

# Epilinea brevis sp. nov.

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**Table 1:** Complete list of names proposed in the current register list.

Proposed Taxon	Etymology	Description	Parent Taxon	Type	Registry URL
Order <i>Epilineales</i>	[E.pi.li.ne.a'les] <b>N.L. fem. n.</b> <i>Epilinea</i> , referring to the type genus Epilinea; -ales, ending to denote an order; <b>N.L. fem. pl. n.</b> <i>Epilineales</i> , the Epilinea order	An order established on the basis of MiGA taxonomic novelty analyses, 16S rRNA gene phylogenetic reconstruction, FISH and phylogenomic analyses and is classified as a member of the Anaerolineae class. The type species is Epilinea brevis.	<i>Anaerolineae</i>	<i>Epilinea</i>	<a href="https://seqco.de/i:43966">seqco.de/i:43966</a>
Family <i>Epilineaceae</i>	[E.pi.li.ne.a'ce.ae] <b>N.L. fem. n.</b> <i>Epilinea</i> , referring to the type genus Epilinea; -aceae, ending to denote a family; <b>N.L. fem. pl. n.</b> <i>Epilineaceae</i> , the Epilinea family	A family established on the basis of MiGA taxonomic novelty analyses, 16S rRNA gene phylogenetic reconstruction, FISH and phylogenomic analyses and is classified as a member of the Epilineales order. The type species is Epilinea brevis.	<i>Epilineales</i>	<i>Epilinea</i>	<a href="https://seqco.de/i:43956">seqco.de/i:43956</a>
Family <i>Villigracilaceae</i>	[Vi.lli.gra.ci.la'ce.ae] <b>N.L. masc. n.</b> <i>Villigracilis</i> , referring to the type genus Villigracilis; -aceae, ending to denote a family; <b>N.L. fem. pl. n.</b> <i>Villigracilaceae</i> , the Villigracilis family	A family established on the basis of MiGA taxonomic novelty analyses, 16S rRNA gene phylogenetic reconstruction, FISH and phylogenomic analyses and is classified as a member of the Anaerolineales order. The type species is Villigracilis saccharophilus.	<i>Anaerolineales</i>	<i>Villigracilis</i>	<a href="https://seqco.de/i:43974">seqco.de/i:43974</a>
Family <i>Flexifilaceae</i>	[Fle.xi.fi.la'ce.ae] <b>N.L. neut. n.</b> <i>Flexifilum</i> , referring to the type genus Flexifilum; -aceae, ending to denote a family; <b>N.L. fem. pl. n.</b> <i>Flexifilaceae</i> , the Flexifilum family	A family established on the basis of MiGA taxonomic novelty analyses, 16S rRNA gene phylogenetic reconstruction, FISH and phylogenomic analyses and is classified as a member of the Epilineales order. The type species is Flexifilum breve.	<i>Aggregatilineales</i>	<i>Flexifilum</i>	<a href="https://seqco.de/i:44001">seqco.de/i:44001</a>
Genus <i>Defluviilinea</i>	[De.flu.vi.i.li.ne'a] <b>L. neut. n.</b> <i>defluvium</i> , sewage; <b>L. fem. n.</b> <i>linea</i> , line, filament; <b>N.L. fem. n.</b> <i>Defluviilinea</i> , filamentous bacterium found in sewage	A genus established on the basis of MiGA taxonomic novelty analyses, ANI, 16S rRNA gene phylogenetic reconstruction, FISH and phylogenomic analyses and is classified as a member of the Villigracilaceae family. The type species of the genus is Defluviilinea gracilis.	<i>Villigracilaceae</i>	<i>Defluviilinea gracilis</i> <sup>TS</sup>	<a href="https://seqco.de/i:43973">seqco.de/i:43973</a>

