

# Register list for 8 new names including Aridivitia classis nov.

Submitted by Leung, Pok Man

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

Proposed Taxon	Etymology	Description	Parent Taxon	Type	Registry URL
Class <i>Aridivitia</i>	[A.ri.di.vi'ti.a.] <b>N.L. fem. n.</b> <i>Aridivita</i> , the type genus of the family; <b>L. neut. pl. suff.</b> <i>-ia</i> , ending to denote a class; <b>N.L. neut. pl. n.</b> <i>Aridivitia</i> , the Aridivita class	Order formerly known as " <a href="#">CADDZG01</a> " in GTDB R226. The description of the class is the same as for its type genus Aridivita.	<i>Actinomycetota</i>	<i>Aridivita</i>	<a href="https://seqco.de/i:49037">seqco.de/i:49037</a>
Order <i>Aridivitales</i>	[A.ri.di.vi.ta'les] <b>N.L. fem. n.</b> <i>Aridivita</i> , the type genus of the family; <b>L. fem. pl. suff.</b> <i>-ales</i> , ending to denote an order; <b>N.L. fem. pl. n.</b> <i>Aridivitales</i> , the Aridivita order	Order formerly known as " <a href="#">CADDZG01</a> " in GTDB R226. The description of the family is the same as for its type genus Aridivita.	<i>Aridivitia</i>	<i>Aridivita</i>	<a href="https://seqco.de/i:52911">seqco.de/i:52911</a>
Family <i>Aridivitaceae</i>	[A.ri.di.vi.ta'ce.ae] <b>N.L. fem. n.</b> <i>Aridivita</i> , the type genus of the family; <b>L. fem. pl. suff.</b> <i>-aceae</i> , ending to denote a family; <b>N.L. fem. pl. n.</b> <i>Aridivitaceae</i> , family of the genus Aridivita	Family formerly known as " <a href="#">WHSQ01</a> " in GTDB R226. The description of the family is the same as for its type genus Aridivita.	<i>Aridivitales</i>	<i>Aridivita</i>	<a href="https://seqco.de/i:52910">seqco.de/i:52910</a>
Family <i>Edaphomicrobiaceae</i>	[E.da.pho.mi.cro.bi.a'ce.ae] <b>N.L. neut. n.</b> <i>Edaphomicrobium</i> , the type genus of the family; <b>L. fem. pl. suff.</b> <i>-aceae</i> , ending to denote a family; <b>N.L. fem. pl. n.</b> <i>Edaphomicrobiaceae</i> , family of the genus Edaphomicrobium	Family formerly known as " <a href="#">CSP1-4</a> " in GTDB R226. The description of the family is the same as for its type genus Edaphomicrobium.	<i>Candidatus</i> <i>Limnocyndrales</i>	<i>Edaphomicrobium</i>	<a href="https://seqco.de/i:52914">seqco.de/i:52914</a>
	[A.ri.di.vi'ta.] <b>L. masc. adj.</b> <i>aridus</i> , dry; <b>L. fem. n.</b>	An actinobacterial genus that thrives in arid desert soils. The genus is		<i>Aridivita</i>	

Genus <i>Aridivita</i> <b>Proposed Taxon</b>	<i>vita</i> , life; <b>N.L. fem. n.</b> <b>Etymology</b> <i>Aridivita</i> , a dry life	formerly known as " <a href="#">IACCZU01</a> " in GTDB R202 to R226. <b>Description</b>	<i>Aridivitaceae</i> <b>Parent Taxon</b>	<i>willemsiae</i> <sup>Ts</sup> <b>Type</b>	<a href="#">seqco.de/i:52908</a> <b>Registry URL</b>
Genus <i>Edaphomicrobium</i>	[E.da.pho.mi.cro'bi.um.] <b>Gr. neut. n.</b> <i>edaphos</i> , soil; <b>N.L. neut. n.</b> <i>microbium</i> , a microbe; <b>N.L. neut. n.</b> <i>Edaphomicrobium</i> , a soil microbe	A Chloroflexota genus that thrives in arid desert soils. The genus is formerly known as " <a href="#">CF-46</a> " in GTDB R202 to R226.	<i>Edaphomicrobiaceae</i>	<i>Edaphomicrobium</i> <i>janssenii</i> <sup>Ts</sup>	<a href="#">seqco.de/i:52912</a>
Species <i>Aridivita</i> <i>willemsiae</i> <sup>Ts</sup>	[wi.llem'si.ae] <b>N.L. gen. n.</b> <i>willemsiae</i> , of Willems, named after Anne Willems, for her contributions to Antarctic microbiology using isolation-based approaches	An actinobacterial bacterium represented a high-quality metagenome-assembled genome (MAG), recovered from desert soils from the Mackay Glacier region, Antarctica. The bacterium is predicted to be capable of aerotrophic growth (growth of on atmospheric substrates), using H <sub>2</sub> (via a high-affinity group 1h [NiFe]-hydrogenase) and CO (via a Form I carbon monoxide dehydrogenase) as energy and electron sources to fix CO <sub>2</sub> (via CBB cycle mediated by a Type IE RuBisCO). The species is proposed to serve as the nomenclatural type for the <i>Aridivita</i> genus, named after Anne Willems, for her contributions to Antarctic microbiology using isolation- based approaches.	<i>Aridivita</i>	NCBI Assembly: GCA_013695835.1 <sup>Ts</sup>	<a href="#">seqco.de/i:23574</a>
Species <i>Edaphomicrobium</i> <i>janssenii</i> <sup>Ts</sup>	[jans.sen'i.i.] <b>N.L. gen. n.</b> <i>janssenii</i> , of Janssen, named after Peter H. Janssen, for his pioneering isolation-based studies that first described this lineage (Ellin6529)	A Chloroflexota bacterium represented a high-quality metagenome- assembled genome (MAG), recovered from desert soils from the Mackay Glacier region, Antarctica. The bacterium is predicted to be an atmospheric hydrogen oxidizer using H <sub>2</sub> (via a high-affinity group 1h [NiFe]- hydrogenase) from air as a key energy source for survival in oligotrophic desert soils. The species is proposed to serve as the nomenclatural type for the <i>Edaphomicrobium</i> genus, and honors Peter H. Janssen, for his pioneering isolation-based studies that first described the class lineage of this	<i>Edaphomicrobium</i>	NCBI Assembly: GCA_013698095.1 <sup>Ts</sup>	<a href="#">seqco.de/i:52913</a>

Proposed Taxon	Etymology	Description	Parent Taxon	Type	Registry URL
		bacterium (Elin6529, later named as Limnocyndria).			