

Taxonomic Outline of the Bacteria and Archaea, Release 7.7 March 6, 2007.
Part 9 – The Bacteria: Phylum “Firmicutes”: Class “Bacilli”
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Class “*Bacilli*” N4Lid DOI: 10.1601/nm.4854

Order *Bacillales*^{AL} Prévot 1953. N4Lid DOI: 10.1601/nm.4855

Family *Bacillaceae*^{AL} Fischer 1895. N4Lid DOI: 10.1601/nm.4856

Genus *Bacillus*^{AL} Cohn 1872. GOLD ID: Gi00834. GCAT ID: 000755_GCAT. Entrez genome id: 13545. Sequenced strain: NRRL B-14911 is from a non-type strain. Genome sequencing is incomplete. Number of genomes of this species sequenced 6 (GOLD) 1 (NCBI). N4Lid DOI: 10.1601/nm.4857

Bacillus subtilis subsp. subtilis^{VP} (Ehrenberg 1835) Cohn 1872. Source of type material recommended for DOE sponsored genome sequencing by the JGI: ATCC 6051. High-quality 16S rRNA sequence S000003473 (RDP), AJ276351 (Genbank). GOLD ID: Gc00010. GCAT ID: 000600_GCAT. Entrez genome id: 76. Sequenced strain: NCIMB 3610 is type material. Genome sequencing is completed. Number of genomes of this species sequenced 4 (GOLD) 1 (NCBI). N4Lid DOI: 10.1601/nm.4858

Bacillus subtilis subsp. spizizenii^{VP} Nakamura et al. 1999. Source of type material recommended for DOE sponsored genome sequencing by the JGI: NRRL B-23049. High-quality 16S rRNA sequence S000428475 (RDP), AF074970 (Genbank). N4Lid DOI: 10.1601/nm.4859

Bacillus acidicola^{VP} Albert et al. 2005. Source of type material recommended for DOE sponsored genome sequencing by the JGI: ATCC BAA-366. High-quality 16S rRNA sequence S000102217 (RDP), AF547209 (Genbank). N4Lid 10.1601/nm.9603

Bacillus aeolius^{VP} Gugliandolo et al. 2003. Source of type material recommended for DOE sponsored genome sequencing by the JGI: DSM 15084. High-quality 16S rRNA sequence S000108528 (RDP), AJ504797 (Genbank). N4Lid DOI: 10.1601/nm.4862

Bacillus aerius^{VP} Shivaji et al. 2006. Source of type material recommended for DOE sponsored genome sequencing by the JGI: JCM 13348. High-quality 16S rRNA sequence S000417317 (RDP), AJ831841 (Genbank). N4Lid DOI: 10.1601/nm.10144

Bacillus aerophilus^{VP} Shivaji et al. 2006. Source of type material recommended for DOE sponsored genome sequencing by the JGI: JCM 13347. High-quality 16S rRNA sequence S000417318 (RDP), AJ831842 (Genbank). N4Lid DOI: 10.1601/nm.10145

Bacillus agaradhaerens^{VP} Nielsen et al. 1995. Source of type material recommended for DOE sponsored genome sequencing by the JGI: ATCC 700163. High-quality 16S rRNA sequence S000003074 (RDP), X76445 (Genbank). N4Lid DOI: 10.1601/nm.4863

Bacillus akibai^{VP} Nogi et al. 2005. Source of type material recommended for DOE sponsored genome sequencing by the JGI: ATCC 43226. High-quality 16S rRNA sequence S000383277 (RDP), AB043858 (Genbank). N4Lid 10.1601/nm.9698

Bacillus alcalophilus^{AL} Vedder 1934. Source of type material recommended for DOE sponsored genome sequencing by the JGI: ATCC 27647. High-quality 16S rRNA sequence S000127880 (RDP), X60603 (Genbank). GOLD ID: Gi00048. GCAT ID: 000710_GCAT. Entrez genome id: 13375. Genome sequence is from a non-type strain. Genome sequencing is incomplete. Number of genomes of this species sequenced 1 (GOLD) 1 (NCBI). N4Lid DOI: 10.1601/nm.4865

Bacillus algicola^{VP} Ivanova et al. 2004. Source of type material recommended for DOE sponsored genome sequencing by the JGI: CIP 107850. High-quality 16S rRNA sequence S000117161 (RDP), AY228462 (Genbank). N4Lid DOI: 10.1601/nm.8490

Bacillus altitudinis^{VP} Shivaji et al. 2006. Source of type material recommended for DOE sponsored genome sequencing by the JGI: JCM 13350. High-quality 16S rRNA sequence S000417320 (RDP), AJ831844 (Genbank). N4Lid DOI: 10.1601/nm.10147

Bacillus alveayuensis^{VP} Bae et al. 2005. Source of type material recommended for DOE sponsored genome sequencing by the JGI: JCM 12523. High-quality 16S rRNA sequence S000548368 (RDP), AY605232 (Genbank). N4Lid 10.1601/nm.9414

Bacillus amyloliquefaciens^{VP} (ex Fukumoto 1943) Priest et al. 1987. Source of type material recommended for DOE sponsored genome sequencing by the JGI: ATCC 23350. High-quality 16S rRNA sequence S000129463 (RDP), X60605 (Genbank). GOLD ID: Gi00049. GCAT ID: 000711_GCAT. Entrez genome id: 13403. Sequenced strain: FZB42 is from a non-type strain. Genome sequencing is incomplete. Number of genomes of this species sequenced 1 (GOLD) 1 (NCBI). N4Lid DOI: 10.1601/nm.4868

Bacillus anthracis^{AL} Cohn 1872. Source of type material recommended for DOE sponsored genome sequencing by the JGI: ATCC 14578. High-quality 16S rRNA sequence S000528458 (RDP). GOLD ID: Gc00136. GCAT ID: 000474_GCAT. Entrez genome id: 309. Sequenced strain: Ames is from a non-type strain. Genome sequencing is completed. Number of genomes of this species sequenced 14 (GOLD) 11 (NCBI). N4Lid DOI: 10.1601/nm.4871

Bacillus aquimaris^{VP} Yoon et al. 2003. Source of type material recommended for DOE sponsored genome sequencing by the JGI: JCM 11545. High-quality 16S rRNA sequence S000429574 (RDP), AF483625 (Genbank). N4Lid DOI: 10.1601/nm.4872

Bacillus arenosi^{VP} Heyrman et al. 2005. Source of type material recommended for DOE sponsored genome sequencing by the JGI: DSM 16319. High-quality 16S rRNA sequence S000366854 (RDP), AJ627212 (Genbank). N4Lid DOI: 10.1601/nm.8491

Bacillus arseniciselenatis^{VP} corrig. Switzer Blum et al. 2001. Source of type material recommended for DOE sponsored genome sequencing by the JGI: ATCC 700614. High-quality 16S rRNA sequence S000440854 (RDP), AJ865469 (Genbank). N4Lid DOI: 10.1601/nm.4873

Bacillus arsenicus^{VP} Shivaji et al. 2005. Source of type material recommended for DOE sponsored genome sequencing by the JGI: DSM 15822. High-quality 16S rRNA sequence S000543964 (RDP), AJ606700 (Genbank). N4Lid 10.1601/nm.9411

Bacillus arvi^{VP} Heyrman et al. 2005. Source of type material recommended for DOE sponsored genome sequencing by the JGI: DSM 16317. High-quality 16S rRNA sequence S000366853 (RDP), AJ627211 (Genbank). N4Lid DOI: 10.1601/nm.8492

Bacillus asahii^{VP} Yumoto et al. 2004. Source of type material recommended for DOE sponsored genome sequencing by the JGI: JCM 12112. High-quality 16S rRNA sequence S000469513 (RDP), AB109209 (Genbank). N4Lid DOI: 10.1601/nm.8493

Bacillus atrophaeus^{VP} Nakamura 1989. Source of type material recommended for DOE sponsored genome sequencing by the JGI: ATCC 49337. High-quality 16S rRNA sequence S000014133 (RDP), AB021181 (Genbank). N4Lid DOI: 10.1601/nm.4874

Bacillus axarquiensis^{VP} Ruiz-García et al. 2005. Source of type material recommended for DOE sponsored genome sequencing by the JGI: LMG 22476. High-quality 16S rRNA sequence S000540600 (RDP), AY603657 (Genbank). N4Lid 10.1601/nm.9470

Bacillus azotoformans^{VP} (ex Pichinoty et al. 1976) Pichinoty et al. 1983. Source of type material recommended for DOE sponsored genome sequencing by the JGI: ATCC 29788. High-quality 16S rRNA sequence S000130996 (RDP), X60609 (Genbank). N4Lid DOI: 10.1601/nm.4876

Bacillus badius^{AL} Batchelor 1919. Source of type material recommended for DOE sponsored genome sequencing by the JGI: ATCC 14574. High-quality 16S rRNA sequence S000413916 (RDP), D78310 (Genbank). N4Lid DOI: 10.1601/nm.4877

Bacillus barbaricus^{VP} Täubel et al. 2003. Source of type material recommended for DOE sponsored genome sequencing by the JGI: DSM 14730. High-quality 16S rRNA sequence S000133610 (RDP), AJ422145 (Genbank). N4Lid DOI: 10.1601/nm.4878

Bacillus bataviensis^{VP} Heyrman et al. 2004. Source of type material recommended for DOE sponsored genome sequencing by the JGI: DSM 15601. High-quality 16S rRNA sequence S000323276 (RDP), AJ542507 (Genbank). N4Lid DOI: 10.1601/nm.4879

Bacillus benzoevorans^{VP} Pichinoty et al. 1987. Source of type material recommended for DOE sponsored genome sequencing by the JGI: ATCC 49005. High-quality 16S rRNA sequence S000435826 (RDP), D78311 (Genbank). N4Lid DOI: 10.1601/nm.4880

Bacillus bogoriensis^{VP} Vargas et al. 2005. Source of type material recommended for DOE sponsored genome sequencing by the JGI: ATCC BAA-922. High-quality 16S rRNA sequence S000501792 (RDP), AY376312 (Genbank). N4Lid 10.1601/nm.9336

Bacillus carboniphilus^{VP} Fujita et al. 1996. Source of type material recommended for DOE sponsored genome sequencing by the JGI: ATCC 700100. High-quality 16S rRNA sequence S000007628 (RDP), AB021182 (Genbank). N4Lid DOI: 10.1601/nm.4883

- Bacillus cellulosilyticus*^{VP} Nogi et al. 2005. Source of type material recommended for DOE sponsored genome sequencing by the JGI: DSM 2522. High-quality 16S rRNA sequence S000383271 (RDP), AB043852 (Genbank). N4Lid 10.1601/nm.9697
- Bacillus cereus*^{AL} Frankland and Frankland 1887. Source of type material recommended for DOE sponsored genome sequencing by the JGI: ATCC 14579. High-quality 16S rRNA sequence S000497688 (RDP). GOLD ID: Gc00135. GCAT ID: 000475_GCAT. Entrez genome id: 384. Sequenced strain: ATCC 14579 is type material. Genome sequencing is completed. Number of genomes of this species sequenced 15 (GOLD) 13 (NCBI). N4Lid DOI: 10.1601/nm.4885
- Bacillus cibi*^{VP} Yoon et al. 2005. Source of type material recommended for DOE sponsored genome sequencing by the JGI: DSM 16189. High-quality 16S rRNA sequence S000503246 (RDP), AY550276 (Genbank). N4Lid 10.1601/nm.9318
- Bacillus circulans*^{AL} Jordan 1890. Source of type material recommended for DOE sponsored genome sequencing by the JGI: ATCC 4513. High-quality 16S rRNA sequence S000134147 (RDP), X60613 (Genbank). N4Lid DOI: 10.1601/nm.4889
- Bacillus clarkii*^{VP} Nielsen et al. 1995. Source of type material recommended for DOE sponsored genome sequencing by the JGI: ATCC 700162. High-quality 16S rRNA sequence S000022130 (RDP), X76444 (Genbank). N4Lid DOI: 10.1601/nm.4890
- Bacillus clausii*^{VP} Nielsen et al. 1995. Source of type material recommended for DOE sponsored genome sequencing by the JGI: ATCC 700160. High-quality 16S rRNA sequence S000003470 (RDP), X76440 (Genbank). GOLD ID: Gc00228. GCAT ID: 000382_GCAT. Entrez genome id: 13291. Sequenced strain: KSM-K16 is from a non-type strain. Genome sequencing is completed. Number of genomes of this species sequenced 2 (GOLD) 1 (NCBI). N4Lid DOI: 10.1601/nm.4891
- Bacillus coagulans*^{AL} Hammer 1915. Source of type material recommended for DOE sponsored genome sequencing by the JGI: ATCC 7050. High-quality 16S rRNA sequence S000413549 (RDP), D16267 (Genbank). GOLD ID: Gi01001. GCAT ID: 000738_GCAT. Entrez genome id: 15679. Sequenced strain: 36D1 is from a non-type strain. Genome sequencing is incomplete. Number of genomes of this species sequenced 1 (GOLD) 1 (NCBI). N4Lid DOI: 10.1601/nm.4892
- Bacillus cohnii*^{VP} Spanka and Fritze 1993. Source of type material recommended for DOE sponsored genome sequencing by the JGI: ATCC 51227. High-quality 16S rRNA sequence S000008098 (RDP), X76437 (Genbank). N4Lid DOI: 10.1601/nm.4893
- Bacillus decolorationis*^{VP} Heyrman et al. 2003. Source of type material recommended for DOE sponsored genome sequencing by the JGI: DSM 14890. High-quality 16S rRNA sequence S000446621 (RDP), AJ315075 (Genbank). N4Lid DOI: 10.1601/nm.4896
- Bacillus drentensis*^{VP} Heyrman et al. 2004. Source of type material recommended for DOE sponsored genome sequencing by the JGI: DSM 15600. High-quality 16S rRNA sequence S000323275 (RDP), AJ542506 (Genbank). N4Lid DOI: 10.1601/nm.4898
- Bacillus edaphicus*^{VP} Shelobolina et al. 1998. Source of type material recommended for DOE sponsored genome sequencing by the JGI: CIP 105814. High-quality 16S rRNA sequence S000386999 (RDP), AF006076 (Genbank). N4Lid DOI: 10.1601/nm.4899
- Bacillus endophyticus*^{VP} Reva et al. 2002. Source of type material recommended for DOE sponsored genome sequencing by the JGI: CIP 106778. High-quality 16S rRNA sequence S000390853 (RDP), AF295302 (Genbank). N4Lid DOI: 10.1601/nm.4901
- Bacillus farraginis*^{VP} Scheldeman et al. 2004. Source of type material recommended for DOE sponsored genome sequencing by the JGI: DSM 16013. High-quality 16S rRNA sequence S000485124 (RDP), AY443036 (Genbank). N4Lid DOI: 10.1601/nm.8494
- Bacillus fastidiosus*^{AL} den Dooren de Jong 1929. Source of type material recommended for DOE sponsored genome sequencing by the JGI: ATCC 29604. High-quality 16S rRNA sequence S000129063 (RDP), X60615 (Genbank). N4Lid DOI: 10.1601/nm.4902
- Bacillus firmus*^{AL} Bredemann and Werner 1933. Source of type material recommended for DOE sponsored genome sequencing by the JGI: ATCC 14575. High-quality 16S rRNA sequence S000413550 (RDP), D16268 (Genbank). N4Lid DOI: 10.1601/nm.4903
- Bacillus flexus*^{VP} (ex Batchelor 1919) Priest et al. 1989. Source of type material recommended for DOE sponsored genome sequencing by the JGI: ATCC 49095. High-quality 16S rRNA sequence S000012966 (RDP), AB021185 (Genbank). N4Lid DOI: 10.1601/nm.4904

- Bacillus fordii*^{VP} Scheldeman et al. 2004. Source of type material recommended for DOE sponsored genome sequencing by the JGI: DSM 16014. High-quality 16S rRNA sequence S000485127 (RDP), AY443039 (Genbank). N4Lid DOI: 10.1601/nm.8495
- Bacillus fortis*^{VP} Scheldeman et al. 2004. Source of type material recommended for DOE sponsored genome sequencing by the JGI: DSM 16012. High-quality 16S rRNA sequence S000485126 (RDP), AY443038 (Genbank). N4Lid DOI: 10.1601/nm.8496
- Bacillus fumarioli*^{VP} Logan et al. 2000. Source of type material recommended for DOE sponsored genome sequencing by the JGI: CIP 106910. High-quality 16S rRNA sequence S000021836 (RDP), AJ250056 (Genbank). N4Lid DOI: 10.1601/nm.4906
- Bacillus funiculus*^{VP} Ajithkumar et al. 2002. Source of type material recommended for DOE sponsored genome sequencing by the JGI: DSM 15141. High-quality 16S rRNA sequence S000383485 (RDP), AB049195 (Genbank). N4Lid DOI: 10.1601/nm.4907
- Bacillus fusiformis*^{VP} (ex Meyer and Gottheil 1901) Priest et al. 1989. Source of type material recommended for DOE sponsored genome sequencing by the JGI: ATCC 7055. High-quality 16S rRNA sequence S000414416 (RDP), L14013 (Genbank). N4Lid DOI: 10.1601/nm.4908
- Bacillus galactosidilyticus*^{VP} Heyndrickx et al. 2004. Source of type material recommended for DOE sponsored genome sequencing by the JGI: DSM 15595. High-quality 16S rRNA sequence S000276014 (RDP), AJ535638 (Genbank). N4Lid DOI: 10.1601/nm.4909
- Bacillus gelatini*^{VP} De Clerck et al. 2004. Source of type material recommended for DOE sponsored genome sequencing by the JGI: DSM 15865. High-quality 16S rRNA sequence S000366467 (RDP), AJ551329 (Genbank). N4Lid DOI: 10.1601/nm.8497
- Bacillus gibsonii*^{VP} Nielsen et al. 1995. Source of type material recommended for DOE sponsored genome sequencing by the JGI: ATCC 700164. High-quality 16S rRNA sequence S000006950 (RDP), X76446 (Genbank). N4Lid DOI: 10.1601/nm.4911
- Bacillus halmapalus*^{VP} Nielsen et al. 1995. Source of type material recommended for DOE sponsored genome sequencing by the JGI: ATCC 700165. High-quality 16S rRNA sequence S000001559 (RDP), X76447 (Genbank). N4Lid DOI: 10.1601/nm.4916
- Bacillus halodurans*^{VP} (ex Boyer 1973) Nielsen et al. 1995. Source of type material recommended for DOE sponsored genome sequencing by the JGI: ATCC 27557. High-quality 16S rRNA sequence S000010351 (RDP), AJ302709 (Genbank). GOLD ID: Gc00031. GCAT ID: 000579_GCAT. Entrez genome id: 235. Sequenced strain: JCM 9153 is from a non-type strain. Genome sequencing is completed. Number of genomes of this species sequenced 1 (GOLD) 1 (NCBI). N4Lid DOI: 10.1601/nm.4919
- Bacillus halophilus*^{VP} Ventosa et al. 1990. Source of type material recommended for DOE sponsored genome sequencing by the JGI: ATCC 49085. High-quality 16S rRNA sequence S000006846 (RDP), AB021188 (Genbank). N4Lid DOI: 10.1601/nm.4920
- Bacillus hemicellulosilyticus*^{VP} Nogi et al. 2005. Source of type material recommended for DOE sponsored genome sequencing by the JGI: DSM 16731. High-quality 16S rRNA sequence S000383265 (RDP), AB043846 (Genbank). N4Lid 10.1601/nm.9696
- Bacillus herbersteinensis*^{VP} Wieser et al. 2005. Source of type material recommended for DOE sponsored genome sequencing by the JGI: DSM 16534. High-quality 16S rRNA sequence S000447571 (RDP), AJ781029 (Genbank). N4Lid 10.1601/nm.9602
- Bacillus horikoshii*^{VP} Nielsen et al. 1995. Source of type material recommended for DOE sponsored genome sequencing by the JGI: ATCC 700161. High-quality 16S rRNA sequence S000381271 (RDP), X76443 (Genbank). N4Lid DOI: 10.1601/nm.4921
- Bacillus horti*^{VP} Yumoto et al. 1998. Source of type material recommended for DOE sponsored genome sequencing by the JGI: ATCC 700778. High-quality 16S rRNA sequence S000435906 (RDP), D87035 (Genbank). N4Lid DOI: 10.1601/nm.4922
- Bacillus humi*^{VP} Heyrman et al. 2005. Source of type material recommended for DOE sponsored genome sequencing by the JGI: DSM 16318. High-quality 16S rRNA sequence S000366852 (RDP), AJ627210 (Genbank). N4Lid DOI: 10.1601/nm.8498
- Bacillus hwajinpoensis*^{VP} Yoon et al. 2004. Source of type material recommended for DOE sponsored genome sequencing by the JGI: JCM 11807. High-quality 16S rRNA sequence S000351293 (RDP), AF541966 (Genbank). N4Lid DOI: 10.1601/nm.8499

- Bacillus indicus*^{VP} Suresh et al. 2004. Source of type material recommended for DOE sponsored genome sequencing by the JGI: DSM 15820. High-quality 16S rRNA sequence S000366697 (RDP), AJ583158 (Genbank). N4Lid DOI: 10.1601/nm.8500
- Bacillus infernus*^{VP} Boone et al. 1995. Source of type material recommended for DOE sponsored genome sequencing by the JGI: DSM 10277. High-quality 16S rRNA sequence S000437258 (RDP), U20385 (Genbank). N4Lid DOI: 10.1601/nm.4923
- Bacillus insolitus*^{AL} Larkin and Stokes 1967. Source of type material recommended for DOE sponsored genome sequencing by the JGI: ATCC 23299. High-quality 16S rRNA sequence S000129057 (RDP), X60642 (Genbank). N4Lid DOI: 10.1601/nm.4924
- Bacillus jeotgali*^{VP} Yoon et al. 2001. Source of type material recommended for DOE sponsored genome sequencing by the JGI: CIP 107104. High-quality 16S rRNA sequence S000389386 (RDP), AF221061 (Genbank). N4Lid DOI: 10.1601/nm.4925
- Bacillus koreensis*^{VP} Lim et al. 2006. Source of type material recommended for DOE sponsored genome sequencing by the JGI: DSM 16467. High-quality 16S rRNA sequence S000373337 (RDP), AY667496 (Genbank). N4Lid DOI: 10.1601/nm.9830
- Bacillus krulwichiae*^{VP} Yumoto et al. 2003. Source of type material recommended for DOE sponsored genome sequencing by the JGI: IAM 15000. High-quality 16S rRNA sequence S000147238 (RDP), AB086897 (Genbank). N4Lid DOI: 10.1601/nm.4928
- Bacillus laevolacticus*^{VP} (ex Nakayama and Yanoshi 1967) Andersch et al. 1994. Synonym links through N4Lid: 10.1601/ex.4929. Source of type material recommended for DOE sponsored genome sequencing by the JGI: ATCC 23492. High-quality 16S rRNA sequence S000413552 (RDP), D16270 (Genbank). N4Lid DOI: 10.1601/nm.4929
- Bacillus lentus*^{AL} Gibson 1935. Source of type material recommended for DOE sponsored genome sequencing by the JGI: ATCC 10840. High-quality 16S rRNA sequence S000413554 (RDP), D16272 (Genbank). N4Lid DOI: 10.1601/nm.4934
- Bacillus licheniformis*^{AL} (Weigmann 1898) Chester 1901. Source of type material recommended for DOE sponsored genome sequencing by the JGI: ATCC 14580. High-quality 16S rRNA sequence S000006574 (RDP), X68416 (Genbank). GOLD ID: Gc00213. GCAT ID: 000397_GCAT. Entrez genome id: 12388. Sequenced strain: ATCC 14580 is type material. Genome sequencing is completed. Number of genomes of this species sequenced 2 (GOLD) 2 (NCBI). N4Lid DOI: 10.1601/nm.4935
- Bacillus litoralis*^{VP} Yoon and Oh 2005. Source of type material recommended for DOE sponsored genome sequencing by the JGI: DSM 16303. High-quality 16S rRNA sequence S000331995 (RDP), AY608605 (Genbank). N4Lid DOI: 10.1601/nm.9585
- Bacillus luciferensis*^{VP} Logan et al. 2002. Source of type material recommended for DOE sponsored genome sequencing by the JGI: CIP 107105. High-quality 16S rRNA sequence S000130053 (RDP), AJ419629 (Genbank). N4Lid DOI: 10.1601/nm.4936
- Bacillus macauensis*^{VP} Zhang et al. 2006. Source of type material recommended for DOE sponsored genome sequencing by the JGI: DSM 17262. High-quality 16S rRNA sequence S000408851 (RDP), AY373018 (Genbank). N4Lid DOI: 10.1601/nm.9880
- Bacillus macyae*^{VP} Santini et al. 2004. Source of type material recommended for DOE sponsored genome sequencing by the JGI: ATCC BAA-881. High-quality 16S rRNA sequence S000460403 (RDP), AY032601 (Genbank). N4Lid DOI: 10.1601/nm.8501
- Bacillus malacitensis*^{VP} Ruiz-García et al. 2005. Source of type material recommended for DOE sponsored genome sequencing by the JGI: LMG 22477. High-quality 16S rRNA sequence S000540599 (RDP), AY603656 (Genbank). N4Lid DOI: 10.1601/nm.9417
- Bacillus mannanilyticus*^{VP} Nogi et al. 2005. Source of type material recommended for DOE sponsored genome sequencing by the JGI: DSM 16130. High-quality 16S rRNA sequence S000383283 (RDP), AB043864 (Genbank). N4Lid DOI: 10.1601/nm.9699
- Bacillus marisflavi*^{VP} Yoon et al. 2003. Source of type material recommended for DOE sponsored genome sequencing by the JGI: JCM 11544. High-quality 16S rRNA sequence S000429573 (RDP), AF483624 (Genbank). N4Lid DOI: 10.1601/nm.4940
- Bacillus massiliensis*^{VP} Glazunova et al. 2006. Source of type material recommended for DOE sponsored genome sequencing by the JGI: CCUG 49529. High-quality 16S rRNA sequence S000574645 (RDP), AY677116 (Genbank). N4Lid DOI: 10.1601/nm.10149

- Bacillus megaterium*^{AL} de Bary 1884. Source of type material recommended for DOE sponsored genome sequencing by the JGI: ATCC 14581. High-quality 16S rRNA sequence S000129064 (RDP), X60629 (Genbank). GOLD ID: Gi01156. GCAT ID: 000739_GCAT. Sequenced strain: MS941 is from a non-type strain. Genome sequencing is incomplete. Number of genomes of this species sequenced 2 (GOLD). N4Lid DOI: 10.1601/nm.4942
- Bacillus methanolicus*^{VP} Arfman et al. 1992. Source of type material recommended for DOE sponsored genome sequencing by the JGI: ATCC 51375. N4Lid DOI: 10.1601/nm.4943
- Bacillus mojavenis*^{VP} Roberts et al. 1994. Source of type material recommended for DOE sponsored genome sequencing by the JGI: ATCC 51516. High-quality 16S rRNA sequence S000006847 (RDP), AB021191 (Genbank). GOLD ID: Gi01243. GCAT ID: 000756_GCAT. Sequenced strain: NRRL B-14698 is type material. Genome sequencing is incomplete. Number of genomes of this species sequenced 1 (GOLD). N4Lid DOI: 10.1601/nm.4945
- Bacillus mucilaginosus*^{VP} Avakyan et al. 1998. Source of type material recommended for DOE sponsored genome sequencing by the JGI: CIP 105815. High-quality 16S rRNA sequence S000387000 (RDP), AF006077 (Genbank). N4Lid DOI: 10.1601/nm.4946
- Bacillus muralis*^{VP} Heyrman et al. 2005. Source of type material recommended for DOE sponsored genome sequencing by the JGI: DSM 16288. High-quality 16S rRNA sequence S000471716 (RDP), AJ628748 (Genbank). N4Lid DOI: 10.1601/nm.8502
- Bacillus mycoides*^{AL} Flügge 1886. Source of type material recommended for DOE sponsored genome sequencing by the JGI: ATCC 6462. High-quality 16S rRNA sequence S000388279 (RDP), AF155956 (Genbank). N4Lid DOI: 10.1601/nm.4947
- Bacillus naganoensis*^{VP} Tomimura et al. 1990. Source of type material recommended for DOE sponsored genome sequencing by the JGI: ATCC 53909. High-quality 16S rRNA sequence S000005760 (RDP), AB021193 (Genbank). N4Lid DOI: 10.1601/nm.4948
- Bacillus nealsonii*^{VP} Venkateswaran et al. 2003. Source of type material recommended for DOE sponsored genome sequencing by the JGI: ATCC BAA-519. High-quality 16S rRNA sequence S000389763 (RDP), AF234863 (Genbank). N4Lid DOI: 10.1601/nm.4949
- Bacillus neidei*^{VP} Nakamura et al. 2002. Source of type material recommended for DOE sponsored genome sequencing by the JGI: NRRL BD-87. High-quality 16S rRNA sequence S000388471 (RDP), AF169520 (Genbank). N4Lid DOI: 10.1601/nm.4950
- Bacillus niacini*^{VP} Nagel and Andreesen 1991. Source of type material recommended for DOE sponsored genome sequencing by the JGI: NRRL B-23384. High-quality 16S rRNA sequence S000014510 (RDP), AB021194 (Genbank). N4Lid DOI: 10.1601/nm.4951
- Bacillus novalis*^{VP} Heyrman et al. 2004. Source of type material recommended for DOE sponsored genome sequencing by the JGI: DSM 15603. High-quality 16S rRNA sequence S000323281 (RDP), AJ542512 (Genbank). N4Lid DOI: 10.1601/nm.4952
- Bacillus odysseyi*^{VP} La Duc et al. 2004. Source of type material recommended for DOE sponsored genome sequencing by the JGI: ATCC PTA-4993. High-quality 16S rRNA sequence S000431501 (RDP), AF526913 (Genbank). N4Lid DOI: 10.1601/nm.4953
- Bacillus okhensis*^{VP} Nowlan et al. 2006. Source of type material recommended for DOE sponsored genome sequencing by the JGI: ATCC BAA-1137. High-quality 16S rRNA sequence S000653122 (RDP), DQ026060 (Genbank). N4Lid DOI: 10.1601/nm.10038
- Bacillus okuhidensis*^{VP} Li et al. 2002. Source of type material recommended for DOE sponsored genome sequencing by the JGI: DSM 13666. High-quality 16S rRNA sequence S000083979 (RDP), AB047684 (Genbank). N4Lid DOI: 10.1601/nm.4955
- Bacillus oleronius*^{VP} Kuhnigk et al. 1996. Source of type material recommended for DOE sponsored genome sequencing by the JGI: ATCC 700005. High-quality 16S rRNA sequence S000260717 (RDP), X82492 (Genbank). N4Lid DOI: 10.1601/nm.4954
- Bacillus oshimensis*^{VP} Yumoto et al. 2005. Source of type material recommended for DOE sponsored genome sequencing by the JGI: JCM 12663. High-quality 16S rRNA sequence S000496869 (RDP), AB188090 (Genbank). N4Lid 10.1601/nm.9337
- Bacillus patagoniensis*^{VP} Olivera et al. 2005. Source of type material recommended for DOE sponsored genome sequencing by the JGI: ATCC BAA-965. High-quality 16S rRNA sequence S000473524 (RDP), AY258614 (Genbank). N4Lid DOI: 10.1601/nm.8503

- Bacillus pseudocaliphilus*^{VP} corrig. Nielsen et al. 1995. Source of type material recommended for DOE sponsored genome sequencing by the JGI: ATCC 700166. High-quality 16S rRNA sequence S000010355 (RDP), X76449 (Genbank). N4Lid DOI: 10.1601/nm.4964
- Bacillus pseudofirmus*^{VP} Nielsen et al. 1995. Source of type material recommended for DOE sponsored genome sequencing by the JGI: ATCC 700159. High-quality 16S rRNA sequence S000013858 (RDP), X76439 (Genbank). N4Lid DOI: 10.1601/nm.4965
- Bacillus pseudomycoides*^{VP} Nakamura 1998. Source of type material recommended for DOE sponsored genome sequencing by the JGI: NRRL B-617. N4Lid DOI: 10.1601/nm.4966
- Bacillus psychrodurans*^{VP} Abd El-Rahman et al. 2002. Source of type material recommended for DOE sponsored genome sequencing by the JGI: ATCC BAA-796. High-quality 16S rRNA sequence S000104372 (RDP), AJ277984 (Genbank). N4Lid DOI: 10.1601/nm.4967
- Bacillus psychrosaccharolyticus*^{VP} (ex Larkin and Stokes 1967) Priest et al. 1989. Source of type material recommended for DOE sponsored genome sequencing by the JGI: ATCC 23296. High-quality 16S rRNA sequence S000130032 (RDP), X60635 (Genbank). N4Lid DOI: 10.1601/nm.4969
- Bacillus psychrotolerans*^{VP} Abd El-Rahman et al. 2002. Source of type material recommended for DOE sponsored genome sequencing by the JGI: DSM 11706. High-quality 16S rRNA sequence S000105391 (RDP), AJ277983 (Genbank). N4Lid DOI: 10.1601/nm.4970
- Bacillus pumilus*^{AL} Meyer and Gottheil 1901. Source of type material recommended for DOE sponsored genome sequencing by the JGI: ATCC 7061. High-quality 16S rRNA sequence S000378387 (RDP), AY456263 (Genbank). GOLD ID: Gi00674. GCAT ID: 000752_GCAT. Entrez genome id: 13626. Sequenced strain: FO-036b is from a non-type strain. Genome sequencing is incomplete. Number of genomes of this species sequenced 2 (GOLD) 2 (NCBI). N4Lid DOI: 10.1601/nm.4972
- Bacillus pycnus*^{VP} Nakamura et al. 2002. Source of type material recommended for DOE sponsored genome sequencing by the JGI: NRRL NRS-1691. High-quality 16S rRNA sequence S000388482 (RDP), AF169531 (Genbank). N4Lid DOI: 10.1601/nm.4973
- Bacillus ruris*^{VP} Heyndrickx et al. 2005. Source of type material recommended for DOE sponsored genome sequencing by the JGI: DSM 17057. High-quality 16S rRNA sequence S000276781 (RDP), AJ535639 (Genbank). N4Lid DOI: 10.1601/nm.9711
- Bacillus safensis*^{VP} Satomi et al. 2006. Source of type material recommended for DOE sponsored genome sequencing by the JGI: ATCC BAA-1126. High-quality 16S rRNA sequence S000458519 (RDP), AF234854 (Genbank). N4Lid DOI: 10.1601/nm.10225
- Bacillus salarius*^{VP} Lim et al. 2006. Source of type material recommended for DOE sponsored genome sequencing by the JGI: DSM 16461. High-quality 16S rRNA sequence S000373335 (RDP), AY667494 (Genbank). N4Lid DOI: 10.1601/nm.9883
- Bacillus saliphilus*^{VP} Romano et al. 2005. Source of type material recommended for DOE sponsored genome sequencing by the JGI: ATCC BAA-957. High-quality 16S rRNA sequence S000471065 (RDP), AJ493660 (Genbank). N4Lid DOI: 10.1601/nm.8504
- Bacillus schlegelii*^{VP} Schenk and Aragno 1981. Source of type material recommended for DOE sponsored genome sequencing by the JGI: ATCC 43741. High-quality 16S rRNA sequence S000011925 (RDP), Z26934 (Genbank). N4Lid DOI: 10.1601/nm.4976
- Bacillus selenitireducens*^{VP} Switzer Blum et al. 2001. Source of type material recommended for DOE sponsored genome sequencing by the JGI: ATCC 700615. High-quality 16S rRNA sequence S000428344 (RDP), AF064704 (Genbank). GOLD ID: Gi00921. GCAT ID: 000753_GCAT. Entrez genome id: 13376. Sequenced strain: MLS-10 is from a non-type strain. Genome sequencing is incomplete. Number of genomes of this species sequenced 2 (GOLD) 1 (NCBI). N4Lid DOI: 10.1601/nm.4977
- Bacillus seohaeanensis*^{VP} Lee et al. 2006. Source of type material recommended for DOE sponsored genome sequencing by the JGI: DSM 16464. High-quality 16S rRNA sequence S000373336 (RDP), AY667495 (Genbank). N4Lid DOI: 10.1601/nm.10229
- Bacillus shackletonii*^{VP} Logan et al. 2004. Source of type material recommended for DOE sponsored genome sequencing by the JGI: CIP 107762. High-quality 16S rRNA sequence S000131291 (RDP), AJ250318 (Genbank). N4Lid DOI: 10.1601/nm.4978

- Bacillus silvestris*^{VP} Rheims et al. 1999. Source of type material recommended for DOE sponsored genome sequencing by the JGI: ATCC BAA-269. High-quality 16S rRNA sequence S000113071 (RDP), AJ006086 (Genbank). N4Lid DOI: 10.1601/nm.4979
- Bacillus simplex*^{VP} (ex Meyer and Gottheil 1901) Priest et al. 1989. Source of type material recommended for DOE sponsored genome sequencing by the JGI: ATCC 49097. High-quality 16S rRNA sequence S000413941 (RDP), D78478 (Genbank). N4Lid DOI: 10.1601/nm.4980
- Bacillus siralis*^{VP} Pettersson et al. 2000. Source of type material recommended for DOE sponsored genome sequencing by the JGI: DSM 13140. High-quality 16S rRNA sequence S000428419 (RDP), AF071856 (Genbank). N4Lid DOI: 10.1601/nm.4981
- Bacillus smithii*^{VP} Nakamura et al. 1988. Source of type material recommended for DOE sponsored genome sequencing by the JGI: ATCC 49841. High-quality 16S rRNA sequence S000130240 (RDP), X60643 (Genbank). N4Lid DOI: 10.1601/nm.4982
- Bacillus soli*^{VP} Heyrman et al. 2004. Source of type material recommended for DOE sponsored genome sequencing by the JGI: DSM 15604. High-quality 16S rRNA sequence S000323282 (RDP), AJ542513 (Genbank). N4Lid DOI: 10.1601/nm.4983
- Bacillus sonorensis*^{VP} Palmisano et al. 2001. Source of type material recommended for DOE sponsored genome sequencing by the JGI: NRRL B-23154. High-quality 16S rRNA sequence S000390972 (RDP), AF302118 (Genbank). N4Lid DOI: 10.1601/nm.4984
- Bacillus sphaericus*^{AL} Meyer and Neide 1904. Source of type material recommended for DOE sponsored genome sequencing by the JGI: ATCC 14577. High-quality 16S rRNA sequence S000414413 (RDP), L14010 (Genbank). N4Lid DOI: 10.1601/nm.4985
- Bacillus sporothermodurans*^{VP} Pettersson et al. 1996. Source of type material recommended for DOE sponsored genome sequencing by the JGI: DSM 10599. High-quality 16S rRNA sequence S000437736 (RDP), U49078 (Genbank). N4Lid DOI: 10.1601/nm.4986
- Bacillus stratosphericus*^{VP} Shivaji et al. 2006. Source of type material recommended for DOE sponsored genome sequencing by the JGI: JCM 13349. High-quality 16S rRNA sequence S000417319 (RDP), AJ831843 (Genbank). N4Lid DOI: 10.1601/nm.10146
- Bacillus subterraneus*^{VP} Kanso et al. 2002. Source of type material recommended for DOE sponsored genome sequencing by the JGI: ATCC BAA-136. N4Lid DOI: 10.1601/nm.4988
- Bacillus tequilensis*^{VP} Gatson et al. 2006. Source of type material recommended for DOE sponsored genome sequencing by the JGI: ATCC BAA-819. High-quality 16S rRNA sequence S000401607 (RDP), AY197613 (Genbank). N4Lid DOI: 10.1601/nm.10148
- Bacillus thermantarcticus*^{VP} corrig. Nicolaus et al. 2002. Source of type material recommended for DOE sponsored genome sequencing by the JGI: DSM 9572. N4Lid DOI: 10.1601/nm.4989
- Bacillus thermoamylovorans*^{VP} Combet-Blanc et al. 1995. Source of type material recommended for DOE sponsored genome sequencing by the JGI: LMG 18084. High-quality 16S rRNA sequence S000414555 (RDP), L27478 (Genbank). N4Lid DOI: 10.1601/nm.4991
- Bacillus thermocloacae*^{VP} Demharter and Hensel 1989. Source of type material recommended for DOE sponsored genome sequencing by the JGI: ATCC 49805. N4Lid DOI: 10.1601/nm.4993
- Bacillus thuringiensis*^{AL} Berliner 1915. Source of type material recommended for DOE sponsored genome sequencing by the JGI: ATCC 10792. High-quality 16S rRNA sequence S000021267 (RDP), AF290545 (Genbank). GOLD ID: Gc00463. GCAT ID: 000146_GCAT. Entrez genome id: 18255. Sequenced strain: Al Hakam is from a non-type strain. Genome sequencing is completed. Number of genomes of this species sequenced 3 (GOLD) 3 (NCBI). N4Lid DOI: 10.1601/nm.5000
- Bacillus tusciae*^{VP} Bonjour and Aragno 1985. Source of type material recommended for DOE sponsored genome sequencing by the JGI: DSM 2912. High-quality 16S rRNA sequence S000007289 (RDP), Z26933 (Genbank). N4Lid DOI: 10.1601/nm.5001
- Bacillus vallismortis*^{VP} Roberts et al. 1996. Source of type material recommended for DOE sponsored genome sequencing by the JGI: ATCC 700092. High-quality 16S rRNA sequence S000012241 (RDP), AB021198 (Genbank). N4Lid DOI: 10.1601/nm.5003
- Bacillus vedderi*^{VP} Agnew et al. 1996. Source of type material recommended for DOE sponsored genome sequencing by the JGI: ATCC 700130. High-quality 16S rRNA sequence S000006194 (RDP), Z48306 (Genbank). N4Lid DOI: 10.1601/nm.5004

Bacillus velezensis^{VP} Ruiz-García et al. 2005. Source of type material recommended for DOE sponsored genome sequencing by the JGI: LMG 22478. High-quality 16S rRNA sequence S000475562 (RDP), AY603658 (Genbank). N4Lid DOI: 10.1601/nm.8505

Bacillus vietnamensis^{VP} Noguchi et al. 2004. Source of type material recommended for DOE sponsored genome sequencing by the JGI: NRRL B-23890. High-quality 16S rRNA sequence S000439486 (RDP), AB099708 (Genbank). N4Lid DOI: 10.1601/nm.8506

Bacillus vireti^{VP} Heyrman et al. 2004. Source of type material recommended for DOE sponsored genome sequencing by the JGI: DSM 15602. High-quality 16S rRNA sequence S000323278 (RDP), AJ542509 (Genbank). N4Lid DOI: 10.1601/nm.5005

Bacillus wakoensis^{VP} Nogi et al. 2005. Source of type material recommended for DOE sponsored genome sequencing by the JGI: DSM 2521. High-quality 16S rRNA sequence S000383270 (RDP), AB043851 (Genbank). N4Lid 10.1601/nm.9695

Bacillus weihenstephanensis^{VP} Lechner et al. 1998. Source of type material recommended for DOE sponsored genome sequencing by the JGI: NRRL B-23307. High-quality 16S rRNA sequence S000016288 (RDP), AB021199 (Genbank). GOLD ID: Gi00791. GCAT ID: 000734_GCAT. Entrez genome id: 13623. Sequenced strain: KBAB4 is from a non-type strain. Genome sequencing is incomplete. Number of genomes of this species sequenced 1 (GOLD) 1 (NCBI). N4Lid DOI: 10.1601/nm.5007

Genus *Alkalibacillus*^{VP} Jeon et al. 2005. N4Lid 10.1601/nm.9579

Alkalibacillus haloalkaliphilus^{VP} (Fritze 1996) Jeon et al. 2005. <== *Bacillus haloalkaliphilus* (**basonym**). Synonym links through N4Lid: 10.1601/ex.4917. Source of type material recommended for DOE sponsored genome sequencing by the JGI: ATCC 700606. N4Lid 10.1601/nm.9272

