

Rhizobium deserti sp. nov.

Submitted by Van Lill, Melandre

Table 1: Complete list of names proposed in the current register list.

Proposed Taxon	Etymology	Description	Parent Taxon	Type	Registry URL
Species <i>Rhizobium deserti</i>	[de.ser'ti] L. gen. n. <i>deserti</i> , of a desert	Cell is gram-negative, aerobic, non-motile, and rod-shaped (0.7–2.0-μm long and 0.3–0.7-μm wide). Colonies are circular with regular margins, convex, milky, and 2–3 mm in diameter after incubation for 48 h on YMA at 30 °C. Grows in the presence of 0–2% (w/v) NaCl (optimum, 0% NaCl) at pH 6.0–9.0 (optimum, 7.0–8.0) and at 15–37 °C (optimum, 30 °C). Positive for nitrate reduction, and catalase and oxidase. Eesculin is hydrolyzed and gelatin is weakly hydrolyzed. Starch and casein are not hydrolyzed. Can assimilate mannose, <i>N</i> -acetyl glucosamine, maltose, and citric acid. Negative for H ₂ S, urease, and indole production and Voges–Proskauer reaction. In the API ZYM system, positive for alkaline phosphatase, esterase (C4), esterase lipase (C8), leucine arylamidase, acid phosphatase, naphthol-AS-BI-phosphohydrolase, and β-glucosidase. The following carbon sources are utilized: dextrin, <i>N</i> -acetyl-d-glucosamine, <i>N</i> -Acetyl-β-d-mannosamine, α-d-glucose, d-mannose, d-fructose, d-galactose, d-fucose, l-fucose, l-rhamnose, d-mannitol, d-arabitol, <i>myo</i> -inositol, glycerol, glycyl-l-proline, l-alanine, l-aspartic acid, l-glutamic acid, d-galacturonic acid, d-gluconic acid, d-glucuronic acid, glucuronamide, α-keto-glutaric acid, d-malic acid, l-malic acid, bromo-succinic acid, Tween 40, β-hydroxy-d, l-butyric acid, acetoacetic acid, and acetic acid. The major cellular fatty acids are summed feature 8 (C18:1ω7c and/or C18:1ω6c) and C16:0. The draft genome is 4.75 Mb in size and the common genes required for legume nodulation, <i>nodACD</i> and <i>nifH</i> , are absent from the genome. The G + C content is 60.0%.	<i>Rhizobium</i>	NCBI Assembly: GCF_004358025.1 Ts	seqco.de/i:39270