

THE EPIDEMIOLOGICAL RELATIONSHIP BETWEEN *SALMONELLA ENTERICA* SEROVAR TYPHIMURIUM AND *SALMONELLA ENTERICA* SEROVAR 4,[5],12:i:- ISOLATES FROM HUMANS AND SWINE IN THAILAND

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Abstract. A total of 138 isolates of *S. Typhimurium* and *S. 4,[5],12:i:-* from humans and swine in Thailand during 2003-2006, were evaluated for antimicrobial sensitivity by the disk diffusion method against 10 antimicrobial drugs and pulsed-field gel electrophoresis (PFGE) with endonuclease *Xba*I to investigate the epidemiological relationship among isolates. It was found that all isolates were classified into 27 antimicrobial resistance patterns, and 80% of *S. Typhimurium* and 95.4% of *S. 4,[5],12:i:-* isolates were resistant to three or more antimicrobial agents. By PFGE testing, the 84 PFGE patterns were categorized into A to Z patterns. Eighty percent of *S. Typhimurium* and 71.3% of *S. 4,[5],12:i:-* isolates in 7 major PFGE patterns had close clonal relationships ($\geq 85\%$ similarity). Our studies indicate the spread of genetically identical clones of *S. Typhimurium* and *S. 4,[5],12:i:-* in humans and swine in Thailand.

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