

Rhizobium glycinendophyticum

Submitted by Van Lill, Melandre

Species *Rhizobium glycinendophyticum*

Etymology

[gly.cin.en.do.phy'ti.cum] **N.L. fem. n.** *Glycine*, the botanical genus name of the soy bean; **Gr. pref. endo-**, within; **Gr. neut. n. phyton**, plant; **L. neut. adj. suff. -icum**, used with the sense of belonging to; **N.L. neut. adj. glycinendophyticum**, an endophyte of soybean

Nomenclatural type

[NCBI Assembly: GCF_006443685.1](#) ^{Ts}

Reference Strain

[Strain scl0039552](#): CL12 = GDMCC 1.1597 = [KACC 21281](#)

Description

Grow well on NA, BHI and 272 agar, but not on MacConkey and TSA agar. After 2 days of incubation at 30 °C on R2A agar, colonies are cream and circular, and cells are Gram-stain-negative, oxidase-positive, catalase-positive, aerobic, motile, rod-shaped and approximately 1.4–2.9 µm long and 0.6–0.8 µm wide (Fig. S4). The temperature range for growth is 10–42 °C (optimum, 30 °C). The pH range for growth is pH 5.0–9.5 (optimum, pH 7.0). Growth occurs at a NaCl concentration of 0–4.5% (optimum, 2.0%). It could not hydrolyse starch, CM-cellulose, casein, chitin, Tween 20, 40 and 80. It does not contain the nodulation genes (*nodC* and *nodA*) and nitrogenase reductase gene (*nifH*). The predominant fatty acids (> 5% of the total amounts) include Summed Feature 8 (C18:1 ω 7c and/or C18:1 ω 6c, 72.9%), Summed Feature 2 (iso-C16:1 I and/or C14:0 3-OH, 6.3%) and C18:0 (5.7%).

The type strain, CL12T (=GDMCC 1.1597T = KACC 21281T), was isolated from roots of *G. max* (Linn. Merr.). The genome size is 4.84 Mbp, with a high genomic DNA G+C content of 61.1 mol%. The GenBank accession numbers of 16S rRNA, *recA*, *atpD*, *rpoB*, *glnA* gene sequences and the whole genome sequence of strain CL12T are MF383489, MN087401, MN087402, MN087403, MN087404, and VFYP00000000, respectively.

Classification

Bacteria » *Pseudomonadota* » *Alphaproteobacteria* » *Hyphomicrobiales* » *Rhizobiaceae* » *Rhizobium* » *Rhizobium glycinendophyticum*

References

Effective publication: Wang et al., 2020 [1]

Registry URL

<https://seqco.de/i:39360>

References

1. Wang et al. (2020). *Rhizobium glycinendophyticum* sp. nov., isolated from roots of *Glycine max* (Linn. Merr.). *Antonie van Leeuwenhoek* [DOI:10.1007/s10482-019-01324-1](https://doi.org/10.1007/s10482-019-01324-1)

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/aic8iu0f submitted by **Van Lill, Melandre** and including 1 new name has been successfully validated.

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