† *Bacillus haloalkaliphilus*^{VP} Fritze 1996. ==> *Alkalibacillus haloalkaliphilus* (**new combination**). Synonym links through N4Lid: 10.1601/ex.4917. Source of type material recommended for DOE sponsored genome sequencing by the JGI: ATCC 700606. N4Lid DOI: 10.1601/nm.4917

Alkalibacillus füliformis^{VP} Romano et al. 2005. Source of type material recommended for DOE sponsored genome sequencing by the JGI: ATCC BAA-956. High-quality 16S rRNA sequence S000471066 (RDP), AJ493661 (Genbank). N4Lid 10.1601/nm.9702

Alkalibacillus salilacus^{VP} Jeon et al. 2005. Source of type material recommended for DOE sponsored genome sequencing by the JGI: DSM 16460. High-quality 16S rRNA sequence S000374557 (RDP), AY671976 (Genbank). N4Lid 10.1601/nm.9578

Genus *Amphibacillus*^{VP} Niimura et al. 1990. N4Lid DOI: 10.1601/nm.5008

Amphibacillus xylanus^{VP} Niimura et al. 1990. Source of type material recommended for DOE sponsored genome sequencing by the JGI: ATCC 51415. High-quality 16S rRNA sequence S000433906 (RDP), AJ496807 (Genbank). N4Lid DOI: 10.1601/nm.5009

Amphibacillus fermentum^{VP} Zhilina et al. 2002. Source of type material recommended for DOE sponsored genome sequencing by the JGI: DSM 13869. High-quality 16S rRNA sequence S000393873 (RDP), AF418603 (Genbank). N4Lid DOI: 10.1601/nm.5010

Amphibacillus tropicus^{VP} Zhilina et al. 2002. Source of type material recommended for DOE sponsored genome sequencing by the JGI: DSM 13870. High-quality 16S rRNA sequence S000393872 (RDP), AF418602 (Genbank). N4Lid DOI: 10.1601/nm.5011

Genus *Anoxybacillus*^{VP} Pikuta et al. 2000. N4Lid DOI: 10.1601/nm.5012

Anoxybacillus pushchinoensis^{VP} corrig. Pikuta et al. 2000. Source of type material recommended for DOE sponsored genome sequencing by the JGI: ATCC 700785. N4Lid DOI: 10.1601/nm.5013

Anoxybacillus ayderensis^{VP} Dulger et al. 2004. Source of type material recommended for DOE sponsored genome sequencing by the JGI: NCIMB 13972. High-quality 16S rRNA sequence S000416202 (RDP), AF001963 (Genbank). N4Lid DOI: 10.1601/nm.8465

Anoxybacillus amyolyticus^{VP} Poli et al. 2006. Source of type material recommended for DOE sponsored genome sequencing by the JGI: ATCC BAA-872. High-quality 16S rRNA sequence S000543968 (RDP), AJ618979 (Genbank). N4Lid DOI: 10.1601/nm.10189

Anoxybacillus contaminans^{VP} De Clerck et al. 2004. Source of type material recommended for DOE sponsored genome sequencing by the JGI: DSM 15866. High-quality 16S rRNA sequence S000323341 (RDP), AJ551330 (Genbank). N4Lid DOI: 10.1601/nm.8466

- Anoxybacillus flavithermus*^{VP} Pikuta et al. 2000. Source of type material recommended for DOE sponsored genome sequencing by the JGI: DSM 2641. High-quality 16S rRNA sequence S000001145 (RDP), Z26932 (Genbank). N4Lid DOI: 10.1601/nm.5015
- Anoxybacillus gonensis*^{VP} Belduz et al. 2003. Source of type material recommended for DOE sponsored genome sequencing by the JGI: NCIMB 13933. High-quality 16S rRNA sequence S000396417 (RDP), AY122325 (Genbank). N4Lid DOI: 10.1601/nm.5014
- Anoxybacillus kamchatkensis*^{VP} Kevbrin et al. 2006. Source of type material recommended for DOE sponsored genome sequencing by the JGI: ATCC BAA-549. High-quality 16S rRNA sequence S000583639 (RDP), DQ100254 (Genbank). N4Lid DOI: 10.1601/nm.10068
- Anoxybacillus kestanbolensis*^{VP} Dulger et al. 2004. Source of type material recommended for DOE sponsored genome sequencing by the JGI: NCIMB 13971. High-quality 16S rRNA sequence S000417862 (RDP), AY248711 (Genbank). N4Lid DOI: 10.1601/nm.8467
- Anoxybacillus voinovskiensis*^{VP} Yumoto et al. 2004. Source of type material recommended for DOE sponsored genome sequencing by the JGI: JCM 12111. High-quality 16S rRNA sequence S000364575 (RDP), AB110008 (Genbank). N4Lid DOI: 10.1601/nm.8468
- Genus *Caldalkalibacillus***^{VP} Xue et al. 2006. N4Lid DOI: 10.1601/nm.10093
- Caldalkalibacillus thermarum*^{VP} Xue et al. 2006. Source of type material recommended for DOE sponsored genome sequencing by the JGI: JCM 13486. High-quality 16S rRNA sequence S000426636 (RDP), AY753654 (Genbank). N4Lid DOI: 10.1601/nm.10092
- Genus *Cerasibacillus***^{VP} Nakamura et al. 2004. N4Lid DOI: 10.1601/nm.8535
- Cerasibacillus quisquiliarum*^{VP} Nakamura et al. 2004. Source of type material recommended for DOE sponsored genome sequencing by the JGI: DSM 15825. High-quality 16S rRNA sequence S000364572 (RDP), AB107894 (Genbank). N4Lid DOI: 10.1601/nm.8536
- Genus *Exiguobacterium***^{VP} Collins et al. 1984. GOLD ID: Gi00247. GCAT ID: 001053_GCAT. Entrez genome id: 10649. Sequenced strain: 255-15 is from a non-type strain. Genome sequencing is incomplete. Number of genomes of this species sequenced 1 (GOLD) 1 (NCBI). N4Lid DOI: 10.1601/nm.5016
- Exiguobacterium aurantiacum*^{VP} Collins et al. 1984. Source of type material recommended for DOE sponsored genome sequencing by the JGI: ATCC 35652. High-quality 16S rRNA sequence S000004312 (RDP), X70316 (Genbank). N4Lid DOI: 10.1601/nm.5017
- Exiguobacterium acetylicum*^{VP} (Levine and Soppeland 1926) Farrow et al. 1994. <==
Brevibacterium acetylicum (basonym). Synonym links through N4Lid: 10.1601/ex.5923. Source of type material recommended for DOE sponsored genome sequencing by the JGI: ATCC 953. High-quality 16S rRNA sequence S000005065 (RDP), X70313 (Genbank). N4Lid DOI: 10.1601/nm.5018
- † *Brevibacterium acetylicum*^{AL} (Levine and Soppeland 1926) Breed 1957. ==>
Exiguobacterium acetylicum (new combination). Synonym links through N4Lid: 10.1601/ex.5923. Source of type material recommended for DOE sponsored genome sequencing by the JGI: ATCC 953. High-quality 16S rRNA sequence S000005065 (RDP), X70313 (Genbank). N4Lid DOI: 10.1601/nm.5923
- Exiguobacterium aestuarii*^{VP} Kim et al. 2005. Source of type material recommended for DOE sponsored genome sequencing by the JGI: DSM 16306. High-quality 16S rRNA sequence S000504076 (RDP), AY594264 (Genbank). N4Lid 10.1601/nm.9335
- Exiguobacterium antarcticum*^{VP} Frühling et al. 2002. Source of type material recommended for DOE sponsored genome sequencing by the JGI: DSM 14480. High-quality 16S rRNA sequence S000008131 (RDP), AJ297437 (Genbank). N4Lid DOI: 10.1601/nm.5019
- Exiguobacterium artemiae*^{VP} López-Cortés et al. 2006. Source of type material recommended for DOE sponsored genome sequencing by the JGI: DSM 16484. N4Lid DOI: 10.1601/nm.10192
- Exiguobacterium marinum*^{VP} Kim et al. 2005. Source of type material recommended for DOE sponsored genome sequencing by the JGI: DSM 16307. High-quality 16S rRNA sequence S000504078 (RDP), AY594266 (Genbank). N4Lid 10.1601/nm.9334
- Exiguobacterium mexicanum*^{VP} López-Cortés et al. 2006. Source of type material recommended for DOE sponsored genome sequencing by the JGI: DSM 16483. High-quality 16S rRNA sequence S000571530 (RDP), AM072764 (Genbank). N4Lid DOI: 10.1601/nm.10193

Exiguobacterium oxidotolerans^{VP} Yumoto et al. 2004. Source of type material recommended for DOE sponsored genome sequencing by the JGI: JCM 12280. High-quality 16S rRNA sequence S000439502 (RDP), AB105164 (Genbank). N4Lid DOI: 10.1601/nm.8582

Exiguobacterium undae^{VP} Frühling et al. 2002. Source of type material recommended for DOE sponsored genome sequencing by the JGI: DSM 14481. High-quality 16S rRNA sequence S000089082 (RDP), AJ344151 (Genbank). N4Lid DOI: 10.1601/nm.5020

Genus *Filobacillus*^{VP} Schlesner et al. 2001. N4Lid DOI: 10.1601/nm.5021

Filobacillus milosensis^{VP} corrig. Schlesner et al. 2001. Source of type material recommended for DOE sponsored genome sequencing by the JGI: ATCC 700960. High-quality 16S rRNA sequence S000010526 (RDP), AJ238042 (Genbank). N4Lid DOI: 10.1601/nm.5022

Genus *Geobacillus*^{VP} Nazina et al. 2001. N4Lid DOI: 10.1601/nm.5023

Geobacillus stearothermophilus^{VP} (Donk 1920) Nazina et al. 2001. <== *Bacillus stearothermophilus* (basonym). Synonym links through N4Lid: 10.1601/ex.4987. Source of type material recommended for DOE sponsored genome sequencing by the JGI: ATCC 12980. High-quality 16S rRNA sequence S000013050 (RDP), AJ294817 (Genbank). GOLD ID: Gi01651. GCAT ID: 001104_GCAT. Entrez genome id: 17695. Sequenced strain: L14 is from a non-type strain. Genome sequencing is incomplete. Number of genomes of this species sequenced 1 (GOLD) 2 (NCBI). N4Lid DOI: 10.1601/nm.5024

† *Bacillus stearothermophilus*^{AL} Donk 1920. ==> *Geobacillus stearothermophilus* (new combination). Synonym links through N4Lid: 10.1601/ex.4987. Source of type material recommended for DOE sponsored genome sequencing by the JGI: ATCC 12980. High-quality 16S rRNA sequence S000013050 (RDP), AJ294817 (Genbank). GOLD ID: Gi00063. GCAT ID: 000754_GCAT. Sequenced strain: 10 is from a non-type strain. Genome sequencing is incomplete. Number of genomes of this species sequenced 1 (GOLD). N4Lid DOI: 10.1601/nm.4987

Geobacillus caldoxylosilyticus^{VP} (Ahmad et al. 2000) Fortina et al. 2001. <== *Saccharococcus caldoxylosilyticus* (basonym). Synonym links through N4Lid: 10.1601/ex.5055. Source of type material recommended for DOE sponsored genome sequencing by the JGI: ATCC 700356. High-quality 16S rRNA sequence S000428365 (RDP), AF067651 (Genbank). N4Lid DOI: 10.1601/nm.5025

† *Saccharococcus caldoxylosilyticus*^{VP} Ahmad et al. 2000. ==> *Geobacillus caldoxylosilyticus* (new combination). Synonym links through N4Lid: 10.1601/ex.5055. Source of type material recommended for DOE sponsored genome sequencing by the JGI: ATCC 700356. High-quality 16S rRNA sequence S000428365 (RDP), AF067651 (Genbank). N4Lid DOI: 10.1601/nm.5055

Geobacillus debilis^{VP} Banat et al. 2004. Source of type material recommended for DOE sponsored genome sequencing by the JGI: DSM 16016. High-quality 16S rRNA sequence S000447002 (RDP), AJ564616 (Genbank). N4Lid DOI: 10.1601/nm.8586

Geobacillus gargensis^{VP} Nazina et al. 2004. Source of type material recommended for DOE sponsored genome sequencing by the JGI: DSM 15378. High-quality 16S rRNA sequence S000460555 (RDP), AY193888 (Genbank). N4Lid DOI: 10.1601/nm.8587

Geobacillus jurassicus^{VP} Nazina et al. 2005. Source of type material recommended for DOE sponsored genome sequencing by the JGI: DSM 15726. High-quality 16S rRNA sequence S000500951 (RDP), AY312405 (Genbank). N4Lid 10.1601/nm.9393

Geobacillus kaustophilus^{VP} (Priest et al. 1989) Nazina et al. 2001. <== *Bacillus kaustophilus* (basonym). Synonym links through N4Lid: 10.1601/ex.4926. Source of type material recommended for DOE sponsored genome sequencing by the JGI: ATCC 8005. High-quality 16S rRNA sequence S000128486 (RDP), X60618 (Genbank). GOLD ID: Gc00237. GCAT ID: 000372_GCAT. Entrez genome id: 13233. Sequenced strain: HTA426 is from a non-type strain. Genome sequencing is completed. Number of genomes of this species sequenced 1 (GOLD) 1 (NCBI). N4Lid DOI: 10.1601/nm.5026

† *Bacillus kaustophilus*^{VP} (ex Prickett 1928) Priest et al. 1989. ==> *Geobacillus kaustophilus* (new combination). Synonym links through N4Lid: 10.1601/ex.4926. Source of type material recommended for DOE sponsored genome sequencing by the JGI: ATCC 8005. High-quality 16S rRNA sequence S000128486 (RDP), X60618 (Genbank). GOLD ID: Gc00237. GCAT ID: 000372_GCAT. Entrez genome id: 13233. Sequenced strain: HTA426 is from a non-type strain. Genome sequencing is completed. Number of genomes of this species sequenced 1 (GOLD) 1 (NCBI). N4Lid DOI: 10.1601/nm.4926

- Geobacillus lituanicus*^{VP} Kuisiene et al. 2004. Source of type material recommended for DOE sponsored genome sequencing by the JGI: DSM 15325. High-quality 16S rRNA sequence S000460422 (RDP), AY044055 (Genbank). N4Lid DOI: 10.1601/nm.8588
- Geobacillus pallidus*^{VP} (Scholz et al. 1988) Banat et al. 2004. <== *Bacillus pallidus* (basonym). Synonym links through N4Lid: 10.1601/ex.4957. Source of type material recommended for DOE sponsored genome sequencing by the JGI: ATCC 51176. High-quality 16S rRNA sequence S000014222 (RDP), Z26930 (Genbank). N4Lid DOI: 10.1601/nm.8589
- † *Bacillus pallidus*^{VP} Scholz et al. 1988. ==> *Geobacillus pallidus* (new combination). Synonym links through N4Lid: 10.1601/ex.4957. Source of type material recommended for DOE sponsored genome sequencing by the JGI: ATCC 51176. High-quality 16S rRNA sequence S000014222 (RDP), Z26930 (Genbank). N4Lid DOI: 10.1601/nm.4957
- Geobacillus subterraneus*^{VP} Nazina et al. 2001. Source of type material recommended for DOE sponsored genome sequencing by the JGI: DSM 13552. High-quality 16S rRNA sequence S000390505 (RDP), AF276306 (Genbank). N4Lid DOI: 10.1601/nm.5027
- Geobacillus tepidamans*^{VP} Schäffer et al. 2004. Source of type material recommended for DOE sponsored genome sequencing by the JGI: ATCC BAA-942. High-quality 16S rRNA sequence S000486337 (RDP), AY563003 (Genbank). N4Lid DOI: 10.1601/nm.8590
- Geobacillus thermocatenulatus*^{VP} (Golovacheva et al. 1991) Nazina et al. 2001. <== *Bacillus thermocatenulatus* (basonym). Synonym links through N4Lid: 10.1601/ex.4992. Source of type material recommended for DOE sponsored genome sequencing by the JGI: DSM 730. High-quality 16S rRNA sequence S000005078 (RDP), Z26926 (Genbank). N4Lid DOI: 10.1601/nm.5028
- † *Bacillus thermocatenulatus*^{VP} Golovacheva et al. 1991. ==> *Geobacillus thermocatenulatus* (new combination). Synonym links through N4Lid: 10.1601/ex.4992. Source of type material recommended for DOE sponsored genome sequencing by the JGI: DSM 730. High-quality 16S rRNA sequence S000005078 (RDP), Z26926 (Genbank). N4Lid DOI: 10.1601/nm.4992
- Geobacillus thermodenitrificans*^{VP} (Manachini et al. 2000) Nazina et al. 2001. <== *Bacillus thermodenitrificans* (basonym). Synonym links through N4Lid: 10.1601/ex.4994. Source of type material recommended for DOE sponsored genome sequencing by the JGI: ATCC 29492. High-quality 16S rRNA sequence S000004284 (RDP), Z26928 (Genbank). N4Lid DOI: 10.1601/nm.5029
- † *Bacillus thermodenitrificans*^{VP} (ex Klaushofer and Hollaus 1970) Manachini et al. 2000. ==> *Geobacillus thermodenitrificans* (new combination). Synonym links through N4Lid: 10.1601/ex.4994. Source of type material recommended for DOE sponsored genome sequencing by the JGI: ATCC 29492. High-quality 16S rRNA sequence S000004284 (RDP), Z26928 (Genbank). N4Lid DOI: 10.1601/nm.4994
- Geobacillus thermoglucosidasius*^{VP} (Suzuki et al. 1984) Nazina et al. 2001. <== *Bacillus thermoglucosidasius* (basonym). Synonym links through N4Lid: 10.1601/ex.4995. Source of type material recommended for DOE sponsored genome sequencing by the JGI: ATCC 43742. High-quality 16S rRNA sequence S000130033 (RDP), X60641 (Genbank). N4Lid DOI: 10.1601/nm.5030
- † *Bacillus thermoglucosidasius*^{VP} Suzuki 1984. ==> *Geobacillus thermoglucosidasius* (new combination). Synonym links through N4Lid: 10.1601/ex.4995. Source of type material recommended for DOE sponsored genome sequencing by the JGI: ATCC 43742. High-quality 16S rRNA sequence S000130033 (RDP), X60641 (Genbank). N4Lid DOI: 10.1601/nm.4995
- Geobacillus thermoleovorans*^{VP} (Zarilla and Perry 1988) Nazina et al. 2001. <== *Bacillus thermoleovorans* (basonym). Synonym links through N4Lid: 10.1601/ex.4996. Source of type material recommended for DOE sponsored genome sequencing by the JGI: ATCC BAA-979. High-quality 16S rRNA sequence S000436720 (RDP), M77488 (Genbank). N4Lid DOI: 10.1601/nm.5031
- † *Bacillus thermoleovorans*^{VP} Zarilla and Perry 1988. ==> *Geobacillus thermoleovorans* (new combination). Synonym links through N4Lid: 10.1601/ex.4996. Source of type material recommended for DOE sponsored genome sequencing by the JGI: ATCC BAA-979. High-quality 16S rRNA sequence S000436720 (RDP), M77488 (Genbank). N4Lid DOI: 10.1601/nm.4996
- Geobacillus toebii*^{VP} Sung et al. 2002. Source of type material recommended for DOE sponsored genome sequencing by the JGI: ATCC BAA-1004. High-quality 16S rRNA sequence S000391621 (RDP), AF326278 (Genbank). N4Lid DOI: 10.1601/nm.5032

Geobacillus uzenensis^{VP} Nazina et al. 2001. Source of type material recommended for DOE sponsored genome sequencing by the JGI: DSM 13551. High-quality 16S rRNA sequence S000390503 (RDP), AF276304 (Genbank). N4Lid DOI: 10.1601/nm.5033

Geobacillus vulcani^{VP} (Caccamo et al. 2000) Nazina et al. 2004. <== *Bacillus vulcani* (basonym). Synonym links through N4Lid: 10.1601/ex.5006. Source of type material recommended for DOE sponsored genome sequencing by the JGI: DSM 13174. High-quality 16S rRNA sequence S000010113 (RDP), AJ293805 (Genbank). N4Lid DOI: 10.1601/nm.8591

† *Bacillus vulcani*^{VP} Caccamo et al. 2000. ==> *Geobacillus vulcani* (new combination). Synonym links through N4Lid: 10.1601/ex.5006. Source of type material recommended for DOE sponsored genome sequencing by the JGI: DSM 13174. High-quality 16S rRNA sequence S000010113 (RDP), AJ293805 (Genbank). N4Lid DOI: 10.1601/nm.5006

Genus *Gracilibacillus*^{VP} Wainø et al. 1999. N4Lid DOI: 10.1601/nm.5034

Gracilibacillus halotolerans^{VP} Wainø et al. 1999. Source of type material recommended for DOE sponsored genome sequencing by the JGI: ATCC 700849. High-quality 16S rRNA sequence S000427946 (RDP), AF036922 (Genbank). N4Lid DOI: 10.1601/nm.5035

† *Bacillus dipsosauri*^{VP} Lawson et al. 1996. ==> *Gracilibacillus dipsosauri* (new combination). Synonym links through N4Lid: 10.1601/ex.4897. Source of type material recommended for DOE sponsored genome sequencing by the JGI: ATCC 700347. High-quality 16S rRNA sequence S000008327 (RDP), X82436 (Genbank). N4Lid DOI: 10.1601/nm.4897

Gracilibacillus dipsosauri^{VP} (Lawson et al. 1996) Wainø et al. 1999. <== *Bacillus dipsosauri* (basonym). Synonym links through N4Lid: 10.1601/ex.4897. Source of type material recommended for DOE sponsored genome sequencing by the JGI: ATCC 700347. High-quality 16S rRNA sequence S000008327 (RDP), X82436 (Genbank). N4Lid DOI: 10.1601/nm.5036

Gracilibacillus orientalis^{VP} Carrasco et al. 2006. Source of type material recommended for DOE sponsored genome sequencing by the JGI: AS 1.4250. High-quality 16S rRNA sequence S000544658 (RDP), AM040716 (Genbank). N4Lid 10.1601/nm.9931

Genus *Halobacillus*^{VP} Spring et al. 1996. N4Lid DOI: 10.1601/nm.5037

Halobacillus halophilus^{VP} (Claus et al. 1984) Spring et al. 1996. <== *Sporosarcina halophila* (basonym). Synonym links through N4Lid: 10.1601/ex.5213. Source of type material recommended for DOE sponsored genome sequencing by the JGI: ATCC 35676. N4Lid DOI: 10.1601/nm.5038

† *Sporosarcina halophila*^{VP} Claus et al. 1984. ==> *Halobacillus halophilus* (new combination). Synonym links through N4Lid: 10.1601/ex.5213. Source of type material recommended for DOE sponsored genome sequencing by the JGI: ATCC 35676. N4Lid DOI: 10.1601/nm.5213

Halobacillus aidingensis^{VP} Liu et al. 2005. Source of type material recommended for DOE sponsored genome sequencing by the JGI: JCM 12771. High-quality 16S rRNA sequence S000143076 (RDP), AY351389 (Genbank). N4Lid 10.1601/nm.9590

Halobacillus dabanensis^{VP} Liu et al. 2005. Source of type material recommended for DOE sponsored genome sequencing by the JGI: JCM 12772. High-quality 16S rRNA sequence S000143299 (RDP), AY351395 (Genbank). N4Lid 10.1601/nm.9589

Halobacillus karajensis^{VP} Amoozegar et al. 2003. Source of type material recommended for DOE sponsored genome sequencing by the JGI: DSM 14948. High-quality 16S rRNA sequence S000136777 (RDP), AJ486874 (Genbank). N4Lid DOI: 10.1601/nm.5039

Halobacillus litoralis^{VP} Spring et al. 1996. Source of type material recommended for DOE sponsored genome sequencing by the JGI: ATCC 700076. High-quality 16S rRNA sequence S000011961 (RDP), X94558 (Genbank). N4Lid DOI: 10.1601/nm.5040

Halobacillus locisalis^{VP} Yoon et al. 2004. Source of type material recommended for DOE sponsored genome sequencing by the JGI: DSM 16468. High-quality 16S rRNA sequence S000440964 (RDP), AY190534 (Genbank). N4Lid 10.1601/nm.8602

Halobacillus salinus^{VP} Yoon et al. 2003. Source of type material recommended for DOE sponsored genome sequencing by the JGI: JCM 11546. High-quality 16S rRNA sequence S000539208 (RDP), AF500003 (Genbank). N4Lid DOI: 10.1601/nm.5041

Halobacillus trueperi^{VP} Spring et al. 1996. Source of type material recommended for DOE sponsored genome sequencing by the JGI: ATCC 700077. High-quality 16S rRNA sequence S000013532 (RDP), AJ310149 (Genbank). N4Lid DOI: 10.1601/nm.5042

- Halobacillus yeomjeoni*^{VP} Yoon et al. 2005. Source of type material recommended for DOE sponsored genome sequencing by the JGI: DSM 17110. High-quality 16S rRNA sequence S000481482 (RDP), AY881246 (Genbank). N4Lid 10.1601/nm.9703
- Genus *Halolactibacillus***^{VP} Ishikawa et al. 2005. N4Lid 10.1601/nm.9706
- Halolactibacillus halophilus*^{VP} Ishikawa et al. 2005. Source of type material recommended for DOE sponsored genome sequencing by the JGI: DSM 17073. High-quality 16S rRNA sequence S000568190 (RDP), AB196783 (Genbank). N4Lid 10.1601/nm.9704
- Halolactibacillus miurensis*^{VP} Ishikawa et al. 2005. Source of type material recommended for DOE sponsored genome sequencing by the JGI: DSM 17074. High-quality 16S rRNA sequence S000568190 (RDP), AB196783 (Genbank). N4Lid 10.1601/nm.9705
- Genus *Jeotgalibacillus***^{VP} Yoon et al. 2001. N4Lid DOI: 10.1601/nm.5043
- Jeotgalibacillus alimentarius*^{VP} Yoon et al. 2001. Source of type material recommended for DOE sponsored genome sequencing by the JGI: JCM 10872. High-quality 16S rRNA sequence S000008459 (RDP), AF281158 (Genbank). N4Lid DOI: 10.1601/nm.5044
- Genus *Lentibacillus***^{VP} Yoon et al. 2002. N4Lid DOI: 10.1601/nm.5045
- Lentibacillus salicampi*^{VP} Yoon et al. 2002. Source of type material recommended for DOE sponsored genome sequencing by the JGI: ATCC BAA-719. High-quality 16S rRNA sequence S000540399 (RDP), AY057394 (Genbank). N4Lid DOI: 10.1601/nm.5046
- Lentibacillus halophilus*^{VP} Tanasupawat et al. 2006. Source of type material recommended for DOE sponsored genome sequencing by the JGI: JCM 12149. High-quality 16S rRNA sequence S000416064 (RDP), AB191345 (Genbank). N4Lid DOI: 10.1601/nm.10228
- Lentibacillus juripiscarius*^{VP} Namwong et al. 2005. Source of type material recommended for DOE sponsored genome sequencing by the JGI: JCM 12147. High-quality 16S rRNA sequence S000469599 (RDP), AB127980 (Genbank). N4Lid 10.1601/nm.8669
- Lentibacillus lacisalsi*^{VP} Lim et al. 2005. Source of type material recommended for DOE sponsored genome sequencing by the JGI: DSM 16462. High-quality 16S rRNA sequence S000373338 (RDP), AY667497 (Genbank). N4Lid 10.1601/nm.9573
- Lentibacillus salarius*^{VP} Jeon et al. 2005. Source of type material recommended for DOE sponsored genome sequencing by the JGI: DSM 16459. High-quality 16S rRNA sequence S000549091 (RDP), AY667493 (Genbank). N4Lid 10.1601/nm.9420
- Genus *Marinibacillus***^{VP} Yoon et al. 2001. N4Lid DOI: 10.1601/nm.5047
- Marinibacillus marinus*^{VP} (Rüger and Richter 1979) Yoon et al. 2001. <== *Bacillus globisporus* subsp. *marinus* (basonym). Synonym links through N4Lid: 10.1601/ex.4913. Source of type material recommended for DOE sponsored genome sequencing by the JGI: ATCC 29841. High-quality 16S rRNA sequence S000018491 (RDP), AJ237708 (Genbank). N4Lid DOI: 10.1601/nm.5048
- Bacillus marinus*^{VP} (Rüger and Richter 1979) Rüger 1983. <== *Bacillus globisporus* subsp. *marinus* (basonym). *Marinibacillus marinus* (new combination). Synonym links through N4Lid: 10.1601/ex.4913. Source of type material recommended for DOE sponsored genome sequencing by the JGI: ATCC 29841. High-quality 16S rRNA sequence S000018491 (RDP), AJ237708 (Genbank). N4Lid DOI: 10.1601/nm.4939
- † *Bacillus globisporus* subsp. *marinus*^{AL} Rüger and Richter 1979. ==> *Bacillus marinus* (new combination). Synonym links through N4Lid: 10.1601/ex.4913. Source of type material recommended for DOE sponsored genome sequencing by the JGI: ATCC 29841. High-quality 16S rRNA sequence S000018491 (RDP), AJ237708 (Genbank). N4Lid DOI: 10.1601/nm.4913
- Marinibacillus campisalis*^{VP} Yoon et al. 2004. Source of type material recommended for DOE sponsored genome sequencing by the JGI: JCM 11810. High-quality 16S rRNA sequence S000368085 (RDP), AY190535 (Genbank). N4Lid 10.1601/nm.8685
- Genus *Oceanobacillus***^{VP} Lu et al. 2002. N4Lid DOI: 10.1601/nm.5049
- Oceanobacillus iheyensis*^{VP} Lu et al. 2002. Source of type material recommended for DOE sponsored genome sequencing by the JGI: DSM 14371. High-quality 16S rRNA sequence S000541807 (RDP), AB010863 (Genbank). GOLD ID: Gc00099. GCAT ID: 000511_GCAT. Entrez genome id: 284. Sequenced strain: DSM 14371 is type material. Genome sequencing is completed. Number of genomes of this species sequenced 1 (GOLD) 1 (NCBI). N4Lid DOI: 10.1601/nm.5050

Oceanobacillus oncorhynchi subsp. *oncorhynchi*^{VP} Yumoto et al. 2005. Source of type material recommended for DOE sponsored genome sequencing by the JGI: JCM 12661. High-quality 16S rRNA sequence S000543167 (RDP), AB188089 (Genbank). N4Lid 10.1601/nm.9767

Oceanobacillus oncorhynchi subsp. *incaldanensis*^{VP} Romano et al. 2006. Source of type material recommended for DOE sponsored genome sequencing by the JGI: ATCC BAA-954. High-quality 16S rRNA sequence S000324026 (RDP), AJ640134 (Genbank). N4Lid 10.1601/nm.9983

Oceanobacillus picturae^{VP} (Heyrman et al. 2003) Lee et al. 2006. <== *Virgibacillus picturae* (basonym). Synonym links through N4Lid: 10.1601/ex.5067. Source of type material recommended for DOE sponsored genome sequencing by the JGI: DSM 14867. High-quality 16S rRNA sequence S000446607 (RDP), AJ315060 (Genbank). N4Lid 10.1601/nm.9805

† *Virgibacillus picturae*^{VP} Heyrman et al. 2003. ==> *Oceanobacillus picturae* (new combination). Synonym links through N4Lid: 10.1601/ex.5067. Source of type material recommended for DOE sponsored genome sequencing by the JGI: DSM 14867. High-quality 16S rRNA sequence S000446607 (RDP), AJ315060 (Genbank). N4Lid DOI: 10.1601/nm.5067

Genus *Ornithinibacillus*^{VP} Mayr et al. 2006. N4Lid DOI: 10.1601/nm.10097

Ornithinibacillus bavariensis^{VP} Mayr et al. 2006. Source of type material recommended for DOE sponsored genome sequencing by the JGI: DSM 15681. High-quality 16S rRNA sequence S000538949 (RDP), Y13066 (Genbank). N4Lid DOI: 10.1601/nm.10095

Ornithinibacillus californiensis^{VP} Mayr et al. 2006. Source of type material recommended for DOE sponsored genome sequencing by the JGI: DSM 16628. High-quality 16S rRNA sequence AF326265 (RDP), AF326265 (Genbank). N4Lid DOI: 10.1601/nm.10096

Genus *Paraliobacillus*^{VP} Ishikawa et al. 2003. N4Lid DOI: 10.1601/nm.5051

Paraliobacillus ryukyensis^{VP} Ishikawa et al. 2003. Source of type material recommended for DOE sponsored genome sequencing by the JGI: DSM 15140. High-quality 16S rRNA sequence S000385195 (RDP), AB087828 (Genbank). N4Lid DOI: 10.1601/nm.5052

Genus *Paucisalibacillus*^{VP} Nunes et al. 2006. N4Lid DOI: 10.1601/nm.10227

Paucisalibacillus globulus^{VP} Nunes et al. 2006. Source of type material recommended for DOE sponsored genome sequencing by the JGI: CIP 108857. High-quality 16S rRNA sequence S000629396 (RDP), AM114102 (Genbank). N4Lid DOI: 10.1601/nm.10226

Genus *Pontibacillus*^{VP} Lim et al. 2005. N4Lid 10.1601/nm.8784

Pontibacillus chungwhensis^{VP} Lim et al. 2005. Source of type material recommended for DOE sponsored genome sequencing by the JGI: DSM 16287. High-quality 16S rRNA sequence S000475020 (RDP), AY553296 (Genbank). N4Lid 10.1601/nm.8785

Pontibacillus marinus^{VP} Lim et al. 2005. Source of type material recommended for DOE sponsored genome sequencing by the JGI: DSM 16465. High-quality 16S rRNA sequence S000548367 (RDP), AY603977 (Genbank). N4Lid 10.1601/nm.9407

Genus *Saccharococcus*^{VP} Nystrand 1984. N4Lid DOI: 10.1601/nm.5053

Saccharococcus thermophilus^{VP} Nystrand 1984. Source of type material recommended for DOE sponsored genome sequencing by the JGI: ATCC 43125. High-quality 16S rRNA sequence S000015414 (RDP), X70430 (Genbank). N4Lid DOI: 10.1601/nm.5054

Genus *Salinibacillus*^{VP} Ren and Zhou 2005. N4Lid 10.1601/nm.9342

Salinibacillus aidingensis^{VP} Ren and Zhou 2005. Source of type material recommended for DOE sponsored genome sequencing by the JGI: JCM 12389. High-quality 16S rRNA sequence S000500961 (RDP), AY321436 (Genbank). N4Lid 10.1601/nm.9340

Salinibacillus kushneri^{VP} Ren and Zhou 2005. Source of type material recommended for DOE sponsored genome sequencing by the JGI: JCM 12390. High-quality 16S rRNA sequence S000500960 (RDP), AY321434 (Genbank). N4Lid 10.1601/nm.9341

Genus *Tenuibacillus*^{VP} Ren and Zhou 2005. N4Lid 10.1601/nm.8879

Tenuibacillus multivorans^{VP} Ren and Zhou 2005. Source of type material recommended for DOE sponsored genome sequencing by the JGI: NBRC 100370. High-quality 16S rRNA sequence S000473604 (RDP), AY319933 (Genbank). N4Lid 10.1601/nm.8880

Genus *Thalassobacillus*^{VP} García et al. 2005. N4Lid 10.1601/nm.9571

Thalassobacillus devorans^{VP} García et al. 2005. Source of type material recommended for DOE sponsored genome sequencing by the JGI: DSM 16966. High-quality 16S rRNA sequence S000471782 (RDP), AJ717299 (Genbank). N4Lid 10.1601/nm.9570

Genus *Ureibacillus*^{VP} Fortina et al. 2001. N4Lid DOI: 10.1601/nm.5059

Ureibacillus thermosphaericus^{VP} (Andersson et al. 1996) Fortina et al. 2001. <== *Bacillus thermosphaericus* (basonym). Synonym links through N4Lid: 10.1601/ex.4998. Source of type material recommended for DOE sponsored genome sequencing by the JGI: DSM 10633. High-quality 16S rRNA sequence S000016384 (RDP), X90640 (Genbank). N4Lid DOI: 10.1601/nm.5060

† *Bacillus thermosphaericus*^{VP} Andersson et al. 1996. ==> *Ureibacillus thermosphaericus* (new combination). Synonym links through N4Lid: 10.1601/ex.4998. Source of type material recommended for DOE sponsored genome sequencing by the JGI: DSM 10633. High-quality 16S rRNA sequence S000016384 (RDP), X90640 (Genbank). N4Lid DOI: 10.1601/nm.4998

Ureibacillus terrenus^{VP} Fortina et al. 2001. Source of type material recommended for DOE sponsored genome sequencing by the JGI: ATCC BAA-384. High-quality 16S rRNA sequence S000128831 (RDP), AJ276403 (Genbank). N4Lid DOI: 10.1601/nm.5061

Ureibacillus suwonensis^{VP} Kim et al. 2006. Source of type material recommended for DOE sponsored genome sequencing by the JGI: DSM 16752. High-quality 16S rRNA sequence S000488239 (RDP), AY850379 (Genbank). N4Lid 10.1601/nm.9933

Genus *Virgibacillus*^{VP} Heyndrickx et al. 1998. ≈ *Virgibacillus* (later heterotypic synonym), links through 10.1601./nm.5062. N4Lid DOI: 10.1601/nm.5062

Virgibacillus pantothenicus^{VP} (Proom and Knight 1950) Heyndrickx et al. 1998. <== *Bacillus pantothenicus* (basonym). Synonym links through N4Lid: 10.1601/ex.4958. Source of type material recommended for DOE sponsored genome sequencing by the JGI: ATCC 14576. High-quality 16S rRNA sequence S000130239 (RDP), X60627 (Genbank). N4Lid DOI: 10.1601/nm.5063

† *Bacillus pantothenicus*^{AL} Proom and Knight 1950. ==> *Virgibacillus pantothenicus* (new combination). Synonym links through N4Lid: 10.1601/ex.4958. Source of type material recommended for DOE sponsored genome sequencing by the JGI: ATCC 14576. High-quality 16S rRNA sequence S000130239 (RDP), X60627 (Genbank). N4Lid DOI: 10.1601/nm.4958

Virgibacillus carmonensis^{VP} Heyrman et al. 2003. Source of type material recommended for DOE sponsored genome sequencing by the JGI: DSM 14868. High-quality 16S rRNA sequence S000446630 (RDP), AJ316302 (Genbank). N4Lid DOI: 10.1601/nm.5064

Virgibacillus dokdonensis^{VP} Yoon et al. 2005. Source of type material recommended for DOE sponsored genome sequencing by the JGI: DSM 16826. High-quality 16S rRNA sequence S000456450 (RDP), AY822043 (Genbank). N4Lid 10.1601/nm.9575

Virgibacillus halodenitrificans^{VP} (Denariáz et al. 1989) Yoon et al. 2004. <== *Bacillus halodenitrificans* (basonym). Synonym links through N4Lid: 10.1601/ex.4918. Source of type material recommended for DOE sponsored genome sequencing by the JGI: ATCC 49067. High-quality 16S rRNA sequence S000441838 (RDP), AY543168 (Genbank). N4Lid 10.1601/nm.8904

† *Bacillus halodenitrificans*^{VP} Denariáz et al. 1989. ==> *Virgibacillus halodenitrificans* (new combination). Synonym links through N4Lid: 10.1601/ex.4918. Source of type material recommended for DOE sponsored genome sequencing by the JGI: ATCC 49067. High-quality 16S rRNA sequence S000441838 (RDP), AY543168 (Genbank). N4Lid DOI: 10.1601/nm.4918

Virgibacillus koreensis^{VP} Lee et al. 2006. Source of type material recommended for DOE sponsored genome sequencing by the JGI: JCM 12387. N4Lid 10.1601/nm.9831

Virgibacillus marismortui^{VP} (Arahal et al. 1999) Heyrman et al. 2003. <== *Bacillus marismortui* (basonym). Synonym links through N4Lid: 10.1601/ex.4941. Source of type material recommended for DOE sponsored genome sequencing by the JGI: ATCC 700626. High-quality 16S rRNA sequence S000130993 (RDP), AJ009793 (Genbank). N4Lid DOI: 10.1601/nm.5065

Salibacillus marismortui^{VP} (Arahal et al. 1999) Arahal et al. 2000. <== *Bacillus marismortui* (basonym). *Virgibacillus marismortui* (new combination). Synonym links through N4Lid: 10.1601/ex.4941. Source of type material recommended for DOE sponsored genome sequencing by the JGI: ATCC 700626. High-quality 16S rRNA sequence S000130993 (RDP), AJ009793 (Genbank). N4Lid DOI: 10.1601/nm.5058

† *Bacillus marismortui*^{VP} Arahal et al. 1999. ==> *Salibacillus marismortui* (new combination).
Synonym links through N4Lid: 10.1601/ex.4941. Source of type material recommended for DOE
sponsored genome sequencing by the JGI: ATCC 700626. High-quality 16S rRNA sequence
S000130993 (RDP), AJ009793 (Genbank). N4Lid DOI: 10.1601/nm.4941

Virgibacillus necropolis^{VP} Heyrman et al. 2003. Source of type material recommended for DOE
sponsored genome sequencing by the JGI: DSM 14866. High-quality 16S rRNA sequence
S000446603 (RDP), AJ315056 (Genbank). N4Lid DOI: 10.1601/nm.5066

Virgibacillus proomii^{VP} Heyndrickx et al. 1999. Source of type material recommended for DOE
sponsored genome sequencing by the JGI: DSM 13055. High-quality 16S rRNA sequence
S000128991 (RDP), AJ012667 (Genbank). N4Lid DOI: 10.1601/nm.5068

Virgibacillus salexigens^{VP} (Garabito et al. 1997) Heyrman et al. 2003. <== *Bacillus salexigens*
(basonym). Synonym links through N4Lid: 10.1601/ex.4975. Source of type material
recommended for DOE sponsored genome sequencing by the JGI: ATCC 700290. High-quality
16S rRNA sequence S000381465 (RDP), Y11603 (Genbank). N4Lid DOI: 10.1601/nm.5069

Salibacillus salexigens^{VP} (Garabito et al. 1997) Wainø et al. 1999. <== *Bacillus salexigens*
(basonym). *Virgibacillus salexigens* (new combination). Synonym links through N4Lid:
10.1601/ex.4975. Source of type material recommended for DOE sponsored genome sequencing
by the JGI: ATCC 700290. High-quality 16S rRNA sequence S000381465 (RDP), Y11603
(Genbank). N4Lid DOI: 10.1601/nm.5057

† *Bacillus salexigens*^{VP} Garabito et al. 1997. ==> *Salibacillus salexigens* (new combination).
Synonym links through N4Lid: 10.1601/ex.4975. Source of type material recommended for DOE
sponsored genome sequencing by the JGI: ATCC 700290. High-quality 16S rRNA sequence
S000381465 (RDP), Y11603 (Genbank). N4Lid DOI: 10.1601/nm.4975

Genus † *Salibacillus*^{VP} Wainø et al. 1999. ≈ *Virgibacillus* (earlier heterotypic synonym), links
through 10.1601/nm.5062. N4Lid DOI: 10.1601/nm.5056

Genus *Vulcanibacillus*^{VP} L'Haridon et al. 2006. N4Lid DOI: 10.1601/nm.10037

Vulcanibacillus modesticaldus^{VP} L'Haridon et al. 2006. Source of type material recommended for
DOE sponsored genome sequencing by the JGI: DSM 14931. High-quality 16S rRNA sequence
S000544828 (RDP), AM050346 (Genbank). N4Lid DOI: 10.1601/nm.10036

Family "*Alicyclobacillaceae*" N4Lid DOI: 10.1601/nm.5070

Genus *Alicyclobacillus*^{VP} Wisotzkey et al. 1992. N4Lid DOI: 10.1601/nm.5071

Alicyclobacillus acidocaldarius subsp. acidocaldarius^{VP} (Darland and Brock 1971) Wisotzkey et
al. 1992. <== *Bacillus acidocaldarius* (basonym). Synonym links through N4Lid:
10.1601/ex.4860. Source of type material recommended for DOE sponsored genome sequencing
by the JGI: ATCC 27009. High-quality 16S rRNA sequence S000383221 (RDP), AB042056
(Genbank). N4Lid DOI: 10.1601/nm.5072

