

Taxonomic Outline of the Bacteria and Archaea, Release 7.7 March 6, 2007.
Part 3 – The Bacteria: Phylum “Proteobacteria”, Class Alphaproteobacteria
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Phylum “Proteobacteria” Garrity et al. 2005. N4Lid DOI: 10.1601/nm.808

Class Alphaproteobacteria^{VP} Garrity et al 2006. N4Lid DOI: 10.1601/nm.809

Order Rhodospirillales^{AL} Pfennig and Trüper 1971. N4Lid DOI: 10.1601/nm.810

Family Rhodospirillaceae^{AL} Pfennig and Trüper 1971. N4Lid DOI: 10.1601/nm.811

Genus Rhodospirillum^{AL} Molisch 1907. N4Lid DOI: 10.1601/nm.812

Rhodospirillum rubrum^{AL} (Esmarch 1887) Molisch 1907. Source of type material recommended for DOE sponsored genome sequencing by the JGI: ATCC 11170. High-quality 16S rRNA sequence S000413733 (RDP), D30778 (Genbank). GOLD ID: Gc00396. GCAT ID: 000213_GCAT. Entrez genome id: 58. Sequenced strain: ATCC 11170 is type material. Genome sequencing is completed. Number of genomes of this species sequenced 1 (GOLD) 1 (NCBI). N4Lid DOI: 10.1601/nm.813

Rhodospirillum photometricum^{AL} Molisch 1907. Source of type material recommended for DOE sponsored genome sequencing by the JGI: ATCC 49918. High-quality 16S rRNA sequence S000253432 (RDP), AJ222662 (Genbank). N4Lid DOI: 10.1601/nm.817

Genus Azospirillum^{AL} Tarrand et al. 1979. N4Lid DOI: 10.1601/nm.822

Azospirillum lipoferum^{AL} (Beijerinck 1925) Tarrand et al. 1979. Source of type material recommended for DOE sponsored genome sequencing by the JGI: ATCC 29707. High-quality 16S rRNA sequence S000436436 (RDP), M59061 (Genbank). N4Lid DOI: 10.1601/nm.823

Azospirillum amazonense^{VP} Magalhães et al. 1984. Source of type material recommended for DOE sponsored genome sequencing by the JGI: ATCC 35119. High-quality 16S rRNA sequence S000127672 (RDP), Z29616 (Genbank). N4Lid DOI: 10.1601/nm.824

Azospirillum brasilense^{AL} corrig. Tarrand et al. 1979. ≈ *Roseomonas fauriae* (later heterotypic synonym), links through 10.1601/nm.825. Source of type material recommended for DOE sponsored genome sequencing by the JGI: ATCC 29145. High-quality 16S rRNA sequence S000002977 (RDP), X79739 (Genbank). GOLD ID: Gi00731. GCAT ID: 000707_GCAT. Entrez genome id: 13216. 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.825

† *Roseomonas fauriae*^{VP} Rihs et al. 1998. ≈ *Azospirillum brasilense* (earlier heterotypic synonym), links through 10.1601/nm.825. Source of type material recommended for DOE sponsored genome sequencing by the JGI: ATCC 49958. High-quality 16S rRNA sequence S000398099 (RDP), AY150046 (Genbank). N4Lid DOI: 10.1601/nm.1604

Azospirillum doebereineriae^{VP} Eckert et al. 2001. Source of type material recommended for DOE sponsored genome sequencing by the JGI: DSM 13131. High-quality 16S rRNA sequence S000020300 (RDP), AJ238567 (Genbank). N4Lid DOI: 10.1601/nm.826

Azospirillum halopraeferens^{VP} Reinhold et al. 1987. Source of type material recommended for DOE sponsored genome sequencing by the JGI: ATCC 43709. High-quality 16S rRNA sequence S000008828 (RDP), X79731 (Genbank). N4Lid DOI: 10.1601/nm.827

Azospirillum irakense^{VP} Khammas et al. 1991. Source of type material recommended for DOE sponsored genome sequencing by the JGI: ATCC 51182. High-quality 16S rRNA sequence S000003850 (RDP), X79737 (Genbank). N4Lid DOI: 10.1601/nm.828

Azospirillum largimobile^{VP} corrig. (Skerman et al. 1983) Ben Dekhil et al. 1997. <==>
Conglomeromonas largomobilis subsp. largomobilis (basonym). Synonym links through N4Lid: 10.1601/ex.829. Source of type material recommended for DOE sponsored genome sequencing by the JGI: ACM 2041. High-quality 16S rRNA sequence S000004699 (RDP), X90759 (Genbank). N4Lid DOI: 10.1601/nm.829

† *Conglomeromonas largomobilis subsp. largomobilis*^{VP} Skerman et al. 1983. ==>
Azospirillum largimobile (new combination). Synonym links through N4Lid: 10.1601/ex.829. Source of type material recommended for DOE sponsored genome sequencing by the JGI: ACM

2041. High-quality 16S rRNA sequence S000004699 (RDP), X90759 (Genbank). N4Lid 10.1601/nm.9118

Azospirillum melinis^{VP} Peng et al. 2006. Source of type material recommended for DOE sponsored genome sequencing by the JGI: LMG 23364. High-quality 16S rRNA sequence S000583256 (RDP), DQ022958 (Genbank). N4Lid DOI: 10.1601/nm.10105

Azospirillum oryzae^{VP} Xie and Yokota 2005. Source of type material recommended for DOE sponsored genome sequencing by the JGI: IAM 15130. High-quality 16S rRNA sequence S000543165 (RDP), AB185396 (Genbank). N4Lid 10.1601/nm.9519

Genus *Conglomeromonas*^{VP} Skerman et al. 1983. N4Lid 10.1601/nm.9106

Conglomeromonas largomobilis^{VP} Skerman et al. 1983. Source of type material recommended for DOE sponsored genome sequencing by the JGI: ACM 2041. High-quality 16S rRNA sequence S000004699 (RDP), X90759 (Genbank). N4Lid 10.1601/nm.9116

Genus *Defluviococcus*^{VP} corrig. Maszenan et al. 2005. N4Lid 10.1601/nm.9766

Defluviococcus vanus^{VP} corrig. Maszenan et al. 2005. Source of type material recommended for DOE sponsored genome sequencing by the JGI: ATCC BAA-1008. High-quality 16S rRNA sequence S000388715 (RDP), AF179678 (Genbank). N4Lid 10.1601/nm.9765

Genus *Inquilinus*^{VP} Coenye et al. 2002. N4Lid DOI: 10.1601/nm.830

Inquilinus limosus^{VP} Coenye et al. 2002. Source of type material recommended for DOE sponsored genome sequencing by the JGI: CCUG 45653. High-quality 16S rRNA sequence S000434855 (RDP), AY043374 (Genbank). N4Lid DOI: 10.1601/nm.831

Genus *Magnetospirillum*^{VP} Schleifer et al. 1992. N4Lid DOI: 10.1601/nm.832

Magnetospirillum gryphiswaldense^{VP} Schleifer et al. 1992. Source of type material recommended for DOE sponsored genome sequencing by the JGI: DSM 6361. High-quality 16S rRNA sequence S000008159 (RDP), Y10109 (Genbank). N4Lid DOI: 10.1601/nm.833

Magnetospirillum magnetotacticum^{VP} (Maratea and Blakemore 1981) Schleifer et al. 1992. <== *Aquaspirillum magnetotacticum* (basonym). Synonym links through N4Lid: 10.1601/ex.1950. Source of type material recommended for DOE sponsored genome sequencing by the JGI: ATCC 31632. High-quality 16S rRNA sequence S000011973 (RDP), Y10110 (Genbank). GOLD ID: Gc00330. GCAT ID: 000280_GCAT. Entrez genome id: 16217. Sequenced strain: ATCC 31632 is type material. Genome sequencing is completed. Number of genomes of this species sequenced 2 (GOLD) 1 (NCBI). N4Lid DOI: 10.1601/nm.834

† *Aquaspirillum magnetotacticum*^{VP} Maratea and Blakemore 1981. ==> *Magnetospirillum magnetotacticum* (new combination). Synonym links through N4Lid: 10.1601/ex.1950. Source of type material recommended for DOE sponsored genome sequencing by the JGI: ATCC 31632. High-quality 16S rRNA sequence S000011973 (RDP), Y10110 (Genbank). GOLD ID: Gc00330. GCAT ID: 000280_GCAT. Entrez genome id: 16217. Sequenced strain: ATCC 31632 is type material. Genome sequencing is completed. Number of genomes of this species sequenced 2 (GOLD) 1 (NCBI). N4Lid DOI: 10.1601/nm.1950

Genus *Phaeospirillum*^{VP} Imhoff et al. 1998. N4Lid DOI: 10.1601/nm.835

Phaeospirillum fulvum^{VP} (van Niel 1944) Imhoff et al. 1998. <== *Rhodospirillum fulvum* (basonym). Synonym links through N4Lid: 10.1601/ex.815. Source of type material recommended for DOE sponsored genome sequencing by the JGI: ATCC 15798. High-quality 16S rRNA sequence S000018037 (RDP), D14433 (Genbank). N4Lid DOI: 10.1601/nm.836

† *Rhodospirillum fulvum*^{AL} van Niel 1944. ==> *Phaeospirillum fulvum* (new combination). Synonym links through N4Lid: 10.1601/ex.815. Source of type material recommended for DOE sponsored genome sequencing by the JGI: ATCC 15798. High-quality 16S rRNA sequence S000018037 (RDP), D14433 (Genbank). N4Lid DOI: 10.1601/nm.815

Phaeospirillum molischianum^{VP} (Giesberger 1947) Imhoff et al. 1998. <== *Rhodospirillum molischianum* (basonym). Synonym links through N4Lid: 10.1601/ex.816. Source of type material recommended for DOE sponsored genome sequencing by the JGI: ATCC 14031. High-quality 16S rRNA sequence S000436442 (RDP), M59067 (Genbank). N4Lid DOI: 10.1601/nm.837

† *Rhodospirillum molischianum*^{AL} Giesberger 1947. ==> *Phaeospirillum molischianum* (new combination). Synonym links through N4Lid: 10.1601/ex.816. Source of type material recommended for DOE sponsored genome sequencing by the JGI: ATCC 14031. High-quality 16S rRNA sequence S000436442 (RDP), M59067 (Genbank). N4Lid DOI: 10.1601/nm.816

Genus *Rhodocista* ^{VP} Kawasaki et al. 1994. N4Lid DOI: 10.1601/nm.838

Rhodocista centenaria ^{VP} Kawasaki et al. 1994. == *Rhodospirillum centenum* (later homotypic synonym), links through 10.1601/ex.814. Source of type material recommended for DOE sponsored genome sequencing by the JGI: IAM 14193. High-quality 16S rRNA sequence S000439318 (RDP), D12701 (Genbank). N4Lid DOI: 10.1601/nm.839

† *Rhodospirillum centenum* ^{VP} Favinger et al. 1994. == *Rhodocista centenaria* (earlier homotypic synonym), links through 10.1601/ex.814. Source of type material recommended for DOE sponsored genome sequencing by the JGI: ATCC 43720. High-quality 16S rRNA sequence S000439318 (RDP), D12701 (Genbank). GOLD ID: Gi00727. GCAT ID: 001418_GCAT. Entrez genome id: 18307. 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.814

Rhodocista pekingensis ^{VP} Zhang et al. 2003. Source of type material recommended for DOE sponsored genome sequencing by the JGI: JCM 11669. High-quality 16S rRNA sequence S000431235 (RDP), AF523824 (Genbank). N4Lid DOI: 10.1601/nm.840

Genus *Rhodospira* ^{VP} Pfennig et al. 1998. N4Lid DOI: 10.1601/nm.841

Rhodospira trueperi ^{VP} Pfennig et al. 1998. Source of type material recommended for DOE sponsored genome sequencing by the JGI: ATCC 700224. N4Lid DOI: 10.1601/nm.842

Genus *Rhodovibrio* ^{VP} Imhoff et al. 1998. N4Lid DOI: 10.1601/nm.843

Rhodovibrio salinarum ^{VP} (Nissen and Dundas 1985) Imhoff et al. 1998. <== *Rhodospirillum salinarum* (basonym). Synonym links through N4Lid: 10.1601/ex.819. Source of type material recommended for DOE sponsored genome sequencing by the JGI: ATCC 35394. High-quality 16S rRNA sequence S000436444 (RDP), M59069 (Genbank). N4Lid DOI: 10.1601/nm.844

† *Rhodospirillum salinarum* ^{VP} Nissen and Dundas 1985. ==> *Rhodovibrio salinarum* (new combination). Synonym links through N4Lid: 10.1601/ex.819. Source of type material recommended for DOE sponsored genome sequencing by the JGI: ATCC 35394. High-quality 16S rRNA sequence S000436444 (RDP), M59069 (Genbank). N4Lid DOI: 10.1601/nm.819

Rhodovibrio sodomensis ^{VP} (Mack et al. 1996) Imhoff et al. 1998. <== *Rhodospirillum sodomense* (basonym). Synonym links through N4Lid: 10.1601/ex.820. Source of type material recommended for DOE sponsored genome sequencing by the JGI: ATCC 51195. High-quality 16S rRNA sequence S000436446 (RDP), M59072 (Genbank). N4Lid DOI: 10.1601/nm.845

† *Rhodospirillum sodomense* ^{VP} Mack et al. 1996. ==> *Rhodovibrio sodomensis* (new combination). Synonym links through N4Lid: 10.1601/ex.820. Source of type material recommended for DOE sponsored genome sequencing by the JGI: ATCC 51195. High-quality 16S rRNA sequence S000436446 (RDP), M59072 (Genbank). N4Lid DOI: 10.1601/nm.820

Genus *Roseospira* ^{VP} Imhoff et al. 1998. N4Lid DOI: 10.1601/nm.846

Roseospira mediosalina ^{VP} Imhoff et al. 1998. Source of type material recommended for DOE sponsored genome sequencing by the JGI: BN 280. High-quality 16S rRNA sequence S000126926 (RDP), AJ000989 (Genbank). N4Lid DOI: 10.1601/nm.847

Roseospira marina ^{VP} Guyoneaud et al. 2003. Source of type material recommended for DOE sponsored genome sequencing by the JGI: ATCC BAA-447. High-quality 16S rRNA sequence S000130341 (RDP), AJ298879 (Genbank). N4Lid DOI: 10.1601/nm.848

Roseospira navarrensis ^{VP} Guyoneaud et al. 2003. Source of type material recommended for DOE sponsored genome sequencing by the JGI: ATCC BAA-448. High-quality 16S rRNA sequence S000128561 (RDP), AJ298880 (Genbank). N4Lid DOI: 10.1601/nm.849

Genus *Skermanella* ^{VP} Sly and Stackebrandt 1999. N4Lid DOI: 10.1601/nm.850

Skermanella parooensis ^{VP} (Skerman et al. 1983) Sly and Stackebrandt 1999. <== *Conglomeromonas largomobilis subsp. parooensis* (basonym). Synonym links through N4Lid: 10.1601/ex.851. Source of type material recommended for DOE sponsored genome sequencing by the JGI: DSM 9527. High-quality 16S rRNA sequence S000003861 (RDP), X90760 (Genbank). N4Lid DOI: 10.1601/nm.851

† *Conglomeromonas largomobilis subsp. parooensis* ^{VP} Skerman et al. 1983. ==> *Skermanella parooensis* (new combination). Synonym links through N4Lid: 10.1601/ex.851. Source of type material recommended for DOE sponsored genome sequencing by the JGI: DSM 9527. High-quality 16S rRNA sequence S000003861 (RDP), X90760 (Genbank). N4Lid DOI: 10.1601/nm.9119

Genus *Thalassospira* ^{VP} López-López et al. 2002. N4Lid DOI: 10.1601/nm.852

Thalassospira lucentensis^{VP} López-López et al. 2002. Source of type material recommended for DOE sponsored genome sequencing by the JGI: DSM 14000. High-quality 16S rRNA sequence S000392261 (RDP), AF358664 (Genbank). N4Lid DOI: 10.1601/nm.853

Genus *Tistrella*^{VP} Shi et al. 2003. N4Lid DOI: 10.1601/nm.854

Tistrella mobilis^{VP} Shi et al. 2003. Source of type material recommended for DOE sponsored genome sequencing by the JGI: IAM 14872. High-quality 16S rRNA sequence S000021075 (RDP), AB071665 (Genbank). N4Lid DOI: 10.1601/nm.855

Family *Acetobacteraceae*^{VP} (ex Henrici 1939 Gillis and De Ley 1980. N4Lid DOI: 10.1601/nm.856

Genus *Acetobacter*^{AL} Beijerinck 1898. GOLD ID: Gi01846. GCAT ID: 001596_GCAT. Sequenced strain: NBRC 3283 is from a non-type strain. Genome sequencing is incomplete. Number of genomes of this species sequenced 1 (GOLD). N4Lid DOI: 10.1601/nm.857

Acetobacter aceti *subsp. aceti*^{AL} (Pasteur 1864) De Ley and Frateur 1974. <== *Acetobacter aceti* (basonym). Synonym links through N4Lid: 10.1601/ex.858. Source of type material recommended for DOE sponsored genome sequencing by the JGI: ATCC 15973. High-quality 16S rRNA sequence S000015956 (RDP), X74066 (Genbank). N4Lid DOI: 10.1601/nm.859

† *Acetobacter aceti*^{AL} (Pasteur 1864) Beijerinck 1898. ==> *Acetobacter aceti subsp. aceti* (new combination). Synonym links through N4Lid: 10.1601/ex.858. Source of type material recommended for DOE sponsored genome sequencing by the JGI: ATCC 15973. High-quality 16S rRNA sequence S000015956 (RDP), X74066 (Genbank). N4Lid DOI: 10.1601/nm.858

Acetobacter cerevisiae^{VP} Cleenwerck et al. 2002. Source of type material recommended for DOE sponsored genome sequencing by the JGI: ATCC 23765. High-quality 16S rRNA sequence S000091510 (RDP), AJ419843 (Genbank). N4Lid DOI: 10.1601/nm.863

Acetobacter cibinongensis^{VP} Lisdiyanti et al. 2002. Source of type material recommended for DOE sponsored genome sequencing by the JGI: IFO 16605. High-quality 16S rRNA sequence S000469308 (RDP), AB052710 (Genbank). N4Lid DOI: 10.1601/nm.864

Acetobacter estunensis^{VP} (Carr 1958) Lisdiyanti et al. 2001. <== *Acetobacter pasteurianus subsp. estunensis* (basonym). Synonym links through N4Lid: 10.1601/ex.880. Source of type material recommended for DOE sponsored genome sequencing by the JGI: ATCC 23753. N4Lid DOI: 10.1601/nm.866

† *Acetobacter pasteurianus subsp. estunensis*^{AL} (Carr 1958) De Ley and Frateur 1974. ==> *Acetobacter estunensis* (new combination). Synonym links through N4Lid: 10.1601/ex.880. Source of type material recommended for DOE sponsored genome sequencing by the JGI: ATCC 23753. N4Lid DOI: 10.1601/nm.880

Acetobacter indonesiensis^{VP} Lisdiyanti et al. 2001. Source of type material recommended for DOE sponsored genome sequencing by the JGI: IFO 16471. High-quality 16S rRNA sequence S000469298 (RDP), AB032356 (Genbank). N4Lid DOI: 10.1601/nm.869

Acetobacter lovaniensis^{VP} (Frateur 1950) Lisdiyanti et al. 2001. <== *Acetobacter pasteurianus subsp. lovaniensis* (basonym). Synonym links through N4Lid: 10.1601/ex.881. Source of type material recommended for DOE sponsored genome sequencing by the JGI: ATCC 12875. N4Lid DOI: 10.1601/nm.872

† *Acetobacter pasteurianus subsp. lovaniensis*^{AL} (Frateur 1950) De Ley and Frateur 1974. ==> *Acetobacter lovaniensis* (new combination). Synonym links through N4Lid: 10.1601/ex.881. Source of type material recommended for DOE sponsored genome sequencing by the JGI: ATCC 12875. N4Lid DOI: 10.1601/nm.881

Acetobacter malorum^{VP} Cleenwerck et al. 2002. Source of type material recommended for DOE sponsored genome sequencing by the JGI: DSM 14337. High-quality 16S rRNA sequence S000096471 (RDP), AJ419844 (Genbank). N4Lid DOI: 10.1601/nm.873

Acetobacter nitrogenifigens^{VP} Dutta and Gachhui 2006. Source of type material recommended for DOE sponsored genome sequencing by the JGI: LMG 23498. High-quality 16S rRNA sequence S000549097 (RDP), AY669513 (Genbank). N4Lid DOI: 10.1601/nm.10246

Acetobacter oeni^{VP} Silva et al. 2006. Source of type material recommended for DOE sponsored genome sequencing by the JGI: LMG 21952. High-quality 16S rRNA sequence S000457157 (RDP), AY829472 (Genbank). N4Lid DOI: 10.1601/nm.9832

Acetobacter orientalis^{VP} Lisdiyanti et al. 2002. Source of type material recommended for DOE sponsored genome sequencing by the JGI: IFO 16606. High-quality 16S rRNA sequence S000469304 (RDP), AB052706 (Genbank). N4Lid DOI: 10.1601/nm.876

Acetobacter orleanensis^{VP} (Henneberg 1906) Lisdiyanti et al. 2001. <== *Acetobacter acetii* subsp. *orleanensis* (basonym). Synonym links through N4Lid: 10.1601/ex.861. Source of type material recommended for DOE sponsored genome sequencing by the JGI: ATCC 12876. High-quality 16S rRNA sequence S000469292 (RDP), AB032350 (Genbank). N4Lid DOI: 10.1601/nm.877

† *Acetobacter acetii* subsp. *orleanensis*^{AL} (Henneberg 1906) De Ley and Frateur 1974. ==> *Acetobacter orleanensis* (new combination). Synonym links through N4Lid: 10.1601/ex.861. Source of type material recommended for DOE sponsored genome sequencing by the JGI: ATCC 12876. High-quality 16S rRNA sequence S000469292 (RDP), AB032350 (Genbank). N4Lid DOI: 10.1601/nm.861

† *Acetobacter pasteurianus* subsp. *ascendens*^{AL} (Henneberg 1898) De Ley and Frateur 1974. ≈ *Acetobacter orleanensis* (earlier heterotypic synonym), links through 10.1601/nm.877. Source of type material recommended for DOE sponsored genome sequencing by the JGI: LMG 1590. N4Lid DOI: 10.1601/nm.879

† *Acetobacter pasteurianus* subsp. *paradoxus*^{AL} (Frateur 1950) De Ley and Frateur 1974. ≈ *Acetobacter orleanensis* (earlier heterotypic synonym), links through 10.1601/nm.877. Source of type material recommended for DOE sponsored genome sequencing by the JGI: LMG 1591. N4Lid DOI: 10.1601/nm.882

† *Acetobacter peroxydans*^{AL} Visser't Hooft 1925. ≈ *Acetobacter orleanensis* (earlier heterotypic synonym), links through 10.1601/nm.877. Source of type material recommended for DOE sponsored genome sequencing by the JGI: ATCC 12874. High-quality 16S rRNA sequence S000469294 (RDP), AB032352 (Genbank). N4Lid DOI: 10.1601/nm.883

Acetobacter pasteurianus subsp. *pasteurianus*^{AL} (Hansen 1879) De Ley and Frateur 1974. Source of type material recommended for DOE sponsored genome sequencing by the JGI: ATCC 12874. High-quality 16S rRNA sequence S000006932 (RDP), X71863 (Genbank). N4Lid DOI: 10.1601/nm.878

Acetobacter pomorum^{VP} Sokollek et al. 1998. Source of type material recommended for DOE sponsored genome sequencing by the JGI: DSM 11825. High-quality 16S rRNA sequence S000014591 (RDP), AJ001632 (Genbank). N4Lid DOI: 10.1601/nm.884

Acetobacter syzygii^{VP} Lisdiyanti et al. 2002. Source of type material recommended for DOE sponsored genome sequencing by the JGI: IFO 16604. N4Lid DOI: 10.1601/nm.885

Acetobacter tropicalis^{VP} Lisdiyanti et al. 2001. Source of type material recommended for DOE sponsored genome sequencing by the JGI: IFO 16470. High-quality 16S rRNA sequence S000469296 (RDP), AB032354 (Genbank). N4Lid DOI: 10.1601/nm.886

Genus *Acidiphilium*^{VP} Harrison 1981. N4Lid DOI: 10.1601/nm.889

Acidiphilium cryptum^{VP} Harrison 1981. Source of type material recommended for DOE sponsored genome sequencing by the JGI: ATCC 33463. High-quality 16S rRNA sequence S000413728 (RDP), D30773 (Genbank). GOLD ID: Gi00918. GCAT ID: 000611_GCAT. Entrez genome id: 15753. Sequenced strain: JF-5 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.890

Acidiphilium acidophilum^{VP} (Harrison 1983) Hiraishi et al. 1998. <== *Thiobacillus acidophilus* (basonym). Synonym links through N4Lid: 10.1601/ex.1876. Source of type material recommended for DOE sponsored genome sequencing by the JGI: ATCC 27807. High-quality 16S rRNA sequence S000414138 (RDP), D86511 (Genbank). N4Lid DOI: 10.1601/nm.891

† *Thiobacillus acidophilus*^{VP} (ex Guay and Silver 1975) Harrison 1983. ==> *Acidiphilium acidophilum* (new combination). Synonym links through N4Lid: 10.1601/ex.1876. Source of type material recommended for DOE sponsored genome sequencing by the JGI: ATCC 27807. High-quality 16S rRNA sequence S000414138 (RDP), D86511 (Genbank). N4Lid DOI: 10.1601/nm.1876

Acidiphilium angustum^{VP} Wichlacz et al. 1986. Source of type material recommended for DOE sponsored genome sequencing by the JGI: ATCC 35903. High-quality 16S rRNA sequence S000413727 (RDP), D30772 (Genbank). N4Lid DOI: 10.1601/nm.893

Acidiphilium multivorum^{VP} Wakao et al. 1995. Source of type material recommended for DOE sponsored genome sequencing by the JGI: DSM 11245. High-quality 16S rRNA sequence S000381785 (RDP), AB006711 (Genbank). GOLD ID: Gi01298. GCAT ID: 000633_GCAT. Sequenced strain: NBRC 100883 is from a non-type strain. Genome sequencing is incomplete. Number of genomes of this species sequenced 1 (GOLD). N4Lid DOI: 10.1601/nm.895

Acidiphilium organovorum^{VP} Lobos et al. 1986. Source of type material recommended for DOE sponsored genome sequencing by the JGI: ATCC 43141. High-quality 16S rRNA sequence S000413730 (RDP), D30775 (Genbank). N4Lid DOI: 10.1601/nm.896

Acidiphilium rubrum^{VP} Wichlacz et al. 1986. Source of type material recommended for DOE sponsored genome sequencing by the JGI: ATCC 35905. High-quality 16S rRNA sequence S000413731 (RDP), D30776 (Genbank). N4Lid DOI: 10.1601/nm.897

Genus *Acidisphaera*^{VP} Hiraishi et al. 2000. N4Lid DOI: 10.1601/nm.898

Acidisphaera rubrifaciens^{VP} Hiraishi et al. 2000. Source of type material recommended for DOE sponsored genome sequencing by the JGI: JCM 10600. High-quality 16S rRNA sequence S000010801 (RDP), D86512 (Genbank). N4Lid DOI: 10.1601/nm.899

Genus *Acidicaldus*^{VP} Johnson et al. 2006. N4Lid DOI: 10.1601/nm.10186

Acidicaldus organivorans^{VP} corrig. Johnson et al. 2006. Source of type material recommended for DOE sponsored genome sequencing by the JGI: ATCC BAA-1105. High-quality 16S rRNA sequence S000397413 (RDP), AY140238 (Genbank). N4Lid DOI: 10.1601/nm.10185

Genus *Acidocella*^{VP} Kishimoto et al. 1996. N4Lid DOI: 10.1601/nm.900

Acidocella facilis^{VP} (Wichlacz et al. 1986) Kishimoto et al. 1996. <== *Acidiphilium facile* (basonym). Synonym links through N4Lid: 10.1601/ex.894. Source of type material recommended for DOE sponsored genome sequencing by the JGI: ATCC 35904. High-quality 16S rRNA sequence S000413729 (RDP), D30774 (Genbank). N4Lid DOI: 10.1601/nm.901

† *Acidiphilium facile*^{VP} corrig. Wichlacz et al. 1986. ==> *Acidocella facilis* (new combination). Synonym links through N4Lid: 10.1601/ex.894. Source of type material recommended for DOE sponsored genome sequencing by the JGI: ATCC 35904. High-quality 16S rRNA sequence S000413729 (RDP), D30774 (Genbank). N4Lid DOI: 10.1601/nm.894

Acidocella aminolytica^{VP} (Kishimoto et al. 1994) Kishimoto et al. 1996. <== *Acidiphilium aminilyticum* (basonym). Synonym links through N4Lid: 10.1601/ex.892. Source of type material recommended for DOE sponsored genome sequencing by the JGI: ATCC 51361. High-quality 16S rRNA sequence S000413726 (RDP), D30771 (Genbank). N4Lid DOI: 10.1601/nm.902

† *Acidiphilium aminilyticum*^{VP} corrig. Kishimoto et al. 1994. ==> *Acidocella aminolytica* (new combination). Synonym links through N4Lid: 10.1601/ex.892. Source of type material recommended for DOE sponsored genome sequencing by the JGI: ATCC 51361. High-quality 16S rRNA sequence S000413726 (RDP), D30771 (Genbank). N4Lid DOI: 10.1601/nm.892

Genus *Acidomonas*^{VP} Urakami et al. 1989. N4Lid DOI: 10.1601/nm.903

Acidomonas methanolica^{VP} (Uhlig et al. 1986) Urakami et al. 1989. <== *Acetobacter methanolicus* (basonym). Synonym links through N4Lid: 10.1601/ex.874. Source of type material recommended for DOE sponsored genome sequencing by the JGI: ATCC 43581. High-quality 16S rRNA sequence S000413725 (RDP), D30770 (Genbank). N4Lid DOI: 10.1601/nm.904

† *Acetobacter methanolicus*^{VP} Uhlig et al. 1986. ==> *Acidomonas methanolica* (new combination). Synonym links through N4Lid: 10.1601/ex.874. Source of type material recommended for DOE sponsored genome sequencing by the JGI: ATCC 43581. High-quality 16S rRNA sequence S000413725 (RDP), D30770 (Genbank). N4Lid DOI: 10.1601/nm.874

Genus *Asaia*^{VP} Yamada et al. 2000. N4Lid DOI: 10.1601/nm.905

Asaia bogorensis^{VP} Yamada et al. 2000. Source of type material recommended for DOE sponsored genome sequencing by the JGI: ATCC BAA-21. High-quality 16S rRNA sequence S000469285 (RDP), AB025928 (Genbank). N4Lid DOI: 10.1601/nm.906

Asaia krungthepensis^{VP} Yukphan et al. 2004. Source of type material recommended for DOE sponsored genome sequencing by the JGI: NBRC 100057. High-quality 16S rRNA sequence S000650533 (RDP), AB102953 (Genbank). N4Lid DOI: 10.1601/nm.907

Asaia siamensis^{VP} Katsura et al. 2001. Source of type material recommended for DOE sponsored genome sequencing by the JGI: IFO 16457. High-quality 16S rRNA sequence S000469299 (RDP), AB035416 (Genbank). N4Lid DOI: 10.1601/nm.908

Genus *Belnapia* ^{VP} Reddy et al. 2006. N4Lid 10.1601/nm.9837

Belnapia moabensis ^{VP} Reddy et al. 2006. Source of type material recommended for DOE sponsored genome sequencing by the JGI: ATCC BAA-1043. High-quality 16S rRNA sequence S000472450 (RDP), AJ871428 (Genbank). N4Lid 10.1601/nm.9836

Genus *Craurococcus* ^{VP} Saitoh et al. 1998. N4Lid DOI: 10.1601/nm.909

Craurococcus roseus ^{VP} Saitoh et al. 1998. Source of type material recommended for DOE sponsored genome sequencing by the JGI: CIP 105707. High-quality 16S rRNA sequence S000414109 (RDP), D85828 (Genbank). N4Lid DOI: 10.1601/nm.910

Genus *Gluconacetobacter* ^{VP} corrig. Yamada et al. 1998. N4Lid DOI: 10.1601/nm.911

Gluconacetobacter liquefaciens ^{VP} corrig. (Asai 1935) Yamada et al. 1998. <== *Acetobacter aceti* subsp. *liquefaciens* (basonym). Synonym links through N4Lid: 10.1601/ex.871. Source of type material recommended for DOE sponsored genome sequencing by the JGI: ATCC 14835. High-quality 16S rRNA sequence S000020692 (RDP), X75617 (Genbank). N4Lid DOI: 10.1601/nm.912

† *Acetobacter aceti* subsp. *liquefaciens* ^{AL} (Asai 1935) De Ley and Frateur 1974. ==> *Acetobacter liquefaciens* (new combination). Synonym links through N4Lid: 10.1601/ex.871. Source of type material recommended for DOE sponsored genome sequencing by the JGI: ATCC 14835. N4Lid DOI: 10.1601/nm.860

† *Acetobacter liquefaciens* ^{VP} (Asai 1935) Gosselé et al. 1983. <== *Acetobacter aceti* subsp. *liquefaciens* (basonym). *Acetobacter liquefaciens* (new combination). Synonym links through N4Lid: 10.1601/ex.871. Source of type material recommended for DOE sponsored genome sequencing by the JGI: ATCC 14835. High-quality 16S rRNA sequence S000020692 (RDP), X75617 (Genbank). N4Lid DOI: 10.1601/nm.871

Gluconacetobacter azotocaptans ^{VP} Fuentes-Ramírez et al. 2001. Source of type material recommended for DOE sponsored genome sequencing by the JGI: ATCC 700988. High-quality 16S rRNA sequence S000388894 (RDP), AF192761 (Genbank). N4Lid DOI: 10.1601/nm.913

Gluconacetobacter diazotrophicus ^{VP} corrig. (Gillis et al. 1989) Yamada et al. 1998. <== *Acetobacter diazotrophicus* (basonym). Synonym links through N4Lid: 10.1601/ex.865. Source of type material recommended for DOE sponsored genome sequencing by the JGI: ATCC 49037. High-quality 16S rRNA sequence S000011481 (RDP), X75618 (Genbank). GOLD ID: Gi00277. GCAT ID: 001109_GCAT. Entrez genome id: 377. Sequenced strain: ATCC 49037 is type material. Genome sequencing is incomplete. Number of genomes of this species sequenced 2 (GOLD) 1 (NCBI). N4Lid DOI: 10.1601/nm.914

† *Acetobacter diazotrophicus* ^{VP} Gillis et al. 1989. ==> *Gluconacetobacter diazotrophicus* (new combination). Synonym links through N4Lid: 10.1601/ex.865. Source of type material recommended for DOE sponsored genome sequencing by the JGI: ATCC 49037. High-quality 16S rRNA sequence S000011481 (RDP), X75618 (Genbank). GOLD ID: Gi00277. GCAT ID: 001109_GCAT. Entrez genome id: 377. Sequenced strain: ATCC 49037 is type material. Genome sequencing is incomplete. Number of genomes of this species sequenced 2 (GOLD) 1 (NCBI). N4Lid DOI: 10.1601/nm.865

Gluconacetobacter entanii ^{VP} Schüller et al. 2000. Source of type material recommended for DOE sponsored genome sequencing by the JGI: DSM 13536. High-quality 16S rRNA sequence S000130015 (RDP), AJ251110 (Genbank). N4Lid DOI: 10.1601/nm.915

Gluconacetobacter europaeus ^{VP} corrig. (Sievers et al. 1992) Yamada et al. 1998. <== *Acetobacter europaeus* (basonym). Synonym links through N4Lid: 10.1601/ex.867. Source of type material recommended for DOE sponsored genome sequencing by the JGI: ATCC 51845. High-quality 16S rRNA sequence S000004997 (RDP), Z21936 (Genbank). N4Lid DOI: 10.1601/nm.916

† *Acetobacter europaeus* ^{VP} Sievers et al. 1992. ==> *Gluconacetobacter europaeus* (new combination). Synonym links through N4Lid: 10.1601/ex.867. Source of type material recommended for DOE sponsored genome sequencing by the JGI: ATCC 51845. High-quality 16S rRNA sequence S000004997 (RDP), Z21936 (Genbank). N4Lid DOI: 10.1601/nm.867

Gluconacetobacter hansenii ^{VP} corrig. (Gosselé et al. 1983) Yamada et al. 1998. <== *Acetobacter hansenii* (basonym). Synonym links through N4Lid: 10.1601/ex.868. Source of type material recommended for DOE sponsored genome sequencing by the JGI: ATCC 35959. High-quality 16S rRNA sequence S000021935 (RDP), X75620 (Genbank). N4Lid DOI: 10.1601/nm.917

† *Acetobacter hansenii*^{VP} Gosselé et al. 1983. ==> *Gluconacetobacter hansenii* (new combination). Synonym links through N4Lid: 10.1601/ex.868. Source of type material recommended for DOE sponsored genome sequencing by the JGI: ATCC 35959. High-quality 16S rRNA sequence S000021935 (RDP), X75620 (Genbank). N4Lid DOI: 10.1601/nm.868

Gluconacetobacter intermedius^{VP} (Boesch et al. 1998) Yamada 2000. <== *Acetobacter intermedius* (basonym). Synonym links through N4Lid: 10.1601/ex.870. Source of type material recommended for DOE sponsored genome sequencing by the JGI: DSM 11804. High-quality 16S rRNA sequence S000000390 (RDP), Y14694 (Genbank). N4Lid DOI: 10.1601/nm.918

† *Acetobacter intermedius*^{VP} Boesch et al. 1998. ==> *Gluconacetobacter intermedius* (new combination). Synonym links through N4Lid: 10.1601/ex.870. Source of type material recommended for DOE sponsored genome sequencing by the JGI: DSM 11804. High-quality 16S rRNA sequence S000000390 (RDP), Y14694 (Genbank). N4Lid DOI: 10.1601/nm.870

Gluconacetobacter johanna^{VP} Fuentes-Ramírez et al. 2001. Source of type material recommended for DOE sponsored genome sequencing by the JGI: ATCC 700987. High-quality 16S rRNA sequence S000429050 (RDP), AF111841 (Genbank). N4Lid DOI: 10.1601/nm.919

