Species *Planktophila jirickensis*

Etymology
[ji.ri.cken'sis] **L. fem. adj.** *jirickensis*, of Jiricka, named for the dystrophic water body, Jiřická Pond, Czech Republic.

Nomenclatural type
Genome sc|0004106 [Ts]

Description
Etymology. It is named ‘jirickensis’ after the isolation source, a dystrophic water body, Jiřická Pond, Czech Republic.
Brief description. *Planktophila jirickensis* JirE-27 (ENA accession number GCA_965267775) is a very rare organism, isolated from the Jiřická Pond, Czech Republic (date 2020-06-03). Recruitment analysis showed that its presence is restricted to this dystrophic fishpond. Genome characteristics are very similar to those of other *Planktophila* species. It has a circular genome of 1,496,323 bp and a GC content of 48.9%. It encodes for one rRNA operon and 39 tRNAs, having a coding density of 95.57%. It can synthesize most amino acids, but it is auxotrophic for cysteine and asparagine. The genome contains genes encoding rhodopsins, but it is probably dependent on the exogenous retinal, as the last enzyme of the pathway (*blh* gene) is missing. No genes for flagella, pilus assembly or chemotaxis were annotated. The Current GTDB classification (r220) is d__Bacteria; p__Actinomycetota; c__Actinomycetia; o__Nanopelagicales; f__Nanopelagicaceae; g__Planktophila; s__. The closest cultivated representative is *Planktophila rimovensis* MRE-182, sharing an average nucleotide identity of 87.25%.

Classification
Bacteria » *Actinomycetota* » *Actinomycetes* » *Nanopelagicales* » *Nanopelagicaceae* » *Planktophila* » *Planktophila jirickensis*

References
Effective publication: Chiriac et al., 2025 [1]
Assigned taxonomically: Jezbera et al., 2009 [2]

Registry URL
https://seqco.de/i:51027

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
2. Jezbera et al. (2009). 'Candidatus Planktophila limnetica', an actinobacterium representing one of the most numerically important taxa in freshwater bacterioplankton. *INTERNATIONAL JOURNAL OF SYSTEMATIC AND EVOLUTIONARY MICROBIOLOGY*. DOI: 10.1099/ijs.0.010199-0