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| --- | --- | --- | --- | --- | --- |
| **Genus** | **Frequency** | **Biochemical Evidence** | **Reference** | **Comments** | **First Genome Reported on** |
| Acetobacterium | 4 | No | NA | NA | 2012-02-13 |
| Acidiferrobacter | 1 | No | NA | NA | 2016-08-14 |
| Acidihalobacter | 1 | Yes | (Rosenberg et al., 2014) | NA | 2016-06-21 |
| Acidithiobacillus | 3 | Yes | (Dos Santos et al., 2012) | NA | 2008-12-18 |
| Afifella | 1 | Yes | (Madigan, 1995) | Previously *Rhodopseudomonas* | 2016-10-16 |
| Agarivorans | 1 | No | NA | NA | 2013-06-11 |
| Alkalibacter | 1 | No | NA | NA | 2016-12-02 |
| Alkalinema | 1 | Metagenome | NA | NA | 2017-05-17 |
| Alkaliphilus | 1 | No | NA | NA | 2007-06-27 |
| Alkalitalea | 1 | No | NA | NA | 2017-03-07 |
| Allochromatium | 2 | Yes | (Dos Santos et al., 2012) | NA | 2010-02-15 |
| Amphritea | 1 | No | NA | NA | 2016-10-30 |
| Anabaena | 2 | Yes | (Dos Santos et al., 2012) | NA | 2012-11-12 |
| Anabaenopsis | 1 | Yes | (Watanabe & Yamamoto, 1967) | NA | 2017-06-24 |
| Anaerobacillus | 2 | Yes | (Zavarzina et al., 2009) | NA | 2016-11-02 |
| Anaerocolumna | 2 | Yes | NA | Previously *Clostridium neopropionicum* | 2016-12-02 |
| Anaeromyxobacter | 4 | Yes | (Masuda et al., 2020) | NA | NA |
| Anaerosporobacter | 1 | No | NA | NA | 2016-12-02 |
| Anaerosporomusa | 1 | Yes | (Suárez-Moo et al., 2020) | NA | 2016-04-04 |
| Anaerotignum | 1 | Yes | NA | Previously *Clostridium neopropionicum* | 2016-02-23 |
| Anaerovirgula | 1 | No | NA | NA | 2017-07-15 |
| Aquaspirillum | 1 | Yes | (Brenner et al., 2007) | NA | 2017-02-16 |
| Arcobacter | 2 | Yes | (Dos Santos et al., 2012) | NA | 2010-05-16 |
| Arcticibacter | 1 | No | NA | NA | 2013-05-28 |
| Aulosira | 1 | Yes | (Issa et al., 2014) | NA | 2017-06-24 |
| Azoarcus | 3 | Yes | (Hurek & Reinhold-Hurek, 2003) | NA | 2006-12-19 |
| Azonexus | 1 | Yes | (Brenner et al., 2007) | NA | 2017-01-17 |
| Azorhizobium | 1 | Yes | (Liu et al., 2017) | NA | 2007-10-15 |
| Azospira | 2 | Yes | (Brenner et al., 2007) | NA | 2011-12-04 |
| Azospirillum | 9 | Yes | (Zhang et al., 2020) | NA | 2010-02-15 |
| Azotobacter | 4 | Yes | (Dos Santos et al., 2012) | NA | 2009-04-13 |
| Bacillus | 2 | No | NA | NA | 2016-10-21 |
| Bacteroides | 2 | Yes | (Inoue et al., 2015) | NA | 2014-03-30 |
| Beggiatoa | 2 | Yes | (Dubinina et al., 2017) | NA | 2012-05-03 |
| Beijerinckia | 1 | Yes | (Dos Santos et al., 2012) | NA | 2008-04-10 |
| Blastochloris | 1 | Yes | NA | Previously *Rhodopseudomonas* | 2016-02-23 |
| Bradyrhizobium | 41 | Yes | (Dos Santos et al., 2012) | NA | 2004-05-10 |
| Brenneria | 2 | No | NA | NA | 2011-10-20 |
| Burkholderia | 8 | Yes | (Dos Santos et al., 2012) | NA | 2007-03-26 |
| Caenispirillum | 2 | No | NA | NA | 2012-11-28 |
| Calditerrivibrio | 1 | No | NA | NA | 2010-11-29 |