† *Bacillus acidocaldarius*^{AL} Darland and Brock 1971. ==> *Alicyclobacillus acidocaldarius*
subsp. acidocaldarius (new combination). Synonym links through N4Lid: 10.1601/ex.4860.
Source of type material recommended for DOE sponsored genome sequencing by the JGI: ATCC
27009. High-quality 16S rRNA sequence S000383221 (RDP), AB042056 (Genbank). N4Lid DOI:
10.1601/nm.4860

Alicyclobacillus acidocaldarius subsp. rittmannii^{VP} Nicolaus et al. 2002. Source of type material
recommended for DOE sponsored genome sequencing by the JGI: DSM 11297. High-quality 16S
rRNA sequence S000148715 (RDP), AB089859 (Genbank). N4Lid DOI: 10.1601/nm.5073

Alicyclobacillus acidiphilus^{VP} Matsubara et al. 2002. Source of type material recommended for
DOE sponsored genome sequencing by the JGI: DSM 14558. High-quality 16S rRNA sequence
S000364540 (RDP), AB076660 (Genbank). N4Lid DOI: 10.1601/nm.5074

Alicyclobacillus acidoterrestris^{VP} (Deinhard et al. 1988) Wisotzkey et al. 1992. <== *Bacillus*
acidoterrestris (basonym). Synonym links through N4Lid: 10.1601/ex.4861. Source of type
material recommended for DOE sponsored genome sequencing by the JGI: ATCC 49025. N4Lid
DOI: 10.1601/nm.5075

† *Bacillus acidoterrestris*^{VP} Deinhard et al. 1988. ==> *Alicyclobacillus acidoterrestris* (new
combination). Synonym links through N4Lid: 10.1601/ex.4861. Source of type material
recommended for DOE sponsored genome sequencing by the JGI: ATCC 49025. N4Lid DOI:
10.1601/nm.4861

Alicyclobacillus cycloheptanicus^{VP} (Deinhard et al. 1988) Wisotzkey et al. 1992. <== *Bacillus cycloheptanicus* (basonym). Synonym links through N4Lid: 10.1601/ex.4895. Source of type material recommended for DOE sponsored genome sequencing by the JGI: ATCC 49028. High-quality 16S rRNA sequence S000383224 (RDP), AB042059 (Genbank). N4Lid DOI: 10.1601/nm.5076

† *Bacillus cycloheptanicus*^{VP} Deinhard et al. 1988. ==> *Alicyclobacillus cycloheptanicus* (new combination). Synonym links through N4Lid: 10.1601/ex.4895. Source of type material recommended for DOE sponsored genome sequencing by the JGI: ATCC 49028. High-quality 16S rRNA sequence S000383224 (RDP), AB042059 (Genbank). N4Lid DOI: 10.1601/nm.4895

"*Alicyclobacillus disulfidooxidans*" <==Synonym links through N4Lid: 10.1601/ex.5089. Source of type material recommended for DOE sponsored genome sequencing by the JGI: ATCC 51911. High-quality 16S rRNA sequence S000381077 (RDP), U34974 (Genbank). N4Lid DOI: 10.1601/nm.9273

† *Sulfobacillus disulfidooxidans*^{VP} Dufresne et al. 1996. ==> *Alicyclobacillus disulfidooxydans* (new combination). Synonym links through N4Lid: 10.1601/ex.5089. Source of type material recommended for DOE sponsored genome sequencing by the JGI: ATCC 51911. High-quality 16S rRNA sequence S000381077 (RDP), U34974 (Genbank). N4Lid DOI: 10.1601/nm.5089

Alicyclobacillus herbarius^{VP} Goto et al. 2002. Source of type material recommended for DOE sponsored genome sequencing by the JGI: DSM 13609. High-quality 16S rRNA sequence S000383220 (RDP), AB042055 (Genbank). N4Lid DOI: 10.1601/nm.5077

Alicyclobacillus hesperidum^{VP} Albuquerque et al. 2000. Source of type material recommended for DOE sponsored genome sequencing by the JGI: DSM 12489. High-quality 16S rRNA sequence S000004697 (RDP), AJ133633 (Genbank). N4Lid DOI: 10.1601/nm.5078

Alicyclobacillus pomorum^{VP} Goto et al. 2003. Source of type material recommended for DOE sponsored genome sequencing by the JGI: DSM 14955. High-quality 16S rRNA sequence S000148943 (RDP), AB089840 (Genbank). N4Lid DOI: 10.1601/nm.5079

Alicyclobacillus sendaiensis^{VP} Tsuruoka et al. 2003. Source of type material recommended for DOE sponsored genome sequencing by the JGI: ATCC BAA-609. High-quality 16S rRNA sequence S000138065 (RDP), AB084128 (Genbank). N4Lid DOI: 10.1601/nm.5080

Alicyclobacillus tolerans^{VP} Karavaiko et al. 2005. Source of type material recommended for DOE sponsored genome sequencing by the JGI: DSM 16297. High-quality 16S rRNA sequence S000498587 (RDP), AF137502 (Genbank). N4Lid DOI: 10.1601/nm.9339

Alicyclobacillus vulcanalis^{VP} Simbahan et al. 2004. Source of type material recommended for DOE sponsored genome sequencing by the JGI: ATCC BAA-915. High-quality 16S rRNA sequence S000419478 (RDP), AY425985 (Genbank). N4Lid DOI: 10.1601/nm.8456

Genus *Pasteuria*^{AL} Metchnikoff 1888. N4Lid DOI: 10.1601/nm.5081

Pasteuria ramosa^{AL} Metchnikoff 1888. Name is conserved but type strain is rejected. Synonym links through N4Lid: 10.1601/ex.5082. Source of type material recommended for DOE sponsored genome sequencing by the JGI: No viable deposit available. High-quality 16S rRNA sequence S000436220 (RDP), M34126 (Genbank). N4Lid DOI: 10.1601/nm.5082

Pasteuria nishizawae^{VP} Sayre et al. 1992. Source of type material recommended for DOE sponsored genome sequencing by the JGI: No viable deposit available. High-quality 16S rRNA sequence S000735423 (RDP). GOLD ID: Gi00434. GCAT ID: 001351_GCAT. Entrez genome id: 441. Sequenced strain: North American is from a non-type strain. Genome sequencing is incomplete. Number of genomes of this species sequenced 1 (GOLD) 1 (NCBI). N4Lid DOI: 10.1601/nm.5083

Pasteuria penetrans^{VP} (ex Thorne 1940) Sayre and Starr 1986. Source of type material recommended for DOE sponsored genome sequencing by the JGI: No viable deposit available. GOLD ID: Gi00435. GCAT ID: 001352_GCAT. Genome sequence is from a non-type strain. Genome sequencing is incomplete. Number of genomes of this species sequenced 2 (GOLD). N4Lid DOI: 10.1601/nm.5084

Pasteuria thornei^{VP} Starr and Sayre 1988. Source of type material recommended for DOE sponsored genome sequencing by the JGI: No viable deposit available. High-quality 16S rRNA sequence S000381169 (RDP), U80197 (Genbank). N4Lid DOI: 10.1601/nm.5085

Genus *Sulfobacillus*^{VP} Golovacheva and Karavaiko 1991. N4Lid DOI: 10.1601/nm.5086

Sulfobacillus thermosulfidooxidans^{VP} Golovacheva and Karavaiko 1991. Source of type material recommended for DOE sponsored genome sequencing by the JGI: DSM 9293. High-quality 16S rRNA sequence S000006675 (RDP), X91080 (Genbank). N4Lid DOI: 10.1601/nm.5087

Sulfobacillus acidophilus^{VP} Norris et al. 1996. Source of type material recommended for DOE sponsored genome sequencing by the JGI: ATCC 700253. High-quality 16S rRNA sequence S000428081 (RDP), AF050169 (Genbank). N4Lid DOI: 10.1601/nm.5088

Sulfobacillus sibiricus^{VP} Melamud et al. 2006. Source of type material recommended for DOE sponsored genome sequencing by the JGI: DSM 17363. High-quality 16S rRNA sequence S000435074 (RDP), AY079150 (Genbank). N4Lid DOI: 10.1601/nm.9919

Sulfobacillus thermotolerans^{VP} Bogdanova et al. 2006. Source of type material recommended for DOE sponsored genome sequencing by the JGI: DSM 17362. High-quality 16S rRNA sequence S000585350 (RDP), DQ124681 (Genbank). N4Lid DOI: 10.1601/nm.10035

Family Caryophanaceae^{AL} Peshkoff 1939. N4Lid DOI: 10.1601/nm.5090

Genus Caryophanon^{AL} Peshkoff 1939. N4Lid DOI: 10.1601/nm.5091

Caryophanon latum^{AL} Peshkoff 1939. Source of type material recommended for DOE sponsored genome sequencing by the JGI: ATCC 33407. High-quality 16S rRNA sequence S000012583 (RDP), AJ491302 (Genbank). N4Lid DOI: 10.1601/nm.5092

Caryophanon tenue^{VP} (ex Peshkoff 1939) Trentini 1988. Source of type material recommended for DOE sponsored genome sequencing by the JGI: ATCC 33098. High-quality 16S rRNA sequence S000002588 (RDP), AJ491303 (Genbank). N4Lid DOI: 10.1601/nm.5093

Family "Listeriaceae" N4Lid DOI: 10.1601/nm.5094

Genus Listeria^{AL} Pirie 1940. N4Lid DOI: 10.1601/nm.5095

Listeria monocytogenes^{AL} (Murray et al. 1926) Pirie 1940. Source of type material recommended for DOE sponsored genome sequencing by the JGI: ATCC 15313. High-quality 16S rRNA sequence S000131236 (RDP), X56153 (Genbank). GOLD ID: Gc00069. GCAT ID: 000541_GCAT. Entrez genome id: 276. Sequenced strain: EGD-e is from a non-type strain. Genome sequencing is completed. Number of genomes of this species sequenced 26 (GOLD) 23 (NCBI). N4Lid DOI: 10.1601/nm.5096

Listeria grayi^{AL} Errebo Larsen and Seeliger 1966. ≈ *Listeria murrayi* (later heterotypic synonym), links through 10.1601/nm.5098. Source of type material recommended for DOE sponsored genome sequencing by the JGI: ATCC 19120. High-quality 16S rRNA sequence S000006245 (RDP), X98526 (Genbank). GOLD ID: Gi00803. GCAT ID: 001197_GCAT. Entrez genome id: 13440. Sequenced strain: CLIP12515. is from a non-type strain. Genome sequencing is incomplete. Number of genomes of this species sequenced 1 (GOLD) 1 (NCBI). N4Lid DOI: 10.1601/nm.5098

† *Listeria murrayi*^{AL} Welshimer and Meredith 1971. ≈ *Listeria grayi* (earlier heterotypic synonym), links through 10.1601/nm.5098. Source of type material recommended for DOE sponsored genome sequencing by the JGI: ATCC 25401. N4Lid DOI: 10.1601/nm.5102

Listeria innocua^{VP} (ex Seeliger and Schoofs 1979) Seeliger 1983. Source of type material recommended for DOE sponsored genome sequencing by the JGI: ATCC 33090. High-quality 16S rRNA sequence S000005872 (RDP), X98527 (Genbank). GOLD ID: Gc00068. GCAT ID: 000542_GCAT. Entrez genome id: 86. Sequenced strain: Clip11262, rhamnase-negative is from a non-type strain. Genome sequencing is completed. Number of genomes of this species sequenced 1 (GOLD) 1 (NCBI). N4Lid DOI: 10.1601/nm.5099

Listeria ivanovii subsp. ivanovii^{VP} Seeliger et al. 1984. Source of type material recommended for DOE sponsored genome sequencing by the JGI: ATCC 19119. High-quality 16S rRNA sequence S000323320 (RDP), AJ549930 (Genbank). GOLD ID: Gi00331. GCAT ID: 001171_GCAT. Entrez genome id: 13441. Sequenced strain: PAM55 is from a non-type strain. Genome sequencing is incomplete. Number of genomes of this species sequenced 1 (GOLD) 1 (NCBI). N4Lid DOI: 10.1601/nm.5100

Listeria ivanovii subsp. londoniensis^{VP} Boerlin et al. 1992. Source of type material recommended for DOE sponsored genome sequencing by the JGI: ATCC 49954. N4Lid DOI: 10.1601/nm.5101

Listeria seeligeri^{VP} Rocourt and Grimont 1983. Source of type material recommended for DOE sponsored genome sequencing by the JGI: ATCC 35967. High-quality 16S rRNA sequence S000128815 (RDP), X56148 (Genbank). GOLD ID: Gi00801. GCAT ID: 001174_GCAT. Entrez

genome id: 13442. Genome sequence is from a non-type strain. Genome sequencing is incomplete. Number of genomes of this species sequenced 1 (GOLD) 1 (NCBI). N4Lid DOI: 10.1601/nm.5103

Listeria welshimeri^{VP} Rocourt and Grimont 1983. Source of type material recommended for DOE sponsored genome sequencing by the JGI: ATCC 35897. High-quality 16S rRNA sequence S000013094 (RDP), X98532 (Genbank). GOLD ID: Gc00418. GCAT ID: 000192_GCAT. Entrez genome id: 13443. Sequenced strain: SLCC5334 is from a non-type strain. Genome sequencing is completed. Number of genomes of this species sequenced 1 (GOLD) 1 (NCBI). N4Lid DOI: 10.1601/nm.5104

Genus *Brochothrix*^{AL} Sneath and Jones 1976. N4Lid DOI: 10.1601/nm.5105

Brochothrix thermosphacta^{AL} (McLean and Sulzbacher 1953) Sneath and Jones 1976. Source of type material recommended for DOE sponsored genome sequencing by the JGI: ATCC 11509. High-quality 16S rRNA sequence S000436390 (RDP), M58798 (Genbank). N4Lid DOI: 10.1601/nm.5106

Brochothrix campestris^{VP} Talon et al. 1988. Source of type material recommended for DOE sponsored genome sequencing by the JGI: ATCC 43754. High-quality 16S rRNA sequence S000130031 (RDP), X56156 (Genbank). N4Lid DOI: 10.1601/nm.5107

Family "*Paenibacillaceae*" N4Lid DOI: 10.1601/nm.5108

Genus *Paenibacillus*^{VP} Ash et al. 1994. N4Lid DOI: 10.1601/nm.5109

Paenibacillus polymyxa^{VP} (Prazmowski 1880) Ash et al. 1994. <== *Bacillus polymyxa* (basonym). Synonym links through N4Lid: 10.1601/ex.4962. Source of type material recommended for DOE sponsored genome sequencing by the JGI: ATCC 842. High-quality 16S rRNA sequence S000131265 (RDP), X57308 (Genbank). GOLD ID: Gi00423. GCAT ID: 001345_GCAT. Entrez genome id: 16065. Sequenced strain: E681 is from a non-type strain. Genome sequencing is incomplete. Number of genomes of this species sequenced 1 (GOLD) 1 (NCBI). N4Lid DOI: 10.1601/nm.5110

† *Bacillus polymyxa*^{AL} (Prazmowski 1880) Macé 1889. ==> *Paenibacillus polymyxa* (new combination). Synonym links through N4Lid: 10.1601/ex.4962. Source of type material recommended for DOE sponsored genome sequencing by the JGI: ATCC 842. High-quality 16S rRNA sequence S000131265 (RDP), X57308 (Genbank). GOLD ID: Gi00423. GCAT ID: 001345_GCAT. Entrez genome id: 16065. Sequenced strain: E681 is from a non-type strain. Genome sequencing is incomplete. Number of genomes of this species sequenced 1 (GOLD) 1 (NCBI). N4Lid DOI: 10.1601/nm.4962

Paenibacillus agarexedens^{VP} (ex Wieringa 1941) Uetanabaro et al. 2003. Source of type material recommended for DOE sponsored genome sequencing by the JGI: DSM 1327. High-quality 16S rRNA sequence S000136533 (RDP), AJ345020 (Genbank). N4Lid DOI: 10.1601/nm.5111

Paenibacillus agaridevorans^{VP} Uetanabaro et al. 2003. Source of type material recommended for DOE sponsored genome sequencing by the JGI: DSM 1355. High-quality 16S rRNA sequence S000137875 (RDP), AJ345023 (Genbank). N4Lid DOI: 10.1601/nm.5112

Paenibacillus alginolyticus^{VP} (Nakamura 1987) Shida et al. 1997. <== *Bacillus alginolyticus* (basonym). Synonym links through N4Lid: 10.1601/ex.4866. Source of type material recommended for DOE sponsored genome sequencing by the JGI: ATCC 51185. High-quality 16S rRNA sequence S000435827 (RDP), D78465 (Genbank). N4Lid DOI: 10.1601/nm.5113

† *Bacillus alginolyticus*^{VP} Nakamura 1987. ==> *Paenibacillus alginolyticus* (new combination). Synonym links through N4Lid: 10.1601/ex.4866. Source of type material recommended for DOE sponsored genome sequencing by the JGI: ATCC 51185. High-quality 16S rRNA sequence S000435827 (RDP), D78465 (Genbank). N4Lid DOI: 10.1601/nm.4866

Paenibacillus alkaliterrae^{VP} Yoon et al. 2005. Source of type material recommended for DOE sponsored genome sequencing by the JGI: DSM 17040. High-quality 16S rRNA sequence S000515714 (RDP), AY960748 (Genbank). N4Lid 10.1601/nm.9700

Paenibacillus alvei^{VP} (Cheshire and Cheyne 1885) Ash et al. 1994. <== *Bacillus alvei* (basonym). Synonym links through N4Lid: 10.1601/ex.4867. Source of type material recommended for DOE sponsored genome sequencing by the JGI: ATCC 6344. High-quality 16S rRNA sequence S000127339 (RDP), X57304 (Genbank). N4Lid DOI: 10.1601/nm.5114

† *Bacillus alvei*^{AL} Cheshire and Cheyne 1885. ==> *Paenibacillus alvei* (new combination). Synonym links through N4Lid: 10.1601/ex.4867. Source of type material recommended for DOE

sponsored genome sequencing by the JGI: ATCC 6344. High-quality 16S rRNA sequence S000127339 (RDP), X57304 (Genbank). N4Lid DOI: 10.1601/nm.4867

Paenibacillus amylolyticus^{VP} (Nakamura 1984) Ash et al. 1994. <== *Bacillus amylolyticus* (basonym). Synonym links through N4Lid: 10.1601/ex.4869. Source of type material recommended for DOE sponsored genome sequencing by the JGI: ATCC 9995. High-quality 16S rRNA sequence S000414082 (RDP), D85396 (Genbank). N4Lid DOI: 10.1601/nm.5115

† *Bacillus amylolyticus*^{VP} (ex Choukévitch 1911) Nakamura 1984. ==> *Paenibacillus amylolyticus* (new combination). Synonym links through N4Lid: 10.1601/ex.4869. Source of type material recommended for DOE sponsored genome sequencing by the JGI: ATCC 9995. High-quality 16S rRNA sequence S000414082 (RDP), D85396 (Genbank). N4Lid DOI: 10.1601/nm.4869

Paenibacillus anaericanus^{VP} Horn et al. 2005. Source of type material recommended for DOE sponsored genome sequencing by the JGI: ATCC BAA-844. High-quality 16S rRNA sequence S000539389 (RDP), AJ318909 (Genbank). N4Lid 10.1601/nm.9450

Paenibacillus antarcticus^{VP} Montes et al. 2004. Source of type material recommended for DOE sponsored genome sequencing by the JGI: LMG 22078. High-quality 16S rRNA sequence S000416931 (RDP), AJ605292 (Genbank). N4Lid 10.1601/nm.8755

Paenibacillus apiarius^{VP} (ex Katznelson 1955) Nakamura 1996. Source of type material recommended for DOE sponsored genome sequencing by the JGI: NRRL B-23460. High-quality 16S rRNA sequence S000437739 (RDP), U49247 (Genbank). N4Lid DOI: 10.1601/nm.5116

Paenibacillus assamensis^{VP} Saha et al. 2005. Source of type material recommended for DOE sponsored genome sequencing by the JGI: JCM 13186. High-quality 16S rRNA sequence S000481931 (RDP), AY884046 (Genbank). N4Lid 10.1601/nm.9715

Paenibacillus azoreducens^{VP} Meehan et al. 2001. Source of type material recommended for DOE sponsored genome sequencing by the JGI: DSM 13822. High-quality 16S rRNA sequence S000131211 (RDP), AJ272249 (Genbank). N4Lid DOI: 10.1601/nm.5117

Paenibacillus azotofixans^{VP} (Seldin et al. 1984) Ash et al. 1994. <== *Bacillus azotofixans* (basonym). Synonym links through N4Lid: 10.1601/ex.4875. Source of type material recommended for DOE sponsored genome sequencing by the JGI: ATCC 35681. High-quality 16S rRNA sequence S000127882 (RDP), X60608 (Genbank). N4Lid DOI: 10.1601/nm.5118

† *Bacillus azotofixans*^{VP} Seldin et al. 1984. ==> *Paenibacillus azotofixans* (new combination). Synonym links through N4Lid: 10.1601/ex.4875. Source of type material recommended for DOE sponsored genome sequencing by the JGI: ATCC 35681. High-quality 16S rRNA sequence S000127882 (RDP), X60608 (Genbank). N4Lid DOI: 10.1601/nm.4875

Paenibacillus barcinonensis^{VP} Sánchez et al. 2005. Source of type material recommended for DOE sponsored genome sequencing by the JGI: DSM 15478. High-quality 16S rRNA sequence S000539556 (RDP), AJ716019 (Genbank). N4Lid 10.1601/nm.9338

Paenibacillus barengoltzii^{VP} Osman et al. 2006. Source of type material recommended for DOE sponsored genome sequencing by the JGI: ATCC BAA-1209. High-quality 16S rRNA sequence S000399474 (RDP), AY167814 (Genbank). N4Lid DOI: 10.1601/nm.10152

Paenibacillus borealis^{VP} Elo et al. 2001. Source of type material recommended for DOE sponsored genome sequencing by the JGI: DSM 13188. High-quality 16S rRNA sequence S000003607 (RDP), AJ011322 (Genbank). N4Lid DOI: 10.1601/nm.5119

Paenibacillus brasiliensis^{VP} von der Weid et al. 2002. Source of type material recommended for DOE sponsored genome sequencing by the JGI: ATCC BAA-413. High-quality 16S rRNA sequence S000498958 (RDP), AF273740 (Genbank). N4Lid DOI: 10.1601/nm.5120

Paenibacillus campinasensis^{VP} Yoon et al. 1998. Source of type material recommended for DOE sponsored genome sequencing by the JGI: JCM 11200. High-quality 16S rRNA sequence S000387175 (RDP), AF021924 (Genbank). N4Lid DOI: 10.1601/nm.5121

Paenibacillus chibensis^{VP} Shida et al. 1997. Source of type material recommended for DOE sponsored genome sequencing by the JGI: ATCC BAA-725. High-quality 16S rRNA sequence S000414081 (RDP), D85395 (Genbank). N4Lid DOI: 10.1601/nm.5122

Paenibacillus chinjuensis^{VP} Yoon et al. 2002. Source of type material recommended for DOE sponsored genome sequencing by the JGI: DSM 15045. High-quality 16S rRNA sequence S000388421 (RDP), AF164345 (Genbank). N4Lid DOI: 10.1601/nm.5123

- Paenibacillus chitinolyticus*^{VP} (Kuroshima et al. 1996) Lee et al. 2004. <== *Bacillus chitinolyticus* (basonym). Synonym links through N4Lid: 10.1601/ex.4886. Source of type material recommended for DOE sponsored genome sequencing by the JGI: NRRL B-23119. High-quality 16S rRNA sequence S000011821 (RDP), AB021183 (Genbank). N4Lid 10.1601/nm.8756
- † *Bacillus chitinolyticus*^{VP} Kuroshima et al. 1996. ==> *Paenibacillus chitinolyticus* (new combination). Synonym links through N4Lid: 10.1601/ex.4886. Source of type material recommended for DOE sponsored genome sequencing by the JGI: NRRL B-23119. High-quality 16S rRNA sequence S000011821 (RDP), AB021183 (Genbank). N4Lid DOI: 10.1601/nm.4886
- Paenibacillus chondroitinus*^{VP} (Nakamura 1987) Shida et al. 1997. <== *Bacillus chondroitinus* (basonym). Synonym links through N4Lid: 10.1601/ex.4887. Source of type material recommended for DOE sponsored genome sequencing by the JGI: ATCC 51184. High-quality 16S rRNA sequence S000435834 (RDP), D82064 (Genbank). N4Lid DOI: 10.1601/nm.5124
- † *Bacillus chondroitinus*^{VP} Nakamura 1987. ==> *Paenibacillus chondroitinus* (new combination). Synonym links through N4Lid: 10.1601/ex.4887. Source of type material recommended for DOE sponsored genome sequencing by the JGI: ATCC 51184. High-quality 16S rRNA sequence S000435834 (RDP), D82064 (Genbank). N4Lid DOI: 10.1601/nm.4887
- Paenibacillus cineris*^{VP} Logan et al. 2004. Source of type material recommended for DOE sponsored genome sequencing by the JGI: CIP 108109. High-quality 16S rRNA sequence S000366497 (RDP), AJ575658 (Genbank). N4Lid 10.1601/nm.8757
- Paenibacillus cookii*^{VP} Logan et al. 2004. Source of type material recommended for DOE sponsored genome sequencing by the JGI: CIP 108110. High-quality 16S rRNA sequence S000128829 (RDP), AJ250317 (Genbank). N4Lid 10.1601/nm.8758
- Paenibacillus curdlanolyticus*^{VP} (Kanzawa et al. 1995) Shida et al. 1997. <== *Bacillus curdlanolyticus* (basonym). Synonym links through N4Lid: 10.1601/ex.4894. Source of type material recommended for DOE sponsored genome sequencing by the JGI: ATCC 51898. High-quality 16S rRNA sequence S000435828 (RDP), D78466 (Genbank). N4Lid DOI: 10.1601/nm.5125
- † *Bacillus curdlanolyticus*^{VP} Kanzawa et al. 1995. ==> *Paenibacillus curdlanolyticus* (new combination). Synonym links through N4Lid: 10.1601/ex.4894. Source of type material recommended for DOE sponsored genome sequencing by the JGI: ATCC 51898. High-quality 16S rRNA sequence S000435828 (RDP), D78466 (Genbank). N4Lid DOI: 10.1601/nm.4894
- Paenibacillus daejeonensis*^{VP} Lee et al. 2002. Source of type material recommended for DOE sponsored genome sequencing by the JGI: JCM 11236. High-quality 16S rRNA sequence S000392904 (RDP), AF391124 (Genbank). N4Lid DOI: 10.1601/nm.5126
- Paenibacillus dendritiformis*^{VP} Tcherpakov et al. 1999. Source of type material recommended for DOE sponsored genome sequencing by the JGI: CIP 105967. N4Lid DOI: 10.1601/nm.5127
- Paenibacillus durus*^{VP} corrig. (Smith and Cato 1974) Collins et al. 1994. <== *Clostridium durum* (basonym). Synonym links through N4Lid: 10.1601/ex.3927. Source of type material recommended for DOE sponsored genome sequencing by the JGI: ATCC 27763. High-quality 16S rRNA sequence S000008361 (RDP), AJ251192 (Genbank). N4Lid DOI: 10.1601/nm.5128
- † *Clostridium durum*^{AL} Smith and Cato 1974. ==> *Paenibacillus durus* (new combination). Synonym links through N4Lid: 10.1601/ex.3927. Source of type material recommended for DOE sponsored genome sequencing by the JGI: ATCC 27763. High-quality 16S rRNA sequence S000008361 (RDP), AJ251192 (Genbank). N4Lid DOI: 10.1601/nm.3927
- Paenibacillus ehimensis*^{VP} (Kuroshima et al. 1996) Lee et al. 2004. <== *Bacillus ehimensis* (basonym). Synonym links through N4Lid: 10.1601/ex.4900. Source of type material recommended for DOE sponsored genome sequencing by the JGI: NRRL B-23118. High-quality 16S rRNA sequence S000396188 (RDP), AY116665 (Genbank). N4Lid 10.1601/nm.8759
- † *Bacillus ehimensis*^{VP} Kuroshima et al. 1996. ==> *Paenibacillus ehimensis* (new combination). Synonym links through N4Lid: 10.1601/ex.4900. Source of type material recommended for DOE sponsored genome sequencing by the JGI: NRRL B-23118. High-quality 16S rRNA sequence S000396188 (RDP), AY116665 (Genbank). N4Lid DOI: 10.1601/nm.4900
- Paenibacillus elgii*^{VP} Kim et al. 2004. Source of type material recommended for DOE sponsored genome sequencing by the JGI: NBRC 100335. High-quality 16S rRNA sequence S000460455 (RDP), AY090110 (Genbank). N4Lid 10.1601/nm.8760

Paenibacillus favisporus^{VP} Velázquez et al. 2004. Source of type material recommended for DOE sponsored genome sequencing by the JGI: LMG 20987. High-quality 16S rRNA sequence S000401711 (RDP), AY208751 (Genbank). N4Lid DOI: 10.1601/nm.5129

Paenibacillus gansuensis^{VP} Lim et al. 2006. Source of type material recommended for DOE sponsored genome sequencing by the JGI: DSM 16968. High-quality 16S rRNA sequence S000467801 (RDP), AY839866 (Genbank). N4Lid DOI: 10.1601/nm.10279

Paenibacillus glucanolyticus^{VP} (Alexander and Priest 1989) Shida et al. 1997. <== *Bacillus glucanolyticus* (basonym). Synonym links through N4Lid: 10.1601/ex.4914. Source of type material recommended for DOE sponsored genome sequencing by the JGI: ATCC 49278. High-quality 16S rRNA sequence S000435829 (RDP), D78470 (Genbank). N4Lid DOI: 10.1601/nm.5130

† *Bacillus glucanolyticus*^{VP} Alexander and Priest 1989. ==> *Paenibacillus glucanolyticus* (new combination). Synonym links through N4Lid: 10.1601/ex.4914. Source of type material recommended for DOE sponsored genome sequencing by the JGI: ATCC 49278. High-quality 16S rRNA sequence S000435829 (RDP), D78470 (Genbank). N4Lid DOI: 10.1601/nm.4914

Paenibacillus glycanilyticus^{VP} Dasman et al. 2002. Source of type material recommended for DOE sponsored genome sequencing by the JGI: NRRL B-23455. High-quality 16S rRNA sequence S000383256 (RDP), AB042938 (Genbank). N4Lid DOI: 10.1601/nm.5131

Paenibacillus gordonae^{VP} (Pichinoty et al. 1987) Ash et al. 1994. <== *Bacillus gordonae* (basonym). Synonym links through N4Lid: 10.1601/ex.4915. Source of type material recommended for DOE sponsored genome sequencing by the JGI: ATCC 29948. High-quality 16S rRNA sequence S000130253 (RDP), X60617 (Genbank). N4Lid DOI: 10.1601/nm.5132

† *Bacillus gordonae*^{VP} Pichinoty et al. 1987. ==> *Paenibacillus gordonae* (new combination). Synonym links through N4Lid: 10.1601/ex.4915. Source of type material recommended for DOE sponsored genome sequencing by the JGI: ATCC 29948. High-quality 16S rRNA sequence S000130253 (RDP), X60617 (Genbank). N4Lid DOI: 10.1601/nm.4915

Paenibacillus graminis^{VP} Berge et al. 2002. Source of type material recommended for DOE sponsored genome sequencing by the JGI: ATCC BAA-95. High-quality 16S rRNA sequence S000017279 (RDP), AJ223987 (Genbank). N4Lid DOI: 10.1601/nm.5133

Paenibacillus granivorans^{VP} Van der Maarel et al. 2001. Source of type material recommended for DOE sponsored genome sequencing by the JGI: DSM 11733. High-quality 16S rRNA sequence S000389809 (RDP), AF237682 (Genbank). N4Lid DOI: 10.1601/nm.5134

Paenibacillus hodogayensis^{VP} Takeda et al. 2005. Source of type material recommended for DOE sponsored genome sequencing by the JGI: JCM 12520. High-quality 16S rRNA sequence S000496374 (RDP), AB179866 (Genbank). N4Lid DOI: 10.1601/nm.9319

Paenibacillus illinoisensis^{VP} Shida et al. 1997. Source of type material recommended for DOE sponsored genome sequencing by the JGI: NRRL NRS-1356. High-quality 16S rRNA sequence S000435846 (RDP), D85397 (Genbank). N4Lid DOI: 10.1601/nm.5135

Paenibacillus jamilae^{VP} Aguilera et al. 2001. Source of type material recommended for DOE sponsored genome sequencing by the JGI: DSM 13815. High-quality 16S rRNA sequence S000126928 (RDP), AJ271157 (Genbank). N4Lid DOI: 10.1601/nm.5136

Paenibacillus kobensis^{VP} (Kanzawa et al. 1995) Shida et al. 1997. <== *Bacillus kobensis* (basonym). Synonym links through N4Lid: 10.1601/ex.4927. Source of type material recommended for DOE sponsored genome sequencing by the JGI: ATCC 51900. High-quality 16S rRNA sequence S000435830 (RDP), D78471 (Genbank). N4Lid DOI: 10.1601/nm.5137

† *Bacillus kobensis*^{VP} Kanzawa et al. 1995. ==> *Paenibacillus kobensis* (new combination). Synonym links through N4Lid: 10.1601/ex.4927. Source of type material recommended for DOE sponsored genome sequencing by the JGI: ATCC 51900. High-quality 16S rRNA sequence S000435830 (RDP), D78471 (Genbank). N4Lid DOI: 10.1601/nm.4927

Paenibacillus koleovorans^{VP} Takeda et al. 2002. Source of type material recommended for DOE sponsored genome sequencing by the JGI: IAM 14926. High-quality 16S rRNA sequence S000089478 (RDP), AB041720 (Genbank). N4Lid DOI: 10.1601/nm.5138

Paenibacillus koreensis^{VP} Chung et al. 2000. Source of type material recommended for DOE sponsored genome sequencing by the JGI: KCCM 40903. High-quality 16S rRNA sequence S000387384 (RDP), AF130254 (Genbank). N4Lid DOI: 10.1601/nm.5139

Paenibacillus kribbensis^{VP} Yoon et al. 2003. Source of type material recommended for DOE sponsored genome sequencing by the JGI: JCM 11465. High-quality 16S rRNA sequence S000392903 (RDP), AF391123 (Genbank). N4Lid DOI: 10.1601/nm.5140

Paenibacillus lactis^{VP} Scheldeman et al. 2004. Source of type material recommended for DOE sponsored genome sequencing by the JGI: DSM 15596. High-quality 16S rRNA sequence S000357057 (RDP), AY257868 (Genbank). N4Lid 10.1601/nm.8761

Paenibacillus larvae subsp. larvae^{VP} (White 1906) Ash et al. 1994. <== *Bacillus larvae* (basonym). Synonym links through N4Lid: 10.1601/ex.4930. Source of type material recommended for DOE sponsored genome sequencing by the JGI: ATCC 49843. High-quality 16S rRNA sequence S000128475 (RDP), X60619 (Genbank). GOLD ID: Gi00422. GCAT ID: 001344_GCAT. Entrez genome id: 13476. Sequenced strain: BRL-230010 is from a non-type strain. Genome sequencing is incomplete. Number of genomes of this species sequenced 1 (GOLD) 1 (NCBI). N4Lid DOI: 10.1601/nm.5141

† *Bacillus larvae*^{AL} White 1906. ==> *Paenibacillus larvae subsp. larvae* (new combination). Synonym links through N4Lid: 10.1601/ex.4930. Source of type material recommended for DOE sponsored genome sequencing by the JGI: ATCC 9545. High-quality 16S rRNA sequence S000128475 (RDP), X60619 (Genbank). GOLD ID: Gi00422. GCAT ID: 001344_GCAT. Entrez genome id: 13476. Sequenced strain: BRL-230010 is from a non-type strain. Genome sequencing is incomplete. Number of genomes of this species sequenced 1 (GOLD) 1 (NCBI). N4Lid DOI: 10.1601/nm.4930

Paenibacillus larvae subsp. pulvifaciens^{VP} (Nakamura 1984) Heyndrickx et al. 1996. <== *Bacillus pulvifaciens* (basonym). Synonym links through N4Lid: 10.1601/ex.4971. Source of type material recommended for DOE sponsored genome sequencing by the JGI: NRRL B-3685. High-quality 16S rRNA sequence S000434627 (RDP), AY030080 (Genbank). N4Lid DOI: 10.1601/nm.5142

† *Bacillus pulvifaciens*^{VP} (ex Katznelson 1950) Nakamura 1984. ==> *Paenibacillus pulvifaciens* (new combination). Synonym links through N4Lid: 10.1601/ex.4971. Source of type material recommended for DOE sponsored genome sequencing by the JGI: ATCC 9545. High-quality 16S rRNA sequence S000434627 (RDP), AY030080 (Genbank). N4Lid DOI: 10.1601/nm.4971

Paenibacillus pulvifaciens^{VP} (Nakamura 1984) Ash et al. 1994. <== *Bacillus pulvifaciens* (basonym). *Paenibacillus larvae subsp. pulvifaciens* (new combination). Synonym links through N4Lid: 10.1601/ex.4971. Source of type material recommended for DOE sponsored genome sequencing by the JGI: ATCC 49843. High-quality 16S rRNA sequence S000434627 (RDP), AY030080 (Genbank). N4Lid DOI: 10.1601/nm.5153

Paenibacillus lautus^{VP} (Nakamura 1984) Heyndrickx et al. 1996. <== *Bacillus lautus* (basonym). Synonym links through N4Lid: 10.1601/ex.4932. Source of type material recommended for DOE sponsored genome sequencing by the JGI: ATCC 43898. High-quality 16S rRNA sequence S000435831 (RDP), D78473 (Genbank). N4Lid DOI: 10.1601/nm.5143

† *Bacillus lautus*^{VP} (ex Batchelor 1919) Nakamura 1984. ==> *Paenibacillus lautus* (new combination). Synonym links through N4Lid: 10.1601/ex.4932. Source of type material recommended for DOE sponsored genome sequencing by the JGI: ATCC 43898. High-quality 16S rRNA sequence S000435831 (RDP), D78473 (Genbank). N4Lid DOI: 10.1601/nm.4932

Paenibacillus lentimorbus^{VP} (Dutky 1940) Pettersson et al. 1999. <== *Bacillus lentimorbus* (basonym). Synonym links through N4Lid: 10.1601/ex.4933. Source of type material recommended for DOE sponsored genome sequencing by the JGI: ATCC 14707. High-quality 16S rRNA sequence S000428424 (RDP), AF071861 (Genbank). N4Lid DOI: 10.1601/nm.5144

† *Bacillus lentimorbus*^{AL} Dutky 1940. ==> *Paenibacillus lentimorbus* (new combination). Synonym links through N4Lid: 10.1601/ex.4933. Source of type material recommended for DOE sponsored genome sequencing by the JGI: ATCC 14707. High-quality 16S rRNA sequence S000428424 (RDP), AF071861 (Genbank). N4Lid DOI: 10.1601/nm.4933

Paenibacillus macerans^{VP} (Schardinger 1905) Ash et al. 1994. <== *Bacillus macerans* (basonym). Synonym links through N4Lid: 10.1601/ex.4937. Source of type material recommended for DOE sponsored genome sequencing by the JGI: ATCC 8244. High-quality 16S rRNA sequence S000128278 (RDP), X57306 (Genbank). N4Lid DOI: 10.1601/nm.5145

† *Bacillus macerans*^{AL} Schardinger 1905. ==> *Paenibacillus macerans* (new combination). Synonym links through N4Lid: 10.1601/ex.4937. Source of type material recommended for DOE

sponsored genome sequencing by the JGI: ATCC 8244. High-quality 16S rRNA sequence S000128278 (RDP), X57306 (Genbank). N4Lid DOI: 10.1601/nm.4937

Paenibacillus macquariensis^{VP} (Marshall and Ohye 1966) Ash et al. 1994. <== *Bacillus macquariensis* (basonym). Synonym links through N4Lid: 10.1601/ex.4938. Source of type material recommended for DOE sponsored genome sequencing by the JGI: ATCC 23464. High-quality 16S rRNA sequence S000130359 (RDP), X57305 (Genbank). N4Lid DOI: 10.1601/nm.5146

† *Bacillus macquariensis*^{AL} Marshall and Ohye 1966. ==> *Paenibacillus macquariensis* (new combination). Synonym links through N4Lid: 10.1601/ex.4938. Source of type material recommended for DOE sponsored genome sequencing by the JGI: ATCC 23464. High-quality 16S rRNA sequence S000130359 (RDP), X57305 (Genbank). N4Lid DOI: 10.1601/nm.4938

Paenibacillus massiliensis^{VP} Roux and Raoult 2004. Source of type material recommended for DOE sponsored genome sequencing by the JGI: CCUG 48215. High-quality 16S rRNA sequence S000368305 (RDP), AY323608 (Genbank). N4Lid 10.1601/nm.8762

Paenibacillus mendelii^{VP} Smerda et al. 2005. Source of type material recommended for DOE sponsored genome sequencing by the JGI: LMG 23002. High-quality 16S rRNA sequence S000483843 (RDP), AF537343 (Genbank). N4Lid 10.1601/nm.9701

Paenibacillus motobuensis^{VP} Iida et al. 2005. Source of type material recommended for DOE sponsored genome sequencing by the JGI: CCUG 50090. High-quality 16S rRNA sequence S000426024 (RDP), AY741810 (Genbank). N4Lid 10.1601/nm.9574

Paenibacillus naphthalenovorans^{VP} Daane et al. 2002. Source of type material recommended for DOE sponsored genome sequencing by the JGI: ATCC BAA-206. High-quality 16S rRNA sequence S000392108 (RDP), AF353681 (Genbank). N4Lid DOI: 10.1601/nm.5147

Paenibacillus nematophilus^{VP} Enright et al. 2003. Source of type material recommended for DOE sponsored genome sequencing by the JGI: DSM 13559. High-quality 16S rRNA sequence S000125872 (RDP), AF480935 (Genbank). N4Lid DOI: 10.1601/nm.5148

Paenibacillus odorifer^{VP} Berge et al. 2002. Source of type material recommended for DOE sponsored genome sequencing by the JGI: ATCC BAA-93. High-quality 16S rRNA sequence S000016744 (RDP), AJ223990 (Genbank). N4Lid DOI: 10.1601/nm.5149

Paenibacillus pabuli^{VP} (Nakamura 1984) Ash et al. 1994. <== *Bacillus pabuli* (basonym). Synonym links through N4Lid: 10.1601/ex.4956. Source of type material recommended for DOE sponsored genome sequencing by the JGI: ATCC 43899. High-quality 16S rRNA sequence S000127874 (RDP), X60630 (Genbank). N4Lid DOI: 10.1601/nm.5150

† *Bacillus pabuli*^{VP} (ex Schiebllich 1923) Nakamura 1984. ==> *Paenibacillus pabuli* (new combination). Synonym links through N4Lid: 10.1601/ex.4956. Source of type material recommended for DOE sponsored genome sequencing by the JGI: ATCC 43899. High-quality 16S rRNA sequence S000127874 (RDP), X60630 (Genbank). N4Lid DOI: 10.1601/nm.4956

Paenibacillus pasadenensis^{VP} Osman et al. 2006. Source of type material recommended for DOE sponsored genome sequencing by the JGI: ATCC BAA-1211. High-quality 16S rRNA sequence S000438950 (RDP), AY167820 (Genbank). N4Lid DOI: 10.1601/nm.10151

Paenibacillus peoriae^{VP} (Montefusco et al. 1993) Heyndrickx et al. 1996. <== *Bacillus peoriae* (basonym). Synonym links through N4Lid: 10.1601/ex.4961. Source of type material recommended for DOE sponsored genome sequencing by the JGI: ATCC 51925. High-quality 16S rRNA sequence S000435833 (RDP), D78476 (Genbank). N4Lid DOI: 10.1601/nm.5151

