

TAXONOMIC NOTE

Corrigenda to the Validation Lists

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Some repetitions, omissions or errors have been made in the Validation Lists published in the *International Journal of Systematic Bacteriology* and they are corrected in this paper.

Keywords: Validation List, Bacteriological Code, corrigenda

Background

Validation Lists are lists that have been published regularly since July 1977 in the *International Journal of Systematic Bacteriology* (IJSB) or in the *International Journal of Systematic and Evolutionary Microbiology* (IJSEM), validating bacterial names that have been effectively published elsewhere. This procedure was introduced by the revision of the *International Code of Nomenclature of Bacteria*, published in 1975 (Lapage *et al.*, 1975). Validation Lists nos 1–71 appear in IJSB and Validation Lists no. 72 *et seq.* in IJSEM.

Unfortunately, some repetitions, omissions or errors have been made in Validation Lists published in the IJSB and they are corrected below. Some problems cannot be simply solved by a correction. It is notably true for the nomenclature of *Aeromonas caviae*, which appears in Validation List no. 15, for the nomenclatures of subgenera *Moraxella* and *Branhamella*, which appear in Validation List no. 15, for the nomenclatures of *Streptomyces flaviscleroticus* and *Streptomyces fumigatiscleroticus*, which appear in Validation List no. 22, and for the nomenclature of *Thermodesulfobacterium mobile*, which appears in Validation List no. 36. The nomenclatures of subgenera *Moraxella* and *Branhamella* are considered in an accompanying Request for an Opinion (Euzéby, 2001).

References of Validation Lists and of effective publications cited in this paper can be found in the *List of Bacterial Names with Standing in Nomenclature* <http://www.bacterio.cict.fr> (Euzéby, 1997). Official publication dates of Validation Lists cited below are those given on the Web site of the IJSEM (see: <http://ijs.sgmjournals.org/misc/pubdates.shtml>).

Repetitions

Eighteen names are cited in two different Validation Lists: *Actinokineospora* (List nos 27 and 36), *Actinokineospora riparia* (List nos 27 and 36), *Bifidobacterium saeculare* (List nos 40 and 41), *Brevibacterium casei* (List nos 12 and 13), *Brevibacterium epidermidis* (List nos 12 and 13), *Clostridium puniceum* (List nos 6 and 8), *Enterococcus sulfureus* (List nos 39 and 40), *Halobacterium mediterranei* (List nos 12 and 13), *Methanotheroxiphilum thermoacetophila* (List nos 25 and 31), *Nitrospira* (List nos 21 and 22), *Nitrospira marina* (List nos 21 and 22), *Planctomycetaceae* (List nos 23 and 26), *Planctomycetales* (List nos 23 and 26), *Rhodococcus opacus* (List nos 52 and 53), *Staphylococcus chromogenes* (List nos 23 and 26), *Tetragenococcus* (List nos 44 and 49), *Tetragenococcus halophilus* (List nos 44 and 49) and *Thermus scotoductus* (List nos 50 and 53). The second citation of such names should be disregarded and the date of valid publication of the names is in fact that of the first citation in a Validation List:

Actinokineospora Hasegawa 1988 (List no. 27, published 7 October 1988).

Actinokineospora riparia Hasegawa 1988 (List no. 27, published 7 October 1988).

Bifidobacterium saeculare Biavati *et al.* 1992 (List no. 40, published 8 January 1992).

Brevibacterium casei Collins *et al.* 1983 (List no. 12, published 17 October 1983).

Brevibacterium epidermidis Collins *et al.* 1983 (List no. 12, published 17 October 1983).

Clostridium puniceum Lund *et al.* 1981 (List no. 6, published 19 May 1981).

Enterococcus sulfureus Martinez-Murcia and Collins 1991 (List no. 39, published 9 October 1991).

Halobacterium mediterranei Rodriguez-Valera *et al.* 1983 (List no. 12, published 17 October 1983).