| Calothrix | 10 | Yes | (Issa et al., 2014) | NA | 2012-12-03 |
| Candidatus Accumulibacter | 1 | No | NA | NA | NA |
| Candidatus Atelocyanobacterium | 1 | Yes | (Muñoz-Marín et al., 2019) | NA | 2010-01-27 |
| Candidatus Azobacteroides | 1 | Yes | (Hongoh et al., 2008) | NA | 2008-11-11 |
| Candidatus Dactylopiibacterium | 1 | Yes | (Vera-Ponce de León et al., 2017) | NifH transcription evidence | 2017-08-31 |
| Candidatus Magnetoovum | 1 | No | NA | NA | 2015-03-22 |
| Candidatus Thiodiazotropha | 1 | Yes | (König et al., 2016) | NifH transcription evidence | 2016-08-22 |
| Chlorobaculum | 3 | Yes | (Dos Santos et al., 2012) | NA | 2002-07-01 |
| Chlorobium | 5 | Yes | (Dos Santos et al., 2012) | NA | 2005-10-25 |
| Chloroherpeton | 1 | No | NA | NA | 2008-06-26 |
| Chroococcidiopsis | 2 | Yes | (Banerjee & Verma, 2009) | NA | 2012-12-04 |
| Chroogloeocystis | 1 | No | NA | NA | 2016-12-13 |
| Clostridium | 31 | Yes | (Dos Santos et al., 2012) | NA | 2007-06-26 |
| Cohaesibacter | 2 | No | NA | NA | 2016-11-01 |
| Coleofasciculus | 1 | Yes | NA | Previously known as *Microcoelus* | 2008-08-14 |
| Confluentimicrobium | 1 | Metagenome | NA | NA | 2017-10-24 |
| Consotaella | 1 | Yes | (Díaz-Cárdenas et al., 2017) | NA | 2017-03-03 |
| Coraliomargarita | 1 | No | NA | NA | 2010-04-04 |
| Crenothrix | 1 | Metagenome | NA | NA | 2017-05-11 |
| Crocosphaera | 8 | Yes | (Boyd & Peters, 2013) | NA | 2005-06-15 |
| Cupriavidus | 1 | Yes | (Dos Santos et al., 2012) | NA | 2008-03-26 |
| Cyanothece | 1 | Yes | (Dos Santos et al., 2012) | NA | 2009-01-08 |
| Cylindrospermopsis | 3 | Yes | (Willis et al., 2016) | NA | 2009-12-14 |
| Cylindrospermum | 1 | Yes | (Issa et al., 2014) | NA | 2017-06-24 |
| Dechloromonas | 2 | No | NA | NA | 2005-08-04 |
| Defluviimonas | 1 | No | NA | NA | 2016-04-14 |
| Dehalobacter | 2 | No | NA | NA | 2012-10-15 |
| Dehalococcoides | 1 | Yes | (Dos Santos et al., 2012) | NA | 2005-01-06 |
| Dendrosporobacter | 1 | Yes | NA | Was originally *Clostridium* | 2016-10-20 |
| Denitrovibrio | 2 | No | NA | NA | 2010-03-10 |
| Desertifilum | 1 | No | NA | NA | 2016-09-25 |
| Desulfacinum | 1 | No | NA | NA | 2016-12-02 |
| Desulfallas | 3 | Yes | NA | Previously *Desulfotomaculum* | 2013-05-05 |
| Desulfamplus | 1 | No | NA | NA | 2017-03-28 |
| Desulfarculus | 1 | No | NA | NA | 2010-07-28 |
| Desulfatibacillum | 2 | Yes | (Cravo-Laureau et al., 2004) | NA | 2008-12-23 |
| Desulfatitalea | 1 | Metagenome | NA | NA | 2015-03-23 |
| Desulfitobacterium | 1 | Yes | (Dos Santos et al., 2012) | NA | 2009-01-04 |
| Desulfobacca | 1 | No | NA | NA | 2011-04-06 |
| Desulfobacter | 1 | Yes | (Thajudeen et al., 2017) | NA | 2012-05-30 |
| Desulfobacterium | 1 | No | NA | NA | 2009-02-17 |
| Desulfobacula | 1 | Metagenome | NA | NA | 2016-10-19 |