† *Bacillus peoriae*^{VP} Montefusco et al. 1993. ==> *Paenibacillus peoriae* (new combination). Synonym links through N4Lid: 10.1601/ex.4961. Source of type material recommended for DOE sponsored genome sequencing by the JGI: ATCC 51925. High-quality 16S rRNA sequence S000435833 (RDP), D78476 (Genbank). N4Lid DOI: 10.1601/nm.4961

Paenibacillus phyllosphaerae^{VP} Rivas et al. 2005. Source of type material recommended for DOE sponsored genome sequencing by the JGI: LMG 22192. High-quality 16S rRNA sequence S000504520 (RDP), AY598818 (Genbank). N4Lid 10.1601/nm.9320

Paenibacillus popilliae^{VP} (Dutky 1940) Pettersson et al. 1999. <== *Bacillus popilliae* (basonym). Synonym links through N4Lid: 10.1601/ex.4963. Source of type material recommended for DOE sponsored genome sequencing by the JGI: ATCC 14706. High-quality 16S rRNA sequence S000428422 (RDP), AF071859 (Genbank). N4Lid DOI: 10.1601/nm.5152

- † *Bacillus popilliae*^{AL} Dutky 1940. ==> *Paenibacillus popilliae* (new combination). Synonym links through N4Lid: 10.1601/ex.4963. Source of type material recommended for DOE sponsored genome sequencing by the JGI: ATCC 14706. High-quality 16S rRNA sequence S000428422 (RDP), AF071859 (Genbank). N4Lid DOI: 10.1601/nm.4963
- Paenibacillus rhizosphaerae*^{VP} Rivas et al. 2005. Source of type material recommended for DOE sponsored genome sequencing by the JGI: LMG 21955. High-quality 16S rRNA sequence S000549738 (RDP), AY751754 (Genbank). N4Lid 10.1601/nm.9418
- Paenibacillus sanguinis*^{VP} Roux and Raoult 2004. Source of type material recommended for DOE sponsored genome sequencing by the JGI: CCUG 48214. High-quality 16S rRNA sequence S000368306 (RDP), AY323609 (Genbank). N4Lid 10.1601/nm.8763
- Paenibacillus stellifer*^{VP} Suominen et al. 2003. Source of type material recommended for DOE sponsored genome sequencing by the JGI: DSM 14472. High-quality 16S rRNA sequence S000146443 (RDP), AJ316013 (Genbank). N4Lid DOI: 10.1601/nm.5154
- Paenibacillus terrae*^{VP} Yoon et al. 2003. Source of type material recommended for DOE sponsored genome sequencing by the JGI: JCM 11466. N4Lid DOI: 10.1601/nm.5155
- Paenibacillus thiaminolyticus*^{VP} (Nakamura 1990) Shida et al. 1997. <== *Bacillus thiaminolyticus* (basonym). Synonym links through N4Lid: 10.1601/ex.4999. Source of type material recommended for DOE sponsored genome sequencing by the JGI: NRRL B-4156. High-quality 16S rRNA sequence S000435832 (RDP), D78475 (Genbank). N4Lid DOI: 10.1601/nm.5156
- † *Bacillus thiaminolyticus*^{VP} (ex Kuno 1951) Nakamura 1990. ==> *Paenibacillus thiaminolyticus* (new combination). Synonym links through N4Lid: 10.1601/ex.4999. Source of type material recommended for DOE sponsored genome sequencing by the JGI: NRRL B-4156. High-quality 16S rRNA sequence S000435832 (RDP), D78475 (Genbank). N4Lid DOI: 10.1601/nm.4999
- Paenibacillus timonensis*^{VP} Roux and Raoult 2004. Source of type material recommended for DOE sponsored genome sequencing by the JGI: CCUG 48216. High-quality 16S rRNA sequence S000368307 (RDP), AY323610 (Genbank). N4Lid 10.1601/nm.8764
- Paenibacillus turicensis*^{VP} Bosshard et al. 2002. Source of type material recommended for DOE sponsored genome sequencing by the JGI: DSM 14349. High-quality 16S rRNA sequence S000483697 (RDP), AF378694 (Genbank). N4Lid DOI: 10.1601/nm.5157
- Paenibacillus validus*^{VP} (Nakamura 1984) Ash et al. 1994. <== *Bacillus validus* (basonym). Synonym links through N4Lid: 10.1601/ex.5002. Source of type material recommended for DOE sponsored genome sequencing by the JGI: ATCC 43897. High-quality 16S rRNA sequence S000130253 (RDP), X60617 (Genbank). N4Lid DOI: 10.1601/nm.5158
- † *Bacillus validus*^{VP} (ex Bredemann and Heigener 1935) Nakamura 1984. ==> *Paenibacillus validus* (new combination). Synonym links through N4Lid: 10.1601/ex.5002. Source of type material recommended for DOE sponsored genome sequencing by the JGI: ATCC 43897. High-quality 16S rRNA sequence S000130253 (RDP), X60617 (Genbank). N4Lid DOI: 10.1601/nm.5002
- Paenibacillus wynnii*^{VP} Rodríguez-Díaz et al. 2005. Source of type material recommended for DOE sponsored genome sequencing by the JGI: CIP 108306. High-quality 16S rRNA sequence S000447386 (RDP), AJ633647 (Genbank). N4Lid 10.1601/nm.9598
- Paenibacillus xylanilyticus*^{VP} Rivas et al. 2005. Source of type material recommended for DOE sponsored genome sequencing by the JGI: LMG 21957. High-quality 16S rRNA sequence S000473813 (RDP), AY427832 (Genbank). N4Lid 10.1601/nm.8765
- Genus *Ammoniphilus***^{VP} Zaitsev et al. 1998. N4Lid DOI: 10.1601/nm.5159
- Ammoniphilus oxalaticus*^{VP} Zaitsev et al. 1998. Source of type material recommended for DOE sponsored genome sequencing by the JGI: ATCC 700649. High-quality 16S rRNA sequence S000000782 (RDP), Y14578 (Genbank). N4Lid DOI: 10.1601/nm.5160
- Ammoniphilus oxalivorans*^{VP} Zaitsev et al. 1998. Source of type material recommended for DOE sponsored genome sequencing by the JGI: ATCC 700648. High-quality 16S rRNA sequence S000013381 (RDP), Y14580 (Genbank). N4Lid DOI: 10.1601/nm.5161
- Genus *Aneurinibacillus***^{VP} Shida et al. 1996. N4Lid DOI: 10.1601/nm.5162

Aneurinibacillus aneurinilyticus^{VP} corrig. (Shida et al. 1994) Shida et al. 1996. <== *Bacillus aneurinilyticus* (basonym). Synonym links through N4Lid: 10.1601/ex.4870. Source of type material recommended for DOE sponsored genome sequencing by the JGI: ATCC12856. High-quality 16S rRNA sequence S000413929 (RDP), D78455 (Genbank). N4Lid DOI: 10.1601/nm.5163

† *Bacillus aneurinilyticus*^{VP} corrig. (ex Kimura and Aoyama 1952) Shida et al. 1994. ==> *Aneurinibacillus aneurinilyticus* (new combination). Synonym links through N4Lid: 10.1601/ex.4870. Source of type material recommended for DOE sponsored genome sequencing by the JGI: ATCC 12856. High-quality 16S rRNA sequence S000413929 (RDP), D78455 (Genbank). N4Lid DOI: 10.1601/nm.4870

Aneurinibacillus danicus^{VP} Goto et al. 2004. Source of type material recommended for DOE sponsored genome sequencing by the JGI: IAM 15048. High-quality 16S rRNA sequence S000278163 (RDP), AB112725 (Genbank). N4Lid DOI: 10.1601/nm.5164

Aneurinibacillus migulanus^{VP} (Takagi et al. 1993) Shida et al. 1996. <== *Bacillus migulanus* (basonym). Synonym links through N4Lid: 10.1601/ex.4944. Source of type material recommended for DOE sponsored genome sequencing by the JGI: ATCC 9999. High-quality 16S rRNA sequence S000413936 (RDP), D78462 (Genbank). N4Lid DOI: 10.1601/nm.5165

† *Bacillus migulanus*^{VP} Takagi et al. 1993. ==> *Aneurinibacillus migulanus* (new combination). Synonym links through N4Lid: 10.1601/ex.4944. Source of type material recommended for DOE sponsored genome sequencing by the JGI: ATCC 9999. High-quality 16S rRNA sequence S000413936 (RDP), D78462 (Genbank). N4Lid DOI: 10.1601/nm.4944

Aneurinibacillus terranovensis^{VP} Allan et al. 2005. Source of type material recommended for DOE sponsored genome sequencing by the JGI: CIP 108308. High-quality 16S rRNA sequence S000539549 (RDP), AJ715385 (Genbank). N4Lid 10.1601/nm.9409

Aneurinibacillus thermoaerophilus^{VP} (Meier-Staufffer et al. 1996) Heyndrickx et al. 1997. <== *Bacillus thermoaerophilus* (basonym). Synonym links through N4Lid: 10.1601/ex.4990. Source of type material recommended for DOE sponsored genome sequencing by the JGI: ATCC 700303. High-quality 16S rRNA sequence S000000404 (RDP), X94196 (Genbank). N4Lid DOI: 10.1601/nm.5166

† *Bacillus thermoaerophilus*^{VP} Meier-Staufffer et al. 1996. ==> *Aneurinibacillus thermoaerophilus* (new combination). Synonym links through N4Lid: 10.1601/ex.4990. Source of type material recommended for DOE sponsored genome sequencing by the JGI: ATCC 700303. High-quality 16S rRNA sequence S000000404 (RDP), X94196 (Genbank). N4Lid DOI: 10.1601/nm.4990

Genus *Brevibacillus*^{VP} Shida et al. 1996. GOLD ID: Gi01398. GCAT ID: 000721_GCAT. Entrez genome id: 16295. Sequenced strain: PNG 276 is from a non-type strain. Genome sequencing is incomplete. Number of genomes of this species sequenced 1 (GOLD) 1 (NCBI). N4Lid DOI: 10.1601/nm.5167

Brevibacillus brevis^{VP} (Migula 1900) Shida et al. 1996. <== *Bacillus brevis* (basonym). Synonym links through N4Lid: 10.1601/ex.4882. Source of type material recommended for DOE sponsored genome sequencing by the JGI: ATCC 8246. High-quality 16S rRNA sequence S000436033 (RDP), M10111 (Genbank). GOLD ID: Gi00095. GCAT ID: 000720_GCAT. Entrez genome id: 12509. Sequenced strain: 47 is from a non-type strain. Genome sequencing is incomplete. Number of genomes of this species sequenced 1 (GOLD) 1 (NCBI). N4Lid DOI: 10.1601/nm.5168

† *Bacillus brevis*^{AL} Migula 1900. ==> *Brevibacillus brevis* (new combination). Synonym links through N4Lid: 10.1601/ex.4882. Source of type material recommended for DOE sponsored genome sequencing by the JGI: ATCC 8246. High-quality 16S rRNA sequence S000436033 (RDP), M10111 (Genbank). GOLD ID: Gi00095. GCAT ID: 000720_GCAT. Entrez genome id: 12509. Sequenced strain: 47 is from a non-type strain. Genome sequencing is incomplete. Number of genomes of this species sequenced 1 (GOLD) 1 (NCBI). N4Lid DOI: 10.1601/nm.4882

Brevibacillus agri^{VP} (Nakamura 1993) Shida et al. 1996. <== *Bacillus agri* (basonym). Synonym links through N4Lid: 10.1601/ex.4864. Source of type material recommended for DOE sponsored genome sequencing by the JGI: ATCC 51663. High-quality 16S rRNA sequence S000413928 (RDP), D78454 (Genbank). N4Lid DOI: 10.1601/nm.5169

- † *Bacillus galactophilus*^{VP} Takagi et al. 1993. ≈ *Brevibacillus agri* (earlier heterotypic synonym), links through 10.1601/nm.5169. Source of type material recommended for DOE sponsored genome sequencing by the JGI: ATCC 51360. N4Lid DOI: 10.1601/nm.4910
- † *Bacillus agri*^{VP} (ex Laubach and Rice 1916) Nakamura 1993. ==> *Brevibacillus agri* (new combination). Synonym links through N4Lid: 10.1601/ex.4864. Source of type material recommended for DOE sponsored genome sequencing by the JGI: ATCC 51663. High-quality 16S rRNA sequence S000413928 (RDP), D78454 (Genbank). N4Lid DOI: 10.1601/nm.4864
- Brevibacillus borstelensis*^{VP} (Shida et al. 1995) Shida et al. 1996. <== *Bacillus borstelensis* (basonym). Synonym links through N4Lid: 10.1601/ex.4881. Source of type material recommended for DOE sponsored genome sequencing by the JGI: ATCC 51668. High-quality 16S rRNA sequence S000413930 (RDP), D78456 (Genbank). N4Lid DOI: 10.1601/nm.5170
- † *Bacillus borstelensis*^{VP} (ex Porter) Shida et al. 1995. ==> *Brevibacillus borstelensis* (new combination). Synonym links through N4Lid: 10.1601/ex.4881. Source of type material recommended for DOE sponsored genome sequencing by the JGI: ATCC 51668. High-quality 16S rRNA sequence S000413930 (RDP), D78456 (Genbank). N4Lid DOI: 10.1601/nm.4881
- Brevibacillus centrosporus*^{VP} (Nakamura 1993) Shida et al. 1996. <== *Bacillus centrosporus* (basonym). Synonym links through N4Lid: 10.1601/ex.4884. Source of type material recommended for DOE sponsored genome sequencing by the JGI: ATCC 51661. High-quality 16S rRNA sequence S000413932 (RDP), D78458 (Genbank). N4Lid DOI: 10.1601/nm.5171
- † *Bacillus centrosporus*^{VP} (ex Ford 1916) Nakamura 1993. ==> *Brevibacillus centrosporus* (new combination). Synonym links through N4Lid: 10.1601/ex.4884. Source of type material recommended for DOE sponsored genome sequencing by the JGI: ATCC 51661. High-quality 16S rRNA sequence S000413932 (RDP), D78458 (Genbank). N4Lid DOI: 10.1601/nm.4884
- Brevibacillus choshinensis*^{VP} (Takagi et al. 1993) Shida et al. 1996. <== *Bacillus choshinensis* (basonym). Synonym links through N4Lid: 10.1601/ex.4888. Source of type material recommended for DOE sponsored genome sequencing by the JGI: ATCC 51359. High-quality 16S rRNA sequence S000413933 (RDP), D78459 (Genbank). N4Lid DOI: 10.1601/nm.5172
- † *Bacillus choshinensis*^{VP} Takagi et al. 1993. ==> *Brevibacillus choshinensis* (new combination). Synonym links through N4Lid: 10.1601/ex.4888. Source of type material recommended for DOE sponsored genome sequencing by the JGI: ATCC 51359. High-quality 16S rRNA sequence S000413933 (RDP), D78459 (Genbank). N4Lid DOI: 10.1601/nm.4888
- Brevibacillus formosus*^{VP} (Shida et al. 1995) Shida et al. 1996. <== *Bacillus formosus* (basonym). Synonym links through N4Lid: 10.1601/ex.4905. Source of type material recommended for DOE sponsored genome sequencing by the JGI: ATCC 51669. High-quality 16S rRNA sequence S000413934 (RDP), D78460 (Genbank). N4Lid DOI: 10.1601/nm.5173
- † *Bacillus formosus*^{VP} (ex Porter) Shida et al. 1995. ==> *Brevibacillus formosus* (new combination). Synonym links through N4Lid: 10.1601/ex.4905. Source of type material recommended for DOE sponsored genome sequencing by the JGI: ATCC 51669. High-quality 16S rRNA sequence S000413934 (RDP), D78460 (Genbank). N4Lid DOI: 10.1601/nm.4905
- Brevibacillus invocatus*^{VP} Logan et al. 2002. Source of type material recommended for DOE sponsored genome sequencing by the JGI: ATCC BAA-715. High-quality 16S rRNA sequence S000392674 (RDP), AF378231 (Genbank). N4Lid DOI: 10.1601/nm.5174
- Brevibacillus laterosporus*^{VP} (Laubach 1916) Shida et al. 1996. <== *Bacillus laterosporus* (basonym). Synonym links through N4Lid: 10.1601/ex.4931. Source of type material recommended for DOE sponsored genome sequencing by the JGI: ATCC 64. High-quality 16S rRNA sequence S000129181 (RDP), X57307 (Genbank). N4Lid DOI: 10.1601/nm.5175
- † *Bacillus laterosporus*^{AL} Laubach 1916. ==> *Brevibacillus laterosporus* (new combination). Synonym links through N4Lid: 10.1601/ex.4931. Source of type material recommended for DOE sponsored genome sequencing by the JGI: ATCC 4517. High-quality 16S rRNA sequence S000129181 (RDP), X57307 (Genbank). N4Lid DOI: 10.1601/nm.4931
- Brevibacillus levickii*^{VP} Allan et al. 2005. Source of type material recommended for DOE sponsored genome sequencing by the JGI: CIP 108307. High-quality 16S rRNA sequence S000539542 (RDP), AJ715378 (Genbank). N4Lid 10.1601/nm.9408
- Brevibacillus limnophilus*^{VP} Goto et al. 2004. Source of type material recommended for DOE sponsored genome sequencing by the JGI: NRRL NRS-887. High-quality 16S rRNA sequence S000278683 (RDP), AB112717 (Genbank). N4Lid DOI: 10.1601/nm.5176

Brevibacillus parabrevis^{VP} (Takagi et al. 1993) Shida et al. 1996. <== *Bacillus parabrevis* (basonym). Synonym links through N4Lid: 10.1601/ex.4959. Source of type material recommended for DOE sponsored genome sequencing by the JGI: ATCC 10027. High-quality 16S rRNA sequence S000413937 (RDP), D78463 (Genbank). N4Lid DOI: 10.1601/nm.5177

† *Bacillus parabrevis*^{VP} Takagi et al. 1993. ==> *Brevibacillus parabrevis* (new combination). Synonym links through N4Lid: 10.1601/ex.4959. Source of type material recommended for DOE sponsored genome sequencing by the JGI: ATCC 10027. High-quality 16S rRNA sequence S000413937 (RDP), D78463 (Genbank). N4Lid DOI: 10.1601/nm.4959

Brevibacillus reuszeri^{VP} (Shida et al. 1995) Shida et al. 1996. <== *Bacillus reuszeri* (basonym). Synonym links through N4Lid: 10.1601/ex.4974. Source of type material recommended for DOE sponsored genome sequencing by the JGI: ATCC 51665. High-quality 16S rRNA sequence S000413938 (RDP), D78464 (Genbank). N4Lid DOI: 10.1601/nm.5178

† *Bacillus reuszeri*^{VP} Shida et al. 1995. ==> *Brevibacillus reuszeri* (new combination). Synonym links through N4Lid: 10.1601/ex.4974. Source of type material recommended for DOE sponsored genome sequencing by the JGI: ATCC 51665. High-quality 16S rRNA sequence S000413938 (RDP), D78464 (Genbank). N4Lid DOI: 10.1601/nm.4974

Brevibacillus thermoruber^{VP} (Manachini et al. 1985) Shida et al. 1996. <== *Bacillus thermoruber* (basonym). Synonym links through N4Lid: 10.1601/ex.4997. Source of type material recommended for DOE sponsored genome sequencing by the JGI: DSM 7064. High-quality 16S rRNA sequence S000006192 (RDP), Z26921 (Genbank). N4Lid DOI: 10.1601/nm.5179

† *Bacillus thermoruber*^{VP} (ex Guicciardi et al. 1968) Manachini et al. 1985. ==> *Brevibacillus thermoruber* (new combination). Synonym links through N4Lid: 10.1601/ex.4997. Source of type material recommended for DOE sponsored genome sequencing by the JGI: DSM 7064. High-quality 16S rRNA sequence S000006192 (RDP), Z26921 (Genbank). N4Lid DOI: 10.1601/nm.4997

Genus *Cohnella*^{VP} Kämpfer et al. 2006. N4Lid 10.1601/nm.9981

Cohnella thermotolerans^{VP} Kämpfer et al. 2006. Source of type material recommended for DOE sponsored genome sequencing by the JGI: DSM 17683. High-quality 16S rRNA sequence S000540122 (RDP), AJ971483 (Genbank). N4Lid 10.1601/nm.9979

Cohnella hongkongensis^{VP} Kämpfer et al. 2006. Source of type material recommended for DOE sponsored genome sequencing by the JGI: DSM 17642. High-quality 16S rRNA sequence S000394134 (RDP), AF433165 (Genbank). N4Lid 10.1601/nm.9980

Genus *Oxalophagus*^{VP} Collins et al. 1994. N4Lid DOI: 10.1601/nm.5180

Oxalophagus oxalicus^{VP} (Dehning and Schink 1990) Collins et al. 1994. <== *Clostridium oxalicum* (basonym). Synonym links through N4Lid: 10.1601/ex.3982. Source of type material recommended for DOE sponsored genome sequencing by the JGI: ATCC 49686. High-quality 16S rRNA sequence S000260682 (RDP), X77840 (Genbank). N4Lid DOI: 10.1601/nm.5181

† *Clostridium oxalicum*^{VP} Dehning and Schink 1990. ==> *Oxalophagus oxalicus* (new combination). Synonym links through N4Lid: 10.1601/ex.3982. Source of type material recommended for DOE sponsored genome sequencing by the JGI: ATCC 49686. High-quality 16S rRNA sequence S000260682 (RDP), X77840 (Genbank). N4Lid DOI: 10.1601/nm.3982

Genus *Thermicanus*^{VP} Gößner et al. 2000. N4Lid DOI: 10.1601/nm.5182

Thermicanus aegyptius^{VP} Gößner et al. 2000. Source of type material recommended for DOE sponsored genome sequencing by the JGI: ATCC 700890. High-quality 16S rRNA sequence S000130840 (RDP), AJ242495 (Genbank). N4Lid DOI: 10.1601/nm.5183

Genus *Thermobacillus*^{VP} Touzel et al. 2000. N4Lid DOI: 10.1601/nm.5184

Thermobacillus xylanilyticus^{VP} Touzel et al. 2000. Source of type material recommended for DOE sponsored genome sequencing by the JGI: CNCM I-1017. High-quality 16S rRNA sequence S000128771 (RDP), AJ005795 (Genbank). N4Lid DOI: 10.1601/nm.5185

Family *Planococcaceae*^{AL} Krasil'nikov 1949. N4Lid DOI: 10.1601/nm.5186

Genus *Planococcus*^{AL} Migula 1894. N4Lid DOI: 10.1601/nm.5187

Planococcus citreus^{AL} Migula 1894. Source of type material recommended for DOE sponsored genome sequencing by the JGI: ATCC 14404. High-quality 16S rRNA sequence S000134417 (RDP), X62172 (Genbank). N4Lid DOI: 10.1601/nm.5188

Planococcus antarcticus^{VP} Reddy et al. 2002. Source of type material recommended for DOE sponsored genome sequencing by the JGI: DSM 14505. High-quality 16S rRNA sequence S000121343 (RDP), AJ314745 (Genbank). N4Lid DOI: 10.1601/nm.5190

Planococcus kocurii^{VP} Hao and Komagata 1986. Source of type material recommended for DOE sponsored genome sequencing by the JGI: ATCC 43650. High-quality 16S rRNA sequence S000134023 (RDP), X62173 (Genbank). N4Lid DOI: 10.1601/nm.5192

Planococcus maitriensis^{VP} Alam et al. 2004. Source of type material recommended for DOE sponsored genome sequencing by the JGI: DSM 15305. High-quality 16S rRNA sequence S000118557 (RDP), AJ544622 (Genbank). N4Lid DOI: 10.1601/nm.5193

Planococcus maritimus^{VP} Yoon et al. 2003. Source of type material recommended for DOE sponsored genome sequencing by the JGI: JCM 11543. High-quality 16S rRNA sequence S000395439 (RDP), AF500007 (Genbank). N4Lid DOI: 10.1601/nm.5194

Planococcus rifietoensis^{VP} corrig. Romano et al. 2003. Source of type material recommended for DOE sponsored genome sequencing by the JGI: ATCC BAA-790. High-quality 16S rRNA sequence S000260363 (RDP), AJ493659 (Genbank). N4Lid DOI: 10.1601/nm.5198

Planococcus stackebrandii^{VP} Mayilraj et al. 2005. Source of type material recommended for DOE sponsored genome sequencing by the JGI: DSM 16419. High-quality 16S rRNA sequence S000473873 (RDP), AY437845 (Genbank). N4Lid DOI: 10.1601/nm.8782

Genus *Filibacter*^{VP} Maiden and Jones 1985. N4Lid DOI: 10.1601/nm.5199

Filibacter limicola^{VP} Maiden and Jones 1985. Source of type material recommended for DOE sponsored genome sequencing by the JGI: ATCC 43646. N4Lid DOI: 10.1601/nm.5200

Genus *Kurthia*^{AL} Trevisan 1885. N4Lid DOI: 10.1601/nm.5201

Kurthia zopfii^{AL} (Kurth 1883) Trevisan 1885. Source of type material recommended for DOE sponsored genome sequencing by the JGI: ATCC 33403. High-quality 16S rRNA sequence S000713079 (RDP), M58800 (Genbank). N4Lid DOI: 10.1601/nm.5202

Kurthia gibsonii^{VP} Shaw and Keddie 1983. Source of type material recommended for DOE sponsored genome sequencing by the JGI: ATCC 43195. High-quality 16S rRNA sequence S000022194 (RDP), X70320 (Genbank). N4Lid DOI: 10.1601/nm.5203

Kurthia sibirica^{VP} Belikova et al. 1988. Source of type material recommended for DOE sponsored genome sequencing by the JGI: ATCC 49154. High-quality 16S rRNA sequence S000248323 (RDP), AJ605774 (Genbank). N4Lid DOI: 10.1601/nm.5204

Genus *Planomicrobium*^{VP} Yoon et al. 2001. N4Lid DOI: 10.1601/nm.5205

Planomicrobium koreense^{VP} Yoon et al. 2001. Source of type material recommended for DOE sponsored genome sequencing by the JGI: CIP 107134. High-quality 16S rRNA sequence S000388112 (RDP), AF144750 (Genbank). N4Lid DOI: 10.1601/nm.5206

Planomicrobium alkanoclasticum^{VP} (Engelhardt et al. 2001) Dai et al. 2005. <== *Planococcus alkanoclasticus* (basonym). Synonym links through N4Lid: 10.1601/ex.5189. Source of type material recommended for DOE sponsored genome sequencing by the JGI: CIP 107718. High-quality 16S rRNA sequence S000427859 (RDP), AF029364 (Genbank). N4Lid DOI: 10.1601/nm.9275

† *Planococcus alkanoclasticus*^{VP} Engelhardt et al. 2001. ==> *Planomicrobium alkanoclasticum* (new combination). Synonym links through N4Lid: 10.1601/ex.5189. Source of type material recommended for DOE sponsored genome sequencing by the JGI: CIP 107718. High-quality 16S rRNA sequence S000427859 (RDP), AF029364 (Genbank). N4Lid DOI: 10.1601/nm.5189

Planomicrobium chinense^{VP} Dai et al. 2005. Source of type material recommended for DOE sponsored genome sequencing by the JGI: JCM 12466. High-quality 16S rRNA sequence S000539536 (RDP), AJ697862 (Genbank). N4Lid DOI: 10.1601/nm.9312

Planomicrobium mcmeekinii^{VP} (Junge et al. 1998) Yoon et al. 2001. <== *Planococcus mcmeekinii* (basonym). Synonym links through N4Lid: 10.1601/ex.5195. Source of type material recommended for DOE sponsored genome sequencing by the JGI: ATCC 700539. High-quality 16S rRNA sequence S000428006 (RDP), AF041791 (Genbank). N4Lid DOI: 10.1601/nm.5207

† *Planococcus mcmeekinii*^{VP} Junge et al. 1998. ==> *Planomicrobium mcmeekinii* (new combination). Synonym links through N4Lid: 10.1601/ex.5195. Source of type material recommended for DOE sponsored genome sequencing by the JGI: ATCC 700539. High-quality 16S rRNA sequence S000428006 (RDP), AF041791 (Genbank). N4Lid DOI: 10.1601/nm.5195

Planomicrobium okeanokoites^{VP} (ZoBell and Upham 1944) Yoon et al. 2001. <== *Flavobacterium okeanokoites* (basonym). Synonym links through N4Lid: 10.1601/ex.8106. Source of type material recommended for DOE sponsored genome sequencing by the JGI: ATCC 33414. High-quality 16S rRNA sequence S000413835 (RDP), D55729 (Genbank). N4Lid DOI: 10.1601/nm.5208

† *Planococcus okeanokoites*^{VP} (ZoBell and Upham 1944) Nakagawa et al. 1996. <== *Flavobacterium okeanokoites* (basonym). *Planomicrobium okeanokoites* (new combination). Synonym links through N4Lid: 10.1601/ex.8106. Source of type material recommended for DOE sponsored genome sequencing by the JGI: ATCC 33414. High-quality 16S rRNA sequence S000413835 (RDP), D55729 (Genbank). N4Lid DOI: 10.1601/nm.5196

† *Flavobacterium okeanokoites*^{AL} ZoBell and Upham 1944. ==> *Planococcus okeanokoites* (new combination). Synonym links through N4Lid: 10.1601/ex.8106. Source of type material recommended for DOE sponsored genome sequencing by the JGI: ATCC 33414. High-quality 16S rRNA sequence S000413835 (RDP), D55729 (Genbank). N4Lid DOI: 10.1601/nm.8106

Planomicrobium psychrophilum^{VP} (Reddy et al. 2002) Dai et al. 2005. <== *Planococcus psychrophilus* (basonym). Synonym links through N4Lid: 10.1601/ex.5197. Source of type material recommended for DOE sponsored genome sequencing by the JGI: DSM 14507. High-quality 16S rRNA sequence S000122841 (RDP), AJ314746 (Genbank). N4Lid 10.1601/nm.9276

† *Planococcus psychrophilus*^{VP} Reddy et al. 2002. ==> *Planomicrobium psychrophilum* (new combination). Synonym links through N4Lid: 10.1601/ex.5197. Source of type material recommended for DOE sponsored genome sequencing by the JGI: DSM 14507. High-quality 16S rRNA sequence S000122841 (RDP), AJ314746 (Genbank). N4Lid DOI: 10.1601/nm.5197

Genus *Sporosarcina*^{AL} Kluver and van Niel 1936. N4Lid DOI: 10.1601/nm.5209

Sporosarcina ureae^{AL} (Beijerinck 1901) Kluver and van Niel 1936. Source of type material recommended for DOE sponsored genome sequencing by the JGI: ATCC 6473. High-quality 16S rRNA sequence S000128763 (RDP), X62175 (Genbank). N4Lid DOI: 10.1601/nm.5210

Sporosarcina aquimarina^{VP} Yoon et al. 2001. Source of type material recommended for DOE sponsored genome sequencing by the JGI: ATCC BAA-723. High-quality 16S rRNA sequence S000389016 (RDP), AF202056 (Genbank). N4Lid DOI: 10.1601/nm.5211

Sporosarcina globispora^{VP} (Larkin and Stokes 1967) Yoon et al. 2001. <== *Bacillus globisporus* subsp. *globisporus* (basonym). Synonym links through N4Lid: 10.1601/ex.4912. Source of type material recommended for DOE sponsored genome sequencing by the JGI: ATCC 23301. High-quality 16S rRNA sequence S000011919 (RDP), X68415 (Genbank). N4Lid DOI: 10.1601/nm.5212

† *Bacillus globisporus* subsp. *globisporus*^{AL} Larkin and Stokes 1967. ==> *Sporosarcina globispora* (new combination). Synonym links through N4Lid: 10.1601/ex.4912. Source of type material recommended for DOE sponsored genome sequencing by the JGI: ATCC 23301. High-quality 16S rRNA sequence S000011919 (RDP), X68415 (Genbank). N4Lid DOI: 10.1601/nm.4912

Sporosarcina macmurdoensis^{VP} Reddy et al. 2003. Source of type material recommended for DOE sponsored genome sequencing by the JGI: DSM 15428. High-quality 16S rRNA sequence S000146513 (RDP), AJ514408 (Genbank). N4Lid DOI: 10.1601/nm.5214

Sporosarcina pasteurii^{VP} (Miquel 1889) Yoon et al. 2001. <== *Bacillus pasteurii* (basonym). Synonym links through N4Lid: 10.1601/ex.4960. Source of type material recommended for DOE sponsored genome sequencing by the JGI: ATCC 11859. High-quality 16S rRNA sequence S000130877 (RDP), X60631 (Genbank). N4Lid DOI: 10.1601/nm.5215

† *Bacillus pasteurii*^{AL} (Miquel 1889) Chester 1898. ==> *Sporosarcina pasteurii* (new combination). Synonym links through N4Lid: 10.1601/ex.4960. Source of type material recommended for DOE sponsored genome sequencing by the JGI: ATCC 11859. High-quality 16S rRNA sequence S000130877 (RDP), X60631 (Genbank). N4Lid DOI: 10.1601/nm.4960

Sporosarcina psychrophila^{VP} (Nakamura 1984) Yoon et al. 2001. <== *Bacillus psychrophilus* (basonym). Synonym links through N4Lid: 10.1601/ex.4968. Source of type material recommended for DOE sponsored genome sequencing by the JGI: ATCC 23304. High-quality 16S rRNA sequence S000126601 (RDP), X60634 (Genbank). N4Lid DOI: 10.1601/nm.5216

† *Bacillus psychrophilus*^{VP} (ex Larkin and Stokes 1967) Nakamura 1984. ==> *Sporosarcina psychrophila* (new combination). Synonym links through N4Lid: 10.1601/ex.4968. Source of type

material recommended for DOE sponsored genome sequencing by the JGI: ATCC 23304. High-quality 16S rRNA sequence S000126601 (RDP), X60634 (Genbank). N4Lid DOI: 10.1601/nm.4968

Family "Sporolactobacillaceae" N4Lid DOI: 10.1601/nm.5217

Genus *Sporolactobacillus*^{AL} Kitahara and Suzuki 1963. N4Lid DOI: 10.1601/nm.5218

Sporolactobacillus inulinus^{AL} (Kitahara and Suzuki 1963) Kitahara and Lai 1967. Source of type material recommended for DOE sponsored genome sequencing by the JGI: ATCC 15538. High-quality 16S rRNA sequence S000436429 (RDP), M58838 (Genbank). N4Lid DOI: 10.1601/nm.5219

Sporolactobacillus kofuensis^{VP} Yanagida et al. 1997. Source of type material recommended for DOE sponsored genome sequencing by the JGI: ATCC 700382. High-quality 16S rRNA sequence S000352619 (RDP), AJ634661 (Genbank). N4Lid DOI: 10.1601/nm.5220

Sporolactobacillus lactosus^{VP} Yanagida et al. 1997. Source of type material recommended for DOE sponsored genome sequencing by the JGI: JCM 9690. N4Lid DOI: 10.1601/nm.5221

Sporolactobacillus nakayamae subsp. nakayamae^{VP} Yanagida et al. 1997. Source of type material recommended for DOE sponsored genome sequencing by the JGI: ATCC 700379. High-quality 16S rRNA sequence S000352621 (RDP), AJ634663 (Genbank). N4Lid DOI: 10.1601/nm.5222

Sporolactobacillus nakayamae subsp. racemicus^{VP} Yanagida et al. 1997. Source of type material recommended for DOE sponsored genome sequencing by the JGI: ATCC 700381. High-quality 16S rRNA sequence S000413571 (RDP), D16289 (Genbank). N4Lid DOI: 10.1601/nm.5223

Sporolactobacillus terrae^{VP} Yanagida et al. 1997. Source of type material recommended for DOE sponsored genome sequencing by the JGI: ATCC 700380. High-quality 16S rRNA sequence S000352620 (RDP), AJ634662 (Genbank). N4Lid DOI: 10.1601/nm.5224

Genus *Marinococcus*^{VP} Hao et al. 1985. N4Lid DOI: 10.1601/nm.5225

Marinococcus halophilus^{VP} (Novitsky and Kushner 1976) Hao et al. 1985. <== *Planococcus halophilus* (basonym). Synonym links through N4Lid: 10.1601/ex.5191. Source of type material recommended for DOE sponsored genome sequencing by the JGI: ATCC 27964. High-quality 16S rRNA sequence S000260873 (RDP), X90835 (Genbank). N4Lid DOI: 10.1601/nm.5226

† *Planococcus halophilus*^{AL} Novitsky and Kushner 1976. ==> *Marinococcus halophilus* (new combination). Synonym links through N4Lid: 10.1601/ex.5191. Source of type material recommended for DOE sponsored genome sequencing by the JGI: ATCC 27964. High-quality 16S rRNA sequence S000260873 (RDP), X90835 (Genbank). N4Lid DOI: 10.1601/nm.5191

Marinococcus albus^{VP} Hao et al. 1985. Source of type material recommended for DOE sponsored genome sequencing by the JGI: ATCC 49811. High-quality 16S rRNA sequence S000260584 (RDP), X90834 (Genbank). N4Lid DOI: 10.1601/nm.5227

Marinococcus halotolerans^{VP} Li et al. 2005. Source of type material recommended for DOE sponsored genome sequencing by the JGI: DSM 16375. High-quality 16S rRNA sequence S000445440 (RDP), AY817493 (Genbank). N4Lid 10.1601/nm.9572

Genus *Sinococcus*^{VP} Li et al. 2006. N4Lid DOI: 10.1601/nm.10091

Sinococcus qinghaiensis^{VP} Li et al. 2006. Source of type material recommended for DOE sponsored genome sequencing by the JGI: DSM 17008. High-quality 16S rRNA sequence S000600587 (RDP), DQ168584 (Genbank). N4Lid DOI: 10.1601/nm.10090

Family "Staphylococcaceae" N4Lid DOI: 10.1601/nm.5229

Genus *Staphylococcus*^{AL} Rosenbach 1884. N4Lid DOI: 10.1601/nm.5230

Staphylococcus aureus subsp. aureus^{VP} Rosenbach 1884. Source of type material recommended for DOE sponsored genome sequencing by the JGI: ATCC 12600. High-quality 16S rRNA sequence S000413958 (RDP), D83357 (Genbank). GOLD ID: Gc00050. GCAT ID: 000560_GCAT. Entrez genome id: 264. Sequenced strain: N315 (MRSA) is from a non-type strain. Genome sequencing is completed. Number of genomes of this species sequenced 18 (GOLD) 12 (NCBI). N4Lid DOI: 10.1601/nm.5231

Staphylococcus aureus subsp. anaerobius^{VP} De La Fuente et al. 1985. Source of type material recommended for DOE sponsored genome sequencing by the JGI: ATCC 35844. N4Lid DOI: 10.1601/nm.5232

- Staphylococcus arlettae*^{VP} Schleifer et al. 1985. Source of type material recommended for DOE sponsored genome sequencing by the JGI: ATCC 43957. High-quality 16S rRNA sequence S000381980 (RDP), AB009933 (Genbank). N4Lid DOI: 10.1601/nm.5233
- Staphylococcus auricularis*^{VP} Kloos and Schleifer 1983. Source of type material recommended for DOE sponsored genome sequencing by the JGI: ATCC 33753. High-quality 16S rRNA sequence S000413959 (RDP), D83358 (Genbank). N4Lid DOI: 10.1601/nm.5234
- Staphylococcus capitis subsp. capitis*^{VP} Kloos and Schleifer 1975. Source of type material recommended for DOE sponsored genome sequencing by the JGI: ATCC 27840. High-quality 16S rRNA sequence S000381984 (RDP), AB009937 (Genbank). N4Lid DOI: 10.1601/nm.5235
- Staphylococcus capitis subsp. urealyticus*^{VP} corrig. Bannerman and Kloos 1991. Source of type material recommended for DOE sponsored genome sequencing by the JGI: ATCC 49326. N4Lid DOI: 10.1601/nm.5236
- Staphylococcus caprae*^{VP} Devriese et al. 1983. Source of type material recommended for DOE sponsored genome sequencing by the JGI: ATCC 35538. High-quality 16S rRNA sequence S000381982 (RDP), AB009935 (Genbank). N4Lid DOI: 10.1601/nm.5237
- Staphylococcus carnosus subsp. carnosus*^{VP} Schleifer and Fischer 1982. Source of type material recommended for DOE sponsored genome sequencing by the JGI: ATCC 51365. High-quality 16S rRNA sequence S000381981 (RDP), AB009934 (Genbank). GOLD ID: Gi00598. GCAT ID: 001520_GCAT. Sequenced strain: TM300 is from a non-type strain. Genome sequencing is incomplete. Number of genomes of this species sequenced 1 (GOLD). N4Lid DOI: 10.1601/nm.5238
- Staphylococcus carnosus subsp. utilis*^{VP} Probst et al. 1998. Source of type material recommended for DOE sponsored genome sequencing by the JGI: DSM 11676. N4Lid DOI: 10.1601/nm.5239
- Staphylococcus chromogenes*^{VP} (Devriese et al. 1978) Hájek et al. 1987. <== *Staphylococcus hyicus subsp. chromogenes* (basonym). Synonym links through N4Lid: 10.1601/ex.5256. Source of type material recommended for DOE sponsored genome sequencing by the JGI: ATCC 43764. High-quality 16S rRNA sequence S000413961 (RDP), D83360 (Genbank). N4Lid DOI: 10.1601/nm.5241
- † *Staphylococcus hyicus subsp. chromogenes*^{AL} Devriese et al. 1978. ==> *Staphylococcus chromogenes* (new combination). Synonym links through N4Lid: 10.1601/ex.5256. Source of type material recommended for DOE sponsored genome sequencing by the JGI: ATCC 43764. High-quality 16S rRNA sequence S000413961 (RDP), D83360 (Genbank). N4Lid DOI: 10.1601/nm.5256
- Staphylococcus cohnii subsp. cohnii*^{VP} Schleifer and Kloos 1975. Source of type material recommended for DOE sponsored genome sequencing by the JGI: ATCC 29974. High-quality 16S rRNA sequence S000413962 (RDP), D83361 (Genbank). N4Lid DOI: 10.1601/nm.5242
- Staphylococcus cohnii subsp. urealyticus*^{VP} corrig. Kloos and Wolfshohl 1991. Source of type material recommended for DOE sponsored genome sequencing by the JGI: ATCC 49330. N4Lid DOI: 10.1601/nm.5243
- Staphylococcus condimentii*^{VP} Probst et al. 1998. Source of type material recommended for DOE sponsored genome sequencing by the JGI: DSM 11674. High-quality 16S rRNA sequence S000127286 (RDP), Y15750 (Genbank). N4Lid DOI: 10.1601/nm.5244
- Staphylococcus delphini*^{VP} Varaldo et al. 1988. Source of type material recommended for DOE sponsored genome sequencing by the JGI: ATCC 49171. High-quality 16S rRNA sequence S000381985 (RDP), AB009938 (Genbank). N4Lid DOI: 10.1601/nm.5245
- Staphylococcus epidermidis*^{AL} (Winslow and Winslow 1908) Evans 1916. Source of type material recommended for DOE sponsored genome sequencing by the JGI: ATCC 14990. High-quality 16S rRNA sequence S000413964 (RDP), D83363 (Genbank). GOLD ID: Gc00117. GCAT ID: 000493_GCAT. Entrez genome id: 279. Sequenced strain: ATCC 12228 is from a non-type strain. Genome sequencing is completed. Number of genomes of this species sequenced 4 (GOLD) 2 (NCBI). N4Lid DOI: 10.1601/nm.5246
- Staphylococcus equorum subsp. equorum*^{VP} Schleifer et al. 1985. Source of type material recommended for DOE sponsored genome sequencing by the JGI: ATCC 43958. High-quality 16S rRNA sequence S000381986 (RDP), AB009939 (Genbank). N4Lid DOI: 10.1601/nm.5247
- Staphylococcus equorum subsp. linens*^{VP} Place et al. 2003. Source of type material recommended for DOE sponsored genome sequencing by the JGI: DSM 15097. N4Lid DOI: 10.1601/nm.5248

