Species *Mesorhizobium album*

Etymology

[al'bum] **L. neut. adj.** *album*, referring to the white colonies of the type strain on YM agar.

Nomenclatural type

NCBI Assembly: GCA_033977205.1 [Ts]

Reference Strain

VK24D

Description

Cells are Gram-negative, motile rods. On YM agar, following 5 days of incubation at 28 °C, the colonies are circular, white, opaque with entire margins and convex elevations with viscid consistency. The strain was able to grow in the pH range of 6 to 9 and tolerate a NaCl concentration of 0.3 % to 2.5 %. The strain can grow at 15 °C to 40 °C. The strain tested positive for the ability to reduce nitrates to nitrites and nitrogen, arginine, urea, esculin and gelatin hydrolysis. The strain could assimilate 4-nitrophenyl-β,D-galactopyranoside, D-glucose, L-arabinose, potassium gluconate, malic acid and phenylacetic acid. The strain could utilize dextrin, D-maltose, D-trehalose, D-cellubiose, gentiobiose, sucrose, D-turanose, stachyose, D-raffinose, α-D-lactose, β -methyl-D glucoside, α-D-glucose, D-mannose, D-fructose, D-galactose, 3-methyl glucose, D-fucose, L- fucose, L-rhamnose, inosine, D-serine, gelatin, Glycyl-L-proline, L-alanine, L-arginine, L-aspartic acid, L-glutamic acid, L-histidine, L-pyroglutamic acid, L-serine, guanidine HCl, Niaproof 4, D-galacturonic acid, L-galactonic acid lactone, D-gluconic acid, glucuronamide, mucic acid, quinic acid, D-saccharic acid, the reduction of tetrazolium blue, methyl pyruvate, D-lactic acid methyl ester, L-lactic acid, D- malic acid, L-malic acid, bromo-succinic acid, nalidixic acid, potassium tellurite, Tween 40, acetoacetic acid and acetic acid sole sources of carbon. The strain was able to form effective symbiosis with *V. karroo*.

Classification

Bacteria » *Pseudomonadota* » *Alphaproteobacteria* » *Hyphomicrobiales* » *Phyllobacteriaceae* » *Mesorhizobium* » *Mesorhizobium album*

References

Effective publication: van Lill et al., 2024 [1]

Registry URL

https://seqco.de/i:32771

References

1. van Lill et al. (2024). SeqCode facilitates naming of South African rhizobia left in limbo. *Systematic and Applied Microbiology*. DOI:10.1016/j.syapm.2024.126504