

**ISOLATION AND IDENTIFICATION OF GRAM
NEGATIVE BACTERIA FROM *MUSCA* SPP. GUT AT
WET MARKET AREA IN KUALA PILAH, NEGERI
SEMBILAN**

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ABSTRACT

ISOLATION AND IDENTIFICATION OF GRAM NEGATIVE BACTERIA FROM *MUSCA* SPP. GUT AT WET MARKET AREA IN KUALA PILAH, NEGERI SEMBILAN

The wet market is the best place to purchase the raw material such as meat, vegetables and fishes. The moisture and wet environment was a suitably place for the *Musca* spp. to reproduce and can carries a lot of bacterial either resides in their gut or attached to their external bodies and legs. This research was conducted to isolate and identify the Gram negative bacteria of *Salmonella* spp. and *Shigella* spp. from the *Musca* spp. gut by dissecting method. The cultivation of the gut samples into differential medium of MacConkey agar (MCA) and selective media of Salmonella-Shigella agar (SSA) with an addition of biochemical test showed positive growth of *Salmonella* sp., *Shigella* sp., *Citrobacter* sp., *Proteus* sp., and *Providencia* sp., . Furthermore, the identification of bacteria by duplicate samples shows that *Salmonella* spp. is the most identified bacterial inside the *Musca* spp. In general, these group of Enterobacteriaceae resulted in transmissions of foodborne disease around human population due to the location of the wet market was near to the waste bin and food stall as well as shops. All of the market vendors are recommend to applied a proper hygiene care towards the shop's area and also their waste management. Finally, a further studies can be conducted by using specific identification method such Polymerase Chain Reaction (PCR) to identifies other bacterial species might be present in the samples.