A304 Properties of *Streptomyces* Isolated from Antarctic and Seawater

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One-hundred and ten streptomycete strains were isolated from Antarctic terrestrial soil and seawater near Komundo island. The morphological, pigmentation, cultural properties, degradation, enzyme synthesis, antibiotic resistance, and antibiosis of the isolates were determined. Similarity of the isolates were analyzed and the strains were clustered with UPGMA algorithm. The isolates were identified with the probability identification matrix. The isolates were belong to a few types of color group. Most of the strains prduced straight or flexible spore chain. Most of them were sensitive to neomycin and rifampicin, and do not show antibacterial activity. Over 90% of the strains grew at the presence of 7% NaCl. But only 7 strains grew at 45℃. One of the isolate could demulsify the oil-in-water emlusion.

A305 Rapid Diagnosis of *Helicobacter pylori*

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Optimal conditions for the rapid diagnosis of *Helicobacter pylori* were determined. The strains were isolated from biopsy where the ulcer was observed with endoscope. Morphological and cultural properties of the isolates were determined. Efficiency and sensitivity of several diagnostic tests were compared. Ulcer tissues as well as pure cultures of *H. pylori* showed positive reaction in urease test broth or semi-solid agar containing 10% urea and 0.1% phenol red within 5 min. Urease test was highly reproducible and sensitive. Urease A gene extracted from pure culture and tissue was amplified by nested PCR using HEPY1/2 and HEPY3/4 primers. Electrophoresis of PCR product confirmed that DNAs extracted from tissues and isolates which show positive reaction in urease test contain Urease A gene. Among several diagnostic methods used in general, this test was recommended as convenient, cheap and easy method.