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ISOLATION, CHARACTERIZATION AND ANTIBIOGRAM STUDY OF SALMONELLA ISOLATED FROM APPARENTLY HEALTHY JAPANESE QUAIL

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ABSTRACT

Salmonellosis is a major public health problem around the world affecting both animals and humans caused by various species of *Salmonella*. The present study was aimed at isolation, identification and antibiogram profiling of *Salmonella* spp. isolated from cloacal swabs of apparently healthy Japanese quail of selected live bird markets at Dinajpur Sadar Upazila under Dinajpur district of Bangladesh. The isolates were identified based on their morphological, cultural and biochemical characteristics and motility test. While the antibiogram profiling of the *Salmonella* isolates were performed with standard disc diffusion methods. Among the collected samples (n=53), 16.98% samples (n=9/53) were found positive for *Salmonella* spp. Interestingly, all isolates were found to be motile while tested with Motility Indole Urease

(MIU) test. The antibiogram study revealed that all the isolates were completely (100%) resistant to Amoxicillin, Gentamicin, Erythromycin, Tetracycline and Ceftriaxone, whereas the sensitivity rate of the isolates to Ciprofloxacin, Amikacin and Streptomycin were 77.8%, 55.6% and 33.3%, respectively. While, among the resistant *Salmonella* isolates, all were multidrug resistant (MDR). Therefore, findings of the present research work suggested that presence of multidrug resistant *Salmonella* spp. in quails could be a potential threat for public health.



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