Gluconacetobacter oboediens^{VP} (Sokollek et al. 1998) Yamada 2000. <== *Acetobacter oboediens* (basonym). Synonym links through N4Lid: 10.1601/ex.875. Source of type material recommended for DOE sponsored genome sequencing by the JGI: DSM 11826. High-quality 16S rRNA sequence S000003055 (RDP), AJ001631 (Genbank). N4Lid DOI: 10.1601/nm.920

† *Acetobacter oboediens*^{VP} Sokollek et al. 1998. ==> *Gluconacetobacter oboediens* (new combination). Synonym links through N4Lid: 10.1601/ex.875. Source of type material recommended for DOE sponsored genome sequencing by the JGI: DSM 11826. High-quality 16S rRNA sequence S000003055 (RDP), AJ001631 (Genbank). N4Lid DOI: 10.1601/nm.875

Gluconacetobacter nataicola^{VP} Lisdiyanti et al. 2006. Source of type material recommended for DOE sponsored genome sequencing by the JGI: LMG 1536. High-quality 16S rRNA sequence S000415178 (RDP), AB166743 (Genbank). N4Lid DOI: 10.1601/nm.10285

Gluconacetobacter rhaeticus^{VP} Dellaglio et al. 2005. Source of type material recommended for DOE sponsored genome sequencing by the JGI: DSM 16663. High-quality 16S rRNA sequence S000400217 (RDP), AY180961 (Genbank). N4Lid 10.1601/nm.9731

Gluconacetobacter sacchari^{VP} Franke et al. 1999. Source of type material recommended for DOE sponsored genome sequencing by the JGI: DSM 12717. High-quality 16S rRNA sequence S000387324 (RDP), AF127407 (Genbank). N4Lid 10.1601/nm.9200

Gluconacetobacter saccharivorans^{VP} Lisdiyanti et al. 2006. Source of type material recommended for DOE sponsored genome sequencing by the JGI: LMG 1582. High-quality 16S rRNA sequence S000415176 (RDP), AB166740 (Genbank). N4Lid DOI: 10.1601/nm.10284

Gluconacetobacter swingsii^{VP} Dellaglio et al. 2005. Source of type material recommended for DOE sponsored genome sequencing by the JGI: DSM 16373. High-quality 16S rRNA sequence S000400216 (RDP), AY180960 (Genbank). N4Lid 10.1601/nm.9730

Gluconacetobacter xylinus^{VP} corrig. (Brown 1886) Yamada et al. 1998. <== *Acetobacter aceti* subsp. *xylinus* (basonym). Synonym links through N4Lid: 10.1601/ex.887. Source of type material recommended for DOE sponsored genome sequencing by the JGI: ATCC 23767. High-quality 16S rRNA sequence S000020699 (RDP), AJ007698 (Genbank). GOLD ID: Gi01851. GCAT ID: 000845_GCAT. Sequenced strain: NBRC 3288 is from a non-type strain. Genome sequencing is incomplete. Number of genomes of this species sequenced 1 (GOLD). N4Lid DOI: 10.1601/nm.921

† *Acetobacter xylinus* subsp. *sacrofermentans*^{VP} corrig. Toyosaki et al. 1996. ≈ *Gluconacetobacter xylinus* (earlier heterotypic synonym), links through 10.1601/nm.921. Source of type material recommended for DOE sponsored genome sequencing by the JGI: JCM 9730. N4Lid DOI: 10.1601/nm.888

† *Acetobacter xylinus* subsp. *xylinus*^{VP} corrig. (Brown 1886) Yamada 1984. <== *Acetobacter aceti* subsp. *xylinus* (basonym). *Gluconacetobacter xylinus* (new combination). Synonym links through N4Lid: 10.1601/ex.887. Source of type material recommended for DOE sponsored genome sequencing by the JGI: ATCC 23767. High-quality 16S rRNA sequence S000020699 (RDP), AJ007698 (Genbank). GOLD ID: Gi01851. GCAT ID: 000845_GCAT. Sequenced strain: NBRC 3288 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.887

† *Acetobacter aceti* subsp. *xylinus*^{AL} corrig. (Brown 1886) De Ley and Frateur 1974. ==>
Acetobacter xylinus subsp. *xylinus* (new combination). Synonym links through N4Lid:
10.1601/ex.887. Source of type material recommended for DOE sponsored genome sequencing by
the JGI: ATCC 23767. N4Lid DOI: 10.1601/nm.862

Genus *Gluconobacter*^{AL} Asai 1935. N4Lid DOI: 10.1601/nm.922

Gluconobacter oxydans subsp. *oxydans*^{AL} (Henneberg 1897) De Ley 1961. Source of type material recommended for DOE sponsored genome sequencing by the JGI: ATCC 19357. High-quality 16S rRNA sequence S000014972 (RDP), X73820 (Genbank). GOLD ID: Gc00251. GCAT ID: 000358_GCAT. Entrez genome id: 13325. Sequenced strain: 621H is from a non-type strain. Genome sequencing is completed. Number of genomes of this species sequenced 1 (GOLD). N4Lid DOI: 10.1601/nm.923

Gluconobacter oxydans subsp. *industrius*^{AL} (Henneberg 1898) De Ley and Frateur 1974. Source of type material recommended for DOE sponsored genome sequencing by the JGI: LMG 1674. N4Lid DOI: 10.1601/nm.924

Gluconobacter oxydans subsp. *melanogenes*^{AL} (Beijerinck 1911) De Ley and Frateur 1974. Source of type material recommended for DOE sponsored genome sequencing by the JGI: LMD 29.2. N4Lid DOI: 10.1601/nm.925

Gluconobacter oxydans subsp. *sphaericus*^{AL} Ameyama 1975. Source of type material recommended for DOE sponsored genome sequencing by the JGI: CIP 106061. N4Lid DOI: 10.1601/nm.926

Gluconobacter oxydans subsp. *suboxydans*^{AL} (Kluyver and de Leeuw 1924) De Ley and Frateur 1974. Source of type material recommended for DOE sponsored genome sequencing by the JGI: LMG 1673. N4Lid DOI: 10.1601/nm.927

Gluconobacter albidus^{VP} (ex Kondo and Ameyama 1958) Yukphan et al. 2005. Source of type material recommended for DOE sponsored genome sequencing by the JGI: NBRC 3250. High-quality 16S rRNA sequence S000496369 (RDP), AB178392 (Genbank). N4Lid 10.1601/nm.9394

Gluconobacter asaii^{VP} Mason and Claus 1989. ≈ *Gluconobacter cerinus* (earlier heterotypic synonym), links through 10.1601/nm.929. Source of type material recommended for DOE sponsored genome sequencing by the JGI: ATCC 49206. High-quality 16S rRNA sequence S000260238 (RDP), X80165 (Genbank). N4Lid DOI: 10.1601/nm.928

Gluconobacter cerinus^{VP} (ex Asai 1935) Yamada and Akita 1984. ≈ *Gluconobacter asaii* (later heterotypic synonym), links through 10.1601/nm.929. Source of type material recommended for DOE sponsored genome sequencing by the JGI: ATCC 19441. High-quality 16S rRNA sequence S000259951 (RDP), X80775 (Genbank). N4Lid DOI: 10.1601/nm.929

Gluconobacter frateurii^{VP} Mason and Claus 1989. Source of type material recommended for DOE sponsored genome sequencing by the JGI: ATCC 49207. High-quality 16S rRNA sequence S000259950 (RDP), X82290 (Genbank). N4Lid DOI: 10.1601/nm.930

Gluconobacter thailandicus^{VP} Tanasupawat et al. 2005. Source of type material recommended for DOE sponsored genome sequencing by the JGI: JCM 12310. High-quality 16S rRNA sequence S000469600 (RDP), AB128050 (Genbank). N4Lid 10.1601/nm.9395

Genus *Kozakia*^{VP} Lisdiyanti et al. 2002. N4Lid DOI: 10.1601/nm.931

Kozakia baliensis^{VP} Lisdiyanti et al. 2002. Source of type material recommended for DOE sponsored genome sequencing by the JGI: DSM 14400. High-quality 16S rRNA sequence S000469432 (RDP), AB056321 (Genbank). N4Lid DOI: 10.1601/nm.932

Genus *Muricoccus*^{VP} Kämpfer et al. 2003. N4Lid DOI: 10.1601/nm.933

Muricoccus roseus^{VP} Kämpfer et al. 2003. Source of type material recommended for DOE sponsored genome sequencing by the JGI: DSM 14916. High-quality 16S rRNA sequence S000142444 (RDP), AJ488505 (Genbank). N4Lid DOI: 10.1601/nm.934

Genus "*Neoasia*" N4Lid 10.1601/nm.9916

Neoasia Chiangmaiensis^{VP} Source of type material recommended for DOE sponsored genome sequencing by the JGI: NBRC 101099. N4Lid 10.1601/nm.9915

Genus *Paracraurococcus*^{VP} Saitoh et al. 1998. N4Lid DOI: 10.1601/nm.935

Paracraurococcus ruber^{VP} Saitoh et al. 1998. Source of type material recommended for DOE sponsored genome sequencing by the JGI: CIP 105708. High-quality 16S rRNA sequence S000414108 (RDP), D85827 (Genbank). N4Lid DOI: 10.1601/nm.936

- Genus *Rhodopila*** ^{VP} Imhoff et al. 1984. N4Lid DOI: 10.1601/nm.937
- Rhodopila globiformis* ^{VP} (Pfennig 1974) Imhoff et al. 1984. <== *Rhodopseudomonas globiformis* (basonym). Synonym links through N4Lid: 10.1601/ex.1501. Source of type material recommended for DOE sponsored genome sequencing by the JGI: ATCC 35887. High-quality 16S rRNA sequence S000011943 (RDP), D86513 (Genbank). N4Lid DOI: 10.1601/nm.938
- † *Rhodopseudomonas globiformis* ^{AL} Pfennig 1974. ==> *Rhodopila globiformis* (new combination). Synonym links through N4Lid: 10.1601/ex.1501. Source of type material recommended for DOE sponsored genome sequencing by the JGI: ATCC 35887. High-quality 16S rRNA sequence S000011943 (RDP), D86513 (Genbank). N4Lid DOI: 10.1601/nm.1501
- Genus *Rhodovarius*** ^{VP} Kämpfer et al. 2004. N4Lid 10.1601/nm.8814
- Rhodovarius lipocyclicus* ^{VP} Kämpfer et al. 2004. Source of type material recommended for DOE sponsored genome sequencing by the JGI: CCUG 44693. High-quality 16S rRNA sequence S000324008 (RDP), AJ633644 (Genbank). N4Lid 10.1601/nm.8815
- Genus *Roseococcus*** ^{VP} Yurkov et al. 1994. N4Lid DOI: 10.1601/nm.939
- Roseococcus thiosulfatophilus* ^{VP} Yurkov et al. 1994. Source of type material recommended for DOE sponsored genome sequencing by the JGI: ATCC 700004. High-quality 16S rRNA sequence S000005151 (RDP), X72908 (Genbank). N4Lid DOI: 10.1601/nm.940
- Genus *Roseomonas*** ^{VP} Rihs et al. 1998. N4Lid DOI: 10.1601/nm.1600
- Roseomonas gilardii subsp. gilardii* ^{VP} Rihs et al. 1998. Source of type material recommended for DOE sponsored genome sequencing by the JGI: ATCC 49956. High-quality 16S rRNA sequence S000398098 (RDP), AY150045 (Genbank). N4Lid DOI: 10.1601/nm.1601
- Roseomonas gilardii subsp. rosea* ^{VP} Han et al. 2003. Source of type material recommended for DOE sponsored genome sequencing by the JGI: ATCC BAA-691. High-quality 16S rRNA sequence S000402934 (RDP), AY220740 (Genbank). N4Lid DOI: 10.1601/nm.1602
- Roseomonas cervicalis* ^{VP} Rihs et al. 1998. Source of type material recommended for DOE sponsored genome sequencing by the JGI: ATCC 49957. High-quality 16S rRNA sequence S000398100 (RDP), AY150047 (Genbank). N4Lid DOI: 10.1601/nm.1603
- Roseomonas lacus* ^{VP} Jiang et al. 2006. Source of type material recommended for DOE sponsored genome sequencing by the JGI: JCM 13283. High-quality 16S rRNA sequence S000539622 (RDP), AJ786000 (Genbank). N4Lid 10.1601/nm.9833
- Roseomonas mucosa* ^{VP} Han et al. 2003. Source of type material recommended for DOE sponsored genome sequencing by the JGI: ATCC BAA-692. High-quality 16S rRNA sequence S000432127 (RDP), AF538712 (Genbank). N4Lid DOI: 10.1601/nm.1605
- Genus *Rubritepida*** ^{VP} Alarico et al. 2002. N4Lid DOI: 10.1601/nm.941
- Rubritepida flocculans* ^{VP} Alarico et al. 2002. Source of type material recommended for DOE sponsored genome sequencing by the JGI: ATCC BAA-385. High-quality 16S rRNA sequence S000111731 (RDP), AF465832 (Genbank). N4Lid DOI: 10.1601/nm.942
- Genus *Saccharibacter*** ^{VP} Jojima et al. 2004. N4Lid 10.1601/nm.8824
- Saccharibacter floricola* ^{VP} Jojima et al. 2004. Source of type material recommended for DOE sponsored genome sequencing by the JGI: DSM 15669. High-quality 16S rRNA sequence S000439512 (RDP), AB110421 (Genbank). N4Lid 10.1601/nm.8825
- Genus *Stella*** ^{VP} Vasilyeva 1985. N4Lid DOI: 10.1601/nm.943
- Stella humosa* ^{VP} Vasilyeva 1985. Source of type material recommended for DOE sponsored genome sequencing by the JGI: ATCC 43930. High-quality 16S rRNA sequence S000351835 (RDP), AJ535710 (Genbank). N4Lid DOI: 10.1601/nm.944
- Stella vacuolata* ^{VP} Vasilyeva 1985. Source of type material recommended for DOE sponsored genome sequencing by the JGI: ATCC 43931. High-quality 16S rRNA sequence S000351836 (RDP), AJ535711 (Genbank). N4Lid DOI: 10.1601/nm.945
- Genus *Swaminathania*** ^{VP} Loganathan and Nair 2004. N4Lid 10.1601/nm.8876
- Swaminathania salitolerans* ^{VP} Loganathan and Nair 2004. Source of type material recommended for DOE sponsored genome sequencing by the JGI: LMG 21291. High-quality 16S rRNA sequence S000366209 (RDP), AF459454 (Genbank). N4Lid 10.1601/nm.8877
- Genus *Teichococcus*** ^{VP} Kämpfer et al. 2003. N4Lid DOI: 10.1601/nm.946

Teichococcus ludipueritiae^{VP} Kämpfer et al. 2003. Source of type material recommended for DOE sponsored genome sequencing by the JGI: DSM 14915. High-quality 16S rRNA sequence S000141396 (RDP), AJ488504 (Genbank). N4Lid DOI: 10.1601/nm.947

Genus *Zavarzinia*^{VP} Meyer et al. 1994. N4Lid DOI: 10.1601/nm.948

Zavarzinia compransoris^{VP} (ex Nozhevnikova and Zavarzin 1974) Meyer et al. 1994. Source of type material recommended for DOE sponsored genome sequencing by the JGI: ATCC 51430. N4Lid DOI: 10.1601/nm.949

Order *Kordiimonadales*^{VP} Kwon et al 2005. N4Lid DOI: 10.1601/nm.10333

Family "*Kordiimonadaceae*" N4Lid DOI: 10.1601/nm.10334

Genus *Kordiimonas*^{VP} Kwon et al. 2005. N4Lid 10.1601/nm.9632

Kordiimonas gwangyangensis^{VP} Kwon et al. 2005. Source of type material recommended for DOE sponsored genome sequencing by the JGI: JCM 12864. High-quality 16S rRNA sequence S000541016 (RDP), AY682384 (Genbank). N4Lid 10.1601/nm.9631

Order *Rickettsiales*^{AL} Gieszczykiewicz 1939. N4Lid DOI: 10.1601/nm.950

Family *Rickettsiaceae*^{AL} Pinkerton 1936. N4Lid DOI: 10.1601/nm.951

Genus *Rickettsia*^{AL} da Rocha-Lima 1916. N4Lid DOI: 10.1601/nm.952

Rickettsia prowazekii^{AL} da Rocha-Lima 1916. Source of type material recommended for DOE sponsored genome sequencing by the JGI: ATCC VR-142. High-quality 16S rRNA sequence S000735415 (RDP). GOLD ID: Gc00018. GCAT ID: 000592_GCAT. Entrez genome id: 43. Sequenced strain: Madrid E is from a non-type strain. Genome sequencing is completed. Number of genomes of this species sequenced 3 (GOLD) 1 (NCBI). N4Lid DOI: 10.1601/nm.953

Rickettsia aeschlimannii^{VP} Beati et al. 1997. Source of type material recommended for DOE sponsored genome sequencing by the JGI: MC16. High-quality 16S rRNA sequence S000334553 (RDP), U74757 (Genbank). N4Lid DOI: 10.1601/nm.954

Rickettsia africana^{VP} Kelly et al. 1996. Source of type material recommended for DOE sponsored genome sequencing by the JGI: Z9-Hu. GOLD ID: Gi00810. GCAT ID: 001419_GCAT. Entrez genome id: 15711. Sequenced strain: ESF-5 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.955

Rickettsia akari^{AL} Huebner et al. 1946. Source of type material recommended for DOE sponsored genome sequencing by the JGI: ATCC VR-148. High-quality 16S rRNA sequence S000414651 (RDP), L36099 (Genbank). GOLD ID: Gc00220. GCAT ID: 000390_GCAT. Entrez genome id: 12953. Sequenced strain: Hartford 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.956

Rickettsia australis^{AL} Philip 1950. Source of type material recommended for DOE sponsored genome sequencing by the JGI: NIAID Phillips 32. High-quality 16S rRNA sequence S000414653 (RDP), L36101 (Genbank). N4Lid DOI: 10.1601/nm.957

Rickettsia bellii^{VP} Philip et al. 1983. Source of type material recommended for DOE sponsored genome sequencing by the JGI: RML 369-C. High-quality 16S rRNA sequence S000414655 (RDP), L36103 (Genbank). GOLD ID: Gc00363. GCAT ID: 000247_GCAT. Entrez genome id: 13996. Sequenced strain: RML 369-C is type material. Genome sequencing is completed. Number of genomes of this species sequenced 2 (GOLD) 2 (NCBI). N4Lid DOI: 10.1601/nm.958

Rickettsia canadensis^{AL} corrig. McKiel et al. 1967. Source of type material recommended for DOE sponsored genome sequencing by the JGI: ATCC VR-610. High-quality 16S rRNA sequence S000414656 (RDP), L36104 (Genbank). GOLD ID: Gi01536. GCAT ID: 001421_GCAT. Entrez genome id: 12952. Sequenced strain: McKiel 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.959

Rickettsia conorii^{AL} Brumpt 1932. Source of type material recommended for DOE sponsored genome sequencing by the JGI: ATCC VR-613. High-quality 16S rRNA sequence S000735436 (RDP). GOLD ID: Gc00062. GCAT ID: 000548_GCAT. Entrez genome id: 42. Sequenced strain: Malish 7 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.960

Rickettsia felis^{VP} Bouyer et al. 2001. Source of type material recommended for DOE sponsored genome sequencing by the JGI: Ctenocephalides felis-LSU. The type strain is maintained in an

infected flea colony by the Department of Entomology, Louisiana State University Agricultural Center. High-quality 16S rRNA sequence S000804901 (RDP). GOLD ID: Gc00267. GCAT ID: 000342_GCAT. Entrez genome id: 13884. Sequenced strain: ATCC VR-1525 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.961

Rickettsia heilongjiangensis^{VP} Fournier et al. 2006. Source of type material recommended for DOE sponsored genome sequencing by the JGI: ATCC VR-1524. High-quality 16S rRNA sequence S000388701 (RDP), AF178037 (Genbank). N4Lid 10.1601/nm.9918

Rickettsia helvetica^{VP} Beati et al. 1993. Source of type material recommended for DOE sponsored genome sequencing by the JGI: ATCC VR-1375. N4Lid DOI: 10.1601/nm.962

Rickettsia honei^{VP} Stenos et al. 1998. Source of type material recommended for DOE sponsored genome sequencing by the JGI: ATCC VR-1472. High-quality 16S rRNA sequence S000437236 (RDP), U17645 (Genbank). N4Lid DOI: 10.1601/nm.963

Rickettsia japonica^{VP} Uchida et al. 1992. Source of type material recommended for DOE sponsored genome sequencing by the JGI: ATCC VR-1363. N4Lid DOI: 10.1601/nm.964

Rickettsia massiliae^{VP} Beati and Raoult 1993. Source of type material recommended for DOE sponsored genome sequencing by the JGI: ATCC VR-1376. High-quality 16S rRNA sequence S000414664 (RDP), L36214 (Genbank). GOLD ID: Gi00812. GCAT ID: 001423_GCAT. Entrez genome id: 15710. Sequenced strain: ATCC VR-1376 is type material. Genome sequencing is incomplete. Number of genomes of this species sequenced 1 (GOLD) 1 (NCBI). N4Lid DOI: 10.1601/nm.965

Rickettsia montanensis^{VP} corrig. (ex Lackman et al. 1965) Weiss and Moulder 1984. Source of type material recommended for DOE sponsored genome sequencing by the JGI: ATCC VR-611. High-quality 16S rRNA sequence S000414665 (RDP), L36215 (Genbank). N4Lid DOI: 10.1601/nm.966

Rickettsia parkeri^{AL} Lackman et al. 1965. Source of type material recommended for DOE sponsored genome sequencing by the JGI: NIAID maculatum 20. High-quality 16S rRNA sequence S000414680 (RDP), L36673 (Genbank). N4Lid DOI: 10.1601/nm.967

Rickettsia peacockii^{VP} Niebylski et al. 1997. Source of type material recommended for DOE sponsored genome sequencing by the JGI: Skalkaho maintained in Dermacentor andersoni ticks. N4Lid DOI: 10.1601/nm.968

Rickettsia rhipicephali^{VP} (ex Burgdorfer et al. 1978) Weiss and Moulder 1988. Source of type material recommended for DOE sponsored genome sequencing by the JGI: Burgdorfer 3-7-female 6. High-quality 16S rRNA sequence S000414666 (RDP), L36216 (Genbank). N4Lid DOI: 10.1601/nm.969

Rickettsia rickettsii^{AL} (Wolbach 1919) Brumpt 1922. Source of type material recommended for DOE sponsored genome sequencing by the JGI: ATCC VR-149. High-quality 16S rRNA sequence S000414667 (RDP), L36217 (Genbank). GOLD ID: Gi00512. GCAT ID: 001426_GCAT. Entrez genome id: 9636. Genome sequence 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.970

Rickettsia sibirica^{AL} Zdrovovskii 1948. Source of type material recommended for DOE sponsored genome sequencing by the JGI: ATCC VR-151. High-quality 16S rRNA sequence S000414668 (RDP), L36218 (Genbank). GOLD ID: Gc00121. GCAT ID: 000489_GCAT. Entrez genome id: 1414. Sequenced strain: 246 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.972

Rickettsia slovaca^{VP} Sekeyová et al. 1998. Source of type material recommended for DOE sponsored genome sequencing by the JGI: No viable deposit available. GOLD ID: Gi00813. GCAT ID: 001424_GCAT. Entrez genome id: 15712. Sequenced strain: 13-B 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.973

Rickettsia tamurae^{VP} Fournier et al. 2006. Source of type material recommended for DOE sponsored genome sequencing by the JGI: CSUR R1. High-quality 16S rRNA sequence S000434918 (RDP), AY049981 (Genbank). N4Lid DOI: 10.1601/nm.10166

Rickettsia typhi^{AL} (Wolbach and Todd 1920) Philip 1943. Source of type material recommended for DOE sponsored genome sequencing by the JGI: ATCC VR-144. High-quality 16S rRNA sequence S000414671 (RDP), L36221 (Genbank). GOLD ID: Gc00208. GCAT ID: 000402_GCAT. Entrez genome id: 10679. Sequenced strain: Wilmington 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.975

Genus *Orientia*^{VP} Tamura et al. 1995. N4Lid DOI: 10.1601/nm.976

Orientia tsutsugamushi^{VP} (Hayashi 1920) Tamura et al. 1995. <== *Rickettsia tsutsugamushi* (**basonym**). Synonym links through N4Lid: 10.1601/ex.974. Source of type material recommended for DOE sponsored genome sequencing by the JGI: ATCC VR-150. High-quality 16S rRNA sequence S000413795 (RDP), D38623 (Genbank). N4Lid DOI: 10.1601/nm.977

† *Rickettsia tsutsugamushi*^{AL} (Hayashi 1920) Ogata 1931. ==> *Orientia tsutsugamushi* (**new combination**). Synonym links through N4Lid: 10.1601/ex.974. Source of type material recommended for DOE sponsored genome sequencing by the JGI: ATCC VR-150. High-quality 16S rRNA sequence S000413795 (RDP), D38623 (Genbank). N4Lid DOI: 10.1601/nm.974

Family *Anaplasmataceae*^{AL} Philip 1957. N4Lid DOI: 10.1601/nm.978

Genus *Anaplasma*^{AL} Theiler 1910. N4Lid DOI: 10.1601/nm.979

Anaplasma marginale^{AL} Theiler 1910. Source of type material recommended for DOE sponsored genome sequencing by the JGI: no culture isolated. High-quality 16S rRNA sequence S000391339 (RDP), AF311303 (Genbank). GOLD ID: Gc00239. GCAT ID: 000370_GCAT. Entrez genome id: 40. Sequenced strain: St. Maries 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.980

Anaplasma bovis^{VP} (ex Donatien and Lestoquard 1936) Dumler et al. 2001. Source of type material recommended for DOE sponsored genome sequencing by the JGI: no culture isolated. High-quality 16S rRNA sequence S000437007 (RDP), U03775 (Genbank). N4Lid DOI: 10.1601/nm.981

Anaplasma caudatum^{VP} (ex Kreier and Ristic 1963) Ristic and Kreier 1984. Source of type material recommended for DOE sponsored genome sequencing by the JGI: no culture isolated. N4Lid DOI: 10.1601/nm.982

Anaplasma centrale^{VP} (ex Theiler 1911) Ristic and Kreier 1984. Source of type material recommended for DOE sponsored genome sequencing by the JGI: no culture isolated. High-quality 16S rRNA sequence S000391052 (RDP), AF309869 (Genbank). N4Lid DOI: 10.1601/nm.983

Anaplasma ovis^{AL} Lestoquard 1924. Source of type material recommended for DOE sponsored genome sequencing by the JGI: no culture isolated. High-quality 16S rRNA sequence S000391451 (RDP), AF318945 (Genbank). N4Lid DOI: 10.1601/nm.984

Anaplasma phagocytophilum^{VP} corrig. (Foggie 1949) Dumler et al. 2001. <== *Ehrlichia phagocytophila* (**basonym**). Synonym links through N4Lid: 10.1601/ex.997. Source of type material recommended for DOE sponsored genome sequencing by the JGI: Webster. High-quality 16S rRNA sequence S000388561 (RDP), AF172167 (Genbank). GOLD ID: Gc00351. GCAT ID: 000259_GCAT. Entrez genome id: 336. Sequenced strain: HZ 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.985

† *Ehrlichia phagocytophila*^{AL} (Foggie 1949) Philip 1962. ==> *Anaplasma phagocytophilum* (**new combination**). Synonym links through N4Lid: 10.1601/ex.997. Source of type material recommended for DOE sponsored genome sequencing by the JGI: Webster. High-quality 16S rRNA sequence S000388561 (RDP), AF172167 (Genbank). GOLD ID: Gc00351. GCAT ID: 000259_GCAT. Entrez genome id: 336. Sequenced strain: HZ 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.997

† *Ehrlichia equi*^{VP} Lewis et al. 1988. ≈ *Anaplasma phagocytophilum* (**earlier heterotypic synonym**), links through 10.1601/nm.985. Source of type material recommended for DOE sponsored genome sequencing by the JGI: No viable deposit available. N4Lid DOI: 10.1601/nm.994

Anaplasma platys^{VP} Dumler et al. 2001. Source of type material recommended for DOE sponsored genome sequencing by the JGI: no culture isolated. High-quality 16S rRNA sequence S000388296 (RDP), AF156784 (Genbank). N4Lid DOI: 10.1601/nm.986

Genus *Aegyptianella*^{AL} Carpano 1929. N4Lid DOI: 10.1601/nm.987

Aegyptianella pullorum^{AL} Carpano 1929. Source of type material recommended for DOE sponsored genome sequencing by the JGI: No viable deposit available. N4Lid DOI: 10.1601/nm.988

- Genus *Ehrlichia*^{AL}** Moshkovski 1945. ≈ *Ehrlichia* (later heterotypic synonym), links through 10.1601/nm.991. N4Lid DOI: 10.1601/nm.991
- Ehrlichia canis*^{AL} (Donatien and Lestoquard 1935) Moshkovski 1945. Source of type material recommended for DOE sponsored genome sequencing by the JGI: No viable deposit available. High-quality 16S rRNA sequence S000437402 (RDP), U26740 (Genbank). GOLD ID: Gc00294. GCAT ID: 000315_GCAT. Entrez genome id: 10694. Sequenced strain: Jake 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.992
- Ehrlichia chaffeensis*^{VP} Anderson et al. 1992. Source of type material recommended for DOE sponsored genome sequencing by the JGI: ATCC CRL-10679. High-quality 16S rRNA sequence S000437299 (RDP), U23503 (Genbank). GOLD ID: Gc00353. GCAT ID: 000260_GCAT. Entrez genome id: 325. Sequenced strain: Arkansas is type material. Genome sequencing is completed. Number of genomes of this species sequenced 2 (GOLD) 2 (NCBI). N4Lid DOI: 10.1601/nm.993
- Ehrlichia ewingii*^{VP} Anderson et al. 1992. Source of type material recommended for DOE sponsored genome sequencing by the JGI: Stillwater. High-quality 16S rRNA sequence S000438904 (RDP), U96436 (Genbank). N4Lid DOI: 10.1601/nm.995
- Ehrlichia muris*^{VP} Wen et al. 1995. Source of type material recommended for DOE sponsored genome sequencing by the JGI: ATCC VR-1411. High-quality 16S rRNA sequence S000437199 (RDP), U15527 (Genbank). GOLD ID: Gi01840. GCAT ID: 000748_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.996
- Ehrlichia ruminantium*^{VP} (Cowdry 1925) Dumler et al. 2001. <== *Cowdria ruminantium* (basonym). Synonym links through N4Lid: 10.1601/ex.990. Source of type material recommended for DOE sponsored genome sequencing by the JGI: Welgevonden. High-quality 16S rRNA sequence S000437009 (RDP), U03777 (Genbank). GOLD ID: Gc00244. GCAT ID: 000365_GCAT. Entrez genome id: 9614. Sequenced strain: Welgevonden, ARC-OVI 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.999
- † *Cowdria ruminantium*^{AL} (Cowdry 1925) Moshkovski 1947. ==> *Ehrlichia ruminantium* (new combination). Synonym links through N4Lid: 10.1601/ex.990. Source of type material recommended for DOE sponsored genome sequencing by the JGI: Welgevonden. High-quality 16S rRNA sequence S000437009 (RDP), U03777 (Genbank). GOLD ID: Gc00244. GCAT ID: 000365_GCAT. Entrez genome id: 9614. Sequenced strain: Welgevonden, ARC-OVI 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.990
- Genus † *Cowdria*^{AL}** Moshkovski 1947. ≈ *Ehrlichia* (earlier heterotypic synonym), links through 10.1601/nm.991. N4Lid DOI: 10.1601/nm.989
- Genus *Neoehrlichia*^C** N4Lid 10.1601/nm.8987
- Neoehrlichia mikurensis*^C Kawahara et al. 2004. Source of type material recommended for DOE sponsored genome sequencing by the JGI: No viable deposit available. High-quality 16S rRNA sequence S000415011 (RDP), AB084582 (Genbank). N4Lid 10.1601/nm.8972
- Genus *Neorickettsia*^{AL}** Philip et al. 1953. N4Lid DOI: 10.1601/nm.1001
- Neorickettsia helminthoeca*^{AL} Philip et al. 1953. Source of type material recommended for DOE sponsored genome sequencing by the JGI: no culture isolated. High-quality 16S rRNA sequence S000437116 (RDP), U12457 (Genbank). N4Lid DOI: 10.1601/nm.1002
- Neorickettsia risticii*^{VP} (Holland et al. 1985) Dumler et al. 2001. <== *Ehrlichia risticii* (basonym). Synonym links through N4Lid: 10.1601/ex.998. Source of type material recommended for DOE sponsored genome sequencing by the JGI: ATCC VR-986. High-quality 16S rRNA sequence S000436051 (RDP), M21290 (Genbank). N4Lid DOI: 10.1601/nm.1003
- † *Ehrlichia risticii*^{VP} Holland et al. 1985. ==> *Neorickettsia risticii* (new combination). Synonym links through N4Lid: 10.1601/ex.998. Source of type material recommended for DOE sponsored genome sequencing by the JGI: ATCC VR-986. High-quality 16S rRNA sequence S000436051 (RDP), M21290 (Genbank). N4Lid DOI: 10.1601/nm.998
- Ehrlichia sennetsu*^{VP} (Misao and Kobayashi 1956) Ristic and Huxsoll 1984. <== *Rickettsia sennetsu* (basonym). *Neorickettsia sennetsu* (new combination). Synonym links through N4Lid: 10.1601/ex.971. Source of type material recommended for DOE sponsored genome sequencing by

the JGI: ATCC VR-367. High-quality 16S rRNA sequence S000436657 (RDP), M73225 (Genbank). GOLD ID: Gc00352. GCAT ID: 000258_GCAT. Entrez genome id: 357. Sequenced strain: Miyayama is type material. Genome sequencing is completed. Number of genomes of this species sequenced 1 (GOLD) 0 (NCBI). N4Lid DOI: 10.1601/nm.1000

Neorickettsia sennetsu^{VP} (Misao and Kobayashi 1956) Dumler et al. 2001. <== *Rickettsia sennetsu* (basonym). Synonym links through N4Lid: 10.1601/ex.971. Source of type material recommended for DOE sponsored genome sequencing by the JGI: ATCC VR-367. High-quality 16S rRNA sequence S000436657 (RDP), M73225 (Genbank). GOLD ID: Gc00352. GCAT ID: 000258_GCAT. Entrez genome id: 357. Sequenced strain: Miyayama is type material. Genome sequencing is completed. Number of genomes of this species sequenced 1 (GOLD). N4Lid DOI: 10.1601/nm.1004

† *Rickettsia sennetsu*^{AL} Misao and Kobayashi 1956. ==> *Ehrlichia sennetsu* (new combination). Synonym links through N4Lid: 10.1601/ex.971. Source of type material recommended for DOE sponsored genome sequencing by the JGI: ATCC VR-367. High-quality 16S rRNA sequence S000436657 (RDP), M73225 (Genbank). GOLD ID: Gc00352. GCAT ID: 000258_GCAT. Entrez genome id: 357. Sequenced strain: Miyayama is type material. Genome sequencing is completed. Number of genomes of this species sequenced 1 (GOLD) 0 (NCBI). N4Lid DOI: 10.1601/nm.971

Genus *Wolbachia*^{AL} Hertig 1936. GOLD ID: Gc00255. GCAT ID: 000354_GCAT. Entrez genome id: 12475. Sequenced strain: TRS is from a non-type strain. Genome sequencing is completed. Number of genomes of this species sequenced 10 (GOLD) 8 (NCBI). N4Lid DOI: 10.1601/nm.1005

Wolbachia pipientis^{AL} Hertig 1936. Source of type material recommended for DOE sponsored genome sequencing by the JGI: no culture isolated. High-quality 16S rRNA sequence S000013503 (RDP), X61768 (Genbank). GOLD ID: Gc00172. GCAT ID: 000438_GCAT. Entrez genome id: 272. Sequenced strain: wMel is from a non-type strain. Genome sequencing is completed. Number of genomes of this species sequenced 2 (GOLD). N4Lid DOI: 10.1601/nm.1006

Wolbachia melophagi^{AL} (Nöller 1917) Philip 1956. Source of type material recommended for DOE sponsored genome sequencing by the JGI: no culture isolated. High-quality 16S rRNA sequence S000001022 (RDP), X89110 (Genbank). N4Lid DOI: 10.1601/nm.1007

Wolbachia persica^{AL} Suitor and Weiss 1961. Source of type material recommended for DOE sponsored genome sequencing by the JGI: ATCC VR-331. High-quality 16S rRNA sequence S000436053 (RDP), M21292 (Genbank). N4Lid DOI: 10.1601/nm.1008

Genus *Xenohalictis*^C N4Lid DOI: 10.1601/nm.1009

Xenohalictis californiensis^C Friedman et al. 2000. Source of type material recommended for DOE sponsored genome sequencing by the JGI: No viable deposit available. High-quality 16S rRNA sequence S000387857 (RDP), AF133090 (Genbank). N4Lid DOI: 10.1601/nm.1010

Family *Holosporaceae*^{VP} Görtz and Schmidt 2006. N4Lid DOI: 10.1601/nm.1011

Genus *Holospora*^{VP} (ex Hafkine 1890) Preer and Preer 1982. N4Lid DOI: 10.1601/nm.1012

Holospora undulata^{VP} (ex Hafkine 1890) Preer and Preer 1982. Source of type material recommended for DOE sponsored genome sequencing by the JGI: C204. N4Lid DOI: 10.1601/nm.1013

Holospora caryophila^{VP} (ex Preer et al. 1974) Preer and Preer 1982. Source of type material recommended for DOE sponsored genome sequencing by the JGI: ATCC 30694. N4Lid DOI: 10.1601/nm.1014

Holospora elegans^{VP} (ex Hafkine 1890) Preer and Preer 1982. Source of type material recommended for DOE sponsored genome sequencing by the JGI: C101. N4Lid DOI: 10.1601/nm.1015

Holospora obtusa^{VP} (ex Hafkine 1890) Preer and Preer 1982. Source of type material recommended for DOE sponsored genome sequencing by the JGI: C103. High-quality 16S rRNA sequence S000003921 (RDP), X58198 (Genbank). N4Lid DOI: 10.1601/nm.1016

Family *Incertae sedis*^{4 NVP} N4Lid 10.1601/nm.8936

Genus *Caedibacter*^{VP} (ex Preer et al. 1974) Preer and Preer 1982. N4Lid DOI: 10.1601/nm.1017

Caedibacter taeniospiralis^{VP} (ex Preer et al. 1974) Preer and Preer 1982. Source of type material recommended for DOE sponsored genome sequencing by the JGI: ATCC 30632. N4Lid DOI: 10.1601/nm.1018

