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## **Prokaryotic Diversity in Korean Tidal Flats**

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### **Abstract**

The tidal flat of Korea is one of the most dynamic areas in terms of sediment erosion and deposition. Tidal flats provide important food resources, ecological niche for diverse organisms and have functional role of bioremediation by mineralizing organic matters. Generally, microbes are essential constituent for biochemical transformations, such as mineralization of organic matters and biodegradation of pollutants. Understanding microbes in tidal flat sediment is necessary to understand these processes. In order to understand role of microbes in tidal flat, this study investigated prokaryotic communities by several methods such as clone library, DGGE, and pyrosequencing. In addition, quantification of microorganisms and isolation biodegrading bacteria were investigated in tidal flats of Western Coast.