| Desulfobulbus | 1 | Metagenome | NA | NA | 2014-10-27 |
| Desulfocapsa | 1 | Yes | (Finster et al., n.d.) | NA | 2013-02-19 |
| Desulfocarbo | 1 | No | NA | NA | 2015-07-20 |
| Desulfocucumis | 1 | No | NA | NA | 2018-02-06 |
| Desulfocurvibacter | 2 | No | NA | NA | 2012-01-03 |
| Desulfofarcimen | 1 | Yes | NA | Previously *Desulfotomaculum* | 2009-09-09 |
| Desulfofustis | 1 | Yes | (Finster et al., n.d.) | NA | 2016-12-02 |
| Desulfohalovibrio | 1 | Yes | NA | Previously *Desulfovibrio* | 2013-07-10 |
| Desulfoluna | 1 | No | NA | NA | 2016-10-17 |
| Desulfomicrobium | 3 | No | NA | NA | 2009-08-25 |
| Desulfomonile | 1 | No | NA | NA | 2012-06-11 |
| Desulfonatronospira | 1 | No | NA | NA | 2010-06-16 |
| Desulfonatronum | 1 | No | NA | NA | 2016-10-20 |
| Desulfopila | 1 | No | NA | NA | 2016-12-09 |
| Desulforhopalus | 1 | No | NA | NA | 2016-10-20 |
| Desulfosporosinus | 9 | Yes | (Vos et al., 2011) | NA | 2011-08-25 |
| Desulfotalea | 1 | Metagenome | NA | NA | 2017-10-25 |
| Desulfotomaculum | 8 | Yes | (Dos Santos et al., 2012) | NA | 2007-03-23 |
| Desulfovibrio | 13 | Yes | (Dos Santos et al., 2012) | NA | 2004-04-20 |
| Desulfuribacillus | 2 | No | NA | NA | 2016-09-15 |
| Desulfurivibrio | 1 | No | NA | NA | 2010-05-26 |
| Desulfurobacterium | 1 | No | NA | NA | 2017-07-15 |
| Desulfuromonas | 1 | No | NA | NA | 2015-09-01 |
| Dethiobacter | 1 | No | NA | NA | 2009-03-16 |
| Dickeya | 4 | Yes | NA | Previously classified as *Erwinia* | 2009-06-25 |
| Draconibacterium | 1 | No | NA | NA | 2015-03-09 |
| Dysgonomonas | 1 | Yes | (Inoue et al., 2015) | NA | 2011-05-17 |
| Ectothiorhodospira | 4 | Yes | (Rosenberg et al., 2014) | NA | 2016-04-26 |
| Ensifer | 5 | Yes | NA | NA | 2016-05-24 |
| Enterobacter | 2 | No | NA | NA | 2013-06-10 |
| Euhalothece | 1 | Yes | (Mogany et al., 2018) | NA | 2018-01-24 |
| Ferrovum | 1 | Yes | (Ullrich et al., 2016) | NA | 2016-03-07 |
| Fischerella | 11 | Yes | (Issa et al., 2014) | NA | 2011-10-20 |
| Fontibacillus | 1 | No | NA | NA | 2016-10-20 |
| Frankia | 17 | Yes | (Dos Santos et al., 2012) | NA | 2006-08-02 |
| Geoalkalibacter | 2 | Yes | (Zavarzina et al., 2006) | NA | 2015-01-15 |
| Geobacter | 2 | Yes | (Dos Santos et al., 2012) | NA | 2009-01-26 |
| Geofilum | 1 | Yes | (Inoue et al., 2015) | NA | 2015-03-25 |
| Geosporobacter | 1 | No | NA | NA | 2016-10-02 |
| Gloeothece | 2 | Yes | (Issa et al., 2014) | NA | 2008-12-16 |
| Gluconacetobacter | 1 | Yes | (Bertalan et al., 2009) | NA | 2008-10-15 |
| Gracilibacter | 1 | Metagenome | NA | NA | 2016-01-14 |
| Gynuella | 1 | No | NA | NA | 2015-03-03 |
| Halanaerobium | 2 | No | NA | NA | 2016-02-28 |
| Halodesulfovibrio | 1 | Yes | NA | Previously *Desulfovibrio* | NA |
| Halomonas | 1 | No | NA | NA | 2018-01-12 |
| Halorhodospira | 2 | Yes | (Dos Santos et al., 2012) | NA | 2007-01-09 |
