Rhizobium oryzihabitans

Submitted by Van Lill, Melandre

Species Rhizobium oryzihabitans

Etymology

[o.ry.zi.ha.bi'tans] L. fem. n. oryza, rice; L. pres. part. habitans, inhabiting, dwelling; N.L. neut. part. adj. oryzihabitans, rice inhabiting

Nomenclatural type

NCBI Assembly: GCF 010669145.1 Ts

Reference Strain

Strain sc|0039559: M15 = ACCC 60121 = JCM 32903

Description

Cells are Gram-negative, aerobic, flagellate and rods. Colonies are circular and cream-white on YMA at 30 °C. Growth occurs from 15 °C to 50 °C and the pH range for growth is 5.0-12.0. The tolerant of NaCl concentrations is up to 7.0% (w/v). Positive reactions for nitrate reduction, aesculin hydrolysis, urease and nitro-D-methyl galactose activities, and assimilation of glucose, arabinose, mannose, mannitol, *N*-acetyl-glucosamine, maltose, gluconate, malic acid, citric acid, phenylacetic acid are positive. Catalase and oxidase positive. The following compounds utilize as carbon sources: *N*-acetyl-D-galactosamine, *N*-acetyl-D-glucosamine, adonitol, L-arabinose, D-arabitol, D-cellobiose, D-fructose, L-fucose, D-galactose, gentiobiose, α -D-glucose, m-inositol, α -D-lactose, lactulose, maltose, D-mannitol, D-mannose, D-melibiose, β -methyl-D-glucoside, D-raffinose, L-rhamnose, D-sorbitol, sucrose, D-trehalose, turanose, xylitol, acetic Acid, D-galactonic acid lactone, D-gluconic Acid, α -keto glutaric acid, DL-lactic acid, propionic acid, quinic acid, succinic acid, D-alanine, L-alanine, L-alanyl-glycine, L-asparagine, L-aspartic acid, L-glutamic acid, L-histidine, hydroxy-L-proline, L-ornithine, L-proline, L-pyroglutamic acid, L-serine, inosine, uridine, glycerol, glucose-1-phosphate, glucose-6-phosphate. The DNA G+C content of type strain is 59.28 mol %. Major cellular fatty acids are summed feature 8 (C18:1 ω 7 c and/or C18:1 ω 6 c) and Summed feature 2 (aldehyde-C12:0 and/or unknown equivalent chain length).

The type strain, M15T (= JCM 32903T = ACCC 60121T), was isolated from the root of rice.

The GenBank/The European Bioinformatics Institute EMBL-EBI (EMBL))/DNA Data Bank of Japan (DDBJ) accession numbers for the 16S rRNA, *recA*, *ropB* and *atpD* gene sequences of strain M15T are MT023790, MT028481, MT028482 and MT028483, respectively. The complete genome has been deposited in GenBank under the accession numbers of SAMN14048699.

Classification

Bacteria » Pseudomonadota » Alphaproteobacteria » Hyphomicrobiales » Rhizobiaceae » Rhizobium » Rhizobium oryzihabitans

References

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

Registry URL

https://seqco.de/i:38934

References

1. Zhao et al. (2020). Isolation, Identification and Characterization of Endophytic Bacterium Rhizobium oryzihabitans sp. nov., from Rice Root with Biotechnological Potential in Agriculture. *Microorganisms*. DOI:10.3390/microorganisms8040608

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:nojfpkk5** submitted by **Van Lill, Melandre** and including 1 new name has been successfully validated.

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