Species *Pampinifervens sericum*

Etymology

[se.ri'cum] **L. neut. adj.** *sericum*, silken, referring to the silk-like appearance of the streamer communities in many of the springs in the Rehai Geothermal Field, where genomes belonging to this species were recovered from

Nomenclatural type

INSDC Nucleotide: JBBKAW000000000 Ts

Description

In addition, or in contrast, to the characteristics described for the genus, the genomes of this species lack *hyaB*, required for Group 1d hydrogenases, and only encode a partial SOX complex required for thiosulfate oxidation. Additionally, structural genes for flagellar motility are absent from genomes of this species. Genomic G+C content for this species range between 42.57% and 44.77%. Genealogical concordance and ANI support the novelty of this species, and phylogenomics and AAI places this species in the genus *Pampinifervens* gen. nov. The type for this species is the genome GMQ_2011_Aq_binTs, sampled from Gumingquan (Drum Beating Spring) in the Rehai Geothermal Field, Tengchong, China, and is available under the GenBank assembly accession GCA_037722135.1. (BioProject: PRJNA1048437, BioSample: SAMN38639742).

Classification

Bacteria » *Aquificota* » *Aquificia* » *Aquificales* » *Aquificaceae* » *Pampinifervens* » *Pampinifervens sericum*

References

Effective publication: Palmer et al., 2025 [1]

Registry URL

https://seqco.de/i:43942

References

1. Palmer et al. (2025). Nitrogen fixation in Pampinifervens, a new species-rich genus of Aquificaceae that inhabits a wide pH range in terrestrial hot springs. *Systematic and Applied Microbiology*. DOI:10.1016/j.syapm.2025.126644