Methanothrix thermoacetophila corrig. Nozhevnikova and Chudina 1988 (List no. 25, published 8 April 1988).

Nitrospira Watson *et al.* 1986 (List no. 21, published 14 July 1986).

Nitrospira marina Watson *et al.* 1986 (List no. 21, published 14 July 1986).

Planctomycetaceae Schlesner and Stackebrandt 1987 (List no. 23, published 9 April 1987).

Planctomycetales Schlesner and Stackebrandt 1987 (List no. 23, published 9 April 1987).

Rhodococcus opacus Klatte *et al.* 1995 (List no. 52, published 9 January 1995).

Staphylococcus chromogenes (Devriese *et al.* 1978) Hájek *et al.* 1987 (List no. 23, published 9 April 1987).

Tetragenococcus Collins *et al.* 1993 (List no. 44, published 7 January 1993).

Tetragenococcus halophilus (Mees 1934) Collins *et al.* 1993 (List no. 44, published 7 January 1993).

Thermus scotoductus Kristjansson *et al.* 1994 (List no. 50, published 1 July 1994).

Omissions

According to Rule 40d (formerly Rule 46) of the *Bacteriological Code* (1990 Revision) (Lapage *et al.*, 1992) the subspecies *Alcaligenes denitrificans* subsp. *denitrificans* is automatically created by the valid publication of *Alcaligenes denitrificans* subsp. *xylosoxydans* (Yabuuchi and Yano 1981) Kersters and De Ley 1984 which appears in Validation List no. 15 (published 16 July 1984). However, *Alcaligenes denitrificans* subsp. *denitrificans* is not cited in Validation List no. 15 and this name seems inadvertently to have been omitted from this List. This error should be corrected and I propose the valid publication of the taxon *Alcaligenes denitrificans* subsp. *denitrificans* (ex Leifson and Hugh 1954) Rügger and Tan 1983 subsp. nov. Type strain: NCTC 8582 = DSM 30026 = ATCC 15173 = CIP 77.15. The date of valid publication of this subspecies is that of List no. 15 (16 July 1984).

The subgenera *Acetobacter* and *Gluconoacetobacter* appear in Validation List no. 17 (published 15 April 1985). The nomenclatural types of these subgenera are cited as *Acetobacter* (subgen. *Acetobacter*) *aceti* and *Acetobacter* (subgen. *Gluconoacetobacter*) *liquefaciens*, respectively.

However, neither *Acetobacter* (subgen. *Acetobacter*) *aceti* nor *Acetobacter* (subgen. *Gluconoacetobacter*) *liquefaciens* are listed in Validation List no. 17. So,

these names seem inadvertently to have been omitted from this List and I propose the following valid publications:

Acetobacter (subgen. *Acetobacter* Beijerinck 1898) *aceti* (Pasteur 1864) Beijerinck 1898. Type strain: NCIB 8621 = ATCC 15973 = ICMP 8807 = LMG 1261. Basonym: *Acetobacter aceti* (Pasteur 1864) Beijerinck 1898 (Approved Lists 1980). The date of valid publication of this name is that of List no. 17 (15 April 1985).

Acetobacter (subgen. *Gluconoacetobacter* Yamada and Kondo 1985) *liquefaciens* (Asai 1935) Yamada and Kondo 1985. Type strain: ATCC 14835 = IAM 1834 = IFO 12388. Basonyms: *Acetobacter aceti* subsp. *liquefaciens* (Asai 1935) De Ley and Frateur 1974 (Approved Lists 1980), *Acetobacter liquefaciens* (Asai 1935) Gossele *et al.* 1983. The date of valid publication of this name is that of List no. 17 (15 April 1985).

The *Bacteriological Code* (1990 Revision) does not envisage the status of the species transferred into subgenera but, as proposed in an accompanying Request for an Opinion (Euzéby, 2001), the status of such species should be that of new combinations.