Caedibacter caryophilus^{VP} corrig. Schmidt et al. 1987. Source of type material recommended for DOE sponsored genome sequencing by the JGI: No viable deposit available. High-quality 16S rRNA sequence S000414747 (RDP), X71837 (Genbank). N4Lid DOI: 10.1601/nm.1019

Caedibacter paraconjugatus^{VP} Quackenbush 1982. Source of type material recommended for DOE sponsored genome sequencing by the JGI: ATCC 30638. N4Lid DOI: 10.1601/nm.1020

Caedibacter pseudomutans^{VP} Quackenbush 1982. Source of type material recommended for DOE sponsored genome sequencing by the JGI: ATCC 30633. N4Lid DOI: 10.1601/nm.1021

Caedibacter varicaedens^{VP} Quackenbush 1982. Source of type material recommended for DOE sponsored genome sequencing by the JGI: ATCC 30637. N4Lid DOI: 10.1601/nm.1022

Genus *Lyticum*^{VP} (ex Preer et al. 1974) Preer and Preer 1982. N4Lid DOI: 10.1601/nm.1023

Lyticum flagellatum^{VP} (ex Preer et al. 1974) Preer and Preer 1982. Source of type material recommended for DOE sponsored genome sequencing by the JGI: ATCC 30700. N4Lid DOI: 10.1601/nm.1024

Lyticum sinuosum^{VP} (ex Preer et al. 1974) Preer and Preer 1982. Source of type material recommended for DOE sponsored genome sequencing by the JGI: ATCC 30696. N4Lid DOI: 10.1601/nm.1025

Genus *Odyssella*^C N4Lid DOI: 10.1601/nm.1026

Odyssella thessalonicensis^C Birtles et al. 2000. Source of type material recommended for DOE sponsored genome sequencing by the JGI: No viable deposit available. High-quality 16S rRNA sequence S000428386 (RDP), AF069496 (Genbank). N4Lid DOI: 10.1601/nm.1027

Genus *Pseudocaedibacter*^{VP} Quackenbush 1982. N4Lid DOI: 10.1601/nm.1028

Pseudocaedibacter conjugatus^{VP} (ex Preer et al. 1974) Quackenbush 1982. Source of type material recommended for DOE sponsored genome sequencing by the JGI: ATCC 30796. N4Lid DOI: 10.1601/nm.1029

Pseudocaedibacter falsus^{VP} (ex Preer et al. 1974) Quackenbush 1982. Source of type material recommended for DOE sponsored genome sequencing by the JGI: ATCC 30640. N4Lid DOI: 10.1601/nm.1030

Pseudocaedibacter minutus^{VP} (ex Preer et al. 1974) Quackenbush 1982. Source of type material recommended for DOE sponsored genome sequencing by the JGI: ATCC 30699. N4Lid DOI: 10.1601/nm.1031

Genus *Symbiotes*^{AL} Philip 1956. N4Lid DOI: 10.1601/nm.1032

Symbiotes lectularius^{AL} (Arkwright et al. 1921) Philip 1956. Source of type material recommended for DOE sponsored genome sequencing by the JGI: No viable deposit available. N4Lid DOI: 10.1601/nm.1033

Genus *Tectibacter*^{VP} (ex Preer et al. 1974) Preer and Preer 1982. N4Lid DOI: 10.1601/nm.1034

Tectibacter vulgaris^{VP} (ex Preer et al. 1974) Preer and Preer 1982. Source of type material recommended for DOE sponsored genome sequencing by the JGI: ATCC 30697. N4Lid DOI: 10.1601/nm.1035

Order *Rhodobacterales*^{VP} Garrity et al 2006. GOLD ID: Gi00899. GCAT ID: 001621_GCAT. Entrez genome id: 13614. Sequenced strain: HTCC2654 is from a non-type strain. Genome sequencing is incomplete. Number of genomes of this species sequenced 4 (GOLD) 3 (NCBI). N4Lid DOI: 10.1601/nm.1036

Family *Rhodobacteraceae*^{VP} Garrity et al 2006. N4Lid DOI: 10.1601/nm.1037

Genus *Rhodobacter*^{VP} Imhoff et al. 1984. GOLD ID: Gi01562. GCAT ID: 001417_GCAT. Sequenced strain: SW2 is from a non-type strain. Genome sequencing is incomplete. Number of genomes of this species sequenced 1 (GOLD). N4Lid DOI: 10.1601/nm.1038

Rhodobacter capsulatus^{VP} (Molisch 1907) Imhoff et al. 1984. <== *Rhodopseudomonas capsulata* (basonym). Synonym links through N4Lid: 10.1601/ex.1498. Source of type material recommended for DOE sponsored genome sequencing by the JGI: ATCC 11166. High-quality 16S rRNA sequence S000003157 (RDP), D13474 (Genbank). GOLD ID: Gi00507. GCAT ID: 001411_GCAT. Entrez genome id: 55. Sequenced strain: SB1003 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.1039

† *Rhodopseudomonas capsulata*^{AL} (Molisch 1907) van Niel 1944. ==> *Rhodobacter capsulatus* (new combination). Synonym links through N4Lid: 10.1601/ex.1498. Source of type material recommended for DOE sponsored genome sequencing by the JGI: ATCC 11166. High-quality 16S rRNA sequence S000003157 (RDP), D13474 (Genbank). GOLD ID: Gi00507. GCAT ID: 001411_GCAT. Entrez genome id: 55. Sequenced strain: SB1003 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.1498

Rhodobacter azotoformans^{VP} Hiraishi et al. 1997. Source of type material recommended for DOE sponsored genome sequencing by the JGI: CIP 105439. High-quality 16S rRNA sequence S000413906 (RDP), D70846 (Genbank). N4Lid DOI: 10.1601/nm.1041

Rhodobacter blasticus^{VP} corrig. (Eckersley and Dow 1981) Kawasaki et al. 1994. <== *Rhodopseudomonas blastica* (basonym). Synonym links through N4Lid: 10.1601/ex.1497. Source of type material recommended for DOE sponsored genome sequencing by the JGI: ATCC 33485. High-quality 16S rRNA sequence S000413586 (RDP), D16429 (Genbank). N4Lid DOI: 10.1601/nm.1042

† *Rhodopseudomonas blastica*^{VP} Eckersley and Dow 1981. ==> *Rhodobacter blasticus* (new combination). Synonym links through N4Lid: 10.1601/ex.1497. Source of type material recommended for DOE sponsored genome sequencing by the JGI: ATCC 33485. High-quality 16S rRNA sequence S000413586 (RDP), D16429 (Genbank). N4Lid DOI: 10.1601/nm.1497

Rhodobacter massiliensis^{VP} Greub and Raoult 2006. Source of type material recommended for DOE sponsored genome sequencing by the JGI: CCUG 47968. High-quality 16S rRNA sequence S000394397 (RDP), AF452106 (Genbank). N4Lid DOI: 10.1601/nm.10328

Rhodobacter sphaeroides^{VP} (van Niel 1944) Imhoff et al. 1984. <== *Rhodopseudomonas sphaeroides* (basonym). Synonym links through N4Lid: 10.1601/ex.1507. Source of type material recommended for DOE sponsored genome sequencing by the JGI: ATCC 17023. High-quality 16S rRNA sequence S000364319 (RDP), X53853 (Genbank). GOLD ID: Gc00417. GCAT ID: 000193_GCAT. Entrez genome id: 56. Sequenced strain: 2.4.1. 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.1044

† *Rhodopseudomonas sphaeroides*^{AL} van Niel 1944. ==> *Rhodobacter sphaeroides* (new combination). Synonym links through N4Lid: 10.1601/ex.1507. Source of type material recommended for DOE sponsored genome sequencing by the JGI: ATCC 17023. High-quality 16S rRNA sequence S000364319 (RDP), X53853 (Genbank). GOLD ID: Gc00417. GCAT ID: 000193_GCAT. Entrez genome id: 56. Sequenced strain: 2.4.1. 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.1507

Rhodobacter veldkampii^{VP} Hansen and Imhoff 1985. Source of type material recommended for DOE sponsored genome sequencing by the JGI: ATCC 35703. High-quality 16S rRNA sequence S000003560 (RDP), D13477 (Genbank). N4Lid DOI: 10.1601/nm.1046

Genus *Ahrensia*^{VP} Uchino et al. 1999. N4Lid DOI: 10.1601/nm.1047

Ahrensia kielensis^{VP} corrig. (ex Ahrens 1968) Uchino et al. 1999. Source of type material recommended for DOE sponsored genome sequencing by the JGI: ATCC 25656. High-quality 16S rRNA sequence S000414216 (RDP), D88524 (Genbank). N4Lid DOI: 10.1601/nm.1048

Genus *Albidovulum*^{VP} Albuquerque et al. 2003. N4Lid DOI: 10.1601/nm.1049

Albidovulum inexpectatum^{VP} Albuquerque et al. 2003. Source of type material recommended for DOE sponsored genome sequencing by the JGI: ATCC BAA-387. High-quality 16S rRNA sequence S000394586 (RDP), AF465833 (Genbank). N4Lid DOI: 10.1601/nm.1050

Genus *Amaricoccus*^{VP} Maszenan et al. 1997. N4Lid DOI: 10.1601/nm.1051

Amaricoccus kaplicensis^{VP} Maszenan et al. 1997. Source of type material recommended for DOE sponsored genome sequencing by the JGI: ACM 5099. High-quality 16S rRNA sequence S000438700 (RDP), U88041 (Genbank). N4Lid DOI: 10.1601/nm.1052

Amaricoccus macauensis^{VP} Maszenan et al. 1997. Source of type material recommended for DOE sponsored genome sequencing by the JGI: ACM 5096. High-quality 16S rRNA sequence S000438701 (RDP), U88042 (Genbank). N4Lid DOI: 10.1601/nm.1053

Amaricoccus tamworthensis^{VP} Maszenan et al. 1997. Source of type material recommended for DOE sponsored genome sequencing by the JGI: ACM 5097. High-quality 16S rRNA sequence S000438703 (RDP), U88044 (Genbank). N4Lid DOI: 10.1601/nm.1054

Amaricoccus veronensis^{VP} Maszenan et al. 1997. Source of type material recommended for DOE sponsored genome sequencing by the JGI: ACM 5098. High-quality 16S rRNA sequence S000438702 (RDP), U88043 (Genbank). N4Lid DOI: 10.1601/nm.1055

Genus *Antarctobacter*^{VP} Labrenz et al. 1998. N4Lid DOI: 10.1601/nm.1056

Antarctobacter heliothermus^{VP} Labrenz et al. 1998. Source of type material recommended for DOE sponsored genome sequencing by the JGI: DSM 11445. High-quality 16S rRNA sequence S000021200 (RDP), Y11552 (Genbank). N4Lid DOI: 10.1601/nm.1057

Genus *Catellibacterium*^{VP} Tanaka et al. 2004. N4Lid DOI: 10.1601/nm.8533

Catellibacterium nectariphilum^{VP} Tanaka et al. 2004. Source of type material recommended for DOE sponsored genome sequencing by the JGI: DSM 15620. High-quality 16S rRNA sequence S000319417 (RDP), AB101543 (Genbank). N4Lid DOI: 10.1601/nm.8534

Genus *Citricella*^{VP} Sorokin et al. 2006. N4Lid 10.1601/nm.9811

Citricella thiooxidans^{VP} Sorokin et al. 2006. Source of type material recommended for DOE sponsored genome sequencing by the JGI: DSM 10146. High-quality 16S rRNA sequence S000333610 (RDP), AY639887 (Genbank). N4Lid 10.1601/nm.9810

Genus *Dinoroseobacter*^{VP} Biebl et al. 2005. N4Lid 10.1601/nm.9432

Dinoroseobacter shibae^{VP} Biebl et al. 2005. Source of type material recommended for DOE sponsored genome sequencing by the JGI: DSM 16493. High-quality 16S rRNA sequence S000543935 (RDP), AJ534211 (Genbank). GOLD ID: Gi01335. GCAT ID: 001747_GCAT. Entrez genome id: 17417. Sequenced strain: DSM 16493 is type material. Genome sequencing is incomplete. Number of genomes of this species sequenced 1 (GOLD) 1 (NCBI). N4Lid 10.1601/nm.9431

Genus *Gemmobacter*^{VP} Rothe et al. 1988. N4Lid DOI: 10.1601/nm.1058

Gemmobacter aquatilis^{VP} Rothe et al. 1988. Source of type material recommended for DOE sponsored genome sequencing by the JGI: ATCC 49971. N4Lid DOI: 10.1601/nm.1059

Genus *Hirschia*^{VP} Schlesner et al. 1990. N4Lid DOI: 10.1601/nm.1060

Hirschia baltica^{VP} Schlesner et al. 1990. Source of type material recommended for DOE sponsored genome sequencing by the JGI: ATCC 49814. High-quality 16S rRNA sequence S000130643 (RDP), X52909 (Genbank). N4Lid DOI: 10.1601/nm.1061

Genus *Hyphomonas*^{VP} (ex Pongratz 1957) Moore et al. 1984. N4Lid DOI: 10.1601/nm.1062

Hyphomonas polymorpha^{VP} (ex Pongratz 1957) Moore et al. 1984. Source of type material recommended for DOE sponsored genome sequencing by the JGI: ATCC 33881. High-quality 16S rRNA sequence S000112779 (RDP), AJ227813 (Genbank). N4Lid DOI: 10.1601/nm.1063

Hyphomonas adhaerens^{VP} Weiner et al. 2000. Source of type material recommended for DOE sponsored genome sequencing by the JGI: ATCC 43965. High-quality 16S rRNA sequence S000428567 (RDP), AF082790 (Genbank). N4Lid DOI: 10.1601/nm.1064

Hyphomonas hirschiana^{VP} Weiner et al. 1985. Source of type material recommended for DOE sponsored genome sequencing by the JGI: ATCC 33886. High-quality 16S rRNA sequence S000428571 (RDP), AF082794 (Genbank). N4Lid DOI: 10.1601/nm.1065

Hyphomonas jannaschiana^{VP} Weiner et al. 1985. Source of type material recommended for DOE sponsored genome sequencing by the JGI: ATCC 33883. High-quality 16S rRNA sequence S000112501 (RDP), AJ227814 (Genbank). N4Lid DOI: 10.1601/nm.1066

Hyphomonas johnsonii^{VP} Weiner et al. 2000. Source of type material recommended for DOE sponsored genome sequencing by the JGI: ATCC 43964. High-quality 16S rRNA sequence S000428568 (RDP), AF082791 (Genbank). N4Lid DOI: 10.1601/nm.1067

Hyphomonas neptunium^{VP} (Leifson 1964) Moore et al. 1984. <== *Hyphomicrobium neptunium* (**basonym**). Synonym links through N4Lid: 10.1601/ex.1524. Source of type material recommended for DOE sponsored genome sequencing by the JGI: ATCC 15444. High-quality 16S rRNA sequence S000428575 (RDP), AF082798 (Genbank). GOLD ID: Gc00428. GCAT ID: 000182_GCAT. Entrez genome id: 15721. Sequenced strain: ATCC 15444 is type material.

Genome sequencing is completed. Number of genomes of this species sequenced 1 (GOLD) 1 (NCBI). N4Lid DOI: 10.1601/nm.1068

† *Hyphomicrobium neptunium*^{AL} Leifson 1964. ==> *Hyphomonas neptunium* (new combination). Synonym links through N4Lid: 10.1601/ex.1524. Source of type material recommended for DOE sponsored genome sequencing by the JGI: ATCC 15444. High-quality 16S rRNA sequence S000428575 (RDP), AF082798 (Genbank). GOLD ID: Gc00428. GCAT ID: 000182_GCAT. Entrez genome id: 15721. Sequenced strain: ATCC 15444 is type material. Genome sequencing is completed. Number of genomes of this species sequenced 1 (GOLD) 1 (NCBI). N4Lid DOI: 10.1601/nm.1524

Hyphomonas oceanitis^{VP} Weiner et al. 1985. Source of type material recommended for DOE sponsored genome sequencing by the JGI: ATCC 33879. High-quality 16S rRNA sequence S000428574 (RDP), AF082797 (Genbank). N4Lid DOI: 10.1601/nm.1069

Hyphomonas rosenbergii^{VP} Weiner et al. 2000. Source of type material recommended for DOE sponsored genome sequencing by the JGI: ATCC 43869. High-quality 16S rRNA sequence S000428572 (RDP), AF082795 (Genbank). N4Lid DOI: 10.1601/nm.1070

Genus *Loktanella*^{VP} Van Trappen et al. 2004. N4Lid 10.1601/nm.8673

Loktanella hongkongensis^{VP} Lau et al. 2004. Source of type material recommended for DOE sponsored genome sequencing by the JGI: NRRL B-41039. High-quality 16S rRNA sequence S000486943 (RDP), AY600300 (Genbank). N4Lid 10.1601/nm.8675

Loktanella agnita^{VP} Ivanova et al. 2005. Source of type material recommended for DOE sponsored genome sequencing by the JGI: CIP 107883. High-quality 16S rRNA sequence S000374965 (RDP), AY682198 (Genbank). N4Lid 10.1601/nm.9636

Loktanella fryxellensis^{VP} Van Trappen et al. 2004. Source of type material recommended for DOE sponsored genome sequencing by the JGI: CIP 108323. High-quality 16S rRNA sequence S000416877 (RDP), AJ582225 (Genbank). N4Lid 10.1601/nm.8674

Loktanella koreensis^{VP} Weon et al. 2006. Source of type material recommended for DOE sponsored genome sequencing by the JGI: DSM 17925. High-quality 16S rRNA sequence S000640783 (RDP), DQ344498 (Genbank). N4Lid DOI: 10.1601/nm.10292

Loktanella rosea^{VP} Ivanova et al. 2005. Source of type material recommended for DOE sponsored genome sequencing by the JGI: CIP 107851. High-quality 16S rRNA sequence S000374966 (RDP), AY682199 (Genbank). N4Lid 10.1601/nm.9637

Loktanella salsilacus^{VP} Van Trappen et al. 2004. Source of type material recommended for DOE sponsored genome sequencing by the JGI: CIP 108322. High-quality 16S rRNA sequence S000416760 (RDP), AJ440997 (Genbank). N4Lid 10.1601/nm.8676

Loktanella vestfoldensis^{VP} Van Trappen et al. 2004. Source of type material recommended for DOE sponsored genome sequencing by the JGI: CIP 108321. High-quality 16S rRNA sequence S000416878 (RDP), AJ582226 (Genbank). GOLD ID: Gi00850. GCAT ID: 001199_GCAT. Entrez genome id: 13444. Sequenced strain: SKA53 is from a non-type strain. Genome sequencing is incomplete. Number of genomes of this species sequenced 1 (GOLD) 1 (NCBI). N4Lid 10.1601/nm.8677

Genus *Jannaschia*^{VP} Wagner-Döbler et al. 2003. ≈ *Jannaschia* (later heterotypic synonym), links through 10.1601/nm.1071. GOLD ID: Gc00354. GCAT ID: 000256_GCAT. Entrez genome id: 12733. Sequenced strain: CCS1 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.1071

Genus † *Thalassobacter*^{VP} Macián et al. 2005. ≈ *Jannaschia* (earlier heterotypic synonym), links through 10.1601/nm.1071. N4Lid 10.1601/nm.8881

Jannaschia helgolandensis^{VP} Wagner-Döbler et al. 2003. Source of type material recommended for DOE sponsored genome sequencing by the JGI: DSM 14858. High-quality 16S rRNA sequence S000133991 (RDP), AJ438157 (Genbank). N4Lid DOI: 10.1601/nm.1072

Jannaschia cystaugens^{VP} Adachi et al. 2004. ≈ *Thalassobacter stenotrophicus* (later heterotypic synonym), links through 10.1601/nm.8630. Source of type material recommended for DOE sponsored genome sequencing by the JGI: NBRC 100362. High-quality 16S rRNA sequence S000415130 (RDP), AB121782 (Genbank). N4Lid 10.1601/nm.8630

† *Thalassobacter stenotrophicus*^{VP} Macián et al. 2005. ≈ *Jannaschia cystaugens* (earlier heterotypic synonym), links through 10.1601/nm.8630. Source of type material recommended for

DOE sponsored genome sequencing by the JGI: DSM 16310. High-quality 16S rRNA sequence S000471772 (RDP), AJ631302 (Genbank). N4Lid 10.1601/nm.8882

Jannaschia rubra^{VP} Macián et al. 2005. Source of type material recommended for DOE sponsored genome sequencing by the JGI: DSM 16279. High-quality 16S rRNA sequence S000539587 (RDP), AJ748747 (Genbank). N4Lid 10.1601/nm.9354

Jannaschia seosinensis^{VP} Choi et al. 2006. Source of type material recommended for DOE sponsored genome sequencing by the JGI: JCM 13035. High-quality 16S rRNA sequence S000490108 (RDP), AY906862 (Genbank). N4Lid 10.1601/nm.9835

Genus *Ketogulonicigenium*^{VP} corrig. Urbance et al. 2001. N4Lid DOI: 10.1601/nm.1073

Ketogulonicigenium vulgare^{VP} corrig. Urbance et al. 2001. Source of type material recommended for DOE sponsored genome sequencing by the JGI: DSM 4025. N4Lid DOI: 10.1601/nm.1074

Ketogulonicigenium robustum^{VP} corrig. Urbance et al. 2001. Source of type material recommended for DOE sponsored genome sequencing by the JGI: NRRL B-21627. N4Lid DOI: 10.1601/nm.1075

Genus *Leisingera*^{VP} Schaefer et al. 2002. N4Lid DOI: 10.1601/nm.1076

Leisingera methylohalidivorans^{VP} Schäfer et al. 2002. Source of type material recommended for DOE sponsored genome sequencing by the JGI: ATCC BAA-92. High-quality 16S rRNA sequence S000434336 (RDP), AY005463 (Genbank). N4Lid DOI: 10.1601/nm.1077

Genus *Maricaulis*^{VP} Abraham et al. 1999. N4Lid DOI: 10.1601/nm.1078

Maricaulis maris^{VP} (Poindexter 1964) Abraham et al. 1999. <== *Caulobacter maris* (basonym). Synonym links through N4Lid: 10.1601/ex.1259. Source of type material recommended for DOE sponsored genome sequencing by the JGI: ATCC 15268. High-quality 16S rRNA sequence S000013061 (RDP), AJ007807 (Genbank). GOLD ID: Gc00425. GCAT ID: 000185_GCAT. Entrez genome id: 17333. Sequenced strain: MCS10 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.1079

† *Caulobacter maris*^{AL} Poindexter 1964. ==> *Maricaulis maris* (new combination). Synonym links through N4Lid: 10.1601/ex.1259. Source of type material recommended for DOE sponsored genome sequencing by the JGI: ATCC 15268. High-quality 16S rRNA sequence S000013061 (RDP), AJ007807 (Genbank). GOLD ID: Gc00425. GCAT ID: 000185_GCAT. Entrez genome id: 17333. Sequenced strain: MCS10 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.1259

† *Caulobacter halobacteroides*^{AL} Poindexter 1964. ≈ *Maricaulis maris* (earlier heterotypic synonym), links through 10.1601/nm.1079. Source of type material recommended for DOE sponsored genome sequencing by the JGI: ATCC 15269. High-quality 16S rRNA sequence S000014608 (RDP), AJ007804 (Genbank). N4Lid DOI: 10.1601/nm.1255

Maricaulis parjimensis^{VP} Abraham et al. 2002. Source of type material recommended for DOE sponsored genome sequencing by the JGI: CIP 107440. High-quality 16S rRNA sequence S000114852 (RDP), AJ227808 (Genbank). N4Lid DOI: 10.1601/nm.1080

Maricaulis salignorans^{VP} Abraham et al. 2002. Source of type material recommended for DOE sponsored genome sequencing by the JGI: CIP 107439. High-quality 16S rRNA sequence S000112633 (RDP), AJ227806 (Genbank). N4Lid DOI: 10.1601/nm.1081

Maricaulis virginensis^{VP} Abraham et al. 2002. Source of type material recommended for DOE sponsored genome sequencing by the JGI: CIP 107438. High-quality 16S rRNA sequence S000103720 (RDP), AJ301667 (Genbank). N4Lid DOI: 10.1601/nm.1082

Maricaulis washingtonensis^{VP} Abraham et al. 2002. Source of type material recommended for DOE sponsored genome sequencing by the JGI: CIP 107441. High-quality 16S rRNA sequence S000112990 (RDP), AJ227804 (Genbank). N4Lid DOI: 10.1601/nm.1083

Genus *Marinovum*^{VP} Martens et al. 2006. N4Lid DOI: 10.1601/nm.10133

Marinovum algicola^{VP} (Lafay et al. 1995) Martens et al. 2006. <== *Roseobacter algicola* (basonym). Synonym links through N4Lid: 10.1601/ex.1136. Source of type material recommended for DOE sponsored genome sequencing by the JGI: ATCC 51440. High-quality 16S rRNA sequence S000007365 (RDP), X78315 (Genbank). N4Lid 10.1601/nm.9794

† *Roseobacter algicola*^{VP} Lafay et al. 1995. ==> *Ruegeria algicola* (new combination). Synonym links through N4Lid: 10.1601/ex.1136. Source of type material recommended for DOE

sponsored genome sequencing by the JGI: ATCC 51440. High-quality 16S rRNA sequence S000007365 (RDP), X78315 (Genbank). N4Lid DOI: 10.1601/nm.1136

Ruegeria algicola ^{VP} (Lafay et al. 1995) Uchino et al. 1999. <== *Roseobacter algicola* (basonym). *Marinovum algicola* (new combination). Synonym links through N4Lid: 10.1601/ex.1136. Source of type material recommended for DOE sponsored genome sequencing by the JGI: ATCC 51440. High-quality 16S rRNA sequence S000007365 (RDP), X78315 (Genbank). N4Lid DOI: 10.1601/nm.1146

Genus *Methylarcula* ^{VP} Doronina et al. 2000. N4Lid DOI: 10.1601/nm.1084

Methylarcula marina ^{VP} Doronina et al. 2000. Source of type material recommended for DOE sponsored genome sequencing by the JGI: VKM B-2159. High-quality 16S rRNA sequence S000427863 (RDP), AF030436 (Genbank). N4Lid DOI: 10.1601/nm.1085

Methylarcula terricola ^{VP} Doronina et al. 2000. Source of type material recommended for DOE sponsored genome sequencing by the JGI: VKM B-2160. High-quality 16S rRNA sequence S000427863 (RDP), AF030436 (Genbank). N4Lid DOI: 10.1601/nm.1086

Genus *Nesiotobacter* ^{VP} Donachie et al. 2006. N4Lid 10.1601/nm.9939

Nesiotobacter exalbescens ^{VP} Donachie et al. 2006. Source of type material recommended for DOE sponsored genome sequencing by the JGI: ATCC BAA-994. High-quality 16S rRNA sequence S000539216 (RDP), AF513441 (Genbank). N4Lid 10.1601/nm.9938

Genus *Nereida* ^{VP} Pujalte et al. 2005. N4Lid 10.1601/nm.9351

Nereida ignava ^{VP} Pujalte et al. 2005. Source of type material recommended for DOE sponsored genome sequencing by the JGI: DSM 16309. High-quality 16S rRNA sequence S000539588 (RDP), AJ748748 (Genbank). N4Lid 10.1601/nm.9350

Genus *Oceanicaulis* ^{VP} Strömpl et al. 2003. N4Lid DOI: 10.1601/nm.1087

Oceanicaulis alexandrii ^{VP} Strömpl et al. 2003. Source of type material recommended for DOE sponsored genome sequencing by the JGI: DSM 11625. High-quality 16S rRNA sequence S000251239 (RDP), AJ309862 (Genbank). GOLD ID: Gi00864. GCAT ID: 001278_GCAT. Entrez genome id: 13448. Sequenced strain: HTCC2633 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.1088

Genus *Oceanibulbus* ^{VP} Wagner-Döbler et al. 2004. N4Lid 10.1601/nm.8747

Oceanibulbus indolifex ^{VP} Wagner-Döbler et al. 2004. Source of type material recommended for DOE sponsored genome sequencing by the JGI: DSM 14862. High-quality 16S rRNA sequence S000366464 (RDP), AJ550939 (Genbank). GOLD ID: Gi01440. GCAT ID: 000905_GCAT. Sequenced strain: DSM 14862 is type material. Genome sequencing is incomplete. Number of genomes of this species sequenced 1 (GOLD). N4Lid 10.1601/nm.8748

Genus *Oceanicola* ^{VP} Cho and Giovannoni 2004. N4Lid 10.1601/nm.8749

Oceanicola granulosus ^{VP} Cho and Giovannoni 2004. Source of type material recommended for DOE sponsored genome sequencing by the JGI: ATCC BAA-861. High-quality 16S rRNA sequence S000368742 (RDP), AY424896 (Genbank). GOLD ID: Gi00863. GCAT ID: 001277_GCAT. Entrez genome id: 13450. Sequenced strain: HTCC 2516 is type material. Genome sequencing is incomplete. Number of genomes of this species sequenced 1 (GOLD) 1 (NCBI). N4Lid 10.1601/nm.8751

Oceanicola batsensis ^{VP} Cho and Giovannoni 2004. Source of type material recommended for DOE sponsored genome sequencing by the JGI: ATCC BAA-863. High-quality 16S rRNA sequence S000368744 (RDP), AY424898 (Genbank). GOLD ID: Gi00862. GCAT ID: 001276_GCAT. Entrez genome id: 13449. Sequenced strain: HTCC 2597 is type material. Genome sequencing is incomplete. Number of genomes of this species sequenced 1 (GOLD) 1 (NCBI). N4Lid 10.1601/nm.8750

Genus *Octadecabacter* ^{VP} Gosink et al. 1998. N4Lid DOI: 10.1601/nm.1089

Octadecabacter arcticus ^{VP} Gosink et al. 1998. Source of type material recommended for DOE sponsored genome sequencing by the JGI: CIP 106732. High-quality 16S rRNA sequence S000438412 (RDP), U73725 (Genbank). GOLD ID: Gi01442. GCAT ID: 000907_GCAT. Sequenced strain: 238 is type material. Genome sequencing is incomplete. Number of genomes of this species sequenced 1 (GOLD). N4Lid DOI: 10.1601/nm.1090

- Octadecabacter antarcticus*^{VP} Gosink et al. 1998. Source of type material recommended for DOE sponsored genome sequencing by the JGI: CIP 106731. High-quality 16S rRNA sequence S000437166 (RDP), U14583 (Genbank). GOLD ID: Gi01441. GCAT ID: 000906_GCAT. Sequenced strain: 307 is type material. Genome sequencing is incomplete. Number of genomes of this species sequenced 1 (GOLD). N4Lid DOI: 10.1601/nm.1091
- Genus *Palleronia***^{VP} Martínez-Checa et al. 2005. N4Lid 10.1601/nm.9741
- Palleronia marisminoris*^{VP} Martínez-Checa et al. 2005. Source of type material recommended for DOE sponsored genome sequencing by the JGI: LMG 22959. High-quality 16S rRNA sequence S000493806 (RDP), AY926462 (Genbank). N4Lid 10.1601/nm.9740
- Genus *Pannonibacter***^{VP} Borsodi et al. 2003. N4Lid DOI: 10.1601/nm.1092
- Pannonibacter phragmitetus*^{VP} Borsodi et al. 2003. Source of type material recommended for DOE sponsored genome sequencing by the JGI: DSM 14782. High-quality 16S rRNA sequence S000129173 (RDP), AJ400704 (Genbank). N4Lid DOI: 10.1601/nm.1093
- Genus *Paracoccus***^{AL} Davis 1969. N4Lid DOI: 10.1601/nm.1094
- Paracoccus denitrificans*^{AL} (Beijerinck and Minkman 1910) Davis 1969. Source of type material recommended for DOE sponsored genome sequencing by the JGI: ATCC 17741. High-quality 16S rRNA sequence S000013118 (RDP), Y16927 (Genbank). GOLD ID: Gc00472. GCAT ID: 000137_GCAT. Entrez genome id: 13020. Sequenced strain: PD1222 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.1095
- Paracoccus alcaliphilus*^{VP} Urakami et al. 1989. Source of type material recommended for DOE sponsored genome sequencing by the JGI: ATCC 51199. High-quality 16S rRNA sequence S000469024 (RDP), D32238 (Genbank). N4Lid DOI: 10.1601/nm.1096
- Paracoccus alkenifer*^{VP} Lipski et al. 1998. Source of type material recommended for DOE sponsored genome sequencing by the JGI: DSM 11593. High-quality 16S rRNA sequence S000012756 (RDP), Y13827 (Genbank). N4Lid DOI: 10.1601/nm.1097
- Paracoccus aminophilus*^{VP} Urakami et al. 1990. Source of type material recommended for DOE sponsored genome sequencing by the JGI: ATCC 49673. High-quality 16S rRNA sequence S000469025 (RDP), D32239 (Genbank). N4Lid DOI: 10.1601/nm.1098
- Paracoccus aminovorans*^{VP} Urakami et al. 1990. Source of type material recommended for DOE sponsored genome sequencing by the JGI: ATCC 49632. High-quality 16S rRNA sequence S000469026 (RDP), D32240 (Genbank). N4Lid DOI: 10.1601/nm.1099
- Paracoccus carotinifaciens*^{VP} Tsubokura et al. 1999. Source of type material recommended for DOE sponsored genome sequencing by the JGI: IFO 16121. High-quality 16S rRNA sequence S000381788 (RDP), AB006899 (Genbank). N4Lid DOI: 10.1601/nm.1100
- Paracoccus haeundaensis*^{VP} Lee et al. 2004. Source of type material recommended for DOE sponsored genome sequencing by the JGI: LMG P-21903. High-quality 16S rRNA sequence S000417749 (RDP), AY189743 (Genbank). N4Lid 10.1601/nm.8766
- Paracoccus kocurii*^{VP} Ohara et al. 1990. Source of type material recommended for DOE sponsored genome sequencing by the JGI: ATCC 49631. High-quality 16S rRNA sequence S000469027 (RDP), D32241 (Genbank). N4Lid DOI: 10.1601/nm.1102
- Paracoccus kondratievae*^{VP} Doronina and Trotsenko 2001. Source of type material recommended for DOE sponsored genome sequencing by the JGI: NCIMB 13773. High-quality 16S rRNA sequence S000390068 (RDP), AF250332 (Genbank). N4Lid DOI: 10.1601/nm.1103
- Paracoccus koreensis*^{VP} La et al. 2005. Source of type material recommended for DOE sponsored genome sequencing by the JGI: KCTC 12238. High-quality 16S rRNA sequence S000543166 (RDP), AB187584 (Genbank). N4Lid 10.1601/nm.9535
- Paracoccus marcusii*^{VP} Harker et al. 1998. Source of type material recommended for DOE sponsored genome sequencing by the JGI: DSM 11574. N4Lid DOI: 10.1601/nm.1104
- Paracoccus methylutens*^{VP} Doronina et al. 1998. Source of type material recommended for DOE sponsored genome sequencing by the JGI: VKM B-2164. High-quality 16S rRNA sequence S000390070 (RDP), AF250334 (Genbank). N4Lid DOI: 10.1601/nm.1105
- Paracoccus pantotrophus*^{VP} (Robertson and Kuenen 1984) Rainey et al. 1999. <== *Thiosphaera pantotropha* (basonym). Synonym links through N4Lid: 10.1601/ex.1106. Source of type material

recommended for DOE sponsored genome sequencing by the JGI: ATCC 17741. High-quality 16S rRNA sequence S000020760 (RDP), Y16933 (Genbank). N4Lid DOI: 10.1601/nm.1106

† *Thiosphaera pantotropha*^{VP} Robertson and Kuenen 1984. ==> *Paracoccus pantotrophus* (new combination). Synonym links through N4Lid: 10.1601/ex.1106. Source of type material recommended for DOE sponsored genome sequencing by the JGI: ATCC 17741. High-quality 16S rRNA sequence S000020760 (RDP), Y16933 (Genbank). N4Lid 10.1601/nm.9128

Paracoccus seriniphilus^{VP} Pukall et al. 2003. Source of type material recommended for DOE sponsored genome sequencing by the JGI: DSM 14827. High-quality 16S rRNA sequence S000109011 (RDP), AJ428275 (Genbank). N4Lid DOI: 10.1601/nm.1107

Paracoccus solventivorans^{VP} Siller et al. 1996. Source of type material recommended for DOE sponsored genome sequencing by the JGI: ATCC 700252. High-quality 16S rRNA sequence S000381438 (RDP), Y07705 (Genbank). N4Lid DOI: 10.1601/nm.1108

Paracoccus thiocyanatus^{VP} Katayama et al. 1996. Source of type material recommended for DOE sponsored genome sequencing by the JGI: ATCC 700171. High-quality 16S rRNA sequence S000469028 (RDP), D32242 (Genbank). N4Lid DOI: 10.1601/nm.1109

Paracoccus versutus^{VP} (Harrison 1983) Katayama et al. 1996. <== *Thiobacillus versutus* (basonym). Synonym links through N4Lid: 10.1601/ex.1895. Source of type material recommended for DOE sponsored genome sequencing by the JGI: ATCC 25364. High-quality 16S rRNA sequence S000469029 (RDP), D32243 (Genbank). N4Lid DOI: 10.1601/nm.1110

† *Thiobacillus versutus*^{VP} Harrison 1983. ==> *Paracoccus versutus* (new combination). Synonym links through N4Lid: 10.1601/ex.1895. Source of type material recommended for DOE sponsored genome sequencing by the JGI: ATCC 25364. High-quality 16S rRNA sequence S000469029 (RDP), D32243 (Genbank). N4Lid DOI: 10.1601/nm.1895

Paracoccus yeei^{VP} corrig. Daneshvar et al. 2003. Source of type material recommended for DOE sponsored genome sequencing by the JGI: ATCC BAA-599. High-quality 16S rRNA sequence S000434392 (RDP), AY014173 (Genbank). N4Lid DOI: 10.1601/nm.1111

Paracoccus zeaxanthinifaciens^{VP} Berry et al. 2003. Source of type material recommended for DOE sponsored genome sequencing by the JGI: ATCC 21588. High-quality 16S rRNA sequence S000394509 (RDP), AF461158 (Genbank). N4Lid DOI: 10.1601/nm.1112

Genus † *Thiosphaera*^{VP} Robertson and Kuenen 1984. Unified with *Paracoccus*, links through 10.1601/nm.7782. N4Lid 10.1601/nm.9124

