



Genetic diversity of *Bacillus cereus* isolated from fried rice

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Abstract : Thirty five (n=35) genomic DNA of *Bacillus cereus* among fried rice isolates were determined their genetic diversity using plasmid profiling and arbitrarily primed polymerase chain reaction (AP-PCR) analysis. The *B. cereus* isolates, were isolated from 3 locations; Kajang (17), Bangi (11) and UKM's cafeteria (7) from August 2013 to July 2014. Plasmid profiling revealed 2 patterns either consist 23.kb or 23 Kb and 3.6 kb of plasmid, indicated that plasmid patterns were less heterogeneous when compared to AP-PCR analysis. Genetic fingerprinting of 35 *B. cereus* isolates was examined by AP-PCR analysis using AP1, AP2 and AP3 primers. The results of the AP-PCR were analyzed using Gel ComparII software to form dendrogram of *B. cereus* phylogeny. Dendrogram AP-PCR with primer AP1 discriminated the *B. cereus* isolates into 5 clusters and 4 single isolates, AP2 primers into 3 clusters and 3 single isolates and AP13 primers into 5 clusters and 3 single isolates at 70% similarity level examined. Results in the present study demonstrated a wide heterogeneity among rice fried isolates of *B. cereus*.

Keywords : Genetic diversity, plasmid, *Bacillus cereus*, fried rice, AP-PCR analysis.

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