Errors

Validation List no. 5 (published October 1980)

In the reference citation of *Legionella gormanii* Morris *et al.* 1980, the author's name Feeley is erroneously cited as Feley.

Validation List no. 6 (published 19 May 1981)

Bacillus schlegelii Schenk and Aragno 1981 sp. nov. is erroneously cited as a new subspecies.

Beijerinckia derxia [sic] subsp. *venezuelae* Thompson and Skerman 1981 should read *Beijerinckia derxia* subsp. *venezuelae* Thompson and Skerman 1981.

The type strain of *Methanococcus voltae* Balch and Wolfe 1981, DSM 1537, is erroneously cited as DSM 153.

Validation List no. 8 (published 17 April 1982)

Pseudocaedibacter conjugatus is a *species nova*, a *nomen revictum* and a *combinatio nova*, **not** a *species nova*. The correct citation of this taxon is *Pseudocaedibacter conjugatus* (ex Preer *et al.* 1974) Quackenbush 1982 sp. nov., nom. rev., comb. nov. (synonym: 'Caedobacter [sic] conjugatus' Preer *et al.* 1974).

Pseudocaedibacter falsus is a *species nova*, a *nomen revictum* and a *combinatio nova*, **not** a *species nova*. The correct citation of this taxon is *Pseudocaedibacter falsus* (ex Preer *et al.* 1974) Quackenbush 1982 sp. nov., nom. rev., comb. nov. (synonym: 'Caedobacter [sic] falsus' Preer *et al.* 1974).

Pseudocaedibacter minutus is a *species nova*, a *nomen revictum* and a *combinatio nova*, **not** a *species nova*. The

correct citation of this name is *Pseudocaedibacter minutus* (ex Preer *et al.* 1974) Quackenbush 1982 sp. nov., nom. rev., comb. nov. (synonym: 'Caedobacter [sic] minutus' Preer *et al.* 1974).

Vibrio proteolyticus is a *combinatio nova*, **not** a *species nova*. The correct citation of this name is *Vibrio proteolyticus* (Merkel *et al.* 1964) Baumann *et al.* 1982 comb. nov. [basonym: *Aeromonas hydrophila* subsp. *proteolytica* (Merkel *et al.* 1964) Schubert 1969 (Approved Lists 1980)].

Validation List no. 11 (published 15 July 1983)

Dactylosporangium matsuzakiense Shomura [sic] and Niida 1983 should read *Dactylosporangium matsuzakiense* Shomura and Niida 1983.

Melisococcus [sic] Bailey and Collins 1983 should read *Melissococcus* Bailey and Collins 1983.

Validation List no. 12 (published 17 October 1983)

The type strain of *Acetobacter liquefaciens* (Asai 1935) Gossele *et al.* 1983, IFO 12388, is erroneously cited as IFO 2388.

Validation List no. 14 (published 13 April 1984)

Acetobacter xylinus corrig. is a *combinatio nova*, **not** a *nomen revictum*. The correct citation of this name is *Acetobacter xylinus* corrig. (Brown 1886) Yamada 1984 comb. nov. [basonym: *Acetobacter acetii* subsp. *xylinus* corrig. (Brown 1886) De Ley and Frateur 1974 (Approved Lists 1980)].

Validation List no. 15 (published 16 July 1984)

The new combination *Ehrlichia sennetsu* (Misao and Kobayashi 1956) Ristic and Huxsoll 1984 [basonym: *Rickettsia sennetsu* Misao and Kobayashi 1956 (Approved Lists 1980)] was proposed by Ristic and Huxsoll in 1984, then validly published by announcement in Validation List no. 15. In the effective publication and in Validation List no. 15, no type strain was designated. However, strain ATCC VR-367 is the type strain of the basonym *Rickettsia sennetsu* and this strain is available at the ATCC. So, the type strain of *Ehrlichia sennetsu* should be strain ATCC VR-367.