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Genus <i>Villigracilis</i>	[Vi.lli.gra.ci'lis] L. <b>masc. n.</b> <i>villus</i> , tuft of hair; L. <b>masc. adj.</b> <i>gracilis</i> , slim, slender; N.L. <b>masc. n.</b> <i>Villigracilis</i> , bacteria shaped as a slender tuft of hair	A genus established on the basis of MiGA taxonomic novelty analyses, ANI, 16S rRNA gene phylogenetic reconstruction, FISH and phylogenomic analyses and is classified as a member of the Villigracilaceae. The type species of the genus is <i>Villigracilis saccharophilus</i> .	<i>Villigracilaceae</i>	<i>Villigracilis saccharophilus</i> <sup>TS</sup>	<a href="https://seqco.de/i:43977">seqco.de/i:43977</a>
Genus <i>Flexifilum</i>	[Fle.xi.fi'lum] L. <b>masc. part.</b> <i>flexus</i> , bent; L. <b>neut. n.</b> <i>filum</i> , thread; N.L. <b>neut. n.</b> <i>Flexifilum</i> , bent-shaped filamentous bacterium	A genus established on the basis of MiGA taxonomic novelty analyses, ANI, 16S rRNA gene phylogenetic reconstruction, FISH and phylogenomic analyses and is classified as a member of the Promineofilaceae family. The type species of the genus is <i>Flexifilum breve</i> .	<i>Flexifilaceae</i>	<i>Flexifilum breve</i> <sup>TS</sup>	<a href="https://seqco.de/i:44000">seqco.de/i:44000</a>
Genus <i>Flexicrinis</i>	[Fle.xi.cri'nis] L. <b>masc. part.</b> <i>flexus</i> , bent; L. <b>masc. n.</b> <i>crinis</i> , hair, filament; N.L. <b>masc. n.</b> <i>Flexicrinis</i> , bent-shaped filamentous bacterium	A genus established on the basis of MiGA taxonomic novelty analyses, ANI, 16S rRNA gene phylogenetic reconstruction and phylogenomic analyses and is classified as a member of the Promineofilaceae family. The type species of the genus is <i>Flexicrinis affinis</i> .	<i>Flexifilaceae</i>	<i>Flexicrinis affinis</i> <sup>TS</sup>	<a href="https://seqco.de/i:43997">seqco.de/i:43997</a>
Genus <i>Amarobacter</i>	[A.ma.ro.bac'ter] Gr. <b>fem. n.</b> <i>amara</i> , trench, conduit, here a sewage conduit; N.L. <b>masc. n.</b> <i>bacter</i> , rod-shaped bacterium; N.L. <b>masc. n.</b> <i>Amarobacter</i> , rod-shaped bacterium found in sewage sludge	A genus established on the basis of MiGA taxonomic novelty analyses, ANI, 16S rRNA gene phylogenetic reconstruction, FISH and phylogenomic analyses and is classified as a member of the Tepidiformalceae family. The type species of the genus is <i>Amarobacter glycogeticus</i> .	<i>Tepidiformaceae</i>	<i>Amarobacter glycogeticus</i> <sup>TS</sup>	<a href="https://seqco.de/i:44011">seqco.de/i:44011</a>
Genus <i>Amarobacillus</i>	[A.ma.ro.ba.cil'lus] Gr. <b>fem. n.</b> <i>amara</i> , trench, conduit, here a sewage conduit; N.L. <b>masc. n.</b> <i>bacillus</i> , rod-shaped bacterium; N.L. <b>masc. n.</b> <i>Amarobacillus</i> , rod-shaped bacterium from activated sludge	A genus established on the basis of MiGA taxonomic novelty analyses, ANI, 16S rRNA gene phylogenetic reconstruction, FISH and phylogenomic analyses and is classified as a member of the Tepidiformaceae family. The type species of the genus is <i>Amarobacillus elongatus</i> .	<i>Tepidiformaceae</i>	<i>Amarobacillus elongatus</i> <sup>TS</sup>	<a href="https://seqco.de/i:44013">seqco.de/i:44013</a>
Genus <i>Epilinea</i>	[E.pi.li.ne'a] Gr. <b>pref.</b> <i>epi</i> , on; L. <b>fem. n.</b> <i>linea</i> , line; N.L. <b>fem. n.</b> <i>Epilinea</i> , filamentous bacteria attached to other filaments	A genus established on the basis of MiGA taxonomic novelty analyses, ANI, 16S rRNA gene phylogenetic reconstruction, FISH and phylogenomic analyses and is classified as a member of the <i>Epilineaceae</i> family. The type species of the genus is <i>Epilinea brevis</i> .	<i>Epilineaceae</i>	<i>Epilinea brevis</i> <sup>TS</sup>	<a href="https://seqco.de/i:43955">seqco.de/i:43955</a>

