Mesorhizobium xinjiangense sp. nov.

Submitted by Van Lill, Melandre

Species *Mesorhizobium xinjiangense*

Etymology
[xin.jiang.en'se] **N.L. neut. adj.** *xinjiangense*, referring to Xinjiang province in China, the area where the type strain was isolated

Nomenclatural type
NCBI Assembly: GCF_009749525.1 [Ts]

Reference Strain
Strain sc|0038897: lm94 = KCTC 72863 = CCTCC AB2019377

Description
Cells are Gram-stain-negative, aerobic, non-flagellated, non-gliding, rod-shaped, 0.3–0.5 µm in width, 0.4–1.0 µm in length. Colonies on LB are circular, convex, smooth, opaque, beige-pigmented and approximately 1.0–1.5 mm in diameter after 3 days at 37 °C. Growth occurs at 20–45 °C (optimum 37 °C), pH 6.0–9.5 (optimum pH 7.0–7.5), and in the presence of 0–6% (w/v) NaCl (optimum 0–1%). Cells are catalase-positive and oxidase-positive. They are negative for H2S production, citrate utilization, indole production, gelatinase production and starch hydrolysing but positive for arabinose, tryptophan deaminase and lysine decarboxylase according to API 20E tests. Acid is produced from d-arabinose, l-arabinose, d-ribose, d-xylose, d-adonitol, d-glucose, d-fructose, l-rhamnose, mannose, ESC, sorbitol, d-lyxose, d-fucose, l-fucose, d-arbaitol and 5-keto-potassium gluconate (API 50 CHB). In API ZYM tests, positive for alkaline phosphatase, esterase (C4), leucine arylamidase, valine arylamidase, trypsin, acid phosphatase and naphthol-AS-BI-phosphohydrolase activities. In carbon source oxidation tests, cells are positive for d-sorbitol, d-mannitol, d-arabitol, glycerol, d-fructose-6-PO4, N-acetyl-d-glucosamine, l-alanine, l-arginine, l-glutamic acid, l-histidine, α-d-glucose, d-mannose, d-fructose, l-fucose, d-fucose, l-rhamnose, d-serine, d-glucuronic acid, glucuronamide, l-lactic acid, d-malic acid and l-malic acid. Q-10 is the sole respiratory quinone. The major polar lipids are phosphatidylethanolamine (PE), phosphatidylglycerol (PG), unidentified phospholipid (PL), phosphatidylcholine (PC), diphosphatidylglycerol (DPG), unidentified aminolipid (AL), unknown glycolipid (GL), unidentified aminophospholipid (APL2) and unidentified polar lipid (L1 and L2). The major cellular fatty acids (> 10.0%) are C19:0 cyclo *ω8c* and Summed Feature 8 (C18:1 *ω6c* and/or C18:1 *ω7c*). The genomic DNA G+C content of the type strain is 63.6 mol%.

Classification
Bacteria » *Pseudomonadota* » *Alphaproteobacteria* » *Hyphomicrobiales* » *Phyllobacteriaceae* » *Mesorhizobium* » *Mesorhizobium xinjiangense*

References
Effective publication: Meng et al., 2022 [1]

Registry URL
https://seqco.de/i:49632

References

1. Meng et al. (2022). Mesorhizobium xinjiangense sp. nov., isolated from rhizosphere soil of Alhagi sparsifolia. *Archives of Microbiology*. DOI:10.1007/s00203-021-02686-9

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:g4_brxk9** submitted by **Van Lill, Melandre** and including 1 new name has been successfully validated.

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