Genus *Pelagibaca*^{VP} Cho and Giovannoni 2006. N4Lid 10.1601/nm.9996

Pelagibaca bermudensis^{VP} Cho and Giovannoni 2006. Source of type material recommended for DOE sponsored genome sequencing by the JGI: JCM 13377. High-quality 16S rRNA sequence S000603812 (RDP), DQ178660 (Genbank). N4Lid 10.1601/nm.9995

Genus *Phaeobacter*^{VP} Martens et al. 2006. N4Lid DOI: 10.1601/nm.10131

Phaeobacter gallaeciensis^{VP} (Ruiz-Ponte et al. 1998) Martens et al. 2006. <== *Roseobacter gallaeciensis* (basonym). Synonym links through N4Lid: 10.1601/ex.1138. Source of type material recommended for DOE sponsored genome sequencing by the JGI: ATCC 700781. High-quality 16S rRNA sequence S000009291 (RDP), Y13244 (Genbank). GOLD ID: Gi01451. GCAT ID: 000916_GCAT. Sequenced strain: BS107 is type material. Genome sequencing is incomplete. Number of genomes of this species sequenced 2 (GOLD) 0 (NCBI). N4Lid 10.1601/nm.9798

† *Roseobacter gallaeciensis*^{VP} Ruiz-Ponte et al. 1998. ==> *Phaeobacter gallaeciensis* (new combination). Synonym links through N4Lid: 10.1601/ex.1138. Source of type material recommended for DOE sponsored genome sequencing by the JGI: ATCC 700781. High-quality 16S rRNA sequence S000009291 (RDP), Y13244 (Genbank). GOLD ID: Gi01451. GCAT ID: 000916_GCAT. Sequenced strain: BS107 is type material. Genome sequencing is incomplete. Number of genomes of this species sequenced 2 (GOLD). N4Lid DOI: 10.1601/nm.1138

Phaeobacter inhibens^{VP} Martens et al. 2006. Source of type material recommended for DOE sponsored genome sequencing by the JGI: DSM 16374. High-quality 16S rRNA sequence S000473338 (RDP), AY177712 (Genbank). N4Lid DOI: 10.1601/nm.10132

Genus *Pseudorhodobacter*^{VP} Uchino et al. 2003. N4Lid DOI: 10.1601/nm.1113

Pseudorhodobacter ferrugineus^{VP} (Rüger and Höfle 1992) Uchino et al. 2003. <== *Agrobacterium ferrugineum* (basonym). Synonym links through N4Lid: 10.1601/ex.1313. Source

of type material recommended for DOE sponsored genome sequencing by the JGI: ATCC 25652. N4Lid DOI: 10.1601/nm.1114

† *Agrobacterium ferrugineum*^{VP} (ex Ahrens and Rheinheimer 1967) Rügner and Höfle 1992. ==> *Pseudorhodobacter ferrugineus* (new combination). Synonym links through N4Lid: 10.1601/ex.1313. Source of type material recommended for DOE sponsored genome sequencing by the JGI: ATCC 25652. N4Lid DOI: 10.1601/nm.1313

Genus *Pseudovibrio*^{VP} Shieh et al. 2004. GOLD ID: Gi01692. GCAT ID: 001342_GCAT. Sequenced strain: JE061 is from a non-type strain. Genome sequencing is incomplete. Number of genomes of this species sequenced 1 (GOLD). N4Lid 10.1601/nm.8799

Pseudovibrio denitrificans^{VP} Shieh et al. 2004. Source of type material recommended for DOE sponsored genome sequencing by the JGI: JCM 12308. High-quality 16S rRNA sequence S000485572 (RDP), AY486423 (Genbank). N4Lid 10.1601/nm.8800

Pseudovibrio ascidiaceicola^{VP} Fukunaga et al. 2006. Source of type material recommended for DOE sponsored genome sequencing by the JGI: DSM 16392. High-quality 16S rRNA sequence S000364797 (RDP), AB175663 (Genbank). N4Lid 10.1601/nm.9890

Genus *Rhodobaca*^{VP} Milford et al. 2001. N4Lid DOI: 10.1601/nm.1115

Rhodobaca bogoriensis^{VP} Milford et al. 2001. Source of type material recommended for DOE sponsored genome sequencing by the JGI: ATCC 700920. High-quality 16S rRNA sequence S000390053 (RDP), AF248638 (Genbank). N4Lid DOI: 10.1601/nm.1116

Genus *Rhodothalassium*^{VP} Imhoff et al. 1998. N4Lid DOI: 10.1601/nm.1117

Rhodothalassium salexigens^{VP} (Drews 1982) Imhoff et al. 1998. <== *Rhodospirillum salexigens* (basonym). Synonym links through N4Lid: 10.1601/ex.818. Source of type material recommended for DOE sponsored genome sequencing by the JGI: ATCC 35888. High-quality 16S rRNA sequence S000019651 (RDP), D14431 (Genbank). N4Lid DOI: 10.1601/nm.1118

† *Rhodospirillum salexigens*^{VP} Drews 1982. ==> *Rhodothalassium salexigens* (new combination). Synonym links through N4Lid: 10.1601/ex.818. Source of type material recommended for DOE sponsored genome sequencing by the JGI: ATCC 35888. High-quality 16S rRNA sequence S000019651 (RDP), D14431 (Genbank). N4Lid DOI: 10.1601/nm.818

Genus *Rhodovulum*^{VP} Hiraishi and Ueda 1994. N4Lid DOI: 10.1601/nm.1119

Rhodobacter sulfidophilus^{VP} (Hansen and Veldkamp 1973) Imhoff et al. 1984. <== *Rhodopseudomonas sulfidophila* (basonym). *Rhodovulum sulfidophilum* (new combination). Synonym links through N4Lid: 10.1601/ex.1508. Source of type material recommended for DOE sponsored genome sequencing by the JGI: ATCC 35886. High-quality 16S rRNA sequence S000413580 (RDP), D16423 (Genbank). N4Lid DOI: 10.1601/nm.1045

† *Rhodopseudomonas sulfidophila*^{AL} Hansen and Veldkamp 1973. ==> *Rhodobacter sulfidophilus* (new combination). Synonym links through N4Lid: 10.1601/ex.1508. Source of type material recommended for DOE sponsored genome sequencing by the JGI: ATCC 35886. High-quality 16S rRNA sequence S000413580 (RDP), D16423 (Genbank). N4Lid DOI: 10.1601/nm.1508

Rhodovulum sulfidophilum^{VP} (Hansen and Veldkamp 1973) Hiraishi and Ueda 1994. <== *Rhodopseudomonas sulfidophila* (basonym). Synonym links through N4Lid: 10.1601/ex.1508. Source of type material recommended for DOE sponsored genome sequencing by the JGI: ATCC 35886. High-quality 16S rRNA sequence S000413580 (RDP), D16423 (Genbank). N4Lid DOI: 10.1601/nm.1120

Rhodovulum marinum^{VP} Srinivas et al. 2006. Source of type material recommended for DOE sponsored genome sequencing by the JGI: ATCC BAA 1215. High-quality 16S rRNA sequence S000539911 (RDP), AJ891122 (Genbank). N4Lid DOI: 10.1601/nm.10164

Rhodobacter adriaticus^{VP} (Neutzling et al. 1984) Imhoff et al. 1984. <== *Rhodopseudomonas adriatica* (basonym). *Rhodovulum adriaticum* (new combination). Synonym links through N4Lid: 10.1601/ex.1496. Source of type material recommended for DOE sponsored genome sequencing by the JGI: ATCC 35885. High-quality 16S rRNA sequence S000008553 (RDP), D13476 (Genbank). N4Lid DOI: 10.1601/nm.1040

† *Rhodopseudomonas adriatica*^{VP} Neutzling et al. 1984. ==> *Rhodobacter adriaticus* (new combination). Synonym links through N4Lid: 10.1601/ex.1496. Source of type material

recommended for DOE sponsored genome sequencing by the JGI: ATCC 35885. High-quality 16S rRNA sequence S000008553 (RDP), D13476 (Genbank). N4Lid DOI: 10.1601/nm.1496

Rhodovulum adriaticum^{VP} (Neutzling et al. 1984) Hiraishi and Ueda 1994. <==
Rhodopseudomonas adriatica (basonym). Synonym links through N4Lid: 10.1601/ex.1496.
Source of type material recommended for DOE sponsored genome sequencing by the JGI: ATCC 35885. High-quality 16S rRNA sequence S000008553 (RDP), D13476 (Genbank). N4Lid DOI: 10.1601/nm.1121

† ***Rhodobacter euryhalinus***^{VP} Kompantseva 1989. ==> *Rhodovulum euryhalinum* (new combination). Synonym links through N4Lid: 10.1601/ex.1043. Source of type material recommended for DOE sponsored genome sequencing by the JGI: DSM 4868. High-quality 16S rRNA sequence S000022070 (RDP), D13479 (Genbank). N4Lid DOI: 10.1601/nm.1043

Rhodovulum euryhalinum^{VP} (Kompantseva 1989) Hiraishi and Ueda 1994. <== *Rhodobacter euryhalinus* (basonym). Synonym links through N4Lid: 10.1601/ex.1043. Source of type material recommended for DOE sponsored genome sequencing by the JGI: DSM 4868. High-quality 16S rRNA sequence S000022070 (RDP), D13479 (Genbank). N4Lid DOI: 10.1601/nm.1122

Rhodovulum iodosum^{VP} Straub et al. 1999. Source of type material recommended for DOE sponsored genome sequencing by the JGI: ATCC 700895. High-quality 16S rRNA sequence S000020210 (RDP), Y15011 (Genbank). N4Lid DOI: 10.1601/nm.1123

Rhodovulum robiginosum^{VP} Straub et al. 1999. Source of type material recommended for DOE sponsored genome sequencing by the JGI: ATCC 700896. High-quality 16S rRNA sequence S000019650 (RDP), Y15012 (Genbank). N4Lid DOI: 10.1601/nm.1124

Rhodovulum strictum^{VP} Hiraishi and Ueda 1995. Source of type material recommended for DOE sponsored genome sequencing by the JGI: DSM 11289. High-quality 16S rRNA sequence S000413576 (RDP), D16419 (Genbank). N4Lid DOI: 10.1601/nm.1125

Genus *Roseibacterium*^{VP} Suzuki et al. 2006. N4Lid 10.1601/nm.9897

Roseibacterium elongatum^{VP} Suzuki et al. 2006. Source of type material recommended for DOE sponsored genome sequencing by the JGI: CIP 107377. High-quality 16S rRNA sequence S000102613 (RDP), AB061273 (Genbank). N4Lid 10.1601/nm.9896

Genus *Roseibium*^{VP} Suzuki et al. 2000. N4Lid DOI: 10.1601/nm.1126

Roseibium denhamense^{VP} Suzuki et al. 2000. Source of type material recommended for DOE sponsored genome sequencing by the JGI: ATCC BAA-251. High-quality 16S rRNA sequence S000414112 (RDP), D85832 (Genbank). N4Lid DOI: 10.1601/nm.1127

Roseibium hamelinense^{VP} Suzuki et al. 2000. Source of type material recommended for DOE sponsored genome sequencing by the JGI: ATCC BAA-252. High-quality 16S rRNA sequence S000414114 (RDP), D85836 (Genbank). N4Lid DOI: 10.1601/nm.1128

Genus *Roseicyclus*^{VP} Rathgeber et al. 2005. N4Lid 10.1601/nm.9533

Roseicyclus mahoneyensis^{VP} Rathgeber et al. 2005. Source of type material recommended for DOE sponsored genome sequencing by the JGI: DSM 16097. High-quality 16S rRNA sequence S000570154 (RDP), AJ315682 (Genbank). N4Lid 10.1601/nm.9532

Genus *Roseinatronobacter*^{VP} Sorokin et al. 2000. N4Lid DOI: 10.1601/nm.1129

Roseinatronobacter thiooxidans^{VP} Sorokin et al. 2000. Source of type material recommended for DOE sponsored genome sequencing by the JGI: DSM 13087. High-quality 16S rRNA sequence S000390062 (RDP), AF249749 (Genbank). N4Lid DOI: 10.1601/nm.1130

Genus *Roseisalinus*^{VP} Labrenz et al. 2005. N4Lid 10.1601/nm.8949

Roseisalinus antarcticus^{VP} Labrenz et al. 2005. Source of type material recommended for DOE sponsored genome sequencing by the JGI: DSM 11466. High-quality 16S rRNA sequence S000471104 (RDP), AJ605747 (Genbank). N4Lid 10.1601/nm.8950

Genus *Roseivivax*^{VP} Suzuki et al. 1999. N4Lid DOI: 10.1601/nm.1131

Roseivivax halodurans^{VP} Suzuki et al. 1999. Source of type material recommended for DOE sponsored genome sequencing by the JGI: ATCC 700843. High-quality 16S rRNA sequence S000414110 (RDP), D85829 (Genbank). N4Lid DOI: 10.1601/nm.1132

Roseivivax halotolerans^{VP} Suzuki et al. 1999. Source of type material recommended for DOE sponsored genome sequencing by the JGI: ATCC 700842. High-quality 16S rRNA sequence S000414111 (RDP), D85831 (Genbank). N4Lid DOI: 10.1601/nm.1133

- Genus *Roseobacter*** ^{VP} Shiba 1991. GOLD ID: Gc00386. GCAT ID: 000224_GCAT. Entrez genome id: 13040. Sequenced strain: TM1040 is from a non-type strain. Genome sequencing is completed. Number of genomes of this species sequenced 8 (GOLD) 1 (NCBI). N4Lid DOI: 10.1601/nm.1134
- Roseobacter litoralis*** ^{VP} Shiba 1991. Source of type material recommended for DOE sponsored genome sequencing by the JGI: ATCC 49566. High-quality 16S rRNA sequence S000012007 (RDP), X78312 (Genbank). GOLD ID: Gi01452. GCAT ID: 000918_GCAT. Sequenced strain: ATCC 49566 is type material. Genome sequencing is incomplete. Number of genomes of this species sequenced 1 (GOLD). N4Lid DOI: 10.1601/nm.1135
- Roseobacter denitrificans*** ^{VP} Shiba 1991. Source of type material recommended for DOE sponsored genome sequencing by the JGI: ATCC 33942. High-quality 16S rRNA sequence S000016668 (RDP), M96746 (Genbank). GOLD ID: Gc00448. GCAT ID: 000161_GCAT. Entrez genome id: 16426. Sequenced strain: OCh 114 is type material. Genome sequencing is completed. Number of genomes of this species sequenced 2 (GOLD) 1 (NCBI). N4Lid DOI: 10.1601/nm.1137
- Genus *Roseovarius*** ^{VP} Labrenz et al. 1999. GOLD ID: Gi00882. GCAT ID: 001433_GCAT. Entrez genome id: 13574. Sequenced strain: HTCC2601 is from a non-type strain. Genome sequencing is incomplete. Number of genomes of this species sequenced 3 (GOLD) 2 (NCBI). N4Lid DOI: 10.1601/nm.1139
- Roseovarius tolerans*** ^{VP} Labrenz et al. 1999. Source of type material recommended for DOE sponsored genome sequencing by the JGI: DSM 11457. High-quality 16S rRNA sequence S000003166 (RDP), Y11551 (Genbank). N4Lid DOI: 10.1601/nm.1140
- Roseovarius crassostreae*** ^{VP} Boettcher et al. 2005. Source of type material recommended for DOE sponsored genome sequencing by the JGI: ATCC BAA-1102. High-quality 16S rRNA sequence S000628388 (RDP), AF114484 (Genbank). N4Lid 10.1601/nm.9525
- Roseovarius mucosus*** ^{VP} Biebl et al. 2005. Source of type material recommended for DOE sponsored genome sequencing by the JGI: DSM 17069. High-quality 16S rRNA sequence S000145487 (RDP), AJ534215 (Genbank). N4Lid 10.1601/nm.9734
- Roseovarius nubinhibens*** ^{VP} González et al. 2003. Source of type material recommended for DOE sponsored genome sequencing by the JGI: ATCC BAA-591. High-quality 16S rRNA sequence S000428856 (RDP), AF098495 (Genbank). GOLD ID: Gi00884. GCAT ID: 001435_GCAT. Entrez genome id: 13464. Sequenced strain: ATCC BAA-591 is type material. Genome sequencing is incomplete. Number of genomes of this species sequenced 1 (GOLD) 1 (NCBI). N4Lid DOI: 10.1601/nm.1141
- Genus *Rubellimicrobium*** ^{VP} Denner et al. 2006. N4Lid DOI: 10.1601/nm.10111
- Rubellimicrobium thermophilum*** ^{VP} Denner et al. 2006. Source of type material recommended for DOE sponsored genome sequencing by the JGI: DSM 16684. High-quality 16S rRNA sequence S000701187 (RDP), AJ844281 (Genbank). N4Lid DOI: 10.1601/nm.10110
- Genus *Rubrimonas*** ^{VP} Suzuki et al. 1999. N4Lid DOI: 10.1601/nm.1142
- Rubrimonas cliftonensis*** ^{VP} Suzuki et al. 1999. Source of type material recommended for DOE sponsored genome sequencing by the JGI: CIP 105913. High-quality 16S rRNA sequence S000414113 (RDP), D85834 (Genbank). N4Lid DOI: 10.1601/nm.1143
- Genus *Ruegeria*** ^{VP} Uchino et al. 1999. N4Lid DOI: 10.1601/nm.1144
- Ruegeria atlantica*** ^{VP} (Rüger and Höfle 1992) Uchino et al. 1999. <== *Agrobacterium atlanticum* (basonym). Synonym links through N4Lid: 10.1601/ex.1312. Source of type material recommended for DOE sponsored genome sequencing by the JGI: ATCC 700000. N4Lid DOI: 10.1601/nm.1145
- † *Agrobacterium atlanticum* ^{VP} Rüger and Höfle 1992. ==> *Ruegeria atlantica* (new combination). Synonym links through N4Lid: 10.1601/ex.1312. Source of type material recommended for DOE sponsored genome sequencing by the JGI: ATCC 700000. N4Lid DOI: 10.1601/nm.1312
- † *Agrobacterium meteori* ^{VP} Rüger and Höfle 1992. ≈ *Ruegeria atlantica* (earlier heterotypic synonym), links through 10.1601/nm.1145. Source of type material recommended for DOE sponsored genome sequencing by the JGI: ATCC 700001. N4Lid DOI: 10.1601/nm.1316
- Genus *Sagittula*** ^{VP} Gonzalez et al. 1997. N4Lid DOI: 10.1601/nm.1148
- Sagittula stellata*** ^{VP} Gonzalez et al. 1997. Source of type material recommended for DOE sponsored genome sequencing by the JGI: ATCC 700073. High-quality 16S rRNA sequence

S000004338 (RDP), U58356 (Genbank). GOLD ID: Gi01458. GCAT ID: 000924_GCAT. Sequenced strain: ATCC 700073 is type material. Genome sequencing is incomplete. Number of genomes of this species sequenced 1 (GOLD). N4Lid DOI: 10.1601/nm.1149

Genus *Shimia* ^{VP} Choi and Cho 2006. N4Lid DOI: 10.1601/nm.10243

Shimia marina ^{VP} Choi and Cho 2006. Source of type material recommended for DOE sponsored genome sequencing by the JGI: JCM 13038. High-quality 16S rRNA sequence S000515801 (RDP), AY962292 (Genbank). N4Lid DOI: 10.1601/nm.10242

Genus *Salipiger* ^{VP} Martínez-Cánovas et al. 2004. N4Lid 10.1601/nm.8832

Salipiger mucosus ^{VP} corrig. Martínez-Cánovas et al. 2004. Source of type material recommended for DOE sponsored genome sequencing by the JGI: DSM 16094. High-quality 16S rRNA sequence S000412037 (RDP), AY527274 (Genbank). N4Lid 10.1601/nm.8833

Genus *Silicibacter* ^{VP} Petursdottir and Kristjansson 1999. N4Lid DOI: 10.1601/nm.1150

Silicibacter lacuscaerulensis ^{VP} Petursdottir and Kristjansson 1999. Source of type material recommended for DOE sponsored genome sequencing by the JGI: DSM 11314. High-quality 16S rRNA sequence S000363875 (RDP), U77644 (Genbank). N4Lid DOI: 10.1601/nm.1151

Silicibacter pomeroyi ^{VP} González et al. 2003. Source of type material recommended for DOE sponsored genome sequencing by the JGI: ATCC 700808. High-quality 16S rRNA sequence S000428852 (RDP), AF098491 (Genbank). GOLD ID: Gc00242. GCAT ID: 000367_GCAT. Entrez genome id: 281. Sequenced strain: ATCC 700808 is type material. Genome sequencing is completed. Number of genomes of this species sequenced 1 (GOLD) 1 (NCBI). N4Lid DOI: 10.1601/nm.1152

Genus *Staleya* ^{VP} Labrenz et al. 2000. N4Lid DOI: 10.1601/nm.1153

Staleya guttiformis ^{VP} Labrenz et al. 2000. Source of type material recommended for DOE sponsored genome sequencing by the JGI: ATCC BAA-5. High-quality 16S rRNA sequence S000021710 (RDP), Y16427 (Genbank). N4Lid DOI: 10.1601/nm.1154

Genus *Stappia* ^{VP} Uchino et al. 1999. N4Lid DOI: 10.1601/nm.1155

Stappia stellulata ^{VP} (Rüger and Höfle 1992) Uchino et al. 1999. <== *Agrobacterium stellulatum* (basonym). Synonym links through N4Lid: 10.1601/ex.1320. Source of type material recommended for DOE sponsored genome sequencing by the JGI: ATCC 15215. N4Lid DOI: 10.1601/nm.1156

† *Agrobacterium stellulatum* ^{VP} (ex Stapp and Knösel 1954) Rüger and Höfle 1992. ==> *Stappia stellulata* (new combination). Synonym links through N4Lid: 10.1601/ex.1320. Source of type material recommended for DOE sponsored genome sequencing by the JGI: ATCC 15215. N4Lid DOI: 10.1601/nm.1320

Stappia aggregata ^{VP} (ex Ahrens 1968) Uchino et al. 1999. Source of type material recommended for DOE sponsored genome sequencing by the JGI: ATCC 25650. High-quality 16S rRNA sequence S000414212 (RDP), D88520 (Genbank). GOLD ID: Gi01460. GCAT ID: 000926_GCAT. Entrez genome id: 18315. Sequenced strain: ATCC 25650 is type material. Genome sequencing is incomplete. Number of genomes of this species sequenced 1 (GOLD) 1 (NCBI). N4Lid DOI: 10.1601/nm.1157

Stappia alba ^{VP} Pujalte et al. 2006. Source of type material recommended for DOE sponsored genome sequencing by the JGI: CIP 108402. High-quality 16S rRNA sequence S000591900 (RDP), AJ878875 (Genbank). N4Lid 10.1601/nm.9816

Stappia marina ^{VP} Kim et al. 2006. Source of type material recommended for DOE sponsored genome sequencing by the JGI: DSM 17023. High-quality 16S rRNA sequence S000332892 (RDP), AY628423 (Genbank). N4Lid 10.1601/nm.9838

Genus *Sulfitobacter* ^{VP} Sorokin 1996. GOLD ID: Gi00887. GCAT ID: 001578_GCAT. Entrez genome id: 13560. Sequenced strain: GAI-109 is from a non-type strain. Genome sequencing is incomplete. Number of genomes of this species sequenced 3 (GOLD) 3 (NCBI). N4Lid DOI: 10.1601/nm.1158

Sulfitobacter pontiacus ^{VP} Sorokin 1996. Source of type material recommended for DOE sponsored genome sequencing by the JGI: DSM 10014. High-quality 16S rRNA sequence S000004794 (RDP), Y13155 (Genbank). N4Lid DOI: 10.1601/nm.1159

Sulfitobacter brevis^{VP} Labrenz et al. 2000. Source of type material recommended for DOE sponsored genome sequencing by the JGI: ATCC BAA-4. High-quality 16S rRNA sequence S000014692 (RDP), Y16425 (Genbank). N4Lid DOI: 10.1601/nm.1160

Sulfitobacter delicatus^{VP} Ivanova et al. 2004. Source of type material recommended for DOE sponsored genome sequencing by the JGI: ATCC BAA-321. High-quality 16S rRNA sequence S000400181 (RDP), AY180103 (Genbank). N4Lid DOI: 10.1601/nm.1161

Sulfitobacter dubius^{VP} Ivanova et al. 2004. Source of type material recommended for DOE sponsored genome sequencing by the JGI: ATCC BAA-320. High-quality 16S rRNA sequence S000400180 (RDP), AY180102 (Genbank). N4Lid DOI: 10.1601/nm.1162

Sulfitobacter mediterraneus^{VP} Pukall et al. 1999. Source of type material recommended for DOE sponsored genome sequencing by the JGI: ATCC 700856. High-quality 16S rRNA sequence S000018041 (RDP), Y17387 (Genbank). N4Lid DOI: 10.1601/nm.1163

Genus *Thalassobius*^{VP} Arahal et al. 2005. N4Lid 10.1601/nm.9733

Thalassobius gelatinovorans^{VP} (Rüger and Höfle 1992) Arahal et al. 2005. <== *Agrobacterium gelatinovorum* (basonym). *Thalassobius gelatinovorans* (new combination). Synonym links through N4Lid: 10.1601/ex.1314. Source of type material recommended for DOE sponsored genome sequencing by the JGI: ATCC 25655. N4Lid 10.1601/nm.9800

† *Ruegeria gelatinovorans*^{VP} corrig. (Rüger and Höfle 1992) Uchino et al. 1999. <== *Agrobacterium gelatinovorum* (basonym). *Thalassobius gelatinovorans* (new combination). Synonym links through N4Lid: 10.1601/ex.1314. Source of type material recommended for DOE sponsored genome sequencing by the JGI: ATCC 25655. N4Lid DOI: 10.1601/nm.1147

† *Agrobacterium gelatinovorum*^{VP} (ex Ahrens 1968) Rüger and Höfle 1992. ==> *Ruegeria gelatinovorans* (new combination). Synonym links through N4Lid: 10.1601/ex.1314. Source of type material recommended for DOE sponsored genome sequencing by the JGI: ATCC 25655. N4Lid DOI: 10.1601/nm.1314

Thalassobius mediterraneus^{VP} Arahal et al. 2005. Source of type material recommended for DOE sponsored genome sequencing by the JGI: CCUG 49438. High-quality 16S rRNA sequence S000571188 (RDP), AJ878874 (Genbank). N4Lid 10.1601/nm.9732

Genus *Thioclava*^{VP} Sorokin et al. 2005. N4Lid 10.1601/nm.9428

Thioclava pacifica^{VP} Sorokin et al. 2005. Source of type material recommended for DOE sponsored genome sequencing by the JGI: DSM 10166. High-quality 16S rRNA sequence S000548871 (RDP), AY656719 (Genbank). N4Lid 10.1601/nm.9427

Genus *Woodsholea*^{VP} Abraham et al. 2004. N4Lid 10.1601/nm.8912

Woodsholea maritima^{VP} Abraham et al. 2004. Source of type material recommended for DOE sponsored genome sequencing by the JGI: LMG 21817. High-quality 16S rRNA sequence S000366610 (RDP), AJ578476 (Genbank). N4Lid 10.1601/nm.8913

Genus *Yangia*^{VP} Dai et al. 2006. N4Lid 10.1601/nm.9936

Yangia pacifica^{VP} Dai et al. 2006. Source of type material recommended for DOE sponsored genome sequencing by the JGI: JCM 12573. High-quality 16S rRNA sequence S000484378 (RDP), AJ877265 (Genbank). N4Lid 10.1601/nm.9935

Order *Sphingomonadales*^{VP} Yabuuchi and Kosako 2006. N4Lid DOI: 10.1601/nm.1164

Family *Sphingomonadaceae*^{VP} Kosako et al 2000. N4Lid DOI: 10.1601/nm.1165

Genus *Sphingomonas*^{VP} Yabuuchi et al. 1990. GOLD ID: Gi00886. GCAT ID: 001507_GCAT. Entrez genome id: 13584. Sequenced strain: SKA58 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.1166

Sphingomonas paucimobilis^{VP} (Holmes et al. 1977) Yabuuchi et al. 1990. <== *Pseudomonas paucimobilis* (basonym). Synonym links through N4Lid: 10.1601/ex.2659. Source of type material recommended for DOE sponsored genome sequencing by the JGI: ATCC 10829. High-quality 16S rRNA sequence S000437265 (RDP), U20776 (Genbank). N4Lid DOI: 10.1601/nm.1167

† *Pseudomonas paucimobilis*^{AL} Holmes et al. 1977. ==> *Sphingomonas paucimobilis* (new combination). Synonym links through N4Lid: 10.1601/ex.2659. Source of type material recommended for DOE sponsored genome sequencing by the JGI: ATCC 29837. High-quality 16S rRNA sequence S000437265 (RDP), U20776 (Genbank). N4Lid DOI: 10.1601/nm.2659

- † *Flavobacterium devorans*^{AL} (Zimmermann 1890) Bergey et al. 1923. ≈ *Sphingomonas paucimobilis* (earlier heterotypic synonym), links through 10.1601/nm.1167. Source of type material recommended for DOE sponsored genome sequencing by the JGI: ATCC 29837. N4Lid DOI: 10.1601/nm.8080
- Sphingomonas adhaesiva*^{VP} Yabuuchi et al. 1990. Source of type material recommended for DOE sponsored genome sequencing by the JGI: ATCC 51229. High-quality 16S rRNA sequence S000016653 (RDP), D16146 (Genbank). N4Lid DOI: 10.1601/nm.1168
- Sphingomonas abaci*^{VP} Busse et al. 2005. Source of type material recommended for DOE sponsored genome sequencing by the JGI: DSM 15867. High-quality 16S rRNA sequence S000138899 (RDP), AJ575817 (Genbank). N4Lid 10.1601/nm.9743
- Sphingomonas aerolata*^{VP} Busse et al. 2003. Source of type material recommended for DOE sponsored genome sequencing by the JGI: DSM 14746. N4Lid DOI: 10.1601/nm.1169
- Sphingomonas aquatilis*^{VP} Lee et al. 2001. Source of type material recommended for DOE sponsored genome sequencing by the JGI: IFO 16722. High-quality 16S rRNA sequence S000387421 (RDP), AF131295 (Genbank). N4Lid DOI: 10.1601/nm.1171
- Sphingomonas asaccharolytica*^{VP} Takeuchi et al. 1995. Source of type material recommended for DOE sponsored genome sequencing by the JGI: ATCC 51839. High-quality 16S rRNA sequence S000012774 (RDP), Y09639 (Genbank). N4Lid DOI: 10.1601/nm.1173
- Sphingomonas aurantiaca*^{VP} Busse et al. 2003. Source of type material recommended for DOE sponsored genome sequencing by the JGI: DSM 14748. High-quality 16S rRNA sequence S000145110 (RDP), AJ429236 (Genbank). N4Lid DOI: 10.1601/nm.1174
- Sphingomonas azotifigens*^{VP} Xie and Yokota 2006. Source of type material recommended for DOE sponsored genome sequencing by the JGI: NBRC 15497. High-quality 16S rRNA sequence S000627319 (RDP), AB217471 (Genbank). N4Lid 10.1601/nm.9999
- Sphingomonas dokdonensis*^{VP} Yoon et al. 2006. Source of type material recommended for DOE sponsored genome sequencing by the JGI: CIP 108841. High-quality 16S rRNA sequence S000603877 (RDP), DQ178975 (Genbank). N4Lid DOI: 10.1601/nm.10288
- Sphingomonas echinoides*^{VP} (Heumann 1962) Denner et al. 1999. <== *Pseudomonas echinoides* (basonym). Synonym links through N4Lid: 10.1601/ex.2598. Source of type material recommended for DOE sponsored genome sequencing by the JGI: ATCC 14820. High-quality 16S rRNA sequence S000001467 (RDP), AB021370 (Genbank). N4Lid DOI: 10.1601/nm.1179
- † *Pseudomonas echinoides*^{AL} Heumann 1962. ==> *Sphingomonas echinoides* (new combination). Synonym links through N4Lid: 10.1601/ex.2598. Source of type material recommended for DOE sponsored genome sequencing by the JGI: ATCC 14820. High-quality 16S rRNA sequence S000001467 (RDP), AB021370 (Genbank). N4Lid DOI: 10.1601/nm.2598
- Sphingomonas faeni*^{VP} Busse et al. 2003. Source of type material recommended for DOE sponsored genome sequencing by the JGI: DSM 14747. High-quality 16S rRNA sequence S000145113 (RDP), AJ429239 (Genbank). N4Lid DOI: 10.1601/nm.1180
- Sphingomonas korensis*^{VP} Lee et al. 2001. Source of type material recommended for DOE sponsored genome sequencing by the JGI: IFO 16723. High-quality 16S rRNA sequence S000387422 (RDP), AF131296 (Genbank). N4Lid DOI: 10.1601/nm.1182
- Sphingomonas mali*^{VP} Takeuchi et al. 1995. Source of type material recommended for DOE sponsored genome sequencing by the JGI: ATCC 51840. High-quality 16S rRNA sequence S000009304 (RDP), Y09638 (Genbank). N4Lid DOI: 10.1601/nm.1184
- Sphingomonas melonis*^{VP} Buonauro et al. 2002. Source of type material recommended for DOE sponsored genome sequencing by the JGI: DSM 14444. High-quality 16S rRNA sequence S000383774 (RDP), AB055863 (Genbank). N4Lid DOI: 10.1601/nm.1185
- Sphingomonas oligophenolica*^{VP} Ohta et al. 2004. Source of type material recommended for DOE sponsored genome sequencing by the JGI: CIP 107926. High-quality 16S rRNA sequence S000439484 (RDP), AB018439 (Genbank). N4Lid 10.1601/nm.8850
- Sphingomonas panni*^{VP} Busse et al. 2005. Source of type material recommended for DOE sponsored genome sequencing by the JGI: DSM 15761. High-quality 16S rRNA sequence S000471092 (RDP), AJ575818 (Genbank). N4Lid 10.1601/nm.9744

- Sphingomonas parapaucimobilis*^{VP} Yabuuchi et al. 1990. Source of type material recommended for DOE sponsored genome sequencing by the JGI: ATCC 51231. High-quality 16S rRNA sequence S000011270 (RDP), X72721 (Genbank). N4Lid DOI: 10.1601/nm.1187
- Sphingomonas phyllosphaerae*^{VP} Rivas et al. 2004. Source of type material recommended for DOE sponsored genome sequencing by the JGI: LMG 21958. High-quality 16S rRNA sequence S000441280 (RDP), AY453855 (Genbank). N4Lid 10.1601/nm.8851
- Sphingomonas pituitosa*^{VP} Denner et al. 2001. Source of type material recommended for DOE sponsored genome sequencing by the JGI: DSM 13101. High-quality 16S rRNA sequence S000022290 (RDP), AJ243751 (Genbank). N4Lid DOI: 10.1601/nm.1188
- Sphingomonas pruni*^{VP} Takeuchi et al. 1995. Source of type material recommended for DOE sponsored genome sequencing by the JGI: ATCC 51838. High-quality 16S rRNA sequence S000007383 (RDP), Y09637 (Genbank). N4Lid DOI: 10.1601/nm.1189
- Sphingomonas roseiflava*^{VP} corrig. Yun et al. 2000. Source of type material recommended for DOE sponsored genome sequencing by the JGI: CIP 106847. High-quality 16S rRNA sequence S000482850 (RDP), D84520 (Genbank). N4Lid DOI: 10.1601/nm.1191
- Sphingomonas sanguinis*^{VP} corrig. Takeuchi et al. 1993. Source of type material recommended for DOE sponsored genome sequencing by the JGI: ATCC 51382. High-quality 16S rRNA sequence S000413465 (RDP), D13726 (Genbank). N4Lid DOI: 10.1601/nm.1192
- Sphingomonas soli*^{VP} Yang et al. 2006. Source of type material recommended for DOE sponsored genome sequencing by the JGI: KCTC 12210. High-quality 16S rRNA sequence S000386317 (RDP), AB166883 (Genbank). N4Lid 10.1601/nm.9986
- Sphingomonas suberifaciens*^{VP} (van Bruggen et al. 1990) Yabuuchi et al. 1999. <== *Rhizomonas suberifaciens* (basonym). Synonym links through N4Lid: 10.1601/ex.1231. Source of type material recommended for DOE sponsored genome sequencing by the JGI: ATCC 49355. N4Lid DOI: 10.1601/nm.1195
- † *Rhizomonas suberifaciens*^{VP} van Bruggen et al. 1990. ==> *Sphingomonas suberifaciens* (new combination). Synonym links through N4Lid: 10.1601/ex.1231. Source of type material recommended for DOE sponsored genome sequencing by the JGI: ATCC 49355. N4Lid DOI: 10.1601/nm.1231
- Sphingomonas trueperi*^{VP} Kämpfer et al. 1997. Source of type material recommended for DOE sponsored genome sequencing by the JGI: ATCC 12417. High-quality 16S rRNA sequence S000381408 (RDP), X97776 (Genbank). N4Lid DOI: 10.1601/nm.1199
- Sphingomonas wittichii*^{VP} Yabuuchi et al. 2001. Source of type material recommended for DOE sponsored genome sequencing by the JGI: DSM 6014. High-quality 16S rRNA sequence S000382574 (RDP), AB021492 (Genbank). GOLD ID: Gi01358. GCAT ID: 001775_GCAT. Entrez genome id: 17343. Sequenced strain: DSM 6014 is type material. Genome sequencing is incomplete. Number of genomes of this species sequenced 1 (GOLD) 1 (NCBI). N4Lid DOI: 10.1601/nm.1201
- Sphingomonas yabuuchiae*^{VP} Li et al. 2004. Source of type material recommended for DOE sponsored genome sequencing by the JGI: DSM 14562. High-quality 16S rRNA sequence S000334614 (RDP), AB071955 (Genbank). N4Lid 10.1601/nm.8852
- Sphingomonas yunnanensis*^{VP} Zhang et al. 2005. Source of type material recommended for DOE sponsored genome sequencing by the JGI: KCTC 12346. High-quality 16S rRNA sequence S000482243 (RDP), AY894691 (Genbank). N4Lid 10.1601/nm.9729
- Genus** *Erythromicrobium*^{VP} Yurkov et al. 1994. N4Lid DOI: 10.1601/nm.1212
- Genus** † *Erythromonas*^{VP} Yurkov et al. 1997. Unified with *Sphingomonas*, links through 10.1601/nm.1235. N4Lid DOI: 10.1601/nm.1214
- Genus** † *Rhizomonas*^{VP} van Bruggen et al. 1990. (Illegitimate name, rejected) (N4Lid DOI: 10.1601/nm.1230)
- Genus** *Blastomonas*^{VP} Sly and Cahill 1997. N4Lid DOI: 10.1601/nm.1204
- Blastomonas natatoria*^{VP} (Sly 1985) Sly and Cahill 1997. <== *Blastobacter natatorius* (basonym). *Sphingomonas natatoria* (new combination). Synonym links through N4Lid: 10.1601/ex.1477. Source of type material recommended for DOE sponsored genome sequencing by the JGI: ATCC 35951. High-quality 16S rRNA sequence S000091005 (RDP), Y13774 (Genbank). N4Lid DOI: 10.1601/nm.1205

