

Genetic relatedness among isolates of *Acanthamoeba* based on RAPD analysis

ABSTRACT

Acanthamoeba is a pathogen frequently infecting brain, eyes, skin and lung of human and animal. Seven *Acanthamoeba* local isolates from various sources, two *Acanthamoeba* type strains and one strain of *Hartmannella vermiformis* were characterized for their genetic variability using randomly amplified polymorphic DNA (RAPD) technique using four different 10-mer oligonucleotides primers. Electrophoresis of the amplification products generated DNA bands ranging from approximately 0.25 to 7.50 kbp in size. A genetic relatedness among the isolates was examined using Dice similarity coefficient as the genetic distance measured between the strains of *Acanthamoeba* and *H. vermiformis*. Three distinct clusters could be separated at genetic distance of approximately 0.330. © 2006 Asian Network for Scientific Information.

Keyword: *Acanthamoeba*; DNA polymorphism; Genetic distance; RAPD-PCR