Opinion

Status of strains that contravene Rules 27 (3) and 30 of the International Code of Nomenclature of Bacteria. Opinion 81

Judicial Commission of the International Committee on Systematics of Prokaryotes

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Based on a list of 205 names proposed in original articles in the *International Journal of Systematic and Evolutionary Microbiology* or cited in Validation Lists from January 2001 that are not in accordance with Rules 27(3) and 30 of the International Code of Nomenclature of Bacteria (the Code), the Judicial Commission rules that names contained in lists 2–4 are to be considered to be validly published and that deposit in more than one collection in different countries is documented. Names included in list 1 are only to be considered validly published if evidence is presented that the strains have been deposited in additional collections, as laid down by Rules 27 (3) and 30 of the Code.

At the meetings of the Judicial Commission at the IUMS Bacteriology and Applied Microbiology Congress in San Francisco in 2005, the Judicial Commission of the International Committee for Systematics of Prokaryotes decided that, of the 205 names listed by Euzéby & Tindall (2004) in their Request for an Opinion, those listed in Tables 2–4 of the original Request are to be considered to be validly published.

The names contained in the first list (Table 1 of the original Request) are more problematic. In some cases, additional deposits have been documented, and the names can be considered to be validly published in a fashion analogous to the names listed in Tables 2–4. In cases where at least a second deposit in a culture collection in a different country is not documented at present, the names cannot be considered to be validly published. Authors of these names, or other scientists who wish to have these names validly published, should submit evidence of the deposit of the type strain in additional collections to the List Editor (either directly or via the IJSEM Editorial Office) before the next meeting of the Judicial Commission in Sapporo, Japan, in 2011. After that time, the names will be ruled not to have been validly published. If, after that deadline, the authors or other scientists wish to have these names validly published, this may be done by confirming that the names are in accordance with the requirements of the International Code of Nomenclature of Bacteria (the Code) and either by requesting valid publication via the Validation Lists or by inclusion of the proposal in an original article in the IJSEM. The details of valid publication will then make reference to those publications. If authors or other scientists feel that an exception should

be granted to Rule 30, requiring deposit of the type in two different collections in two different countries, they should contact the Editorial Office of the IJSEM. In order to clarify the current situation, the names listed in the Table 1 of the original request (Euzéby & Tindall, 2004) have been subdivided into Table 1a, containing those names that can be considered to be validly published in the original publication/Validation List, and Table 1b, which lists those names that are currently considered not to be validly published.

Citations of the publication in which these names appeared with the original intent of having them validly published have been omitted in order to reduce the length of this Opinion.

Those names included in Tables 2, 3 and 4 and the corresponding collections where the types are held are included for completeness. Their format follows that of the tables in the original request, with the additional condition that these listings indicate that the Judicial Commission rules that the names should be considered to be in accordance with the Rules of the Code at the time that the names were originally published and their status as new names or new combinations was proposed.

Opinion compiled on behalf of the Judicial Commission by B. J. Tindall and J. P. Euzéby.

Reference

Euzéby, J. P. & Tindall, B. J. (2004). Status of strains that contravene Rules 27 (3) and 30 of the Bacteriological Code. Request for an Opinion. *Int J Syst Evol Microbiol* 54, 293–301.

Table 1a. Names where the original publication does not document the deposit of the type in at least two culture collections in two different countries, but where such deposits have been documented

These names are considered to be validly published, since deposit in a second collection in a different country has been documented. Valid publication is considered to have taken place in the original Validation List or original article published in the IJSEM.