Natronobacterium pharaonis is a new combination, **not** a new species. The correct citation of this name is *Natronobacterium pharaonis* (Soliman and Trüper 1983) Tindall *et al.* 1984 comb. nov. (basonym: *Halobacterium pharaonis* Soliman and Trüper 1983).

Validation List no. 20 (published 15 April 1986)

Lactococcus lactis (Löhnis) [sic] Schleifer *et al.* 1986 should read *Lactococcus lactis* (Lister 1873) Schleifer *et al.* 1986.

Lactococcus lactis subsp. *lactis* (Löhnis) [sic] Schleifer *et al.* 1986 should read *Lactococcus lactis* subsp. *lactis* (Lister 1873) Schleifer *et al.* 1986.

Validation List no. 22 (published 15 October 1986)

Haloferax volcanii is a new combination, **not** a new species. The correct citation of this name is *Haloferax volcanii* (Mullakhanbhai and Larsen 1975) Torreblanca *et al.* 1986 comb. nov. [basonym: *Halobacterium volcanii* Mullakhanbhai and Larsen 1975 (Approved Lists 1980)].

The title of the journal has been omitted in the reference citation of *Pilimelia columellifera* (ex Schäfer 1973) Vobis *et al.* 1986, *Pilimelia columellifera* subsp. *columellifera* (ex Schäfer 1973) Vobis *et al.* 1986, and *Pilimelia columellifera* subsp. *pallida* (ex Schäfer 1973) Vobis *et al.* 1986 subsp. nov., nom. rev. The complete reference is as follows: Vobis, G., Schäfer, D., Kothe, H. W. & Brenner, B. (1986). Descriptions of *Pilimelia columellifera* (ex Schäfer 1973) nom. rev. and *Pilimelia columellifera* subsp. *pallida* (ex Schäfer 1973) nom. rev. *Syst Appl Microbiol* **8**, 67–74.

The KCC accession numbers for the type strains of *Streptomyces brasiliensis* (Falcão de Moraes *et al.* 1966) Goodfellow *et al.* 1986, *Streptomyces carpinensis* (Falcão de Moraes *et al.* 1971) Goodfellow *et al.* 1986, *Streptomyces cinereus* (Cross *et al.* 1963) Goodfellow *et al.* 1986, *Streptomyces flaveus* (Cross *et al.* 1963) Goodfellow *et al.* 1986, *Streptomyces flaviscleroticus* (ex Pridham 1970) Goodfellow *et al.* 1986, *Streptomyces fumigatiscleroticus* (ex Pridham 1970) Goodfellow *et al.* 1986, *Streptomyces humiferus* Goodfellow *et al.* 1986, *Streptomyces niger* (Thirumalachar 1955) Goodfellow *et al.* 1986, *Streptomyces paradoxus* Goodfellow *et al.* 1986, *Streptomyces pseudoechinosporeus* Goodfellow *et al.* 1986, *Streptomyces purpureus* (Matsumae and Hata 1968) Goodfellow *et al.* 1986, *Streptomyces ruber* (Thirumalachar 1955) Goodfellow *et al.* 1986, *Streptomyces spiralis* (Falcão de Moraes 1970) Goodfellow *et al.* 1986 and *Streptomyces yerevanensis* Goodfellow *et al.* 1986 should be KCC A-0086 (**not** KCC 3086), KCC A-0301 (**not** KCC 3301), KCC A-0040 (**not** KCC 3040), KCC A-0035 (**not** KCC 3035), KCC A-0100 (**not** KCC 3100), KCC A-0101 (**not** KCC 3101), KCC A-0044 (**not** KCC 3044), KCC A-0158 (**not** KCC 3158), KCC A-0052 (**not** KCC 3052), KCC A-0066 (**not** KCC 3066), KCC A-0172 (**not** KCC 3172), KCC A-0131 (**not** KCC 3131), KCC A-0302 (**not** KCC 3302) and KCC A-0047 (**not** KCC 3047), respectively.

