

# Register list for 44 new names including *Fervidifonticulator octavus* sp. nov.

Submitted by Liu, Lan

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

Proposed Taxon	Etymology	Description	Parent Taxon	Type	Registry URL
Phylum <i>Sysuimicrobiota</i>	[Sy.su.i.mic.ro'bi.o'ta] N.L. neut. n. <i>Sysuimicrobium</i> , type genus of the phylum; <i>-ota</i> , ending to denote a phylum; N.L. pl. neut. n. <i>Sysuimicrobiota</i> , the <i>Sysuimicrobium</i> phylum	A phylum established on the basis of AAI, ANI, dDDH and phylogenomic analyses.	<i>Bacteria</i>	<i>Sysuimicrobium</i>	<a href="https://seqco.de/i:32755">seqco.de/i:32755</a>
Class <i>Sysuimicrobiia</i>	[Sy.su.i.mic.ro'bi.ia] N.L. neut. n. <i>Sysuimicrobium</i> , referring to the type genus <i>Sysuimicrobium</i> ; <i>-ia</i> , ending to denote a class; N.L. neut. pl. n. <i>Sysuimicrobiia</i> , the <i>Sysuimicrobium</i> class	A class established on the basis of AAI, ANI, dDDH and phylogenomic analyses, and is classified as a member of the <i>Sysuimicrobiota</i> phylum.	<i>Sysuimicrobiota</i>	<i>Sysuimicrobium</i>	<a href="https://seqco.de/i:32781">seqco.de/i:32781</a>
Order <i>Sysuimicrobiales</i>	[Sy.su.i.mi.cro'bi.a'les] N.L. neut. n. <i>Sysuimicrobium</i> , type genus of the order; <i>-ales</i> , ending to denote an order; N.L. fem. pl. n. <i>Sysuimicrobiales</i> , the <i>Sysuimicrobium</i> order	A order established on the basis of AAI, ANI, dDDH and phylogenomic analyses, and is classified as a member of the <i>Sysuimicrobiia</i> class.	<i>Sysuimicrobiia</i>	<i>Sysuimicrobium</i>	<a href="https://seqco.de/i:32782">seqco.de/i:32782</a>
Family <i>Kaftiobacteriaceae</i>	[Kaf.ti.o.bac.te.ri.a.ce'ae] N.L. neut. n. <i>Kaftiobacterium</i> , type genus of the family; L. suff. <i>aceae</i> , ending to denote a family; N.L. fem. pl. n. <i>Kaftiobacteriaceae</i> , the <i>Kaftiobacterium</i> family	A family established on the basis of AAI, ANI, dDDH and phylogenomic analyses, and is classified as a member of the <i>Sysuimicrobiales</i> order.	<i>Sysuimicrobiales</i>	<i>Kaftiobacterium</i>	<a href="https://seqco.de/i:32799">seqco.de/i:32799</a>
Family <i>Segetimicrobiaceae</i>	[Se.ge'ti.mi.cro.bi.a.ce'ae] N.L. neut. n. <i>Segetimicrobium</i> , type genus of the family; <i>-aceae</i> , ending to denote a family; N.L. fem. pl. n. <i>Segetimicrobiaceae</i> , the <i>Segetimicrobium</i> family	A family established on the basis of AAI, ANI, dDDH and phylogenomic analyses, and is classified as a member of the <i>Sysuimicrobiales</i> order.	<i>Sysuimicrobiales</i>	<i>Segetimicrobium</i>	<a href="https://seqco.de/i:32796">seqco.de/i:32796</a>