Name	Type strains cited in the effective publication	Accession numbers provided by way of a certificate or accession number found on culture collection website
<i>Acetobacter cibinongensis</i> Lisdiyanti <i>et al.</i> 2002	4H-1 =NBRC 16605 =JCM 11196	CIP 107380, DSM 15549
<i>Acetobacter orientalis</i> Lisdiyanti <i>et al.</i> 2002	21F-2 =NBRC 16606 =JCM 11195	CIP 107379, DSM 15550
<i>Acetobacter syzygii</i> Lisdiyanti <i>et al.</i> 2002	9H-2 =NBRC 16604 =JCM 11197	CIP 107378, DSM 15548
<i>Actinoplanes capillaceus</i> Matsumoto <i>et al.</i> 2001	K95-5561 =JCM 10268 =NBRC 16408	DSM 44859
<i>Aeromonas culicicola</i> Pidiyar <i>et al.</i> 2002	MTCC3249 =NCIM 5147	CIP 107763
<i>Asaia siamensis</i> Katsura <i>et al.</i> 2001	S60-1 =JCM 10715 =NBRC 16457 =NRIC 0323	CCM 7132 =KCTC 12914 =MTCC4042
<i>Bacillus thermantarcticus</i> Nicolaus <i>et al.</i> 2002	M1 =DSM 9572	ATCC 700235 =BGSC 20A1
<i>Bradyrhizobium yuanmingense</i> Yao <i>et al.</i> 2002	CCBAU 10071 =CFNEB 101	CIP 108027
<i>Clostridium phytofermentans</i> Warnick <i>et al.</i> 2002	ISDg =ATCC 700394	DSM 18823
<i>Comamonas koreensis</i> Chang <i>et al.</i> 2002	YH12 =KCTC 12005 =IMSNU 11158	CIP 108012
<i>Ensifer kummerowiae</i> (Wei <i>et al.</i> 2002) Young 2003	AS 1.3046 =CCBAU 71714	CIP 108026
<i>Enterobacter cowanii</i> Inoue <i>et al.</i> 2001	888-76 =JCM 10956	CIP 107300
<i>Haloferax alexandrinus</i> Asker and Ohta 2002	TM =JCM 10717 =NBRC 16590	CIP 107620 =KCTC 12962
<i>Helicobacter typhlonius</i> Franklin <i>et al.</i> 2002	MIT 97-6810 =ATCC BAA-367	CIP 107792 =CCUG 48335
<i>Herbaspirillum frisingense</i> Kirchhof <i>et al.</i> 2001	GSF30 =DSM 13128	CCUG 47444 =JCM 21445 =NBRC 102522
<i>Hydrogenophaga intermedia</i> Contzen <i>et al.</i> 2001	S1 =DSM 5680	IAM 14919 =JCM 21401 =NBRC 102510
<i>Lactobacillus ferintoshensis</i> Simpson <i>et al.</i> 2002	R7-84 =CIP 106749	JCM 12511
<i>Leuconostoc gasicomitatum</i> Björkroth <i>et al.</i> 2001	TB 1-10 =LMG 18811	CCUG 46042 =CECT 5767
<i>Marinospirillum alkaliphilum</i> Zhang <i>et al.</i> 2002	Z4 =CGMCC AS 1.2746	JCM 11312
<i>Methylovorus mays</i> Doronina <i>et al.</i> 2001*	BV =VKM B-2221	NCIMB 13992
<i>Mycobacterium heckeshornense</i> Roth <i>et al.</i> 2001	S369 =DSM 44428	CIP 107347
<i>Mycoplasma agassizii</i> Brown <i>et al.</i> 2001	PS6 =ATCC 700616	CCUG 53180
<i>Mycoplasma alligatoris</i> Brown <i>et al.</i> 2001	A21JP2 =ATCC 700619	CCUG 53179
<i>Mycoplasma microti</i> Brown <i>et al.</i> 2001	IL371 =ATCC 700935	CCUG 53181
<i>Nitrobacter hamburgensis</i> Bock <i>et al.</i> 2001	X14 =DSM 10229	NCIMB 13809
<i>Planococcus alkanoclasticus</i> Engelhardt <i>et al.</i> 2001	MAE2 =NCIMB 13489	CIP 107718
<i>Pseudomonas cremoricolorata</i> Uchino <i>et al.</i> 2002	CC-8 =NRIC 0181 =NBRC 16634 =JCM 11246	CIP 107616, DSM 17059
<i>Pseudomonas parafulva</i> Uchino <i>et al.</i> 2002	CB-1 =AJ 2129 =NBRC 16636 =JCM 11244 =NRIC 0501	CIP 107617, DSM 17004
<i>Pseudomonas psychrophila</i> Yumoto <i>et al.</i> 2002	E-3 =JCM 10889	CIP 107901
<i>Rhizobium indigoferae</i> Wei <i>et al.</i> 2002	AS 1.3045 =CCBAU 71042	CIP 108029
<i>Sinorhizobium kummerowiae</i> Wei <i>et al.</i> 2002	AS 1.3046 =CCBAU 71714	CIP 108026
<i>Sinorhizobium morelense</i> Wang <i>et al.</i> 2002	Lc04 =CFN E1007 =LMG 21331	NBRC 100387
<i>Sulfolobus tokodaii</i> Suzuki <i>et al.</i> 2002	7 =JCM 10545	DSM 16993
<i>Treponema parvum</i> Wyss <i>et al.</i> 2001	OMZ 833 =ATCC 700770	DSM 16260
<i>Trichlorobacter thiogenes</i> De Wever <i>et al.</i> 2001	K1 =ATCC BAA-34	JCM 14045

*This description has also been emended as *Methylovorus mays* Doronina *et al.* 2001 emend. Doronina *et al.* 2005 [Int J Syst Evol Microbiol 55 (2005), 903–906].

Table 1b. Names considered not to be validly published at the time of writing, since deposit in two different collections in two different countries has not been documented