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Genus <i>Avedoeria</i>	[A.ve.doe'ri.a] N.L. <b>fem. n.</b> <i>Avedoeria</i> , arbitrarily formed genus name to refer to a bacterium named after the city Avedoere where the MAG has been retrieved	A genus established on the basis of MiGA taxonomic novelty analyses, ANI, 16S rRNA gene phylogenetic reconstruction, FISH and phylogenomic analyses and is classified as a member of the Epilineaceae family. The type species of the genus is <i>Avedoeria danica</i> .	<i>Epilineaceae</i>	<i>Avedoeria danica</i> <sup>TS</sup>	<a href="https://seqco.de/i:43968">seqco.de/i:43968</a>
Genus <i>Fredericiella</i>	[Fre.de.ri.ci.el'la] N.L. <b>fem. dim. n.</b> <i>Fredericiella</i> , Bacterium named after the city Fredericia	A genus established on the basis of MiGA taxonomic novelty analyses, ANI, 16S rRNA gene phylogenetic reconstruction and phylogenomic analyses and is classified as a member of the Caldilineaceae family. The type species of the genus is <i>Fredericiella danica</i> .	<i>Caldilineaceae</i>	<i>Fredericiella danica</i> <sup>TS</sup>	<a href="https://seqco.de/i:44004">seqco.de/i:44004</a>
Genus <i>Ribeilla</i>	[Ri.be.i.el'la] N.L. <b>fem. dim. n.</b> <i>Ribeilla</i> , Bacterium named after the city of Ribe	A genus established on the basis of MiGA taxonomic novelty analyses, ANI, 16S rRNA gene phylogenetic reconstruction and phylogenomic analyses and is classified as a member of the Roseiflexaceae family. The type species of the genus is <i>Ribeilla danica</i> .	<i>Roseiflexaceae</i>	<i>Ribeilla danica</i> <sup>TS</sup>	<a href="https://seqco.de/i:44006">seqco.de/i:44006</a>
Genus <i>Hadersleviella</i>	[Ha.der.sle.vi.e'lla] N.L. <b>fem. n.</b> <i>Hadersleviella</i> , bacterium named after the city Haderslev where the MAG has been retrieved	A genus established on the basis of MiGA taxonomic novelty analyses, ANI, 16S rRNA gene phylogenetic reconstruction, FISH and phylogenomic analyses and is classified as a member of the Promineofilaceae family. The type species of the genus is <i>Hadersleviella danica</i> .	<i>Promineofilaceae</i>	<i>Hadersleviella danica</i> <sup>TS</sup>	<a href="https://seqco.de/i:43984">seqco.de/i:43984</a>
Genus <i>Leptofilum</i>	[Lep.to.fi'lum] Gr. <b>masc. adj.</b> <i>leptos</i> , thin; L. <b>neut. adj.</b> <i>filum</i> , thread; N.L. <b>neut. n.</b> <i>Leptofilum</i> , bacterium with thin filamentous morphology	A genus established on the basis of MiGA taxonomic novelty analyses, ANI, 16S rRNA gene phylogenetic reconstruction, FISH and phylogenomic analyses and is classified as a member of the Promineofilaceae family. The type species of the genus is <i>Leptofilum gracile</i> .	<i>Promineofilaceae</i>	<i>Leptofilum gracile</i> <sup>TS</sup>	<a href="https://seqco.de/i:43990">seqco.de/i:43990</a>
Genus <i>Leptovillus</i>	[Lep.to.vi'llus] Gr. <b>masc. adj.</b> <i>leptos</i> , thin; L. <b>masc. n.</b> <i>villus</i> , hair, filament; N.L. <b>masc. n.</b> <i>Leptovillus</i> , thin filamentous bacterium	A genus established on the basis of MiGA taxonomic novelty analyses, ANI, 16S rRNA gene phylogenetic reconstruction, FISH and phylogenomic analyses and is classified as a member of the Promineofilaceae family. The type species of the genus is <i>Leptovillus gracilis</i> .	<i>Promineofilaceae</i>	<i>Leptovillus gracilis</i> <sup>TS</sup>	<a href="https://seqco.de/i:43994">seqco.de/i:43994</a>

