

Pseudomonas edsoni sp. nov. and Pseudomonas acericola sp. nov.

Submitted by Filteau, Marie

Species *Pseudomonas acericola*

Etymology

[a.ce.ri'co.la] **L. neut. n.** *acer*, the maple tree; **L. fem. suff.** *-cola*, dweller, inhabitant; **N.L. fem. n.** *akericola*, maple dweller

Nomenclatural type

[NCBI Assembly: GCA_053456465.1](#) ^{Ts}

Description

Pseudomonas acericola sp. nov. is a member of the *Pseudomonas fluorescens* subgroup, isolated from maple sap (*Acer saccharum*) in Quebec, Canada. The genome size is approximately 6.18 Mbp with a GC content of 61.37%. Phylogenomic analysis places this species in a distinct clade, with ANI values below 95% and dDDH values below 70% compared to all known type strains. Diagnostic genomic traits include: Presence of multiple nonribosomal peptide synthetase (NRPS) clusters for cyclic lipopeptides, Presence of quorum-sensing related homoserine lactone (HSL) clusters, with partial similarity to known polyketide and cepacin A clusters; Presence of a terpene and a microcin biosynthetic gene cluster; Absence of phenazine biosynthetic operons, distinguishing it from *P. edsoni*.

Classification

Bacteria » *Pseudomonadota* » *Gammaproteobacteria* » *Pseudomonadales* » *Pseudomonadaceae*
» *Pseudomonas* » *Pseudomonas acericola*

References

Effective publication: Gupta et al., 2026 [1]

Registry URL

<https://seqco.de/i:55780>

Species *Pseudomonas edsoni*

Etymology

[ed.so'ni] **N.L. gen. n.** *edsoni*, of Edson, in honor of H.A. Edson, who conducted pioneering work on the microbiology of maple sap in the early 20th century

Nomenclatural type

[NCBI Assembly: GCA_053456185.1](#) ^{Ts}

Description

Pseudomonas edsoni sp. nov. belongs to the *Pseudomonas fluorescens* subgroup and was isolated from maple sap (*Acer saccharum*) in Quebec, Canada. The genome size ranges from 6.5–6.6 Mbp with a GC content of ~60.6%. The species is phylogenetically distinct, forming a separate clade supported by ANI values >95% among its members and <95% to other species, and dDDH <70% with all known type strains. Diagnostic genomic traits include: Presence of a conserved phenazine biosynthetic operon (phzABCDEFGF); Multiple nonribosomal peptide synthetase (NRPS) clusters for cyclic lipopeptides; Genes for hydrogen cyanide (hcnABC) production, often in hybrid clusters with NRPS and metallophore genes; Type VI secretion system (T6SS) gene clusters.

Classification

Bacteria » *Pseudomonadota* » *Gammaproteobacteria* » *Pseudomonadales* » *Pseudomonadaceae* » *Pseudomonas* » *Pseudomonas edsoni*

References

Effective publication: Gupta et al., 2026 [1]

Registry URL

<https://seqco.de/i:55781>

References

1. Gupta et al. (2026). Genomic insights and antifungal potential of *Pseudomonas* species isolated from maple sap, including the novel species *Pseudomonas acericola* sp. nov. and *Pseudomonas edsoni* sp. nov. *Systematic and Applied Microbiology*. [DOI:10.1016/j.syapm.2026.126738](https://doi.org/10.1016/j.syapm.2026.126738)

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:frsgkbu1** submitted by **Filteau, Marie** and including 2 new names has been successfully validated.

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