† *Blastobacter natatorius*^{VP} Sly 1985. ==> *Blastomonas natatoria* (new combination).
Synonym links through N4Lid: 10.1601/ex.1477. Source of type material recommended for DOE sponsored genome sequencing by the JGI: ATCC 35951. High-quality 16S rRNA sequence S000091005 (RDP), Y13774 (Genbank). N4Lid DOI: 10.1601/nm.1477

† *Sphingomonas natatoria*^{VP} (Sly 1985) Yabuuchi et al. 1999. <== *Blastobacter natatorius* (basonym). Synonym links through N4Lid: 10.1601/ex.1477. Source of type material recommended for DOE sponsored genome sequencing by the JGI: ATCC 35951. High-quality 16S rRNA sequence S000091005 (RDP), Y13774 (Genbank). N4Lid DOI: 10.1601/nm.1186

Blastomonas ursincola^{VP} (Yurkov et al. 1997) Hiraishi et al. 2000. <== *Erythromonas ursincola* (basonym). Synonym links through N4Lid: 10.1601/ex.1215. Source of type material recommended for DOE sponsored genome sequencing by the JGI: DSM 9006. High-quality 16S rRNA sequence S000089782 (RDP), Y10677 (Genbank). N4Lid DOI: 10.1601/nm.1206

† *Erythromonas ursincola*^{VP} Yurkov et al. 1997. ==> *Sphingomonas ursincola* (new combination). Synonym links through N4Lid: 10.1601/ex.1215. Source of type material recommended for DOE sponsored genome sequencing by the JGI: DSM 9006. High-quality 16S rRNA sequence S000089782 (RDP), Y10677 (Genbank). N4Lid DOI: 10.1601/nm.1215

† *Sphingomonas ursincola*^{VP} (Yurkov et al. 1997) Yabuuchi et al. 1999. <== *Erythromonas ursincola* (basonym). *Blastomonas ursincola* (new combination). Synonym links through N4Lid: 10.1601/ex.1215. Source of type material recommended for DOE sponsored genome sequencing by the JGI: DSM 9006. High-quality 16S rRNA sequence S000089782 (RDP), Y10677 (Genbank). N4Lid DOI: 10.1601/nm.1200

Genus *Erythrobacter*^{VP} Shiba and Simidu 1982. GOLD ID: Gi00841. GCAT ID: 001021_GCAT. Entrez genome id: 13512. Sequenced strain: NAP1 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.1207

Erythrobacter longus^{VP} Shiba and Simidu 1982. Source of type material recommended for DOE sponsored genome sequencing by the JGI: ATCC 33941. High-quality 16S rRNA sequence S000439316 (RDP), D12699 (Genbank). N4Lid DOI: 10.1601/nm.1208

Erythrobacter aquimaris^{VP} Yoon et al. 2004. Source of type material recommended for DOE sponsored genome sequencing by the JGI: JCM 12189. High-quality 16S rRNA sequence S000441377 (RDP), AY461441 (Genbank). N4Lid DOI: 10.1601/nm.8579

Erythrobacter citreus^{VP} Denner et al. 2002. Source of type material recommended for DOE sponsored genome sequencing by the JGI: DSM 14432. N4Lid DOI: 10.1601/nm.1209

Erythrobacter flavus^{VP} Yoon et al. 2003. Source of type material recommended for DOE sponsored genome sequencing by the JGI: JCM 11808. High-quality 16S rRNA sequence S000395436 (RDP), AF500004 (Genbank). N4Lid DOI: 10.1601/nm.1210

Erythrobacter gaetbuli^{VP} Yoon et al. 2005. Source of type material recommended for DOE sponsored genome sequencing by the JGI: DSM 16225. High-quality 16S rRNA sequence S000475150 (RDP), AY562220 (Genbank). N4Lid DOI: 10.1601/nm.8580

Erythrobacter litoralis^{VP} Yurkov et al. 1994. Source of type material recommended for DOE sponsored genome sequencing by the JGI: ATCC 700002. High-quality 16S rRNA sequence S000004181 (RDP), AB013354 (Genbank). GOLD ID: Gc00339. GCAT ID: 000271_GCAT. Entrez genome id: 13480. Sequenced strain: HTCC2594 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.1211

Erythrobacter luteolus^{VP} Yoon et al. 2005. Source of type material recommended for DOE sponsored genome sequencing by the JGI: JCM 12599. High-quality 16S rRNA sequence S000541026 (RDP), AY739662 (Genbank). N4Lid 10.1601/nm.9439

Erythrobacter vulgaris^{VP} Ivanova et al. 2006. Source of type material recommended for DOE sponsored genome sequencing by the JGI: CIP 108956. High-quality 16S rRNA sequence S000505317 (RDP), AY706935 (Genbank). N4Lid 10.1601/nm.9914

Erythrobacter seohaensis^{VP} Yoon et al. 2005. Source of type material recommended for DOE sponsored genome sequencing by the JGI: DSM 16221. High-quality 16S rRNA sequence S000475149 (RDP), AY562219 (Genbank). N4Lid DOI: 10.1601/nm.8581

Erythromicrobium ramosum^{VP} Yurkov et al. 1994. Source of type material recommended for DOE sponsored genome sequencing by the JGI: ATCC 700003. High-quality 16S rRNA sequence S000021430 (RDP), AB013355 (Genbank). N4Lid DOI: 10.1601/nm.1213

Genus *Novosphingobium*^{VP} Takeuchi et al. 2001. N4Lid DOI: 10.1601/nm.1216

Novosphingobium capsulatum^{VP} (Leifson 1962) Takeuchi et al. 2001. <== *Flavobacterium capsulatum* (basonym). Synonym links through N4Lid: 10.1601/ex.8078. Source of type material recommended for DOE sponsored genome sequencing by the JGI: NRRL B-4261. High-quality 16S rRNA sequence S000010663 (RDP), D16147 (Genbank). N4Lid DOI: 10.1601/nm.1217

† *Sphingomonas capsulata*^{VP} (Leifson 1962) Yabuuchi et al. 1990. <== *Flavobacterium capsulatum* (basonym). *Novosphingobium capsulatum* (new combination). Synonym links through N4Lid: 10.1601/ex.8078. Source of type material recommended for DOE sponsored genome sequencing by the JGI: NRRL B-4261. High-quality 16S rRNA sequence S000010663 (RDP), D16147 (Genbank). N4Lid DOI: 10.1601/nm.1175

† *Flavobacterium capsulatum*^{AL} Leifson 1962. ==> *Sphingomonas capsulata* (new combination). Synonym links through N4Lid: 10.1601/ex.8078. Source of type material recommended for DOE sponsored genome sequencing by the JGI: NRRL B-4261. High-quality 16S rRNA sequence S000010663 (RDP), D16147 (Genbank). N4Lid DOI: 10.1601/nm.8078

Novosphingobium aromaticivorans^{VP} corrig. (Balkwill et al. 1997) Takeuchi et al. 2001. <== *Sphingomonas aromaticivorans* (basonym). Synonym links through N4Lid: 10.1601/ex.1172. Source of type material recommended for DOE sponsored genome sequencing by the JGI: ATCC 700278. High-quality 16S rRNA sequence S000437260 (RDP), U20756 (Genbank). GOLD ID: Gc00348. GCAT ID: 000262_GCAT. Entrez genome id: 204. Sequenced strain: DSM 12444 is type material. Genome sequencing is completed. Number of genomes of this species sequenced 2 (GOLD) 1 (NCBI). N4Lid DOI: 10.1601/nm.1218

† *Sphingomonas aromaticivorans*^{VP} Balkwill et al. 1997. ==> *Novosphingobium aromaticivorans* (new combination). Synonym links through N4Lid: 10.1601/ex.1172. Source of type material recommended for DOE sponsored genome sequencing by the JGI: ATCC 700278. High-quality 16S rRNA sequence S000437260 (RDP), U20756 (Genbank). GOLD ID: Gc00348. GCAT ID: 000262_GCAT. Entrez genome id: 204. Sequenced strain: DSM 12444 is type material. Genome sequencing is completed. Number of genomes of this species sequenced 2 (GOLD) 1 (NCBI). N4Lid DOI: 10.1601/nm.1172

Novosphingobium hassiacum^{VP} Kämpfer et al. 2002. Source of type material recommended for DOE sponsored genome sequencing by the JGI: DSM 14552. High-quality 16S rRNA sequence S000018317 (RDP), AJ416411 (Genbank). N4Lid DOI: 10.1601/nm.1219

Novosphingobium lentum^{VP} Tirola et al. 2005. Source of type material recommended for DOE sponsored genome sequencing by the JGI: DSM 13663. High-quality 16S rRNA sequence S000539365 (RDP), AJ303009 (Genbank). N4Lid 10.1601/nm.9345

Novosphingobium pentaromativorans^{VP} Sohn et al. 2004. Source of type material recommended for DOE sponsored genome sequencing by the JGI: JCM 12182. High-quality 16S rRNA sequence S000458739 (RDP), AF502400 (Genbank). N4Lid 10.1601/nm.8746

Novosphingobium rosa^{VP} corrig. (Takeuchi et al. 1995) Takeuchi et al. 2001. <== *Sphingomonas rosa* (basonym). Synonym links through N4Lid: 10.1601/ex.1190. Source of type material recommended for DOE sponsored genome sequencing by the JGI: ATCC 51837. N4Lid DOI: 10.1601/nm.1220

† *Sphingomonas rosa*^{VP} Takeuchi et al. 1995. ==> *Novosphingobium rosa* (new combination). Synonym links through N4Lid: 10.1601/ex.1190. Source of type material recommended for DOE sponsored genome sequencing by the JGI: ATCC 51837. N4Lid DOI: 10.1601/nm.1190

Novosphingobium stygium^{VP} corrig. (Balkwill et al. 1997) Takeuchi et al. 2001. <== *Sphingomonas stygia* (basonym). Synonym links through N4Lid: 10.1601/ex.1193. Source of type material recommended for DOE sponsored genome sequencing by the JGI: ATCC 700280. High-quality 16S rRNA sequence S000437264 (RDP), U20775 (Genbank). N4Lid DOI: 10.1601/nm.1221

† *Sphingomonas stygia*^{VP} Balkwill et al. 1997. ==> *Novosphingobium stygium* (new combination). Synonym links through N4Lid: 10.1601/ex.1193. Source of type material recommended for DOE sponsored genome sequencing by the JGI: ATCC 700280. High-quality 16S rRNA sequence S000437264 (RDP), U20775 (Genbank). N4Lid DOI: 10.1601/nm.1193

Novosphingobium subarcticum^{VP} (Nohynek et al. 1996) Takeuchi et al. 2001. <== *Sphingomonas subarctica* (basonym). Synonym links through N4Lid: 10.1601/ex.1194. Source of type material recommended for DOE sponsored genome sequencing by the JGI: DSM 10700. High-quality 16S rRNA sequence S000130319 (RDP), X94102 (Genbank). N4Lid DOI: 10.1601/nm.1222

† *Sphingomonas subarctica*^{VP} Nohynek et al. 1996. ==> *Novosphingobium subarcticum* (new combination). Synonym links through N4Lid: 10.1601/ex.1194. Source of type material recommended for DOE sponsored genome sequencing by the JGI: DSM 10700. High-quality 16S rRNA sequence S000130319 (RDP), X94102 (Genbank). N4Lid DOI: 10.1601/nm.1194

Novosphingobium subterraneum^{VP} corrig. (Balkwill et al. 1997) Takeuchi et al. 2001. <== *Sphingomonas subterranea* (basonym). Synonym links through N4Lid: 10.1601/ex.1196. Source of type material recommended for DOE sponsored genome sequencing by the JGI: ATCC 700279. High-quality 16S rRNA sequence S000437262 (RDP), U20773 (Genbank). N4Lid DOI: 10.1601/nm.1223

† *Sphingomonas subterranea*^{VP} Balkwill et al. 1997. ==> *Novosphingobium subterraneum* (new combination). Synonym links through N4Lid: 10.1601/ex.1196. Source of type material recommended for DOE sponsored genome sequencing by the JGI: ATCC 700279. High-quality 16S rRNA sequence S000437262 (RDP), U20773 (Genbank). N4Lid DOI: 10.1601/nm.1196

Novosphingobium taihuense^{VP} Liu et al. 2005. Source of type material recommended for DOE sponsored genome sequencing by the JGI: JCM 12465. High-quality 16S rRNA sequence S000547982 (RDP), AY500142 (Genbank). N4Lid 10.1601/nm.9443

Novosphingobium tarдаgens^{VP} Fujii et al. 2003. Source of type material recommended for DOE sponsored genome sequencing by the JGI: ATCC BAA-531. High-quality 16S rRNA sequence S000017844 (RDP), AB070237 (Genbank). N4Lid DOI: 10.1601/nm.1224

Genus *Porphyrobacter*^{VP} Fuerst et al. 1993. N4Lid DOI: 10.1601/nm.1225

Porphyrobacter neustonensis^{VP} Fuerst et al. 1993. Source of type material recommended for DOE sponsored genome sequencing by the JGI: DSM 9434. High-quality 16S rRNA sequence S000414257 (RDP), L01785 (Genbank). N4Lid DOI: 10.1601/nm.1226

Porphyrobacter cryptus^{VP} Rainey et al. 2003. Source of type material recommended for DOE sponsored genome sequencing by the JGI: ATCC BAA-386. High-quality 16S rRNA sequence S000394587 (RDP), AF465834 (Genbank). N4Lid DOI: 10.1601/nm.1227

Porphyrobacter dokdonensis^{VP} Yoon et al. 2006. Source of type material recommended for DOE sponsored genome sequencing by the JGI: DSM 17193. High-quality 16S rRNA sequence S000541574 (RDP), DQ011529 (Genbank). N4Lid DOI: 10.1601/nm.10050

Porphyrobacter donghaensis^{VP} Yoon et al. 2004. Source of type material recommended for DOE sponsored genome sequencing by the JGI: DSM 16220. High-quality 16S rRNA sequence S000441842 (RDP), AY559428 (Genbank). N4Lid 10.1601/nm.8786

Porphyrobacter sanguineus^{VP} (ex Ahrens and Rheinheimer 1968) Hiraishi et al. 2002. Source of type material recommended for DOE sponsored genome sequencing by the JGI: ATCC 25659. N4Lid DOI: 10.1601/nm.1228

Porphyrobacter tepidarius^{VP} Hanada et al. 1997. Source of type material recommended for DOE sponsored genome sequencing by the JGI: DSM 10594. High-quality 16S rRNA sequence S000482848 (RDP), D84429 (Genbank). N4Lid DOI: 10.1601/nm.1229

Genus *Sandaracinobacter*^{VP} Yurkov et al. 1997. N4Lid DOI: 10.1601/nm.1232

Sandaracinobacter sibiricus^{VP} Yurkov et al. 1997. Source of type material recommended for DOE sponsored genome sequencing by the JGI: RB16-17. High-quality 16S rRNA sequence S000012028 (RDP), Y10678 (Genbank). N4Lid DOI: 10.1601/nm.1233

Genus *Sandarakinorhabdus*^{VP} Gich and Overmann 2006. N4Lid 10.1601/nm.9994

Sandarakinorhabdus limnophila^{VP} Gich and Overmann 2006. Source of type material recommended for DOE sponsored genome sequencing by the JGI: DSM 17366. High-quality 16S rRNA sequence S000576842 (RDP), AY902680 (Genbank). N4Lid 10.1601/nm.9993

Genus *Sphingobium*^{VP} Takeuchi et al. 2001. N4Lid DOI: 10.1601/nm.1234

Sphingobium yanoikuyae^{VP} (Yabuuchi et al. 1990) Takeuchi et al. 2001. <== *Sphingomonas yanoikuyae* (basonym). Synonym links through N4Lid: 10.1601/ex.1203. Source of type material

recommended for DOE sponsored genome sequencing by the JGI: ATCC 51230. High-quality 16S rRNA sequence S000010636 (RDP), D16145 (Genbank). N4Lid DOI: 10.1601/nm.1235

† *Sphingomonas yanoikuyae*^{VP} Yabuuchi et al. 1990. ==> *Sphingobium yanoikuyae* (new combination). Synonym links through N4Lid: 10.1601/ex.1203. Source of type material recommended for DOE sponsored genome sequencing by the JGI: ATCC 51230. High-quality 16S rRNA sequence S000010636 (RDP), D16145 (Genbank). N4Lid DOI: 10.1601/nm.1203

Sphingobium chlorophenicum^{VP} (Nohynek et al. 1996) Takeuchi et al. 2001. <== *Sphingomonas chlorophenolica* (basonym). Synonym links through N4Lid: 10.1601/ex.1176. Source of type material recommended for DOE sponsored genome sequencing by the JGI: ATCC 33790. High-quality 16S rRNA sequence S000010453 (RDP), X87161 (Genbank). N4Lid DOI: 10.1601/nm.1236

† *Sphingomonas chlorophenolica*^{VP} Nohynek et al. 1996. ==> *Sphingobium chlorophenicum* (new combination). Synonym links through N4Lid: 10.1601/ex.1176. Source of type material recommended for DOE sponsored genome sequencing by the JGI: ATCC 33790. High-quality 16S rRNA sequence S000010453 (RDP), X87161 (Genbank). N4Lid DOI: 10.1601/nm.1176

Sphingobium chungbukense^{VP} (Kim et al. 2000) Pal et al. 2005. <== *Sphingomonas chungbukensis* (basonym). Synonym links through N4Lid: 10.1601/ex.1178. Source of type material recommended for DOE sponsored genome sequencing by the JGI: JCM 11454. High-quality 16S rRNA sequence S000498638 (RDP), AF159257 (Genbank). N4Lid 10.1601/nm.9274

† *Sphingomonas chungbukensis*^{VP} Kim et al. 2000. ==> *Sphingobium chungbukense* (new combination). Synonym links through N4Lid: 10.1601/ex.1178. Source of type material recommended for DOE sponsored genome sequencing by the JGI: JCM 11454. High-quality 16S rRNA sequence S000498638 (RDP), AF159257 (Genbank). N4Lid DOI: 10.1601/nm.1178

Sphingobium cloacae^{VP} (Fujii et al. 2001) Prakash and Lal 2006. <== *Sphingomonas cloacae* (basonym). Synonym links through N4Lid: 10.1601/ex.1177. Source of type material recommended for DOE sponsored genome sequencing by the JGI: ATCC BAA-570. High-quality 16S rRNA sequence S000019816 (RDP), AB040739 (Genbank). N4Lid 10.1601/nm.9802

† *Sphingomonas cloacae*^{VP} Fujii et al. 2001. ==> *Sphingobium cloacae* (new combination). Synonym links through N4Lid: 10.1601/ex.1177. Source of type material recommended for DOE sponsored genome sequencing by the JGI: ATCC BAA-570. High-quality 16S rRNA sequence S000019816 (RDP), AB040739 (Genbank). N4Lid DOI: 10.1601/nm.1177

Sphingobium francense^{VP} Pal et al. 2005. Source of type material recommended for DOE sponsored genome sequencing by the JGI: CCM 7288. High-quality 16S rRNA sequence S000359026 (RDP), AY519130 (Genbank). N4Lid 10.1601/nm.9625

Sphingobium fuliginis^{VP} Prakash and Lal 2006. Source of type material recommended for DOE sponsored genome sequencing by the JGI: CCM 7327. High-quality 16S rRNA sequence S000599485 (RDP), DQ092757 (Genbank). N4Lid DOI: 10.1601/nm.10301

Sphingobium herbicidovorans^{VP} (Zipper et al. 1997) Takeuchi et al. 2001. <== *Sphingomonas herbicidovorans* (basonym). Synonym links through N4Lid: 10.1601/ex.1181. Source of type material recommended for DOE sponsored genome sequencing by the JGI: ATCC 700291. High-quality 16S rRNA sequence S000016991 (RDP), AB042233 (Genbank). N4Lid DOI: 10.1601/nm.1237

† *Sphingomonas herbicidovorans*^{VP} Zipper et al. 1997. ==> *Sphingobium herbicidovorans* (new combination). Synonym links through N4Lid: 10.1601/ex.1181. Source of type material recommended for DOE sponsored genome sequencing by the JGI: ATCC 700291. High-quality 16S rRNA sequence S000016991 (RDP), AB042233 (Genbank). N4Lid DOI: 10.1601/nm.1181

Sphingobium indicum^{VP} Pal et al. 2005. Source of type material recommended for DOE sponsored genome sequencing by the JGI: CCM 7286. High-quality 16S rRNA sequence S000359025 (RDP), AY519129 (Genbank). N4Lid 10.1601/nm.9623

Sphingobium japonicum^{VP} Pal et al. 2005. Source of type material recommended for DOE sponsored genome sequencing by the JGI: CCM 7287. High-quality 16S rRNA sequence S000427979 (RDP), AF039168 (Genbank). GOLD ID: Gi01844. GCAT ID: 000838_GCAT. Sequenced strain: NBRC 101211 is from a non-type strain. Genome sequencing is incomplete. Number of genomes of this species sequenced 1 (GOLD). N4Lid 10.1601/nm.9624

Sphingobium xenophagum^{VP} (Stolz et al. 2000) Pal et al. 2006. <== *Sphingomonas xenophaga* (basonym). Synonym links through N4Lid: 10.1601/ex.1202. Source of type material

recommended for DOE sponsored genome sequencing by the JGI: DSM 6383. High-quality 16S rRNA sequence S000128764 (RDP), X94098 (Genbank). N4Lid 10.1601/nm.9801

† *Sphingomonas xenophaga*^{VP} Stolz et al. 2000. ==> *Sphingobium xenophagum* (new combination). Synonym links through N4Lid: 10.1601/ex.1202. Source of type material recommended for DOE sponsored genome sequencing by the JGI: DSM 6383. High-quality 16S rRNA sequence S000128764 (RDP), X94098 (Genbank). N4Lid DOI: 10.1601/nm.1202

Genus *Sphingopyxis*^{VP} Takeuchi et al. 2001. N4Lid DOI: 10.1601/nm.1238

Sphingopyxis macrogoltabida^{VP} (Takeuchi et al. 1993) Takeuchi et al. 2001. <== *Sphingomonas macrogoltabidus* (basonym). Synonym links through N4Lid: 10.1601/ex.1183. Source of type material recommended for DOE sponsored genome sequencing by the JGI: ATCC 51380. N4Lid DOI: 10.1601/nm.1239

† *Sphingomonas macrogoltabidus*^{VP} Takeuchi et al. 1993. ==> *Sphingopyxis macrogoltabida* (new combination). Synonym links through N4Lid: 10.1601/ex.1183. Source of type material recommended for DOE sponsored genome sequencing by the JGI: ATCC 51380. N4Lid DOI: 10.1601/nm.1183

Sphingopyxis alaskensis^{VP} (Vancanneyt et al. 2001) Godoy et al. 2003. <== *Sphingomonas alaskensis* (basonym). Synonym links through N4Lid: 10.1601/ex.1170. Source of type material recommended for DOE sponsored genome sequencing by the JGI: DSM 13593. High-quality 16S rRNA sequence S000775633 (RDP). GOLD ID: Gc00384. GCAT ID: 000226_GCAT. Entrez genome id: 13907. Sequenced strain: DSM 13593 is type material. Genome sequencing is completed. Number of genomes of this species sequenced 1 (GOLD) 1 (NCBI). N4Lid DOI: 10.1601/nm.1240

† *Sphingomonas alaskensis*^{VP} Vancanneyt et al. 2001. ==> *Sphingopyxis alaskensis* (new combination). Synonym links through N4Lid: 10.1601/ex.1170. Source of type material recommended for DOE sponsored genome sequencing by the JGI: DSM 13593. GOLD ID: Gc00384. GCAT ID: 000226_GCAT. Entrez genome id: 13907. Sequenced strain: DSM 13593 is type material. Genome sequencing is completed. Number of genomes of this species sequenced 1 (GOLD) 1 (NCBI). N4Lid DOI: 10.1601/nm.1170

Sphingopyxis baekryungensis^{VP} Yoon et al. 2005. Source of type material recommended for DOE sponsored genome sequencing by the JGI: DSM 16222. High-quality 16S rRNA sequence S000540605 (RDP), AY608604 (Genbank). N4Lid 10.1601/nm.9442

† *Sphingomonas taejonensis*^{VP} Lee et al. 2001. ==> *Sphingopyxis taejonensis* (new combination). Synonym links through N4Lid: 10.1601/ex.1197. Source of type material recommended for DOE sponsored genome sequencing by the JGI: DSM 15583. High-quality 16S rRNA sequence S000387423 (RDP), AF131297 (Genbank). N4Lid DOI: 10.1601/nm.1197

Sphingopyxis taejonensis^{VP} (Lee et al. 2001) Pal et al. 2006. <== *Sphingomonas taejonensis* (basonym). Synonym links through N4Lid: 10.1601/ex.1197. Source of type material recommended for DOE sponsored genome sequencing by the JGI: DSM 15583. High-quality 16S rRNA sequence S000387423 (RDP), AF131297 (Genbank). N4Lid 10.1601/nm.9803

Sphingobium amiense^{VP} Ushiba et al. 2003. Source of type material recommended for DOE sponsored genome sequencing by the JGI: CIP 107839. High-quality 16S rRNA sequence S000260195 (RDP), AB047364 (Genbank). N4Lid DOI: 10.1601/nm.1241

Sphingopyxis chilensis^{VP} Godoy et al. 2003. Source of type material recommended for DOE sponsored genome sequencing by the JGI: DSM 14889. High-quality 16S rRNA sequence S000392514 (RDP), AF367204 (Genbank). N4Lid DOI: 10.1601/nm.1242

Sphingopyxis flavimaris^{VP} Yoon and Oh 2005. Source of type material recommended for DOE sponsored genome sequencing by the JGI: DSM 16223. High-quality 16S rRNA sequence S000475022 (RDP), AY554010 (Genbank). N4Lid 10.1601/nm.8853

Sphingopyxis terrae^{VP} (Takeuchi et al. 1993) Takeuchi et al. 2001. <== *Sphingomonas terrae* (basonym). Synonym links through N4Lid: 10.1601/ex.1198. Source of type material recommended for DOE sponsored genome sequencing by the JGI: ATCC 51381. High-quality 16S rRNA sequence S000413466 (RDP), D13727 (Genbank). N4Lid DOI: 10.1601/nm.1243

† *Sphingomonas terrae*^{VP} Takeuchi et al. 1993. ==> *Sphingopyxis terrae* (new combination). Synonym links through N4Lid: 10.1601/ex.1198. Source of type material recommended for DOE sponsored genome sequencing by the JGI: ATCC 51381. High-quality 16S rRNA sequence S000413466 (RDP), D13727 (Genbank). N4Lid DOI: 10.1601/nm.1198

Sphingopyxis witflariensis^{VP} Kämpfer et al. 2002. Source of type material recommended for DOE sponsored genome sequencing by the JGI: ATCC BAA-814. High-quality 16S rRNA sequence S000103956 (RDP), AJ416410 (Genbank). N4Lid DOI: 10.1601/nm.1244

Genus *Sphingosinicella*^{VP} Maruyama et al. 2006. N4Lid 10.1601/nm.9841

Sphingosinicella microcystinivorans^{VP} Maruyama et al. 2006. Source of type material recommended for DOE sponsored genome sequencing by the JGI: JCM 13185. High-quality 16S rRNA sequence S000016693 (RDP), AB084247 (Genbank). N4Lid 10.1601/nm.9840

Genus *Zymomonas*^{AL} Kluver and van Niel 1936. N4Lid DOI: 10.1601/nm.1245

Zymomonas mobilis subsp. mobilis^{AL} (Lindner 1928) De Ley and Swings 1976. Source of type material recommended for DOE sponsored genome sequencing by the JGI: ATCC 10988. High-quality 16S rRNA sequence S000003443 (RDP), AF281031 (Genbank). GOLD ID: Gc00240. GCAT ID: 000369_GCAT. Entrez genome id: 12354. Sequenced strain: ATCC 31821 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.1246

Zymomonas mobilis subsp. pomaceae^{AL} (Millis 1956) De Ley and Swings 1976. Source of type material recommended for DOE sponsored genome sequencing by the JGI: ATCC 29192. High-quality 16S rRNA sequence S000005814 (RDP), AF281032 (Genbank). N4Lid DOI: 10.1601/nm.1247

Order *Caulobacterales*^{AL} Henrici and Johnson 1935. N4Lid DOI: 10.1601/nm.1248

Family *Caulobacteraceae*^{AL} Henrici and Johnson 1935. N4Lid DOI: 10.1601/nm.1249

Genus *Caulobacter*^{AL} Henrici and Johnson 1935. GOLD ID: Gi01009. GCAT ID: 000849_GCAT. Entrez genome id: 16306. Sequenced strain: K31 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.1250

Caulobacter vibrioides^{AL} Henrici and Johnson 1935. ≈ *Caulobacter crescentus* (later heterotypic synonym), links through 10.1601/nm.1251. Source of type material recommended for DOE sponsored genome sequencing by the JGI: DSM 9893. High-quality 16S rRNA sequence S000112511 (RDP), AJ227756 (Genbank). N4Lid DOI: 10.1601/nm.1251

† *Caulobacter crescentus*^{AL} Poindexter 1964. ≈ *Caulobacter vibrioides* (earlier heterotypic synonym), links through 10.1601/nm.1251. Source of type material recommended for DOE sponsored genome sequencing by the JGI: ATCC 15252. GOLD ID: Gc00056. GCAT ID: 000554_GCAT. Entrez genome id: 298. Sequenced strain: ATCC 19089 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.1253

Caulobacter fusiformis^{AL} Poindexter 1964. Source of type material recommended for DOE sponsored genome sequencing by the JGI: ATCC 15257. High-quality 16S rRNA sequence S000113111 (RDP), AJ227759 (Genbank). N4Lid DOI: 10.1601/nm.1254

Caulobacter henricii^{AL} Poindexter 1964. Source of type material recommended for DOE sponsored genome sequencing by the JGI: ATCC 15253. High-quality 16S rRNA sequence S000112393 (RDP), AJ227758 (Genbank). N4Lid DOI: 10.1601/nm.1256

Caulobacter leidyi^{AL} corrig. Poindexter 1964. Source of type material recommended for DOE sponsored genome sequencing by the JGI: ATCC 15260. High-quality 16S rRNA sequence S000112987 (RDP), AJ227812 (Genbank). N4Lid DOI: 10.1601/nm.1258

Caulobacter segnis^{VP} (Urakami et al. 1990) Abraham et al. 1999. <== *Mycoplana segnis* (basonym). Synonym links through N4Lid: 10.1601/ex.1391. Source of type material recommended for DOE sponsored genome sequencing by the JGI: ATCC 21756. High-quality 16S rRNA sequence S000413473 (RDP), D13947 (Genbank). N4Lid DOI: 10.1601/nm.1260

† *Mycoplana segnis*^{VP} Urakami et al. 1990. ==> *Caulobacter segnis* (new combination). Synonym links through N4Lid: 10.1601/ex.1391. Source of type material recommended for DOE sponsored genome sequencing by the JGI: ATCC 21756. High-quality 16S rRNA sequence S000413473 (RDP), D13947 (Genbank). N4Lid DOI: 10.1601/nm.1391

Genus *Asticcacaulis*^{AL} Poindexter 1964. N4Lid DOI: 10.1601/nm.1263

Asticcacaulis excentricus^{AL} Poindexter 1964. Source of type material recommended for DOE sponsored genome sequencing by the JGI: ATCC 15261. High-quality 16S rRNA sequence S000382373 (RDP), AB016610 (Genbank). N4Lid DOI: 10.1601/nm.1264

Asticcacaulis benevestitus^{VP} Vasilyeva et al. 2006. Source of type material recommended for DOE sponsored genome sequencing by the JGI: ATCC BAA-896. High-quality 16S rRNA sequence S000592821 (RDP), AM087199 (Genbank). N4Lid DOI: 10.1601/nm.10283

Asticcacaulis biprosthecium^{AL} (sic) Pate et al. 1973. Source of type material recommended for DOE sponsored genome sequencing by the JGI: ATCC 27554. High-quality 16S rRNA sequence S000011476 (RDP), AJ007799 (Genbank). N4Lid DOI: 10.1601/nm.1265

Asticcacaulis taihuensis^{VP} Liu et al. 2005. Source of type material recommended for DOE sponsored genome sequencing by the JGI: JCM 12463. High-quality 16S rRNA sequence S000547981 (RDP), AY500141 (Genbank). N4Lid 10.1601/nm.9446

Genus *Brevundimonas*^{VP} Segers et al. 1994. GOLD ID: Gi01405. GCAT ID: 000861_GCAT. Sequenced strain: BAL3 is from a non-type strain. Genome sequencing is incomplete. Number of genomes of this species sequenced 1 (GOLD). N4Lid DOI: 10.1601/nm.1266

Brevundimonas diminuta^{VP} (Leifson and Hugh 1954) Segers et al. 1994. <== *Pseudomonas diminuta* (basonym). Synonym links through N4Lid: 10.1601/ex.2596. Source of type material recommended for DOE sponsored genome sequencing by the JGI: ATCC 11568. High-quality 16S rRNA sequence S000436439 (RDP), M59064 (Genbank). N4Lid DOI: 10.1601/nm.1267

† *Pseudomonas diminuta*^{AL} Leifson and Hugh 1954. ==> *Brevundimonas diminuta* (new combination). Synonym links through N4Lid: 10.1601/ex.2596. Source of type material recommended for DOE sponsored genome sequencing by the JGI: ATCC 11568. High-quality 16S rRNA sequence S000436439 (RDP), M59064 (Genbank). N4Lid DOI: 10.1601/nm.2596

Brevundimonas alba^{VP} (ex Poindexter 1964) Abraham et al. 1999. Source of type material recommended for DOE sponsored genome sequencing by the JGI: ATCC 15265. N4Lid DOI: 10.1601/nm.1268

Brevundimonas aurantiaca^{VP} (ex Poindexter 1964) Abraham et al. 1999. Source of type material recommended for DOE sponsored genome sequencing by the JGI: ATCC 15266. High-quality 16S rRNA sequence S000113115 (RDP), AJ227787 (Genbank). N4Lid DOI: 10.1601/nm.1269

Brevundimonas bacteroides^{VP} (Poindexter 1964) Abraham et al. 1999. <== *Caulobacter bacteroides* (basonym). Synonym links through N4Lid: 10.1601/ex.1252. Source of type material recommended for DOE sponsored genome sequencing by the JGI: ATCC 15254. High-quality 16S rRNA sequence S000381874 (RDP), AB008513 (Genbank). N4Lid DOI: 10.1601/nm.1270

† *Caulobacter bacteroides*^{AL} Poindexter 1964. ==> *Brevundimonas bacteroides* (new combination). Synonym links through N4Lid: 10.1601/ex.1252. Source of type material recommended for DOE sponsored genome sequencing by the JGI: ATCC 15254. High-quality 16S rRNA sequence S000381874 (RDP), AB008513 (Genbank). N4Lid DOI: 10.1601/nm.1252

Brevundimonas intermedia^{VP} (Poindexter 1964) Abraham et al. 1999. <== *Caulobacter intermedius* (basonym). Synonym links through N4Lid: 10.1601/ex.1257. Source of type material recommended for DOE sponsored genome sequencing by the JGI: ATCC 15262. High-quality 16S rRNA sequence S000382694 (RDP), AB023784 (Genbank). N4Lid DOI: 10.1601/nm.1271

† *Caulobacter intermedius*^{AL} Poindexter 1964. ==> *Brevundimonas intermedia* (new combination). Synonym links through N4Lid: 10.1601/ex.1257. Source of type material recommended for DOE sponsored genome sequencing by the JGI: ATCC 15262. High-quality 16S rRNA sequence S000382694 (RDP), AB023784 (Genbank). N4Lid DOI: 10.1601/nm.1257

Brevundimonas kwangchunensis^{VP} Yoon et al. 2006. Source of type material recommended for DOE sponsored genome sequencing by the JGI: DSM 17033. High-quality 16S rRNA sequence S000516043 (RDP), AY971368 (Genbank). N4Lid 10.1601/nm.9945

Brevundimonas mediterranea^{VP} Fritz et al. 2005. Source of type material recommended for DOE sponsored genome sequencing by the JGI: CIP 107934. N4Lid DOI: 10.1601/nm.8524

Brevundimonas nasdae^{VP} Li et al. 2004. Source of type material recommended for DOE sponsored genome sequencing by the JGI: DSM 14572. High-quality 16S rRNA sequence S000334613 (RDP), AB071954 (Genbank). N4Lid DOI: 10.1601/nm.8525

Brevundimonas subvibrioides^{VP} (Poindexter 1964) Abraham et al. 1999. <== *Caulobacter subvibrioides* (basonym). Synonym links through N4Lid: 10.1601/ex.1261. Source of type material recommended for DOE sponsored genome sequencing by the JGI: ATCC 15264. High-quality 16S rRNA sequence S000001964 (RDP), X94470 (Genbank). N4Lid DOI: 10.1601/nm.1272

† *Caulobacter subvibrioides*^{AL} Poindexter 1964. ==> *Brevundimonas subvibrioides* (new combination). Synonym links through N4Lid: 10.1601/ex.1261. Source of type material recommended for DOE sponsored genome sequencing by the JGI: ATCC 15264. High-quality 16S rRNA sequence S000001964 (RDP), X94470 (Genbank). N4Lid DOI: 10.1601/nm.1261

Brevundimonas variabilis^{VP} (Poindexter 1989) Abraham et al. 1999. <== *Caulobacter variabilis* (basonym). Synonym links through N4Lid: 10.1601/ex.1262. Source of type material recommended for DOE sponsored genome sequencing by the JGI: ATCC 15255. High-quality 16S rRNA sequence S000008120 (RDP), AJ007808 (Genbank). N4Lid DOI: 10.1601/nm.1273

† *Caulobacter variabilis*^{VP} (ex Poindexter 1964) Poindexter 1989. ==> *Brevundimonas variabilis* (new combination). Synonym links through N4Lid: 10.1601/ex.1262. Source of type material recommended for DOE sponsored genome sequencing by the JGI: ATCC 15255. High-quality 16S rRNA sequence S000008120 (RDP), AJ007808 (Genbank). N4Lid DOI: 10.1601/nm.1262

