

Species *Pampinifervens tengchongense*

Etymology

[ten.gchon.gen'se] **N.L. neut. adj.** *tengchongense*, referring to Tengchong

Nomenclatural type

[INSDC Nucleotide: JBBKAY000000000](#)^{Ts}

Description

In addition to traits reported for the genus, genomes of this species encode most genes for a denitrification pathway and can likely convert nitrate to dinitrogen. Genomes of this species also encode an arsenite transporter, arsenite oxidase, and arsenate reductase. The G+C content of the genomes range between 43.26% and 45.56%. 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 GXS_2011_Aq_binTs, recovered from Gongxiaoshe hot spring in Tengchong, China, and is available under the GenBank assembly accession number GCA_037722225.1. (BioProject: PRJNA1048437, BioSample: SAMN38639757).

Classification

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

References

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

Registry URL

<https://seqco.de/i:43944>

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](https://doi.org/10.1016/j.syapm.2025.126644)