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Genus <i>Trichofilum</i>	[Tri.cho.fi'lum] <b>Gr. fem. n. thrix</b> , hair, filament; <b>L. neut. n. filum</b> , thread; <b>N.L. neut. n. Trichofilum</b> , bacterium with filamentous morphology	A genus established on the basis of MiGA taxonomic novelty analyses, ANI, 16S rRNA gene phylogenetic reconstruction, FISH and phylogenomic analyses and is classified as a member of the Promineofilaceae family. The type species of the genus is <i>Trichofilum aggregatum</i> .	<i>Promineofilaceae</i>	<i>Trichofilum aggregatum</i> <sup>Ts</sup>	<a href="https://seqco.de/i:43986">seqco.de/i:43986</a>
Genus <i>Kouleothrix</i>	[Ko.u.le.oth'rix] <b>Gr. neut. n. kouleon</b> , sheath; <b>Gr. fem. n. thrix</b> , hair, filament; <b>N.L. fem. n. Kouleothrix</b> , sheath filamentous bacteria	Filamentous organisms abundant in activated sludge worldwide, sometime associated with bulking episodes. They are often arranged in bundles of filaments with epiphytic bacteria. Specialized in metabolism of sugars.	<i>Roseiflexaceae</i>	<i>Kouleothrix ribensis</i> <sup>Ts</sup>	<a href="https://seqco.de/i:35217">seqco.de/i:35217</a>
Species <i>Epilinea brevis</i> <sup>Ts</sup>	[bre'vis] <b>L. fem. adj. brevis</b> , short	The species is established on the same basis as the genus and the type material is the genome Hirt_BATAC.427. Fluorescence in situ hybridization with genus-specific FISH probes shows filamentous morphology (4-57 × 0.4-0.7 µm).	<i>Epilinea</i>	NCBI Assembly: GCA_016710785.1 <sup>Ts</sup>	<a href="https://seqco.de/i:43954">seqco.de/i:43954</a>
Species <i>Avedoeria danica</i> <sup>Ts</sup>	[da.ni'ca] <b>L. fem. adj. danica</b> , Danish	The species is established on the same basis as the genus and the type material is the genome Aved_BATAC.767.	<i>Avedoeria</i>	NCBI Assembly: GCA_016703025.1 <sup>Ts</sup>	<a href="https://seqco.de/i:43967">seqco.de/i:43967</a>
Species <i>Defluviilinea gracilis</i> <sup>Ts</sup>	[gra.ci'lis] <b>L. fem. adj. gracilis</b> , slender	The species is established on the same basis as the genus and the type material is the genome Kalu_BAT3C.361. Fluorescence in situ hybridization with genus-specific FISH probes shows filamentous morphology (12-50 × 0.3-0.4 µm).	<i>Defluviilinea</i>	NCBI Assembly: GCA_016716235.1 <sup>Ts</sup>	<a href="https://seqco.de/i:43972">seqco.de/i:43972</a>
Species <i>Defluviilinea proxima</i>	[pro.xi'ma] <b>L. fem. adj. proxima</b> , next of kin	The species is established on the same basis as the genus and the type material is the genome Skiv_MAXAC.174. Fluorescence in situ hybridization with genus-specific FISH probes shows filamentous morphology (12-50 × 0.3-0.4 µm).	<i>Defluviilinea</i>	NCBI Assembly: GCA_016721115.1 <sup>Ts</sup>	<a href="https://seqco.de/i:43975">seqco.de/i:43975</a>
Species <i>Villigracilis vicinus</i>	[vi.ci'nus] <b>L. masc. adj. vicinus</b> , close	The species is established on the same basis as the genus and the type material is the genome Skiv_MAXAC.043. Fluorescence in situ hybridization with genus-specific FISH probes shows filamentous morphology (12-50 × 0.3-0.4 µm).	<i>Villigracilis</i>	NCBI Assembly: GCA_016721315.1 <sup>Ts</sup>	<a href="https://seqco.de/i:43976">seqco.de/i:43976</a>