Name	Type strain(s) cited in the effective publication
<i>Actinoplanes friuliensis</i> Aretz <i>et al.</i> 2001	HAG 010964 =DSM 7358*
<i>Alicyclobacillus acidocaldarius</i> subsp. <i>rittmannii</i> Nicolaus <i>et al.</i> 2002	MR1 =DSM 11297
<i>Alkalispirillum mobile</i> Rijkenberg <i>et al.</i> 2002	SL-1 =DSM 12769
<i>Anaeromyxobacter dehalogenans</i> Sanford <i>et al.</i> 2002	2CP-1 =ATCC BAA-258
<i>Azoarcus buckelii</i> Mechichi <i>et al.</i> 2002	U120 =DSM 14744
<i>Azospirillum doebereineriae</i> Eckert <i>et al.</i> 2001	GSF71 =DSM 13131
<i>Borrelia sinica</i> Masuzawa <i>et al.</i> 2001	CMN3 =JCM 10505
<i>Chlorobaculum limnaeum</i> Imhoff 2003	DSM 1677
<i>Chlorobaculum parvum</i> Imhoff 2003	DSM 263
<i>Chlorobaculum thiosulfatophilum</i> Imhoff 2003	DSM 249
<i>Chlorobium clathratiforme</i> (Szafer 1911) Imhoff 2003	BU1 =DSM 5477
<i>Chlorobium luteolum</i> (Schmidle 1901) Imhoff 2003	DSM 273
<i>Dehalospirillum multivorans</i> Scholz-Muramatsu <i>et al.</i> 2002	DSM 12446
<i>Desulfobulbus mediterraneus</i> Sass <i>et al.</i> 2002	86FS1 =DSM 13871
<i>Desulfomicrobium orale</i> Langendijk <i>et al.</i> 2001	NY678 =DSM 12838
<i>Desulfomonile limimaris</i> Sun <i>et al.</i> 2001	DCB-M =ATCC 700979
<i>Desulfovibrio dechloracetivorans</i> Sun <i>et al.</i> 2001	SF3 =ATCC 700912
<i>Desulfovibrio mexicanus</i> Hernandez-Eugenio <i>et al.</i> 2001	Lup1 =DSM 13116
<i>Desulfovibrio vietnamensis</i> Dang <i>et al.</i> 2002	G3 100 =DSM 10520
<i>Dethiosulfovibrio acidaminovorans</i> Surkov <i>et al.</i> 2001	SR 15 =DSM 12590
<i>Dethiosulfovibrio marinus</i> Surkov <i>et al.</i> 2001	WS 100 =DSM 12537
<i>Dethiosulfovibrio russensis</i> Surkov <i>et al.</i> 2001	SR 12 =DSM 12538
<i>Geoglobus ahangari</i> Kashefi <i>et al.</i> 2002	234 =ATCC BAA-425
<i>Hahella chejuensis</i> Lee <i>et al.</i> 2001	96CJ10356 =KCTC 2396 =IMSNU 11157
<i>Halorhodospira neutriphila</i> Hirschler-Réa <i>et al.</i> 2003	SG 3301 =DSM 15116
<i>Heliobacterium sulfidophilum</i> Bryantseva <i>et al.</i> 2001	BR4 =UNIQEM 113
<i>Heliorestis baculata</i> Bryantseva <i>et al.</i> 2001	OS-H1 =DSM 13446
<i>Hydrogenobacter subterraneus</i> Takai <i>et al.</i> 2001	HGP1 =NBRC 16485 =JCM 10560
<i>Ketogulonicigenium vulgare</i> Urbance <i>et al.</i> 2001	DSM 4025†
<i>Leptotrichia trevisanii</i> Tee <i>et al.</i> 2002	'Wee Tee' 1999 =ATCC 700907
<i>Methanocaldococcus fervens</i> (Jeanthon <i>et al.</i> 1999) Whitman 2002	AG86 =DSM 4213
<i>Methanocaldococcus infernus</i> (Jeanthon <i>et al.</i> 1998) Whitman 2002	ME =DSM 11812
<i>Methylococcobium buryatense</i> Kaluzhnaya <i>et al.</i> 2001	5B =VKM B-2245
<i>Microcystis aeruginosa</i> Otsuka <i>et al.</i> 2001‡	NIES843 =IAM M-247
<i>Nautilia lithotrophica</i> Miroshnichenko <i>et al.</i> 2002	525 =DSM 13520
<i>Neochlamydia hartmannellae</i> Horn <i>et al.</i> 2001	A ₁ Hsp =ATCC 50802
<i>Neorickettsia risticii</i> (Holland <i>et al.</i> 1985) Dumler <i>et al.</i> 2001	Illinois =HRC-IL =ATCC VR-986 (deaccessioned)
<i>Neorickettsia sennetsu</i> (Misao and Kobayashi 1956) Dumler <i>et al.</i> 2001	Miyayama =ATCC VR-367
<i>Nitrosomonas aestuarii</i> Koops <i>et al.</i> 2001	Nm 36
<i>Nitrosomonas communis</i> Koops <i>et al.</i> 2001	Nm 2
<i>Nitrosomonas eutropha</i> Koops <i>et al.</i> 2001	Nm 57
<i>Nitrosomonas halophila</i> Koops <i>et al.</i> 2001	Nm 1
<i>Nitrosomonas marina</i> Koops <i>et al.</i> 2001	Nm 22
<i>Nitrosomonas nitrosa</i> Koops <i>et al.</i> 2001	Nm 90
<i>Nitrosomonas oligotropha</i> Koops <i>et al.</i> 2001	Nm 45
<i>Nitrosomonas ureae</i> Koops <i>et al.</i> 2001	Nm 10
<i>Nitrospira moscoviensis</i> Ehrich <i>et al.</i> 2001	NSP M-1 =DSM 10035
<i>Opitutut terrae</i> Chin <i>et al.</i> 2001	PB90-1 =DSM 11246
<i>Paenibacillus granivorans</i> Van der Maarel <i>et al.</i> 2001	A30 =CBS 229.89§
<i>Prochlorococcus marinus</i> Chisholm <i>et al.</i> 2001‡	CCMP-1375
<i>Prochlorococcus marinus</i> subsp. <i>marinus</i> Chisholm <i>et al.</i> 2001‡	CCMP-1375
<i>Propionispora vibrioides</i> Biebl <i>et al.</i> 2001	FKBS1 =DSM 13305
<i>Prosthecochloris vibrioformis</i> (Pelsh 1936) Imhoff 2003	DSM 260
<i>Pseudomonas cedrina</i> Dabboussi <i>et al.</i> 2002	CFML 96-198 =CIP 105541
<i>Pseudomonas orientalis</i> Dabboussi <i>et al.</i> 2002	CFML 96-170 =CIP 105540
<i>Rhodobaca bogoriensis</i> Milford <i>et al.</i> 2001	LBB1 =ATCC 700920

