

Nanopusillus acidilobi gen. nov. sp. nov.

Submitted by St. John, Emily

Genus *Nanopusillus*

Etymology

[Na.no.pu.sil'lus] **Gr. masc. n.** *nanos*, a dwarf; **L. masc. adj.** *pusillus*, very small; **N.L. masc. n.** *Nanopusillus*, a very small member of the Nanoarchaeota

Nomenclatural type

Species *Nanopusillus acidilob*^{TS}

Description

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 *Acidilobus*. 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"

Classification

Archaea » *Nanobdellota* » *Nanobdellia* » *Nanobdellales* » *Nanobdellaceae* » *Nanopusillus*

References

Effective publication: Wurch et al., 2016 [1]

Registry URL

<https://seqco.de/i:55881>

Species *Nanopusillus acidilob*^{TS}

Etymology

[a.ci.di.lo'bi] **N.L. gen. n.** *acidilobi*, of acidilobus, growth dependent on *Acidilobus*

Nomenclatural type

[NCBI Assembly: GCA_001552015.1](#)^{TS}

Description

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References

Effective publication: Wurch et al., 2016 [1]

Registry URL

<https://seqco.de/i:41509>

References

1. Wurch et al. (2016). Genomics-informed isolation and characterization of a symbiotic Nanoarchaeota system from a terrestrial geothermal environment. *Nature Communications*. [DOI:10.1038/ncomms12115](https://doi.org/10.1038/ncomms12115)

Register List Certificate of Validation

On behalf of the *Committee on the Systematics of Prokaryotes Described from Sequence Data* (SeqCode Committee), we hereby certify that the Register List **seqco.de/r:33hdbh80** submitted by **St. John, Emily** and including 2 new names has been successfully validated.

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