

# Register list for 3 new names including *Acidulidesulfobacteriota* phyl. 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
Phylum <i>Acidulidesulfobacteriota</i>	[A.ci.du.li.de.sul.fo.bac.te.ri.o'ta] <b>N.L. neut. n.</b> <i>Acidulidesulfobacterium</i> , referring to the type genus <i>Acidulidesulfobacterium</i> ; -ota, ending to denote a phylum; <b>N.L. neut. pl. n.</b> <i>Acidulidesulfobacteriota</i> , the <i>Acidulidesulfobacterium</i> phylum	<i>Acidulidesulfobacteriota</i> represents an ecologically significant group in sulfur-rich environments including artificial acid mine drainage and hydrothermal sulfides. Phylogenomic and 16S rRNA gene analyses indicated that this lineage represents a distinct phylum-level clade, leading us to propose the designation <i>Acidulidesulfobacteriota</i> . Notably, the concatenated DsrAB protein phylogeny and the mixed enzyme types involved in Dsr- dependent dissimilatory sulfur metabolism suggest that <i>Acidulidesulfobacteriota</i> may represent a transitional lineage in the evolutionary shift from reductive to oxidative Dsr metabolism.	<i>Bacteria</i>	<i>Acidulidesulfobacterium</i>	<a href="https://seqco.de/i:50994">seqco.de/i:50994</a>
	[A.ci.du.li.de.sul.fo.bac.te.ri'i.a] <b>N.L. neut. n.</b> <i>Acidulidesulfobacterium</i> ,				

Class <b>Proposed Taxon</b> <i>Acidulidesulfobacteriia</i>	<b>Etymology</b> referring to the type genus <i>Acidulidesulfobacterium</i> ; <i>-ia</i> ,	<b>Description</b> <i>Acidulidesulfobacteriia</i> is a class of the phylum	<b>Parent Taxon</b> <i>Acidulidesulfobacteriota</i>	<b>Type</b> <i>Acidulidesulfobacterium</i>	<b>Registry URL</b> <a href="https://seqco.de/i:54934">seqco.de/i:54934</a>
	ending to denote a class; <b>N.L. neut. pl. n.</b> <i>Acidulidesulfobacteriia</i> , the <i>Acidulidesulfobacterium</i> class	<i>Acidulidesulfobacteriota</i>			
Order <i>Acididesulfobacterales</i>	[A.ci.di.de.sul.fo.bac.te.ra'les] <b>N.L. masc. n.</b> <i>Acididesulfobacter</i> , referring to the type genus <i>Acididesulfobacter</i> ; <i>-ales</i> , ending to denote an order; <b>N.L. fem. pl. n.</b> <i>Acididesulfobacterales</i> , the <i>Acididesulfobacter</i> order		<i>Acidulidesulfobacteriia</i>	<i>Acididesulfobacter</i>	<a href="https://seqco.de/i:54934">seqco.de/i:54934</a>