

method MKAV/M 005 of the Veterinary Public Health Laboratory Malaysia, Salak Tinggi, Sepang which was the modified method of FSIS USDA Microbiology Laboratory Guidebook MLG 4.06. Isolated *Salmonella* spp. were sent to Veterinary Research Institute, Ipoh, Perak for *Salmonella* serotyping according to the Kauffmann and White Scheme and 24 (2.9%) were tested *Salmonella* positive. Of 24 *Salmonella* positive samples, 15 different serotypes were identified. The dominant serotype was *S. senftenberg* (20.8%) followed by *S. agona*, *S. bovismorbificans* and *S. corvallis* each with percentage of 8.3%. Other *Salmonella* serotypes isolated were *S. Typhimurium*, *S. enteritidis*, *S. enterica sub salamae*, *S. albany*, *S. norwich*, *S. Stanley*, *S. nitri*, *S. reubeuss*, *S. frintop*, *S. Bradford* and *S. ughelli* with percentage of 4.2 % respectively. Results of the study indicate that *Salmonella* spp. is present in imported frozen buffalo meat but the prevalence is low and still under control. Further research on *S. senftenberg* from imported buffalo meat should be conducted since it is the most dominant and most common serotype identified, yet there is still little information on it.

17. Assessment Of Microbiological Contamination In Chicken Meat From Small And Medium Scale Chicken Processing Plants In Peninsular Malaysia

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Abstract

The objective of this study was to evaluate the microbiological safety and quality of chicken meat collected at small and medium scale chicken processing plants from 12 states in Peninsular Malaysia during October 2015 to December 2015. A total of 1580 chicken carcasses were collected from 316 small and medium scale chicken processing plants in four regions of Peninsular Malaysia which covers Northern (Perlis, Kedah, Penang and Perak), Central (Selangor, Negeri Sembilan and Malacca), Southern (Johore) and East Coast (Pahang, Terengganu and Kelantan). All the samples were subjected to aerobic plate count (APC), total coliform and *E.coli* count as well as *Salmonella* detection. A total of 111 samples (7.0%) exceeded the limit of 1000000 (1×10^6) cfu/gram for APC, a limit established by the Malaysian Regulatory Standard. As for total coliform count, 127 samples (8.0%) were above the maximum limit of 1000 (1×10^3) cfu/gram whereas 275 samples (17.4%) exceeded the limit for *E.coli* count (100 cfu/gram). *Salmonella* spp. was detected from a total of 273 samples (17.3%) respectively. This study shows the microbiological contamination of chicken meat from small and medium scale chicken processing plants in Malaysia is still high which can reflect its possible role in spoilage and food-borne illnesses.