Request for an Opinion

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The status of the species *Leifsonia rubra* Reddy *et al.* 2003. Request for an Opinion

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On the basis of 16S rRNA gene sequence analysis, it is ascertained that the type strain of *Leifsonia rubra* does not exist in any established culture collection or with the authors who described this species. Therefore, it cannot be included in any scientific study. It is proposed that the Judicial Commission place the name *Leifsonia rubra* on the list of rejected names if a suitable type strain is not found or a neotype is not proposed within two years following the publication of this Request for an Opinion.

The species *Leifsonia rubra* was described by Reddy *et al.* (2003). Cells are aerobic, Gram-positive, non-motile, curved rods. The species grows at between 0 and 22 °C and between pH 6 and 12 and tolerates up to 3 % NaCl. The cell-wall peptidoglycan contains DL-diaminobutyric acid as the diamino acid, along with glycine, glutamic acid and alanine. The cell-wall sugars are galactose, glucose, ribose and rhamnose. The major menaquinone is MK-11. The G + C content of the DNA of the type strain is 66 mol%. The type strain is strain CMS 76r^T (=MTCC 4210^T=DSM 15304^T=CIP 107783^T=JCM 12471^T). The GenBank/EMBL/DDBJ accession number for the 16S rRNA gene sequence of strain CMS 76r^T is AJ438585.

In order to include the type strain of *Leifsonia rubra* in a comparative study of the species belonging to the genus *Leifsonia*, the type strain was obtained from different culture collections and from the authors who described this species (Reddy *et al.*, 2003). MTCC 4210^T was obtained from the Microbial Type Culture Collection and Gene Bank, Institute of Microbial Technology, Chandigarh, India, CIP 107783^T was obtained from the Collection de Bacteries de l'Institut Pasteur, Paris, France, DSM 15304^T was obtained from the DSMZ–Deutsche Sammlung von Mikroorganismen und Zellkulturen GmbH, Braunschweig, Germany, JCM 12471^T was obtained from the Japan Collection of Microorganisms, RIKEN, Wako, Japan and CMS 76r^T was obtained from the Centre for Cellular and Molecular Biology, Hyderabad, India.

It was found that none of the obtained strains conformed to the description of the type strain of *Leifsonia rubra*. Based on the results of 16S rRNA gene sequence analysis, [*Leifsonia*

rubra] MTCC 4210^T and [*Leifsonia rubra*] JCM 12471^T were identified as representing a gammaproteobacterium. Strain CMS 76r^T, obtained from the authors of the original description (Reddy *et al.*, 2003), [*Leifsonia rubra*] CIP 107783^T and [*Leifsonia rubra*] DSM 15304^T had 99.9 % 16S rRNA gene sequence similarity with *Arthrobacter roseus* (Reddy *et al.*, 2002). Strains CMS 76r^T, CIP 107783^T and DSM 15304^T shared 100 % gene sequence similarity with each other. Thus, the type strain of *Leifsonia rubra* originally described by Reddy *et al.* (2003) does not exist.

According to Rule 18c of the International Code of Nomenclature of Bacteria (Lapage *et al.*, 1992), if a suitable replacement type strain or a neotype cannot be found or proposed, respectively, within two years of the publication of this Request for an Opinion, it is proposed that the Judicial Commission places the name *Leifsonia rubra* on the list of rejected names.

References

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