Azoamicus gen. nov.

Submitted by Speth, Daan

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

Proposed Taxon	Etymology	Description	Parent Taxon	Type	Registry URL
Genus *Azoamicus*	[A.zo.a'mi.cus] **N.L. pref.** *azo-*, pertaining to nitrogen; **L. masc. n.** *amicus*, friend; **N.L. masc. n.** *Azoamicus*, friend that pertains to nitrogen	'*Candidatus* Azoamicus ciliaticola' is an obligate endosymbiont of an anaerobic ciliate and has a dedicated role in respiration and providing energy for its eukaryotic host. '*Candidatus* A. ciliaticola' contains a highly reduced 0.29-Mb genome that encodes core genes for central information processing, the electron transport chain, a truncated tricarboxylic acid cycle, ATP generation and iron–sulfur cluster biosynthesis. The genome encodes a respiratory denitrification pathway instead of aerobic terminal oxidases, which enables its host to breathe nitrate instead of oxygen. '*Candidatus* A. ciliaticola' and its ciliate host represent an example of a symbiosis that is based on the transfer of energy in the form of ATP, rather than nutrition.	*Azoamicaceae*	*Azoamicus ciliaticola*[Ts]	seqco.de/i:49071
Species *Azoamicus ciliaticola*[Ts]	[ci.li.a.ti.co'la] **N.L. fem. n.** *ciliata*, referring to a group of ciliated protozoa; **N.L. masc. suff.** *-cola*, dweller or inhabitant; **N.L. masc. adj.** *ciliaticola*, dwelling within a ciliate	*Azoamicus ciliaticola*, which is an obligate endosymbiont of an anaerobic ciliate and has a dedicated role in respiration and providing energy for its eukaryotic host. *A. ciliaticola* contains a highly reduced 0.29-Mb genome that encodes core genes for central information processing, the electron transport chain, a truncated tricarboxylic acid cycle, ATP generation and iron–sulfur cluster biosynthesis. The genome encodes a respiratory denitrification pathway instead of aerobic terminal oxidases, which enables its host to breathe nitrate instead of oxygen. *A. ciliaticola* and its ciliate host represent an example of a symbiosis that is based on the transfer of energy in the form of ATP, rather than nutrition.	*Azoamicus*	NCBI Assembly: GCF_902860225.1 [Ts]	seqco.de/i:49070