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Family <i>Sysuimicrobiaceae</i>	[Sy.su.i.mi.cro.bi.a.ce'ae] <b>N.L. neut. n.</b> <i>Sysuimicrobium</i> , type genus of the family; <b>-aceae</b> , ending to denote a family; <b>N.L. fem. pl. n.</b> <i>Sysuimicrobiaceae</i> , the <i>Sysuimicrobium</i> family	A family established on the basis of AAI, ANI, dDDH and phylogenomic analyses, and is classified as a member of the <i>Sysuimicrobiales</i> order.	<i>Sysuimicrobiales</i>	<i>Sysuimicrobium</i>	<a href="https://seqco.de/i:32783">seqco.de/i:32783</a>
Family <i>Thermofontiventaceae</i>	[Ther.mo.fon.ti.vi.ven.ta.ce'ae] <b>N.L. masc. n.</b> <i>Thermofontivivens</i> , referring to the type genus <i>Thermofontivivens</i> ; <b>-aceae</b> , ending to denote a family; <b>N.L. fem. pl. n.</b> <i>Thermofontiventaceae</i> , the <i>Thermofontivivens</i> family	A family established on the basis of AAI, ANI, dDDH and phylogenomic analyses, and is classified as a member of the <i>Sysuimicrobiales</i> order.	<i>Sysuimicrobiales</i>	<i>Thermofontivivens</i>	<a href="https://seqco.de/i:32792">seqco.de/i:32792</a>
Family <i>Humicultoraceae</i>	[Hu.mi.cul.tor.a.ce'ae] <b>N.L. masc. n.</b> <i>Humicultor</i> , type genus of the family; <b>L. suff. -aceae</b> , ending to denote a family; <b>N.L. fem. pl. n.</b> <i>Humicultoraceae</i> , the <i>Humicultor</i> family	A family established on the basis of AAI, ANI, dDDH and phylogenomic analyses, and is classified as a member of the <i>Sysuimicrobiales</i> order.	<i>Sysuimicrobiales</i>	<i>Humicultor</i>	<a href="https://seqco.de/i:32808">seqco.de/i:32808</a>
Genus <i>Fervidifonticultor</i>	[Fer.vi.di.fon.ti.cul'tor] <b>L. masc. adj.</b> <i>fervidus</i> , hot, burning; <b>L. masc. n.</b> <i>fons</i> , a spring, fountain; <b>L. masc. n.</b> <i>cultor</i> , an inhabitant; <b>N.L. masc. n.</b> <i>Fervidifonticultor</i> , inhabitant of a hot spring	A genus established on the basis of AAI, ANI, dDDH and phylogenomic analyses, and is classified as a member of the <i>Humicultoraceae</i> family. The type species of the genus is <i>Fervidifonticultor primus</i> .	<i>Humicultoraceae</i>	<i>Fervidifonticultor primus</i> <sup>TS</sup>	<a href="https://seqco.de/i:32815">seqco.de/i:32815</a>
Genus <i>Calidihabitans</i>	[Ca.li.di.ha.bi'tans] <b>L. masc. adj.</b> <i>calidus</i> , hot; <b>L. pres. part.</b> <i>habitans</i> , inhabiting; <b>N.L. masc. n.</b> <i>Calidihabitans</i> , inhabitants of hot environments	A genus established on the basis of AAI, ANI, dDDH and phylogenomic analyses, and is classified as a member of the <i>Kaftiobacteriaceae</i> family. The type species of the genus is <i>Calidihabitans tengchongensis</i> .	<i>Kaftiobacteriaceae</i>	<i>Calidihabitans tengchongensis</i> <sup>TS</sup>	<a href="https://seqco.de/i:32806">seqco.de/i:32806</a>
Genus <i>Kaftiobacterium</i>	[Kaf.ti.o.bac.te.ri.um] <b>Gr. adj.</b> <i>kafti</i> , hot; <b>N.L. neut. n.</b> <i>bacterium</i> , rod or staff and, in biology a bacterium; <b>N.L. neut. n.</b> <i>Kaftiobacterium</i> , a bacterium in hot environment	A genus established on the basis of AAI, ANI, dDDH and phylogenomic analyses, and is classified as a member of the <i>Kaftiobacteriaceae</i> family. The type species of the genus is <i>Kaftiobacterium primum</i> .	<i>Kaftiobacteriaceae</i>	<i>Kaftiobacterium secundum</i> <sup>TS</sup>	<a href="https://seqco.de/i:32800">seqco.de/i:32800</a>

