SCREENING OF *Salmonella* spp. ON RAW ULAM AT FOOD STALL AROUND KUALA PILAH, NEGERI SEMBILAN

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Final Year Project Report Submitted in
Partial Fulfilment of the Requirements for the
Degree of Bachelor of Science (Hons.) Biology
In the Faculty of Applied Sciences
Universiti Teknologi MARA

JULY 2018

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ABSTRACT

SCREENING OF *Salmonella* spp. ON RAW ULAM AT FOOD STALL AROUND KUALA PILAH, NEGERI SEMBILAN

Salmonella spp. is a Gram negative bacterium that has long been identify as an important foodborne pathogen which causes outbreaks of human diseases. Human with salmonellosis often develop diarrhoea, fever and abdominal cramp. This pathogen is commonly associated with meat, dairy products, poultry, egg, fresh fruits and vegetables. Despite of the nutritional value provided by vegetables, the potential health hazard should not be taken lightly. In this study, raw ulam such as winged bean (*Psophocarpus tetragonolobus*), lettuce (*Lactuca sativa*), Asiatic pennywort (*Centella asiatica*) and long bean (*Vigna unguiculata*) were sampled randomly at food stalls around Kuala Pilah, Negeri Sembilan to evaluate the presence of *Salmonella* spp and its susceptibility to antibiotic. These bacteria were screened by using *Salmonella-Shigella* agar and confirmed by morphological testing and biochemical test. The result showed that only seven out of 27 isolates were positive for *Salmonella* spp. which was found to exhibit a high resistance (100%) towards penicillin G, erythromycin, cephalothin and vancomycin. The multiple antimicrobial resistance (MAR) indices ranged from 0.45 to 0.78 with a multidrug resistance. The presence of *Salmonella* spp. on raw ulam revealed that there is a high probability of contamination to occur due to inadequate hygiene conditions performed by the food handlers.