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***Vibrio jindong* sp. nov., a pH-dependent halophile
isolated from seawater**

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Abstract

A strain, designated KYJ 962, was isolated from seawater in Jindong, Republic of Korea, and identified as a species of the genus *Vibrio* on the basis of the 16S rDNA sequence. Its 16S rDNA sequence showed approximately 99.6% homology to *Vibrio alginolyticus*, *Vibrio parahaemolyticus*, *Vibrio campbelli*, and *Vibrio natrigens*, but strain KYJ 962 was quite different physiologically from other *Vibrio* species. *V. alginolyticus*, *V. parahaemolyticus*, *V. campbelli*, and *V. natrigens* are typical marine halophiles. In contrast, the level of salt requirement revealed that strain KYJ 962 is a pH-dependent halophile. Strain KYJ 962 required NaCl at a concentration of 0.3–0.5 M for optimal growth. The strain can grow around neutral pH even though NaCl is not present at all, whereas it does not grow at all at acidic and alkaline pHs unless NaCl is present. Also, strain KYJ 962 required KCl at a concentration of 0.2 M for optimal growth in place of NaCl, whereas *V. alginolyticus*, *V. parahaemolyticus*, *V. campbelli*, and *V. natrigens* required KCl at 0.6 M, 0.4 M, 0.3 M, and 0.2 M, respectively. On the other hand, strain KYJ 962 and *V. alginolyticus* can grow at 45°C, whereas *V. parahaemolyticus*, *V. campbelli*, and *V. natrigens* can not grow at 45°C. Also, the membrane pattern of strain KYJ 962 on SDS-PAGE was different from other *Vibrio* species. On the basis of the results, the name *Vibrio jindong* sp. nov. is proposed for strain KYJ 962.