Brevundimonas vesicularis^{VP} (Büsing et al. 1953) Segers et al. 1994. <== *Pseudomonas vesicularis* (basonym). Synonym links through N4Lid: 10.1601/ex.2706. Source of type material recommended for DOE sponsored genome sequencing by the JGI: ATCC 11426. High-quality 16S rRNA sequence S000016026 (RDP), AJ007801 (Genbank). N4Lid DOI: 10.1601/nm.1274

† *Pseudomonas vesicularis*^{AL} (Büsing et al. 1953) Galarneault and Leifson 1964. ==> *Brevundimonas vesicularis* (new combination). Synonym links through N4Lid: 10.1601/ex.2706. Source of type material recommended for DOE sponsored genome sequencing by the JGI: ATCC 11426. High-quality 16S rRNA sequence S000016026 (RDP), AJ007801 (Genbank). N4Lid DOI: 10.1601/nm.2706

Genus *Phenylobacterium*^{VP} Lingens et al. 1985. N4Lid DOI: 10.1601/nm.1275

Phenylobacterium immobile^{VP} Lingens et al. 1985. Source of type material recommended for DOE sponsored genome sequencing by the JGI: ATCC 35973. High-quality 16S rRNA sequence S000010431 (RDP), Y18216 (Genbank). N4Lid DOI: 10.1601/nm.1276

Phenylobacterium falsum^{VP} Tiago et al. 2005. Source of type material recommended for DOE sponsored genome sequencing by the JGI: CIP 108469. High-quality 16S rRNA sequence S000544176 (RDP), AJ717391 (Genbank). N4Lid 10.1601/nm.9666

Phenylobacterium koreense^{VP} Aslam et al. 2005. Source of type material recommended for DOE sponsored genome sequencing by the JGI: KCTC 12206. High-quality 16S rRNA sequence S000386315 (RDP), AB166881 (Genbank). N4Lid 10.1601/nm.9628

Phenylobacterium lituiforme^{VP} Kanso and Patel 2004. Source of type material recommended for DOE sponsored genome sequencing by the JGI: ATCC BAA-294. High-quality 16S rRNA sequence S000462805 (RDP), AY534887 (Genbank). N4Lid 10.1601/nm.8773

Order *Rhizobiales*^{VP} Kuykendall 2006. N4Lid DOI: 10.1601/nm.1277

Family *Rhizobiaceae*^{AL} Conn 1938. N4Lid DOI: 10.1601/nm.1278

Genus *Rhizobium*^{AL} Frank 1889. ≈ *Rhizobium* (later heterotypic synonym), links through 10.1601/nm.1279. GOLD ID: Gi00585. GCAT ID: 001406_GCAT. Sequenced strain: NGR234 is from a non-type strain. Genome sequencing is incomplete. Number of genomes of this species sequenced 1 (GOLD). N4Lid DOI: 10.1601/nm.1279

Rhizobium leguminosarum^{AL} (Frank 1879) Frank 1889. Source of type material recommended for DOE sponsored genome sequencing by the JGI: ATCC 10004. High-quality 16S rRNA sequence S000265215 (RDP), AY509899 (Genbank). GOLD ID: Gc00385. GCAT ID: 000225_GCAT. Entrez genome id: 344. Sequenced strain: 3841 is from a non-type strain. Genome sequencing is completed. Number of genomes of this species sequenced 3 (GOLD) 1 (NCBI). N4Lid DOI: 10.1601/nm.1280

Rhizobium daejeonense^{VP} Quan et al. 2005. Source of type material recommended for DOE sponsored genome sequencing by the JGI: KCTC 12121. High-quality 16S rRNA sequence S000140466 (RDP), AY341343 (Genbank). N4Lid 10.1601/nm.9742

Rhizobium etli^{VP} Segovia et al. 1993. Source of type material recommended for DOE sponsored genome sequencing by the JGI: ATCC 51251. High-quality 16S rRNA sequence S000437446 (RDP), U28916 (Genbank). GOLD ID: Gc00342. GCAT ID: 000268_GCAT. Entrez genome id: 13932. Sequenced strain: CFN42 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.1282

Rhizobium galegae^{VP} Lindström 1989. Source of type material recommended for DOE sponsored genome sequencing by the JGI: ATCC 43677. High-quality 16S rRNA sequence S000413447 (RDP), D11343 (Genbank). N4Lid DOI: 10.1601/nm.1284

Rhizobium gallicum^{VP} Amarger et al. 1997. Source of type material recommended for DOE sponsored genome sequencing by the JGI: MSDJ1109. High-quality 16S rRNA sequence S000387016 (RDP), AF008130 (Genbank). N4Lid DOI: 10.1601/nm.1285

Rhizobium giardinii^{VP} Amarger et al. 1997. Source of type material recommended for DOE sponsored genome sequencing by the JGI: CIP 105503. High-quality 16S rRNA sequence S000438628 (RDP), U86344 (Genbank). N4Lid DOI: 10.1601/nm.1286

Rhizobium hainanense^{VP} Chen et al. 1997. Source of type material recommended for DOE sponsored genome sequencing by the JGI: DSM 11917. High-quality 16S rRNA sequence S000381164 (RDP), U71078 (Genbank). N4Lid DOI: 10.1601/nm.1287

Rhizobium huautlense^{VP} Wang et al. 1998. Source of type material recommended for DOE sponsored genome sequencing by the JGI: ATCC BAA-115. High-quality 16S rRNA sequence S000427818 (RDP), AF025852 (Genbank). N4Lid DOI: 10.1601/nm.1289

Rhizobium indigoferae^{VP} Wei et al. 2002. Source of type material recommended for DOE sponsored genome sequencing by the JGI: CIP 108029. High-quality 16S rRNA sequence S000111802 (RDP), AF364068 (Genbank). N4Lid DOI: 10.1601/nm.1290

Rhizobium loessense^{VP} Wei et al. 2003. Source of type material recommended for DOE sponsored genome sequencing by the JGI: CIP 108030. High-quality 16S rRNA sequence S000392405 (RDP), AF364069 (Genbank). N4Lid DOI: 10.1601/nm.1291

Rhizobium larrymoorei^{VP} (Bouzar and Jones 2001) Young 2004. <== *Agrobacterium larrymoorei* (basonym). Synonym links through N4Lid: 10.1601/ex.1315. Source of type material recommended for DOE sponsored genome sequencing by the JGI: ATCC 51759. High-quality 16S rRNA sequence S000021216 (RDP), Z30542 (Genbank). N4Lid DOI: 10.1601/nm.1294

† *Agrobacterium larrymoorei*^{VP} Bouzar and Jones 2001. ==> *Rhizobium larrymoorei* (new combination). Synonym links through N4Lid: 10.1601/ex.1315. Source of type material recommended for DOE sponsored genome sequencing by the JGI: ATCC 51759. High-quality 16S rRNA sequence S000021216 (RDP), Z30542 (Genbank). N4Lid DOI: 10.1601/nm.1315

Rhizobium lupini^{AL} (Schroeter 1886) Eckhardt et al. 1931. Source of type material recommended for DOE sponsored genome sequencing by the JGI: ATCC 10319. N4Lid DOI: 10.1601/nm.1295

Rhizobium mongolense^{VP} Van Berkum et al. 1998. Source of type material recommended for DOE sponsored genome sequencing by the JGI: ATCC BAA-116. High-quality 16S rRNA sequence S000438747 (RDP), U89817 (Genbank). N4Lid DOI: 10.1601/nm.1298

Rhizobium phaseoli^{AL} Dangeard 1926. Source of type material recommended for DOE sponsored genome sequencing by the JGI: NRRL L-321. N4Lid DOI: 10.1601/nm.1299

Rhizobium radiobacter^{VP} (Beijerinck and van Delden 1902) Young et al. 2001. <== *Agrobacterium radiobacter* (basonym). Synonym links through N4Lid: 10.1601/ex.1317. Source of type material recommended for DOE sponsored genome sequencing by the JGI: ATCC 19358. GOLD ID: Gi00020. GCAT ID: 000691_GCAT. Entrez genome id: 13402. Sequenced strain: biovar II K84 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.1300

† *Agrobacterium radiobacter*^{AL} (Beijerinck and van Delden 1902) Conn 1942. ==> *Rhizobium radiobacter* (new combination). Synonym links through N4Lid: 10.1601/ex.1317. Source of type material recommended for DOE sponsored genome sequencing by the JGI: ATCC 19358. GOLD ID: Gi00020. GCAT ID: 000691_GCAT. Entrez genome id: 13402. Sequenced strain: biovar II K84 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.1317

† *Agrobacterium tumefaciens*^{AL} (Smith and Townsend 1907) Conn 1942. ≈ *Rhizobium radiobacter* (earlier heterotypic synonym), links through 10.1601/nm.1300. Source of type material recommended for DOE sponsored genome sequencing by the JGI: ATCC 23308. High-quality 16S rRNA sequence S000436036 (RDP), M11223 (Genbank). GOLD ID: Gc00072. GCAT ID: 000538_GCAT. Entrez genome id: 283. Sequenced strain: ATCC 33970 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.1311

Rhizobium rhizogenes^{VP} (Riker et al. 1930) Young et al. 2001. <== *Agrobacterium rhizogenes* (basonym). Synonym links through N4Lid: 10.1601/ex.1318. Source of type material recommended for DOE sponsored genome sequencing by the JGI: ATCC 11325. High-quality 16S rRNA sequence S000413471 (RDP), D13945 (Genbank). N4Lid DOI: 10.1601/nm.1301

† *Agrobacterium rhizogenes*^{AL} (Riker et al. 1930) Conn 1942. ==> *Rhizobium rhizogenes* (new combination). Synonym links through N4Lid: 10.1601/ex.1318. Source of type material recommended for DOE sponsored genome sequencing by the JGI: ATCC 11325. High-quality 16S rRNA sequence S000413471 (RDP), D13945 (Genbank). N4Lid DOI: 10.1601/nm.1318

Rhizobium rubi^{VP} (Hildebrand 1940) Young et al. 2001. <== *Agrobacterium rubi* (basonym). Synonym links through N4Lid: 10.1601/ex.1319. Source of type material recommended for DOE sponsored genome sequencing by the JGI: ATCC 13335. High-quality 16S rRNA sequence S000364334 (RDP), X67228 (Genbank). N4Lid DOI: 10.1601/nm.1302

† *Agrobacterium rubi*^{AL} (Hildebrand 1940) Starr and Weiss 1943. ==> *Rhizobium rubi* (new combination). Synonym links through N4Lid: 10.1601/ex.1319. Source of type material recommended for DOE sponsored genome sequencing by the JGI: ATCC 13335. High-quality 16S rRNA sequence S000364334 (RDP), X67228 (Genbank). N4Lid DOI: 10.1601/nm.1319

Rhizobium sullae^{VP} Squartini et al. 2002. Source of type material recommended for DOE sponsored genome sequencing by the JGI: DSM 14623. High-quality 16S rRNA sequence S000364392 (RDP), Y10170 (Genbank). N4Lid DOI: 10.1601/nm.1303

Rhizobium trifolii^{AL} Dangeard 1926. Source of type material recommended for DOE sponsored genome sequencing by the JGI: ATCC 14480. N4Lid DOI: 10.1601/nm.1305

Rhizobium tropici^{VP} Martínez-Romero et al. 1991. Source of type material recommended for DOE sponsored genome sequencing by the JGI: ATCC 49672. High-quality 16S rRNA sequence S000438762 (RDP), U89832 (Genbank). GOLD ID: Gi00505. GCAT ID: 001405_GCAT. Entrez genome id: 13459. Sequenced strain: PRF 81 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.1306

Rhizobium undicola^{VP} (de Lajudie et al. 1998) Young et al. 2001. <== *Allorhizobium undicola* (basonym). Synonym links through N4Lid: 10.1601/ex.1307. Source of type material recommended for DOE sponsored genome sequencing by the JGI: ATCC 700741. High-quality 16S rRNA sequence S000022059 (RDP), Y17047 (Genbank). N4Lid DOI: 10.1601/nm.1307

† *Allorhizobium undicola*^{VP} de Lajudie et al. 1998. ==> *Rhizobium undicola* (new combination). Synonym links through N4Lid: 10.1601/ex.1307. Source of type material recommended for DOE sponsored genome sequencing by the JGI: ATCC 700741. High-quality 16S rRNA sequence S000022059 (RDP), Y17047 (Genbank). N4Lid DOI: 10.1601/nm.1323

Rhizobium vitis^{VP} (Ophel and Kerr 1990) Young et al. 2001. <== *Agrobacterium vitis* (basonym). Synonym links through N4Lid: 10.1601/ex.1308. Source of type material recommended for DOE sponsored genome sequencing by the JGI: ATCC 49767. High-quality 16S rRNA sequence S000364331 (RDP), X67225 (Genbank). GOLD ID: Gi00021. GCAT ID: 000692_GCAT. Entrez genome id: 13372. Sequenced strain: biovar III, S4 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.1308

† *Agrobacterium vitis*^{VP} Ophel and Kerr 1990. ==> *Rhizobium vitis* (new combination). Synonym links through N4Lid: 10.1601/ex.1308. Source of type material recommended for DOE sponsored genome sequencing by the JGI: ATCC 49767. High-quality 16S rRNA sequence S000364331 (RDP), X67225 (Genbank). GOLD ID: Gi00021. GCAT ID: 000692_GCAT. Entrez genome id: 13372. Sequenced strain: biovar III, S4 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.1321

Rhizobium yanglingense^{VP} Tan et al. 2001. Source of type material recommended for DOE sponsored genome sequencing by the JGI: CIP 108028. High-quality 16S rRNA sequence S000386896 (RDP), AF003375 (Genbank). N4Lid DOI: 10.1601/nm.1309

Genus † *Agrobacterium*^{AL} Conn 1942. ≈ *Rhizobium* (earlier heterotypic synonym), links through 10.1601/nm.1279. N4Lid DOI: 10.1601/nm.1310

Genus † *Allorhizobium*^{VP} de Lajudie et al. 1998. ≈ *Rhizobium* (earlier heterotypic synonym), links through 10.1601/nm.1279. N4Lid DOI: 10.1601/nm.1322

- Genus *Sinorhizobium*** ^{VP} Chen et al. 1988. ≈ *Rhizobium* (earlier heterotypic synonym), links through 10.1601/nm.1279. N4Lid DOI: 10.1601/nm.1339
- Sinorhizobium americanum* ^{VP} corrig. Toledo et al. 2004. Source of type material recommended for DOE sponsored genome sequencing by the JGI: ATCC BAA-532. High-quality 16S rRNA sequence S000701177 (RDP), AF506513 (Genbank). N4Lid 10.1601/nm.8849
- Genus *Carbophilus*** ^{VP} Meyer et al. 1994. N4Lid DOI: 10.1601/nm.1324
- Carbophilus carboxidus* ^{VP} (ex Nozhevnikova and Zavarzin 1974) Meyer et al. 1994. Source of type material recommended for DOE sponsored genome sequencing by the JGI: ATCC 51424. N4Lid DOI: 10.1601/nm.1325
- Genus *Ensifer*** ^{VP} Casida 1982. N4Lid DOI: 10.1601/nm.1328
- Ensifer arboris* ^{VP} (Nick et al. 1999) Young 2003. <== *Sinorhizobium arboris* (basonym). Synonym links through N4Lid: 10.1601/ex.1342. Source of type material recommended for DOE sponsored genome sequencing by the JGI: ATCC BAA-226. N4Lid DOI: 10.1601/nm.1330
- † *Sinorhizobium arboris* ^{VP} Nick et al. 1999. ==> *Ensifer arboris* (new combination). Synonym links through N4Lid: 10.1601/ex.1342. Source of type material recommended for DOE sponsored genome sequencing by the JGI: ATCC BAA-226. N4Lid DOI: 10.1601/nm.1342
- Ensifer adhaerens* ^{VP} Casida ==> *Sinorhizobium adhaerens* (new combination, illegitimate). Synonym links through N4Lid: 10.1601/ex.1329. Source of type material recommended for DOE sponsored genome sequencing by the JGI: ATCC 33212. High-quality 16S rRNA sequence S000388874 (RDP), AF191739 (Genbank). N4Lid DOI: 10.1601/nm.1329
- † "*Sinorhizobium adhaerens*" <== *Ensifer adhaerens* (basonym, illegitimate). Synonym links through N4Lid: 10.1601/ex.1329. Source of type material recommended for DOE sponsored genome sequencing by the JGI: ATCC 33212. High-quality 16S rRNA sequence S000388874 (RDP), AF191739 (Genbank). N4Lid DOI: 10.1601/nm.1341
- Sinorhizobium morelense* ^{VP} Wang et al. 2002. ≈ *Ensifer adhaerens* (earlier heterotypic synonym), links through 10.1601/nm.1329. Source of type material recommended for DOE sponsored genome sequencing by the JGI: LMG 21331. N4Lid DOI: 10.1601/nm.1347
- Ensifer fredii* ^{VP} (Scholla and Elkan 1984) Young 2003. <== *Rhizobium fredii* (basonym). Synonym links through N4Lid: 10.1601/ex.1283. Source of type material recommended for DOE sponsored genome sequencing by the JGI: ATCC 35423. High-quality 16S rRNA sequence S000413535 (RDP), D14516 (Genbank). N4Lid DOI: 10.1601/nm.1331
- † *Sinorhizobium fredii* ^{VP} (Scholla and Elkan 1984) Chen et al. 1988. <== *Rhizobium fredii* (basonym). *Ensifer fredii* (new combination). Synonym links through N4Lid: 10.1601/ex.1283. Source of type material recommended for DOE sponsored genome sequencing by the JGI: ATCC 35423. High-quality 16S rRNA sequence S000413535 (RDP), D14516 (Genbank). N4Lid DOI: 10.1601/nm.1340
- † *Rhizobium fredii* ^{VP} Scholla and Elkan 1984. ==> *Sinorhizobium fredii* (new combination). Synonym links through N4Lid: 10.1601/ex.1283. Source of type material recommended for DOE sponsored genome sequencing by the JGI: ATCC 35423. High-quality 16S rRNA sequence S000413535 (RDP), D14516 (Genbank). N4Lid DOI: 10.1601/nm.1283
- Ensifer kostiensis* ^{VP} (Nick et al. 1999) Young 2003. <== *Sinorhizobium kostiense* (basonym). Synonym links through N4Lid: 10.1601/ex.1343. Source of type material recommended for DOE sponsored genome sequencing by the JGI: ATCC BAA-227. N4Lid DOI: 10.1601/nm.1332
- † *Sinorhizobium kostiense* ^{VP} Nick et al. 1999. ==> *Ensifer kostiensis* (new combination). Synonym links through N4Lid: 10.1601/ex.1343. Source of type material recommended for DOE sponsored genome sequencing by the JGI: ATCC BAA-227. N4Lid DOI: 10.1601/nm.1343
- Ensifer kummerowiae* ^{VP} (Wei et al. 2002) Young 2003. <== *Sinorhizobium kummerowiae* (basonym). Synonym links through N4Lid: 10.1601/ex.1344. Source of type material recommended for DOE sponsored genome sequencing by the JGI: CIP 108026. High-quality 16S rRNA sequence S000111801 (RDP), AF364067 (Genbank). N4Lid DOI: 10.1601/nm.1333
- † *Sinorhizobium kummerowiae* ^{VP} Wei et al. 2002. ==> *Ensifer kummerowiae* (new combination). Synonym links through N4Lid: 10.1601/ex.1344. Source of type material recommended for DOE sponsored genome sequencing by the JGI: CIP 108026. High-quality 16S rRNA sequence S000111801 (RDP), AF364067 (Genbank). N4Lid DOI: 10.1601/nm.1344

Ensifer medicae^{VP} (Rome et al. 1996) Young 2003. <== *Sinorhizobium medicae* (basonym).
Synonym links through N4Lid: 10.1601/ex.1345. Source of type material recommended for DOE
sponsored genome sequencing by the JGI: NBRC 100384. GOLD ID: Gi01041. GCAT ID:
001593_GCAT. Entrez genome id: 16304. Sequenced strain: WSM419 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.1334

† *Sinorhizobium medicae*^{VP} Rome et al. 1996. ==> *Ensifer medicae* (new combination).
Synonym links through N4Lid: 10.1601/ex.1345. Source of type material recommended for DOE
sponsored genome sequencing by the JGI: NBRC 100384. GOLD ID: Gi01041. GCAT ID:
001593_GCAT. Entrez genome id: 16304. Sequenced strain: WSM419 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.1345

Ensifer meliloti^{VP} (Dangeard 1926) Young 2003. <== *Rhizobium meliloti* (basonym).
Synonym links through N4Lid: 10.1601/ex.1297. Source of type material recommended for DOE sponsored
genome sequencing by the JGI: ATCC 9930. High-quality 16S rRNA sequence S000364328
(RDP), X67222 (Genbank). GOLD ID: Gc00059. GCAT ID: 000551_GCAT. Entrez genome id:
19. Sequenced strain: 1021 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.1335

† *Sinorhizobium meliloti*^{VP} (Dangeard 1926) De Lajudie et al. 1994. <== *Rhizobium meliloti*
(basonym). *Ensifer meliloti* (new combination). Synonym links through N4Lid: 10.1601/ex.1297.
Source of type material recommended for DOE sponsored genome sequencing by the JGI: ATCC
9930. High-quality 16S rRNA sequence S000364328 (RDP), X67222 (Genbank). GOLD ID:
Gc00059. GCAT ID: 000551_GCAT. Entrez genome id: 19. Sequenced strain: 1021 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.1346

† *Rhizobium meliloti*^{AL} Dangeard 1926. ==> *Sinorhizobium meliloti* (new combination).
Synonym links through N4Lid: 10.1601/ex.1297. Source of type material recommended for DOE
sponsored genome sequencing by the JGI: ATCC 9930. High-quality 16S rRNA sequence
S000364328 (RDP), X67222 (Genbank). GOLD ID: Gc00059. GCAT ID: 000551_GCAT. Entrez
genome id: 19. Sequenced strain: 1021 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.1297

Ensifer saheli^{VP} (De Lajudie et al. 1994) Young 2003. <== *Sinorhizobium saheli* (basonym).
Synonym links through N4Lid: 10.1601/ex.1348. Source of type material recommended for DOE
sponsored genome sequencing by the JGI: ATCC 51690. High-quality 16S rRNA sequence
S000364344 (RDP), X68390 (Genbank). N4Lid DOI: 10.1601/nm.1336

† *Sinorhizobium saheli*^{VP} De Lajudie et al. 1994. ==> *Ensifer saheli* (new combination).
Synonym links through N4Lid: 10.1601/ex.1348. Source of type material recommended for DOE
sponsored genome sequencing by the JGI: ATCC 51690. High-quality 16S rRNA sequence
S000364344 (RDP), X68390 (Genbank). N4Lid DOI: 10.1601/nm.1348

Ensifer terangae^{VP} (De Lajudie et al. 1994) Young 2003. <== *Sinorhizobium terangae*
(basonym). Synonym links through N4Lid: 10.1601/ex.1349. Source of type material
recommended for DOE sponsored genome sequencing by the JGI: ATCC 51692. High-quality 16S
rRNA sequence S000364342 (RDP), X68388 (Genbank). N4Lid DOI: 10.1601/nm.1337

† *Sinorhizobium terangae*^{VP} corrig. De Lajudie et al. 1994. ==> *Ensifer terangae* (new
combination). Synonym links through N4Lid: 10.1601/ex.1349. Source of type material
recommended for DOE sponsored genome sequencing by the JGI: ATCC 51692. High-quality 16S
rRNA sequence S000364342 (RDP), X68388 (Genbank). N4Lid DOI: 10.1601/nm.1349

Ensifer xinjiangensis^{VP} (Chen et al. 1988) Young 2003. <== *Sinorhizobium xinjiangense*
(basonym). Synonym links through N4Lid: 10.1601/ex.1350. Source of type material
recommended for DOE sponsored genome sequencing by the JGI: ATCC 49357. High-quality 16S
rRNA sequence S000468990 (RDP), D12796 (Genbank). N4Lid DOI: 10.1601/nm.1338

† *Sinorhizobium xinjiangense*^{VP} corrig. Chen et al. 1988. ==> *Ensifer xinjiangensis* (new
combination). Synonym links through N4Lid: 10.1601/ex.1350. Source of type material
recommended for DOE sponsored genome sequencing by the JGI: ATCC 49357. High-quality 16S
rRNA sequence S000468990 (RDP), D12796 (Genbank). N4Lid DOI: 10.1601/nm.1350

Genus *Kaistia*^{VP} Im et al. 2005. N4Lid 10.1601/nm.9398

Kaistia adipata^{VP} Im et al. 2005. Source of type material recommended for DOE sponsored genome sequencing by the JGI: KCTC 12095. High-quality 16S rRNA sequence S000018605 (RDP), AY039817 (Genbank). N4Lid 10.1601/nm.9397

Family "Aurantimonadaceae" N4Lid DOI: 10.1601/nm.1351

Genus *Aurantimonas*^{VP} Denner et al. 2003. GOLD ID: Gi00907. GCAT ID: 001632_GCAT. Entrez genome id: 13607. Sequenced strain: SI85-9A1 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.1352

Aurantimonas coralicida^{VP} Denner et al. 2003. Source of type material recommended for DOE sponsored genome sequencing by the JGI: DSM 14790. High-quality 16S rRNA sequence S000435010 (RDP), AY065627 (Genbank). N4Lid DOI: 10.1601/nm.1353

Genus *Fulvimarina*^{VP} Cho and Giovannoni 2003. N4Lid DOI: 10.1601/nm.1354

Fulvimarina pelagi^{VP} Cho and Giovannoni 2003. Source of type material recommended for DOE sponsored genome sequencing by the JGI: ATCC BAA-666. High-quality 16S rRNA sequence S000400145 (RDP), AY178860 (Genbank). GOLD ID: Gi00844. GCAT ID: 001093_GCAT. Entrez genome id: 13506. Sequenced strain: HTCC2506 is type material. Genome sequencing is incomplete. Number of genomes of this species sequenced 1 (GOLD) 1 (NCBI). N4Lid DOI: 10.1601/nm.1355

Genus *Marteella*^{VP} Rivas et al. 2005. N4Lid 10.1601/nm.9376

Marteella mediterranea^{VP} Rivas et al. 2005. Source of type material recommended for DOE sponsored genome sequencing by the JGI: LMG 22193. High-quality 16S rRNA sequence S000504762 (RDP), AY649762 (Genbank). N4Lid 10.1601/nm.9375

Family *Bartonellaceae*^{AL} Gieszczykiewicz 1939. N4Lid DOI: 10.1601/nm.1356

Genus *Bartonella*^{AL} Strong et al. 1915. ≈ *Bartonella* (later heterotypic synonym), links through 10.1601/nm.1357. N4Lid DOI: 10.1601/nm.1357

Bartonella bacilliformis^{AL} (Strong et al. 1913) Strong et al. 1915. Source of type material recommended for DOE sponsored genome sequencing by the JGI: ATCC 35685. High-quality 16S rRNA sequence S000000975 (RDP), Z11683 (Genbank). GOLD ID: Gc00503. GCAT ID: 000106_GCAT. Entrez genome id: 16249. Sequenced strain: KC583 is type material. Genome sequencing is completed. Number of genomes of this species sequenced 2 (GOLD) 2 (NCBI). N4Lid DOI: 10.1601/nm.1358

Bartonella alsatica^{VP} Heller et al. 1999. Source of type material recommended for DOE sponsored genome sequencing by the JGI: CIP 105477. High-quality 16S rRNA sequence S000091004 (RDP), AJ002139 (Genbank). N4Lid DOI: 10.1601/nm.1359

Bartonella birtlesii^{VP} Bermond et al. 2000. Source of type material recommended for DOE sponsored genome sequencing by the JGI: CCUG 44360. High-quality 16S rRNA sequence S000389043 (RDP), AF204274 (Genbank). N4Lid DOI: 10.1601/nm.1360

Bartonella bovis^{VP} Bermond et al. 2002. Source of type material recommended for DOE sponsored genome sequencing by the JGI: CCUG 43828. High-quality 16S rRNA sequence S000390807 (RDP), AF293391 (Genbank). N4Lid DOI: 10.1601/nm.1361

Bartonella capreoli^{VP} Bermond et al. 2002. Source of type material recommended for DOE sponsored genome sequencing by the JGI: CCUG 43827. High-quality 16S rRNA sequence S000390806 (RDP), AF293389 (Genbank). N4Lid DOI: 10.1601/nm.1362

Bartonella chomelii^{VP} Maillard et al. 2004. Source of type material recommended for DOE sponsored genome sequencing by the JGI: CCUG 47497. High-quality 16S rRNA sequence S000404721 (RDP), AY254309 (Genbank). N4Lid DOI: 10.1601/nm.1363

Bartonella clarridgeiae^{VP} Lawson and Collins 1996. Source of type material recommended for DOE sponsored genome sequencing by the JGI: ATCC 51734. N4Lid DOI: 10.1601/nm.1364

Bartonella doshiae^{VP} Birtles et al. 1995. Source of type material recommended for DOE sponsored genome sequencing by the JGI: ATCC 700133. High-quality 16S rRNA sequence S000013051 (RDP), Z31351 (Genbank). N4Lid DOI: 10.1601/nm.1365

Bartonella elizabethae^{VP} (Daly et al. 1993) Brenner et al. 1993. <== *Rochalimaea elizabethae* (basonym). Synonym links through N4Lid: 10.1601/ex.1366. Source of type material recommended for DOE sponsored genome sequencing by the JGI: ATCC 49927. High-quality 16S rRNA sequence S000414250 (RDP), L01260 (Genbank). N4Lid DOI: 10.1601/nm.1366

- † *Rochalimaea elizabethae*^{VP} Daly et al. 1993. ==> *Bartonella elizabethae* (new combination).
Synonym links through N4Lid: 10.1601/ex.1366. Source of type material recommended for DOE sponsored genome sequencing by the JGI: ATCC 49927. High-quality 16S rRNA sequence S000414250 (RDP), L01260 (Genbank). N4Lid 10.1601/nm.9176
- Bartonella grahamii*^{VP} Birtles et al. 1995. Source of type material recommended for DOE sponsored genome sequencing by the JGI: ATCC 700132. High-quality 16S rRNA sequence S000011165 (RDP), Z31349 (Genbank). N4Lid DOI: 10.1601/nm.1367
- Bartonella henselae*^{VP} (Regnery et al. 1992) Brenner et al. 1993. <== *Rochalimaea henselae* (basonym). Synonym links through N4Lid: 10.1601/ex.1368. Source of type material recommended for DOE sponsored genome sequencing by the JGI: ATCC 49882. High-quality 16S rRNA sequence S000770082 (RDP). GOLD ID: Gc00192. GCAT ID: 000418_GCAT. Entrez genome id: 196. Sequenced strain: ATCC 49882 is type material. Genome sequencing is completed. Number of genomes of this species sequenced 1 (GOLD) 1 (NCBI). N4Lid DOI: 10.1601/nm.1368
- † *Rochalimaea henselae*^{VP} Regnery et al. 1992. ==> *Bartonella henselae* (new combination).
Synonym links through N4Lid: 10.1601/ex.1368. Source of type material recommended for DOE sponsored genome sequencing by the JGI: ATCC 49882. GOLD ID: Gc00192. GCAT ID: 000418_GCAT. Entrez genome id: 196. Sequenced strain: ATCC 49882 is type material. Genome sequencing is completed. Number of genomes of this species sequenced 1 (GOLD) 1 (NCBI). N4Lid 10.1601/nm.9173
- Bartonella koehlerae*^{VP} Droz et al. 2000. Source of type material recommended for DOE sponsored genome sequencing by the JGI: ATCC 700693. High-quality 16S rRNA sequence S000428477 (RDP), AF076237 (Genbank). N4Lid DOI: 10.1601/nm.1369
- Bartonella peromysci*^{VP} (Ristic and Kreier 1984) Birtles et al. 1995. <== *Grahamella peromysci* (basonym). Synonym links through N4Lid: 10.1601/ex.1370. Source of type material recommended for DOE sponsored genome sequencing by the JGI: No viable deposit available. N4Lid DOI: 10.1601/nm.1370
- † *Grahamella peromysci*^{VP} (ex Tyzzer 1942) Ristic and Kreier 1984. ==> *Bartonella peromysci* (new combination). Synonym links through N4Lid: 10.1601/ex.1370. Source of type material recommended for DOE sponsored genome sequencing by the JGI: no viable deposit. N4Lid 10.1601/nm.9126
- Bartonella quintana*^{VP} (Schmincke 1917) Brenner et al. 1993. <== *Rochalimaea quintana* (basonym). Synonym links through N4Lid: 10.1601/ex.1371. Source of type material recommended for DOE sponsored genome sequencing by the JGI: ATCC VR-358. High-quality 16S rRNA sequence S000735417 (RDP). GOLD ID: Gc00191. GCAT ID: 000419_GCAT. Entrez genome id: 44. Sequenced strain: Toulouse 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.1371
- † *Rochalimaea quintana*^{AL} (Schmincke 1917) Krieg 1961. ==> *Bartonella quintana* (new combination). Synonym links through N4Lid: 10.1601/ex.1371. Source of type material recommended for DOE sponsored genome sequencing by the JGI: ATCC VR 358. GOLD ID: Gc00191. GCAT ID: 000419_GCAT. Entrez genome id: 44. Sequenced strain: Toulouse is from a non-type strain. Genome sequencing is completed. Number of genomes of this species sequenced 1 (GOLD) 1 (NCBI). N4Lid 10.1601/nm.9010
- Bartonella schoenbuchensis*^{VP} corrig. Dehio et al. 2001. Source of type material recommended for DOE sponsored genome sequencing by the JGI: DSM 13525. High-quality 16S rRNA sequence S000014396 (RDP), AJ278187 (Genbank). N4Lid DOI: 10.1601/nm.1372
- Bartonella talpae*^{VP} (Ristic and Kreier 1984) Birtles et al. 1995. <== *Grahamella talpae* (basonym). Synonym links through N4Lid: 10.1601/ex.1373. Source of type material recommended for DOE sponsored genome sequencing by the JGI: No viable deposit available. N4Lid DOI: 10.1601/nm.1373
- † *Grahamella talpae*^{VP} (ex Brumpt 1911) Ristic and Kreier 1984. ==> *Bartonella talpae* (new combination). Synonym links through N4Lid: 10.1601/ex.1373. Source of type material recommended for DOE sponsored genome sequencing by the JGI: no viable deposit. N4Lid 10.1601/nm.9127

Bartonella taylorii^{VP} Birtles et al. 1995. Source of type material recommended for DOE sponsored genome sequencing by the JGI: CIP 107028. High-quality 16S rRNA sequence S000003476 (RDP), Z31350 (Genbank). N4Lid DOI: 10.1601/nm.1374

Bartonella tribocorum^{VP} Heller et al. 1998. Source of type material recommended for DOE sponsored genome sequencing by the JGI: CIP 105476. High-quality 16S rRNA sequence S000012687 (RDP), AJ003070 (Genbank). GOLD ID: Gi01157. GCAT ID: 000773_GCAT. Entrez genome id: 16098. 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.1375

Bartonella vinsonii subsp. vinsonii^{VP} (Weiss and Dasch 1982) Brenner et al. 1993. <== *Rochalimaea vinsonii* (basonym). Synonym links through N4Lid: 10.1601/ex.1376. Source of type material recommended for DOE sponsored genome sequencing by the JGI: ATCC 51672. High-quality 16S rRNA sequence S000622335 (RDP), L35052 (Genbank). N4Lid DOI: 10.1601/nm.1376

† *Rochalimaea vinsonii*^{VP} Weiss and Dasch 1982. ==> *Bartonella vinsonii subsp. vinsonii* (new combination). Synonym links through N4Lid: 10.1601/ex.1376. Source of type material recommended for DOE sponsored genome sequencing by the JGI: ATCC VR-152. High-quality 16S rRNA sequence S000622335 (RDP), L35052 (Genbank). N4Lid 10.1601/nm.9103

Bartonella vinsonii subsp. arupensis^{VP} Welch et al. 2000. Source of type material recommended for DOE sponsored genome sequencing by the JGI: ATCC 700727. N4Lid DOI: 10.1601/nm.1377

Bartonella vinsonii subsp. berkhoffii^{VP} Kordick et al. 1996. Source of type material recommended for DOE sponsored genome sequencing by the JGI: ATCC 51672. N4Lid DOI: 10.1601/nm.1378

Genus † *Grahamella*^{VP} (ex Brumpt 1911) Ristic and Kreier 1984. ≈ *Bartonella* (earlier heterotypic synonym), links through 10.1601/nm.1357. N4Lid 10.1601/nm.9121

Genus † *Rochalimaea*^{AL} (Macchiavello 1947) Krieg 1961. ≈ *Bartonella* (earlier heterotypic synonym), links through 10.1601/nm.1357. N4Lid 10.1601/nm.9009

Family *Brucellaceae*^{AL} Breed et al 1957. N4Lid DOI: 10.1601/nm.1379

Genus *Brucella*^{AL} Meyer and Shaw 1920. N4Lid DOI: 10.1601/nm.1380

Brucella melitensis^{AL} (Hughes 1893) Meyer and Shaw 1920. ≈ *Brucella abortus* (later heterotypic synonym), links through 10.1601/nm.1381. Source of type material recommended for DOE sponsored genome sequencing by the JGI: ATCC 23456. High-quality 16S rRNA sequence S000414547 (RDP), L26166 (Genbank). GOLD ID: Gc00074. GCAT ID: 000536_GCAT. Entrez genome id: 180. Sequenced strain: ATCC 23456 is type material. Genome sequencing is completed. Number of genomes of this species sequenced 5 (GOLD) 2 (NCBI). N4Lid DOI: 10.1601/nm.1381

† *Brucella abortus*^{AL} (Schmidt 1901) Meyer and Shaw 1920. ≈ *Brucella melitensis* (earlier heterotypic synonym), links through 10.1601/nm.1381. Source of type material recommended for DOE sponsored genome sequencing by the JGI: ATCC 23456. High-quality 16S rRNA sequence S000414547 (RDP), L26166 (Genbank). GOLD ID: Gc00263. GCAT ID: 000346_GCAT. Entrez genome id: 9619. Sequenced strain: ATCC 23456 is type material. Genome sequencing is completed. Number of genomes of this species sequenced 1 (GOLD) 1 (NCBI). N4Lid DOI: 10.1601/nm.1382