| Halothece | 1 | Yes | (Zehr et al., 1997) | NA | 2012-12-06 |
| Hartmannibacter | 1 | Yes | (Suarez et al., 2014) | NA | 2017-10-24 |
| Herbaspirillum | 2 | Yes | (Dos Santos et al., 2012) | NA | 2010-07-01 |
| Hungateiclostridium | 1 | Yes | NA | Previously *Clostridium neopropionicum* | 2011-12-11 |
| Hydrococcus | 1 | No | NA | NA | 2016-12-13 |
| Hydrocoleum | 1 | Yes | (Palińska et al., 2015) | NA | 2017-08-17 |
| Hydrogenophaga | 1 | Yes | NA | Formerly known as *Pseudomonas* | 2017-02-15 |
| Hyphomicrobium | 1 | No | NA | NA | 2011-06-23 |
| Ilyobacter | 1 | No | NA | NA | 2010-10-21 |
| Imhoffiella | 1 | No | NA | NA | 2014-03-03 |
| Insolitispirillum | 1 | Yes | (DeLong et al., 2014) | NA | 2017-01-14 |
| Klebsiella | 10 | Yes | (Dos Santos et al., 2012) | NA | 2011-12-28 |
| Kosakonia | 6 | Yes | (Madhaiyan et al., 2013) | NA | 2016-08-03 |
| Kyrpidia | 1 | No | NA | NA | 2017-12-03 |
| Labilibaculum | 2 | No | NA | NA | 2017-06-05 |
| Lachnoclostridium | 2 | Yes | NA | previously *Clostridium neopropionicum* | 2016-10-30 |
| Leptolyngbya | 6 | Yes | (Shimura et al., 2015) | NA | 2012-12-02 |
| Leptospirillum | 4 | Yes | (Parro & Moreno-Paz, 2004) | NA | 2012-03-29 |
| Leptothrix | 1 | No | NA | NA | 2008-03-24 |
| Limnoraphis | 1 | Yes | (Komárková et al., 2016) | NA | 2015-07-16 |
| Lutibacter | 1 | No | NA | NA | 2017-07-15 |
| Lyngbya | 2 | Yes | (Omoregie et al., 2004) | NA | 2006-12-14 |
| Magnetococcus | 1 | Yes | (Bazylinski et al., 2013) | NA | 2006-11-07 |
| Magnetospirillum | 9 | Yes | (Dos Santos et al., 2012) | NA | 2005-11-30 |
| Magnetovibrio | 1 | Yes | (DeLong et al., 2014) | NA | 2016-09-25 |
| Mangrovibacter | 2 | Yes | (Behera et al., 2017) | NA | 2014-06-11 |
| Marichromatium | 1 | No | NA | NA | 2014-01-02 |
| Marinobacter | 1 | Metagenome | NA | NA | 2013-10-20 |
| Marinobacterium | 2 | Yes | (Alfaro-Espinoza & Ullrich, 2014) |  | 2014-06-11 |
| Marinospirillum | 1 | No | NA | NA | 2016-11-17 |
| Martelella | 1 | Yes | (정영륜 et al., 2013) | NA | 2015-03-23 |
| Mastigocoleus | 1 | Yes | (Guida & Garcia-Pichel, 2016) | NA | 2015-12-02 |
| Mesorhizobium | 66 | Yes | (Dos Santos et al., 2012) | NA | 2004-05-10 |
| Methanobacterium | 4 | Yes | (Dos Santos et al., 2012) | NA | 2013-11-13 |
| Methanocella | 2 | No | NA | NA | 2006-10-11 |
| Methanococcus | 4 | Yes | (Dos Santos et al., 2012) | NA | 2007-03-14 |
| Methanolacinia | 1 | No | NA | NA | 2010-09-16 |
| Methanolobus | 2 | No | NA | NA | 2016-02-28 |
| Methanoregula | 1 | No | NA | NA | 2007-07-25 |
| Methanosarcina | 24 | Yes | (Dos Santos et al., 2012) | NA | 2002-04-02 |
| Methanosphaerula | 1 | No | NA | NA | 2009-01-04 |
| Methanothermobacter | 4 | Yes | (Dos Santos et al., 2012) | NA | 1999-12-21 |
| Methanothrix | 1 | Yes | (Bae et al., 2018) | NifH transcription evidence | 2011-04-14 |