Table 1b. cont.

Name	Type strain(s) cited in the effective publication
<i>Rhodospirillum rubrum</i> Madigan <i>et al.</i> 2001	ANT.BR =ATCC 700587
<i>Rickettsia felis</i> Bouyer <i>et al.</i> 2001	Strain <i>Ctenocephalides felis</i> -LSU =CNCM I-2363 [¶]
<i>Roseospiroillum parvum</i> Glaeser and Overmann 2001	930I =DSM 12498
<i>Selenihalanaerobacter shriftii</i> Switzer Blum <i>et al.</i> 2001	DSSe-1 =ATCC BAA-73
<i>Sulfurospirillum multivorans</i> (Scholz-Muramatsu <i>et al.</i> 2002) Luijten <i>et al.</i> 2003	DSM 12446
<i>Syntrophus aciditrophicus</i> Jackson <i>et al.</i> 2001	SB =ATCC 700169
<i>Thauera aminoaromatica</i> Mechichi <i>et al.</i> 2002	S2 =DSM 14742
<i>Thauera chlorobenzoica</i> Song <i>et al.</i> 2001	3CB-1 =ATCC 700723
<i>Thauera phenylacetica</i> Mechichi <i>et al.</i> 2002	B4P =DSM 14743
<i>Thermococcus sibiricus</i> Miroshnichenko <i>et al.</i> 2001	MM 739 =DSM 12597
<i>Thermoproteus uzoniensis</i> Bonch-Osmolovskaya <i>et al.</i> 2001	Z-605 =DSM 5263
<i>Thioflavicoccus mobilis</i> Imhoff and Pfennig 2001	8321 =ATCC 700959
<i>Tropheryma whippelii</i> La Scola <i>et al.</i> 2001	CNCM I-2202 [¶]

*The type strain DSM 7358 is a patent strain. The strain can be obtained from the DSMZ for scientific research by special agreement.

†This strain is not in the public collection of the DSMZ.

‡These are names of cyanobacteria. The genus names *Prochlorococcus* Chisholm *et al.* 2001 and *Microcystis* Lemmermann 1907 do not appear to be validly published under the International Code of Nomenclature of Bacteria. This also has implications for the name *Prochlorococcus marinus* subsp. *pastoris* Rippka *et al.* 2001.

§This is probably a strain deposited for patent purposes.

||This species description has also been emended as *Rickettsia felis* Bouyer *et al.* 2001 emend. La Scola *et al.* 2002 [*Int J Syst Evol Microbiol* **52** (2002), 2035–2041].

¶This collection exists solely for deposit for patent purposes.

Table 2. New species, subspecies or combinations whose type strains were originally deposited in only one recognized culture collection or in two recognized culture collections of the same country, for which deposit in at least one recognized culture collection in another country was documented in the original Request for an Opinion

These names are considered to be validly published. Valid publication is considered to have taken place in the original Validation List or original article published in the IJSEM.