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Genus <i>Segetimicrobium</i>	[Se.ge.ti.mi.cro'bi.um.] L. <b>gen. n.</b> <i>segetis</i> , of the soil; <b>N.L. neut. n.</b> <i>microbium</i> , microbe; <b>N.L. neut. n.</b> <i>Segetimicrobium</i> , a microbe of the earth	A genus established on the basis of AAI, ANI, dDDH and phylogenomic analyses, and is classified as a member of the <i>Segetimicrobiaceae</i> family. The type species of the genus is <i>Segetimicrobium genomatis</i> .	<i>Segetimicrobiaceae</i>	<i>Segetimicrobium genomatis</i> <sup>TS</sup>	<a href="https://seqco.de/i:32797">seqco.de/i:32797</a>
Genus <i>Caldifonticola</i>	[Cal.di.fon.ti'co.la] L. <b>adj.</b> <i>caldus</i> , hot; L. <b>masc. n.</b> <i>fons</i> , a spring; <b>N.L. masc. suff.</b> <i>cola</i> , an inhabitant; <b>N.L. masc. n.</b> <i>Caldifonticola</i> , inhabitant of a hot spring	A genus established on the basis of AAI, ANI, dDDH and phylogenomic analyses, and is classified as a member of the <i>Sysuimicrobiaceae</i> family. The type species of the genus is <i>Caldifonticola tengchongensis</i> .	<i>Sysuimicrobiaceae</i>	<i>Caldifonticola tengchongensis</i> <sup>TS</sup>	<a href="https://seqco.de/i:32788">seqco.de/i:32788</a>
Genus <i>Tepidifontimicrobium</i>	[Te.pi.di.fon.ti.mi.cro'bi.um] L. <b>masc. adj.</b> <i>tepidus</i> , moderately warm; L. <b>masc. n.</b> <i>fons</i> , a spring; <b>N.L. neut. n.</b> <i>microbium</i> , microbe; <b>N.L. neut. n.</b> <i>Tepidifontimicrobium</i> , a microbe from a warm spring	A genus established on the basis of AAI, ANI, dDDH and phylogenomic analyses, and is classified as a member of the <i>Sysuimicrobiaceae</i> family. The type species of the genus is <i>Tepidifontimicrobium thermophilum</i> .	<i>Sysuimicrobiaceae</i>	<i>Tepidifontimicrobium thermophilum</i> <sup>TS</sup>	<a href="https://seqco.de/i:32790">seqco.de/i:32790</a>
Genus <i>Geohabitans</i>	[Ge.o.ha.bi.tans] Gr. <b>n.</b> <i>geo</i> , the earth; L. <b>pres. part.</b> <i>habitans</i> , inhabiting; <b>N.L. masc. n.</b> <i>Geohabitans</i> , an inhabitant of Earth	A genus established on the basis of AAI, ANI, dDDH and phylogenomic analyses, and is classified as a member of the <i>Humicultoraceae</i> family. The type species of the genus is <i>Geohabitans tengchongensis</i> .	<i>Humicultoraceae</i>	<i>Geohabitans tengchongensis</i> <sup>TS</sup>	<a href="https://seqco.de/i:32812">seqco.de/i:32812</a>
Genus <i>Thermofontivivens</i>	[Ther.mo.fon.ti.vi'vens] Gr. <b>masc. adj.</b> <i>thermos</i> , hot; L. <b>masc. n.</b> <i>fons</i> , a spring; L. <b>pres. part.</b> <i>vivens</i> , living; <b>N.L. masc. n.</b> <i>Thermofontivivens</i> , living in a hot spring	A genus established on the basis of AAI, ANI, dDDH and phylogenomic analyses, and is classified as a member of the <i>Thermofontiviventaceae</i> family. The type species of the genus is <i>Thermofontivivens primum</i> .	<i>Thermofontiviventaceae</i>	<i>Thermofontivivens primum</i> <sup>TS</sup>	<a href="https://seqco.de/i:32793">seqco.de/i:32793</a>

