

**Note: characterization of Vibrio cholerae O139 Bengal isolated from water in Malaysia**

**ABSTRACT**

Four *Vibrio cholerae* O139 Bengal strains isolated from surface water were characterized by antibiotic resistance, plasmid profile, presence of cholera toxin gene and random amplification of polymorphic DNA (RAPD) analysis. All four strains exhibit multiple resistance towards the antibiotics tested with a multiple antibiotic resistance index of 0.5–0.66, and harboured a 2.0 MDa non-conjugative plasmid. The *Vibrio cholerae* O139 Bengal were positive for the cholera toxin gene. Antibiotyping and random amplification of polymorphic DNA analysis with four primers proved to be useful in discriminating the isolates. RAPD proved to be more sensitive. These results reveal that there is significant genetic diversity among the *Vibrio cholerae* O139 Bengal strains studied.

**Keyword:** Water; Isolated; Antibiotic; *Vibrio cholerae* O139 Bengal