Name and authorship	Type strain cited in original publication	Other designation(s) under which the type strain is available
<i>Actinocorallia aurantiaca</i> (Lavrova and Preobrazhenskaya 1975) Zhang <i>et al.</i> 2001	JCM 8201	DSM 43924 =IFO (now NBRC) 15554 =IFO (now NBRC) 16147 =IMET 9577 =KCTC 9554
<i>Actinocorallia glomerata</i> (Itoh <i>et al.</i> 1996) Zhang <i>et al.</i> 2001	JCM 9376	DSM 44360 =IFO (now NBRC) 15960
<i>Actinocorallia libanotica</i> (Meyer 1981) Zhang <i>et al.</i> 2001	IFO (now NBRC) 14095	ATCC 35576 =DSM 43554 =JCM 3284 =JCM 10696 =NRRL B-16097 =VKM Ac-939
<i>Actinocorallia longicatena</i> (Itoh <i>et al.</i> 1996) Zhang <i>et al.</i> 2001	JCM 9377	CIP 105488 =DSM 44361 =IFO (now NBRC) 15961
<i>Actinomadura viridilutea</i> (Agre and Guzeva 1975) Zhang <i>et al.</i> 2001	JCM 3398	ATCC 33925 =CCRC 13638 =DSM 44433 =IFO (now NBRC) 14480 =JCM 7346
<i>Anaerobranca gottschalkii</i> Prowe and Antranikian 2001	DSM 13577	ATCC BAA-51
<i>Anaerococcus octavius</i> (Murdoch <i>et al.</i> 1997) Ezaki <i>et al.</i> 2001	NCTC 9810	DSM 11663
<i>Anaerococcus prevotii</i> (Foubert and Douglas 1948) Ezaki <i>et al.</i> 2001	ATCC 9321	CCUG 41932 =CIP 105881 =DSM 20548 =JCM 6508 =NCTC 11806
<i>Bacillus selenitireducens</i> Switzer Blum <i>et al.</i> 2001	ATCC 700615	DSM 15326
<i>Carboxydibrachium pacificum</i> corrig. Sokolova <i>et al.</i> 2001	DSM 12653	ATCC BAA-271
<i>Cellulosimicrobium cellulans</i> (Metcalf and Brown 1957) Schumann <i>et al.</i> 2001	DSM 43879	ATCC 12830 =CFBP 4267 =CIP 103404 =HAMB1 95 =IFO (now NBRC) 15516 =JCM 9965 =LMG 16221 =NRRL B-2768 =VKM Ac-1412
<i>Clostridium hungatei</i> Monserrate <i>et al.</i> 2001	ATCC 700212	DSM 14427
<i>Clostridium saccharoperbutylacetonicum</i> Keis <i>et al.</i> 2001	ATCC 27021 (derived from ATCC 13564)	DSM 14923 =NCIMB 12606
<i>Comamonas denitrificans</i> Gumaelius <i>et al.</i> 2001	ATCC 700936	CCUG 44425
<i>Cryptosporangium aurantiacum</i> (ex Ruan <i>et al.</i> 1976) Tamura and Hatano 2001	IFO (now NBRC) 13967 =JCM 3241	AS 4.1052 =DSM 46144 =KCC A-0241 =KCTC 9529 =NCIMB 12649 =NRRL B-16698
<i>Desulfotobacterium chlororespirans</i> Sanford <i>et al.</i> 2001	ATCC 700175	DSM 11544
<i>Desulfotobacterium metallireducens</i> Finneran <i>et al.</i> 2002	ATCC BAA-636	DSM 15288
<i>Desulfobacula phenolica</i> (Bak and Widdel 1988) Kuever <i>et al.</i> 2001*	–	ATCC 43956 =DSM 3384
<i>Desulfotignum balticum</i> Kuever <i>et al.</i> 2001	DSM 7044	ATCC BAA-19
<i>Desulfotomaculum thermobenzoicum</i> subsp. <i>thermosyntrophicum</i> Plugge <i>et al.</i> 2002	DSM 14055	ATCC BAA-281
<i>Dorea formicigenerans</i> (Holdeman and Moore 1974) Taras <i>et al.</i> 2002	ATCC 27755	DSM 3992
<i>Gallicola barnesae</i> (Schiefer-Ullrich and Andreessen 1986) Ezaki <i>et al.</i> 2001	DSM 3244	ATCC 49795
<i>Geobacillus kaustophilus</i> (Priest <i>et al.</i> 1989) Nazina <i>et al.</i> 2001	ATCC 8005	CCUG 28890 =CIP 106929 =DSM 7263 =LMG 9819 =NCCB 30003 =NRRL NRS-81
<i>Geobacillus stearothermophilus</i> (Donk 1920) Nazina <i>et al.</i> 2001	DSM 22	ATCC 12980 =CCM 2062 =CCRC 11092 =CCUG 26241 =CIP 66.23 =IAM 11062 =IFO (now NBRC) 12550 =JCM 2501 =KCTC 1665 =KCTC 1752 =LMG 6939 =NCCB 75019 =NCFB 1768 =NCIMB 8923 =NCTC 10339 =NRRL B-1172 =VKM B-510

Table 2. cont.