- Staphylococcus felis*^{VP} Igimi et al. 1989. Source of type material recommended for DOE sponsored genome sequencing by the JGI: ATCC 49168. High-quality 16S rRNA sequence S000413965 (RDP), D83364 (Genbank). N4Lid DOI: 10.1601/nm.5249
- Staphylococcus fleurettii*^{VP} Vernozy-Rozand et al. 2000. Source of type material recommended for DOE sponsored genome sequencing by the JGI: ATCC BAA-274. N4Lid DOI: 10.1601/nm.5250
- Staphylococcus gallinarum*^{VP} Devriese et al. 1983. Source of type material recommended for DOE sponsored genome sequencing by the JGI: ATCC 35539. High-quality 16S rRNA sequence S000413967 (RDP), D83366 (Genbank). N4Lid DOI: 10.1601/nm.5251
- Staphylococcus haemolyticus*^{AL} Schleifer and Kloos 1975. Source of type material recommended for DOE sponsored genome sequencing by the JGI: ATCC 29970. High-quality 16S rRNA sequence S000413968 (RDP), D83367 (Genbank). GOLD ID: Gc00274. GCAT ID: 000335_GCAT. Entrez genome id: 12508. Sequenced strain: JCSC1435 is from a non-type strain. Genome sequencing is completed. Number of genomes of this species sequenced 1 (GOLD) 1 (NCBI). N4Lid DOI: 10.1601/nm.5252
- Staphylococcus hominis subsp. hominis*^{VP} Kloos and Schleifer 1975. Source of type material recommended for DOE sponsored genome sequencing by the JGI: ATCC 27844. High-quality 16S rRNA sequence S000414715 (RDP), L37601 (Genbank). N4Lid DOI: 10.1601/nm.5253
- Staphylococcus hominis subsp. novobiosepticus*^{VP} Kloos et al. 1998. Source of type material recommended for DOE sponsored genome sequencing by the JGI: ATCC 700236. N4Lid DOI: 10.1601/nm.5254
- Staphylococcus hyicus subsp. hyicus*^{AL} (Sompolinsky 1953) Devriese et al. 1978. Source of type material recommended for DOE sponsored genome sequencing by the JGI: ATCC 11249. High-quality 16S rRNA sequence S000413969 (RDP), D83368 (Genbank). N4Lid DOI: 10.1601/nm.5255
- Staphylococcus intermedius*^{AL} Hajek 1976. Source of type material recommended for DOE sponsored genome sequencing by the JGI: ATCC 29663. High-quality 16S rRNA sequence S000413970 (RDP), D83369 (Genbank). N4Lid DOI: 10.1601/nm.5257
- Staphylococcus kloosii*^{VP} Schleifer et al. 1985. Source of type material recommended for DOE sponsored genome sequencing by the JGI: ATCC 43959. High-quality 16S rRNA sequence S000381987 (RDP), AB009940 (Genbank). N4Lid DOI: 10.1601/nm.5258
- Staphylococcus lentus*^{VP} (Kloos et al. 1976) Schleifer et al. 1983. <== *Staphylococcus sciuri subsp. lentus* (basonym). Synonym links through N4Lid: 10.1601/ex.5274. Source of type material recommended for DOE sponsored genome sequencing by the JGI: ATCC 29070. High-quality 16S rRNA sequence S000413971 (RDP), D83370 (Genbank). N4Lid DOI: 10.1601/nm.5259
- † *Staphylococcus sciuri subsp. lentus*^{AL} Kloos et al. 1976. ==> *Staphylococcus lentus* (new combination). Synonym links through N4Lid: 10.1601/ex.5274. Source of type material recommended for DOE sponsored genome sequencing by the JGI: ATCC 29070. High-quality 16S rRNA sequence S000413971 (RDP), D83370 (Genbank). N4Lid DOI: 10.1601/nm.5274
- Staphylococcus lugdunensis*^{VP} Freney et al. 1988. Source of type material recommended for DOE sponsored genome sequencing by the JGI: ATCC 43809. High-quality 16S rRNA sequence S000381988 (RDP), AB009941 (Genbank). N4Lid DOI: 10.1601/nm.5260
- Staphylococcus lutrae*^{VP} Foster et al. 1997. Source of type material recommended for DOE sponsored genome sequencing by the JGI: ATCC 700373. N4Lid DOI: 10.1601/nm.5261
- Staphylococcus muscae*^{VP} Hájek et al. 1992. Source of type material recommended for DOE sponsored genome sequencing by the JGI: ATCC 49910. High-quality 16S rRNA sequence S000381046 (RDP), S83566 (Genbank). N4Lid DOI: 10.1601/nm.5262
- Staphylococcus nepalensis*^{VP} Spargser et al. 2003. Source of type material recommended for DOE sponsored genome sequencing by the JGI: DSM 15150. High-quality 16S rRNA sequence S000251954 (RDP), AJ517414 (Genbank). N4Lid DOI: 10.1601/nm.5263
- Staphylococcus pasteurii*^{VP} Chesneau et al. 1993. Source of type material recommended for DOE sponsored genome sequencing by the JGI: ATCC 51129. High-quality 16S rRNA sequence S000381991 (RDP), AB009944 (Genbank). N4Lid DOI: 10.1601/nm.5264
- Staphylococcus piscifermentans*^{VP} Tanasupawat et al. 1992. Source of type material recommended for DOE sponsored genome sequencing by the JGI: ATCC 51136. High-quality 16S rRNA sequence S000381990 (RDP), AB009943 (Genbank). N4Lid DOI: 10.1601/nm.5265

Staphylococcus pseudintermedius^{VP} Devriese et al. 2005. Source of type material recommended for DOE sponsored genome sequencing by the JGI: CCUG 49543. High-quality 16S rRNA sequence S000570530 (RDP), AJ780976 (Genbank). N4Lid 10.1601/nm.9497

Staphylococcus saccharolyticus^{VP} (Foubert and Douglas 1948) Kilpper-Bälz and Schleifer 1984. <== *Peptococcus saccharolyticus* (basonym). Synonym links through N4Lid: 10.1601/ex.4312. Source of type material recommended for DOE sponsored genome sequencing by the JGI: ATCC 14953. High-quality 16S rRNA sequence S000414716 (RDP), L37602 (Genbank). N4Lid DOI: 10.1601/nm.5267

† *Peptococcus saccharolyticus*^{AL} (Foubert and Douglas 1948) Douglas 1957. ==> *Staphylococcus saccharolyticus* (new combination). Synonym links through N4Lid: 10.1601/ex.4312. Source of type material recommended for DOE sponsored genome sequencing by the JGI: ATCC 14953. High-quality 16S rRNA sequence S000414716 (RDP), L37602 (Genbank). N4Lid DOI: 10.1601/nm.4312

Staphylococcus saprophyticus subsp. bovis^{VP} Hájek et al. 1996. Source of type material recommended for DOE sponsored genome sequencing by the JGI: CCUG 36975. N4Lid DOI: 10.1601/nm.5269

Staphylococcus saprophyticus subsp. saprophyticus^{VP} (Fairbrother 1940) Shaw et al. 1951. Source of type material recommended for DOE sponsored genome sequencing by the JGI: ATCC 15305. High-quality 16S rRNA sequence S000413972 (RDP), D83371 (Genbank). GOLD ID: Gc00291. GCAT ID: 000318_GCAT. Entrez genome id: 15596. Sequenced strain: ATCC 15305 is type material. Genome sequencing is completed. Number of genomes of this species sequenced 1 (GOLD) 1 (NCBI). N4Lid DOI: 10.1601/nm.5268

Staphylococcus schleiferi subsp. coagulans^{VP} Igimi et al. 1990. Source of type material recommended for DOE sponsored genome sequencing by the JGI: ATCC 49545. N4Lid DOI: 10.1601/nm.5271

Staphylococcus schleiferi subsp. schleiferi^{VP} Freney et al. 1988. Source of type material recommended for DOE sponsored genome sequencing by the JGI: ATCC 43808. High-quality 16S rRNA sequence S000381992 (RDP), AB009945 (Genbank). N4Lid DOI: 10.1601/nm.5270

Staphylococcus sciuri subsp. carnaticus^{VP} Kloos et al. 1997. Source of type material recommended for DOE sponsored genome sequencing by the JGI: ATCC 700058. N4Lid DOI: 10.1601/nm.5273

Staphylococcus sciuri subsp. rodentium^{VP} Kloos et al. 1997. Source of type material recommended for DOE sponsored genome sequencing by the JGI: ATCC 700061. N4Lid DOI: 10.1601/nm.5275

Staphylococcus sciuri subsp. sciuri^{AL} Kloos et al. 1976. Source of type material recommended for DOE sponsored genome sequencing by the JGI: ATCC 29062. High-quality 16S rRNA sequence S000014058 (RDP), AJ421446 (Genbank). N4Lid DOI: 10.1601/nm.5272

Staphylococcus simiae^{VP} Pantucek et al. 2005. Source of type material recommended for DOE sponsored genome sequencing by the JGI: LMG 22723. High-quality 16S rRNA sequence S000541025 (RDP), AY727530 (Genbank). GOLD ID: Gi01605. GCAT ID: 001534_GCAT. Sequenced strain: LMG 22723 is type material. Genome sequencing is incomplete. Number of genomes of this species sequenced 1 (GOLD). N4Lid 10.1601/nm.9586

Staphylococcus simulans^{AL} Kloos and Schleifer 1975. Source of type material recommended for DOE sponsored genome sequencing by the JGI: ATCC 27848. High-quality 16S rRNA sequence S000413974 (RDP), D83373 (Genbank). N4Lid DOI: 10.1601/nm.5276

Staphylococcus succinus^{VP} Lambert et al. 1998. Source of type material recommended for DOE sponsored genome sequencing by the JGI: ATCC 700337. N4Lid DOI: 10.1601/nm.5277

Staphylococcus succinus subsp. casei^{VP} Place et al. 2003. Source of type material recommended for DOE sponsored genome sequencing by the JGI: DSM 15096. N4Lid DOI: 10.1601/nm.5279

Staphylococcus succinus subsp. succinus^{VP} Lambert et al. 1998. Source of type material recommended for DOE sponsored genome sequencing by the JGI: ATCC 700337. High-quality 16S rRNA sequence S000386909 (RDP), AF004220 (Genbank). N4Lid DOI: 10.1601/nm.5278

Staphylococcus vitulinus^{VP} corrig. Webster et al. 1994. ≈ *Staphylococcus pulvereri* (later heterotypic synonym), links through 10.1601/nm.5280. Source of type material recommended for DOE sponsored genome sequencing by the JGI: ATCC 51145. High-quality 16S rRNA sequence S000381993 (RDP), AB009946 (Genbank). N4Lid DOI: 10.1601/nm.5280

- † *Staphylococcus pulvereri*^{VP} Zakrzewska-Czerwinska et al. 1995. ≈ *Staphylococcus vitulinus* (earlier heterotypic synonym), links through 10.1601/nm.5280. Source of type material recommended for DOE sponsored genome sequencing by the JGI: ATCC 51698. High-quality 16S rRNA sequence S000381989 (RDP), AB009942 (Genbank). N4Lid DOI: 10.1601/nm.5266
- Staphylococcus warneri*^{AL} Kloos and Schleifer 1975. Source of type material recommended for DOE sponsored genome sequencing by the JGI: ATCC 27836. High-quality 16S rRNA sequence S000414717 (RDP), L37603 (Genbank). N4Lid DOI: 10.1601/nm.5281
- Staphylococcus xylosus*^{AL} Schleifer and Kloos 1975. Source of type material recommended for DOE sponsored genome sequencing by the JGI: ATCC 29971. High-quality 16S rRNA sequence S000413975 (RDP), D83374 (Genbank). GOLD ID: Gi01086. GCAT ID: 001523_GCAT. Entrez genome id: 15714. Sequenced strain: C2a is from a non-type strain. Genome sequencing is incomplete. Number of genomes of this species sequenced 1 (GOLD) 1 (NCBI). N4Lid DOI: 10.1601/nm.5282
- Genus *Gemella***^{AL} Berger 1960. N4Lid DOI: 10.1601/nm.5283
- Gemella bergeri*^{VP} corrig. Collins et al. 1998. Source of type material recommended for DOE sponsored genome sequencing by the JGI: ATCC 700627. High-quality 16S rRNA sequence S000009365 (RDP), Y13365 (Genbank). N4Lid DOI: 10.1601/nm.5284
- Gemella cuniculi*^{VP} Hoyles et al. 2000. Source of type material recommended for DOE sponsored genome sequencing by the JGI: ATCC BAA-287. N4Lid DOI: 10.1601/nm.5285
- Gemella haemolysans*^{AL} (Thjøtta and Bøe 1938) Berger 1960. Source of type material recommended for DOE sponsored genome sequencing by the JGI: ATCC 10379. High-quality 16S rRNA sequence S000414422 (RDP), L14326 (Genbank). N4Lid DOI: 10.1601/nm.5286
- Gemella morbillorum*^{VP} (Prévot 1933) Kilpper-Bälz and Schleifer 1988. <== *Streptococcus morbillorum* (basonym). Synonym links through N4Lid: 10.1601/ex.5662. Source of type material recommended for DOE sponsored genome sequencing by the JGI: ATCC 27824. High-quality 16S rRNA sequence S000414423 (RDP), L14327 (Genbank). N4Lid DOI: 10.1601/nm.5287
- † *Streptococcus morbillorum*^{AL} (Prévot 1933) Holdeman and Moore 1974. ==> *Gemella morbillorum* (new combination). Synonym links through N4Lid: 10.1601/ex.5662. Source of type material recommended for DOE sponsored genome sequencing by the JGI: ATCC 27824. High-quality 16S rRNA sequence S000414423 (RDP), L14327 (Genbank). N4Lid DOI: 10.1601/nm.5662
- Gemella palaticanis*^{VP} Collins et al. 1999. Source of type material recommended for DOE sponsored genome sequencing by the JGI: ATCC BAA-58. High-quality 16S rRNA sequence S000004023 (RDP), Y17280 (Genbank). N4Lid DOI: 10.1601/nm.5288
- Gemella sanguinis*^{VP} Collins et al. 1999. Source of type material recommended for DOE sponsored genome sequencing by the JGI: ATCC 700632. High-quality 16S rRNA sequence S000016156 (RDP), Y13364 (Genbank). N4Lid DOI: 10.1601/nm.5289
- Genus *Jeotgalicoccus***^{VP} Yoon et al. 2003. N4Lid DOI: 10.1601/nm.5290
- Jeotgalicoccus halotolerans*^{VP} Yoon et al. 2003. Source of type material recommended for DOE sponsored genome sequencing by the JGI: JCM 11198. High-quality 16S rRNA sequence S000434601 (RDP), AY028925 (Genbank). N4Lid DOI: 10.1601/nm.5291
- Jeotgalicoccus pinnipedialis*^{VP} Hoyles et al. 2004. Source of type material recommended for DOE sponsored genome sequencing by the JGI: CCUG 42722. High-quality 16S rRNA sequence S000366394 (RDP), AJ251530 (Genbank). N4Lid 10.1601/nm.8631
- Jeotgalicoccus psychrophilus*^{VP} Yoon et al. 2003. Source of type material recommended for DOE sponsored genome sequencing by the JGI: JCM 11199. High-quality 16S rRNA sequence S000540397 (RDP), AY028926 (Genbank). N4Lid DOI: 10.1601/nm.5292
- Genus *Macrococcus***^{VP} Kloos et al. 1998. N4Lid DOI: 10.1601/nm.5293
- Macrococcus equipercicus*^{VP} Kloos et al. 1998. Source of type material recommended for DOE sponsored genome sequencing by the JGI: ATCC 51831. N4Lid DOI: 10.1601/nm.5294
- Macrococcus bovicus*^{VP} Kloos et al. 1998. Source of type material recommended for DOE sponsored genome sequencing by the JGI: ATCC 51825. N4Lid DOI: 10.1601/nm.5295
- Macrococcus brunensis*^{VP} Mannerová et al. 2003. Source of type material recommended for DOE sponsored genome sequencing by the JGI: LMG 21712. N4Lid DOI: 10.1601/nm.5296

Macrococcus carouelicus^{VP} Kloos et al. 1998. Source of type material recommended for DOE sponsored genome sequencing by the JGI: ATCC 51828. N4Lid DOI: 10.1601/nm.5297

Macrococcus caseolyticus^{VP} (Schleifer et al. 1982) Kloos et al. 1998. <== *Staphylococcus caseolyticus* (basonym). Synonym links through N4Lid: 10.1601/ex.5240. Source of type material recommended for DOE sponsored genome sequencing by the JGI: ATCC 13548. High-quality 16S rRNA sequence S000413960 (RDP), D83359 (Genbank). N4Lid DOI: 10.1601/nm.5298

† *Staphylococcus caseolyticus*^{VP} (ex Evans 1916) Schleifer et al. 1982. ==> *Macrococcus caseolyticus* (new combination). Synonym links through N4Lid: 10.1601/ex.5240. Source of type material recommended for DOE sponsored genome sequencing by the JGI: ATCC 13548. High-quality 16S rRNA sequence S000413960 (RDP), D83359 (Genbank). N4Lid DOI: 10.1601/nm.5240

Macrococcus hajekii^{VP} Mannerová et al. 2003. Source of type material recommended for DOE sponsored genome sequencing by the JGI: LMG 21711. High-quality 16S rRNA sequence S000396322 (RDP), AY119685 (Genbank). N4Lid DOI: 10.1601/nm.5299

Macrococcus lamae^{VP} Mannerová et al. 2003. Source of type material recommended for DOE sponsored genome sequencing by the JGI: LMG 21713. High-quality 16S rRNA sequence S000396324 (RDP), AY119687 (Genbank). N4Lid DOI: 10.1601/nm.5300

Genus *Salinicoccus*^{VP} Ventosa et al. 1990. N4Lid DOI: 10.1601/nm.5301

Salinicoccus roseus^{VP} Ventosa et al. 1990. Source of type material recommended for DOE sponsored genome sequencing by the JGI: ATCC 49258. High-quality 16S rRNA sequence S000013942 (RDP), X94559 (Genbank). N4Lid DOI: 10.1601/nm.5302

Salinicoccus alkaliphilus^{VP} Zhang et al. 2002. Source of type material recommended for DOE sponsored genome sequencing by the JGI: ATCC BAA-722. High-quality 16S rRNA sequence S000390500 (RDP), AF275710 (Genbank). N4Lid DOI: 10.1601/nm.5303

Salinicoccus hispanicus^{VP} (Marquez et al. 1990) Ventosa et al. 1993. <== *Marinococcus hispanicus* (basonym). Synonym links through N4Lid: 10.1601/ex.5228. Source of type material recommended for DOE sponsored genome sequencing by the JGI: ATCC 49259. High-quality 16S rRNA sequence S000434603 (RDP), AY028927 (Genbank). N4Lid DOI: 10.1601/nm.5304

† *Marinococcus hispanicus*^{VP} Marquez et al. 1990. ==> *Salinicoccus hispanicus* (new combination). Synonym links through N4Lid: 10.1601/ex.5228. Source of type material recommended for DOE sponsored genome sequencing by the JGI: ATCC 49259. High-quality 16S rRNA sequence S000434603 (RDP), AY028927 (Genbank). N4Lid DOI: 10.1601/nm.5228

Family *Thermoactinomycetaceae*^{VP} Matsuo et al 2006. N4Lid DOI: 10.1601/nm.5305

Genus *Thermoactinomyces*^{AL} Tsilinsky 1899. N4Lid DOI: 10.1601/nm.5306

Thermoactinomyces vulgaris^{AL} Tsilinsky 1899. ≈ *Thermoactinomyces candidus* (later heterotypic synonym), links through 10.1601/nm.5307. Source of type material recommended for DOE sponsored genome sequencing by the JGI: ATCC 27868. High-quality 16S rRNA sequence S000387935 (RDP), AF138739 (Genbank). N4Lid DOI: 10.1601/nm.5307

† *Thermoactinomyces candidus*^{AL} Kurup et al. 1975. ≈ *Thermoactinomyces vulgaris* (earlier heterotypic synonym), links through 10.1601/nm.5307. Source of type material recommended for DOE sponsored genome sequencing by the JGI: NRRL B-8109. N4Lid DOI: 10.1601/nm.5308

Thermoactinomyces intermedius^{VP} Kurup et al. 1981. Source of type material recommended for DOE sponsored genome sequencing by the JGI: ATCC 33205. High-quality 16S rRNA sequence S000011748 (RDP), AJ251775 (Genbank). N4Lid DOI: 10.1601/nm.5310

Genus *Laceyella*^{VP} Yoon et al. 2005. N4Lid 10.1601/nm.8653

Laceyella sacchari^{VP} (Lacey 1971) Yoon et al. 2005. <== *Thermoactinomyces sacchari* (basonym). Synonym links through N4Lid: 10.1601/ex.5313. Source of type material recommended for DOE sponsored genome sequencing by the JGI: ATCC 27375. High-quality 16S rRNA sequence S000387934 (RDP), AF138738 (Genbank). N4Lid 10.1601/nm.8655

† *Thermoactinomyces thalophilus*^{VP} (ex Waksman and Corke 1953) Lacey and Cross 1989. ≈ *Laceyella sacchari* (earlier heterotypic synonym), links through 10.1601/nm.8655. Source of type material recommended for DOE sponsored genome sequencing by the JGI: JCM 3217. N4Lid DOI: 10.1601/nm.5314

† *Thermoactinomyces sacchari*^{AL} Lacey 1971. ==> *Laceyella sacchari* (new combination). Synonym links through N4Lid: 10.1601/ex.5313. Source of type material recommended for DOE

sponsored genome sequencing by the JGI: ATCC 27375. High-quality 16S rRNA sequence S000387934 (RDP), AF138738 (Genbank). N4Lid DOI: 10.1601/nm.5313

Laceyella putida^{VP} (Lacey and Cross 1989) Yoon et al. 2005. <== *Thermoactinomyces putidus* (basonym). Synonym links through N4Lid: 10.1601/ex.5312. Source of type material recommended for DOE sponsored genome sequencing by the JGI: ATCC 49853. High-quality 16S rRNA sequence S000387932 (RDP), AF138736 (Genbank). N4Lid 10.1601/nm.8654

† *Thermoactinomyces putidus*^{VP} Lacey and Cross 1989. ==> *Laceyella putida* (new combination). Synonym links through N4Lid: 10.1601/ex.5312. Source of type material recommended for DOE sponsored genome sequencing by the JGI: ATCC 49853. High-quality 16S rRNA sequence S000387932 (RDP), AF138736 (Genbank). N4Lid DOI: 10.1601/nm.5312

Genus *Planifilum*^{VP} Hatayama et al. 2005. N4Lid 10.1601/nm.9601

Planifilum fimeticola^{VP} Hatayama et al. 2005. Source of type material recommended for DOE sponsored genome sequencing by the JGI: ATCC BAA-969. High-quality 16S rRNA sequence S000110722 (RDP), AB088364 (Genbank). N4Lid 10.1601/nm.9599

Planifilum fulgidum^{VP} Hatayama et al. 2005. Source of type material recommended for DOE sponsored genome sequencing by the JGI: ATCC BAA-970. High-quality 16S rRNA sequence S000111853 (RDP), AB088362 (Genbank). N4Lid 10.1601/nm.9600

Genus *Seinonella*^{VP} Yoon et al. 2005. N4Lid 10.1601/nm.8834

Seinonella peptonophila^{VP} (Nonomura and Ohara 1971) Yoon et al. 2005. <== *Thermoactinomyces peptonophilus* (basonym). Synonym links through N4Lid: 10.1601/ex.5311. Source of type material recommended for DOE sponsored genome sequencing by the JGI: ATCC 27302. High-quality 16S rRNA sequence S000387931 (RDP), AF138735 (Genbank). N4Lid 10.1601/nm.8835

† *Thermoactinomyces peptonophilus*^{AL} Nonomura and Ohara 1971. ==> *Seinonella peptonophila* (new combination). Synonym links through N4Lid: 10.1601/ex.5311. Source of type material recommended for DOE sponsored genome sequencing by the JGI: ATCC 27302. High-quality 16S rRNA sequence S000387931 (RDP), AF138735 (Genbank). N4Lid DOI: 10.1601/nm.5311

Genus *Thermoflavimicrobium*^{VP} Yoon et al. 2005. N4Lid 10.1601/nm.8884

Thermoflavimicrobium dichotomicum^{VP} (Krasil'nikov and Agre 1964) Yoon et al. 2005. <== *Thermoactinomyces dichotomicus* (basonym). Synonym links through N4Lid: 10.1601/ex.5309. Source of type material recommended for DOE sponsored genome sequencing by the JGI: ATCC 49854. High-quality 16S rRNA sequence S000387929 (RDP), AF138733 (Genbank). N4Lid 10.1601/nm.8885

† *Thermoactinomyces dichotomicus*^{AL} corrig. (Krasil'nikov and Agre 1964) Cross and Goodfellow 1973. ==> *Thermoflavimicrobium dichotomicum* (new combination). Synonym links through N4Lid: 10.1601/ex.5309. Source of type material recommended for DOE sponsored genome sequencing by the JGI: ATCC 49854. High-quality 16S rRNA sequence S000387929 (RDP), AF138733 (Genbank). N4Lid DOI: 10.1601/nm.5309

Family "*Turicibacteraceae*" N4Lid DOI: 10.1601/nm.5315

Genus *Turicibacter*^{VP} Bosshard et al. 2002. N4Lid DOI: 10.1601/nm.5316

Turicibacter sanguinis^{VP} Bosshard et al. 2002. Source of type material recommended for DOE sponsored genome sequencing by the JGI: DSM 14220. High-quality 16S rRNA sequence S000392070 (RDP), AF349724 (Genbank). N4Lid DOI: 10.1601/nm.5317

Order "*Lactobacillales*" N4Lid DOI: 10.1601/nm.5318

Family *Lactobacillaceae*^{AL} Winslow et al 1917. N4Lid DOI: 10.1601/nm.5319

Genus *Lactobacillus*^{AL} Beijerinck 1901. N4Lid DOI: 10.1601/nm.5320

Lactobacillus delbrueckii subsp. delbrueckii^{VP} (Leichmann 1896) Beijerinck 1901. Source of type material recommended for DOE sponsored genome sequencing by the JGI: ATCC 11842. High-quality 16S rRNA sequence S000436405 (RDP), M58814 (Genbank). N4Lid DOI: 10.1601/nm.5321

† *Lactobacillus bulgaricus*^{AL} (Orla-Jensen 1919) Rogosa and Hansen 1971. ==> *Lactobacillus delbrueckii subsp. bulgaricus* (new combination). Synonym links through N4Lid: 10.1601/ex.5341. Source of type material recommended for DOE sponsored genome sequencing by the JGI: ATCC

11842. High-quality 16S rRNA sequence S000434920 (RDP), AY050171 (Genbank). GOLD ID: Gc00394. GCAT ID: 000216_GCAT. Entrez genome id: 16871. Sequenced strain: ATCC 11842 is type material. Genome sequencing is completed. Number of genomes of this species sequenced 2 (GOLD) 2 (NCBI). N4Lid DOI: 10.1601/nm.5341

Lactobacillus delbrueckii subsp. bulgaricus^{VP} (Orla-Jensen 1919) Weiss et al. 1984. <== *Lactobacillus bulgaricus* (basonym). Synonym links through N4Lid: 10.1601/ex.5341. Source of type material recommended for DOE sponsored genome sequencing by the JGI: ATCC 11842. High-quality 16S rRNA sequence S000434920 (RDP), AY050171 (Genbank). GOLD ID: Gc00394. GCAT ID: 000216_GCAT. Entrez genome id: 16871. Sequenced strain: ATCC 11842 is type material. Genome sequencing is completed. Number of genomes of this species sequenced 2 (GOLD) 2 (NCBI). N4Lid DOI: 10.1601/nm.5322

Lactobacillus delbrueckii subsp. indicus^{VP} Dellaglio et al. 2005. Source of type material recommended for DOE sponsored genome sequencing by the JGI: DSM 15996. High-quality 16S rRNA sequence S000473811 (RDP), AY421720 (Genbank). N4Lid 10.1601/nm.8657

Lactobacillus delbrueckii subsp. lactis^{VP} (Orla-Jensen 1919) Weiss et al. 1984. <== *Lactobacillus lactis* (basonym). Synonym links through N4Lid: 10.1601/ex.5394. Source of type material recommended for DOE sponsored genome sequencing by the JGI: ATCC 12315. High-quality 16S rRNA sequence S000436414 (RDP), M58823 (Genbank). N4Lid DOI: 10.1601/nm.5323

† *Lactobacillus lactis*^{AL} (Orla-Jensen 1919) Bergey et al. 1934. ==> *Lactobacillus delbrueckii subsp. lactis* (new combination). Synonym links through N4Lid: 10.1601/ex.5394. Source of type material recommended for DOE sponsored genome sequencing by the JGI: ATCC 12315. High-quality 16S rRNA sequence S000436414 (RDP), M58823 (Genbank). N4Lid DOI: 10.1601/nm.5394

† *Lactobacillus leichmannii*^{AL} (Henneberg 1903) Bergey et al. 1923. ≈ *Lactobacillus delbrueckii subsp. lactis* (earlier heterotypic synonym), links through 10.1601/nm.5323. Source of type material recommended for DOE sponsored genome sequencing by the JGI: ATCC 4797. N4Lid DOI: 10.1601/nm.5395

Lactobacillus acetotolerans^{VP} Entani et al. 1986. Source of type material recommended for DOE sponsored genome sequencing by the JGI: ATCC 43578. High-quality 16S rRNA sequence S000436392 (RDP), M58801 (Genbank). N4Lid DOI: 10.1601/nm.5324

Lactobacillus acidifarinae^{VP} Vancanneyt et al. 2005. Source of type material recommended for DOE sponsored genome sequencing by the JGI: LMG 22200. High-quality 16S rRNA sequence S000539488 (RDP), AJ632158 (Genbank). N4Lid 10.1601/nm.9306

Lactobacillus acidipiscis^{VP} Tanasupawat et al. 2000. ≈ *Lactobacillus cypricasei* (later heterotypic synonym), links through 10.1601/nm.5325. Source of type material recommended for DOE sponsored genome sequencing by the JGI: CIP 106750. High-quality 16S rRNA sequence S000000171 (RDP), AB023836 (Genbank). N4Lid DOI: 10.1601/nm.5325

† *Lactobacillus cypricasei*^{VP} Lawson et al. 2001. ≈ *Lactobacillus acidipiscis* (earlier heterotypic synonym), links through 10.1601/nm.5325. Source of type material recommended for DOE sponsored genome sequencing by the JGI: ATCC BAA-288. High-quality 16S rRNA sequence S000129411 (RDP), AJ251560 (Genbank). N4Lid DOI: 10.1601/nm.5358

Lactobacillus acidophilus^{AL} Johnson et al. 1980. Source of type material recommended for DOE sponsored genome sequencing by the JGI: ATCC 4356. High-quality 16S rRNA sequence S000436393 (RDP), M58802 (Genbank). GOLD ID: Gc00252. GCAT ID: 000357_GCAT. Entrez genome id: 82. Sequenced strain: ATCC 700396 is from a non-type strain. Genome sequencing is completed. Number of genomes of this species sequenced 1 (GOLD) 1 (NCBI). N4Lid DOI: 10.1601/nm.5326

Lactobacillus agilis^{VP} Weiss et al. 1982. Source of type material recommended for DOE sponsored genome sequencing by the JGI: NRRL B-14856. High-quality 16S rRNA sequence S000436394 (RDP), M58803 (Genbank). N4Lid DOI: 10.1601/nm.5327

Lactobacillus algidus^{VP} Kato et al. 2000. Source of type material recommended for DOE sponsored genome sequencing by the JGI: ATCC BAA-482. High-quality 16S rRNA sequence S000382995 (RDP), AB033209 (Genbank). N4Lid DOI: 10.1601/nm.5328

Lactobacillus alimentarius^{VP} (ex Reuter 1970) Reuter 1983. Source of type material recommended for DOE sponsored genome sequencing by the JGI: ATCC 29643. High-quality 16S rRNA sequence S000436395 (RDP), M58804 (Genbank). N4Lid DOI: 10.1601/nm.5329

- Lactobacillus amylolyticus*^{VP} Bohak et al. 1999. Source of type material recommended for DOE sponsored genome sequencing by the JGI: DSM 11664. High-quality 16S rRNA sequence S000007776 (RDP), Y17361 (Genbank). N4Lid DOI: 10.1601/nm.5330
- Lactobacillus amylophilus*^{VP} Nakamura and Crowell 1981. Source of type material recommended for DOE sponsored genome sequencing by the JGI: ATCC 49845. High-quality 16S rRNA sequence S000436397 (RDP), M58806 (Genbank). N4Lid DOI: 10.1601/nm.5331
- Lactobacillus amylovorus*^{VP} Nakamura 1981. Source of type material recommended for DOE sponsored genome sequencing by the JGI: ATCC 33620. High-quality 16S rRNA sequence S000436396 (RDP), M58805 (Genbank). N4Lid DOI: 10.1601/nm.5332
- Lactobacillus animalis*^{VP} Dent and Williams 1983. Source of type material recommended for DOE sponsored genome sequencing by the JGI: ATCC 35046. High-quality 16S rRNA sequence S000436398 (RDP), M58807 (Genbank). N4Lid DOI: 10.1601/nm.5333
- Lactobacillus antri*^{VP} Roos et al. 2005. Source of type material recommended for DOE sponsored genome sequencing by the JGI: DSM 16041. High-quality 16S rRNA sequence S000473522 (RDP), AY253659 (Genbank). N4Lid 10.1601/nm.8656
- Lactobacillus apodemi*^{VP} Osawa et al. 2006. Source of type material recommended for DOE sponsored genome sequencing by the JGI: DSM 16634. High-quality 16S rRNA sequence S000531194 (RDP), AJ871178 (Genbank). N4Lid DOI: 10.1601/nm.10156
- Lactobacillus aviarius subsp. araffinosus*^{VP} Fujisawa et al. 1986. Source of type material recommended for DOE sponsored genome sequencing by the JGI: ATCC 43235. N4Lid DOI: 10.1601/nm.5336
- Lactobacillus aviarius subsp. aviarius*^{VP} Fujisawa et al. 1985. Source of type material recommended for DOE sponsored genome sequencing by the JGI: ATCC 43234. High-quality 16S rRNA sequence S000436399 (RDP), M58808 (Genbank). N4Lid DOI: 10.1601/nm.5335
- Lactobacillus bif fermentans*^{VP} (ex Pette and van Beynum 1943) Kandler et al. 1983. Source of type material recommended for DOE sponsored genome sequencing by the JGI: ATCC 35409. High-quality 16S rRNA sequence S000436400 (RDP), M58809 (Genbank). N4Lid DOI: 10.1601/nm.5338
- Lactobacillus brevis*^{AL} (Orla-Jensen 1919) Bergey et al. 1934. Source of type material recommended for DOE sponsored genome sequencing by the JGI: ATCC 14869. High-quality 16S rRNA sequence S000436401 (RDP), M58810 (Genbank). GOLD ID: Gc00436. GCAT ID: 000174_GCAT. Entrez genome id: 404. Sequenced strain: ATCC 367 is from a non-type strain. Genome sequencing is completed. Number of genomes of this species sequenced 1 (GOLD) 1 (NCBI). N4Lid DOI: 10.1601/nm.5339
- Lactobacillus buchneri*^{AL} (Henneberg 1903) Bergey et al. 1923. Source of type material recommended for DOE sponsored genome sequencing by the JGI: ATCC 4005. High-quality 16S rRNA sequence S000436402 (RDP), M58811 (Genbank). N4Lid DOI: 10.1601/nm.5340
- Lactobacillus casei subsp. casei*^{AL} (Orla-Jensen 1916) Hansen and Lessel 1971. Source of type material recommended for DOE sponsored genome sequencing by the JGI: ATCC 393. High-quality 16S rRNA sequence S000016651 (RDP), M23928 (Genbank). GOLD ID: Gc00438. GCAT ID: 000172_GCAT. Entrez genome id: 402. Sequenced strain: ATCC 334 is from a non-type strain. Genome sequencing is completed. Number of genomes of this species sequenced 1 (GOLD) 1 (NCBI). N4Lid DOI: 10.1601/nm.5343
- Lactobacillus catenaformis*^{AL} corrig. (Eggerth 1935) Moore and Holdeman 1970. Source of type material recommended for DOE sponsored genome sequencing by the JGI: ATCC 25536. High-quality 16S rRNA sequence S000436093 (RDP), M23729 (Genbank). N4Lid DOI: 10.1601/nm.5348
- Lactobacillus coleohominis*^{VP} Nikolaitchouk et al. 2001. Source of type material recommended for DOE sponsored genome sequencing by the JGI: DSM 14060. High-quality 16S rRNA sequence S000608871 (RDP), AM113776 (Genbank). N4Lid DOI: 10.1601/nm.5350
- Lactobacillus collinoides*^{AL} Carr and Davies 1972. Source of type material recommended for DOE sponsored genome sequencing by the JGI: ATCC 27612. High-quality 16S rRNA sequence S000381770 (RDP), AB005893 (Genbank). N4Lid DOI: 10.1601/nm.5351
- Lactobacillus concavus*^{VP} Tong and Dong 2005. Source of type material recommended for DOE sponsored genome sequencing by the JGI: LMG 22739. High-quality 16S rRNA sequence S000379822 (RDP), AY683322 (Genbank). N4Lid 10.1601/nm.9609

Lactobacillus coryniformis subsp. coryniformis^{AL} Abo-Elnaga and Kandler 1965. Source of type material recommended for DOE sponsored genome sequencing by the JGI: ATCC 25602. High-quality 16S rRNA sequence S000264490 (RDP), AJ575741 (Genbank). N4Lid DOI: 10.1601/nm.5353

Lactobacillus coryniformis subsp. torquens^{AL} Abo-Elnaga and Kandler 1965. Source of type material recommended for DOE sponsored genome sequencing by the JGI: ATCC 25600. N4Lid DOI: 10.1601/nm.5354

Lactobacillus crispatus^{AL} (Brygoo and Aladame 1953) Moore and Holdeman 1970. Source of type material recommended for DOE sponsored genome sequencing by the JGI: ATCC 33820. High-quality 16S rRNA sequence S000009255 (RDP), Y17362 (Genbank). N4Lid DOI: 10.1601/nm.5355

Lactobacillus curvatus subsp. curvatus^{VP} (Troili-Petersson 1903) Abo-Elnaga and Kandler 1965. Source of type material recommended for DOE sponsored genome sequencing by the JGI: ATCC 25601. High-quality 16S rRNA sequence S000608872 (RDP), AM113777 (Genbank). N4Lid DOI: 10.1601/nm.5356

Lactobacillus diolivorans^{VP} Krooneman et al. 2002. Source of type material recommended for DOE sponsored genome sequencing by the JGI: DSM 14421. N4Lid DOI: 10.1601/nm.5359

Lactobacillus equi^{VP} Morotomi et al. 2002. Source of type material recommended for DOE sponsored genome sequencing by the JGI: ATCC BAA-261. High-quality 16S rRNA sequence S000383460 (RDP), AB048833 (Genbank). N4Lid DOI: 10.1601/nm.5362

Lactobacillus farciminis^{VP} (ex Reuter 1970) Reuter 1983. Source of type material recommended for DOE sponsored genome sequencing by the JGI: ATCC 29644. High-quality 16S rRNA sequence S000436408 (RDP), M58817 (Genbank). N4Lid DOI: 10.1601/nm.5363

Lactobacillus fermentum^{AL} Beijerinck 1901. ≈ *Lactobacillus cellobiosus* (later heterotypic synonym), links through 10.1601/nm.5365. Source of type material recommended for DOE sponsored genome sequencing by the JGI: ATCC 11739. High-quality 16S rRNA sequence S000263425 (RDP), AJ575812 (Genbank). N4Lid DOI: 10.1601/nm.5365

† *Lactobacillus cellobiosus*^{AL} Rogosa et al. 1953. ≈ *Lactobacillus fermentum* (earlier heterotypic synonym), links through 10.1601/nm.5365. Source of type material recommended for DOE sponsored genome sequencing by the JGI: ATCC 11739. N4Lid DOI: 10.1601/nm.5349

Lactobacillus fornicalis^{VP} Dicks et al. 2000. Source of type material recommended for DOE sponsored genome sequencing by the JGI: ATCC 700934. High-quality 16S rRNA sequence S000003126 (RDP), Y18654 (Genbank). N4Lid DOI: 10.1601/nm.5366

† *Lactobacillus heterohiochii*^{AL} Kitahara et al. 1957. ≈ *Lactobacillus fructivorans* (earlier heterotypic synonym), links through 10.1601/nm.5367. Source of type material recommended for DOE sponsored genome sequencing by the JGI: ATCC 15435. N4Lid DOI: 10.1601/nm.5377

Lactobacillus fructivorans^{AL} Charlton et al. 1934. ≈ *Lactobacillus heterohiochii* (later heterotypic synonym), links through 10.1601/nm.5367. Source of type material recommended for DOE sponsored genome sequencing by the JGI: ATCC 15435. High-quality 16S rRNA sequence S000436409 (RDP), M58818 (Genbank). N4Lid DOI: 10.1601/nm.5367

† *Lactobacillus trichodes*^{AL} Fornachon et al. 1949. ≈ *Lactobacillus fructivorans* (earlier heterotypic synonym), links through 10.1601/nm.5367. Source of type material recommended for DOE sponsored genome sequencing by the JGI: ATCC 27394. N4Lid DOI: 10.1601/nm.5436

Lactobacillus frumenti^{VP} Müller et al. 2000. Source of type material recommended for DOE sponsored genome sequencing by the JGI: DSM 13145. High-quality 16S rRNA sequence S000126953 (RDP), AJ250074 (Genbank). N4Lid DOI: 10.1601/nm.5369

Lactobacillus fuchuensis^{VP} Sakala et al. 2002. Source of type material recommended for DOE sponsored genome sequencing by the JGI: DSM 14340. High-quality 16S rRNA sequence S000384091 (RDP), AB063479 (Genbank). N4Lid DOI: 10.1601/nm.5370

Lactobacillus gallinarum^{VP} Fujisawa et al. 1992. Source of type material recommended for DOE sponsored genome sequencing by the JGI: ATCC 33199. High-quality 16S rRNA sequence S000011215 (RDP), AJ242968 (Genbank). N4Lid DOI: 10.1601/nm.5371

Lactobacillus gasseri^{VP} Lauer and Kandler 1980. Source of type material recommended for DOE sponsored genome sequencing by the JGI: ATCC 33323. High-quality 16S rRNA sequence S000436411 (RDP), M58820 (Genbank). GOLD ID: Gc00447. GCAT ID: 000165_GCAT. Entrez

genome id: 84. Sequenced strain: ATCC 33323 is type material. Genome sequencing is completed. Number of genomes of this species sequenced 1 (GOLD) 1 (NCBI). N4Lid DOI: 10.1601/nm.5372

Lactobacillus gastricus^{VP} Roos et al. 2005. Source of type material recommended for DOE sponsored genome sequencing by the JGI: DSM 16045. High-quality 16S rRNA sequence S000473521 (RDP), AY253658 (Genbank). N4Lid 10.1601/nm.8658

Lactobacillus graminis^{VP} Beck et al. 1989. Source of type material recommended for DOE sponsored genome sequencing by the JGI: ATCC 51150. High-quality 16S rRNA sequence S000608873 (RDP), AM113778 (Genbank). N4Lid DOI: 10.1601/nm.5373

Lactobacillus hammesii^{VP} Valcheva et al. 2005. Source of type material recommended for DOE sponsored genome sequencing by the JGI: DSM 16381. High-quality 16S rRNA sequence S000539489 (RDP), AJ632219 (Genbank). N4Lid 10.1601/nm.9321