Validation List no. 23 (published 9 April 1987)

The correct reference citation of *Actinomadura cremea* subsp. *rifamycinii* Gauze *et al.* 1987 is the following: Gauze, G. F., Preobrazhenskaya, T. P., Lavrova, N. V., Ukholina, R. S., Kochetkova, G. V., Nechaeva, N. P., Konstantinova, N. V. & Tolstyykh, I. V. (1975). *Actinomadura cremea* var. *rifamycinii*, a rifamycin-

producing organism. *Antibiotiki* **20**, 963–966 [not Gause, G. F., Terekhova, L. P., Galatenko, O. A., Preobrazhenskaya, T. P., Borisova, V. N. & Federova, G. B. (1984). *Actinomadura recticatena* sp. nov., a new species and its antibiotic properties. *Antibiotiki* **29**, 3–7].

In the reference citation of *Haloferax mediterranei* (Rodriguez-Valera *et al.* 1983) Torreblanca *et al.* 1987, the author's name Kamekura is erroneously cited as Kamemura.

Validation List no. 24 (published 8 January 1988)

The type strain of *Flectobacillus glomeratus* McGuire *et al.* 1988, ACAM 171, is erroneously cited as ACAM 171T.

Validation List no. 25 (published 8 April 1988)

Clostridium articum [sic] (*ex* Jordan and McNicol 1979) Cato *et al.* 1988 should read *Clostridium arcticum* (*ex* Jordan and McNicol 1979) Cato *et al.* 1988.

Lactococcus raffinolactis is a new combination, **not** a new species. The correct citation of this name is *Lactococcus raffinolactis* (Orla-Jensen and Hansen 1932) Schleifer *et al.* 1988 comb. nov. [basonym: *Streptococcus raffinolactis* Orla-Jensen and Hansen 1932 (Approved Lists 1980)].

Nematospora sinecauda is cited in Validation List no. 25. However, *Nematospora sinecauda* is a yeast and this name should not have appeared this List.

Validation List no. 26 (published 8 July 1988)

Colwellia psychrerythraea corrig. is a *species nova*, a *nomen revictum* and a *combinatio nova*, **not** a *combinatio nova*. The correct citation of this taxon is *Colwellia psychrerythraea* corrig. (*ex* D'Aoust and Kushner 1972) Deming *et al.* 1988 sp. nov., nom. rev., comb. nov. (synonym: '*Vibrio psychroerythrus*' D'Aoust and Kushner 1972).

Desulfobacter [sic] *giganteus* Esnault *et al.* 1988 should read *Desulfobacterium giganteus* Esnault *et al.* 1988.

Validation List no. 28 (published 9 January 1989)

Bacillus fusiformis is a *species nova*, a *nomen revictum* and a *combinatio nova*, **not** a *combinatio nova*. The correct citation of this name is *Bacillus fusiformis* (*ex* Meyer and Gottheil 1901) Priest *et al.* 1989 sp. nov., nom. rev., comb. nov. (synonym: '*Bacillus sphaericus* subsp. *fusiformis*' Meyer and Gottheil 1901).

Dermabacter hominus [sic] Jones and Collins 1989 should read *Dermabacter hominis* Jones and Collins 1989.

Validation List no. 30 (published 7 July 1989)

Gordonia bronchialis corrig. is a *combinatio nova*, **not** a *species nova* and a *nomen revictum*. The correct citation of this name is *Gordonia bronchialis* (Tsukamura 1971) Stackebrandt *et al.* 1989 comb. nov. [basonym: *Rhodococcus bronchialis* (Tsukamura 1971) Tsukamura 1974 (Approved Lists 1980)].

