

Species *Rhizobium alarense*

Etymology

[a.la.ren'se] N.L. neut. adj. *alarense*, pertaining to Alar, a city in Northwest China, where the type strain was isolated

Nomenclatural type

[NCBI Assembly: GCF_021555155.1](#) ^{TS}

Reference Strain

[Strain sci0038879](#): TRM95111

Description

Cells on YMA agar plates were circular, smooth, convex, white colored and rod shaped (1.05–1.10 µm in length and 0.26–0.30 µm in width) for 3 days at 25 °C. Growth occurred at 12–37 °C (optimum, 25 °C); growth occurred at pH 6.0–9.0 (optimum, pH 7.0) and 0–3% (w/v) NaCl (optimum, 1%). The following substrates were utilized on Biolog GENIII microplates: D-arabitol, acetic acid, D-aspartic acid, L-aspartic acid, D-cellobiose, i-erythritol, d-fructose, l-fructose, d-fructose-6-PO₄, d-galactose, gentiobiose, α-d-glucose, d-glucose-6-PO₄, d-gluconic acid, d-glucuronic acid, l-glutamic acid, glycerol, 3-methyl-glucose, myo-inositol, inosine, α-d-lactose, d-maltose, d-mannose, d-mannitol, d-melibiose, d-raffinose, l-rhamnose, stachyose, sucrose, d-trehalose, d-turanose, pectin, N-acetylneuraminic acid, α-keto-glutaric acid, d-malic acid, l-malic acid, mucic acid, propionic acid, quinic acid, d-salicin, d-saccharic acid, l-alanine, l-arginine, N-acetyl-d-galactosamine, N-acetyl-d-glucosamine, N-acetyl-β-d-mannosamine, β-methyl-d-glucoside, glucuronamide, l-histidine, l-serine, l-pyroglutamic and urea. The nitrate reduction, oxidase, starch hydrolysis and urease were positive. H₂S production, lipase, catalase production, melanin production, milk coagulation and peptonization were negative. Cellulose and tween 20, 40, 60 and 80 were hydrolyzed. The whole-cell sugars consisted mainly of arabinose, glucose and ribose. Contained *meso*-diaminopimelic acid as the diagnostic cell wall amino acid. The detected polar lipids were unidentified aminophospholipids, unidentified phospholipids, phosphatidylcholine, unidentified lipids and phospholipids of unknown structure. The predominant menaquinone was identified as Q-10. Major fatty acids (> 5% of the total amounts) were Summed Feature 8 (C18:1ω7c and/or C18:1 ω6c), C19:0 cyclo ω8c, C16:0 and C18:1 ω7c 11-methyl. Resistant to ampicillin, chloramphenicol, erythromycin, gentamicin, nalidixic acid, tetracycline and vancomycin, but sensitive to amikacin, kanamycin and streptomycin.

Classification

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

References

Effective publication: Shen et al., 2022 [1]

Registry URL

<https://seqco.de/i:49635>

References

1. Shen et al. (2022). *Rhizobium alarense* sp. nov. and *Rhizobium halophilum* sp. nov. isolated from the nodule and rhizosphere of *Lotus japonicus*. *Archives of Microbiology*. [DOI:10.1007/s00203-022-03202-3](https://doi.org/10.1007/s00203-022-03202-3)