Species *Mesorhizobium captivum*

Etymology

[cap.ti'vum] **L. neut. adj.** *captivum*, captured or captive, referring to the capturing of this organism with a compatible rhizobial host.

Nomenclatural type

NCBI Assembly: GCA_033977165.1 [Ts]

Reference Strain

VK22E

Description

Cells are Gram-negative, motile rods. On YM agar, following 5 days of incubation at 28 °C, the colonies are circular, cream, translucent 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 1.5 %. The strain can grow at 15 °C to 35 °C. The strain tested positive for urease and esculin hydrolysis. The strain could assimilate 4-nitrophenyl-β,D-galactopyranoside, D-glucose, L-arabinose, D-mannose, D-mannitol, D-maltose, potassium gluconate, adipic acid and trisodium citrate. The strain could utilize dextrin, D-maltose, D-trehalose, D-cellubiose, gentiobiose, sucrose, D-turanose, D-raffinose, α-D-lactose, D-melibiose, β -methyl-D glucoside, D-salicin, N-acetyl-D glucosamine, N-acetyl-β-D mannosamine, N-acetyl-D galactosamine, α-D-glucose, D-mannose, D-fructose, D-galactose, 3-methyl glucose, D-fucose, L- fucose, L-rhamnose, D-sorbitol, D-mannitol, D-arabitol, myo-inositol, glycerol, D-glucose6-PO_4, D-fructose6-PO_4, gelatin, glycyl-L-proline, L-alanine, L-arginine, L-aspartic acid, L-glutamic acid, L-histidine, pectin, D-galacturonic acid, L-galactonic acid lactone, D-gluconic acid, D-glucuronic acid, glucuronamide, mucic acid, D-lactic acid methyl ester, citric acid, L-lactic acid, D- malic acid, L-malic acid, bromo-succinic acid, Tween 40, γ -Amino-butyric acid, β-hydroxy-D-L-butyric acid, acetoacetic acid, propionic acid and acetic acid as sole sources of carbon. The strain was able to form effective symbiosis with *V. karroo*.

Classification

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

References

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

Registry URL

https://seqco.de/i:32831

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