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Genus <i>Sysuimicrobium</i>	[Sy.su.i.mi.cro.bi.um] <b>N.L. neut. n.</b> <i>microbium</i> , microbe; <b>N.L. neut. n.</b> <i>Sysuimicrobium</i> , arbitrary name from the acronym of Sun Yat-Sen University, SYSU where the identification of microbial metagenome was done	A genus established on the basis of AAI, ANI, dDDH and phylogenomic analyses, and is classified as a member of the <i>Sysuimicrobiaceae</i> family. The type species of the genus is <i>Sysuimicrobium thermophilum</i> .	<i>Sysuimicrobiaceae</i>	<i>Sysuimicrobium calidum</i> <sup>Ts</sup>	<a href="https://seqco.de/i:32784">seqco.de/i:32784</a>
Genus <i>Humicultor</i>	[Hu.mi.cul'tor] <b>L. fem. n.</b> <i>humus</i> , soil; <b>L. masc. n.</b> <i>cultor</i> , an inhabitant; <b>N.L. masc. n.</b> <i>Humicultor</i> , an inhabitant of soil	A genus established on the basis of AAI, ANI, dDDH and phylogenomic analyses, and is classified as a member of the <i>Humicultoraceae</i> family. The type species of the genus is <i>Humicultor riflensis</i> .	<i>Humicultoraceae</i>	<i>Humicultor tengchongensis</i> <sup>Ts</sup>	<a href="https://seqco.de/i:32809">seqco.de/i:32809</a>
Species <i>Fervidifonticulator primus</i> <sup>Ts</sup>	[pri'mus] <b>L. masc. adj.</b> <i>primus</i> , first, to represent the first genome bin from of the genus	A species established on the basis of AAI, ANI, dDDH and phylogenomic analyses, and is classified as a member of the <i>Fervidifonticulator</i> genus.	<i>Fervidifonticulator</i>	INSDC Nucleotide: JAVKHP000000000 <sup>Ts</sup>	<a href="https://seqco.de/i:32816">seqco.de/i:32816</a>
Species <i>Fervidifonticulator quartus</i>	[qu.ar'tus] <b>L. masc. adj.</b> <i>quartus</i> , fourth, to represent the fourth genome bin of the genus	A species established on the basis of AAI, ANI, dDDH and phylogenomic analyses, and is classified as a member of the <i>Fervidifonticulator</i> genus.	<i>Fervidifonticulator</i>	NCBI Assembly: GCA_031458775.1 <sup>Ts</sup>	<a href="https://seqco.de/i:32819">seqco.de/i:32819</a>
Species <i>Fervidifonticulator secundus</i>	[se.cun'dus] <b>L. masc. adj.</b> <i>secundus</i> , second, to represent the second genome bin of the genus	A species established on the basis of AAI, ANI, dDDH and phylogenomic analyses, and is classified as a member of the <i>Fervidifonticulator</i> genus.	<i>Fervidifonticulator</i>	NCBI Assembly: GCA_031459385.1 <sup>Ts</sup>	<a href="https://seqco.de/i:32817">seqco.de/i:32817</a>
Species <i>Fervidifonticulator tertius</i>	[ter'ti.us.] <b>L. masc. adj.</b> <i>tertius</i> , third, to represent the third genome bin of the genus	A species established on the basis of AAI, ANI, dDDH and phylogenomic analyses, and is classified as a member of the <i>Fervidifonticulator</i> genus.	<i>Fervidifonticulator</i>	NCBI Assembly: GCA_031459235.1 <sup>Ts</sup>	<a href="https://seqco.de/i:32818">seqco.de/i:32818</a>
Species <i>Sysuimicrobium calidum</i> <sup>Ts</sup>	[ca'li.dum] <b>L. neut. adj.</b> <i>calidum</i> , indicating the origin of the metagenome from hot spring	A species established on the basis of AAI, ANI, dDDH and phylogenomic analyses, and is classified as a member of the <i>Sysuimicrobium</i> genus.	<i>Sysuimicrobium</i>	NCBI Assembly: GCA_031459935.1 <sup>Ts</sup>	<a href="https://seqco.de/i:32787">seqco.de/i:32787</a>

