Species *Planktophila zluticensis*

Etymology
[z.lu.ti.cen'sis] **L. fem. adj.** *zluticensis*, from the Žlutice Reservoir in the Czech Republic.

Nomenclatural type
Genome sc|0004100 Ts

Description
Etymology. It is named after the Žlutice Reservoir, Czech Republic, the place from which the representative strain was isolated.
Brief description. *Planktophila zlutica* MZLE-14 (ENA accession number GCA_965268005) was isolated from the epilimnion (5m depth) of the eutrophic Žlutice Reservoir, Czech Republic (date: 2021-04-07) and it is the only isolated representative of the species. It has a complete circular genome of 1,406,539 bp, a GC content of 46.1% and a coding density of 95.9%. The closest isolated species is *Planktophila warneckii* RE-8, with which it shares an average nucleotide identity of 87.8%. It encodes one rRNA operon and 39 tRNA genes; additionally, it has both actinorhodopsin and heliorhodopsin but lacks the capacity for retinal biosynthesis. Also, it lacks the oxidative part of the pentose phosphate pathway but can synthesize all amino acids. It has a limited distribution and low abundance, being recovered in the recruitment analysis only from the Žlutice and Římov Reservoirs in Czech Republic. 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 zluticensis*

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

Registry URL
https://seqco.de/i:51484

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