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Species <i>Villigracilis propinquus</i>	[pro.pin'quus] L. <b>masc. adj.</b> <i>propinquus</i> , next of kin	The species is established on the same basis as the genus and the type material is the genome OdNW_BATAC.378. Fluorescence in situ hybridization with genus-specific FISH probes shows filamentous morphology (12-50 × 0.3-0.4 μm).	<i>Villigracilis</i>	NCBI Assembly: GCA_016714565.1 Ts	<a href="https://seqco.de/i:43979">seqco.de/i:43979</a>
Species <i>Villigracilis affinis</i>	[af.fi'nis] L. <b>masc. adj.</b> <i>affinis</i> , next of kin	The species is established on the same basis as the genus and the type material is the genome OdNW_MAXAC.037. Fluorescence in situ hybridization with genus-specific FISH probes shows filamentous morphology (12-50 × 0.3-0.4 μm).	<i>Villigracilis</i>	NCBI Assembly: GCA_016718275.1 Ts	<a href="https://seqco.de/i:43980">seqco.de/i:43980</a>
Species <i>Villigracilis proximus</i>	[pro.xi'mus] L. <b>masc. adj.</b> <i>proximus</i> , next of kin	The species is established on the same basis as the genus and the type material is the genome OdNE_MAXAC.047. Fluorescence in situ hybridization with genus-specific FISH probes shows filamentous morphology (12-50 × 0.3-0.4 μm).	<i>Villigracilis</i>	NCBI Assembly: GCA_016714625.1 Ts	<a href="https://seqco.de/i:43981">seqco.de/i:43981</a>
Species <i>Villigracilis saccharophilus</i> <sup>Ts</sup>	[sac.cha.ro.phi'lus] Gr. <b>neut. n.</b> <i>saccharon</i> , sugar; Gr. <b>masc. n.</b> <i>philos</i> , lover; N.L. <b>masc. adj.</b> <i>saccharophilus</i> , indicating a preference for sugars as carbon sources	The species is established on the same basis as the genus and the type material is the genome EsbW_MAXAC.021. Fluorescence in situ hybridization with genus-specific FISH probes shows filamentous morphology (12-50 × 0.3-0.4 μm).	<i>Villigracilis</i>	NCBI Assembly: GCA_016709305.1 Ts	<a href="https://seqco.de/i:43982">seqco.de/i:43982</a>
Species <i>Hadersleviella danica</i> <sup>Ts</sup>	[da.ni'ca] L. <b>fem. adj.</b> <i>danica</i> , Danish	The species is established on the same basis as the genus and the type material is the genome Hade_MAXAC.236_sub.	<i>Hadersleviella</i>	NCBI Assembly: GCA_016711405.1 Ts	<a href="https://seqco.de/i:43983">seqco.de/i:43983</a>
Species <i>Trichofilum aggregatum</i> <sup>Ts</sup>	[ag.gre.ga'tum] L. <b>neut. adj.</b> <i>aggregatum</i> , indicating the bundles often formed with other filaments	The species is established on the same basis as the genus and the type material is the genome Hirt_MAXAC.142. Fluorescence in situ hybridization with genus-specific FISH probes shows filamentous morphology (60-200 × 0.6-0.8 μm).	<i>Trichofilum</i>	NCBI Assembly: GCA_016716885.1 Ts	<a href="https://seqco.de/i:43985">seqco.de/i:43985</a>

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Species <i>Leptofilum proximum</i>	[pro.xi'mum] L. neut. adj. <i>proximum</i> , next of kin	The species is established on the same basis as the genus and the type material is the genome Kalu_MAXAC.106v2. Fluorescence in situ hybridization with genus-specific FISH probes shows filamentous morphology (10-70 × 0.7-0.9 µm).	<i>Leptofilum</i>	NCBI Assembly: GCA_016710325.1 Ts	<a href="https://seqco.de/i:43991">seqco.de/i:43991</a>