Gordonia terrae is a *combinatio nova*, **not** a *species nova* and a *nomen revictum*. The correct citation of this name is *Gordonia terrae* (Tsukamura 1971) Stackebrandt *et al.* 1989 comb. nov. [basonym: *Rhodococcus terrae* (Tsukamura 1971) Tsukamura 1974 (Approved Lists 1980)].

Validation List no. 31 (published 9 October 1989)

The page numbers of the reference citation for *Cytophaga* species which appear in Validation List no. 31 are erroneously cited as 2015–2020 in place of 2015–2050.

Cytophaga agarovorans is a *species nova*, a *nomen revictum* and a *combinatio nova*, **not** a *species nova*. The correct citation of this name is *Cytophaga agarovorans* (*ex* Veldkamp 1961) Reichenbach 1989 sp. nov., nom. rev., comb. nov. (synonym: '*Cytophaga salmonicolor* var. *agarovorans*' Veldkamp 1961).

Cytophaga aprica is a *species nova*, a *nomen revictum* and a *combinatio nova*, **not** a *species nova*. The correct citation of this taxon is *Cytophaga aprica* (*ex* Lewin 1969) Reichenbach 1989 sp. nov., nom. rev., comb. nov. (synonym: '*Cytophaga diffluens* subsp. *aprica*' Lewin 1969).

Cytophaga marina is a *species nova*, a *nomen revictum* and a *combinatio nova*, **not** a *species nova*. The correct citation of this name is *Cytophaga marina* (*ex* Hikida *et al.* 1979) Reichenbach 1989 sp. nov., nom. rev., comb. nov. (synonym: '*Flexibacter marinus*' Hikida *et al.* 1979).

Cytophaga pectinovora is a *species nova*, a *nomen revictum* and a *combinatio nova*, **not** a *species nova*. The correct citation of this name is *Cytophaga pectinovora* (*ex* Dorey 1959) Reichenbach 1989 sp. nov., nom. rev., comb. nov. (synonyms: '*Flavobacterium pectinovorum*' Dorey 1959, '*Empedobacter pectinovorum*' [sic] (Dorey 1959) Kaiser 1961).

Cytophaga psychrophila is a *species nova* and a *nomen revictum*, **not** a *species nova*. The correct citation of this name is *Cytophaga psychrophila* (*ex* Borg 1960) Reichenbach 1989 sp. nov., nom. rev. (synonym: '*Cytophaga psychrophila*' Borg 1960).

The basonym of *Cytophaga uliginosa* (ZoBell and Upham 1944) Reichenbach 1989 comb. nov. is *Flavobacterium uliginosum* ZoBell and Upham 1944 (Approved Lists 1980), **not** '*Agarobacterium uliginosum*' (ZoBell and Upham 1944) Breed 1957.

The type strain of *Thiobacillus denitrificans* (ex Beijerinck 1904) Kelly and Harrison 1989, NCIMB 9548, is erroneously cited as NCIMB 8327.

Oscillochloris chrysea is a *species nova*, **not** a *combinatio nova*. The correct citation of this name is *Oscillochloris chrysea* Gorlenko and Pivovarova 1989 sp. nov.

Streptoverticillium reticulum subsp. *protomycicum* (ex Sugawara *et al.* 1963) Locci and Schofield 1989 subsp. nov., nom. rev. appears in Validation List no. 31. However, the names *Streptoverticillium reticulum* and *Streptoverticillium reticulum* subsp. *reticulum* have not been validly published and *Streptoverticillium reticulum* subsp. *protomycicum* is therefore illegitimate.

Streptoverticillium verticillium subsp. *quintum* (ex Arai 1976) Locci and Schofield 1989 subsp. nov., nom. rev. and *Streptoverticillium verticillium* subsp. *tsukushiense* (ex Arai 1976) Locci and Schofield 1989 subsp. nov., nom. rev. appear in Validation List no. 31. However, the names *Streptoverticillium verticillium* and *Streptoverticillium verticillium* subsp. *verticillium* have not been validly published and the names *Streptoverticillium verticillium* subsp. *quintum* and *Streptoverticillium verticillium* subsp. *tsukushiense* are therefore illegitimate.