Lactobacillus hamsteri^{VP} Mitsuka and Fujisawa 1988. Source of type material recommended for DOE sponsored genome sequencing by the JGI: ATCC 43851. High-quality 16S rRNA sequence S000019191 (RDP), AJ306298 (Genbank). N4Lid DOI: 10.1601/nm.5375

Lactobacillus harbinensis^{VP} Miyamoto et al. 2006. Source of type material recommended for DOE sponsored genome sequencing by the JGI: DSM 16991. High-quality 16S rRNA sequence S000606680 (RDP), AB196123 (Genbank). N4Lid 10.1601/nm.9813

Lactobacillus helveticus^{AL} (Orla-Jensen 1919) Bergey et al. 1925. ≈ *Lactobacillus suntoryeus* (later heterotypic synonym), links through 10.1601/nm.5376. Source of type material recommended for DOE sponsored genome sequencing by the JGI: ATCC 15009. High-quality 16S rRNA sequence S000608874 (RDP), AM113779 (Genbank). GOLD ID: Gi00315. GCAT ID: 001150_GCAT. Sequenced strain: CNRZ32 is from a non-type strain. Genome sequencing is incomplete. Number of genomes of this species sequenced 2 (GOLD) 2 (NCBI). N4Lid DOI: 10.1601/nm.5376

† *Lactobacillus suntoryeus*^{VP} Cachat and Priest 2005. ≈ *Lactobacillus helveticus* (earlier heterotypic synonym), links through 10.1601/nm.5376. Source of type material recommended for DOE sponsored genome sequencing by the JGI: NCIMB 14005. N4Lid 10.1601/nm.8664

Lactobacillus hilgardii^{AL} Douglas and Cruess 1936. Source of type material recommended for DOE sponsored genome sequencing by the JGI: ATCC 8290. High-quality 16S rRNA sequence S000436412 (RDP), M58821 (Genbank). N4Lid DOI: 10.1601/nm.5378

Lactobacillus homohiochii^{AL} Kitahara et al. 1957. Source of type material recommended for DOE sponsored genome sequencing by the JGI: ATCC 15434. High-quality 16S rRNA sequence S000608875 (RDP), AM113780 (Genbank). N4Lid DOI: 10.1601/nm.5379

Lactobacillus iners^{VP} Falsen et al. 1999. Source of type material recommended for DOE sponsored genome sequencing by the JGI: DSM 13335. N4Lid DOI: 10.1601/nm.5380

Lactobacillus ingluviei^{VP} Baele et al. 2003. ≈ *Lactobacillus thermotolerans* (later heterotypic synonym), links through 10.1601/nm.5381. Source of type material recommended for DOE sponsored genome sequencing by the JGI: CCUG 45722. High-quality 16S rRNA sequence S000391784 (RDP), AF333975 (Genbank). N4Lid DOI: 10.1601/nm.5381

† *Lactobacillus thermotolerans*^{VP} Niamsup et al. 2003. ≈ *Lactobacillus ingluviei* (earlier heterotypic synonym), links through 10.1601/nm.5381. Source of type material recommended for DOE sponsored genome sequencing by the JGI: DSM 14792. High-quality 16S rRNA sequence S000391442 (RDP), AF317702 (Genbank). N4Lid DOI: 10.1601/nm.5435

Lactobacillus intestinalis^{VP} (ex Hemme 1974) Fujisawa et al. 1990. Source of type material recommended for DOE sponsored genome sequencing by the JGI: ATCC 49335. High-quality 16S rRNA sequence S000001698 (RDP), AJ306299 (Genbank). N4Lid DOI: 10.1601/nm.5382

Lactobacillus jensenii^{AL} Gasser et al. 1970. Source of type material recommended for DOE sponsored genome sequencing by the JGI: ATCC 25258. High-quality 16S rRNA sequence S000389918 (RDP), AF243176 (Genbank). N4Lid DOI: 10.1601/nm.5383

Lactobacillus johnsonii^{VP} Fujisawa et al. 1992. Source of type material recommended for DOE sponsored genome sequencing by the JGI: ATCC 33200. High-quality 16S rRNA sequence S000006242 (RDP), AJ002515 (Genbank). GOLD ID: Gc00171. GCAT ID: 000439_GCAT. Entrez genome id: 9638. Sequenced strain: NCC 533 is from a non-type strain. Genome sequencing is completed. Number of genomes of this species sequenced 1 (GOLD) 1 (NCBI). N4Lid DOI: 10.1601/nm.5384

- Lactobacillus kalixensis*^{VP} Roos et al. 2005. Source of type material recommended for DOE sponsored genome sequencing by the JGI: DSM 16043. High-quality 16S rRNA sequence S000473520 (RDP), AY253657 (Genbank). N4Lid 10.1601/nm.8659
- Lactobacillus kefiranofaciens subsp. kefiranofaciens*^{VP} Fujisawa et al. 1988. Source of type material recommended for DOE sponsored genome sequencing by the JGI: ATCC 43761. High-quality 16S rRNA sequence S000608876 (RDP), AM113781 (Genbank). N4Lid DOI: 10.1601/nm.5386
- Lactobacillus kefiranofaciens subsp. kefirgranum*^{VP} (Takizawa et al. 1994) Vancanneyt et al. 2004. <== *Lactobacillus kefirgranum* (basonym). Synonym links through N4Lid: 10.1601/ex.5389. Source of type material recommended for DOE sponsored genome sequencing by the JGI: ATCC 51647. High-quality 16S rRNA sequence S000608877 (RDP), AM113782 (Genbank). N4Lid DOI: 10.1601/nm.5388
- † *Lactobacillus kefirgranum*^{VP} Takizawa et al. 1994. ==> *Lactobacillus kefiranofaciens subsp. kefirgranum* (new combination). Synonym links through N4Lid: 10.1601/ex.5389. Source of type material recommended for DOE sponsored genome sequencing by the JGI: ATCC 51647. High-quality 16S rRNA sequence S000608877 (RDP), AM113782 (Genbank). N4Lid DOI: 10.1601/nm.5389
- Lactobacillus kefiri*^{VP} corrig. Kandler and Kunath 1983. Source of type material recommended for DOE sponsored genome sequencing by the JGI: ATCC 35411. High-quality 16S rRNA sequence S000543973 (RDP), AJ621553 (Genbank). N4Lid DOI: 10.1601/nm.5390
- Lactobacillus kimchii*^{VP} Yoon et al. 2000. Source of type material recommended for DOE sponsored genome sequencing by the JGI: ATCC BAA-131. High-quality 16S rRNA sequence S000388793 (RDP), AF183558 (Genbank). N4Lid DOI: 10.1601/nm.5391
- Lactobacillus kitasatonis*^{VP} Mukai et al. 2003. Source of type material recommended for DOE sponsored genome sequencing by the JGI: JCM 1039. High-quality 16S rRNA sequence S000252208 (RDP), AB107638 (Genbank). N4Lid DOI: 10.1601/nm.5392
- Lactobacillus kunkeei*^{VP} Edwards et al. 1998. Source of type material recommended for DOE sponsored genome sequencing by the JGI: ATCC 700308. High-quality 16S rRNA sequence S000004837 (RDP), Y11374 (Genbank). N4Lid DOI: 10.1601/nm.5393
- Lactobacillus lindneri*^{VP} (ex Henneberg 1901) Back et al. 1997. Source of type material recommended for DOE sponsored genome sequencing by the JGI: DSM 20690. High-quality 16S rRNA sequence S000414771 (RDP), X95421 (Genbank). N4Lid DOI: 10.1601/nm.5396
- Lactobacillus malefermentans*^{VP} (ex Russell and Walker 1953) Farrow et al. 1989. Source of type material recommended for DOE sponsored genome sequencing by the JGI: ATCC 49373. High-quality 16S rRNA sequence S000608878 (RDP), AM113783 (Genbank). N4Lid DOI: 10.1601/nm.5397
- Lactobacillus manihotivorans*^{VP} Morlon-Guyot et al. 1998. Source of type material recommended for DOE sponsored genome sequencing by the JGI: DSM 13343. High-quality 16S rRNA sequence S000386800 (RDP), AF000162 (Genbank). N4Lid DOI: 10.1601/nm.5400
- Lactobacillus mindensis*^{VP} Ehrmann et al. 2003. Source of type material recommended for DOE sponsored genome sequencing by the JGI: DSM 14500. High-quality 16S rRNA sequence S000126685 (RDP), AJ313530 (Genbank). N4Lid DOI: 10.1601/nm.5401
- Lactobacillus mucosae*^{VP} Roos et al. 2000. Source of type material recommended for DOE sponsored genome sequencing by the JGI: DSM 13345. High-quality 16S rRNA sequence S000387302 (RDP), AF126738 (Genbank). N4Lid DOI: 10.1601/nm.5404
- Lactobacillus murinus*^{VP} Hemme et al. 1982. Source of type material recommended for DOE sponsored genome sequencing by the JGI: ATCC 35020. High-quality 16S rRNA sequence S000436417 (RDP), M58826 (Genbank). N4Lid DOI: 10.1601/nm.5405
- Lactobacillus nagelii*^{VP} Edwards et al. 2000. Source of type material recommended for DOE sponsored genome sequencing by the JGI: ATCC 700692. N4Lid DOI: 10.1601/nm.5406
- Lactobacillus nantensis*^{VP} Valcheva et al. 2006. Source of type material recommended for DOE sponsored genome sequencing by the JGI: DSM 16982. High-quality 16S rRNA sequence S000505072 (RDP), AY690834 (Genbank). N4Lid 10.1601/nm.9930
- Lactobacillus oligofermentans*^{VP} Koort et al. 2005. Source of type material recommended for DOE sponsored genome sequencing by the JGI: DSM 15707. High-quality 16S rRNA sequence S000575017 (RDP), AY733084 (Genbank). N4Lid 10.1601/nm.9687

- Lactobacillus oris*^{VP} Farrow and Collins 1988. Source of type material recommended for DOE sponsored genome sequencing by the JGI: ATCC 49062. High-quality 16S rRNA sequence S000002363 (RDP), X94229 (Genbank). N4Lid DOI: 10.1601/nm.5407
- Lactobacillus panis*^{VP} Wiese et al. 1996. Source of type material recommended for DOE sponsored genome sequencing by the JGI: DSM 6035. High-quality 16S rRNA sequence S000000152 (RDP), X94230 (Genbank). N4Lid DOI: 10.1601/nm.5408
- Lactobacillus pantheris*^{VP} Liu and Dong 2002. Source of type material recommended for DOE sponsored genome sequencing by the JGI: JCM 12539. High-quality 16S rRNA sequence S000393517 (RDP), AF413523 (Genbank). N4Lid DOI: 10.1601/nm.5409
- Lactobacillus parabrevis*^{VP} Vancanneyt et al. 2006. Source of type material recommended for DOE sponsored genome sequencing by the JGI: ATCC 53295. High-quality 16S rRNA sequence S000652838 (RDP), AM158249 (Genbank). N4Lid 10.1601/nm.9787
- Lactobacillus parabuchneri*^{VP} Farrow et al. 1989. ≈ *Lactobacillus ferintoshensis* (later heterotypic synonym), links through 10.1601./nm.5410. Source of type material recommended for DOE sponsored genome sequencing by the JGI: ATCC 49374. High-quality 16S rRNA sequence S000540100 (RDP), AJ970317 (Genbank). N4Lid DOI: 10.1601/nm.5410
- † *Lactobacillus ferintoshensis*^{VP} Simpson et al. 2002. ≈ *Lactobacillus parabuchneri* (earlier heterotypic synonym), links through 10.1601./nm.5410. Source of type material recommended for DOE sponsored genome sequencing by the JGI: CIP 106749. High-quality 16S rRNA sequence S000390495 (RDP), AF275311 (Genbank). N4Lid DOI: 10.1601/nm.5364
- Lactobacillus paracasei subsp. paracasei*^{VP} Collins et al. 1989. ≈ *Lactobacillus casei subsp. alactosus* (later heterotypic synonym), links through 10.1601./nm.5411. Source of type material recommended for DOE sponsored genome sequencing by the JGI: ATCC 25302. High-quality 16S rRNA sequence S000413948 (RDP), D79212 (Genbank). N4Lid DOI: 10.1601/nm.5411
- † *Lactobacillus casei subsp. alactosus*^{AL} Mills and Lessel 1973. ≈ *Lactobacillus paracasei subsp. paracasei* (earlier heterotypic synonym), links through 10.1601./nm.5411. Source of type material recommended for DOE sponsored genome sequencing by the JGI: JCM 8130. High-quality 16S rRNA sequence S000413948 (RDP), D79212 (Genbank). N4Lid DOI: 10.1601/nm.5344
- † *Lactobacillus casei subsp. pseudoplantarium*^{AL} Abo-Elnaga and Kandler 1965. ≈ *Lactobacillus paracasei subsp. paracasei* (earlier heterotypic synonym), links through 10.1601./nm.5411. Source of type material recommended for DOE sponsored genome sequencing by the JGI: JCM 8130. High-quality 16S rRNA sequence S000413948 (RDP), D79212 (Genbank). N4Lid DOI: 10.1601/nm.5345
- Lactobacillus paracasei subsp. tolerans*^{VP} (Abo-Elnaga and Kandler 1965) Collins et al. 1989. <== *Lactobacillus casei subsp. tolerans* (basonym). Synonym links through N4Lid: 10.1601/ex.5347. Source of type material recommended for DOE sponsored genome sequencing by the JGI: ATCC 25599. N4Lid DOI: 10.1601/nm.5412
- † *Lactobacillus casei subsp. tolerans*^{AL} Abo-Elnaga and Kandler 1965. ==> *Lactobacillus paracasei subsp. tolerans* (new combination). Synonym links through N4Lid: 10.1601/ex.5347. Source of type material recommended for DOE sponsored genome sequencing by the JGI: ATCC 25599. N4Lid DOI: 10.1601/nm.5347
- Lactobacillus paracollinoides*^{VP} Suzuki et al. 2004. Source of type material recommended for DOE sponsored genome sequencing by the JGI: DSM 15502. High-quality 16S rRNA sequence S000539630 (RDP), AJ786665 (Genbank). N4Lid DOI: 10.1601/nm.5413
- Lactobacillus parakefiri*^{VP} corrig. Takizawa et al. 1994. Source of type material recommended for DOE sponsored genome sequencing by the JGI: ATCC 51648. High-quality 16S rRNA sequence S000434537 (RDP), AY026750 (Genbank). N4Lid DOI: 10.1601/nm.5414
- Lactobacillus paralimentarius*^{VP} Cai et al. 1999. Source of type material recommended for DOE sponsored genome sequencing by the JGI: DSM 13238. High-quality 16S rRNA sequence S000010988 (RDP), AJ417500 (Genbank). N4Lid DOI: 10.1601/nm.5415
- Lactobacillus paraplantarum*^{VP} Curk et al. 1996. Source of type material recommended for DOE sponsored genome sequencing by the JGI: ATCC 700211. High-quality 16S rRNA sequence S000000066 (RDP), AJ306297 (Genbank). N4Lid DOI: 10.1601/nm.5416

Lactobacillus pentosus^{VP} (ex Fred et al. 1921) Zanoni et al. 1987. Source of type material recommended for DOE sponsored genome sequencing by the JGI: ATCC 8041. High-quality 16S rRNA sequence S000413947 (RDP), D79211 (Genbank). N4Lid DOI: 10.1601/nm.5417

Lactobacillus perolens^{VP} Back et al. 2000. Source of type material recommended for DOE sponsored genome sequencing by the JGI: DSM 12744. High-quality 16S rRNA sequence S000005601 (RDP), Y19167 (Genbank). N4Lid DOI: 10.1601/nm.5418

† *Lactobacillus arizonensis*^{VP} Swezey et al. 2000. ≈ *Lactobacillus plantarum subsp. plantarum* (earlier heterotypic synonym), links through 10.1601./nm.5420. Source of type material recommended for DOE sponsored genome sequencing by the JGI: ATCC BAA-171. High-quality 16S rRNA sequence S000428749 (RDP), AF093757 (Genbank). N4Lid DOI: 10.1601/nm.5334

Lactobacillus plantarum subsp. plantarum^{VP} (Orla-Jensen 1919) Bergey et al. 1923. ≈ *Lactobacillus arizonensis* (later heterotypic synonym), links through 10.1601./nm.5420. Source of type material recommended for DOE sponsored genome sequencing by the JGI: ATCC 14917. High-quality 16S rRNA sequence S000413946 (RDP), D79210 (Genbank). GOLD ID: Gc00122. GCAT ID: 000488_GCAT. Entrez genome id: 356. Sequenced strain: WCFS1 is from a non-type strain. Genome sequencing is completed. Number of genomes of this species sequenced 1 (GOLD) 1 (NCBI). N4Lid DOI: 10.1601/nm.5420

Lactobacillus plantarum subsp. argentoratensis^{VP} Bringel et al. 2005. Source of type material recommended for DOE sponsored genome sequencing by the JGI: DSM 16365. High-quality 16S rRNA sequence S000570459 (RDP), AJ640078 (Genbank). N4Lid 10.1601/nm.9504

Lactobacillus pontis^{VP} Vogel et al. 1994. Source of type material recommended for DOE sponsored genome sequencing by the JGI: ATCC 51518. High-quality 16S rRNA sequence S000446732 (RDP), AJ422032 (Genbank). N4Lid DOI: 10.1601/nm.5421

Lactobacillus psittaci^{VP} Lawson et al. 2001. Source of type material recommended for DOE sponsored genome sequencing by the JGI: DSM 15354. N4Lid DOI: 10.1601/nm.5422

Lactobacillus rennini^{VP} Chenoll et al. 2006. Source of type material recommended for DOE sponsored genome sequencing by the JGI: DSM 20253. High-quality 16S rRNA sequence S000376749 (RDP), AJ576007 (Genbank). N4Lid 10.1601/nm.9886

Lactobacillus reuteri^{VP} Kandler et al. 1982. Source of type material recommended for DOE sponsored genome sequencing by the JGI: ATCC 23272. High-quality 16S rRNA sequence S000414529 (RDP), L23507 (Genbank). GOLD ID: Gi00762. GCAT ID: 001152_GCAT. Entrez genome id: 13431. Sequenced strain: DSM 20016 is type material. Genome sequencing is incomplete. Number of genomes of this species sequenced 4 (GOLD) 2 (NCBI). N4Lid DOI: 10.1601/nm.5423

Lactobacillus rhamnosus^{VP} (Hansen 1968) Collins et al. 1989. <== *Lactobacillus casei subsp. rhamnosus* (basonym). Synonym links through N4Lid: 10.1601/ex.5346. Source of type material recommended for DOE sponsored genome sequencing by the JGI: ATCC 7469. GOLD ID: Gi00316. GCAT ID: 001154_GCAT. Entrez genome id: 13434. Sequenced strain: HN001 is from a non-type strain. Genome sequencing is incomplete. Number of genomes of this species sequenced 1 (GOLD) 1 (NCBI). N4Lid DOI: 10.1601/nm.5424

† *Lactobacillus casei subsp. rhamnosus*^{AL} Hansen 1968. ==> *Lactobacillus rhamnosus* (new combination). Synonym links through N4Lid: 10.1601/ex.5346. Source of type material recommended for DOE sponsored genome sequencing by the JGI: ATCC 7469. GOLD ID: Gi00316. GCAT ID: 001154_GCAT. Entrez genome id: 13434. Sequenced strain: HN001 is from a non-type strain. Genome sequencing is incomplete. Number of genomes of this species sequenced 1 (GOLD) 1 (NCBI). N4Lid DOI: 10.1601/nm.5346

Lactobacillus rogosae^{AL} Holdeman and Moore 1974. Source of type material recommended for DOE sponsored genome sequencing by the JGI: ATCC 27753. N4Lid DOI: 10.1601/nm.5426

Lactobacillus rossiae^{VP} corrig. Corsetti et al. 2005. Source of type material recommended for DOE sponsored genome sequencing by the JGI: ATCC BAA-822. High-quality 16S rRNA sequence S000471091 (RDP), AJ564009 (Genbank). N4Lid 10.1601/nm.8660

Lactobacillus ruminis^{AL} Sharpe et al. 1973. Source of type material recommended for DOE sponsored genome sequencing by the JGI: ATCC 27780. High-quality 16S rRNA sequence S000436419 (RDP), M58828 (Genbank). N4Lid DOI: 10.1601/nm.5427

Lactobacillus sakei subsp. carnosus^{VP} corrig. Torriani et al. 1996. ≈ *Lactobacillus curvatus subsp. melibiosus* (later heterotypic synonym), links through 10.1601./nm.5429. Source of type

material recommended for DOE sponsored genome sequencing by the JGI: CCUG 31331. High-quality 16S rRNA sequence S000417785 (RDP), AY204892 (Genbank). N4Lid DOI: 10.1601/nm.5429

† *Lactobacillus curvatus subsp. melibiosus*^{VP} Torriani et al. 1996. ≈ *Lactobacillus sakei subsp. camosus* (earlier heterotypic synonym), links through 10.1601/nm.5429. Source of type material recommended for DOE sponsored genome sequencing by the JGI: CCUG 34545. High-quality 16S rRNA sequence S000417782 (RDP), AY204889 (Genbank). N4Lid DOI: 10.1601/nm.5357

Lactobacillus sakei subsp. sakei^{VP} corrig. Katagiri et al. 1934. Source of type material recommended for DOE sponsored genome sequencing by the JGI: ATCC 15521. High-quality 16S rRNA sequence S000608879 (RDP), AM113784 (Genbank). GOLD ID: Gc00318. GCAT ID: 000292_GCAT. Entrez genome id: 13435. Sequenced strain: 23K is from a non-type strain. Genome sequencing is completed. Number of genomes of this species sequenced 1 (GOLD) 1 (NCBI). N4Lid DOI: 10.1601/nm.5428

† *Lactobacillus saerimneri*^{VP} Pedersen and Roos 2004. ≈ *Lactobacillus bavaricus* (earlier heterotypic synonym), links through 10.1601/nm.5428. Source of type material recommended for DOE sponsored genome sequencing by the JGI: DSM 16049. High-quality 16S rRNA sequence S000546730 (RDP), AY255802 (Genbank). N4Lid 10.1601/nm.8661

† *Lactobacillus bavaricus*^{VP} Stetter and Stetter 1980. ≈ *Lactobacillus sakei subsp. sakei* (earlier heterotypic synonym), links through 10.1601/nm.5428. Source of type material recommended for DOE sponsored genome sequencing by the JGI: ATCC 31063. N4Lid DOI: 10.1601/nm.5337

Lactobacillus salivarius subsp. salicinius^{AL} Rogosa et al. 1953. Source of type material recommended for DOE sponsored genome sequencing by the JGI: ATCC 11742. N4Lid DOI: 10.1601/nm.5431

Lactobacillus salivarius subsp. salivarius^{AL} Rogosa et al. 1953. Source of type material recommended for DOE sponsored genome sequencing by the JGI: ATCC 11741. High-quality 16S rRNA sequence S000428681 (RDP), AF089108 (Genbank). GOLD ID: Gc00362. GCAT ID: 000248_GCAT. Entrez genome id: 16244. Sequenced strain: UCC118 is from a non-type strain. Genome sequencing is completed. Number of genomes of this species sequenced 1 (GOLD) 1 (NCBI). N4Lid DOI: 10.1601/nm.5430

Lactobacillus sanfranciscensis^{VP} corrig. (ex Kline and Sugihara 1971) Weiss and Schillinger 1984. Source of type material recommended for DOE sponsored genome sequencing by the JGI: ATCC 27651. High-quality 16S rRNA sequence S000003125 (RDP), X76327 (Genbank). N4Lid DOI: 10.1601/nm.5432

Lactobacillus satsumensis^{VP} Endo and Okada 2005. Source of type material recommended for DOE sponsored genome sequencing by the JGI: DSM 16230. High-quality 16S rRNA sequence S000469602 (RDP), AB154519 (Genbank). N4Lid 10.1601/nm.8662

Lactobacillus sharpeae^{VP} Weiss et al. 1982. Source of type material recommended for DOE sponsored genome sequencing by the JGI: ATCC 49974. High-quality 16S rRNA sequence S000436422 (RDP), M58831 (Genbank). N4Lid DOI: 10.1601/nm.5433

Lactobacillus siliginis^{VP} Aslam et al. 2006. Source of type material recommended for DOE sponsored genome sequencing by the JGI: KCTC 3985. High-quality 16S rRNA sequence S000612791 (RDP), DQ168027 (Genbank). N4Lid DOI: 10.1601/nm.10280

Lactobacillus sobrius^{VP} Konstantinov et al. 2006. Source of type material recommended for DOE sponsored genome sequencing by the JGI: DSM 16698. High-quality 16S rRNA sequence S000630964 (RDP), AY700063 (Genbank). N4Lid 10.1601/nm.9829

Lactobacillus spicheri^{VP} Meroth et al. 2004. Source of type material recommended for DOE sponsored genome sequencing by the JGI: DSM 15429. High-quality 16S rRNA sequence S000277165 (RDP), AJ534844 (Genbank). N4Lid 10.1601/nm.8663

Lactobacillus suebicus^{VP} Kleynmans et al. 1989. Source of type material recommended for DOE sponsored genome sequencing by the JGI: ATCC 49375. High-quality 16S rRNA sequence S000263021 (RDP), AJ306403 (Genbank). N4Lid DOI: 10.1601/nm.5434

Lactobacillus ultunensis^{VP} Roos et al. 2005. Source of type material recommended for DOE sponsored genome sequencing by the JGI: DSM 16047. N4Lid 10.1601/nm.8665

† *Lactobacillus durianis*^{VP} Leisner et al. 2002. ≈ *Lactobacillus vaccinnostercus* (earlier heterotypic synonym), links through 10.1601/nm.5438. Source of type material recommended for

DOE sponsored genome sequencing by the JGI: CCUG 45405. High-quality 16S rRNA sequence S000099372 (RDP), AJ315640 (Genbank). N4Lid DOI: 10.1601/nm.5361

Lactobacillus vaccinoferus^{VP} Kozaki and Okada 1983. ≈ *Lactobacillus durianis* (later heterotypic synonym), links through 10.1601/nm.5438. Source of type material recommended for DOE sponsored genome sequencing by the JGI: ATCC 33310. High-quality 16S rRNA sequence S000608881 (RDP), AM113786 (Genbank). N4Lid DOI: 10.1601/nm.5438

Lactobacillus vaginalis^{VP} Embley et al. 1989. Source of type material recommended for DOE sponsored genome sequencing by the JGI: ATCC 49540. High-quality 16S rRNA sequence S000001164 (RDP), X61136 (Genbank). N4Lid DOI: 10.1601/nm.5439

Lactobacillus versmoldensis^{VP} Kröckel et al. 2003. Source of type material recommended for DOE sponsored genome sequencing by the JGI: ATCC BAA-478. High-quality 16S rRNA sequence S000085848 (RDP), AJ496791 (Genbank). N4Lid DOI: 10.1601/nm.5440

Lactobacillus vini^{VP} Rodas et al. 2006. Source of type material recommended for DOE sponsored genome sequencing by the JGI: DSM 20605. High-quality 16S rRNA sequence S000376751 (RDP), AJ576009 (Genbank). N4Lid DOI: 10.1601/nm.9927

Lactobacillus vitulinus^{AL} Sharpe et al. 1973. Source of type material recommended for DOE sponsored genome sequencing by the JGI: ATCC 27783. High-quality 16S rRNA sequence S000436091 (RDP), M23727 (Genbank). N4Lid DOI: 10.1601/nm.5442

Lactobacillus yamanashiensis subsp. mali^{VP} (Carr and Davies 1970) Nonomura 1983. <== *Lactobacillus mali* (basonym). Synonym links through N4Lid: 10.1601/ex.5398. Source of type material recommended for DOE sponsored genome sequencing by the JGI: ATCC 27053. N4Lid DOI: 10.1601/nm.5445

† *Lactobacillus mali*^{AL} Carr and Davies 1970. ==> *Lactobacillus yamanashiensis subsp. mali* (new combination). Synonym links through N4Lid: 10.1601/ex.5398. Source of type material recommended for DOE sponsored genome sequencing by the JGI: ATCC 27053. High-quality 16S rRNA sequence S000436415 (RDP), M58824 (Genbank). N4Lid DOI: 10.1601/nm.5398

Lactobacillus yamanashiensis subsp. yamanashiensis^{VP} (ex Nonomura et al. 1965) Nonomura 1983. Source of type material recommended for DOE sponsored genome sequencing by the JGI: ATCC 27304. N4Lid DOI: 10.1601/nm.5444

Lactobacillus zae^{VP} (ex Kuznetsov 1959) Dicks et al. 1996. Source of type material recommended for DOE sponsored genome sequencing by the JGI: ATCC 15820. High-quality 16S rRNA sequence S000009879 (RDP), D86516 (Genbank). N4Lid DOI: 10.1601/nm.5446

Lactobacillus zymae^{VP} Vancanneyt et al. 2005. Source of type material recommended for DOE sponsored genome sequencing by the JGI: LMG 22198. High-quality 16S rRNA sequence S000539487 (RDP), AJ632157 (Genbank). N4Lid DOI: 10.1601/nm.9305

Genus *Paralactobacillus*^{VP} Leisner et al. 2000. N4Lid DOI: 10.1601/nm.5447

Paralactobacillus selangorensis^{VP} Leisner et al. 2000. Source of type material recommended for DOE sponsored genome sequencing by the JGI: ATCC BAA-66. High-quality 16S rRNA sequence S000428077 (RDP), AF049745 (Genbank). N4Lid DOI: 10.1601/nm.5448

Genus *Pediococcus*^{AL} Claussen 1903. N4Lid DOI: 10.1601/nm.5449

Pediococcus damnosus^{AL} Claussen 1903. Source of type material recommended for DOE sponsored genome sequencing by the JGI: ATCC 29358. High-quality 16S rRNA sequence S000414170 (RDP), D87678 (Genbank). N4Lid DOI: 10.1601/nm.5450

Pediococcus acidilactici^{AL} Lindner 1887. Source of type material recommended for DOE sponsored genome sequencing by the JGI: ATCC 33314. High-quality 16S rRNA sequence S000436424 (RDP), M58833 (Genbank). N4Lid DOI: 10.1601/nm.5451

Pediococcus cellicola^{VP} Zhang et al. 2005. Source of type material recommended for DOE sponsored genome sequencing by the JGI: LMG 22956. High-quality 16S rRNA sequence S000515179 (RDP), AY956788 (Genbank). N4Lid DOI: 10.1601/nm.9605

Pediococcus claussenii^{VP} Dobson et al. 2002. Source of type material recommended for DOE sponsored genome sequencing by the JGI: ATCC BAA-344. High-quality 16S rRNA sequence S000539469 (RDP), AJ621555 (Genbank). N4Lid DOI: 10.1601/nm.5452

Pediococcus dextrinicus^{AL} (Coster and White 1964) Back 1978. Source of type material recommended for DOE sponsored genome sequencing by the JGI: ATCC 33087. High-quality 16S rRNA sequence S000414171 (RDP), D87679 (Genbank). N4Lid DOI: 10.1601/nm.5453

Pediococcus inopinatus^{VP} Back 1988. Source of type material recommended for DOE sponsored genome sequencing by the JGI: ATCC 49902. High-quality 16S rRNA sequence S000006708 (RDP), AJ271383 (Genbank). N4Lid DOI: 10.1601/nm.5455

Pediococcus parvulus^{AL} Gunther and White 1961. Source of type material recommended for DOE sponsored genome sequencing by the JGI: ATCC 19371. High-quality 16S rRNA sequence S000414220 (RDP), D88528 (Genbank). N4Lid DOI: 10.1601/nm.5456

Pediococcus pentosaceus^{AL} Mees 1934. Source of type material recommended for DOE sponsored genome sequencing by the JGI: ATCC 33316. High-quality 16S rRNA sequence S000436425 (RDP), M58834 (Genbank). GOLD ID: Gc00439. GCAT ID: 000171_GCAT. Entrez genome id: 398. Sequenced strain: ATCC 25745 is from a non-type strain. Genome sequencing is completed. Number of genomes of this species sequenced 1 (GOLD) 1 (NCBI). N4Lid DOI: 10.1601/nm.5457

Pediococcus stilesii^{VP} Franz et al. 2006. Source of type material recommended for DOE sponsored genome sequencing by the JGI: CCUG 51290. High-quality 16S rRNA sequence S000642986 (RDP), AJ973157 (Genbank). N4Lid 10.1601/nm.9879

Family "Aerococcaceae" N4Lid DOI: 10.1601/nm.5459

Genus *Aerococcus*^{AL} Williams et al. 1953. N4Lid DOI: 10.1601/nm.5460

Aerococcus viridans^{AL} Williams et al. 1953. Source of type material recommended for DOE sponsored genome sequencing by the JGI: ATCC 11563. High-quality 16S rRNA sequence S000436389 (RDP), M58797 (Genbank). N4Lid DOI: 10.1601/nm.5461

Aerococcus christensenii^{VP} Collins et al. 1999. Source of type material recommended for DOE sponsored genome sequencing by the JGI: CCUG 28831. High-quality 16S rRNA sequence S000127667 (RDP), Y17005 (Genbank). N4Lid DOI: 10.1601/nm.5462

Aerococcus sanguinicola^{VP} corrig. Lawson et al. 2001. Source of type material recommended for DOE sponsored genome sequencing by the JGI: ATCC BAA-465. High-quality 16S rRNA sequence S000130252 (RDP), AJ276512 (Genbank). N4Lid DOI: 10.1601/nm.5463

Aerococcus urinae^{VP} Aguirre and Collins 1992. Source of type material recommended for DOE sponsored genome sequencing by the JGI: ATCC 51268. High-quality 16S rRNA sequence S000436724 (RDP), M77819 (Genbank). N4Lid DOI: 10.1601/nm.5464

Aerococcus urinaeequi^{VP} (Garvie 1988) Felis et al. 2005. <== *Pediococcus urinaeequi* (**basonym**). Synonym links through N4Lid: 10.1601/ex.5458. Source of type material recommended for DOE sponsored genome sequencing by the JGI: ATCC 29723. High-quality 16S rRNA sequence S000539469 (RDP), AJ621555 (Genbank). N4Lid 10.1601/nm.9263

† *Pediococcus urinaeequi*^{VP} (ex Mees 1934) Garvie 1988. ==> *Aerococcus urinaeequi* (**new combination**). Synonym links through N4Lid: 10.1601/ex.5458. Source of type material recommended for DOE sponsored genome sequencing by the JGI: ATCC 29723. High-quality 16S rRNA sequence S000539469 (RDP), AJ621555 (Genbank). N4Lid DOI: 10.1601/nm.5458

Aerococcus urinaehominis^{VP} Lawson et al. 2001. Source of type material recommended for DOE sponsored genome sequencing by the JGI: ATCC BAA-464. High-quality 16S rRNA sequence S000129479 (RDP), AJ278341 (Genbank). N4Lid DOI: 10.1601/nm.5465

Genus *Abiotrophia*^{VP} Kawamura et al. 1995. N4Lid DOI: 10.1601/nm.5466

Abiotrophia defectiva^{VP} (Bouvet et al. 1989) Kawamura et al. 1995. <== *Streptococcus defectivus* (**basonym**). Synonym links through N4Lid: 10.1601/ex.5623. Source of type material recommended for DOE sponsored genome sequencing by the JGI: ATCC 49176. High-quality 16S rRNA sequence S000413824 (RDP), D50541 (Genbank). N4Lid DOI: 10.1601/nm.5467

† *Streptococcus defectivus*^{VP} Bouvet et al. 1989. ==> *Abiotrophia defectiva* (**new combination**). Synonym links through N4Lid: 10.1601/ex.5623. Source of type material recommended for DOE sponsored genome sequencing by the JGI: ATCC 49176. High-quality 16S rRNA sequence S000413824 (RDP), D50541 (Genbank). N4Lid DOI: 10.1601/nm.5623

Genus *Dolosicoccus*^{VP} Collins et al. 1999. N4Lid DOI: 10.1601/nm.5471

Dolosicoccus paucivorans^{VP} Collins et al. 1999. Source of type material recommended for DOE sponsored genome sequencing by the JGI: ATCC BAA-56. High-quality 16S rRNA sequence S000021644 (RDP), AJ012666 (Genbank). N4Lid DOI: 10.1601/nm.5472

Genus *Eremococcus*^{VP} Collins et al. 1999. N4Lid DOI: 10.1601/nm.5473

Eremococcus coleocola^{VP} Collins et al. 1999. Source of type material recommended for DOE sponsored genome sequencing by the JGI: ATCC BAA-57. High-quality 16S rRNA sequence S000004751 (RDP), Y17780 (Genbank). N4Lid DOI: 10.1601/nm.5474

Genus *Facklamia*^{VP} Collins et al. 1997. N4Lid DOI: 10.1601/nm.5475

Facklamia hominis^{VP} Collins et al. 1997. Source of type material recommended for DOE sponsored genome sequencing by the JGI: ATCC 700628. High-quality 16S rRNA sequence S000006425 (RDP), Y10772 (Genbank). N4Lid DOI: 10.1601/nm.5476

Facklamia ignava^{VP} Collins et al. 1998. Source of type material recommended for DOE sponsored genome sequencing by the JGI: ATCC 700631. High-quality 16S rRNA sequence S000005060 (RDP), Y15716 (Genbank). N4Lid DOI: 10.1601/nm.5477

Facklamia languida^{VP} Lawson et al. 1999. Source of type material recommended for DOE sponsored genome sequencing by the JGI: CCUG 37842. High-quality 16S rRNA sequence S000019066 (RDP), Y18053 (Genbank). N4Lid DOI: 10.1601/nm.5478

Facklamia miroungae^{VP} Hoyles et al. 2001. Source of type material recommended for DOE sponsored genome sequencing by the JGI: ATCC BAA-466. High-quality 16S rRNA sequence S000018832 (RDP), AJ277381 (Genbank). N4Lid DOI: 10.1601/nm.5479

Facklamia sourekii^{VP} Collins et al. 1999. Source of type material recommended for DOE sponsored genome sequencing by the JGI: ATCC 700629. High-quality 16S rRNA sequence S000020001 (RDP), Y17312 (Genbank). N4Lid DOI: 10.1601/nm.5480

Facklamia tabacinasalis^{VP} Collins et al. 1999. Source of type material recommended for DOE sponsored genome sequencing by the JGI: ATCC 700838. High-quality 16S rRNA sequence S000021549 (RDP), Y17820 (Genbank). N4Lid DOI: 10.1601/nm.5481

Genus *Globicatella*^{VP} Collins et al. 1995. N4Lid DOI: 10.1601/nm.5482

Globicatella sanguinis^{VP} corrig. Collins et al. 1995. Source of type material recommended for DOE sponsored genome sequencing by the JGI: ATCC 51173. N4Lid DOI: 10.1601/nm.5483

Globicatella sulfidifaciens^{VP} Vandamme et al. 2001. Source of type material recommended for DOE sponsored genome sequencing by the JGI: CCUG 44365. High-quality 16S rRNA sequence S000010536 (RDP), AJ297627 (Genbank). N4Lid DOI: 10.1601/nm.5484

Genus *Ignavigranum*^{VP} Collins et al. 1999. N4Lid DOI: 10.1601/nm.5485

Ignavigranum ruoffiae^{VP} Collins et al. 1999. Source of type material recommended for DOE sponsored genome sequencing by the JGI: ATCC 700630. High-quality 16S rRNA sequence S000013898 (RDP), Y16426 (Genbank). N4Lid DOI: 10.1601/nm.5486

Family "*Carnobacteriaceae*" N4Lid DOI: 10.1601/nm.5487

Genus *Carnobacterium*^{VP} Collins et al. 1987. GOLD ID: Gi01408. GCAT ID: 000865_GCAT. Sequenced strain: AT7 is from a non-type strain. Genome sequencing is incomplete. Number of genomes of this species sequenced 1 (GOLD). N4Lid DOI: 10.1601/nm.5488

Carnobacterium divergens^{VP} (Holzapfel and Gerber 1984) Collins et al. 1987. <== *Lactobacillus divergens* (basonym). Synonym links through N4Lid: 10.1601/ex.5360. Source of type material recommended for DOE sponsored genome sequencing by the JGI: ATCC 35677. High-quality 16S rRNA sequence S000436407 (RDP), M58816 (Genbank). N4Lid DOI: 10.1601/nm.5489

† *Lactobacillus divergens*^{VP} Holzapfel and Gerber 1984. ==> *Carnobacterium divergens* (new combination). Synonym links through N4Lid: 10.1601/ex.5360. Source of type material recommended for DOE sponsored genome sequencing by the JGI: ATCC 35677. High-quality 16S rRNA sequence S000436407 (RDP), M58816 (Genbank). N4Lid DOI: 10.1601/nm.5360

Carnobacterium alterfunditum^{VP} Franzmann et al. 1993. Source of type material recommended for DOE sponsored genome sequencing by the JGI: ATCC 49837. N4Lid DOI: 10.1601/nm.5490

Carnobacterium funditum^{VP} Franzmann et al. 1993. Source of type material recommended for DOE sponsored genome sequencing by the JGI: ATCC 49836. High-quality 16S rRNA sequence S000381051 (RDP), S86170 (Genbank). N4Lid DOI: 10.1601/nm.5491

Carnobacterium gallinarum^{VP} Collins et al. 1987. Source of type material recommended for DOE sponsored genome sequencing by the JGI: ATCC 49517. High-quality 16S rRNA sequence S000128905 (RDP), X54269 (Genbank). N4Lid DOI: 10.1601/nm.5492

Carnobacterium inhibens^{VP} Jöborn et al. 1999. Source of type material recommended for DOE sponsored genome sequencing by the JGI: DSM 13024. N4Lid DOI: 10.1601/nm.5493

Carnobacterium maltaromaticum^{VP} (Miller et al. 1974) Mora et al. 2003. <== *Lactobacillus maltaromicus* (basonym). Synonym links through N4Lid: 10.1601/ex.5399. Source of type material recommended for DOE sponsored genome sequencing by the JGI: ATCC 35586. High-quality 16S rRNA sequence S000126675 (RDP), X54420 (Genbank). N4Lid DOI: 10.1601/nm.5494

† *Lactobacillus maltaromicus*^{AL} Miller et al. 1974. ==> *Carnobacterium maltaromaticum* (new combination). Synonym links through N4Lid: 10.1601/ex.5399. Source of type material recommended for DOE sponsored genome sequencing by the JGI: ATCC 27865. N4Lid DOI: 10.1601/nm.5399

Carnobacterium mobile^{VP} Collins et al. 1987. Source of type material recommended for DOE sponsored genome sequencing by the JGI: ATCC 49516. High-quality 16S rRNA sequence S000128906 (RDP), X54271 (Genbank). N4Lid DOI: 10.1601/nm.5495

Carnobacterium piscicola^{VP} (Hiu et al. 1984) Collins et al. 1987. <== *Lactobacillus piscicola* (basonym). Synonym links through N4Lid: 10.1601/ex.5419. Source of type material recommended for DOE sponsored genome sequencing by the JGI: ATCC 35586. High-quality 16S rRNA sequence S000126675 (RDP), X54420 (Genbank). N4Lid DOI: 10.1601/nm.5496

† *Lactobacillus carnis*^{VP} Shaw and Harding 1986. ≈ *Carnobacterium piscicola* (earlier heterotypic synonym), links through 10.1601/nm.5496. Source of type material recommended for DOE sponsored genome sequencing by the JGI: JCM 9135. N4Lid DOI: 10.1601/nm.5342

† *Lactobacillus piscicola*^{VP} Hiu et al. 1984. ==> *Carnobacterium piscicola* (new combination). Synonym links through N4Lid: 10.1601/ex.5419. Source of type material recommended for DOE sponsored genome sequencing by the JGI: ATCC 35586. High-quality 16S rRNA sequence S000126675 (RDP), X54420 (Genbank). N4Lid DOI: 10.1601/nm.5419

Carnobacterium pleistocenium^{VP} Pikuta et al. 2005. Source of type material recommended for DOE sponsored genome sequencing by the JGI: ATCC BAA-754. High-quality 16S rRNA sequence S000470632 (RDP), AF450136 (Genbank). N4Lid DOI: 10.1601/nm.8532