† *Brucella canis*^{AL} Carmichael and Bruner 1968. ≈ *Brucella melitensis* (earlier heterotypic synonym), links through 10.1601/nm.1381. Source of type material recommended for DOE sponsored genome sequencing by the JGI: ATCC 23365. N4Lid DOI: 10.1601/nm.1383

† *Brucella neotomae*^{AL} Stoenner and Lackman 1957. ≈ *Brucella melitensis* (earlier heterotypic synonym), links through 10.1601/nm.1381. Source of type material recommended for DOE sponsored genome sequencing by the JGI: ATCC 23459. N4Lid DOI: 10.1601/nm.1384

† *Brucella ovis*^{AL} Buddle 1956. ≈ *Brucella melitensis* (earlier heterotypic synonym), links through 10.1601/nm.1381. Source of type material recommended for DOE sponsored genome sequencing by the JGI: ATCC 25840. N4Lid DOI: 10.1601/nm.1385

† *Brucella suis*^{AL} Huddleson 1929. ≈ *Brucella melitensis* (earlier heterotypic synonym), links through 10.1601/nm.1381. Source of type material recommended for DOE sponsored genome

sequencing by the JGI: ATCC 23456. High-quality 16S rRNA sequence S000414547 (RDP), L26166 (Genbank). N4Lid DOI: 10.1601/nm.1386

Genus *Mycoplana*^{AL} Gray and Thornton 1928. N4Lid DOI: 10.1601/nm.1387

Mycoplana dimorpha^{AL} Gray and Thornton 1928. Source of type material recommended for DOE sponsored genome sequencing by the JGI: ATCC 4279. N4Lid DOI: 10.1601/nm.1388

Mycoplana bullata^{AL} Gray and Thornton 1928. Source of type material recommended for DOE sponsored genome sequencing by the JGI: ATCC 4278. High-quality 16S rRNA sequence S000468979 (RDP), D12785 (Genbank). N4Lid DOI: 10.1601/nm.1389

Mycoplana ramosa^{VP} Urakami et al. 1990. Source of type material recommended for DOE sponsored genome sequencing by the JGI: ATCC 49678. N4Lid DOI: 10.1601/nm.1390

Genus *Ochrobactrum*^{VP} Holmes et al. 1988. N4Lid DOI: 10.1601/nm.1392

Ochrobactrum anthropi^{VP} Holmes et al. 1988. Source of type material recommended for DOE sponsored genome sequencing by the JGI: ATCC 49188. High-quality 16S rRNA sequence S000438370 (RDP), U70978 (Genbank). GOLD ID: Gi00415. GCAT ID: 001281_GCAT. Entrez genome id: 13383. 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.1393

Ochrobactrum gallinifaecis^{VP} Kämpfer et al. 2003. Source of type material recommended for DOE sponsored genome sequencing by the JGI: DSM 15295. High-quality 16S rRNA sequence S000133471 (RDP), AJ519939 (Genbank). N4Lid DOI: 10.1601/nm.1394

Ochrobactrum grignonense^{VP} Lebuhn et al. 2000. Source of type material recommended for DOE sponsored genome sequencing by the JGI: DSM 13338. High-quality 16S rRNA sequence S000446569 (RDP), AJ242581 (Genbank). N4Lid DOI: 10.1601/nm.1395

Ochrobactrum intermedium^{VP} Velasco et al. 1998. Source of type material recommended for DOE sponsored genome sequencing by the JGI: CCUG 24694. High-quality 16S rRNA sequence S000650667 (RDP), AM114411 (Genbank). N4Lid DOI: 10.1601/nm.1396

Ochrobactrum lupini^{VP} Trujillo et al. 2006. Source of type material recommended for DOE sponsored genome sequencing by the JGI: DSM 16930. N4Lid DOI: 10.1601/nm.10199

Ochrobactrum oryzae^{VP} Tripathi et al. 2006. Source of type material recommended for DOE sponsored genome sequencing by the JGI: DSM 17471. High-quality 16S rRNA sequence S000544665 (RDP), AM041247 (Genbank). N4Lid DOI: 10.1601/nm.10167

Ochrobactrum tritici^{VP} Lebuhn et al. 2000. Source of type material recommended for DOE sponsored genome sequencing by the JGI: DSM 13340. High-quality 16S rRNA sequence S000446572 (RDP), AJ242584 (Genbank). N4Lid DOI: 10.1601/nm.1397

Genus *Pseudochrobactrum*^{VP} Kämpfer et al. 2006. N4Lid DOI: 10.1601/nm.10238

Pseudochrobactrum asaccharolyticum^{VP} Kämpfer et al. 2006. Source of type material recommended for DOE sponsored genome sequencing by the JGI: CCUG 46016. High-quality 16S rRNA sequence S000623992 (RDP), AM180485 (Genbank). N4Lid DOI: 10.1601/nm.10237

Pseudochrobactrum saccharolyticum^{VP} Kämpfer et al. 2006. Source of type material recommended for DOE sponsored genome sequencing by the JGI: CCUG 33852. High-quality 16S rRNA sequence S000623991 (RDP), AM180484 (Genbank). N4Lid DOI: 10.1601/nm.10236

Family *Phyllobacteriaceae*^{VP} Mergaert and Swings 2006. N4Lid DOI: 10.1601/nm.1398

Genus *Phyllobacterium*^{VP} (ex Knösel 1962) Knösel 1984. N4Lid DOI: 10.1601/nm.1399

Phyllobacterium myrsinacearum^{VP} (ex Knösel 1962) Knösel 1984. ≈ *Phyllobacterium rubiacearum* (later heterotypic synonym), links through 10.1601/nm.1400. Source of type material recommended for DOE sponsored genome sequencing by the JGI: ATCC 43590. High-quality 16S rRNA sequence S000468983 (RDP), D12789 (Genbank). N4Lid DOI: 10.1601/nm.1400

† *Phyllobacterium rubiacearum*^{VP} (ex von Faber 1912) Knösel 1984. ≈ *Phyllobacterium myrsinacearum* (earlier heterotypic synonym), links through 10.1601/nm.1400. Source of type material recommended for DOE sponsored genome sequencing by the JGI: ATCC 43591. N4Lid DOI: 10.1601/nm.1401

Phyllobacterium bourgognense^{VP} Mantelin et al. 2006. Source of type material recommended for DOE sponsored genome sequencing by the JGI: LMG 22837. High-quality 16S rRNA sequence S000618285 (RDP), AY785320 (Genbank). N4Lid DOI: 10.1601/nm.10018

- Phyllobacterium brassicacearum*^{VP} Mantelin et al. 2006. Source of type material recommended for DOE sponsored genome sequencing by the JGI: LMG 22836. High-quality 16S rRNA sequence S000618284 (RDP), AY785319 (Genbank). N4Lid DOI: 10.1601/nm.10017
- Phyllobacterium catacumbae*^{VP} Jurado et al. 2005. Source of type material recommended for DOE sponsored genome sequencing by the JGI: LMG 22520. High-quality 16S rRNA sequence S000548442 (RDP), AY636000 (Genbank). N4Lid 10.1601/nm.9521
- Phyllobacterium ifriqiyense*^{VP} Mantelin et al. 2006. Source of type material recommended for DOE sponsored genome sequencing by the JGI: LMG 22831. High-quality 16S rRNA sequence S000618290 (RDP), AY785325 (Genbank). N4Lid DOI: 10.1601/nm.10016
- Phyllobacterium leguminum*^{VP} Mantelin et al. 2006. Source of type material recommended for DOE sponsored genome sequencing by the JGI: LMG 22833. High-quality 16S rRNA sequence S000618288 (RDP), AY785323 (Genbank). N4Lid DOI: 10.1601/nm.10015
- Phyllobacterium trifolii*^{VP} Valverde et al. 2005. Source of type material recommended for DOE sponsored genome sequencing by the JGI: LMG 22712. High-quality 16S rRNA sequence S000444593 (RDP), AY786080 (Genbank). N4Lid 10.1601/nm.9626
- Genus *Aminobacter***^{VP} Urakami et al. 1992. ≈ *Aminobacter* (later heterotypic synonym), links through 10.1601./nm.1402. N4Lid DOI: 10.1601/nm.1402
- Aminobacter aminovorans*^{VP} (den Dooren de Jong 1926) Urakami et al. 1992. <==
Pseudomonas aminovorans (basonym). Synonym links through N4Lid: 10.1601/ex.2559. Source of type material recommended for DOE sponsored genome sequencing by the JGI: ATCC 23314. High-quality 16S rRNA sequence S000007613 (RDP), AJ011759 (Genbank). N4Lid DOI: 10.1601/nm.1403
- † *Chelatobacter heintzii*^{VP} Auling et al. 1993. ≈ *Aminobacter aminovorans* (earlier heterotypic synonym), links through 10.1601./nm.1403. Source of type material recommended for DOE sponsored genome sequencing by the JGI: ATCC 29600. N4Lid DOI: 10.1601/nm.1327
- † *Pseudomonas aminovorans*^{AL} den Dooren de Jong 1926. ==> *Aminobacter aminovorans* (new combination). Synonym links through N4Lid: 10.1601/ex.2559. Source of type material recommended for DOE sponsored genome sequencing by the JGI: ATCC 23314. High-quality 16S rRNA sequence S000007613 (RDP), AJ011759 (Genbank). N4Lid DOI: 10.1601/nm.2559
- Aminobacter aganoensis*^{VP} Urakami et al. 1992. Source of type material recommended for DOE sponsored genome sequencing by the JGI: nm.1405. High-quality 16S rRNA sequence S000005350 (RDP), AJ011760 (Genbank). N4Lid DOI: 10.1601/nm.1404
- Aminobacter ciceronei*^{VP} McDonald et al. 2005. Source of type material recommended for DOE sponsored genome sequencing by the JGI: ATCC 202197. High-quality 16S rRNA sequence S000011492 (RDP), AF034798 (Genbank). N4Lid 10.1601/nm.9615
- Aminobacter lissarensis*^{VP} McDonald et al. 2005. Source of type material recommended for DOE sponsored genome sequencing by the JGI: CCUG 50579. High-quality 16S rRNA sequence S000012284 (RDP), AF107722 (Genbank). N4Lid 10.1601/nm.9616
- Aminobacter niigataensis*^{VP} Urakami et al. 1992. Source of type material recommended for DOE sponsored genome sequencing by the JGI: ATCC 49932. High-quality 16S rRNA sequence S000016010 (RDP), AJ011761 (Genbank). N4Lid DOI: 10.1601/nm.1405
- Genus † *Chelatobacter***^{VP} Auling et al. 1993. ≈ *Aminobacter* (earlier heterotypic synonym), links through 10.1601./nm.1402. N4Lid DOI: 10.1601/nm.1326
- Genus *Aquamicrobium***^{VP} Bambauer et al. 1998. N4Lid DOI: 10.1601/nm.1406
- Aquamicrobium defluvii*^{VP} Bambauer et al. 1998. Source of type material recommended for DOE sponsored genome sequencing by the JGI: DSM 11603. High-quality 16S rRNA sequence S000018962 (RDP), Y15403 (Genbank). N4Lid DOI: 10.1601/nm.1407
- Genus *Defluvibacter***^{VP} Fritsche et al. 1999. N4Lid DOI: 10.1601/nm.1408
- Defluvibacter lusatiensis*^{VP} corrig. Fritsche et al. 1999. Source of type material recommended for DOE sponsored genome sequencing by the JGI: DSM 11099. High-quality 16S rRNA sequence S000020842 (RDP), AJ132378 (Genbank). N4Lid DOI: 10.1601/nm.1409
- Genus *Hoeflea***^{VP} Peix et al. 2005. N4Lid 10.1601/nm.9438

Hoeflea alexandrii^{VP} Palacios et al. 2006. Source of type material recommended for DOE sponsored genome sequencing by the JGI: DSM 16655. High-quality 16S rRNA sequence S000628776 (RDP), AJ786600 (Genbank). N4Lid DOI: 10.1601/nm.10253

Hoeflea marina^{VP} Peix et al. 2005. Source of type material recommended for DOE sponsored genome sequencing by the JGI: ATCC 25654. High-quality 16S rRNA sequence S000540592 (RDP), AY598817 (Genbank). N4Lid 10.1601/nm.9437

Hoeflea phototrophica^{VP} Biebl et al. 2006. Source of type material recommended for DOE sponsored genome sequencing by the JGI: DSM 17068. High-quality 16S rRNA sequence S000323742 (RDP), AJ582088 (Genbank). GOLD ID: Gi01415. GCAT ID: 000879_GCAT. Sequenced strain: DFL-43 is from a non-type strain. Genome sequencing is incomplete. Number of genomes of this species sequenced 1 (GOLD). N4Lid 10.1601/nm.9992

Genus *Liberibacter*^C N4Lid DOI: 10.1601/nm.1410

Liberibacter asiaticus^C Jagoueix et al. 1994. Source of type material recommended for DOE sponsored genome sequencing by the JGI: No viable deposit available. High-quality 16S rRNA sequence S000414518 (RDP), L22532 (Genbank). N4Lid DOI: 10.1601/nm.1411

Liberibacter africanus subsp. africanus^C Jagoueix et al. 1994. Source of type material recommended for DOE sponsored genome sequencing by the JGI: No viable deposit available. N4Lid DOI: 10.1601/nm.1412

Liberibacter africanus subsp. capensis^C Garnier et al. 2000. Source of type material recommended for DOE sponsored genome sequencing by the JGI: No viable deposit available. N4Lid DOI: 10.1601/nm.1413

Genus *Mesorhizobium*^{VP} Jarvis et al. 1997. GOLD ID: Gc00399. GCAT ID: 000210_GCAT. Entrez genome id: 10690. Sequenced strain: BNC1 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.1414

Mesorhizobium loti^{VP} (Jarvis et al. 1982) Jarvis et al. 1997. <== *Rhizobium loti* (basonym). Synonym links through N4Lid: 10.1601/ex.1293. Source of type material recommended for DOE sponsored genome sequencing by the JGI: ATCC 700743. High-quality 16S rRNA sequence S000380772 (RDP), D14514 (Genbank). GOLD ID: Gc00040. GCAT ID: 000570_GCAT. Entrez genome id: 18. Sequenced strain: MAFF303099 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.1415

† *Rhizobium loti*^{VP} Jarvis et al. 1982. ==> *Mesorhizobium loti* (new combination). Synonym links through N4Lid: 10.1601/ex.1293. Source of type material recommended for DOE sponsored genome sequencing by the JGI: ATCC 700743. High-quality 16S rRNA sequence S000380772 (RDP), D14514 (Genbank). GOLD ID: Gc00040. GCAT ID: 000570_GCAT. Entrez genome id: 18. Sequenced strain: MAFF303099 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.1293

Mesorhizobium amorphae^{VP} Wang et al. 1999. Source of type material recommended for DOE sponsored genome sequencing by the JGI: ATCC BAA-114. High-quality 16S rRNA sequence S000427998 (RDP), AF041442 (Genbank). N4Lid DOI: 10.1601/nm.1416

Mesorhizobium chacoense^{VP} Velázquez et al. 2001. Source of type material recommended for DOE sponsored genome sequencing by the JGI: LMG 19008. High-quality 16S rRNA sequence S000013161 (RDP), AJ278249 (Genbank). N4Lid DOI: 10.1601/nm.1417

Mesorhizobium ciceri^{VP} (Nour et al. 1994) Jarvis et al. 1997. <== *Rhizobium ciceri* (basonym). Synonym links through N4Lid: 10.1601/ex.1281. Source of type material recommended for DOE sponsored genome sequencing by the JGI: ATCC 51585. High-quality 16S rRNA sequence S000437056 (RDP), U07934 (Genbank). N4Lid DOI: 10.1601/nm.1418

† *Rhizobium ciceri*^{VP} Nour et al. 1994. ==> *Mesorhizobium ciceri* (new combination). Synonym links through N4Lid: 10.1601/ex.1281. Source of type material recommended for DOE sponsored genome sequencing by the JGI: ATCC 51585. High-quality 16S rRNA sequence S000437056 (RDP), U07934 (Genbank). N4Lid DOI: 10.1601/nm.1281

Mesorhizobium huakuii^{VP} (Chen et al. 1991) Jarvis et al. 1997. <== *Rhizobium huakuii* (basonym). Synonym links through N4Lid: 10.1601/ex.1288. Source of type material recommended for DOE sponsored genome sequencing by the JGI: ATCC 51122. High-quality 16S rRNA sequence S000468991 (RDP), D12797 (Genbank). N4Lid DOI: 10.1601/nm.1419

† *Rhizobium huakuii*^{VP} Chen et al. 1991. ==> *Mesorhizobium huakuii* (new combination).
Synonym links through N4Lid: 10.1601/ex.1288. Source of type material recommended for DOE sponsored genome sequencing by the JGI: ATCC 51122. High-quality 16S rRNA sequence S000468991 (RDP), D12797 (Genbank). N4Lid DOI: 10.1601/nm.1288

Mesorhizobium mediterraneum^{VP} (Nour et al. 1995) Jarvis et al. 1997. <== *Rhizobium mediterraneum* (basonym). Synonym links through N4Lid: 10.1601/ex.1296. Source of type material recommended for DOE sponsored genome sequencing by the JGI: ATCC 51670. High-quality 16S rRNA sequence S000435922 (RDP), L38825 (Genbank). N4Lid DOI: 10.1601/nm.1420

† *Rhizobium mediterraneum*^{VP} Nour et al. 1995. ==> *Mesorhizobium mediterraneum* (new combination). Synonym links through N4Lid: 10.1601/ex.1296. Source of type material recommended for DOE sponsored genome sequencing by the JGI: ATCC 51670. High-quality 16S rRNA sequence S000435922 (RDP), L38825 (Genbank). N4Lid DOI: 10.1601/nm.1296

Mesorhizobium plurifarum^{VP} de Lajudie et al. 1998. Source of type material recommended for DOE sponsored genome sequencing by the JGI: CIP 105884. High-quality 16S rRNA sequence S000003134 (RDP), Y14158 (Genbank). N4Lid DOI: 10.1601/nm.1421

Mesorhizobium septentrionale^{VP} Gao et al. 2004. Source of type material recommended for DOE sponsored genome sequencing by the JGI: CCBAU 11014. High-quality 16S rRNA sequence S000458751 (RDP), AF508207 (Genbank). N4Lid 10.1601/nm.8693

Mesorhizobium temperatum^{VP} Gao et al. 2004. Source of type material recommended for DOE sponsored genome sequencing by the JGI: CCBAU 11018. High-quality 16S rRNA sequence S000458752 (RDP), AF508208 (Genbank). N4Lid 10.1601/nm.8694

Mesorhizobium thioganicum^{VP} Ghosh and Roy 2006. Source of type material recommended for DOE sponsored genome sequencing by the JGI: LMG 22697. High-quality 16S rRNA sequence S000447839 (RDP), AJ864462 (Genbank). N4Lid 10.1601/nm.9842

Mesorhizobium tianshanense^{VP} (Chen et al. 1995) Jarvis et al. 1997. <== *Rhizobium tianshanense* (basonym). Synonym links through N4Lid: 10.1601/ex.1304. Source of type material recommended for DOE sponsored genome sequencing by the JGI: DSM 11417. High-quality 16S rRNA sequence S000428003 (RDP), AF041447 (Genbank). N4Lid DOI: 10.1601/nm.1422

† *Rhizobium tianshanense*^{VP} Chen et al. 1995. ==> *Mesorhizobium tianshanense* (new combination). Synonym links through N4Lid: 10.1601/ex.1304. Source of type material recommended for DOE sponsored genome sequencing by the JGI: DSM 11417. High-quality 16S rRNA sequence S000428003 (RDP), AF041447 (Genbank). N4Lid DOI: 10.1601/nm.1304

Genus *Nitratireductor*^{VP} Labbé et al. 2004. N4Lid DOI: 10.1601/nm.1423

Nitratireductor aquibiodomus^{VP} Labbé et al. 2004. Source of type material recommended for DOE sponsored genome sequencing by the JGI: ATCC BAA-762. High-quality 16S rRNA sequence S000432025 (RDP), AF534573 (Genbank). N4Lid DOI: 10.1601/nm.1424

Genus *Pseudaminobacter*^{VP} Kämpfer et al. 1999. N4Lid DOI: 10.1601/nm.1425

Pseudaminobacter salicylatoxidans^{VP} Kämpfer et al. 1999. Source of type material recommended for DOE sponsored genome sequencing by the JGI: DSM 6986. High-quality 16S rRNA sequence S000020615 (RDP), AF072542 (Genbank). N4Lid DOI: 10.1601/nm.1426

Pseudaminobacter defluvii^{VP} Kämpfer et al. 1999. Source of type material recommended for DOE sponsored genome sequencing by the JGI: CIP 107185. N4Lid DOI: 10.1601/nm.1427

Family *Methylocystaceae*^{VP} Bowman 2006. N4Lid DOI: 10.1601/nm.1428

Genus *Methylocystis*^{VP} (ex Whittenbury et al. 1970) Bowman et al. 1993. N4Lid DOI: 10.1601/nm.1429

Methylocystis parvus^{VP} (ex Whittenbury et al. 1970) Bowman et al. 1993. Source of type material recommended for DOE sponsored genome sequencing by the JGI: ATCC 35066. High-quality 16S rRNA sequence S000436168 (RDP), M29026 (Genbank). N4Lid DOI: 10.1601/nm.1430

Methylocystis echinoides^{VP} (ex Gal'chenko et al. 1977) Bowman et al. 1993. Source of type material recommended for DOE sponsored genome sequencing by the JGI: UNIQEM 25. High-quality 16S rRNA sequence S000014117 (RDP), AJ458473 (Genbank). N4Lid DOI: 10.1601/nm.1431

Methylocystis rosea^{VP} Wartiainen et al. 2006. Source of type material recommended for DOE sponsored genome sequencing by the JGI: ATCC BAA-1196. High-quality 16S rRNA sequence S000128450 (RDP), AJ414656 (Genbank). N4Lid 10.1601/nm.9937

Genus *Albibacter*^{VP} Doronina et al. 2001. N4Lid DOI: 10.1601/nm.1432

Albibacter methylovorans^{VP} Doronina et al. 2001. Source of type material recommended for DOE sponsored genome sequencing by the JGI: DSM 13819. High-quality 16S rRNA sequence S000390462 (RDP), AF273213 (Genbank). N4Lid DOI: 10.1601/nm.1433

Genus *Methylopila*^{VP} Doronina et al. 1998. N4Lid DOI: 10.1601/nm.1434

Methylopila capsulata^{VP} Doronina et al. 1998. Source of type material recommended for DOE sponsored genome sequencing by the JGI: ATCC 700716. High-quality 16S rRNA sequence S000022501 (RDP), AF004844 (Genbank). N4Lid DOI: 10.1601/nm.1435

Methylopila helvetica^{VP} Doronina et al. 2000. Source of type material recommended for DOE sponsored genome sequencing by the JGI: CIP 106788. High-quality 16S rRNA sequence S000389512 (RDP), AF227126 (Genbank). N4Lid DOI: 10.1601/nm.1436

Genus *Methylosinus*^{VP} (ex Whittenbury et al. 1970) Bowman et al. 1993. N4Lid DOI: 10.1601/nm.1437

Methylosinus trichosporium^{VP} (ex Whittenbury et al. 1970) Bowman et al. 1993. Source of type material recommended for DOE sponsored genome sequencing by the JGI: ATCC 35070. High-quality 16S rRNA sequence S000436166 (RDP), M29024 (Genbank). N4Lid DOI: 10.1601/nm.1438

Methylosinus sporium^{VP} (ex Whittenbury et al. 1970) Bowman et al. 1993. Source of type material recommended for DOE sponsored genome sequencing by the JGI: ATCC 35069. High-quality 16S rRNA sequence S000089783 (RDP), Y18946 (Genbank). N4Lid DOI: 10.1601/nm.1439

Genus *Pleomorphomonas*^{VP} Xie and Yokota 2005. N4Lid 10.1601/nm.9445

Pleomorphomonas koreensis^{VP} Im et al. 2006. Source of type material recommended for DOE sponsored genome sequencing by the JGI: KCTC 12246. High-quality 16S rRNA sequence S000457893 (RDP), AB127972 (Genbank). N4Lid DOI: 10.1601/nm.10165

Pleomorphomonas oryzae^{VP} Xie and Yokota 2005 Xie and Yokota 2005. Source of type material recommended for DOE sponsored genome sequencing by the JGI: ATCC BAA-940. High-quality 16S rRNA sequence S000539067 (RDP), AB159680 (Genbank). N4Lid 10.1601/nm.9444

Genus *Terasakiella*^{VP} Satomi et al. 2002. N4Lid DOI: 10.1601/nm.1440

Terasakiella pusilla^{VP} (Terasaki 1973) Satomi et al. 2002. <== *Oceanospirillum pusillum* (basonym). Synonym links through N4Lid: 10.1601/ex.2456. Source of type material recommended for DOE sponsored genome sequencing by the JGI: ATCC 33338. High-quality 16S rRNA sequence S000427371 (RDP), AB006768 (Genbank). N4Lid DOI: 10.1601/nm.1441

† *Oceanospirillum pusillum*^{AL} (Terasaki 1973) Terasaki 1979. ==> *Terasakiella pusilla* (new combination). Synonym links through N4Lid: 10.1601/ex.2456. Source of type material recommended for DOE sponsored genome sequencing by the JGI: ATCC 33338. High-quality 16S rRNA sequence S000427371 (RDP), AB006768 (Genbank). N4Lid DOI: 10.1601/nm.2456

Family *Beijerinckiaceae*^{VP} Garrity et al 2006. N4Lid DOI: 10.1601/nm.1442

Genus *Beijerinckia*^{AL} Derx 1950. N4Lid DOI: 10.1601/nm.1443

Beijerinckia indica subsp. indica^{VP} (Starkey and De 1939) Derx 1950. Source of type material recommended for DOE sponsored genome sequencing by the JGI: ATCC 9039. High-quality 16S rRNA sequence S000436435 (RDP), M59060 (Genbank). GOLD ID: Gi01551. GCAT ID: 000860_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.1444

Beijerinckia indica subsp. lacticogenes^{VP} Thompson and Skerman 1981. Source of type material recommended for DOE sponsored genome sequencing by the JGI: ATCC 19361. N4Lid DOI: 10.1601/nm.1445

Beijerinckia derxii subsp. derxii^{VP} Tchan 1957. Source of type material recommended for DOE sponsored genome sequencing by the JGI: ATCC 49361. N4Lid DOI: 10.1601/nm.1446

Beijerinckia derxii subsp. *venezuelae*^{VP} Thompson and Skerman 1981. Source of type material recommended for DOE sponsored genome sequencing by the JGI: DSM 2329. N4Lid DOI: 10.1601/nm.1447

Beijerinckia fluminensis^{AL} Döbereiner and Ruschel 1958. Source of type material recommended for DOE sponsored genome sequencing by the JGI: ATCC 35012. N4Lid DOI: 10.1601/nm.1448

Beijerinckia mobilis^{AL} Derx 1950. Source of type material recommended for DOE sponsored genome sequencing by the JGI: ATCC 35011. N4Lid DOI: 10.1601/nm.1449

Genus *Chelatococcus*^{VP} Auling et al. 1993. N4Lid DOI: 10.1601/nm.1450

Chelatococcus asaccharovorans^{VP} Auling et al. 1993. Source of type material recommended for DOE sponsored genome sequencing by the JGI: ATCC 51531. High-quality 16S rRNA sequence S000021715 (RDP), AJ294349 (Genbank). N4Lid DOI: 10.1601/nm.1451

Genus *Methylocapsa*^{VP} Dedysh et al. 2002. N4Lid DOI: 10.1601/nm.1452

Methylocapsa acidiphila^{VP} Dedysh et al. 2002. Source of type material recommended for DOE sponsored genome sequencing by the JGI: DSM 13967. High-quality 16S rRNA sequence S000020000 (RDP), AJ278726 (Genbank). GOLD ID: Gi01550. GCAT ID: 001762_GCAT. Sequenced strain: DSM 13967 is type material. Genome sequencing is incomplete. Number of genomes of this species sequenced 1 (GOLD). N4Lid DOI: 10.1601/nm.1453

Genus *Methylocella*^{VP} Dedysh et al. 2000. N4Lid DOI: 10.1601/nm.1454

Methylocella palustris^{VP} Dedysh et al. 2000. Source of type material recommended for DOE sponsored genome sequencing by the JGI: ATCC 700799. High-quality 16S rRNA sequence S000127710 (RDP), Y17144 (Genbank). N4Lid DOI: 10.1601/nm.1455

Methylocella tundrae^{VP} Dedysh et al. 2004. Source of type material recommended for DOE sponsored genome sequencing by the JGI: DSM 15673. High-quality 16S rRNA sequence S000264333 (RDP), AJ555244 (Genbank). N4Lid DOI: 10.1601/nm.1456

Methylocella silvestris^{VP} Dunfield et al. 2003. Source of type material recommended for DOE sponsored genome sequencing by the JGI: DSM 15510. High-quality 16S rRNA sequence S000146627 (RDP), AJ491847 (Genbank). GOLD ID: Gi01549. GCAT ID: 001763_GCAT. Sequenced strain: DSM 15510 is type material. Genome sequencing is incomplete. Number of genomes of this species sequenced 1 (GOLD). N4Lid DOI: 10.1601/nm.1457

Family *Bradyrhizobiaceae*^{VP} Garrity et al 2006. N4Lid DOI: 10.1601/nm.1458

Genus *Bradyrhizobium*^{VP} Jordan 1982. GOLD ID: Gi00922. GCAT ID: 000788_GCAT. Entrez genome id: 16137. Sequenced strain: BTAi1 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.1459

Bradyrhizobium japonicum^{VP} (Kirchner 1896) Jordan 1982. <== *Rhizobium japonicum* (basonym). Synonym links through N4Lid: 10.1601/ex.1292. Source of type material recommended for DOE sponsored genome sequencing by the JGI: ATCC 10324. High-quality 16S rRNA sequence S000438365 (RDP), U69638 (Genbank). GOLD ID: Gc00116. GCAT ID: 000494_GCAT. Entrez genome id: 17. Sequenced strain: USDA110 is from a non-type strain. Genome sequencing is completed. Number of genomes of this species sequenced 3 (GOLD) 1 (NCBI). N4Lid DOI: 10.1601/nm.1460

† *Rhizobium japonicum*^{AL} (Kirchner 1896) Buchanan 1926. ==> *Bradyrhizobium japonicum* (new combination). Synonym links through N4Lid: 10.1601/ex.1292. Source of type material recommended for DOE sponsored genome sequencing by the JGI: ATCC 10324. High-quality 16S rRNA sequence S000438365 (RDP), U69638 (Genbank). GOLD ID: Gc00116. GCAT ID: 000494_GCAT. Entrez genome id: 17. Sequenced strain: USDA110 is from a non-type strain. Genome sequencing is completed. Number of genomes of this species sequenced 3 (GOLD) 1 (NCBI). N4Lid DOI: 10.1601/nm.1292

Bradyrhizobium betae^{VP} Rivas et al. 2004. Source of type material recommended for DOE sponsored genome sequencing by the JGI: LMG 21987. High-quality 16S rRNA sequence S000368558 (RDP), AY372184 (Genbank). N4Lid DOI: 10.1601/nm.8517

Bradyrhizobium canariense^{VP} Vinuesa et al. 2005. Source of type material recommended for DOE sponsored genome sequencing by the JGI: ATCC BAA-1002. High-quality 16S rRNA sequence S000270387 (RDP), AJ558025 (Genbank). N4Lid 10.1601/nm.9343

- Bradyrhizobium elkanii*^{VP} Kuykendall et al. 1993. Source of type material recommended for DOE sponsored genome sequencing by the JGI: ATCC 49852. High-quality 16S rRNA sequence S000437501 (RDP), U35000 (Genbank). N4Lid DOI: 10.1601/nm.1461
- Bradyrhizobium liaoningense*^{VP} Xu et al. 1995. Source of type material recommended for DOE sponsored genome sequencing by the JGI: ATCC 700350. High-quality 16S rRNA sequence S000392337 (RDP), AF363132 (Genbank). N4Lid DOI: 10.1601/nm.1462
- Bradyrhizobium yuanmingense*^{VP} Yao et al. 2002. Source of type material recommended for DOE sponsored genome sequencing by the JGI: CIP 108027. High-quality 16S rRNA sequence S000498783 (RDP), AF193818 (Genbank). N4Lid DOI: 10.1601/nm.1463
- Genus Afipia**^{VP} Brenner et al. 1992. N4Lid DOI: 10.1601/nm.1464
- Afipia felis*^{VP} Brenner et al. 1992. Source of type material recommended for DOE sponsored genome sequencing by the JGI: ATCC 53690. N4Lid DOI: 10.1601/nm.1465
- Afipia birgiae*^{VP} La Scola et al. 2002. Source of type material recommended for DOE sponsored genome sequencing by the JGI: CCUG 43108. High-quality 16S rRNA sequence S000390733 (RDP), AF288304 (Genbank). N4Lid DOI: 10.1601/nm.1466
- Afipia broomeae*^{VP} Brenner et al. 1992. Source of type material recommended for DOE sponsored genome sequencing by the JGI: ATCC 49717. High-quality 16S rRNA sequence S000438671 (RDP), U87759 (Genbank). N4Lid DOI: 10.1601/nm.1467
- Afipia clevelandensis*^{VP} Brenner et al. 1992. Source of type material recommended for DOE sponsored genome sequencing by the JGI: ATCC 49720. N4Lid DOI: 10.1601/nm.1468
- Afipia massiliensis*^{VP} La Scola et al. 2002. Source of type material recommended for DOE sponsored genome sequencing by the JGI: CCUG 45153. High-quality 16S rRNA sequence S000434611 (RDP), AY029562 (Genbank). N4Lid DOI: 10.1601/nm.1469
- Genus Agromonas**^{VP} Ohta and Hattori 1985. N4Lid DOI: 10.1601/nm.1470
- Agromonas oligotrophica*^{VP} Ohta and Hattori 1985. Source of type material recommended for DOE sponsored genome sequencing by the JGI: ATCC 43045. High-quality 16S rRNA sequence S000413927 (RDP), D78366 (Genbank). N4Lid DOI: 10.1601/nm.1471
- Genus Balneimonas**^{VP} corrig. Takeda et al. 2004. N4Lid DOI: 10.1601/nm.8509
- Balneimonas flocculans*^{VP} corrig. Takeda et al. 2004. Source of type material recommended for DOE sponsored genome sequencing by the JGI: ATCC BAA-817. High-quality 16S rRNA sequence S000385743 (RDP), AB098515 (Genbank). N4Lid DOI: 10.1601/nm.8510
- Genus Blastobacter**^{AL} Zavarzin 1961. N4Lid DOI: 10.1601/nm.1472
- Blastobacter henricii*^{AL} Zavarzin 1961. Source of type material recommended for DOE sponsored genome sequencing by the JGI: No viable deposit available. N4Lid DOI: 10.1601/nm.1473
- Blastobacter aggregatus*^{VP} Hirsch and Müller 1986. Source of type material recommended for DOE sponsored genome sequencing by the JGI: ATCC 43293. High-quality 16S rRNA sequence S000021625 (RDP), X73041 (Genbank). N4Lid DOI: 10.1601/nm.1474
- Blastobacter capsulatus*^{VP} Hirsch and Müller 1986. Source of type material recommended for DOE sponsored genome sequencing by the JGI: ATCC 43294. High-quality 16S rRNA sequence S000015514 (RDP), X73042 (Genbank). N4Lid DOI: 10.1601/nm.1475
- Blastobacter denitrificans*^{VP} Hirsch and Müller 1986. Source of type material recommended for DOE sponsored genome sequencing by the JGI: ATCC 43295. High-quality 16S rRNA sequence S000364326 (RDP), X66025 (Genbank). N4Lid DOI: 10.1601/nm.1476
- Genus Bosea**^{VP} Das et al. 1996. N4Lid DOI: 10.1601/nm.1478
- Bosea thiooxidans*^{VP} Das et al. 1996. Source of type material recommended for DOE sponsored genome sequencing by the JGI: ATCC 700366. High-quality 16S rRNA sequence S000019652 (RDP), X81044 (Genbank). N4Lid DOI: 10.1601/nm.1479
- Bosea eneae*^{VP} La Scola et al. 2003. Source of type material recommended for DOE sponsored genome sequencing by the JGI: CCUG 43111. High-quality 16S rRNA sequence S000390729 (RDP), AF288300 (Genbank). N4Lid DOI: 10.1601/nm.1480
- Bosea massiliensis*^{VP} La Scola et al. 2003. Source of type material recommended for DOE sponsored genome sequencing by the JGI: CCUG 43117. High-quality 16S rRNA sequence S000390738 (RDP), AF288309 (Genbank). N4Lid DOI: 10.1601/nm.1481

Bosea minatitlanensis^{VP} Ouattara et al. 2003. Source of type material recommended for DOE sponsored genome sequencing by the JGI: ATCC 700918. High-quality 16S rRNA sequence S000390460 (RDP), AF273081 (Genbank). N4Lid DOI: 10.1601/nm.1482

Bosea vestrisii^{VP} La Scola et al. 2003. Source of type material recommended for DOE sponsored genome sequencing by the JGI: CCUG 43114. High-quality 16S rRNA sequence S000390735 (RDP), AF288306 (Genbank). N4Lid DOI: 10.1601/nm.1483

Genus *Nitrobacter*^{AL} Winogradsky 1892. GOLD ID: Gi00855. GCAT ID: 001263_GCAT. Entrez genome id: 13538. Sequenced strain: Nb 311A 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.1484

Nitrobacter winogradskyi^{AL} Winslow et al. 1917. Source of type material recommended for DOE sponsored genome sequencing by the JGI: ATCC 25391. High-quality 16S rRNA sequence S000735447 (RDP). GOLD ID: Gc00298. GCAT ID: 000312_GCAT. Entrez genome id: 13474. Sequenced strain: ATCC 25391 is type material. Genome sequencing is completed. Number of genomes of this species sequenced 1 (GOLD) 1 (NCBI). N4Lid DOI: 10.1601/nm.1485

Nitrobacter alkalicus^{VP} Sorokin et al. 1999. Source of type material recommended for DOE sponsored genome sequencing by the JGI: LMD 97.163. High-quality 16S rRNA sequence S000428396 (RDP), AF069956 (Genbank). N4Lid DOI: 10.1601/nm.1486

Nitrobacter hamburgensis^{VP} Bock et al. 2001. Source of type material recommended for DOE sponsored genome sequencing by the JGI: DSM 10229. High-quality 16S rRNA sequence S000414382 (RDP), L11663 (Genbank). GOLD ID: Gc00372. GCAT ID: 000238_GCAT. Entrez genome id: 13473. Sequenced strain: X14 is type material. Genome sequencing is completed. Number of genomes of this species sequenced 1 (GOLD) 1 (NCBI). N4Lid DOI: 10.1601/nm.1487