| Methylacidiphilum | 4 | Yes | (Khadem et al., 2010) | NA | 2008-05-29 |
| Methylobacter | 2 | No | NA | NA | 2011-08-24 |
| Methylobacterium | 2 | Yes | (Dos Santos et al., 2012) | NA | 2008-02-19 |
| Methylocaldum | 1 | No | NA | NA | 2017-09-07 |
| Methylocapsa | 1 | Yes | (Dedysh et al., 2002) | NA | 2016-11-01 |
| Methyloceanibacter | 1 | No | NA | NA | 2016-09-11 |
| Methylocella | 2 | Yes | (Dos Santos et al., 2012) | NA | 2008-12-14 |
| Methylococcus | 1 | Yes | (Dos Santos et al., 2012) | NA | 2005-05-17 |
| Methylocystis | 3 | Yes | (Belova et al., 2013) | NA | 2012-08-19 |
| Methyloglobulus | 1 | Yes | (Deutzmann et al., 2014) | NA | 2013-11-12 |
| Methylomagnum | 1 | No | NA | NA | 2017-04-18 |
| Methylomonas | 7 | Yes | (Dos Santos et al., 2012) | NA | 2011-05-23 |
| Methyloprofundus | 1 | Yes | (Tavormina et al., 2015) |  | 2017-03-27 |
| Methylosinus | 3 | Yes | (Auman et al., 2001) | NA | 2016-05-15 |
| Methyloversatilis | 1 | No | NA | NA | 2016-08-24 |
| Methylovulum | 1 | Yes | (Oshkin et al., 2016) | NA | 2017-06-26 |
| Microchaete | 1 | Yes | (Busch & Montgomery, 2017) | NA | 2017-06-24 |
| Microcoleus | 1 | Yes | (Omoregie et al., 2004) | NA | 2012-12-05 |
| Microvirga | 2 | Yes | (Ardley et al., 2012) | NA | 2012-05-28 |
| Neorhizobium | 4 | Yes | NA | NA | 2014-06-24 |
| Neosynechococcus | 1 | No | NA | NA | 2014-09-28 |
| Nitrospirillum | 2 | Yes | NA | Previously *Azospirillum* | 2011-09-14 |
| Nodularia | 2 | Yes | (Issa et al., 2014) | NA | 2014-04-02 |
| Nostoc | 20 | Yes | (Dos Santos et al., 2012) | NA | 2004-05-10 |
| Novosphingobium | 5 | Yes | (DeLong et al., 2014) | NA | 2011-03-17 |
| Oleibacter | 1 | Metagenome | NA | NA | 2017-10-23 |
| Orenia | 1 | No | NA | NA | 2016-07-25 |
| Paenibacillus | 33 | Yes | NA | NA | 2011-11-15 |
| Paludibacter | 2 | Yes | (Inoue et al., 2015) | NA | 2010-11-22 |
| Pantoea | 3 | Yes | (Dos Santos et al., 2012) | NA | 2011-01-03 |
| Paraburkholderia | 13 | Yes | (Sawana et al., 2014) | NA | 2006-04-09 |
| Pararhodospirillum | 1 | Yes | (DeLong et al., 2014) | NA | 2012-02-22 |
| Pectobacterium | 3 | Yes | NA | Previously classified as *Erwinia* | 2004-06-30 |
| Pelobacter | 1 | Yes | (Dos Santos et al., 2012) | NA | 2006-03-29 |
| Pelodictyon | 2 | Yes | NA | Previously known as *Chlorobium* | 2005-10-25 |
| Pelosinus | 4 | No | NA | NA | 2012-06-19 |
| Phaeospirillum | 2 | Yes | (DeLong et al., 2014) | NA | 2012-03-15 |
| Phormidesmis | 1 | Metagenome | NA | NA | 2015-10-13 |
| Phormidium | 2 | Yes | (Zehr et al., 1997) | NA | 2016-05-04 |
| Phytobacter | 1 | Yes | (Pillonetto et al., 2018) | NA | 2015-06-08 |
| Planktothrix | 1 | Yes | (Pancrace et al., 2017) | NA | 2016-12-01 |
| Pleomorphomonas | 2 | Yes | (Madhaiyan et al., 2013) | NA | 2017-11-13 |
| Pleurocapsa | 1 | Yes | (Bergman et al., 1997) | NA | 2012-12-04 |
