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Chemosystematics of the indigenous microorganisms

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Chemosystematic characteristics of the isolates from the indigenous microorganisms were investigated. Some isolates were identified by the rapid method of cellular fatty acid composition analysis using the Microbial Identification System (MIDI; Microbial ID).

Sphingomonas strains isolated from drinking water of Taejon city have 2-hydroxy fatty acid as a sole hydroxy fatty acid, ubiquinone Q-10, glycosphingolipid, and produced yellow pigment.

Violet-pigment producing bacterium isolated from Mt. Baikdu-san has the cellular fatty acid profile consisted of a significant amount of $C_{16:0}$, ubiquinone Q-8 and 62.1 mol% of DNA G+C content. The violet-pigment producing bacterium was identified as a *Janthinobacterium lividum* BD17-1.

Some halophilic bacteria were isolated from Ullung-do island. All isolates were grew at in 15% NaCl containing media. All isolates were showed positive reaction on catalase test. They were categorized as 4 groups by Microbial Identification System.

References

Kawahara, *et al.* 1994. Isolation of *Sphingomonas* strains from ears of rice and other plants of family *Gramineae*. Biosci. Biotech. Biochem. 58:6000-601.

Lee *et al.* 1996. Analysis of cellular fatty acid methyl esters(FAMEs) for the identification of *Leuconostoc* strains isolated from kimchi. J. Microbiol. 34: 225-228.

Shin *et al.* 1996. Isoprenoid quinone profiles of the *Leclercia adecarboxylata* KCTC 1036^T. J. Microbiol. Biotechnol. 6: 68-69.

Shin *et al.* 1997. Identification of adenosine deaminase inhibitor-producing bacterium isolated from soil. J. Microbiol. Biotechnol. 7: 32-36.