Name and authorship	Type strain cited in original publication	Other designation(s) under which the type strain is available
<i>Geobacillus thermodenitrificans</i> (Manachini <i>et al.</i> 2000) Nazina <i>et al.</i> 2001	DSM 465	ATCC 29492 =LMG 17532
<i>Geobacillus thermoglucosidasius</i> (Suzuki <i>et al.</i> 1984) Nazina <i>et al.</i> 2001	DSM 2542	ATCC 43742 =CCUG 28887 =CIP 106930 =LMG 7137 =NRRL B-14516
<i>Geobacillus thermoleovorans</i> (Zarilla and Perry 1988) Nazina <i>et al.</i> 2001	DSM 5366	ATCC 43513 =LMG 9823
<i>Heliobacterium undosum</i> Bryantseva <i>et al.</i> 2001	DSM 13378	UNIQEM 114
<i>Lamprocystis purpurea</i> (Eichler and Pfennig 1989) Imhoff 2001	DSM 4197	ATCC 49210
<i>Legionella drozanskii</i> Adeleke <i>et al.</i> 2001	ATCC 700990	CCUG 43885
<i>Legionella fallonii</i> Adeleke <i>et al.</i> 2001	ATCC 700992	CCUG 43887
<i>Legionella rowbothamii</i> Adeleke <i>et al.</i> 2001	ATCC 700991	CCUG 43886
<i>Lentzea violacea</i> (Lee <i>et al.</i> 2000) Labeda <i>et al.</i> 2001	IMSNU 50388	JCM 10975
<i>Marinibacillus marinus</i> (Rüger and Richter 1979) Yoon <i>et al.</i> 2001	DSM 1297	ATCC 29841 =CCUG 28884 =CIP 103308 =LMG 6930 =NRRL B-14321
<i>Marinobacterium jannaschii</i> (Bowditch <i>et al.</i> 1984) Satomi <i>et al.</i> 2002	ATCC 27135	CIP 103444 =DSM 6295 =IFO (now NBRC) 15466 =LMG 6239
<i>Marinobacterium stanieri</i> (Baumann <i>et al.</i> 1983) Satomi <i>et al.</i> 2002	ATCC 27130	CCUG 16021 =CIP 106697 =DSM 7027 =LMG 6847
<i>Methanocaldococcus jannaschii</i> (Jones <i>et al.</i> 1984) Whitman 2002	DSM 2661	ATCC 43067 =CIP 104961 =JCM 10045 =OCM 168
<i>Methanocaldococcus vulcanius</i> (Jeanthon <i>et al.</i> 1999) Whitman 2002	DSM 12094	ATCC 700851
<i>Methanothermococcus thermolithotrophicus</i> (Huber <i>et al.</i> 1984) Whitman 2002	DSM 2095	ATCC 35097 =JCM 10549 =OCM 138
<i>Methanotorris igneus</i> (Burggraf <i>et al.</i> 1990) Whitman 2002	DSM 5666	JCM 11834
<i>Methylophilus leisingeri</i> corrig. Doronina and Trotsenko 2001	VKM B-2013	DSM 6813
<i>Nocardia cyriacigeorgica</i> corrig. Yassin <i>et al.</i> 2001	IMMIB D-1627 =DSM 44484	JCM 11763
<i>Nocardia vinacea</i> Kinoshita <i>et al.</i> 2002	JCM 10988 =IFO (now NBRC) 16497	DSM 44638
<i>Nonomuraea roseoviolacea</i> subsp. <i>carminata</i> (Gauze <i>et al.</i> 1973) Gyobu and Miyadoh 2001	IFO (now NBRC) 15903 =INA 4281	DSM 44170 =JCM 9946 =VKM Ac-1780
<i>Nonomuraea roseoviolacea</i> subsp. <i>roseoviolacea</i> (Nonomura and Ohara 1971) Zhang <i>et al.</i> 1998	IFO (now NBRC) 14098	AS 4.1072 =ATCC 27297 =CBS 260.72 =CCM 3491 =CCRC 13406 =CIP 106924 =DSM 43144 =JCM 3145 =KCTC 9283 =NCIMB 11117 =NRRL B-16127 =VKM Ac-909
<i>Oceanobacter kriegii</i> (Bowditch <i>et al.</i> 1984) Satomi <i>et al.</i> 2002	ATCC 27133	CIP 103443 =DSM 6294 =IFO (now NBRC) 15467 =LMG 6238
<i>Olsenella profusa</i> Dewhirst <i>et al.</i> 2001	DSM 13989	CCUG 45371 =CIP 106885
<i>Olsenella uli</i> (Olsen <i>et al.</i> 1991) Dewhirst <i>et al.</i> 2001	VPI D76D-27C =ATCC 49627	CCUG 31166 =DSM 7084 =LMG 11480
<i>Paracoccus kondratievae</i> Doronina and Trotsenko 2001	VKM B-2222	NCIMB 13773
<i>Peptoniphilus asaccharolyticus</i> (Distaso 1912) Ezaki <i>et al.</i> 2001	ATCC 14963	CCUG 9988 =CIP 74.17 =DSM 20463 =NCTC 11461
<i>Peptoniphilus harei</i> (Murdoch <i>et al.</i> 1997) Ezaki <i>et al.</i> 2001	DSM 10020	CIP 105323 =NCTC 13076
<i>Peptoniphilus indolicus</i> (Christiansen 1934) Ezaki <i>et al.</i> 2001	ATCC 29427	CCUG 17639 =DSM 20464 =NCTC 11088
<i>Peptoniphilus ivorii</i> (Murdoch <i>et al.</i> 1997) Ezaki <i>et al.</i> 2001	DSM 10022	CIP 105325 =NCTC 13078
<i>Pseudomonas brenneri</i> Baïda <i>et al.</i> 2002	CFML 97-391 =CIP 106646	DSM 15294
<i>Pseudospirillum japonicum</i> (Watanabe 1959) Satomi <i>et al.</i> 2002	ATCC 19191	CIP 103373 =DSM 7165 =IFO (now NBRC) 15446 =LMG 10146
<i>Sphingomonas aquatilis</i> Lee <i>et al.</i> 2001	KCCM 41067 =KCTC 2881	IFO (now NBRC) 16722 =JCM 11455
<i>Sphingomonas cloacae</i> Fujii <i>et al.</i> 2001	IAM 14885 =JCM 10874	CIP 107076 =DSM 14926
<i>Sphingomonas koreensis</i> Lee <i>et al.</i> 2001	KCCM 41069 =KCTC 2882	IFO (now NBRC) 16723 =JCM 11456
<i>Sphingomonas taejonensis</i> Lee <i>et al.</i> 2001	KCCM 41068 =KCTC 2884	IFO (now NBRC) 16724 =JCM 11457

Table 2. cont.