The type strain of *Streptoverticillium viridoflavum* (ex Waksman and Taber 1953) Locci and Schofield 1989 sp. nov., nom. rev., ATCC 12631, is erroneously cited as strain ATCC 12629. Strain ATCC 12629 is in fact a strain of *Streptoverticillium abikoense* (Umezawa *et al.* 1951) Locci *et al.* 1969.

Validation List no. 38 (published 8 July 1991)

The species *Crinalium epipsammum* De Winder *et al.* 1991 appears in Validation List no. 38. However, the genus *Crinalium* has not been validly published and *Crinalium epipsammum* is therefore illegitimate.

Validation List no. 40 (published 8 January 1992)

In the reference citation of *Aeromonas trota* Carnahan *et al.* 1992, the author's name Chakraborty is erroneously cited as Chakrabarty.

Validation List no. 44 (published 7 January 1993)

The basonym of *Atopobium minutum* (Hauduroy *et al.* 1937) Collins and Wallbanks 1993 is erroneously cited as *Lactobacillus minutum* [sic] in place of *Lactobacillus minutus*.

The reference citation of *Sulfurospirillum* Schumacher *et al.* 1993 and *Sulfurospirillum deleyianum* Schumacher *et al.* 1993 sp. nov. is incomplete. The correct reference is as follows: Schumacher, W., Kroneck, P. M. H. & Pfennig, N. (1992). Comparative systematic study on 'Spirillum' 5175, *Campylobacter* and *Wolinella* species. Description of 'Spirillum' 5175

as *Sulfurospirillum deleyianum* gen. nov., sp. nov. *Arch Microbiol* **158**, 287–293.

Validation List no. 45 (published 9 April 1993)

In the reference citation of *Methanococcoides burtonii* Franzmann *et al.* 1993, the author's name Conway De Macario is erroneously cited as Conway De Marcario.

Validation List no. 48 (published 6 January 1994)

Carbophilus carboxidus is a *species nova*, a *nomen revictum* and a *combinatio nova*, **not** a *combinatio nova*. The correct citation of this taxon is *Carbophilus carboxidus* (ex Nozhevnikova and Zavarzin 1974) Meyer *et al.* 1994 sp. nov., nom. rev., comb. nov. [synonyms: 'Achromobacter carboxydus' Nozhevnikova and Zavarzin 1974, 'Alcaligenes carboxydus' (Nozhevnikova and Zavarzin 1974) Cypionka *et al.* 1980].

Oligotropha carboxidovorans is a *species nova*, a *nomen revictum* and a *combinatio nova*, **not** a *combinatio nova*. The correct citation of this name is *Oligotropha carboxidovorans* (ex Meyer and Schlegel 1978) Meyer *et al.* 1994 sp. nov., nom. rev., comb. nov. (synonym: 'Pseudomonas carboxydovorans' Meyer and Schlegel 1978).

Rhodocista centenaria and *Rhodospirillum centenum* have been validly published by announcement in Validation List no. 48. These two names have the same type strain (ATCC 43720) and the same priority number (priority number 2). Therefore they are homotypic synonyms and no priority can be established. So, *Rhodocista centenaria* is a new species, **not** a new combination as cited in Validation List no. 48, and the correct citation of this name is *Rhodocista centenaria* Kawasaki *et al.* 1994 sp. nov.

Zavarzinia compransoris is a *species nova*, a *nomen revictum* and a *combinatio nova*, **not** a *combinatio nova*. The correct citation of this name is *Zavarzinia compransoris* (ex Nozhevnikova and Zavarzin 1974) Meyer *et al.* 1994 sp. nov., nom. rev., comb. nov. (synonyms: 'Comamonas compransoris' Nozhevnikova and Zavarzin 1974, 'Pseudomonas compransoris' (Nozhevnikova and Zavarzin 1974) Cypionka *et al.* 1980).

