

Nanopusillus acidilobi gen. nov. sp. nov.

Submitted by St. John, Emily

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

Proposed Taxon	Etymology	Description	Parent Taxon	Type	Registry URL
Genus <i>Nanopusillus</i>	[Na.no.pu.sil'lus] Gr. masc. n. <i>nanos</i> , a dwarf; L. masc. adj. <i>pusillus</i> , very small; N.L. masc. n. <i>Nanopusillus</i> , a very small member of the Nanoarchaeota	Wurch et al., 2016 : " Locality. Cistern Spring pool (water and sediment slurry), in the Norris Geyser basin of YNP (latitude: 44.723; longitude: 110.70400). Diagnosis. coccoid cells, 100–300 nm in diameter, obligate ectosymbionts/parasites on the surface of the thermoacidophilic crenarchaeote <i>Acidilobus</i> . Occasional free cells can be observed in the co-culture but their viability is unknown. Optimum growth is in co-culture with its host at 82 C and pH 3.6. First isolated from Cistern Spring, a hot acidic spring in YNP. On the basis of single-cell genomics and metagenomic data, related strains or species that may use other Crenarchaeota as hosts are present in other acidic hot springs in YNP, at pH 2–6"	<i>Nanobdellaceae</i>	<i>Nanopusillus acidilobi</i> ^{Ts}	seqco.de/i:55881
Species <i>Nanopusillus acidilobi</i> ^{Ts}	[a.ci.di.lo'bi] N.L. gen. n. <i>acidilobi</i> , of acidilobus, growth dependent on <i>Acidilobus</i>	Wurch et al., 2016 : " Locality. Cistern Spring pool (water and sediment slurry), in the Norris Geyser basin of YNP (latitude: 44.723; longitude: 110.70400). Diagnosis. coccoid cells, 100–300 nm in diameter, obligate ectosymbionts/parasites on the surface of the thermoacidophilic crenarchaeote <i>Acidilobus</i> . Occasional free cells can be observed in the co-culture but their viability is unknown. Optimum growth is in co-culture with its host at 82 C and pH 3.6. First isolated from Cistern Spring, a hot acidic spring in YNP. On the basis of single-cell genomics and metagenomic data, related strains or species that may use other Crenarchaeota as hosts are present in other acidic hot springs in YNP, at pH 2–6"	<i>Nanopusillus</i>	NCBI Assembly: GCA_001552015.1 ^{Ts}	seqco.de/i:41509