Genus *Novimethylotenera*

Etymology
[No.vi.me.thy.lo.te.ne'ra] **L. adj. masc.** *novus*, new; **N.L. fem. n.** *Methylotenera*, the bacterial genus Methylotenera; **N.L. fem. n.** *Novimethylotenera*, a new Methylotenera

Nomenclatural type
Species *Novimethylotenera aquatica*[Ts]

Description
Type species is *Novimethylotenera aquatica* ME-M6 (GCA_947054645.1). Although the closest cultivated relative (*Methylotenera versatilis* 7; GCF_000799165.1) has an average amino acid identity of 80.36% and average nucleotide identity of 76.56%, the genus *Methylotenera* is known to be polyphyletic in phylogenomic trees (e.g., Salcher et al. 2019; https://doi.org/10.1038/s41396-019-0471-3) and some strains that were previously termed *Methylotenera* should be reclassified. Current GTDB classification of the genus including the closest cultivated relative (GCF_000799165.1) is d__Bacteria; p__Pseudomonadota; c__Gammaproteobacteria; o__Burkholderiales; f__Methylophilaceae; g__Methylotenera_A. We propose a reclassification of the GTDB genus Methylotenera_A to *Novimethylotenera*, gen. nov.

Classification
Bacteria » *Pseudomonadota* » *Betaproteobacteria* » *Nitrosomonadales* » *Methylophilaceae* » *Novimethylotenera*

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

Registry URL
https://seqco.de/i:48702

References

1. Salcher et al. (2025). Bringing the uncultivated microbial majority of freshwater ecosystems into culture. *Nature Communications*. DOI:10.1038/s41467-025-63266-9