Validation List no. 49 (published 4 April 1994)

The basonym of *Weissella confusa* (Holzapfel and Kandler 1969) Collins *et al.* 1994 is erroneously cited as *Lactobacillus confusa* [sic] in place of *Lactobacillus confusus*.

Validation List no. 52 (published 9 January 1995)

Thermus profundus Kobayashi *et al.* 1995 is an incorrect name and the correct entry, *Thermococcus profundus* Kobayashi *et al.* 1995, appears in Validation

List no. 53 (published 7 April 1995). So, *Thermus profundus* should be disregarded on List no. 52.

Validation List no. 53 (published 7 April 1995)

The type strain of *Vibrio iliopiscarius* Onarheim *et al.* 1995, PS1, is erroneously cited as PT1.

Validation List no. 54 (published 5 July 1995)

Isosphaera pallida is a *species nova*, a *combinatio nova* and a *nomen revictum*, **not** a *combinatio nova*. The correct citation of this name is *Isosphaera pallida* (ex Woronichin 1927) Giovannoni *et al.* 1995 sp. nov., nom. rev., comb. nov. [synonyms: 'Isocystis pallida' Woronichin 1927 (as a cyanobacterium), 'Torulopsidosira pallida' (Woronichin 1927) Geitler 1963 (as a yeast)].

Nitrospira tenuis is a *species nova*, a *nomen revictum* and a *combinatio nova*, **not** a *combinatio nova*. The correct citation of this name is *Nitrospira tenuis* (ex Harms *et al.* 1976) Head *et al.* 1995 sp. nov., nom. rev., comb. nov. (synonym: 'Nitrosovibrio tenuis' [sic] Harms *et al.* 1976).

Thermus thermophilus is a *species nova* and a *nomen revictum*, **not** a *combinatio nova*. The correct citation of this name is *Thermus thermophilus* (ex Oshima and Imahori 1974) Manaia *et al.* 1995 sp. nov., nom. rev. (synonym: 'Thermus thermophilus' Oshima and Imahori 1974).

Validation List no. 57 (published 3 April 1996)

The type strain of *Ralstonia solanacearum* (Smith 1896) Yabuuchi *et al.* 1996, ATCC 11696, is erroneously cited as ATCC 10696.

Validation List no. 59 (published 7 October 1996)

The basonym of *Saccharothrix aerocolonigenes* subsp. *stauroporea* corrig. (ex Omura *et al.* 1977) Takahashi *et al.* 1996 is erroneously cited as *Streptomyces stauroporeus* [sic] in place of *Streptomyces stauroporeus*.

Validation List no. 66 (published 12 August 1998)

The type strain of *Bacillus mucilaginosus* Avakyan *et al.* 1998, VKM B-1480D, is erroneously cited as 1480D.

The type strain of *Methylocaldum gracile* (ex Romanovskaya *et al.* 1978) Bodrossy *et al.* 1998, VKM-14L, is erroneously cited as 14L.

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Addenda

Since the submission of this manuscript, three errors have been made in the Validation Lists published in the *International Journal of Systematic and Evolutionary Microbiology*; they are corrected below.

Validation List no. 77 (published 14 December 2000)

Ralstonia oxalatica (ex Khambata and Bhat 1953) Sahin *et al.* 2000 is erroneously cited as *Ralstonia oxalaticus*.

Validation List no. 78 (published 19 January 2001)

Nitrobacter alkalicus Sorokin *et al.* 1999 should be deleted because this name already appears in Validation List no. 71 (published 22 October 1999).

The type strain UNIQEM 113 of *Heliobacterium sulfidophilum* Bryantseva *et al.* 2001 is incorrectly cited as UNIQEM [sic] 113.

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