

Occurrence of *Campylobacter* and *Salmonella* Spp. in Ostrich

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Abstract

Campylobacter spp. and *Salmonella* spp. are important pathogens in veterinary medicine and public health. In Malaysia, there has been limited research done in ostriches due to the small-scale farming and small number of animals. Nevertheless, ostrich farming has a huge potential. Some of the disease agents affecting ostriches, such as *Campylobacter* spp. and *Salmonella* spp. can also cause disease in humans. As such, infected ostrich may serve as potential public health risk. Hence, this study was undertaken to determine the occurrence of *Campylobacter* spp. and *Salmonella* spp. in ostrich and this is the first report documenting the occurrence of these two bacteria in ostrich in Malaysia. Samples were collected from three ostrich show farms, with 8 ostriches from Farm A, 11 from Farm B and 12 from farm C. Samples from the cloaca and skin swabs were obtained from each of the ostrich and examined for *Campylobacter* spp. and *Salmonella* spp. All samples were cultured for *Campylobacter* spp. via direct plating on CCDA. One out of 62 samples (1.6%) was positive for *Campylobacter* spp. and it was isolated from the cloacal swab. Pre-enrichment, enrichment and direct plating on XLT4 and *Salmonella* Chromogenic agar were done for isolation of *Salmonella* spp. from the ostriches. Two samples, one from the skin swab and another one from the cloacal swab, from two different birds were positive for *Salmonella* spp. The study showed the occurrence of *Campylobacter* spp. and *Salmonella* spp. in ostriches. The ostrich is of public health significance as they are used in recreational activities and for human consumption.

Keywords: Ostrich, occurrence, *Campylobacter* spp., *Salmonella* spp.