Molecular typing among poultry isolates of Salmonella agona by PCR-based techniques and pulsed field gel electrophoresis (PFGE)

ABSTRACT

Nine genomic DNA of Salmonella agona isolated from poultry sources were characterised by three variations of PCR-based techniques [polymerase chain reaction (PCR)-ribotyping, enterobacterial repetitive intergenic consensuspolymerase chain reaction (ERIC-PCR), and random amplified polymorphic DNA-polymerase chain reaction (RAPD-PCR)] and pulsed field gel electrophoresis (PFGE). These isolates originated from three different states of Peninsular Malaysia (Pulau Pinang, Negeri Sembilan and Selangor). The results of PCR-ribotyping, ERIC-PCR, RADP-PCR and PFGE to differentiate between nine isolates of S. agona were compared. The isolates were separated into three different genome types by PCR-ribotyping, nine and eight genome types by ERIC-PCR and PFGE, respectively.

Keyword: Salmonella agona; PCR-ribotyping; Enterobacterial repetitive intergenic consensus-PCR (ERIC-PCR); Random amplified polymorphic DNA-PCR (RAPD-PCR); Pulsed field gel electrophoresis (PFGE)