| Polaromonas | 1 | Yes | (Inoue et al., 2015) | NA | 2007-01-03 |
| Propionibacterium | 1 | Yes | (Sellstedt & Richau, 2013) | NA | 2016-10-30 |
| Propionispora | 3 | Yes | (Addo & Dos Santos, 2020) | NA | 2015-09-13 |
| Propionivibrio | 2 | No | NA | NA | 2016-06-15 |
| Prosthecochloris | 3 | Yes | (Dos Santos et al., 2012) | NA | 2008-07-17 |
| Prosthecomicrobium | 1 | No | NA | NA | 2015-09-30 |
| Pseudacidovorax | 1 | Yes | (Kämpfer et al., 2008) | NA | 2013-07-30 |
| Pseudanabaena | 1 | Yes | (Zehr et al., 1997) | NA | 2017-08-14 |
| Pseudoclostridium | 1 | Yes | NA | Previously *Clostridium neopropionicum* | 2018-01-23 |
| Pseudodesulfovibrio | 5 | Yes | NA | Previously known as *Desulfovibrio* | 2011-01-03 |
| Pseudomonas | 10 | Yes | (Dos Santos et al., 2012) | NA | 2007-04-19 |
| Rahnella | 3 | Yes | (Berge et al., 1991) | NA | 2012-01-09 |
| Raoultella | 1 | Yes | NA | Previously classified as *Klebsiella* | 2018-12-06 |
| Rhizobium | 46 | Yes | (Dos Santos et al., 2012) | NA | 2006-03-05 |
| Rhodobacter | 13 | Yes | (Dos Santos et al., 2012) | NA | 2007-02-22 |
| Rhodoblastus | 1 | Yes | (Dos Santos et al., 2012) | Previously *Rhodopseudomonas* | 2017-06-23 |
| Rhodoferax | 2 | Yes | (Baker et al., 2017) | NA | 2017-01-05 |
| Rhodomicrobium | 2 | Yes | (Dos Santos et al., 2012) | NA | 2010-11-04 |
| Rhodopseudomonas | 10 | Yes | (Dos Santos et al., 2012) | NA | 2003-12-10 |
| Rhodospira | 1 | No | NA | NA | 2016-10-20 |
| Rhodospirillum | 2 | Yes | (Dos Santos et al., 2012) | NA | 2005-12-11 |
| Rhodovulum | 4 | Yes | NA | Previously *Rhodobacter* | 2015-03-17 |
| Richelia | 1 | Yes | (Hilton et al., 2013) | NA | 2013-03-26 |
| Rippkaea | 1 | Yes | (Mareš et al., 2019) | NA | 2008-12-16 |
| Roseofilum | 1 | No | NA | NA | 2016-12-06 |
| Roseospirillum | 1 | No | NA | NA | 2016-10-20 |
| Rubrivivax | 2 | Yes | (Brenner et al., 2007) | NA | 2011-02-22 |
| Ruminiclostridium | 3 | Yes | NA | Previously *Clostridium neopropionicum* | 2011-03-13 |
| Saccharicrinis | 1 | Yes | (Inoue et al., 2015) | NA | 2014-02-26 |
| Sagittula | 1 | Yes | (Martínez‐Pérez et al., 2018) |  | 2017-12-06 |
| Scytonema | 3 | Yes | (Zehr et al., 1997) | NA | 2017-06-24 |
| Sedimenticola | 1 | No | NA | NA | 2015-05-14 |
| Sediminispirochaeta | 1 | Yes | (Shivani et al., 2016) | NA | 2010-07-28 |
| Serratia | 1 | Yes | (Gyaneshwar et al., 2001) | NA | 2018-01-03 |
| Shewanella | 1 | No | NA | NA | 2014-09-09 |
| Sideroxydans | 2 | No | NA | NA | 2010-03-25 |
| Sinorhizobium | 15 | Yes | (Dos Santos et al., 2012) | NA | 2003-05-05 |
| Skermanella | 2 | No | NA | NA | 2014-02-23 |
| Solimonas | 1 | No | NA | NA | 2016-10-30 |
| Sphaerotilus | 1 | No | NA | NA | 2014-05-11 |
| Spirochaeta | 1 | Yes | (Lilburn et al., 2001) | NA | 2010-09-09 |
| Sporomusa | 4 | Yes | (Kuhner et al., 1997) | NA | 2015-04-19 |
