

A305 Characterization of heavy metal resistant streptomycetes strains

노재영¹, 대수형¹, 김재현¹, I. C. Hancock²,
단국대학교 자연과학대학 미생물학과¹ Dept of Microbiology, Medical School
University of Newcastle upon Tyne, U.K.²

Two strains of heavy metal resistant streptomycetes were selectively isolated from different sites at Kong-ju and Cheo-an. The strain P5 could survive the relatively high concentration of Pb, Zn and Cu ions. The second isolate (C1) had similar heavy metal susceptibility.

Both of these strains formed well-developed, flexible aerial mycelia and smooth, recti-flexible spore chains. Cell wall was determined as type I. P5 and C1 contained LL-diaminopimelic acid with no characteristic sugars in cell walls. Phospholipid patterns were type PII with phosphatidylethanolamine. The major fatty acids were anteiso-C15:0, iso-C16:0 and the major menaquinones of P5 and C1 were MK-9(H6), MK-9(H8) and MK-9(H4), MK-9(H6), MK-9(H8), respectively. 16S rDNA sequence similarity of P5 was 99.52% with *Streptomyces subbrutillus*, that of C1 was 98.62% with *Streptomyces setonii*.

A306 Inter- and Intra-specific Relationships of Vibrios from Chick Seabird, Little Tern (*Sterna albifrons*) and Shrimps (*Crangon affinis*) Based on Randomly Amplified Polymorphic DNA (RAPD) markers

Ha, KuK Hea¹, Hun Gu Lee¹, Sang Seob Lee²

1. Department of Microbiology, Pukyong National University
2. Department of Biology, Kyunggi University

The strains of Vibrios isolated from seabirds in July, 1997 and shrimps in Summer, 1996 at Nakdong River and were identified by 22 biochemical characteristics. We couldn't identify 24 strains of isolates because their biochemical characteristics didn't agree with that of any type species. Genetic relationship of 24 strains were determined by a RAPD assay for using basic data of their identification. The results were analyzed by a phenetic analysis with the NTSYS-PC software.