Nitrobacter vulgaris^{VP} Bock et al. 2001. Source of type material recommended for DOE sponsored genome sequencing by the JGI: DSM 10236. High-quality 16S rRNA sequence S000608915 (RDP), AM114522 (Genbank). N4Lid DOI: 10.1601/nm.1488

Genus *Oligotropha*^{VP} Meyer et al. 1994. N4Lid DOI: 10.1601/nm.1489

Oligotropha carboxidovorans^{VP} (ex Meyer and Schlegel 1978) Meyer et al. 1994. Source of type material recommended for DOE sponsored genome sequencing by the JGI: ATCC 49405. N4Lid DOI: 10.1601/nm.1490

Genus *Rhodoblastus*^{VP} Imhoff 2001. N4Lid DOI: 10.1601/nm.1491

Rhodoblastus acidophilus^{VP} (Pfennig 1969) Imhoff 2001. <== *Rhodopseudomonas acidophila* (basonym). Synonym links through N4Lid: 10.1601/ex.1495. Source of type material recommended for DOE sponsored genome sequencing by the JGI: ATCC 25092. N4Lid DOI: 10.1601/nm.1492

† *Rhodopseudomonas acidophila*^{AL} Pfennig 1969. ==> *Rhodoblastus acidophilus* (new combination). Synonym links through N4Lid: 10.1601/ex.1495. Source of type material recommended for DOE sponsored genome sequencing by the JGI: ATCC 25092. N4Lid DOI: 10.1601/nm.1495

Rhodoblastus sphagnicola^{VP} Kulichevskaya et al. 2006. Source of type material recommended for DOE sponsored genome sequencing by the JGI: DSM 16996. High-quality 16S rRNA sequence S000544642 (RDP), AM040096 (Genbank). N4Lid DOI: 10.1601/nm.10113

Genus *Rhodopseudomonas*^{AL} Czurda and Maresch 1937. N4Lid DOI: 10.1601/nm.1493

Rhodopseudomonas palustris^{AL} (Molisch 1907) van Niel 1944. ≈ *Rhodopseudomonas rutila* (later heterotypic synonym), links through 10.1601/nm.1494. Source of type material recommended for DOE sponsored genome sequencing by the JGI: ATCC 17001. High-quality 16S rRNA sequence S000439317 (RDP), D12700 (Genbank). GOLD ID: Gc00165. GCAT ID: 000445_GCAT. Entrez genome id: 57. Sequenced strain: ATCC BAA-98 is from a non-type strain. Genome sequencing is completed. Number of genomes of this species sequenced 6 (GOLD) 5 (NCBI). N4Lid DOI: 10.1601/nm.1494

† *Rhodopseudomonas rutila*^{VP} Akiba et al. 1983. ≈ *Rhodopseudomonas palustris* (earlier heterotypic synonym), links through 10.1601/nm.1494. Source of type material recommended for DOE sponsored genome sequencing by the JGI: ATCC 17001. High-quality 16S rRNA sequence S000413604 (RDP), D25312 (Genbank). N4Lid DOI: 10.1601/nm.1506

Rhodopseudomonas faecalis^{VP} Zhang et al. 2002. Source of type material recommended for DOE sponsored genome sequencing by the JGI: JCM 11668. High-quality 16S rRNA sequence S000498560 (RDP), AF123085 (Genbank). N4Lid DOI: 10.1601/nm.1499

Rhodopseudomonas julia^{VP} Kompantseva 1993. Source of type material recommended for DOE sponsored genome sequencing by the JGI: ATCC 51105. High-quality 16S rRNA sequence S000247921 (RDP), AY428572 (Genbank). N4Lid DOI: 10.1601/nm.1502

Rhodopseudomonas rhenobacensis^{VP} Hougardy et al. 2000. Source of type material recommended for DOE sponsored genome sequencing by the JGI: DSM 12706. High-quality 16S rRNA sequence S000385187 (RDP), AB087719 (Genbank). N4Lid DOI: 10.1601/nm.1504

Family Hyphomicrobiaceae^{AL} Babudieri 1950. N4Lid DOI: 10.1601/nm.1511

Genus Hyphomicrobium^{AL} Stutzer and Hartleb 1899. N4Lid DOI: 10.1601/nm.1512

Hyphomicrobium vulgare^{AL} Stutzer and Hartleb 1898. Source of type material recommended for DOE sponsored genome sequencing by the JGI: ATCC 33404. N4Lid DOI: 10.1601/nm.1513

Hyphomicrobium aestuarii^{VP} Hirsch 1989. Source of type material recommended for DOE sponsored genome sequencing by the JGI: ATCC 27483. N4Lid DOI: 10.1601/nm.1514

Hyphomicrobium chloromethanicum^{VP} McDonald et al. 2001. Source of type material recommended for DOE sponsored genome sequencing by the JGI: NCIMB 13687. High-quality 16S rRNA sequence S000388993 (RDP), AF198623 (Genbank). N4Lid DOI: 10.1601/nm.1515

Hyphomicrobium coagulans^{VP} (ex Takada 1975) Hirsch 1989. Source of type material recommended for DOE sponsored genome sequencing by the JGI: Takada 10-2. N4Lid DOI: 10.1601/nm.1516

Hyphomicrobium denitrificans^{VP} Urakami et al. 1995. Source of type material recommended for DOE sponsored genome sequencing by the JGI: ATCC 51888. High-quality 16S rRNA sequence S000010396 (RDP), Y14308 (Genbank). N4Lid DOI: 10.1601/nm.1517

Hyphomicrobium facile subsp. facile^{VP} corrig. Hirsch 1989. Source of type material recommended for DOE sponsored genome sequencing by the JGI: ATCC 27485. High-quality 16S rRNA sequence S000007321 (RDP), Y14311 (Genbank). N4Lid DOI: 10.1601/nm.1518

Hyphomicrobium facile subsp. tolerans^{VP} corrig. Hirsch 1989. Source of type material recommended for DOE sponsored genome sequencing by the JGI: ATCC 27489. High-quality 16S rRNA sequence S000007321 (RDP), Y14311 (Genbank). N4Lid DOI: 10.1601/nm.1519

Hyphomicrobium facile subsp. ureaphilum^{VP} corrig. Hirsch 1989. Source of type material recommended for DOE sponsored genome sequencing by the JGI: ATCC 27492. High-quality 16S rRNA sequence S000006233 (RDP), Y14310 (Genbank). N4Lid DOI: 10.1601/nm.1520

Hyphomicrobium hollandicum^{VP} Hirsch 1989. Source of type material recommended for DOE sponsored genome sequencing by the JGI: ATCC 27498. High-quality 16S rRNA sequence S000016421 (RDP), Y14303 (Genbank). N4Lid DOI: 10.1601/nm.1521

Hyphomicrobium methylovorum^{VP} Izumi et al. 1983. Source of type material recommended for DOE sponsored genome sequencing by the JGI: ATCC 35216. High-quality 16S rRNA sequence S000007772 (RDP), Y14307 (Genbank). N4Lid DOI: 10.1601/nm.1523

Hyphomicrobium sulfonivorans^{VP} Borodina et al. 2002. Source of type material recommended for DOE sponsored genome sequencing by the JGI: ATCC BAA-113. High-quality 16S rRNA sequence S000389774 (RDP), AF235089 (Genbank). N4Lid DOI: 10.1601/nm.1525

Hyphomicrobium zavarzinii^{VP} Hirsch 1989. Source of type material recommended for DOE sponsored genome sequencing by the JGI: ATCC 27496. High-quality 16S rRNA sequence S000011209 (RDP), Y14305 (Genbank). N4Lid DOI: 10.1601/nm.1526

Genus Ancalomicrobium^{AL} Staley 1968. N4Lid DOI: 10.1601/nm.1527

Ancalomicrobium adetum^{AL} Staley 1968. Source of type material recommended for DOE sponsored genome sequencing by the JGI: ATCC 23632. N4Lid DOI: 10.1601/nm.1528

Genus Ancylobacter^{VP} Raj 1983. N4Lid DOI: 10.1601/nm.1529

Ancylobacter aquaticus^{VP} (Ørskov 1928) Raj 1983. <== *Microcycylus aquaticus* (basonym). Synonym links through N4Lid: 10.1601/ex.1530. Source of type material recommended for DOE sponsored genome sequencing by the JGI: ATCC 25396. High-quality 16S rRNA sequence S000010644 (RDP), M62790 (Genbank). N4Lid DOI: 10.1601/nm.1530

- † *Microcycylus aquaticus*^{AL} Ørskov 1928. ==> *Ancylobacter aquaticus* (new combination).
Synonym links through N4Lid: 10.1601/ex.1530. Source of type material recommended for DOE sponsored genome sequencing by the JGI: ATCC 25396. High-quality 16S rRNA sequence S000010644 (RDP), M62790 (Genbank). N4Lid 10.1601/nm.8992
- Ancylobacter polymorphus*^{VP} Xin et al. 2006. Source of type material recommended for DOE sponsored genome sequencing by the JGI: DSM 2457. High-quality 16S rRNA sequence S000401762 (RDP), AY211515 (Genbank). N4Lid DOI: 10.1601/nm.10100
- Ancylobacter rudongensis*^{VP} Xin et al. 2004. Source of type material recommended for DOE sponsored genome sequencing by the JGI: JCM 11671. High-quality 16S rRNA sequence S000434961 (RDP), AY056830 (Genbank). N4Lid DOI: 10.1601/nm.1531
- Ancylobacter vacuolatus*^{VP} Xin et al. 2006. Source of type material recommended for DOE sponsored genome sequencing by the JGI: DSM 1277. High-quality 16S rRNA sequence S000401763 (RDP), AY211516 (Genbank). N4Lid DOI: 10.1601/nm.10099
- Genus † *Microcycylus*^{AL} Ørskov 1928. Unified with *Ancylobacter*, links through 10.1601/nm.1528. N4Lid 10.1601/nm.8991
- Genus *Angulomicrobium*^{VP} Vasil'eva et al. 1986. N4Lid DOI: 10.1601/nm.1532
- Angulomicrobium tetraedrale*^{VP} Vasil'eva et al. 1986. Source of type material recommended for DOE sponsored genome sequencing by the JGI: DSM 5895. N4Lid DOI: 10.1601/nm.1533
- Angulomicrobium amanitifforme*^{VP} Fritz et al. 2004. Source of type material recommended for DOE sponsored genome sequencing by the JGI: DSM 15561. High-quality 16S rRNA sequence S000351834 (RDP), AJ535709 (Genbank). N4Lid DOI: 10.1601/nm.8464
- Genus *Aquabacter*^{VP} Irgens et al. 1993. N4Lid DOI: 10.1601/nm.1534
- Aquabacter spiritensis*^{VP} Irgens et al. 1993. Source of type material recommended for DOE sponsored genome sequencing by the JGI: ATCC 43981. N4Lid DOI: 10.1601/nm.1535
- Genus *Azorhizobium*^{VP} Dreyfus et al. 1988. N4Lid DOI: 10.1601/nm.1536
- Azorhizobium caulinodans*^{VP} Dreyfus et al. 1988. Source of type material recommended for DOE sponsored genome sequencing by the JGI: ATCC 43989. High-quality 16S rRNA sequence S000364327 (RDP), X67221 (Genbank). N4Lid DOI: 10.1601/nm.1537
- Azorhizobium doebereinerae*^{VP} Moreira et al. 2006. Source of type material recommended for DOE sponsored genome sequencing by the JGI: LMG 9993. High-quality 16S rRNA sequence S000332740 (RDP), AY626222 (Genbank). N4Lid DOI: 10.1601/nm.10190
- Genus *Blastochloris*^{VP} Hiraishi 1997. N4Lid DOI: 10.1601/nm.1538
- Blastochloris viridis*^{VP} (Drews and Giesbrecht 1966) Hiraishi 1997. <== *Rhodopseudomonas viridis* (basonym). Synonym links through N4Lid: 10.1601/ex.1510. Source of type material recommended for DOE sponsored genome sequencing by the JGI: ATCC 19567. High-quality 16S rRNA sequence S000413606 (RDP), D25314 (Genbank). N4Lid DOI: 10.1601/nm.1539
- † *Rhodopseudomonas viridis*^{AL} Drews and Giesbrecht 1966. ==> *Blastochloris viridis* (new combination). Synonym links through N4Lid: 10.1601/ex.1510. Source of type material recommended for DOE sponsored genome sequencing by the JGI: ATCC 19567. High-quality 16S rRNA sequence S000413606 (RDP), D25314 (Genbank). N4Lid DOI: 10.1601/nm.1510
- Blastochloris sulfoviridis*^{VP} (Keppen and Gorlenko 1975) Hiraishi 1997. <== *Rhodopseudomonas sulfoviridis* (basonym). Synonym links through N4Lid: 10.1601/ex.1509. Source of type material recommended for DOE sponsored genome sequencing by the JGI: DSM 729. High-quality 16S rRNA sequence S000435895 (RDP), D86514 (Genbank). N4Lid DOI: 10.1601/nm.1540
- † *Rhodopseudomonas sulfoviridis*^{AL} Keppen and Gorlenko 1975. ==> *Blastochloris sulfoviridis* (new combination). Synonym links through N4Lid: 10.1601/ex.1509. Source of type material recommended for DOE sponsored genome sequencing by the JGI: DSM 729. High-quality 16S rRNA sequence S000435895 (RDP), D86514 (Genbank). N4Lid DOI: 10.1601/nm.1509
- Genus *Devosia*^{VP} Nakagawa et al. 1996. N4Lid DOI: 10.1601/nm.1541
- Devosia riboflavina*^{VP} (ex Foster 1944) Nakagawa et al. 1996. Source of type material recommended for DOE sponsored genome sequencing by the JGI: ATCC 9526. High-quality 16S rRNA sequence S000366462 (RDP), AJ549086 (Genbank). N4Lid DOI: 10.1601/nm.1542

- "Devosia euplotis"* Vannini et al. 2004. Source of type material recommended for DOE sponsored genome sequencing by the JGI: No viable deposit available. High-quality 16S rRNA sequence S000366461 (RDP), AJ548825 (Genbank). N4Lid 10.1601/nm.8958
- Devosia limi*^{VP} Vanparys et al. 2005. Source of type material recommended for DOE sponsored genome sequencing by the JGI: DSM 17137. High-quality 16S rRNA sequence S000440546 (RDP), AJ786801 (Genbank). N4Lid 10.1601/nm.9627
- Devosia neptuniae*^{VP} Rivas et al. 2003. Source of type material recommended for DOE sponsored genome sequencing by the JGI: LMG 21357. High-quality 16S rRNA sequence S000395050 (RDP), AF469072 (Genbank). N4Lid DOI: 10.1601/nm.1543
- Genus *Dichotomicrobium***^{VP} Hirsch and Hoffman 1989. N4Lid DOI: 10.1601/nm.1544
- Dichotomicrobium thermohalophilum*^{VP} Hirsch and Hoffman 1989. Source of type material recommended for DOE sponsored genome sequencing by the JGI: ATCC 49408. N4Lid DOI: 10.1601/nm.1545
- Genus *Filomicrobium***^{VP} Schlesner 1988. N4Lid DOI: 10.1601/nm.1546
- Filomicrobium fusiforme*^{VP} Schlesner 1988. Source of type material recommended for DOE sponsored genome sequencing by the JGI: ATCC 35158. High-quality 16S rRNA sequence S000016449 (RDP), Y14313 (Genbank). N4Lid DOI: 10.1601/nm.1547
- Genus *Gemmiger***^{AL} Gossling and Moore 1975. N4Lid DOI: 10.1601/nm.1548
- Gemmiger formicilis*^{AL} Gossling and Moore 1975. Source of type material recommended for DOE sponsored genome sequencing by the JGI: ATCC 27749. N4Lid DOI: 10.1601/nm.1549
- Genus *Labrys***^{VP} Vasilyeva and Semenov 1985. N4Lid DOI: 10.1601/nm.1550
- Labrys monachus*^{VP} corrig. Vasilyeva and Semenov 1985. Source of type material recommended for DOE sponsored genome sequencing by the JGI: ATCC 43932. High-quality 16S rRNA sequence S000351832 (RDP), AJ535707 (Genbank). N4Lid DOI: 10.1601/nm.1551
- Labrys methylaminiphilus*^{VP} Miller et al. 2005. Source of type material recommended for DOE sponsored genome sequencing by the JGI: ATCC BAA-1080. High-quality 16S rRNA sequence S000541037 (RDP), AY766152 (Genbank). N4Lid 10.1601/nm.9447
- Genus *Methylohabdus***^{VP} Doronina et al. 1996. N4Lid DOI: 10.1601/nm.1552
- Methylohabdus multivorans*^{VP} Doronina et al. 1996. Source of type material recommended for DOE sponsored genome sequencing by the JGI: ATCC 51890. High-quality 16S rRNA sequence S000386911 (RDP), AF004845 (Genbank). N4Lid DOI: 10.1601/nm.1553
- Genus *Pedomicrobium***^{AL} Aristovskaya 1961. N4Lid DOI: 10.1601/nm.1554
- Pedomicrobium ferrugineum*^{AL} Aristovskaya 1961. Source of type material recommended for DOE sponsored genome sequencing by the JGI: ATCC 33119. N4Lid DOI: 10.1601/nm.1555
- Pedomicrobium americanum*^{VP} Gebers and Beese 1988. Source of type material recommended for DOE sponsored genome sequencing by the JGI: ATCC 43612. N4Lid DOI: 10.1601/nm.1556
- Pedomicrobium australicum*^{VP} Gebers and Beese 1988. Source of type material recommended for DOE sponsored genome sequencing by the JGI: ATCC 43611. High-quality 16S rRNA sequence S000000822 (RDP), X97693 (Genbank). N4Lid DOI: 10.1601/nm.1557
- Pedomicrobium manganicum*^{AL} Aristovskaya 1961. Source of type material recommended for DOE sponsored genome sequencing by the JGI: ATCC 33121. GOLD ID: Gi01552. GCAT ID: 001354_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.1558
- Genus *Prosthecomicrobium***^{AL} Staley 1968. N4Lid DOI: 10.1601/nm.1559
- Prosthecomicrobium pneumaticum*^{AL} Staley 1968. Source of type material recommended for DOE sponsored genome sequencing by the JGI: ATCC 23633. N4Lid DOI: 10.1601/nm.1560
- Prosthecomicrobium enhydrium*^{AL} Staley 1968. Source of type material recommended for DOE sponsored genome sequencing by the JGI: ATCC 23634. N4Lid DOI: 10.1601/nm.1561
- Prosthecomicrobium hirschii*^{VP} Staley 1984. Source of type material recommended for DOE sponsored genome sequencing by the JGI: ATCC 27832. N4Lid DOI: 10.1601/nm.1562
- Prosthecomicrobium litoralum*^{VP} Bauld et al. 1983. Source of type material recommended for DOE sponsored genome sequencing by the JGI: ATCC 35022. N4Lid DOI: 10.1601/nm.1563
- Genus *Rhodomicrobium***^{AL} Duchow and Douglas 1949. N4Lid DOI: 10.1601/nm.1564

Rhodomicrobium vannielii^{AL} Duchow and Douglas 1949. Source of type material recommended for DOE sponsored genome sequencing by the JGI: ATCC 17100. N4Lid DOI: 10.1601/nm.1565

Genus *Rhodoplanes*^{VP} Hiraishi and Ueda 1994. N4Lid DOI: 10.1601/nm.1566

Rhodoplanes roseus^{VP} (Janssen and Harfoot 1991) Hiraishi and Ueda 1994. <==
Rhodopseudomonas rosea (basonym). Synonym links through N4Lid: 10.1601/ex.1505. Source of type material recommended for DOE sponsored genome sequencing by the JGI: ATCC 49724. High-quality 16S rRNA sequence S000413605 (RDP), D25313 (Genbank). N4Lid DOI: 10.1601/nm.1567

† *Rhodopseudomonas rosea*^{VP} Janssen and Harfoot 1991. ==> *Rhodoplanes roseus* (new combination). Synonym links through N4Lid: 10.1601/ex.1505. Source of type material recommended for DOE sponsored genome sequencing by the JGI: ATCC 49724. High-quality 16S rRNA sequence S000413605 (RDP), D25313 (Genbank). N4Lid DOI: 10.1601/nm.1505

Rhodoplanes elegans^{VP} Hiraishi and Ueda 1994. Source of type material recommended for DOE sponsored genome sequencing by the JGI: ATCC 51906. High-quality 16S rRNA sequence S000413603 (RDP), D25311 (Genbank). N4Lid DOI: 10.1601/nm.1568

Genus *Seliberia*^{AL} Aristovskaya and Parinkina 1963. N4Lid DOI: 10.1601/nm.1569

Seliberia stellata^{AL} Aristovskaya and Parinkina 1963. Source of type material recommended for DOE sponsored genome sequencing by the JGI: VKM B-1340. N4Lid DOI: 10.1601/nm.1570

Genus *Starkeya*^{VP} Kelly et al. 2000. N4Lid DOI: 10.1601/nm.1571

Starkeya novella^{VP} (Starkey 1934) Kelly et al. 2000. <== *Thiobacillus novellus* (basonym). Synonym links through N4Lid: 10.1601/ex.1888. Source of type material recommended for DOE sponsored genome sequencing by the JGI: ATCC 8093. High-quality 16S rRNA sequence S000469033 (RDP), D32247 (Genbank). N4Lid DOI: 10.1601/nm.1572

† *Thiobacillus novellus*^{AL} Starkey 1934. ==> *Starkeya novella* (new combination). Synonym links through N4Lid: 10.1601/ex.1888. Source of type material recommended for DOE sponsored genome sequencing by the JGI: ATCC 8093. High-quality 16S rRNA sequence S000469033 (RDP), D32247 (Genbank). N4Lid DOI: 10.1601/nm.1888

Genus *Xanthobacter*^{AL} Wiegel et al. 1978. N4Lid DOI: 10.1601/nm.1573

Xanthobacter autotrophicus^{AL} (Baumgarten et al. 1974) Wiegel et al. 1978. Source of type material recommended for DOE sponsored genome sequencing by the JGI: ATCC 35674. High-quality 16S rRNA sequence S000006694 (RDP), X94201 (Genbank). GOLD ID: Gi00972. GCAT ID: 001697_GCAT. Entrez genome id: 15756. Sequenced strain: Py2 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.1574

Xanthobacter agilis^{VP} Jenni and Arago 1988. Source of type material recommended for DOE sponsored genome sequencing by the JGI: ATCC 43847. High-quality 16S rRNA sequence S000007851 (RDP), X94198 (Genbank). N4Lid DOI: 10.1601/nm.1575

Xanthobacter aminoxidans^{VP} Doronina and Trotsenko 2003. Source of type material recommended for DOE sponsored genome sequencing by the JGI: ATCC BAA-299. High-quality 16S rRNA sequence S000393169 (RDP), AF399969 (Genbank). N4Lid DOI: 10.1601/nm.1576

Xanthobacter flavus^{AL} Malik and Claus 1979. Source of type material recommended for DOE sponsored genome sequencing by the JGI: ATCC 35867. High-quality 16S rRNA sequence S000008974 (RDP), X94199 (Genbank). N4Lid DOI: 10.1601/nm.1577

Xanthobacter tagetidis^{VP} Padden et al. 1997. Source of type material recommended for DOE sponsored genome sequencing by the JGI: ATCC 700314. High-quality 16S rRNA sequence S000004814 (RDP), X99469 (Genbank). N4Lid DOI: 10.1601/nm.1578

Xanthobacter viscosus^{VP} Doronina and Trotsenko 2003. Source of type material recommended for DOE sponsored genome sequencing by the JGI: ATCC BAA-298. High-quality 16S rRNA sequence S000393170 (RDP), AF399970 (Genbank). N4Lid DOI: 10.1601/nm.1579

Family *Methylobacteriaceae*^{VP} Garrity et al 2006. N4Lid DOI: 10.1601/nm.1580

Genus *Methylobacterium*^{AL} Patt et al. 1976. GOLD ID: Gi01346. GCAT ID: 001761_GCAT. Sequenced strain: 15431 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.1581

- Methylobacterium organophilum*^{AL} Patt et al. 1976. Source of type material recommended for DOE sponsored genome sequencing by the JGI: ATCC 27886. High-quality 16S rRNA sequence S000469012 (RDP), D32226 (Genbank). N4Lid DOI: 10.1601/nm.1582
- Methylobacterium adhaesivum*^{VP} Gallego et al. 2006. Source of type material recommended for DOE sponsored genome sequencing by the JGI: CCM 7305. High-quality 16S rRNA sequence S000544643 (RDP), AM040156 (Genbank). N4Lid 10.1601/nm.9889
- Methylobacterium aminovorans*^{VP} Urakami et al. 1993. Source of type material recommended for DOE sponsored genome sequencing by the JGI: ATCC 51358. N4Lid DOI: 10.1601/nm.1583
- Methylobacterium aquaticum*^{VP} Gallego et al. 2005. Source of type material recommended for DOE sponsored genome sequencing by the JGI: DSM 16371. High-quality 16S rRNA sequence S000471776 (RDP), AJ635303 (Genbank). N4Lid 10.1601/nm.8699
- Methylobacterium extorquens*^{VP} (Urakami and Komagata 1984) Bousfield and Green 1985. <== *Protomonas extorquens* (basonym). Synonym links through N4Lid: 10.1601/ex.1599. Source of type material recommended for DOE sponsored genome sequencing by the JGI: ATCC 43645. High-quality 16S rRNA sequence S000469010 (RDP), D32224 (Genbank). GOLD ID: Gi00369. GCAT ID: 001208_GCAT. Entrez genome id: 20. Sequenced strain: AM1 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.1586
- † *Methylobacterium chloromethanicum*^{VP} McDonald et al. 2001. ≈ *Methylobacterium extorquens* (earlier heterotypic synonym), links through 10.1601./nm.1586. Source of type material recommended for DOE sponsored genome sequencing by the JGI: NCIMB 13688. High-quality 16S rRNA sequence S000388994 (RDP), AF198624 (Genbank). GOLD ID: Gi01341. GCAT ID: 001756_GCAT. Sequenced strain: NCIMB 13688 is type material. Genome sequencing is incomplete. Number of genomes of this species sequenced 1 (GOLD). N4Lid DOI: 10.1601/nm.1584
- † *Methylobacterium dichloromethanicum*^{VP} Doronina et al. 2000. ≈ *Methylobacterium extorquens* (earlier heterotypic synonym), links through 10.1601./nm.1586. Source of type material recommended for DOE sponsored genome sequencing by the JGI: DSM 6343. High-quality 16S rRNA sequence S000389514 (RDP), AF227128 (Genbank). GOLD ID: Gi01019. GCAT ID: 001209_GCAT. Entrez genome id: 16093. Sequenced strain: DM4 is type material. Genome sequencing is incomplete. Number of genomes of this species sequenced 1 (GOLD) 1 (NCBI). N4Lid DOI: 10.1601/nm.1585
- † *Protomonas extorquens*^{VP} (ex Bassalik 1913) Urakami and Komagata 1984. ==> *Methylobacterium extorquens* (new combination). Synonym links through N4Lid: 10.1601/ex.1599. Source of type material recommended for DOE sponsored genome sequencing by the JGI: ATCC 43645. High-quality 16S rRNA sequence S000469010 (RDP), D32224 (Genbank). GOLD ID: Gi00369. GCAT ID: 001208_GCAT. Entrez genome id: 20. Sequenced strain: AM1 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.1599
- Methylobacterium fujisawaense*^{VP} Green et al. 1988. Source of type material recommended for DOE sponsored genome sequencing by the JGI: ATCC 43884. High-quality 16S rRNA sequence S000007789 (RDP), AJ250801 (Genbank). N4Lid DOI: 10.1601/nm.1587
- Methylobacterium hispanicum*^{VP} Gallego et al. 2005. Source of type material recommended for DOE sponsored genome sequencing by the JGI: DSM 16372. High-quality 16S rRNA sequence S000471777 (RDP), AJ635304 (Genbank). N4Lid 10.1601/nm.8700
- Methylobacterium isbiliense*^{VP} Gallego et al. 2005. Source of type material recommended for DOE sponsored genome sequencing by the JGI: CCM 7304. High-quality 16S rRNA sequence S000539892 (RDP), AJ888239 (Genbank). N4Lid 10.1601/nm.9726
- Methylobacterium mesophilicum*^{VP} (Austin and Goodfellow 1979) Green and Bousfield 1983. <== *Pseudomonas mesophila* (basonym). Synonym links through N4Lid: 10.1601/ex.2644. Source of type material recommended for DOE sponsored genome sequencing by the JGI: ATCC 29983. N4Lid DOI: 10.1601/nm.1589
- † *Pseudomonas mesophila*^{AL} Austin and Goodfellow 1979. ==> *Methylobacterium mesophilicum* (new combination). Synonym links through N4Lid: 10.1601/ex.2644. Source of type material recommended for DOE sponsored genome sequencing by the JGI: ATCC 29983. N4Lid DOI: 10.1601/nm.2644

Methylobacterium nodulans^{VP} Jourand et al. 2004. Source of type material recommended for DOE sponsored genome sequencing by the JGI: LMG 21967. High-quality 16S rRNA sequence S000483600 (RDP), AF220763 (Genbank). GOLD ID: Gi01343. GCAT ID: 001758_GCAT. Sequenced strain: LMG 21967 is type material. Genome sequencing is incomplete. Number of genomes of this species sequenced 1 (GOLD). N4Lid 10.1601/nm.8701

Methylobacterium podarium^{VP} Anesti et al. 2006. Source of type material recommended for DOE sponsored genome sequencing by the JGI: ATCC BAA-547. High-quality 16S rRNA sequence S000430937 (RDP), AF514774 (Genbank). N4Lid DOI: 10.1601/nm.10320

Methylobacterium populi^{VP} Van Aken et al. 2004. Source of type material recommended for DOE sponsored genome sequencing by the JGI: ATCC BAA-705. High-quality 16S rRNA sequence S000368128 (RDP), AY251818 (Genbank). GOLD ID: Gi01344. GCAT ID: 001759_GCAT. Sequenced strain: ATCC BAA-705 is type material. Genome sequencing is incomplete. Number of genomes of this species sequenced 1 (GOLD). N4Lid 10.1601/nm.8702

Methylobacterium radiotolerans^{VP} corrig. (Ito and Iizuka 1971) Green and Bousfield 1983. <== *Pseudomonas radiora* (basonym). Synonym links through N4Lid: 10.1601/ex.2676. Source of type material recommended for DOE sponsored genome sequencing by the JGI: ATCC 27329. High-quality 16S rRNA sequence S000469013 (RDP), D32227 (Genbank). GOLD ID: Gi01345. GCAT ID: 001760_GCAT. Sequenced strain: JCM 2831 is type material. Genome sequencing is incomplete. Number of genomes of this species sequenced 1 (GOLD). N4Lid DOI: 10.1601/nm.1590

† *Pseudomonas radiora*^{AL} Ito and Iizuka 1971. ==> *Methylobacterium radiotolerans* (new combination). Synonym links through N4Lid: 10.1601/ex.2676. Source of type material recommended for DOE sponsored genome sequencing by the JGI: ATCC 27329. High-quality 16S rRNA sequence S000469013 (RDP), D32227 (Genbank). GOLD ID: Gi01345. GCAT ID: 001760_GCAT. Sequenced strain: JCM 2831 is type material. Genome sequencing is incomplete. Number of genomes of this species sequenced 1 (GOLD) 0 (NCBI). N4Lid DOI: 10.1601/nm.2676

Methylobacterium rhodesianum^{VP} Green et al. 1988. ≈ *Methylobacterium lusitanum* (later heterotypic synonym), links through 10.1601/nm.1591. Source of type material recommended for DOE sponsored genome sequencing by the JGI: ATCC 43882. High-quality 16S rRNA sequence S000414510 (RDP), L20850 (Genbank). N4Lid DOI: 10.1601/nm.1591

† *Methylobacterium lusitanum*^{VP} Doronina et al. 2002. ≈ *Methylobacterium rhodesianum* (earlier heterotypic synonym), links through 10.1601/nm.1591. Source of type material recommended for DOE sponsored genome sequencing by the JGI: ATCC BAA-714. High-quality 16S rRNA sequence S000434385 (RDP), AY009403 (Genbank). N4Lid DOI: 10.1601/nm.1588

Methylobacterium rhodinum^{VP} corrig. (Heumann 1962) Green and Bousfield 1983. <== *Pseudomonas rhodos* (basonym). Synonym links through N4Lid: 10.1601/ex.2680. Source of type material recommended for DOE sponsored genome sequencing by the JGI: ATCC 14821. High-quality 16S rRNA sequence S000469015 (RDP), D32229 (Genbank). N4Lid DOI: 10.1601/nm.1592

† *Pseudomonas rhodos*^{AL} Heumann 1962. ==> *Methylobacterium rhodinum* (new combination). Synonym links through N4Lid: 10.1601/ex.2680. Source of type material recommended for DOE sponsored genome sequencing by the JGI: ATCC 14821. High-quality 16S rRNA sequence S000469015 (RDP), D32229 (Genbank). N4Lid DOI: 10.1601/nm.2680

Methylobacterium suomiense^{VP} Doronina et al. 2002. Source of type material recommended for DOE sponsored genome sequencing by the JGI: ATCC BAA-713. High-quality 16S rRNA sequence S000434386 (RDP), AY009404 (Genbank). N4Lid DOI: 10.1601/nm.1593

Methylobacterium thiocyanatum^{VP} Wood et al. 1999. Source of type material recommended for DOE sponsored genome sequencing by the JGI: ATCC 700647. N4Lid DOI: 10.1601/nm.1594

Methylobacterium variabile^{VP} Gallego et al. 2005. Source of type material recommended for DOE sponsored genome sequencing by the JGI: DSM 16961. High-quality 16S rRNA sequence S000544284 (RDP), AJ851087 (Genbank). N4Lid 10.1601/nm.9518

Methylobacterium zatmanii^{VP} Green et al. 1988. Source of type material recommended for DOE sponsored genome sequencing by the JGI: ATCC 43883. High-quality 16S rRNA sequence S000414495 (RDP), L20804 (Genbank). N4Lid DOI: 10.1601/nm.1595

Genus † *Protomonas*^{VP} Urakami and Komagata 1984. Unified with *Methylobacterium*, links through 10.1601/nm.2418. N4Lid DOI: 10.1601/nm.1598

Genus *Meganema* ^{VP} Thomsen et al. 2006. N4Lid DOI: 10.1601/nm.10241

Meganema perideroedes ^{VP} Thomsen et al. 2006. Source of type material recommended for DOE sponsored genome sequencing by the JGI: ATCC BAA-740. High-quality 16S rRNA sequence S000388725 (RDP), AF180468 (Genbank). N4Lid DOI: 10.1601/nm.10240

Genus *Microvirga* ^{VP} Kanso and Patel 2003. N4Lid DOI: 10.1601/nm.1596

Microvirga subterranea ^{VP} Kanso and Patel 2003. Source of type material recommended for DOE sponsored genome sequencing by the JGI: ATCC BAA-295. High-quality 16S rRNA sequence S000435060 (RDP), AY078053 (Genbank). N4Lid DOI: 10.1601/nm.1597

Family *Rhodobiaceae* ^{VP} Garrity et al 2006. N4Lid DOI: 10.1601/nm.1606

Genus *Rhodobium* ^{VP} Hiraishi et al. 1995. N4Lid DOI: 10.1601/nm.1607

Rhodobium orientis ^{VP} Hiraishi et al. 1995. Source of type material recommended for DOE sponsored genome sequencing by the JGI: ATCC 51972. High-quality 16S rRNA sequence S000413736 (RDP), D30792 (Genbank). N4Lid DOI: 10.1601/nm.1608

Rhodobium marinum ^{VP} (Imhoff 1984) Hiraishi et al. 1995. <== *Rhodopseudomonas marina* (basonym). Synonym links through N4Lid: 10.1601/ex.1503. Source of type material recommended for DOE sponsored genome sequencing by the JGI: ATCC 35675. High-quality 16S rRNA sequence S000413734 (RDP), D30790 (Genbank). N4Lid DOI: 10.1601/nm.1609

† *Rhodopseudomonas marina* ^{VP} Imhoff 1984. ==> *Rhodobium marinum* (new combination). Synonym links through N4Lid: 10.1601/ex.1503. Source of type material recommended for DOE sponsored genome sequencing by the JGI: ATCC 35675. High-quality 16S rRNA sequence S000413734 (RDP), D30790 (Genbank). N4Lid DOI: 10.1601/nm.1503

Genus *Parvibaculum* ^{VP} Schleheck et al. 2004. N4Lid 10.1601/nm.8767

Parvibaculum lavamentivorans ^{VP} Schleheck et al. 2004. Source of type material recommended for DOE sponsored genome sequencing by the JGI: DSM 13023. High-quality 16S rRNA sequence S000461692 (RDP), AY387398 (Genbank). GOLD ID: Gi01347. GCAT ID: 001764_GCAT. Entrez genome id: 17639. Sequenced strain: DSM 13023 is type material. Genome sequencing is incomplete. Number of genomes of this species sequenced 1 (GOLD) 1 (NCBI). N4Lid 10.1601/nm.8768

Genus *Roseospirillum* ^{VP} Glaeser and Overmann 2001. N4Lid DOI: 10.1601/nm.1610

Roseospirillum parvum ^{VP} Glaeser and Overmann 2001. Source of type material recommended for DOE sponsored genome sequencing by the JGI: DSM 12498. High-quality 16S rRNA sequence S000019711 (RDP), AJ011919 (Genbank). N4Lid DOI: 10.1601/nm.1611

Order "*Parvularculales*" N4Lid DOI: 10.1601/nm.1612

Family "*Parvularculaceae*" N4Lid DOI: 10.1601/nm.1613

Genus *Parvularcula* ^{VP} Cho and Giovannoni 2003. N4Lid DOI: 10.1601/nm.1614

Parvularcula bermudensis ^{VP} Cho and Giovannoni 2003. Source of type material recommended for DOE sponsored genome sequencing by the JGI: ATCC BAA-594. High-quality 16S rRNA sequence S000432339 (RDP), AF544015 (Genbank). GOLD ID: Gi00868. GCAT ID: 001349_GCAT. Entrez genome id: 13509. Sequenced strain: HTCC 2503 is type material. Genome sequencing is incomplete. Number of genomes of this species sequenced 1 (GOLD) 1 (NCBI). N4Lid DOI: 10.1601/nm.1615