

Methyloligotropha calcicola sp. nov.

Submitted by Knudsen, Kalinka

Order *Methyloligotrophales*

Etymology

[Me.thy.lo.li.go.tro.pha'les] **N.L. fem. n.** *Methyloligotropha*, referring to the type genus *Methyloligotropha*; *-ales*, ending to denote an order; **N.L. fem. pl. n.** *Methyloligotrophales*, the *Methyloligotropha* order

Nomenclatural type

Genus *Methyloligotropha*

Description

Putative atmospheric methanotrophs encoding USCg pmoA

Classification

Bacteria » *Pseudomonadota* » *Gammaproteobacteria* » *Methyloligotrophales*

References

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

Registry URL

<https://seqco.de/i:55813>

Family *Methyloligotrophaceae*

Etymology

[Me.thy.lo.li.go.tro.pha'ce.ae] **N.L. fem. n.** *Methyloligotropha*, referring to the type genus *Methyloligotropha*; *-aceae*, ending to denote a family; **N.L. fem. pl. n.** *Methyloligotrophaceae*, the *Methyloligotropha* family

Nomenclatural type

Genus *Methyloligotropha*

Description

Putative atmospheric methanotroph

Classification

Bacteria » *Pseudomonadota* » *Gammaproteobacteria* » *Methyloligotrophales* » *Methyloligotrophaceae*

References

Effective publication: Bay et al., 2025 [1]
Assigned taxonomically: Bay et al., 2025 [1]

Registry URL

<https://seqco.de/i:55812>

Genus *Methyloligotropha*

Etymology

[Me.thy.lo.li.go.tro'pha] **N.L. neut. n.** *methyl*, pertaining to the methyl group; **Gr. masc. adj.** *oligos*, little, few; **Gr. fem. n.** *trophos*, feeder, rearer, that which nourishes ; **N.L. fem. n.** *Methyloligotropha*, an oligotrophic methyl-using bacterium

Nomenclatural type

Species *Methyloligotropha calcicola*^{Ts}

Description

Putative atmospheric methanotroph. An oligotrophic methyl-using bacterium.

Classification

Bacteria » *Pseudomonadota* » *Gammaproteobacteria* » *Methyloligotrophales* » *Methyloligotrophaceae* » *Methyloligotropha*

References

Effective publication: Bay et al., 2025 [1]
Assigned taxonomically: Bay et al., 2025 [1]

Registry URL

<https://seqco.de/i:55810>

Species *Methyloligotropha calcicola*^{Ts}

Etymology

[cal.ci'co.la] **L. fem. n.** *calx*, chalk ; **L. fem. suff.** *-cola*, dweller, inhabitant; **N.L. fem. n.** *calcicola*, dweller of the limestone cave

Nomenclatural type

[NCBI Assembly: GCA_050740455.1](#)^{Ts}

Description

Putative atmospheric methanotroph inhabiting limestone caves

Classification

Bacteria » *Pseudomonadota* » *Gammaproteobacteria* » *Methyloligotrophales* » *Methyloligotrophaceae* » *Methyloligotropha* » *Methyloligotropha calcicola*^{Ts}

References

Effective publication: Bay et al., 2025 [1]
Assigned taxonomically: Bay et al., 2025 [1]

Registry URL

<https://seqco.de/i:55811>

References

1. Bay et al. (2025). Microbial aerotrophy enables continuous primary production in diverse cave ecosystems. *Nature Communications*. [DOI:10.1038/s41467-025-65209-w](https://doi.org/10.1038/s41467-025-65209-w)

Register List Certificate of Validation

On behalf of the *Committee on the Systematics of Prokaryotes Described from Sequence Data* (SeqCode Committee), we hereby certify that the Register List **seqco.de/r:d_am3p8c** submitted by **Knudsen, Kalinka** and including 4 new names has been successfully validated.

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