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Strain LM 161^T, a New Genus of the Order *Actinomycetales*

Soon Dong Lee^{*}, Min Young Kim, Sa-Ouk Kang and Yung Chil Hah
Department of Microbiology, College of Natural Sciences, and Research
Center for Molecular Microbiology, Seoul National University

A new actinomycete genus, strain LM 161^T, which was isolated from a soil sample of a gold mine cave in Kongju, is described. This organism was morphologically characterized by well-developed, branched aerial and substrate mycelium. Both mycelia are fragmented to rod-shaped elements. This organism had a LL-diaminopimelic acid (wall chemotype I), a phospholipid type III, MK-9(H₄) as the major menaquinone, and *anteiso*-pentadecanoic acid (C_{15:0}) as the major fatty acid. Mycolic acids were absent. The phylogenetic position of strain LM 161^T was placed between the genera *Nocardioides* and *Aeromicrobium* on the basis of comparative analysis of 16S rRNA gene sequences. The morphological, and chemotaxonomic characteristics as well as phylogenetic evidence indicated that this isolate represents a new genus of the order *Actinomycetales*. The type strain is strain LM 161^T.

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Strain LM 042^T, a New Genus of the Order *Actinomycetales*

Soon Dong Lee^{*}, Sa-Ouk Kang and Yung Chil Hah
Department of Microbiology, College of Natural Sciences, and Research
Center for Molecular Microbiology, Seoul National University

Strain LM 042^T, which was isolated from a soil sample of a gold mine cave in Kongju, was proposed as a new genus of the order *Actinomycetales*. This organism produced chains of nonmotile spores from vegetative mycelia without the formation of the true aerial mycelium. Sporangium-like structures (dia. 1 μm) on intercalary parts and tips of mycelium were also present in submerged cultures. This organism contained a LL-diaminopimelic acid (wall chemotype I). The whole-cell hydrolyzates contained rhamnose, ribose, xylose, mannose, and glucose as characteristic sugars. However, arabinose and galactose were not detected. This organism had a N-glycolyl muramic acid, a phospholipid type PII, and a fatty acid 2b pattern. Mycolic acids were absent. MK-10(H₄) was found as the predominant menaquinone. MK-9(H₄) and MK-10(H₆) were also present as minor components. This organism was not consistent with previously described genera of the order *Actinomycetales* on the basis of morphological and chemotaxonomic characteristics. The comparative analysis of 16S rRNA gene sequences indicated that the phylogenetic position of strain LM 042^T was placed between the genera *Actinoplanes* and *Dactylosporangium*. The type strain is strain LM 042^T.