

## 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 consensus polymerase 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, RAPD-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)