Carnobacterium viridans^{VP} Holley et al. 2002. Source of type material recommended for DOE sponsored genome sequencing by the JGI: ATCC BAA-336. High-quality 16S rRNA sequence S000393917 (RDP), AF425608 (Genbank). N4Lid DOI: 10.1601/nm.5497

Genus *Agitococcus*^{VP} Franzmann and Skerman 1981. N4Lid DOI: 10.1601/nm.5498

Agitococcus lubricus^{VP} Franzmann and Skerman 1981. Source of type material recommended for DOE sponsored genome sequencing by the JGI: DSM 5822. N4Lid DOI: 10.1601/nm.5499

Genus *Alkalibacterium*^{VP} Ntougias and Russell 2001. N4Lid DOI: 10.1601/nm.5500

Alkalibacterium olivapovliticus^{VP} corrig. Ntougias and Russell 2001. Source of type material recommended for DOE sponsored genome sequencing by the JGI: DSM 13175. High-quality 16S rRNA sequence S000388075 (RDP), AF143511 (Genbank). N4Lid DOI: 10.1601/nm.5501

Alkalibacterium iburiense^{VP} Nakajima et al. 2005. Source of type material recommended for DOE sponsored genome sequencing by the JGI: JCM 12662. High-quality 16S rRNA sequence S000543168 (RDP), AB188091 (Genbank). N4Lid 10.1601/nm.9496

Alkalibacterium psychrotolerans^{VP} Yumoto et al. 2004. Source of type material recommended for DOE sponsored genome sequencing by the JGI: JCM 12281. High-quality 16S rRNA sequence S000439517 (RDP), AB125938 (Genbank). N4Lid DOI: 10.1601/nm.8457

Genus *Allofustis*^{VP} Collins et al. 2003. N4Lid DOI: 10.1601/nm.5502

Allofustis seminis^{VP} Collins et al. 2003. Source of type material recommended for DOE sponsored genome sequencing by the JGI: CCUG 45438. High-quality 16S rRNA sequence S000134316 (RDP), AJ410303 (Genbank). N4Lid DOI: 10.1601/nm.5503

Genus *Alloiococcus*^{VP} Aguirre and Collins 1992. N4Lid DOI: 10.1601/nm.5504

Alloiococcus otitis^{VP} Aguirre and Collins 1992. Source of type material recommended for DOE sponsored genome sequencing by the JGI: ATCC 51267. High-quality 16S rRNA sequence S000134024 (RDP), X59765 (Genbank). N4Lid DOI: 10.1601/nm.5505

Genus *Atopococcus*^{VP} Collins et al. 2005. N4Lid 10.1601/nm.9508

Atopococcus tabaci^{VP} Collins et al. 2005. Source of type material recommended for DOE sponsored genome sequencing by the JGI: CCUG 48253. High-quality 16S rRNA sequence S000544083 (RDP), AJ634917 (Genbank). N4Lid 10.1601/nm.9507

- Genus *Atopostipes***^{VP} Cotta et al. 2004. N4Lid DOI: 10.1601/nm.8483
- Genus † *Planopolyspora***^{VP} Petrolini et al. 1993. Unified with *Catenuloplanes*, links through 10.1601./nm.10206. N4Lid DOI: 10.1601/nm.7521
- Atopostipes suicloacalis*^{VP} corrig. Cotta et al. 2004. Source of type material recommended for DOE sponsored genome sequencing by the JGI: NRRL B-23919. High-quality 16S rRNA sequence S000429374 (RDP), AF445248 (Genbank). N4Lid DOI: 10.1601/nm.8484
- Genus *Desemzia***^{VP} Stackebrandt et al. 1999. N4Lid DOI: 10.1601/nm.5506
- Desemzia incerta*^{VP} (Steinhaus 1941) Stackebrandt et al. 1999. <== *Brevibacterium incertum* (basonym). Synonym links through N4Lid: 10.1601/ex.5935. Source of type material recommended for DOE sponsored genome sequencing by the JGI: ATCC 8363. High-quality 16S rRNA sequence S000014938 (RDP), Y14650 (Genbank). N4Lid DOI: 10.1601/nm.5507
- † *Brevibacterium incertum*^{AL} (Steinhaus 1941) Breed 1953. ==> *Desemzia incerta* (new combination). Synonym links through N4Lid: 10.1601/ex.5935. Source of type material recommended for DOE sponsored genome sequencing by the JGI: ATCC 8363. High-quality 16S rRNA sequence S000014938 (RDP), Y14650 (Genbank). N4Lid DOI: 10.1601/nm.5935
- Genus *Dolosigranulum***^{VP} Aguirre et al. 1994. N4Lid DOI: 10.1601/nm.5508
- Dolosigranulum pigrum*^{VP} Aguirre et al. 1994. Source of type material recommended for DOE sponsored genome sequencing by the JGI: ATCC 51524. High-quality 16S rRNA sequence S000002714 (RDP), X70907 (Genbank). N4Lid DOI: 10.1601/nm.5509
- Genus *Granulicatella***^{VP} Collins and Lawson 2000. N4Lid DOI: 10.1601/nm.5510
- Abiotrophia adiacens*^{VP} (Bouvet et al. 1989) Kawamura et al. 1995. <== *Streptococcus adiacens* (basonym). *Granulicatella adiacens* (new combination). Synonym links through N4Lid: 10.1601/ex.5608. Source of type material recommended for DOE sponsored genome sequencing by the JGI: ATCC 49175. High-quality 16S rRNA sequence S000413823 (RDP), D50540 (Genbank). N4Lid DOI: 10.1601/nm.5468
- Granulicatella adiacens*^{VP} (Bouvet et al. 1989) Collins and Lawson 2000. <== *Streptococcus adiacens* (basonym). Synonym links through N4Lid: 10.1601/ex.5608. Source of type material recommended for DOE sponsored genome sequencing by the JGI: ATCC 49175. High-quality 16S rRNA sequence S000413823 (RDP), D50540 (Genbank). N4Lid DOI: 10.1601/nm.5511
- † *Streptococcus adiacens*^{VP} Bouvet et al. 1989. ==> *Abiotrophia adiacens* (new combination). Synonym links through N4Lid: 10.1601/ex.5608. Source of type material recommended for DOE sponsored genome sequencing by the JGI: ATCC 49175. High-quality 16S rRNA sequence S000413823 (RDP), D50540 (Genbank). N4Lid DOI: 10.1601/nm.5608
- † *Abiotrophia balaenopterae*^{VP} Lawson et al. 1999. ==> *Granulicatella balaenopterae* (new combination). Synonym links through N4Lid: 10.1601/ex.5469. Source of type material recommended for DOE sponsored genome sequencing by the JGI: ATCC 700813. High-quality 16S rRNA sequence S000013765 (RDP), Y16547 (Genbank). N4Lid DOI: 10.1601/nm.5469
- Granulicatella balaenopterae*^{VP} (Lawson et al. 1999) Collins and Lawson 2000. <== *Abiotrophia balaenopterae* (basonym). Synonym links through N4Lid: 10.1601/ex.5469. Source of type material recommended for DOE sponsored genome sequencing by the JGI: ATCC 700813. High-quality 16S rRNA sequence S000013765 (RDP), Y16547 (Genbank). N4Lid DOI: 10.1601/nm.5512
- † *Abiotrophia elegans*^{VP} Roggenkamp et al. 1999. ==> *Granulicatella elegans* (new combination). Synonym links through N4Lid: 10.1601/ex.5470. Source of type material recommended for DOE sponsored genome sequencing by the JGI: ATCC 700633. High-quality 16S rRNA sequence S000387147 (RDP), AF016390 (Genbank). N4Lid DOI: 10.1601/nm.5470
- Granulicatella elegans*^{VP} (Roggenkamp et al. 1999) Collins and Lawson 2000. <== *Abiotrophia elegans* (basonym). Synonym links through N4Lid: 10.1601/ex.5470. Source of type material recommended for DOE sponsored genome sequencing by the JGI: ATCC 700633. High-quality 16S rRNA sequence S000387147 (RDP), AF016390 (Genbank). N4Lid DOI: 10.1601/nm.5513
- Genus *Isobaculum***^{VP} Collins et al. 2002. N4Lid DOI: 10.1601/nm.5514
- Isobaculum melis*^{VP} Collins et al. 2002. Source of type material recommended for DOE sponsored genome sequencing by the JGI: DSM 13760. High-quality 16S rRNA sequence S000019948 (RDP), AJ302648 (Genbank). N4Lid DOI: 10.1601/nm.5515
- Genus *Marinilactibacillus***^{VP} Ishikawa et al. 2003. N4Lid DOI: 10.1601/nm.5518

Marinilactibacillus psychrotolerans^{VP} Ishikawa et al. 2003. Source of type material recommended for DOE sponsored genome sequencing by the JGI: IAM 14980. High-quality 16S rRNA sequence S000134143 (RDP), AB083406 (Genbank). N4Lid DOI: 10.1601/nm.5519

Marinilactibacillus piezotolerans^{VP} Toffin et al. 2005. Source of type material recommended for DOE sponsored genome sequencing by the JGI: DSM 16108. High-quality 16S rRNA sequence S000358762 (RDP), AY485792 (Genbank). N4Lid 10.1601/nm.8686

Genus *Trichococcus*^{VP} Scheff et al. 1984. ≈ *Trichococcus* (later heterotypic synonym), links through 10.1601./nm.5520. N4Lid DOI: 10.1601/nm.5520

Trichococcus flocculiformis^{VP} Scheff et al. 1984. Source of type material recommended for DOE sponsored genome sequencing by the JGI: ATCC 51221. High-quality 16S rRNA sequence S000021942 (RDP), Y17301 (Genbank). N4Lid DOI: 10.1601/nm.5521

Trichococcus collinsii^{VP} Liu et al. 2002. Source of type material recommended for DOE sponsored genome sequencing by the JGI: ATCC BAA-296. High-quality 16S rRNA sequence S000127283 (RDP), AJ306612 (Genbank). N4Lid 10.1601/nm.9804

† *Ruminococcus palustris*^{VP} Zhilina et al. 1997. ==> *Trichococcus palustris* (new combination). Synonym links through N4Lid: 10.1601/ex.4162. Source of type material recommended for DOE sponsored genome sequencing by the JGI: DSM 9172. High-quality 16S rRNA sequence S000022759 (RDP), AJ296179 (Genbank). N4Lid DOI: 10.1601/nm.4162

Trichococcus palustris^{VP} (Zhilina et al. 1997) Liu et al. 2002. <== *Ruminococcus palustris* (basonym). Synonym links through N4Lid: 10.1601/ex.4162. Source of type material recommended for DOE sponsored genome sequencing by the JGI: DSM 9172. High-quality 16S rRNA sequence S000022759 (RDP), AJ296179 (Genbank). N4Lid DOI: 10.1601/nm.5522

Trichococcus pasteurii^{VP} (Schink 1985) Liu et al. 2002. <== *Ruminococcus pasteurii* (basonym). Synonym links through N4Lid: 10.1601/ex.4163. Source of type material recommended for DOE sponsored genome sequencing by the JGI: ATCC 35945. High-quality 16S rRNA sequence S000436015 (RDP), L76599 (Genbank). N4Lid DOI: 10.1601/nm.5523

Lactosphaera pasteurii^{VP} (Schink 1985) Janssen et al. 1995. <== *Ruminococcus pasteurii* (basonym). *Trichococcus pasteurii* (new combination). Synonym links through N4Lid: 10.1601/ex.4163. Source of type material recommended for DOE sponsored genome sequencing by the JGI: ATCC 35945. High-quality 16S rRNA sequence S000436015 (RDP), L76599 (Genbank). N4Lid DOI: 10.1601/nm.5517

† *Ruminococcus pasteurii*^{VP} Schink 1985. ==> *Lactosphaera pasteurii* (new combination). Synonym links through N4Lid: 10.1601/ex.4163. Source of type material recommended for DOE sponsored genome sequencing by the JGI: ATCC 35945. High-quality 16S rRNA sequence S000436015 (RDP), L76599 (Genbank). N4Lid DOI: 10.1601/nm.4163

Trichococcus patagoniensis^{VP} Pikuta et al. 2006. Source of type material recommended for DOE sponsored genome sequencing by the JGI: ATCC BAA-756. High-quality 16S rRNA sequence S000392963 (RDP), AF394926 (Genbank). N4Lid DOI: 10.1601/nm.10276

Genus † *Lactosphaera*^{VP} Janssen et al. 1995. ≈ *Trichococcus* (earlier heterotypic synonym), links through 10.1601./nm.5520. N4Lid DOI: 10.1601/nm.5516

Family "*Enterococcaceae*" N4Lid DOI: 10.1601/nm.5524

Genus *Enterococcus*^{VP} (ex Thiercelin and Jouhaud 1903) Schleifer and Kilpper-Bälz 1984. N4Lid DOI: 10.1601/nm.5525

Enterococcus faecalis^{VP} (Andrewes and Horder 1906) Schleifer and Kilpper-Bälz 1984. <== *Streptococcus faecalis* (basonym). Synonym links through N4Lid: 10.1601/ex.5634. Source of type material recommended for DOE sponsored genome sequencing by the JGI: ATCC 19433. High-quality 16S rRNA sequence S000623175 (RDP). GOLD ID: Gc00127. GCAT ID: 000483_GCAT. Entrez genome id: 70. Sequenced strain: ATCC 700802 is from a non-type strain. Genome sequencing is completed. Number of genomes of this species sequenced 5 (GOLD) 1 (NCBI). N4Lid DOI: 10.1601/nm.5526

† *Streptococcus faecalis*^{AL} Andrewes and Horder 1906. ==> *Enterococcus faecalis* (new combination). Synonym links through N4Lid: 10.1601/ex.5634. Source of type material recommended for DOE sponsored genome sequencing by the JGI: ATCC 19433. GOLD ID: Gc00127. GCAT ID: 000483_GCAT. Entrez genome id: 70. Sequenced strain: ATCC 700802 is from a non-type strain. Genome sequencing is completed. Number of genomes of this species sequenced 5 (GOLD) 1 (NCBI). N4Lid DOI: 10.1601/nm.5634

Enterococcus aquimarinus^{VP} Svec et al. 2005. Source of type material recommended for DOE sponsored genome sequencing by the JGI: LMG 16607. High-quality 16S rRNA sequence S000571184 (RDP), AJ877015 (Genbank). N4Lid 10.1601/nm.9608

Enterococcus asini^{VP} de Vaux et al. 1998. Source of type material recommended for DOE sponsored genome sequencing by the JGI: ATCC 700915. High-quality 16S rRNA sequence S000138302 (RDP), Y11621 (Genbank). N4Lid DOI: 10.1601/nm.5527

Enterococcus avium^{VP} (ex Nowlan and Deibel 1967) Collins et al. 1984. Source of type material recommended for DOE sponsored genome sequencing by the JGI: ATCC 14025. High-quality 16S rRNA sequence S000387859 (RDP), AF133535 (Genbank). N4Lid DOI: 10.1601/nm.5528

Enterococcus caccae^{VP} Carvalho et al. 2006. Source of type material recommended for DOE sponsored genome sequencing by the JGI: ATCC BAA-1240. High-quality 16S rRNA sequence S000514212 (RDP), AY943820 (Genbank). N4Lid DOI: 10.1601/nm.10150

Enterococcus canintestini^{VP} Naser et al. 2005. Source of type material recommended for DOE sponsored genome sequencing by the JGI: LMG 13590. High-quality 16S rRNA sequence S000571347 (RDP), AJ888906 (Genbank). N4Lid 10.1601/nm.9607

Enterococcus canis^{VP} De Graef et al. 2003. Source of type material recommended for DOE sponsored genome sequencing by the JGI: CCUG 46666. N4Lid DOI: 10.1601/nm.5529

Enterococcus casseliflavus^{VP} (ex Vaughn et al. 1979) Collins et al. 1984. ≈ *Streptococcus casseliflavus* (later heterotypic synonym), links through 10.1601/nm.5530. Source of type material recommended for DOE sponsored genome sequencing by the JGI: ATCC 25788. High-quality 16S rRNA sequence S000014629 (RDP), Y18161 (Genbank). N4Lid DOI: 10.1601/nm.5530

"*Streptococcus casseliflavus*" † Illegitimate name, *Enterococcus casseliflavus* (new combination). Synonym links through N4Lid: 10.1601/ex.5616. Source of type material recommended for DOE sponsored genome sequencing by the JGI: ATCC 25788. High-quality 16S rRNA sequence S000014629 (RDP), Y18161 (Genbank). N4Lid DOI: 10.1601/nm.5616

† *Enterococcus flavescens*^{VP} Pompei et al. 1992. ≈ *Enterococcus casseliflavus* (earlier heterotypic synonym), links through 10.1601/nm.5530. Source of type material recommended for DOE sponsored genome sequencing by the JGI: ATCC 49996. High-quality 16S rRNA sequence S000002348 (RDP), AJ301832 (Genbank). N4Lid DOI: 10.1601/nm.5536

Enterococcus cecorum^{VP} (Devriese et al. 1983) Williams et al. 1989. <== *Streptococcus cecorum* (basonym). Synonym links through N4Lid: 10.1601/ex.5617. Source of type material recommended for DOE sponsored genome sequencing by the JGI: ATCC 43198. High-quality 16S rRNA sequence S000428248 (RDP), AF061009 (Genbank). N4Lid DOI: 10.1601/nm.5531

† *Streptococcus cecorum*^{VP} Devriese et al. 1983. ==> *Enterococcus cecorum* (new combination). Synonym links through N4Lid: 10.1601/ex.5617. Source of type material recommended for DOE sponsored genome sequencing by the JGI: ATCC 43198. High-quality 16S rRNA sequence S000428248 (RDP), AF061009 (Genbank). N4Lid DOI: 10.1601/nm.5617

Enterococcus columbae^{VP} Devriese et al. 1993. Source of type material recommended for DOE sponsored genome sequencing by the JGI: ATCC 51263. High-quality 16S rRNA sequence S000005854 (RDP), X56422 (Genbank). N4Lid DOI: 10.1601/nm.5532

Enterococcus devriesei^{VP} Svec et al. 2005. Source of type material recommended for DOE sponsored genome sequencing by the JGI: LMG 14595. High-quality 16S rRNA sequence S000571384 (RDP), AJ891167 (Genbank). N4Lid 10.1601/nm.9709

Enterococcus dispar^{VP} Collins et al. 1991. Source of type material recommended for DOE sponsored genome sequencing by the JGI: ATCC 51266. High-quality 16S rRNA sequence S000428246 (RDP), AF061007 (Genbank). N4Lid DOI: 10.1601/nm.5533

Enterococcus durans^{VP} (ex Sherman and Wing 1937) Collins et al. 1984. == *Streptococcus durans* (later homotypic synonym), links through 10.1601/ex.5534. Source of type material recommended for DOE sponsored genome sequencing by the JGI: ATCC 19432. High-quality 16S rRNA sequence S000133884 (RDP), AJ420801 (Genbank). N4Lid DOI: 10.1601/nm.5534

† *Streptococcus durans*^{VP} (ex Sherman and Wing 1937) Knight et al. 1984. == *Enterococcus durans* (earlier homotypic synonym), links through 10.1601/ex.5534. Source of type material recommended for DOE sponsored genome sequencing by the JGI: ATCC 19432. High-quality 16S rRNA sequence S000133884 (RDP), AJ420801 (Genbank). N4Lid DOI: 10.1601/nm.5627

Enterococcus faecium^{VP} (Orla-Jensen 1919) Schleifer and Kilpper-Bälz 1984. <== *Streptococcus faecium* (basonym). Synonym links through N4Lid: 10.1601/ex.5635. Source of type material recommended for DOE sponsored genome sequencing by the JGI: ATCC 19434. High-quality 16S rRNA sequence S000014252 (RDP), AJ276355 (Genbank). GOLD ID: Gi00227. GCAT ID: 001015_GCAT. Sequenced strain: DO is from a non-type strain. Genome sequencing is incomplete. Number of genomes of this species sequenced 3 (GOLD) 1 (NCBI). N4Lid DOI: 10.1601/nm.5535

† *Streptococcus faecium*^{AL} Orla-Jensen 1919. ==> *Enterococcus faecium* (new combination). Synonym links through N4Lid: 10.1601/ex.5635. Source of type material recommended for DOE sponsored genome sequencing by the JGI: ATCC 19434. High-quality 16S rRNA sequence S000014252 (RDP), AJ276355 (Genbank). GOLD ID: Gi00227. GCAT ID: 001015_GCAT. Genome sequence is from a non-type strain. Genome sequencing is incomplete. Number of genomes of this species sequenced 3 (GOLD) 1 (NCBI). N4Lid DOI: 10.1601/nm.5635

Enterococcus gallinarum^{VP} (Bridge and Sneath 1982) Collins et al. 1984. <== *Streptococcus gallinarum* (basonym). Synonym links through N4Lid: 10.1601/ex.5638. Source of type material recommended for DOE sponsored genome sequencing by the JGI: ATCC 49573. N4Lid DOI: 10.1601/nm.5537

† *Streptococcus gallinarum*^{VP} Bridge and Sneath 1982. ==> *Enterococcus gallinarum* (new combination). Synonym links through N4Lid: 10.1601/ex.5638. Source of type material recommended for DOE sponsored genome sequencing by the JGI: ATCC 49573. N4Lid DOI: 10.1601/nm.5638

Enterococcus gilvus^{VP} Tyrrell et al. 2002. Source of type material recommended for DOE sponsored genome sequencing by the JGI: ATCC BAA-350. High-quality 16S rRNA sequence S000434674 (RDP), AY033814 (Genbank). N4Lid DOI: 10.1601/nm.5538

Enterococcus haemoperoxidus^{VP} Svec et al. 2001. Source of type material recommended for DOE sponsored genome sequencing by the JGI: ATCC BAA-382. High-quality 16S rRNA sequence S000390691 (RDP), AF286832 (Genbank). N4Lid DOI: 10.1601/nm.5539

Enterococcus hermanniensis^{VP} Koort et al. 2004. Source of type material recommended for DOE sponsored genome sequencing by the JGI: CCUG 48100. High-quality 16S rRNA sequence S000419424 (RDP), AY396047 (Genbank). N4Lid DOI: 10.1601/nm.8575

Enterococcus hiraе^{VP} Farrow and Collins 1985. Source of type material recommended for DOE sponsored genome sequencing by the JGI: ATCC 8043. High-quality 16S rRNA sequence S000008500 (RDP), AJ276356 (Genbank). N4Lid DOI: 10.1601/nm.5540

Enterococcus italicus^{VP} Fortina et al. 2004. ≈ *Enterococcus saccharominimus* (later heterotypic synonym), links through 10.1601/nm.8576. Source of type material recommended for DOE sponsored genome sequencing by the JGI: DSM 15952. High-quality 16S rRNA sequence S000416882 (RDP), AJ582753 (Genbank). N4Lid DOI: 10.1601/nm.8576

† *Enterococcus saccharominimus*^{VP} Vancanneyt et al. 2004. ≈ *Enterococcus italicus* (earlier heterotypic synonym), links through 10.1601/nm.8576. Source of type material recommended for DOE sponsored genome sequencing by the JGI: LMG 21727. High-quality 16S rRNA sequence S000440239 (RDP), AJ626902 (Genbank). N4Lid DOI: 10.1601/nm.8577

Enterococcus malodoratus^{VP} (ex Pette 1955) Collins et al. 1984. Source of type material recommended for DOE sponsored genome sequencing by the JGI: ATCC 43197. High-quality 16S rRNA sequence S000428251 (RDP), AF061012 (Genbank). N4Lid DOI: 10.1601/nm.5541

Enterococcus moraviensis^{VP} Svec et al. 2001. Source of type material recommended for DOE sponsored genome sequencing by the JGI: ATCC BAA-383. High-quality 16S rRNA sequence S000390690 (RDP), AF286831 (Genbank). N4Lid DOI: 10.1601/nm.5542

Enterococcus mundtii^{VP} Collins et al. 1986. Source of type material recommended for DOE sponsored genome sequencing by the JGI: ATCC 43186. High-quality 16S rRNA sequence S000428252 (RDP), AF061013 (Genbank). N4Lid DOI: 10.1601/nm.5543

Enterococcus pallens^{VP} Tyrrell et al. 2002. Source of type material recommended for DOE sponsored genome sequencing by the JGI: ATCC BAA-351. High-quality 16S rRNA sequence S000434675 (RDP), AY033815 (Genbank). N4Lid DOI: 10.1601/nm.5544

Enterococcus phoeniculicola^{VP} Law-Brown and Meyers 2003. Source of type material recommended for DOE sponsored genome sequencing by the JGI: ATCC BAA-412. High-quality 16S rRNA sequence S000434594 (RDP), AY028437 (Genbank). N4Lid DOI: 10.1601/nm.5545

Enterococcus pseudoavium^{VP} Collins et al. 1989. Source of type material recommended for DOE sponsored genome sequencing by the JGI: ATCC 49372. High-quality 16S rRNA sequence S000428241 (RDP), AF061002 (Genbank). N4Lid DOI: 10.1601/nm.5547

Enterococcus raffinosus^{VP} Collins et al. 1989. Source of type material recommended for DOE sponsored genome sequencing by the JGI: ATCC 49427. High-quality 16S rRNA sequence S000014631 (RDP), Y18296 (Genbank). N4Lid DOI: 10.1601/nm.5548

Enterococcus ratti^{VP} Teixeira et al. 2001. Source of type material recommended for DOE sponsored genome sequencing by the JGI: ATCC 700914. High-quality 16S rRNA sequence S000103558 (RDP), AF326472 (Genbank). N4Lid DOI: 10.1601/nm.5549

Enterococcus saccharolyticus^{VP} (Farrow et al. 1985) Rodrigues and Collins 1991. <== *Streptococcus saccharolyticus* (basonym). Synonym links through N4Lid: 10.1601/ex.5681. Source of type material recommended for DOE sponsored genome sequencing by the JGI: ATCC 43076. N4Lid DOI: 10.1601/nm.5550

† *Streptococcus saccharolyticus*^{VP} Farrow et al. 1985. ==> *Enterococcus saccharolyticus* (new combination). Synonym links through N4Lid: 10.1601/ex.5681. Source of type material recommended for DOE sponsored genome sequencing by the JGI: ATCC 43076. N4Lid DOI: 10.1601/nm.5681

Enterococcus silesiacus^{VP} Svec et al. 2006. Source of type material recommended for DOE sponsored genome sequencing by the JGI: LMG 23085. High-quality 16S rRNA sequence S000623729 (RDP), AM039968 (Genbank). N4Lid 10.1601/nm.9928

Enterococcus sulfureus^{VP} Martinez-Murcia and Collins 1991. Source of type material recommended for DOE sponsored genome sequencing by the JGI: ATCC 49903. High-quality 16S rRNA sequence S000130332 (RDP), X55133 (Genbank). N4Lid DOI: 10.1601/nm.5553

Enterococcus termitis^{VP} Svec et al. 2006. Source of type material recommended for DOE sponsored genome sequencing by the JGI: LMG 8895. High-quality 16S rRNA sequence S000623727 (RDP), AM039966 (Genbank). N4Lid 10.1601/nm.9929

Enterococcus villorum^{VP} Vancanneyt et al. 2001. ≈ *Enterococcus porcinus* (later heterotypic synonym), links through 10.1601/nm.5554. Source of type material recommended for DOE sponsored genome sequencing by the JGI: CCUG 45025. High-quality 16S rRNA sequence S000391823 (RDP), AF335596 (Genbank). N4Lid DOI: 10.1601/nm.5554

† *Enterococcus porcinus*^{VP} Teixeira et al. 2001. ≈ *Enterococcus villorum* (earlier heterotypic synonym), links through 10.1601/nm.5554. Source of type material recommended for DOE sponsored genome sequencing by the JGI: ATCC 700913. High-quality 16S rRNA sequence S000391823 (RDP), AF335596 (Genbank). N4Lid DOI: 10.1601/nm.5546

Genus *Atopobacter*^{VP} Lawson et al. 2000. N4Lid DOI: 10.1601/nm.5555

Atopobacter phocae^{VP} Lawson et al. 2000. Source of type material recommended for DOE sponsored genome sequencing by the JGI: ATCC BAA-285. High-quality 16S rRNA sequence S000002616 (RDP), Y16546 (Genbank). N4Lid DOI: 10.1601/nm.5556

Genus *Catelllicoccus*^{VP} Lawson et al. 2006. N4Lid 10.1601/nm.9885

Catelllicoccus marimammalium^{VP} Lawson et al. 2006. Source of type material recommended for DOE sponsored genome sequencing by the JGI: CCUG 49459. High-quality 16S rRNA sequence S000642975 (RDP), AJ854484 (Genbank). N4Lid 10.1601/nm.9884

Genus *Melissococcus*^{VP} Bailey and Collins 1983. N4Lid DOI: 10.1601/nm.5557

Melissococcus plutonius^{VP} corrig. (ex White 1912) Bailey and Collins 1983. Source of type material recommended for DOE sponsored genome sequencing by the JGI: ATCC 35311. High-quality 16S rRNA sequence S000019075 (RDP), X75751 (Genbank). N4Lid DOI: 10.1601/nm.5558

Genus *Pilibacter*^{VP} Higashiguchi et al. 2006. N4Lid 10.1601/nm.9828

Pilibacter termitis^{VP} Higashiguchi et al. 2006. Source of type material recommended for DOE sponsored genome sequencing by the JGI: ATCC BAA-1030. High-quality 16S rRNA sequence S000573188 (RDP), AY533171 (Genbank). N4Lid 10.1601/nm.9827

Genus *Tetragenococcus*^{VP} Collins et al. 1993. N4Lid DOI: 10.1601/nm.5559

Tetragenococcus halophilus^{VP} (Mees 1934) Collins et al. 1993. <== *Pediococcus halophilus* (basonym). Synonym links through N4Lid: 10.1601/ex.5454. Source of type material recommended for DOE sponsored genome sequencing by the JGI: ATCC 33315. High-quality 16S

rRNA sequence S000004803 (RDP), AJ301843 (Genbank). GOLD ID: Gi01848. GCAT ID: 000842_GCAT. Sequenced strain: NBRC 12172 is from a non-type strain. Genome sequencing is incomplete. Number of genomes of this species sequenced 1 (GOLD). N4Lid DOI: 10.1601/nm.5560

† *Pediococcus halophilus*^{AL} Mees 1934. ==> *Tetragenococcus halophilus* (new combination).
Synonym links through N4Lid: 10.1601/ex.5454. Source of type material recommended for DOE sponsored genome sequencing by the JGI: ATCC 33315. High-quality 16S rRNA sequence S000004803 (RDP), AJ301843 (Genbank). GOLD ID: Gi01848. GCAT ID: 000842_GCAT. Sequenced strain: NBRC 12172 is from a non-type strain. Genome sequencing is incomplete. Number of genomes of this species sequenced 1 (GOLD) 0 (NCBI). N4Lid DOI: 10.1601/nm.5454

Tetragenococcus koreensis^{VP} Lee et al. 2005. Source of type material recommended for DOE sponsored genome sequencing by the JGI: DSM 16501. High-quality 16S rRNA sequence S000574797 (RDP), AY690334 (Genbank). N4Lid 10.1601/nm.9486

Tetragenococcus muriaticus^{VP} Satomi et al. 1997. Source of type material recommended for DOE sponsored genome sequencing by the JGI: CIP 105747. High-quality 16S rRNA sequence S000380816 (RDP), D88824 (Genbank). N4Lid DOI: 10.1601/nm.5561

† *Enterococcus solitarius*^{VP} Collins et al. 1989. ==> *Tetragenococcus solitarius* (new combination).
Synonym links through N4Lid: 10.1601/ex.5552. Source of type material recommended for DOE sponsored genome sequencing by the JGI: ATCC 49428. High-quality 16S rRNA sequence S000428249 (RDP), AF061010 (Genbank). N4Lid DOI: 10.1601/nm.5552

Tetragenococcus solitarius^{VP} (Collins et al. 1989) Ennahar and Cai 2005. <== *Enterococcus solitarius* (basonym).
Synonym links through N4Lid: 10.1601/ex.5552. Source of type material recommended for DOE sponsored genome sequencing by the JGI: ATCC 49428. High-quality 16S rRNA sequence S000428249 (RDP), AF061010 (Genbank). N4Lid 10.1601/nm.9255

Genus *Vagococcus*^{VP} Collins et al. 1990. N4Lid DOI: 10.1601/nm.5562

Vagococcus fluvialis^{VP} Collins et al. 1990. Source of type material recommended for DOE sponsored genome sequencing by the JGI: ATCC 49515. High-quality 16S rRNA sequence S000622333 (RDP), Y18098 (Genbank). N4Lid DOI: 10.1601/nm.5563

Vagococcus carniphilus^{VP} Shewmaker et al. 2004. Source of type material recommended for DOE sponsored genome sequencing by the JGI: ATCC BAA-640. High-quality 16S rRNA sequence S000417710 (RDP), AY179329 (Genbank). N4Lid 10.1601/nm.8897

Vagococcus fessus^{VP} Hoyles et al. 2000. Source of type material recommended for DOE sponsored genome sequencing by the JGI: ATCC BAA-289. High-quality 16S rRNA sequence S000433018 (RDP), AJ243326 (Genbank). N4Lid DOI: 10.1601/nm.5564

Vagococcus lutrae^{VP} Lawson et al. 1999. Source of type material recommended for DOE sponsored genome sequencing by the JGI: ATCC 700839. High-quality 16S rRNA sequence S000018588 (RDP), Y17152 (Genbank). N4Lid DOI: 10.1601/nm.5565

Vagococcus salmoninarum^{VP} Wallbanks et al. 1990. Source of type material recommended for DOE sponsored genome sequencing by the JGI: ATCC 51200. High-quality 16S rRNA sequence S000129867 (RDP), X54272 (Genbank). N4Lid DOI: 10.1601/nm.5566

Family "*Leuconostocaceae*" N4Lid DOI: 10.1601/nm.5567

Genus *Leuconostoc*^{AL} van Tieghem 1878. N4Lid DOI: 10.1601/nm.5568

Leuconostoc mesenteroides subsp. *mesenteroides*^{VP} (Tsenkovskii 1878) van Tieghem 1878.
Source of type material recommended for DOE sponsored genome sequencing by the JGI: ATCC 8293. High-quality 16S rRNA sequence S000436077 (RDP), M23035 (Genbank). GOLD ID: Gc00444. GCAT ID: 000166_GCAT. Entrez genome id: 315. Sequenced strain: ATCC 8293 is type material. Genome sequencing is completed. Number of genomes of this species sequenced 1 (GOLD) 1 (NCBI). N4Lid DOI: 10.1601/nm.5569

Leuconostoc mesenteroides subsp. *cremoris*^{VP} (Knudsen and Sørensen 1929) Garvie 1983. <== *Leuconostoc cremoris* (basonym).
Synonym links through N4Lid: 10.1601/ex.5577. Source of type material recommended for DOE sponsored genome sequencing by the JGI: ATCC 19254. High-quality 16S rRNA sequence S000436076 (RDP), M23034 (Genbank). N4Lid DOI: 10.1601/nm.5571

† *Leuconostoc cremoris*^{AL} (Knudsen and Sørensen 1929) Garvie 1960. ==> *Leuconostoc mesenteroides* subsp. *cremoris* (new combination).
Synonym links through N4Lid: 10.1601/ex.5577. Source of type material recommended for DOE sponsored genome sequencing

by the JGI: ATCC 19254. High-quality 16S rRNA sequence S000436076 (RDP), M23034 (Genbank). N4Lid DOI: 10.1601/nm.5577

Leuconostoc mesenteroides subsp. dextranicum*^{VP}** (Beijerinck 1912) Garvie 1983. <== ***Leuconostoc dextranicum (basonym). Synonym links through N4Lid: 10.1601/ex.5578. Source of type material recommended for DOE sponsored genome sequencing by the JGI: ATCC 19255. N4Lid DOI: 10.1601/nm.5572

† ***Leuconostoc dextranicum*^{AL}** (Beijerinck 1912) Hucker and Pederson 1930. ==> ***Leuconostoc mesenteroides subsp. dextranicum*** (new combination). Synonym links through N4Lid: 10.1601/ex.5578. Source of type material recommended for DOE sponsored genome sequencing by the JGI: ATCC 19255. N4Lid DOI: 10.1601/nm.5578

***Leuconostoc carnosum*^{VP}** Shaw and Harding 1989. Source of type material recommended for DOE sponsored genome sequencing by the JGI: ATCC 49367. High-quality 16S rRNA sequence S000381403 (RDP), X95977 (Genbank). N4Lid DOI: 10.1601/nm.5575

Leuconostoc citreum*^{VP}** Farrow et al. 1989. ≈ ***Leuconostoc amelibiosum (later heterotypic synonym), links through 10.1601/nm.5576. Source of type material recommended for DOE sponsored genome sequencing by the JGI: ATCC 13146. GOLD ID: Gi00329. GCAT ID: 001168_GCAT. Entrez genome id: 13439. Sequenced strain: KM20 is from a non-type strain. Genome sequencing is incomplete. Number of genomes of this species sequenced 1 (GOLD) 1 (NCBI). N4Lid DOI: 10.1601/nm.5576

† ***Leuconostoc amelibiosum*^{VP}** Schillinger et al. 1989. ≈ ***Leuconostoc citreum*** (earlier heterotypic synonym), links through 10.1601/nm.5576. Source of type material recommended for DOE sponsored genome sequencing by the JGI: DSM 20188. N4Lid DOI: 10.1601/nm.5573

***Leuconostoc durionis*^{VP}** Leisner et al. 2005. Source of type material recommended for DOE sponsored genome sequencing by the JGI: CCUG 49949. High-quality 16S rRNA sequence S000544198 (RDP), AJ780981 (Genbank). N4Lid 10.1601/nm.9416

***Leuconostoc fallax*^{VP}** Martinez-Murcia and Collins 1992. Source of type material recommended for DOE sponsored genome sequencing by the JGI: ATCC 700006. High-quality 16S rRNA sequence S000380991 (RDP), S63851 (Genbank). N4Lid DOI: 10.1601/nm.5579

***Leuconostoc ficulneum*^{VP}** Antunes et al. 2002. Source of type material recommended for DOE sponsored genome sequencing by the JGI: NRRL B-23447. High-quality 16S rRNA sequence S000392298 (RDP), AF360736 (Genbank). N4Lid DOI: 10.1601/nm.5580

Leuconostoc fructosum*^{VP}** (Kodama 1956) Antunes et al. 2002. <== ***Lactobacillus fructosus (basonym). Synonym links through N4Lid: 10.1601/ex.5368. Source of type material recommended for DOE sponsored genome sequencing by the JGI: NRRL B-2041. High-quality 16S rRNA sequence S000392299 (RDP), AF360737 (Genbank). N4Lid DOI: 10.1601/nm.5581

† ***Lactobacillus fructosus*^{AL}** Kodama 1956. ==> ***Leuconostoc fructosum*** (new combination). Synonym links through N4Lid: 10.1601/ex.5368. Source of type material recommended for DOE sponsored genome sequencing by the JGI: ATCC 13162. High-quality 16S rRNA sequence S000392299 (RDP), AF360737 (Genbank). N4Lid DOI: 10.1601/nm.5368

***Leuconostoc gasicomitatum*^{VP}** Björkroth et al. 2001. Source of type material recommended for DOE sponsored genome sequencing by the JGI: JCM 12535. High-quality 16S rRNA sequence S000389694 (RDP), AF231131 (Genbank). GOLD ID: Gi01159. GCAT ID: 001169_GCAT. Entrez genome id: 15732. Sequenced strain: LMG 18811 is type material. Genome sequencing is incomplete. Number of genomes of this species sequenced 1 (GOLD) 1 (NCBI). N4Lid DOI: 10.1601/nm.5582

***Leuconostoc gelidum*^{VP}** Shaw and Harding 1989. Source of type material recommended for DOE sponsored genome sequencing by the JGI: ATCC 49366. High-quality 16S rRNA sequence S000388588 (RDP), AF175402 (Genbank). N4Lid DOI: 10.1601/nm.5583

***Leuconostoc inhae*^{VP}** Kim et al. 2003. Source of type material recommended for DOE sponsored genome sequencing by the JGI: DSM 15101. High-quality 16S rRNA sequence S000394161 (RDP), AF439560 (Genbank). N4Lid DOI: 10.1601/nm.5570

***Leuconostoc kimchii*^{VP}** Kim et al. 2000. Source of type material recommended for DOE sponsored genome sequencing by the JGI: IH25. High-quality 16S rRNA sequence S000388577 (RDP), AF173986 (Genbank). N4Lid DOI: 10.1601/nm.5584

Leuconostoc lactis*^{AL}** Garvie 1960. ≈ ***Leuconostoc argentinum (later heterotypic synonym), links through 10.1601/nm.5585. Source of type material recommended for DOE sponsored genome

sequencing by the JGI: ATCC 19256. High-quality 16S rRNA sequence S000436074 (RDP), M23031 (Genbank). N4Lid DOI: 10.1601/nm.5585

† *Leuconostoc argentinum*^{VP} Dicks et al. 1993. ≈ *Leuconostoc lactis* (earlier heterotypic synonym), links through 10.1601/nm.5585. Source of type material recommended for DOE sponsored genome sequencing by the JGI: DSM 8581. High-quality 16S rRNA sequence S000388589 (RDP), AF175403 (Genbank). N4Lid DOI: 10.1601/nm.5574

Leuconostoc pseudoficulneum^{VP} Chambel et al. 2006. Source of type material recommended for DOE sponsored genome sequencing by the JGI: DSM 15468. High-quality 16S rRNA sequence S000250738 (RDP), AY169967 (Genbank). N4Lid DOI: 10.1601/nm.10094

Leuconostoc pseudomesenteroides^{VP} Farrow et al. 1989. Source of type material recommended for DOE sponsored genome sequencing by the JGI: ATCC 12291. High-quality 16S rRNA sequence S000381405 (RDP), X95979 (Genbank). N4Lid DOI: 10.1601/nm.5588

Genus *Oenococcus*^{VP} Dicks et al. 1995. N4Lid DOI: 10.1601/nm.5589

Oenococcus oeni^{VP} (Garvie 1967) Dicks et al. 1995. <== *Leuconostoc oeni* (basonym). Synonym links through N4Lid: 10.1601/ex.5586. Source of type material recommended for DOE sponsored genome sequencing by the JGI: ATCC 23279. High-quality 16S rRNA sequence S000436257 (RDP), M35820 (Genbank). GOLD ID: Gc00440. GCAT ID: 000170_GCAT. Entrez genome id: 317. Sequenced strain: MCW PSU-1 is from a non-type strain. Genome sequencing is completed. Number of genomes of this species sequenced 2 (GOLD) 2 (NCBI). N4Lid DOI: 10.1601/nm.5590

† *Leuconostoc oeni*^{AL} corrig. Garvie 1967. ==> *Oenococcus oeni* (new combination). Synonym links through N4Lid: 10.1601/ex.5586. Source of type material recommended for DOE sponsored genome sequencing by the JGI: ATCC 23279. High-quality 16S rRNA sequence S000436257 (RDP), M35820 (Genbank). GOLD ID: Gc00440. GCAT ID: 000170_GCAT. Entrez genome id: 317. Sequenced strain: MCW PSU-1 is from a non-type strain. Genome sequencing is completed. Number of genomes of this species sequenced 2 (GOLD) 2 (NCBI). N4Lid DOI: 10.1601/nm.5586

Genus *Weissella*^{VP} Collins et al. 1994. N4Lid DOI: 10.1601/nm.5591

Weissella viridescens^{VP} (Niven and Evans 1957) Collins et al. 1994. <== *Lactobacillus viridescens* (basonym). Synonym links through N4Lid: 10.1601/ex.5441. Source of type material recommended for DOE sponsored genome sequencing by the JGI: ATCC 12706. High-quality 16S rRNA sequence S000436082 (RDP), M23040 (Genbank). N4Lid DOI: 10.1601/nm.5592

