

# Mesorhizobium zhangyense

Submitted by Van Lill, Melandre

## Species *Mesorhizobium zhangyense*

### Etymology

[zhang.yen'se] **N.L. neut. adj.** *zhangyense*, referring to Zhangye, the site of isolation of the type strain

### Nomenclatural type

[NCBI Assembly: GCF\\_011045115.1](#) <sup>Ts</sup>

### Reference Strain

[Strain sc|0039556](#): 23-3-2 = [CGMCC 1.15528](#) = [NBRC 112337](#)

### Description

Gram-negative, non-spore-forming rod, which is motile, aerobic and 0.3–0.5 µm wide and by 0.5–1.2 µm long. Colonies formed on YMA medium are circular, convex, white, semitranslucent and usually have a diameter of 1–2 mm after 3 days growth at 28 °C. The growth and pH optima are 28 °C and pH 7.0, respectively, while growth is inhibited at 10 and 40 °C and above pH of 9.0. The cells could utilize inositol, l-arabinose, d-mannitol, gentiobiose, glucose, sodium citrate, galactose, sodium malonate, pyruvic acid sodium, sucrose, d-xylose, d-ribose, d-fructose, d-mannose, d-maltose, sodium acetate, sodium propionate, esculine, salicine, amygdaline, d-saccharose, d-trehalose, d-tyranose and succinic acid as sole carbon sources, but not l-rhamnose, d-sorbitol, dulcitol, d-lactose, d-raffinose, d-melibiose, erythritol, d-arabinose, d-adonitol, l-xylose, l-sorbose, inuline, xylitol, l-fucose, d-fucose and d-arabitol as the sole source of carbon. The cells grew on YMA medium up to 3% (w/v) of NaCl but did not grow in YMA supplemented with 0.1% malachite green, 0.1% methylene blue or 0.1% neutral red. The cells were sensitive to 10 µg ml<sup>−1</sup> of tetracycline, gentamicin, trobicin, chloramphenicol, ampicillin, streptomycin, kanamycin, and neomycin. The cells were negative for potassium gluconate, potassium 2-ketogluconate, potassium 5-ketogluconate, litmus milk alkali production, indole production, and Voges-Proskauer test, but positive for oxidase, urease, reduction of nitrate and nitrite, double hydrolysis of arginine, casein hydrolysis and hydrolysis of gelatin. The cells could assimilate citric acid, phenylacetic acid and *N*-acetyl glucosamine. The predominant ubiquinone was Q-10 and the main cellular fatty acids are summed feature 8 (comprising of C18:1ω7c and/or C18:1ω6c; 24.56%).

### Classification

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

### References

Effective publication: Xu et al., 2018 [1]

### Registry URL

<https://seqco.de/i:49624>

## References

1. Xu et al. (2018). *Mesorhizobium zhangyense* sp. nov., isolated from wild *Thermopsis lanceolata* in northwestern China. *Archives of Microbiology*. [DOI:10.1007/s00203-017-1464-0](https://doi.org/10.1007/s00203-017-1464-0)

## 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:z6gfeom6** submitted by **Van Lill, Melandre** and including 1 new name has been successfully validated.

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