

Acidiferrales ord. nov. and Acidiferrum typicum gen. et sp. nov.

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Order *Acidiferrales*

Etymology

[A.ci.di.fer.ra'les] **N.L. neut. n.** *Acidiferrum*, referring to the type genus *Acidiferrum*; *-ales*, ending to denote an order; **N.L. fem. pl. n.** *Acidiferrales*, the *Acidiferrum* order

Nomenclatural type

Genus *Acidiferrum*

Description

Epihov et al., 2021 (modified): A new order within the class "Acidobacteriia" (now *Terriglobia*) in the phylum *Acidobacteriota* containing "*Ca. Acidiferrum panamensis*" and *Acidiferrum typicum* in addition to several unnamed environmental genomes (MAGs). In addition to the offered taxonomic placements in the GTDB database and the output results from the GTDB-Tk classify platform, the taxonomic relatedness of *Ca. A. panamensis* and *A. typicum* and the proposal of a new order *Acidoferrales* were further assessed by our own analyses based on amino acid identity (AAI) comparisons of the whole genome sequences of the two MAGs together with representatives of all known orders of class *Terriglobia* and all classes within the phylum *Acidobacteriota*.

Classification

Bacteria » *Acidobacteriota* » *Terriglobia* » *Acidiferrales*

References

Effective publication: Epihov et al., 2021 [1]
Corrigendum: Oren, 2022 [2] (from "Acidoferrales ")

Registry URL

<https://seqco.de/i:41821>

Genus *Acidiferrum*

Etymology

[A.ci.di.fer'rum] **L. masc. adj.** *acidus*, sour, acid, tart; **L. neut. n.** *ferrum*, iron; **N.L. neut. n.** *Acidiferrum*, an acidophilic member of the *Acidobacteriota* with multiple Fe cycling gene homologues

Nomenclatural type

Species *Acidiferrum typicum*^{Ts}

Description

A genus established on the basis of GTDB-Tk analysis including the species "*Ca. A. panamensis*" and *A. typicum*.

Classification

Bacteria » *Acidobacteriota* » *Terriglobia* » *Acidiferrales* » "Acidiferraceae" » *Acidiferrum*

References

Effective publication: Epihov et al., 2021 [1]
Corrigendum: Oren, 2022 [2] (from "Acidoferrum")

Registry URL

<https://seqco.de/i:50878>

Species *Acidiferrum typicum*^{Ts}

Etymology

[ty'pi.cum] L. neut. adj. *typicum*, typical

Nomenclatural type

[NCBI Assembly: GCA_002478115.1](#)^{Ts}

Description

UBA7541 was assembled from a soil metagenome obtained from coniferous forests in the USA.

Classification

Bacteria » *Acidobacteriota* » *Terriglobia* » *Acidiferrales* » “*Acidiferraceae*” » *Acidiferrum* » *Acidiferrum typicum*^{Ts}

References

Effective publication: Epihov et al., 2021 [1]

Corrigendum: Oren, 2022 [2] (from “*Acidoferrum typicum*”)

Registry URL

<https://seqco.de/i:50877>

References

1. Epihov et al. (2021). Legume-microbiome interactions unlock mineral nutrients in regrowing tropical forests. *Proceedings of the National Academy of Sciences*.
[DOI:10.1073/pnas.2022241118](https://doi.org/10.1073/pnas.2022241118)
2. Oren (2022). Candidatus List No. 4: Lists of names of prokaryotic Candidatus taxa. *International Journal of Systematic and Evolutionary Microbiology*. [DOI:10.1099/ijsem.0.005545](https://doi.org/10.1099/ijsem.0.005545)

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:jbgr_2me** submitted by **Rodriguez-R, Luis M** and including 3 new names has been successfully validated.

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