the genera Strepitverticillium and Streptomyces, and emendation of Streptomyces Waksman and Henrici 1943, 339 (AL). — Note: For the transfer of Strepitverticillium album in the genus Streptomyces, it is necessary to substitute a new specific epithet to produce Streptomyces luteosporeus because there is a senior homonym, Streptomyces albicus (Rossi Doria 1891) Waksman and Henrici 1943, included on the Approved Lists of Bacterial Names (rules 34a and 41a).

(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 rutila Akiba et al. 1983. — Reference: HIRAISHI (A.), SANTOS (T.S.), SUGIYAMA (J.) and KOMAGATA (K.): Rhodopseudomonas rutila is a later subjective synonym of Rhodopseudomonas palustris. Int. J. Syst. Bacteriol., 1992, 42, 186–188.

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


= Pectobacterium carneyana (Standing 1942) Brenner et al. 1973 (AL). — Reference: Pectobacterium carneyana Standing 1942 (AL) and Pectobacterium carneyana Standing 1942 (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 rutila Akiba et al. 1983. — Reference: HIRAISHI (A.), SANTOS (T.S.), SUGIYAMA (J.) and KOMAGATA (K.): Rhodopseudomonas rutila 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 tectus.

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