† *Lactobacillus viridescens*^{AL} Niven and Evans 1957. ==> *Weissella viridescens* (new combination). Synonym links through N4Lid: 10.1601/ex.5441. Source of type material recommended for DOE sponsored genome sequencing by the JGI: ATCC 12706. High-quality 16S rRNA sequence S000436082 (RDP), M23040 (Genbank). N4Lid DOI: 10.1601/nm.5441

Weissella cibaria^{VP} Björkroth et al. 2002. ≈ *Weissella kimchii* (later heterotypic synonym), links through 10.1601/nm.5593. Source of type material recommended for DOE sponsored genome sequencing by the JGI: CCUG 41967. High-quality 16S rRNA sequence S000391366 (RDP), AF312874 (Genbank). N4Lid DOI: 10.1601/nm.5593

† *Weissella kimchii*^{VP} Choi et al. 2002. ≈ *Weissella cibaria* (earlier heterotypic synonym), links through 10.1601/nm.5593. Source of type material recommended for DOE sponsored genome sequencing by the JGI: CHJ3. High-quality 16S rRNA sequence S000391366 (RDP), AF312874 (Genbank). N4Lid DOI: 10.1601/nm.5598

Weissella confusa^{VP} (Holzapfel and Kandler 1969) Collins et al. 1994. <== *Lactobacillus confusus* (basonym). Synonym links through N4Lid: 10.1601/ex.5352. Source of type material recommended for DOE sponsored genome sequencing by the JGI: ATCC 10881. High-quality 16S rRNA sequence S000436078 (RDP), M23036 (Genbank). N4Lid DOI: 10.1601/nm.5594

† *Lactobacillus confusus*^{AL} (Holzapfel and Kandler 1969) Sharpe et al. 1972. ==> *Weissella confusa* (new combination). Synonym links through N4Lid: 10.1601/ex.5352. Source of type material recommended for DOE sponsored genome sequencing by the JGI: ATCC 10881. High-quality 16S rRNA sequence S000436078 (RDP), M23036 (Genbank). N4Lid DOI: 10.1601/nm.5352

Weissella halotolerans^{VP} (Kandler et al. 1983) Collins et al. 1994. <== *Lactobacillus halotolerans* (basonym). Synonym links through N4Lid: 10.1601/ex.5374. Source of type material recommended for DOE sponsored genome sequencing by the JGI: ATCC 35410. High-quality 16S rRNA sequence S000436079 (RDP), M23037 (Genbank). N4Lid DOI: 10.1601/nm.5595

† *Lactobacillus halotolerans*^{VP} (ex Reuter 1970) Kandler et al. 1983. ==> *Weissella halotolerans* (new combination). Synonym links through N4Lid: 10.1601/ex.5374. Source of type material recommended for DOE sponsored genome sequencing by the JGI: ATCC 35410. High-quality 16S rRNA sequence S000436079 (RDP), M23037 (Genbank). N4Lid DOI: 10.1601/nm.5374

Weissella hellenica^{VP} Collins et al. 1994. Source of type material recommended for DOE sponsored genome sequencing by the JGI: ATCC 51523. High-quality 16S rRNA sequence S000130192 (RDP), X95981 (Genbank). N4Lid DOI: 10.1601/nm.5596

Weissella kandleri^{VP} (Holzapfel and van Wyk 1983) Collins et al. 1994. <== *Lactobacillus kandleri* (basonym). Synonym links through N4Lid: 10.1601/ex.5385. Source of type material recommended for DOE sponsored genome sequencing by the JGI: ATCC 51149. High-quality 16S rRNA sequence S000436080 (RDP), M23038 (Genbank). N4Lid DOI: 10.1601/nm.5597

† *Lactobacillus kandleri*^{VP} Holzapfel and van Wyk 1983. ==> *Weissella kandleri* (new combination). Synonym links through N4Lid: 10.1601/ex.5385. Source of type material recommended for DOE sponsored genome sequencing by the JGI: ATCC 51149. High-quality 16S rRNA sequence S000436080 (RDP), M23038 (Genbank). N4Lid DOI: 10.1601/nm.5385

Weissella koreensis^{VP} Lee et al. 2002. Source of type material recommended for DOE sponsored genome sequencing by the JGI: JCM 11263. High-quality 16S rRNA sequence S000434700 (RDP), AY035891 (Genbank). N4Lid DOI: 10.1601/nm.5599

Weissella minor^{VP} (Kandler et al. 1983) Collins et al. 1994. <== *Lactobacillus minor* (basonym). Synonym links through N4Lid: 10.1601/ex.5402. Source of type material recommended for DOE sponsored genome sequencing by the JGI: ATCC 35412. High-quality 16S rRNA sequence S000436081 (RDP), M23039 (Genbank). N4Lid DOI: 10.1601/nm.5600

† *Lactobacillus minor*^{VP} (ex Abo-Elnaga and Kandler 1965) Kandler et al. 1983. ==> *Weissella minor* (new combination). Synonym links through N4Lid: 10.1601/ex.5402. Source of type material recommended for DOE sponsored genome sequencing by the JGI: ATCC 35412. High-quality 16S rRNA sequence S000436081 (RDP), M23039 (Genbank). N4Lid DOI: 10.1601/nm.5402

Weissella paramesenteroides^{VP} (Garvie 1967) Collins et al. 1994. <== *Leuconostoc paramesenteroides* (basonym). Synonym links through N4Lid: 10.1601/ex.5587. Source of type material recommended for DOE sponsored genome sequencing by the JGI: ATCC 33313. High-quality 16S rRNA sequence S000436075 (RDP), M23033 (Genbank). N4Lid DOI: 10.1601/nm.5601

† *Leuconostoc paramesenteroides*^{AL} Garvie 1967. ==> *Weissella paramesenteroides* (new combination). Synonym links through N4Lid: 10.1601/ex.5587. Source of type material recommended for DOE sponsored genome sequencing by the JGI: ATCC 33313. High-quality 16S rRNA sequence S000436075 (RDP), M23033 (Genbank). N4Lid DOI: 10.1601/nm.5587

Weissella soli^{VP} Magnusson et al. 2002. Source of type material recommended for DOE sponsored genome sequencing by the JGI: DSM 14420. High-quality 16S rRNA sequence S000434584 (RDP), AY028260 (Genbank). N4Lid DOI: 10.1601/nm.5602

Weissella thailandensis^{VP} Tanasupawat et al. 2000. Source of type material recommended for DOE sponsored genome sequencing by the JGI: CIP 106751. High-quality 16S rRNA sequence S000006851 (RDP), AB023838 (Genbank). N4Lid DOI: 10.1601/nm.5603

Family Streptococcaceae^{AL} Deibel and Seeley 1974. N4Lid DOI: 10.1601/nm.5604

Genus Streptococcus^{AL} Rosenbach 1884. N4Lid DOI: 10.1601/nm.5605

Streptococcus pyogenes^{AL} Rosenbach 1884. Source of type material recommended for DOE sponsored genome sequencing by the JGI: ATCC 12344. High-quality 16S rRNA sequence S000381689 (RDP), AB002521 (Genbank). GOLD ID: Gc00049. GCAT ID: 000561_GCAT. Entrez genome id: 269. Sequenced strain: ATCC 700294 is from a non-type strain. Genome sequencing is completed. Number of genomes of this species sequenced 14 (GOLD) 13 (NCBI). N4Lid DOI: 10.1601/nm.5606

Streptococcus acidominimus^{AL} Ayers and Mudge 1922. Source of type material recommended for DOE sponsored genome sequencing by the JGI: ATCC 51725. High-quality 16S rRNA sequence S000134020 (RDP), X58301 (Genbank). N4Lid DOI: 10.1601/nm.5607

Streptococcus agalactiae^{AL} Lehmann and Neumann 1896. ≈ *Streptococcus difficilis* (later heterotypic synonym), links through 10.1601/nm.5609. Source of type material recommended for

DOE sponsored genome sequencing by the JGI: ATCC 13813. High-quality 16S rRNA sequence S000381647 (RDP), AB002479 (Genbank). GOLD ID: Gc00098. GCAT ID: 000512_GCAT. Entrez genome id: 330. Sequenced strain: 2603V/R is from a non-type strain. Genome sequencing is completed. Number of genomes of this species sequenced 8 (GOLD) 8 (NCBI). N4Lid DOI: 10.1601/nm.5609

† *Streptococcus difficilis*^{VP} corrig. Eldar et al. 1995. ≈ *Streptococcus agalactiae* (earlier heterotypic synonym), links through 10.1601/nm.5609. Source of type material recommended for DOE sponsored genome sequencing by the JGI: ATCC 51487. N4Lid DOI: 10.1601/nm.5625

Streptococcus alactolyticus^{VP} Farrow et al. 1985. ≈ *Streptococcus intestinalis* (later heterotypic synonym), links through 10.1601/nm.5610. Source of type material recommended for DOE sponsored genome sequencing by the JGI: ATCC 43077. High-quality 16S rRNA sequence S000381687 (RDP), AB002519 (Genbank). N4Lid DOI: 10.1601/nm.5610

† *Streptococcus intestinalis*^{VP} Robinson et al. 1988. ≈ *Streptococcus alactolyticus* (earlier heterotypic synonym), links through 10.1601/nm.5610. Source of type material recommended for DOE sponsored genome sequencing by the JGI: ATCC 43492. High-quality 16S rRNA sequence S000381687 (RDP), AB002519 (Genbank). N4Lid DOI: 10.1601/nm.5653

Streptococcus anginosus^{AL} (Andrewes and Horder 1906) Smith and Sherman 1938. Source of type material recommended for DOE sponsored genome sequencing by the JGI: ATCC 33397. High-quality 16S rRNA sequence S000134419 (RDP), X58309 (Genbank). N4Lid DOI: 10.1601/nm.5611

Streptococcus australis^{VP} Willcox et al. 2001. Source of type material recommended for DOE sponsored genome sequencing by the JGI: ATCC 700641. High-quality 16S rRNA sequence S000388821 (RDP), AF184974 (Genbank). N4Lid DOI: 10.1601/nm.5612

Streptococcus bovis^{AL} Orla-Jensen 1919. Source of type material recommended for DOE sponsored genome sequencing by the JGI: ATCC 33317. High-quality 16S rRNA sequence S000381650 (RDP), AB002482 (Genbank). GOLD ID: Gi01868. GCAT ID: 001076_GCAT. Genome sequence is from a non-type strain. Genome sequencing is incomplete. Number of genomes of this species sequenced 1 (GOLD). N4Lid DOI: 10.1601/nm.5613

Streptococcus canis^{VP} Devriese et al. 1986. Source of type material recommended for DOE sponsored genome sequencing by the JGI: ATCC 43496. High-quality 16S rRNA sequence S000381651 (RDP), AB002483 (Genbank). GOLD ID: Gi01604. GCAT ID: 001533_GCAT. Sequenced strain: FSL Z3-227 is from a non-type strain. Genome sequencing is incomplete. Number of genomes of this species sequenced 1 (GOLD). N4Lid DOI: 10.1601/nm.5614

Streptococcus castoreus^{VP} Lawson et al. 2005. Source of type material recommended for DOE sponsored genome sequencing by the JGI: CCUG 48115. High-quality 16S rRNA sequence S000539465 (RDP), AJ606047 (Genbank). N4Lid 10.1601/nm.9325

Streptococcus constellatus subsp. *constellatus*^{VP} (Prévot 1924) Holdeman and Moore 1974. Source of type material recommended for DOE sponsored genome sequencing by the JGI: ATCC 27823. High-quality 16S rRNA sequence S000129168 (RDP), X58310 (Genbank). N4Lid DOI: 10.1601/nm.5618

Streptococcus constellatus subsp. *pharyngis*^{VP} Whiley et al. 1999. Source of type material recommended for DOE sponsored genome sequencing by the JGI: NCTC 13122. N4Lid DOI: 10.1601/nm.5619

Streptococcus criceti^{AL} corrig. Coykendall 1977. Source of type material recommended for DOE sponsored genome sequencing by the JGI: ATCC 19642. High-quality 16S rRNA sequence S000128159 (RDP), X58305 (Genbank). N4Lid DOI: 10.1601/nm.5621

Streptococcus cristatus^{VP} corrig. Handley et al. 1991. Source of type material recommended for DOE sponsored genome sequencing by the JGI: ATCC 51100. High-quality 16S rRNA sequence S000427388 (RDP), AB008313 (Genbank). N4Lid DOI: 10.1601/nm.5622

Streptococcus devriesei^{VP} Collins et al. 2004. Source of type material recommended for DOE sponsored genome sequencing by the JGI: CCUG 47155. High-quality 16S rRNA sequence S000539434 (RDP), AJ564067 (Genbank). N4Lid 10.1601/nm.8858

Streptococcus didelphis^{VP} Rurangirwa et al. 2000. Source of type material recommended for DOE sponsored genome sequencing by the JGI: ATCC 700828. High-quality 16S rRNA sequence S000388602 (RDP), AF176103 (Genbank). N4Lid DOI: 10.1601/nm.5624

- Streptococcus downei*^{VP} Whiley et al. 1988. Source of type material recommended for DOE sponsored genome sequencing by the JGI: ATCC 33748. High-quality 16S rRNA sequence S000130601 (RDP), X58306 (Genbank). N4Lid DOI: 10.1601/nm.5626
- Streptococcus dysgalactiae subsp. dysgalactiae*^{VP} (ex Diernhofer 1932) Garvie et al. 1983. Source of type material recommended for DOE sponsored genome sequencing by the JGI: ATCC 43078. High-quality 16S rRNA sequence S000381653 (RDP), AB002485 (Genbank). N4Lid DOI: 10.1601/nm.5628
- Streptococcus dysgalactiae subsp. equisimilis*^{VP} Vandamme et al. 1996. Source of type material recommended for DOE sponsored genome sequencing by the JGI: CCUG 36637. N4Lid DOI: 10.1601/nm.5629
- Streptococcus entericus*^{VP} Vela et al. 2002. Source of type material recommended for DOE sponsored genome sequencing by the JGI: CCUG 44616. High-quality 16S rRNA sequence S000133824 (RDP), AJ409287 (Genbank). N4Lid DOI: 10.1601/nm.5630
- Streptococcus equi subsp. equi*^{VP} Sand and Jensen 1888. Source of type material recommended for DOE sponsored genome sequencing by the JGI: ATCC 33398. High-quality 16S rRNA sequence S000381683 (RDP), AB002515 (Genbank). GOLD ID: Gi00606. GCAT ID: 001535_GCAT. Entrez genome id: 69. Genome sequence is from a non-type strain. Genome sequencing is incomplete. Number of genomes of this species sequenced 1 (GOLD) 1 (NCBI). N4Lid DOI: 10.1601/nm.5631
- Streptococcus equi subsp. ruminatorum*^{VP} Fernández et al. 2004. Source of type material recommended for DOE sponsored genome sequencing by the JGI: CCUG 47520. High-quality 16S rRNA sequence S000440164 (RDP), AJ605748 (Genbank). N4Lid 10.1601/nm.8859
- Streptococcus equi subsp. zooepidemicus*^{VP} (ex Frost and Englebrecht 1936) Farrow and Collins 1985. Source of type material recommended for DOE sponsored genome sequencing by the JGI: ATCC 43079. High-quality 16S rRNA sequence S000381684 (RDP), AB002516 (Genbank). GOLD ID: Gi00607. GCAT ID: 001572_GCAT. Entrez genome id: 12988. Genome sequence is from a non-type strain. Genome sequencing is incomplete. Number of genomes of this species sequenced 1 (GOLD) 1 (NCBI). N4Lid DOI: 10.1601/nm.5632
- Streptococcus equinus*^{AL} Andrewes and Horder 1906. Source of type material recommended for DOE sponsored genome sequencing by the JGI: ATCC 9812. High-quality 16S rRNA sequence S000134019 (RDP), X58318 (Genbank). N4Lid DOI: 10.1601/nm.5633
- Streptococcus ferus*^{VP} (ex Coykendall 1977) Coykendall 1983. Source of type material recommended for DOE sponsored genome sequencing by the JGI: ATCC 33477. High-quality 16S rRNA sequence S000100382 (RDP), AJ420197 (Genbank). N4Lid DOI: 10.1601/nm.5636
- Streptococcus gallinaeus*^{VP} Collins et al. 2002. Source of type material recommended for DOE sponsored genome sequencing by the JGI: DSM 15349. High-quality 16S rRNA sequence S000087136 (RDP), AJ307888 (Genbank). N4Lid DOI: 10.1601/nm.5637
- Streptococcus gallolyticus subsp. gallolyticus*^{VP} Osawa et al. 1996. Source of type material recommended for DOE sponsored genome sequencing by the JGI: ATCC 51879. High-quality 16S rRNA sequence S000010869 (RDP), X94337 (Genbank). GOLD ID: Gi01038. GCAT ID: 001536_GCAT. Sequenced strain: NEM2135 is from a non-type strain. Genome sequencing is incomplete. Number of genomes of this species sequenced 1 (GOLD) 1 (NCBI). N4Lid DOI: 10.1601/nm.5639
- † *Streptococcus caprinus*^{VP} Brooker et al. 1996. == *Streptococcus gallolyticus subsp. gallolyticus* (earlier homotypic synonym), links through 10.1601/ex.5639. Source of type material recommended for DOE sponsored genome sequencing by the JGI: ATCC BAA-249. N4Lid DOI: 10.1601/nm.5615
- Streptococcus gallolyticus subsp. macedonicus*^{VP} (Tsakalidou et al. 1998) Schlegel et al. 2003. <== *Streptococcus macedonicus* (basonym). Synonym links through N4Lid: 10.1601/ex.5659. Source of type material recommended for DOE sponsored genome sequencing by the JGI: ATCC BAA-249. N4Lid DOI: 10.1601/nm.5641
- † *Streptococcus macedonicus*^{VP} Tsakalidou et al. 1998. ==> *Streptococcus gallolyticus subsp. macedonicus* (new combination). Synonym links through N4Lid: 10.1601/ex.5659. Source of type material recommended for DOE sponsored genome sequencing by the JGI: ATCC BAA-249. High-quality 16S rRNA sequence S000428680 (RDP), AF088900 (Genbank). N4Lid DOI: 10.1601/nm.5659

† *Streptococcus waius*^{VP} Flint et al. 1999. ≈ *Streptococcus gallolyticus subsp. macedonicus* (earlier heterotypic synonym), links through 10.1601/nm.5641. Source of type material recommended for DOE sponsored genome sequencing by the JGI: 38777. High-quality 16S rRNA sequence S000428680 (RDP), AF088900 (Genbank). N4Lid DOI: 10.1601/nm.5694

Streptococcus gallolyticus subsp. pasteurianus^{VP} (Poyart et al. 2002) Schlegel et al. 2003. <== *Streptococcus pasteurianus* (basonym). Synonym links through N4Lid: 10.1601/ex.5671. Source of type material recommended for DOE sponsored genome sequencing by the JGI: DSM 15351. N4Lid DOI: 10.1601/nm.5642

† *Streptococcus pasteurianus*^{VP} Poyart et al. 2002. ==> *Streptococcus gallolyticus subsp. pasteurianus* (new combination). Synonym links through N4Lid: 10.1601/ex.5671. Source of type material recommended for DOE sponsored genome sequencing by the JGI: DSM 15351. N4Lid DOI: 10.1601/nm.5671

Streptococcus gordonii^{VP} Kilian et al. 1989. Source of type material recommended for DOE sponsored genome sequencing by the JGI: ATCC 10558. High-quality 16S rRNA sequence S000386903 (RDP), AF003931 (Genbank). GOLD ID: Gi00608. GCAT ID: 001537_GCAT. Entrez genome id: 66. Sequenced strain: Challis (NCTC7868) is from a non-type strain. Genome sequencing is incomplete. Number of genomes of this species sequenced 1 (GOLD) 1 (NCBI). N4Lid DOI: 10.1601/nm.5644

Streptococcus halichoeri^{VP} Lawson et al. 2004. Source of type material recommended for DOE sponsored genome sequencing by the JGI: CCUG 48324. High-quality 16S rRNA sequence S000416938 (RDP), AJ606046 (Genbank). N4Lid 10.1601/nm.8860

Streptococcus hyointestinalis^{VP} Devriese et al. 1988. Source of type material recommended for DOE sponsored genome sequencing by the JGI: ATCC 49169. High-quality 16S rRNA sequence S000381686 (RDP), AB002518 (Genbank). N4Lid DOI: 10.1601/nm.5646

Streptococcus hyovaginalis^{VP} Devriese et al. 1997. Source of type material recommended for DOE sponsored genome sequencing by the JGI: ATCC 700866. N4Lid DOI: 10.1601/nm.5647

Streptococcus infantarius^{VP} Schlegel et al. 2000. Source of type material recommended for DOE sponsored genome sequencing by the JGI: ATCC BAA-102. High-quality 16S rRNA sequence S000388694 (RDP), AF177729 (Genbank). N4Lid 10.1601/nm.9205

Streptococcus infantarius subsp. coli^{VP} Schlegel et al. 2003. Source of type material recommended for DOE sponsored genome sequencing by the JGI: DSM 15350. High-quality 16S rRNA sequence S000393994 (RDP), AF429763 (Genbank). N4Lid DOI: 10.1601/nm.5649

Streptococcus infantarius subsp. infantarius^{VP} Schlegel et al. 2003. Source of type material recommended for DOE sponsored genome sequencing by the JGI: ATCC BAA-102. High-quality 16S rRNA sequence S000388694 (RDP), AF177729 (Genbank). N4Lid DOI: 10.1601/nm.5648

Streptococcus infantis^{VP} Kawamura et al. 1998. Source of type material recommended for DOE sponsored genome sequencing by the JGI: ATCC 700779. High-quality 16S rRNA sequence S000381842 (RDP), AB008315 (Genbank). N4Lid DOI: 10.1601/nm.5650

Streptococcus iniae^{AL} Pier and Madin 1976. ≈ *Streptococcus shiloi* (later heterotypic synonym), links through 10.1601/nm.5651. Source of type material recommended for DOE sponsored genome sequencing by the JGI: ATCC 29178. High-quality 16S rRNA sequence S000391821 (RDP), AF335572 (Genbank). GOLD ID: Gi01537. GCAT ID: 001538_GCAT. Entrez genome id: 16831. Sequenced strain: 9117 is from a non-type strain. Genome sequencing is incomplete. Number of genomes of this species sequenced 1 (GOLD) 1 (NCBI). N4Lid DOI: 10.1601/nm.5651

† *Streptococcus shiloi*^{VP} Eldar et al. 1995. ≈ *Streptococcus iniae* (earlier heterotypic synonym), links through 10.1601/nm.5651. Source of type material recommended for DOE sponsored genome sequencing by the JGI: ATCC 51499. N4Lid DOI: 10.1601/nm.5685

Streptococcus intermedius^{AL} Prévot 1925. Source of type material recommended for DOE sponsored genome sequencing by the JGI: ATCC 27335. High-quality 16S rRNA sequence S000428921 (RDP), AF104671 (Genbank). N4Lid DOI: 10.1601/nm.5652

Streptococcus lutetiensis^{VP} Poyart et al. 2002. Source of type material recommended for DOE sponsored genome sequencing by the JGI: DSM 15350. High-quality 16S rRNA sequence S000393994 (RDP), AF429763 (Genbank). N4Lid DOI: 10.1601/nm.5657

Streptococcus macacae^{VP} Beighton et al. 1984. Source of type material recommended for DOE sponsored genome sequencing by the JGI: ATCC 35911. High-quality 16S rRNA sequence S000126951 (RDP), X58302 (Genbank). N4Lid DOI: 10.1601/nm.5658

Streptococcus marimammalium^{VP} Lawson et al. 2005. Source of type material recommended for DOE sponsored genome sequencing by the JGI: CCUG 48494. High-quality 16S rRNA sequence S000471775 (RDP), AJ634751 (Genbank). N4Lid DOI: 10.1601/nm.8861

Streptococcus massiliensis^{VP} Glazunova et al. 2006. Source of type material recommended for DOE sponsored genome sequencing by the JGI: CCUG 49690. High-quality 16S rRNA sequence S000487847 (RDP), AY769997 (Genbank). N4Lid DOI: 10.1601/nm.10039

Streptococcus minor^{VP} Vancanneyt et al. 2004. Source of type material recommended for DOE sponsored genome sequencing by the JGI: CCUG 47487. High-quality 16S rRNA sequence S000403332 (RDP), AY232832 (Genbank). N4Lid DOI: 10.1601/nm.5660

Streptococcus mitis^{AL} Andrewes and Horder 1906. Source of type material recommended for DOE sponsored genome sequencing by the JGI: ATCC 49456. High-quality 16S rRNA sequence S000386901 (RDP), AF003929 (Genbank). GOLD ID: Gi00609. GCAT ID: 001539_GCAT. Sequenced strain: B6 is from a non-type strain. Genome sequencing is incomplete. Number of genomes of this species sequenced 2 (GOLD) 1 (NCBI). N4Lid DOI: 10.1601/nm.5661

Streptococcus mutans^{AL} Clarke 1924. Source of type material recommended for DOE sponsored genome sequencing by the JGI: ATCC 25175. High-quality 16S rRNA sequence S000134021 (RDP), X58303 (Genbank). GOLD ID: Gc00109. GCAT ID: 000501_GCAT. Entrez genome id: 333. Sequenced strain: ATCC 700610 is from a non-type strain. Genome sequencing is completed. Number of genomes of this species sequenced 1 (GOLD) 1 (NCBI). N4Lid DOI: 10.1601/nm.5663

Streptococcus oligofermentans^{VP} Tong et al. 2003. Source of type material recommended for DOE sponsored genome sequencing by the JGI: LMG 21535. High-quality 16S rRNA sequence S000395972 (RDP), AY099095 (Genbank). N4Lid DOI: 10.1601/nm.5664

Streptococcus oralis^{VP} Bridge and Sneath 1982. Source of type material recommended for DOE sponsored genome sequencing by the JGI: ATCC 35037. N4Lid DOI: 10.1601/nm.5665

Streptococcus orisratti^{VP} Zhu et al. 2000. Source of type material recommended for DOE sponsored genome sequencing by the JGI: ATCC 700640. High-quality 16S rRNA sequence S000387218 (RDP), AF124350 (Genbank). N4Lid DOI: 10.1601/nm.5666

Streptococcus ovis^{VP} Collins et al. 2001. Source of type material recommended for DOE sponsored genome sequencing by the JGI: CCUG 39485. High-quality 16S rRNA sequence S000009782 (RDP), Y17358 (Genbank). N4Lid DOI: 10.1601/nm.5667

Streptococcus parasanguinis^{VP} corrig. Whiley et al. 1990. Source of type material recommended for DOE sponsored genome sequencing by the JGI: ATCC 15912. High-quality 16S rRNA sequence S000386905 (RDP), AF003933 (Genbank). N4Lid DOI: 10.1601/nm.5668

Streptococcus parauberis^{VP} Williams and Collins 1990. Source of type material recommended for DOE sponsored genome sequencing by the JGI: DSM 6631. N4Lid DOI: 10.1601/nm.5669

Streptococcus peroris^{VP} Kawamura et al. 1998. Source of type material recommended for DOE sponsored genome sequencing by the JGI: ATCC 700780. High-quality 16S rRNA sequence S000381841 (RDP), AB008314 (Genbank). N4Lid DOI: 10.1601/nm.5672

Streptococcus phocae^{VP} Skaar et al. 1994. Source of type material recommended for DOE sponsored genome sequencing by the JGI: ATCC 51973. High-quality 16S rRNA sequence S000389773 (RDP), AF235052 (Genbank). N4Lid DOI: 10.1601/nm.5673

Streptococcus pleomorphus^{AL} Barnes et al. 1979. Source of type material recommended for DOE sponsored genome sequencing by the JGI: ATCC 29734. High-quality 16S rRNA sequence S000436094 (RDP), M23730 (Genbank). N4Lid DOI: 10.1601/nm.5676

Streptococcus pluranimalium^{VP} Devriese et al. 1999. Source of type material recommended for DOE sponsored genome sequencing by the JGI: ATCC 700864. N4Lid DOI: 10.1601/nm.5675

Streptococcus pneumoniae^{AL} (Klein 1884) Chester 1901. Source of type material recommended for DOE sponsored genome sequencing by the JGI: ATCC 33400. High-quality 16S rRNA sequence S000386902 (RDP), AF003930 (Genbank). GOLD ID: Gc00058. GCAT ID: 000552_GCAT. Entrez genome id: 277. Sequenced strain: ATCC-BAA-334 is from a non-type strain. Genome sequencing is completed. Number of genomes of this species sequenced 19 (GOLD) 14 (NCBI). N4Lid DOI: 10.1601/nm.5677

Streptococcus porcinus^{VP} Collins et al. 1985. Source of type material recommended for DOE sponsored genome sequencing by the JGI: ATCC 43138. High-quality 16S rRNA sequence S000381691 (RDP), AB002523 (Genbank). N4Lid DOI: 10.1601/nm.5678

Streptococcus pseudopneumoniae^{VP} Arbique et al. 2005. Source of type material recommended for DOE sponsored genome sequencing by the JGI: ATCC BAA-960. High-quality 16S rRNA sequence S000421498 (RDP), AY612844 (Genbank). N4Lid 10.1601/nm.8862

Streptococcus rattii^{AL} corrig. Coykendall 1977. Source of type material recommended for DOE sponsored genome sequencing by the JGI: ATCC 19645. High-quality 16S rRNA sequence S000100511 (RDP), AJ420201 (Genbank). N4Lid DOI: 10.1601/nm.5680

Streptococcus salivarius subsp. salivarius^{VP} Andrewes and Horder 1906. Source of type material recommended for DOE sponsored genome sequencing by the JGI: ATCC 7073. GOLD ID: Gi01039. GCAT ID: 001559_GCAT. Entrez genome id: 15715. Sequenced strain: JIM8777 is from a non-type strain. Genome sequencing is incomplete. Number of genomes of this species sequenced 2 (GOLD) 2 (NCBI). N4Lid DOI: 10.1601/nm.5682

Streptococcus salivarius subsp. thermophilus^{VP} (Orla-Jensen 1919) Farrow and Collins 1984. <== *Streptococcus thermophilus* (basonym). Synonym links through N4Lid: 10.1601/ex.5683. Source of type material recommended for DOE sponsored genome sequencing by the JGI: ATCC 19258. High-quality 16S rRNA sequence S000004394 (RDP), X68418 (Genbank). GOLD ID: Gc00233. GCAT ID: 000377_GCAT. Entrez genome id: 13163. Sequenced strain: CNRZ 1066 is from a non-type strain. Genome sequencing is completed. Number of genomes of this species sequenced 4 (GOLD) 3 (NCBI). N4Lid DOI: 10.1601/nm.5683

† *Streptococcus thermophilus*^{AL} (Orla-Jensen 1919) Schleifer et al. 1995. ==> *Streptococcus salivarius subsp. thermophilus* (new combination). Synonym links through N4Lid: 10.1601/ex.5683. Source of type material recommended for DOE sponsored genome sequencing by the JGI: ATCC 19258. High-quality 16S rRNA sequence S000004394 (RDP), X68418 (Genbank). GOLD ID: Gc00233. GCAT ID: 000377_GCAT. Entrez genome id: 13163. Sequenced strain: CNRZ 1066 is from a non-type strain. Genome sequencing is completed. Number of genomes of this species sequenced 4 (GOLD) 3 (NCBI). N4Lid DOI: 10.1601/nm.5689

Streptococcus sanguinis^{AL} corrig. White and Niven 1946. Source of type material recommended for DOE sponsored genome sequencing by the JGI: ATCC 10556. High-quality 16S rRNA sequence S000386900 (RDP), AF003928 (Genbank). GOLD ID: Gi00616. GCAT ID: 000100_GCAT. Entrez genome id: 13942. Sequenced strain: SK36 is from a non-type strain. Genome sequencing is incomplete. Number of genomes of this species sequenced 1 (GOLD) 1 (NCBI). N4Lid DOI: 10.1601/nm.5684

Streptococcus sinensis^{VP} Woo et al. 2002. Source of type material recommended for DOE sponsored genome sequencing by the JGI: DSM 14990. High-quality 16S rRNA sequence S000394129 (RDP), AF432856 (Genbank). N4Lid DOI: 10.1601/nm.5686

Streptococcus sobrinus^{VP} (ex Coykendall 1974) Coykendall 1983. Source of type material recommended for DOE sponsored genome sequencing by the JGI: ATCC 33478. High-quality 16S rRNA sequence S000131146 (RDP), X58307 (Genbank). GOLD ID: Gi00617. GCAT ID: 001561_GCAT. Entrez genome id: 1420. Sequenced strain: 6715 is from a non-type strain. Genome sequencing is incomplete. Number of genomes of this species sequenced 1 (GOLD) 1 (NCBI). N4Lid DOI: 10.1601/nm.5687

Streptococcus suis^{VP} (ex Elliot 1966) Kilpper-Bälz and Schleifer 1987. Source of type material recommended for DOE sponsored genome sequencing by the JGI: ATCC 43765. High-quality 16S rRNA sequence S000381693 (RDP), AB002525 (Genbank). GOLD ID: Gi00618. GCAT ID: 001565_GCAT. Entrez genome id: 12417. Sequenced strain: 89/1591 is from a non-type strain. Genome sequencing is incomplete. Number of genomes of this species sequenced 7 (GOLD) 6 (NCBI). N4Lid DOI: 10.1601/nm.5688

Streptococcus thoralensis^{VP} Devriese et al. 1997. Source of type material recommended for DOE sponsored genome sequencing by the JGI: ATCC 700865. High-quality 16S rRNA sequence S000005549 (RDP), Y09007 (Genbank). N4Lid DOI: 10.1601/nm.5690

Streptococcus uberis^{AL} Diernhofer 1932. Source of type material recommended for DOE sponsored genome sequencing by the JGI: ATCC 19436. High-quality 16S rRNA sequence S000381694 (RDP), AB002526 (Genbank). GOLD ID: Gi00625. GCAT ID: 001571_GCAT. Entrez genome id: 353. Sequenced strain: 0140J is from a non-type strain. Genome sequencing is incomplete. Number of genomes of this species sequenced 1 (GOLD) 1 (NCBI). N4Lid DOI: 10.1601/nm.5691

Streptococcus urinalis^{VP} Collins et al. 2000. Source of type material recommended for DOE sponsored genome sequencing by the JGI: CCUG 41590. N4Lid DOI: 10.1601/nm.5692

Streptococcus vestibularis^{VP} Whiley and Hardie 1988. Source of type material recommended for DOE sponsored genome sequencing by the JGI: ATCC 49124. High-quality 16S rRNA sequence S000129396 (RDP), X58321 (Genbank). N4Lid DOI: 10.1601/nm.5693

Genus *Lactococcus*^{VP} Schleifer et al. 1986. N4Lid DOI: 10.1601/nm.5695

Lactococcus lactis subsp. *lactis*^{VP} (Lister 1873) Schleifer et al. 1986. <== *Streptococcus lactis* subsp. *lactis* (basonym). Synonym links through N4Lid: 10.1601/ex.5654. Source of type material recommended for DOE sponsored genome sequencing by the JGI: ATCC 19435. High-quality 16S rRNA sequence S000711592 (RDP). GOLD ID: Gc00054. GCAT ID: 000556_GCAT. Entrez genome id: 72. Sequenced strain: IL1403 is from a non-type strain. Genome sequencing is completed. Number of genomes of this species sequenced 2 (GOLD) 1 (NCBI). N4Lid DOI: 10.1601/nm.5696

† *Streptococcus lactis* subsp. *diacetilactis*^{VP} (ex Matuszewski et al. 1936) Garvie and Farrow 1982. ≈ *Lactococcus lactis* subsp. *lactis* (earlier heterotypic synonym), links through 10.1601/nm.5696. Source of type material recommended for DOE sponsored genome sequencing by the JGI: NCIMB 700176. N4Lid DOI: 10.1601/nm.5656

† *Lactobacillus xylosus*^{AL} Kitahara 1938. ≈ *Lactococcus lactis* subsp. *lactis* (earlier heterotypic synonym), links through 10.1601/nm.5696. Source of type material recommended for DOE sponsored genome sequencing by the JGI: ATCC 15577. N4Lid DOI: 10.1601/nm.5443

† *Streptococcus lactis* subsp. *lactis*^{VP} (Lister 1873) Löhnis 1909. ==> *Lactococcus lactis* subsp. *lactis* (new combination). Synonym links through N4Lid: 10.1601/ex.5654. Source of type material recommended for DOE sponsored genome sequencing by the JGI: ATCC 19435. High-quality 16S rRNA sequence S000528601 (RDP). GOLD ID: Gc00054. GCAT ID: 000556_GCAT. Entrez genome id: 72. Sequenced strain: IL1403 is from a non-type strain. Genome sequencing is completed. Number of genomes of this species sequenced 2 (GOLD) 1 (NCBI). N4Lid DOI: 10.1601/nm.5654

Lactococcus lactis subsp. *cremoris*^{VP} (Orla-Jensen 1919) Schleifer et al. 1986. <== *Streptococcus cremoris* (basonym). Synonym links through N4Lid: 10.1601/ex.5620. Source of type material recommended for DOE sponsored genome sequencing by the JGI: ATCC 19257. High-quality 16S rRNA sequence S000436427 (RDP), M58836 (Genbank). GOLD ID: Gc00450. GCAT ID: 000159_GCAT. Entrez genome id: 401. Sequenced strain: SK11 is from a non-type strain. Genome sequencing is completed. Number of genomes of this species sequenced 1 (GOLD) 2 (NCBI). N4Lid DOI: 10.1601/nm.5697

Streptococcus lactis subsp. *cremoris*^{VP} (Orla-Jensen 1919) Garvie and Farrow 1982. <== *Streptococcus cremoris* (basonym). *Lactococcus lactis* subsp. *cremoris* (new combination). Synonym links through N4Lid: 10.1601/ex.5620. Source of type material recommended for DOE sponsored genome sequencing by the JGI: ATCC 19257. High-quality 16S rRNA sequence S000436427 (RDP), M58836 (Genbank). GOLD ID: Gc00450. GCAT ID: 000159_GCAT. Entrez genome id: 401. Sequenced strain: SK11 is from a non-type strain. Genome sequencing is completed. Number of genomes of this species sequenced 1 (GOLD) 2 (NCBI). N4Lid DOI: 10.1601/nm.5655

† *Streptococcus cremoris*^{AL} Orla-Jensen 1919. ==> *Streptococcus lactis* subsp. *cremoris* (new combination). Synonym links through N4Lid: 10.1601/ex.5620. Source of type material recommended for DOE sponsored genome sequencing by the JGI: ATCC 19257. High-quality 16S rRNA sequence S000436427 (RDP), M58836 (Genbank). GOLD ID: Gc00450. GCAT ID: 000159_GCAT. Entrez genome id: 401. Sequenced strain: SK11 is from a non-type strain. Genome sequencing is completed. Number of genomes of this species sequenced 1 (GOLD) 2 (NCBI). N4Lid DOI: 10.1601/nm.5620

Lactococcus lactis subsp. *hordniae*^{VP} (ex Latorre-Guzman et al. 1977) Schleifer et al. 1986. Source of type material recommended for DOE sponsored genome sequencing by the JGI: ATCC 29071. N4Lid DOI: 10.1601/nm.5699

Lactococcus garvieae^{VP} (Collins et al. 1984) Schleifer et al. 1986. <== *Streptococcus garvieae* (basonym). Synonym links through N4Lid: 10.1601/ex.5643. Source of type material recommended for DOE sponsored genome sequencing by the JGI: ATCC 43921. High-quality 16S rRNA sequence S000414567 (RDP), L32813 (Genbank). N4Lid DOI: 10.1601/nm.5700

† *Streptococcus garvieae*^{VP} Collins et al. 1984. ==> *Lactococcus garvieae* (new combination). Synonym links through N4Lid: 10.1601/ex.5643. Source of type material recommended for DOE sponsored genome sequencing by the JGI: ATCC 43921. N4Lid DOI: 10.1601/nm.5643

† *Enterococcus seriolicida*^{VP} Kusuda et al. 1991. ≈ *Lactococcus garvieae* (earlier heterotypic synonym), links through 10.1601/nm.5700. Source of type material recommended for DOE sponsored genome sequencing by the JGI: YT-3. High-quality 16S rRNA sequence S000414567 (RDP), L32813 (Genbank). N4Lid DOI: 10.1601/nm.5551

Lactococcus piscium^{VP} Williams et al. 1990. Source of type material recommended for DOE sponsored genome sequencing by the JGI: ATCC 700018. High-quality 16S rRNA sequence S000128624 (RDP), X53905 (Genbank). N4Lid DOI: 10.1601/nm.5701

Lactococcus plantarum^{VP} (Collins et al. 1984) Schleifer et al. 1986. <== *Streptococcus plantarum* (basonym). Synonym links through N4Lid: 10.1601/ex.5674. Source of type material recommended for DOE sponsored genome sequencing by the JGI: ATCC 43199. High-quality 16S rRNA sequence S000126778 (RDP), X54259 (Genbank). N4Lid DOI: 10.1601/nm.5702

† *Streptococcus plantarum*^{VP} Collins et al. 1984. ==> *Lactococcus plantarum* (new combination). Synonym links through N4Lid: 10.1601/ex.5674. Source of type material recommended for DOE sponsored genome sequencing by the JGI: ATCC 43199. High-quality 16S rRNA sequence S000126778 (RDP), X54259 (Genbank). N4Lid DOI: 10.1601/nm.5674

Lactococcus raffinolactis^{VP} (Orla-Jensen and Hansen 1932) Schleifer et al. 1988. <== *Streptococcus raffinolactis* (basonym). Synonym links through N4Lid: 10.1601/ex.5679. Source of type material recommended for DOE sponsored genome sequencing by the JGI: ATCC 43920. High-quality 16S rRNA sequence S000128039 (RDP), X54261 (Genbank). N4Lid DOI: 10.1601/nm.5703

† *Streptococcus raffinolactis*^{AL} Orla-Jensen and Hansen 1932. ==> *Lactococcus raffinolactis* (new combination). Synonym links through N4Lid: 10.1601/ex.5679. Source of type material recommended for DOE sponsored genome sequencing by the JGI: ATCC 43920. High-quality 16S rRNA sequence S000128039 (RDP), X54261 (Genbank). N4Lid DOI: 10.1601/nm.5679

Genus *Lactovum*^{VP} Matthies et al. 2005. N4Lid 10.1601/nm.9287

Lactovum miscens^{VP} Matthies et al. 2005. Source of type material recommended for DOE sponsored genome sequencing by the JGI: ATCC BAA-490. High-quality 16S rRNA sequence S000570234 (RDP), AJ439543 (Genbank). N4Lid 10.1601/nm.9286

Family *Incertae sedis*^{NVP} N4Lid DOI: 10.1601/nm.5704

Genus *Acetoanaerobium*^{VP} Sleat et al. 1985. N4Lid DOI: 10.1601/nm.5705

Acetoanaerobium noterae^{VP} Sleat et al. 1985. Source of type material recommended for DOE sponsored genome sequencing by the JGI: ATCC 35199. N4Lid DOI: 10.1601/nm.5706

Genus *Oscillospira*^{AL} Chatton and Pérard 1913. N4Lid DOI: 10.1601/nm.5707

Oscillospira guilliermondii^{AL} corrig. Chatton and Pérard 1913. Source of type material recommended for DOE sponsored genome sequencing by the JGI: No viable deposit available. N4Lid DOI: 10.1601/nm.5708

Genus *Syntrophococcus*^{VP} Krumholz and Bryant 1986. N4Lid DOI: 10.1601/nm.5709

Syntrophococcus sucromutans^{VP} Krumholz and Bryant 1986. Source of type material recommended for DOE sponsored genome sequencing by the JGI: ATCC 43584. High-quality 16S rRNA sequence S000007389 (RDP), Y18191 (Genbank). N4Lid DOI: 10.1601/nm.5710

Genus *Symbiobacterium*^{VP} Ohno et al. 2000. Source of type material recommended for DOE sponsored genome sequencing by the JGI: Incertae sedis. N4Lid 10.1601/nm.9207

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