

Microbulbifer taiwanensis sp. nov., isolated from coastal soil.

Kämpfer P, Arun AB, Young CC, Rekha PD, Martin K, Busse HJ, Chen WM (2012) Microbulbifer taiwanensis sp. nov., isolated from coastal soil. *Int J Syst Evol Microbiol* 62(Pt 10), 2485-2489.

[Details](#)



Abstract

A Gram-negative, non-spore-forming rod (CC-LN1-12(T)) was isolated from coastal soil samples of Luta Island (Green Island), Taiwan, and its taxonomic position was studied. 16S rRNA gene sequence analysis showed that isolate CC-LN1-12(T) was grouped into the Microbulbifer cluster, with the highest similarities to Microbulbifer okinawensis ABABA23(T) (97.9 %), Microbulbifer maritimus TF-17(T) (97.7 %) and Microbulbifer donghaiensis CN85(T) (97.7 %), similarities to all other species of the genus Microbulbifer were lower than 96.8 %. The polyamine pattern contained the major compounds spermidine and cadaverine. The fatty acid profile, comprising the major fatty acids iso-C(15 : 0), iso-C(17 : 1) ω 9c, C(18 : 1) ω 7c and iso-C(11 : 0) 3-OH as the major hydroxylated fatty acid, supported the affiliation of strain CC-LN1-12(T) to the genus Microbulbifer. DNA-DNA hybridizations between strain CC-LN1-12(T) and Microbulbifer okinawensis ABABA23(T), M. donghaiensis CN85(T) and M. maritimus JCM 12187(T) resulted in relatedness values of 21.5 % (14.3 %, reciprocal analysis), 35.9 % (48.5 %, reciprocal analysis) and 48.1 % (52.1 %, reciprocal analysis), respectively. From these data, as well as from physiological and biochemical tests, strain CC-LN1-12(T) could be clearly differentiated from the most closely

related species of the genus *Microbulbifer*. It is concluded that strain CC-LN1-12(T) represents a novel species, for which the name *Microbulbifer taiwanensis* sp. nov. is proposed. The type strain is CC-LN1-12(T) (= LMG 26125(T) = CCM 7856(T)).

Beteiligte Forschungseinheiten

[Biotechnikum Miriam Agler-Rosenbaum](#) [Mehr erfahren](#)

Leibniz-HKI-Autor*innen



Karin Martin

[Details](#)

Identifier

doi: 10.1099/ijis.0.034512-0

PMID: 22155758