

Abstract

The occurrence and distribution of halophilic vibrios in coastal waters of eastern Thailand (August 1991 to July 1992) were investigated. The occurrence rate of bacterial strains in thirty sample sites ranged from 0 to 66.67 %. Sucrose-positive vibrios were found to be more common (60.19 % of total vibrios) than sucrose negative bacteria. A total of 915 bacterial strains belonging to six species were fully characterized. Among these, Vibrio alginolyticus was the most frequently isolated (324 strains) followed by V. parahaemolyticus (307 strains), V. alguillarum (114 strains), non-01 V. cholerae (40 strains), V. vulnificus (34 strains) and Vibrio spp. (96 strains). The distribution rate of halophilic vibrios in each sampling site are not quite different, but the occurrence rate is vary in according to seasons.

Susceptibility testing of Vibrionaceae isolated from eastern Thailand environments showed high resistance to ampicillin, penicillin G and streptomycin but susceptible to tetracycline and chloramphenicol. Very few of these isolates were susceptible to kanamycin and colistin. Some strains of V. parahaemolyticus showed intermediate reaction to tetracycline, and antibiotics important in the treatment of gastroenteritis.