Name and authorship	Type strain cited in original publication	Other designation(s) under which the type strain is available
<i>Streptococcus gallolyticus</i> subsp. <i>pasteurianus</i> (Poyart <i>et al.</i> 2002) Schlegel <i>et al.</i> 2003	NEM 1202 =CIP 107122	DSM 15351
<i>Streptococcus lutetiensis</i> Poyart <i>et al.</i> 2002	NEM 782 =CIP 106849	DSM 15350
<i>Streptococcus pasteurianus</i> Poyart <i>et al.</i> 2002	NEM 1202 =CIP 107122	DSM 15351
<i>Tenacibaculum maritimum</i> (Wakabayashi <i>et al.</i> 1986) Suzuki <i>et al.</i> 2001	NCIMB 2154	ATCC 43398 =CIP 103528 =CCUG 35198 =IFO (now NBRC) 15946 =LMG 11612
<i>Tenacibaculum ovolyticum</i> (Hansen <i>et al.</i> 1992) Suzuki <i>et al.</i> 2001	NCIMB 13127	ATCC 51887 =CCUG 35199 =CIP 106403 =LMG 13026
<i>Terasakiella pusilla</i> (Terasaki 1973) Satomi <i>et al.</i> 2002	IFO (now NBRC) 13613	ATCC 33338 =CIP 103382 =DSM 6293 =LMG 7372
<i>Thermococcus acidaminovorans</i> Dirmeier <i>et al.</i> 2001	DSM 11906	JCM 12186
<i>Thermococcus waioapuensis</i> González <i>et al.</i> 2001	DSM 12768	JCM 10985
<i>Virgisporangium aurantiacum</i> corrig. Tamura <i>et al.</i> 2001	IFO (now NBRC) 16421 =JCM 11002	CIP 107212
<i>Virgisporangium ochraceum</i> corrig. Tamura <i>et al.</i> 2001	IFO (now NBRC) 16418 =JCM 11001	CIP 107213

**Desulfobacula phenolica* (Bak and Widdel 1988) Kuever *et al.* 2001 may be considered as an incidental mention.

Table 3. New combinations whose descriptions do not cite the type strain, for which deposit in at least two recognized culture collections in different countries was documented in the original Request for an Opinion

The Judicial Commission has ruled that these names are considered to be validly published, since at least two deposits in different collections in different countries are documented. Valid publication is considered to have taken place in the original Validation List or original article published in the IJSEM. The type strain designations in culture collections are given below.

