

Species *Planktophila stagnalis*

Etymology

[stag.na'lis] **N.L. fem. adj.** *stagnalis*, of standing water, pond, or swamp

Nomenclatural type

[Genome sc|0004095](#) ^{Is}

Description

Etymology. The name 'stagnalis' comes from Latin, specifically from 'stagnum', which means standing water, pond, or swamp. The suffix -alis is a Latin adjectival ending meaning *related to*. **Brief description.** *Planktophila stragnalis* MRE-20 (ENA accession number GCA_965267665) was isolated from the epilimnion (0.5m depth) of Římov Reservoir, Czech Republic (date: 2021-04-06) and it is the only isolated representative of the species. It has a complete circular genome with a size of 1,464,932 bp, a GC content of 47.6%, and a coding density of 96%. It encodes one rRNA operon and 42 tRNA genes. Recruitment analysis indicated its presence in the epilimnion (0.5m depth) of Římov Reservoir, and to a lower extent in the hypolimnion (30m depth). It encodes for a complete pentose phosphate pathway, both an actinorhodopsin and a heliorhodopsin, and for the retinal biosynthesis pathway. The closest isolated relative is *Planktophila lacus* MMS-IIB-60, with whom it shares an average nucleotide identity of 83.15%. The Current GTDB classification (r220) is d__Bacteria; p__Actinomycetota; c__Actinomycetia; o__Nanopelagicales; f__Nanopelagicaceae; g__Planktophila; s__.

Classification

Bacteria » *Actinomycetota* » *Actinomycetes* » *Nanopelagicales* » *Nanopelagicaceae* » *Planktophila* » *Planktophila stagnalis*

References

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

Registry URL

<https://seqco.de/i:51479>

References

1. Chiriac et al. (2025). Ecological success in freshwater lakes: insights from novel cultivated lineages of the abundant Nanopelagicales order. *Microbiome*. DOI: [10.1186/s40168-025-02272-x](https://doi.org/10.1186/s40168-025-02272-x)