| Sulfuricella | 1 | No | NA | NA | 2015-04-06 |
| Sulfuricurvum | 5 | No | NA | NA | 2010-12-01 |
| Sulfurimonas | 2 | Metagenome | NA | NA | 2016-10-20 |
| Sulfurospirillum | 4 | No | NA | NA | 2012-06-06 |
| Synechococcus | 4 | Yes | (Dos Santos et al., 2012) | NA | 2006-02-05 |
| Syntrophobacter | 1 | No | NA | NA | 2006-10-25 |
| Syntrophobotulus | 1 | No | NA | NA | 2011-02-28 |
| Syntrophomonas | 1 | No | NA | NA | 2015-04-23 |
| Syntrophus | 1 | No | NA | NA | 2016-10-30 |
| Telmatospirillum | 1 | Yes | (DeLong et al., 2014) | NA | 2017-12-19 |
| Teredinibacter | 1 | Yes | (Dos Santos et al., 2012) | NA | 2009-06-14 |
| Terrimicrobium | 1 | No | NA | NA | 2016-03-29 |
| Thermincola | 2 | No | NA | NA | 2010-05-12 |
| Thermoanaerobacterium | 1 | Yes | (Klipp et al., 2005) | Previously *C. thermosaccharolyticum* | 2012-06-03 |
| Thermoclostridium | 1 | Yes | NA | Previously *Clostridium neopropionicum* | 2019-09-10 |
| Thermodesulfovibrio | 2 | No | NA | NA | 2008-09-25 |
| Thiocapsa | 3 | No | NA | NA | 2011-08-17 |
| Thiocystis | 1 | Yes | (DeLong et al., 2014) |  | 2012-06-07 |
| Thiodictyon | 1 | Yes | (Luedin et al., 2019) | NA | 2017-12-06 |
| Thioflavicoccus | 1 | Yes | (DeLong et al., 2014) | NA | 2012-12-19 |
| Thioflexothrix | 1 | No | NA | NA | 2017-05-18 |
| Thioploca | 1 | Metagenome | NA | NA | 2014-09-18 |
| Thiorhodococcus | 1 | Yes | (Addo & Dos Santos, 2020) | NA | 2011-08-18 |
| Thiorhodospira | 1 | Yes | (Severin et al., 2010) | NA | 2011-10-05 |
| Thiorhodovibrio | 1 | Yes | (Rosenberg et al., 2014) | NA | 2012-03-22 |
| Thiothrix | 1 | Yes | (Chernousova et al., 2009) | NA | 2016-10-21 |
| Tolumonas | 1 | No | NA | NA | 2009-05-12 |
| Tolypothrix | 3 | Yes | (Issa et al., 2014) | NA | 2012-09-27 |
| Treponema | 2 | Yes | (Lilburn et al., 2001) | NA | 2011-05-22 |
| Trichodesmium | 1 | Yes | (Dos Santos et al., 2012) | NA | 2006-07-05 |
| Trichormus | 3 | Yes | (Gladkikh et al., 2008) | NA | 2005-09-14 |
| Trinickia | 2 | Yes | (Estrada-de Los Santos et al., 2018) | NA | 2017-04-18 |
| Tropicimonas | 1 | No | NA | NA | 2016-11-01 |
| Uliginosibacterium | 1 | Yes | NA | Previously known as *Azoarcus* | 2018-01-02 |
| Unclassified | 62 | NA | NA | NA | NA |
| Variovorax | 1 | No | NA | NA | 2016-08-15 |
| Vibrio | 10 | Yes | (Dos Santos et al., 2012) | NA | 2016-07-05 |
| Vitreoscilla | 1 | Yes | (Brenner et al., 2007) | NA | 2017-07-19 |
| Wolinella | 1 | Yes | NA | Previously known as *Vibrio* | 2003-09-07 |
| Xanthobacter | 1 | Yes | (Dos Santos et al., 2012) | NA | 2007-07-29 |
| Xenococcus | 1 | Yes | (Zehr et al., 1997) | NA | 2013-01-16 |
| Yangia | 2 | No | NA | NA | 2016-07-17 |
| Youngiibacter | 1 | No | NA | NA | 2013-12-08 |
| Zymomonas | 4 | Yes | (Kremer et al., 2015) | NA | 2010-01-11 |

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