Species <i>Leptovillus affinis</i>	[af.fi'nis] L. masc. adj. <i>affinis</i> , next of kin	The species is established on the same basis as the genus and the type material is the genome AalE_BATAC.251. Fluorescence in situ hybridization with genus-specific FISH probes shows filamentous morphology (10-70 × 0.7-0.9 µm).	<i>Leptovillus</i>	NCBI Assembly: GCA_016705235.1 Ts	<a href="https://seqco.de/i:43993">seqco.de/i:43993</a>
Species <i>Flexicrinis affinis</i> <sup>Ts</sup>	[af.fi'nis] L. masc. adj. <i>affinis</i> , next of kin	The species is established on the same basis as the genus and the type material is the genome Kalu_BAT3C.186. Fluorescence in situ hybridization with genus-specific FISH probes shows filamentous morphology (40-110 × 0.7-1.1 µm).	<i>Flexicrinis</i>	NCBI Assembly: GCA_016716525.1 Ts	<a href="https://seqco.de/i:43995">seqco.de/i:43995</a>
Species <i>Flexicrinis proximus</i>	[pro.xi'mus] L. masc. adj. <i>proximus</i> , next of kin	The species is established on the same basis as the genus and the type material is the genome Fred_MAXAC.112. Fluorescence in situ hybridization with genus-specific FISH probes shows filamentous morphology (40-110 × 0.7-1.1 µm).	<i>Flexicrinis</i>	NCBI Assembly: GCA_016712885.1 Ts	<a href="https://seqco.de/i:43996">seqco.de/i:43996</a>
Species <i>Flexifilum breve</i> <sup>Ts</sup>	[bre've] L. neut. adj. <i>breve</i> , short	The species is established on the same basis as the genus and the type material is the genome Ribe_BATAC.253. Fluorescence in situ hybridization with genus-specific FISH probes shows filamentous morphology (>100 × 0.8-1.1 µm).	<i>Flexifilum</i>	NCBI Assembly: GCA_016717205.1 Ts	<a href="https://seqco.de/i:43998">seqco.de/i:43998</a>
Species <i>Flexifilum affine</i>	[af.fi'ne] L. neut. adj. <i>affine</i> , next of kin	The species is established on the same basis as the genus and the type material is the genome Fred_MAXAC.112. Fluorescence in situ hybridization with genus-specific FISH probes shows filamentous morphology (40-110 × 0.7-1.1 µm).	<i>Flexifilum</i>	NCBI Assembly: GCA_016713325.1 Ts	<a href="https://seqco.de/i:43999">seqco.de/i:43999</a>
Species <i>Amarolinea dominans</i>	[do'mi.nans] L. part. adj. <i>dominans</i> , indicating the high abundance in sewage sludge	A species of filamentous bacteria abundant in activated sludge globally.	<i>Amarolinea</i>	NCBI Assembly: GCA_016719785.1 Ts	<a href="https://seqco.de/i:44002">seqco.de/i:44002</a>

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Species <i>Fredericiella danica</i> <sup>Ts</sup>	[da.ni'ca] L. fem. adj. <i>danica</i> , Danish	A species established on the basis of MiGA taxonomic novelty analyses, ANI, 16S rRNA gene phylogenetic reconstruction and phylogenomic analyses.	<i>Fredericiella</i>	NCBI Assembly: GCA_016713335.1 <sup>Ts</sup>	<a href="https://seqco.de/i:44003">seqco.de/i:44003</a>
Species <i>Caldilinea saccharophila</i>	[sac.cha.ro'phi.la] Gr. neut. n. <i>saccharon</i> , sugar; Gr. masc. n. <i>philos</i> , lover; N.L. fem. adj. <i>saccharophila</i> , indicating a preference for sugars as carbon sources	A species established on the basis of MiGA taxonomic novelty analyses, ANI, 16S rRNA gene phylogenetic reconstruction, FISH and phylogenomic analyses.	<i>Caldilinea</i>	NCBI Assembly: GCA_016710365.1 <sup>Ts</sup>	<a href="https://seqco.de/i:44005">seqco.de/i:44005</a>
Species <i>Ribeilla danica</i> <sup>Ts</sup>	[da.ni'ca] L. fem. adj. <i>danica</i> , Danish	A species abundant in activated sludge, established on the basis of MiGA taxonomic novelty analyses, ANI, 16S rRNA gene phylogenetic reconstruction and phylogenomic analyses.	<i>Ribeilla</i>	NCBI Assembly: GCA_016717335.1 <sup>Ts</sup>	<a href="https://seqco.de/i:44007">seqco.de/i:44007</a>