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Species <i>Sysuimicrobium tengchongense</i>	[teng.chong.en'se] N.L. <b>neut. adj.</b> <i>tengchongense</i> , referring to Tengchong	A species established on the basis of AAI, ANI, dDDH and phylogenomic analyses, and is classified as a member of the <i>Sysuimicrobium</i> genus.	<i>Sysuimicrobium</i>	NCBI Assembly: GCA_031460175.1 <sup>Ts</sup>	<a href="https://seqco.de/i:32786">seqco.de/i:32786</a>
Species <i>Calidihabitans tengchongensis</i> <sup>Ts</sup>	[teng.chong.en'sis] N.L. <b>masc. adj.</b> <i>tengchongensis</i> , pertaining to Tengchong, the source of the metagenomic sample	A species established on the basis of AAI, ANI, dDDH and phylogenomic analyses, and is classified as a member of the <i>Calidihabitans</i> genus.	<i>Calidihabitans</i>	INSDC Nucleotide: JAVKIE000000000 <sup>Ts</sup>	<a href="https://seqco.de/i:32807">seqco.de/i:32807</a>
Species <i>Tepidifontimicrobium thermophilum</i> <sup>Ts</sup>	[ther.mo'phi.lum] Gr. <b>fem. adj.</b> <i>thermê</i> , heat; N.L. <b>neut. adj.</b> <i>philum</i> , loving; N.L. <b>neut. adj.</b> <i>thermophilum</i> , heat loving	A species established on the basis of AAI, ANI, dDDH and phylogenomic analyses, and is classified as a member of the <i>Tepidifontimicrobium</i> genus.	<i>Tepidifontimicrobium</i>	INSDC Nucleotide: JAVKHO000000000 <sup>Ts</sup>	<a href="https://seqco.de/i:32791">seqco.de/i:32791</a>
Species <i>Segetimicrobium genomatis</i> <sup>Ts</sup>	[ge.no.ma'tis] N.L. <b>gen. n.</b> <i>genomatis</i> , of a genome	A species established on the basis of AAI, ANI, dDDH and phylogenomic analyses, and is classified as a member of the <i>Segetimicrobium</i> genus.	<i>Segetimicrobium</i>	INSDC Nucleotide: VBAK000000000 <sup>Ts</sup>	<a href="https://seqco.de/i:32798">seqco.de/i:32798</a>
Species <i>Thermofontivivens primus</i> <sup>Ts</sup>	[pri'mus] L. <b>masc. adj.</b> <i>primus</i> , first, to represent the first genome bin from of the genus	A species established on the basis of AAI, ANI, dDDH and phylogenomic analyses, and is classified as a member of the <i>Thermofontivivens</i> genus.	<i>Thermofontivivens</i>	INSDC Nucleotide: JAVKJW000000000 <sup>Ts</sup>	<a href="https://seqco.de/i:32794">seqco.de/i:32794</a>
Species <i>Kaftiobacterium secundum</i> <sup>Ts</sup>	[se.cun'dum] L. <b>neut. adj.</b> <i>secundum</i> , second, to represent the second genome bin of the genus	A species established on the basis of AAI, ANI, dDDH and phylogenomic analyses, and is classified as a member of the <i>Kaftiobacterium</i> genus.	<i>Kaftiobacterium</i>	INSDC Nucleotide: JAVKHY000000000 <sup>Ts</sup>	<a href="https://seqco.de/i:32802">seqco.de/i:32802</a>
Species <i>Caldifonticola tengchongensis</i> <sup>Ts</sup>	[teng.chong.en'sis] N.L. <b>masc. adj.</b> <i>tengchongensis</i> , pertaining to Tengchong, the source of the metagenomic sample	A species established on the basis of AAI, ANI, dDDH and phylogenomic analyses, and is classified as a member of the <i>Caldifonticola</i> genus.	<i>Caldifonticola</i>	INSDC Nucleotide: JAVKGX000000000 <sup>Ts</sup>	<a href="https://seqco.de/i:32789">seqco.de/i:32789</a>
Species <i>Geohabitans tengchongensis</i> <sup>Ts</sup>	[teng.chong.en'sis] N.L. <b>masc. adj.</b> <i>tengchongensis</i> , pertaining to Tengchong, the source of the metagenomic sample	A species established on the basis of AAI, ANI, dDDH and phylogenomic analyses, and is classified as a member of the <i>Terrahabitans</i> genus.	<i>Geohabitans</i>	NCBI Assembly: GCA_031459625.1 <sup>Ts</sup>	<a href="https://seqco.de/i:32814">seqco.de/i:32814</a>

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Species <i>Humicultor tengchongensis</i> <sup>Ts</sup>	[teng.chong.en'sis] N.L. masc. adj. <i>tengchongensis</i> , pertaining to Tengchong, the source of the metagenomic sample	A species established on the basis of AAI, ANI, dDDH and phylogenomic analyses, and is classified as a member of the <i>Humicultor</i> genus.	<i>Humicultor</i>	INSDC Nucleotide: JAVKIA000000000 <sup>Ts</sup>	<a href="https://seqco.de/i:32811">seqco.de/i:32811</a>