Name and authorship	Culture collection designation(s) under which the type strain is available
<i>Clostridium stercorarium</i> subsp. <i>leptospartum</i> (Toda <i>et al.</i> 1989) Fardeau <i>et al.</i> 2001	ATCC 51338 =DSM 9219 =IAM 13499
<i>Clostridium stercorarium</i> subsp. <i>stercorarium</i> Madden 1983	ATCC 35414 =DSM 8532 =NCIB 11754
<i>Clostridium stercorarium</i> subsp. <i>thermolacticum</i> (Le Ruyet <i>et al.</i> 1988) Fardeau <i>et al.</i> 2001	ATCC 43739 =DSM 2910
<i>Novosphingobium aromaticivorans</i> corrig. (Balkwill <i>et al.</i> 1997) Takeuchi <i>et al.</i> 2001	ATCC 700278 =CIP 105152 =DSM 12444 =HAMBI 2257 =IFO (now NBRC) 16084 =SMCC F199
<i>Novosphingobium capsulatum</i> (Leifson 1962) Takeuchi <i>et al.</i> 2001	ATCC 14666 =CCUG 17697 =CCUG 31202 =CIP 82.103 =DSM 30196 =GIFU 11526 =HAMBI 103 =IFO (now NBRC) 12533 =JCM 7508 =JCM 7452 =LMG 2830 =VKM B-1564
<i>Novosphingobium rosa</i> corrig. (Takeuchi <i>et al.</i> 1995) Takeuchi <i>et al.</i> 2001	ATCC 51837 =DSM 7285 =HAMBI 2068 =IFO (now NBRC) 15208 =LMG 17328 =NCPBPB 2661
<i>Novosphingobium stygium</i> corrig. (Balkwill <i>et al.</i> 1997) Takeuchi <i>et al.</i> 2001	ATCC 700280 =CIP 105154 =DSM 12445 =IFO (now NBRC) 16085 =SMCC B0712
<i>Novosphingobium subarcticum</i> (Nohynek <i>et al.</i> 1996) Takeuchi <i>et al.</i> 2001	CIP 105288 =DSM 10700 =HAMBI 2110 =IFO (now NBRC) 16058 =JCM 10398
<i>Novosphingobium subterraneum</i> corrig. (Balkwill <i>et al.</i> 1997) Takeuchi <i>et al.</i> 2001	ATCC 700279 =CIP 105153 =DSM 12447 =IFO (now NBRC) 16086 =SMCC B0478
<i>Planomicrobium mcmeekinii</i> (Junge <i>et al.</i> 1998) Yoon <i>et al.</i> 2001	ATCC 700539 =CIP 105673
<i>Planomicrobium okeanokoites</i> (ZoBell and Upham 1944) Yoon <i>et al.</i> 2001	ATCC 33414 =CCM 320 =CIP 105082 =IFO (now NBRC) 12536 =LMG 4030 =NCIMB 561 =VKM B-1175
<i>Propionivibrio pelophilus</i> (Meijer <i>et al.</i> 1999) Brune <i>et al.</i> 2002	CIP 106101 =DSM 12018
<i>Sphingobium chlorophenolicum</i> (Nohynek <i>et al.</i> 1996) Takeuchi <i>et al.</i> 2001	ATCC 33790 =CIP 104885 =DSM 7098 =IFO (now NBRC) 16172 =JCM 10275 =LMG 17771
<i>Sphingobium herbicidovorans</i> (Zipper <i>et al.</i> 1997) Takeuchi <i>et al.</i> 2001	CIP 106705 =ATCC 700291 =DSM 11019 =IFO (now NBRC) 16415 =LMG 18315
<i>Sphingobium yanoikuyae</i> (Yabuuchi <i>et al.</i> 1990) Takeuchi <i>et al.</i> 2001	ATCC 51230 =CCUG 28380 =CCUG 31205 =CIP 106726 =DSM 7462 =GIFU 9882 =HAMBI 1842 =IFO (now NBRC) 15102 =JCM 7371 =LMG 11252
<i>Sphingopyxis macrogoltabida</i> (Takeuchi <i>et al.</i> 1993) Takeuchi <i>et al.</i> 2001	ATCC 51380 =CIP 104196 =DSM 8826 =HAMBI 1841 =IFO (now NBRC) 15033 =LMG 17324
<i>Sphingopyxis terrae</i> (Takeuchi <i>et al.</i> 1993) Takeuchi <i>et al.</i> 2001	ATCC 51381 =CIP 104198 =DSM 8831 =HAMBI 1834 =IFO (now NBRC) 15098 =JCM 10195 =LMG 17326
<i>Sporosarcina globispora</i> (Larkin and Stokes 1967) Yoon <i>et al.</i> 2001	ATCC 23301 =CCUG 7419 =CIP 103266 =DSM 4 =HAMBI 471 =IFO (now NBRC) 16082 =JCM 10046 =LMG 6928 =NRRL NRS-1533 =NRRL B-3396 =VKM B-1435
<i>Sporosarcina pasteurii</i> (Miquel 1889) Yoon <i>et al.</i> 2001	ATCC 11859 =CCUG 7425 =CIP 66.21 =DSM 33 =LMG 7130 =NCCB 48021 =NCTC 4822 =NRRL NRS-673 =VKM B-513.
<i>Sporosarcina psychrophila</i> (Nakamura 1984) Yoon <i>et al.</i> 2001	ATCC 23304 =CCM 2117 =CCRC 11738 =CCUG 28886 =CIP 103267 =DSM 3 =IAM 12468 =IFO (now NBRC) 15381 =JCM 9075 =LMG 6929 =NRRL B-3397 =NRRL NRS-1530
<i>Zobellia uliginosa</i> (ZoBell and Upham 1944) Barbeyron <i>et al.</i> 2001	ACAM 538 =ATCC 14397 =CCUG 33448 =CECT 4277 =CIP 104808 =DSM 2061 =IFO (now NBRC) 14962 =LMG 3809 =NCIMB 1863

Table 4. Only one recognized culture collection or two recognized culture collections of the same country were designated in the original description, but another recognized culture collection in another country was cited in the summary

The Judicial Commission has ruled that these names are considered to be validly published, since at least a second deposit in a different collection in a different country is documented. Valid publication is considered to have taken place in the original Validation List or original article published in the IJSEM. The type strain designations in culture collections are given below.

Name and authorship	Culture collection designation(s) cited in the description	Culture collection designations cited in the abstract
<i>Arcanobacterium pluranimalium</i> Lawson <i>et al.</i> 2001	CCUG 42575	CCUG 42575 =CIP 106442
<i>Corynebacterium aurimucosum</i> Yassin <i>et al.</i> 2002	DSM 44532 =IMMIB D-1488	DSM 44532 =IMMIB D-1488 =NRRL B-24143
<i>Corynebacterium casei</i> Brennan <i>et al.</i> 2001	LMG S-19264 =DPC 5298	LMG S-19264 =NCIMB 30130
<i>Corynebacterium mooreparkense</i> Brennan <i>et al.</i> 2001	LMG S-19265 =DPC 5310	LMG S-19265 =NCIMB 30131
<i>Enterococcus villorum</i> Vancanneyt <i>et al.</i> 2001	LMG 12287	LMG 12287 =CCM 4887