Species <i>Kouleothrix ribensis</i> <sup>Ts</sup>	[ri.ben'sis] N.L. fem. adj. <i>ribensis</i> , pertinent to the city of Ribe	A species of filamentous bacteria abundant in activated sludge, established on the basis of MiGA taxonomic novelty analyses, ANI, 16S rRNA gene phylogenetic reconstruction and phylogenomic analyses	<i>Kouleothrix</i>	NCBI Assembly: GCA_016722075.1 <sup>Ts</sup>	<a href="https://seqco.de/i:44008">seqco.de/i:44008</a>
Species <i>Amarobacter glycogenicus</i> <sup>Ts</sup>	[gly.co.ge'ni.cus] N.L. masc. adj. <i>glycogenicus</i> , indicating the presence of intracellular glycogen	A species of rod-shape bacteria abundant in activated sludge, established on the basis of MiGA taxonomic novelty analyses, ANI, 16S rRNA gene phylogenetic reconstruction, FISH and phylogenomic analyses.	<i>Amarobacter</i>	NCBI Assembly: GCA_016719395.1 <sup>Ts</sup>	<a href="https://seqco.de/i:44010">seqco.de/i:44010</a>
Species <i>Amarobacillus elongatus</i> <sup>Ts</sup>	[e.lon.ga'tus] L. masc. adj. <i>elongatus</i> , with elongated shape	A species of bacteria abundant in activated sludge, established on the basis of MiGA taxonomic novelty analyses, ANI, 16S rRNA gene phylogenetic reconstruction, FISH and phylogenomic analyses.	<i>Amarobacillus</i>	NCBI Assembly: GCA_016703545.1 <sup>Ts</sup>	<a href="https://seqco.de/i:44012">seqco.de/i:44012</a>
Species <i>Villigracilis adiacens</i>	[a.di.a'cens] L. masc. part. adj. <i>adiacens</i> , close	The species is established on the same basis as the genus and the type material is the genome Aved_BAT3C.518. Fluorescence in situ hybridization with genus-specific FISH probes shows filamentous morphology (12-50 × 0.3-0.4 μm).	<i>Villigracilis</i>	NCBI Assembly: GCA_016703605.1 <sup>Ts</sup>	<a href="https://seqco.de/i:43978">seqco.de/i:43978</a>

Proposed Taxon	Etymology	Description	Parent Taxon	Type	Registry URL
Species <i>Leptofilum gracile</i> <sup>Ts</sup>	[gra.ci'le] L. neut. adj. <i>gracile</i> , thin	The species is established on the same basis as the genus and the type material is the genome Fred_BAT3C.445. Fluorescence in situ hybridization with genus-specific FISH probes shows filamentous morphology (10-70 × 0.7-0.9 μm).	<i>Leptofilum</i>	NCBI Assembly: GCA_016713825.1 <sup>Ts</sup>	<a href="https://seqco.de/i:43989">seqco.de/i:43989</a>
Species <i>Leptovillus gracilis</i> <sup>Ts</sup>	[gra.ci'lis] L. masc. adj. <i>gracilis</i> , slender	The species is established on the same basis as the genus and the type material is the genome Kalu_BATAC.47. Fluorescence in situ hybridization with genus-specific FISH probes shows filamentous morphology (10-70 × 0.7-0.9 μm).	<i>Leptovillus</i>	NCBI Assembly: GCA_016716065.1 <sup>Ts</sup>	<a href="https://seqco.de/i:43992">seqco.de/i:43992</a>
Species <i>Promineifilum glycogenicum</i>	[gly.co.ge.ni'cum] N.L. neut. adj. <i>glycogenicum</i> , indicating the presence of intracellular glycogen	The species is established on the same basis as the genus and the type material is the genome Ega_BAT3C.159. Fluorescence in situ hybridization with genus-specific FISH probes shows filamentous morphology (20-140 × 0.8 μm).	<i>Promineifilum</i>	NCBI Assembly: GCA_016707605.1 <sup>Ts</sup>	<a href="https://seqco.de/i:43987">seqco.de/i:43987</a>