



Colonization of Zoonotic Bacterial Pathogens and Associated Resistance in Village Chickens in Sri Lanka



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Introduction

- In Sri Lanka, village chickens play a significant role in the rural agricultural landscape.
- There is a growing demand for meat and eggs of village chickens.
- Unlike commercial poultry, village chickens exhibit resilience to diseases.
- The occurrence of zoonotic foodborne bacterial pathogens with their resistance profiles have not been studied in Sri Lanka.

Objectives

- Identify the presence of the common zoonotic foodborne bacterial pathogens and their phenotypic resistance to commonly utilized antimicrobials in village chickens..

Hypothesis

- Village chickens harbor common foodborne pathogens: *Salmonella*, *E. coli*, *Campylobacter*.





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Materials & Methods

- Thirteen family poultry farms situated in the Western Province were visited to collect environmental faecal sample to detect non-typhoidal *Salmonella*.
- From each farm one chicken was slaughtered to collect caeca and cloacal swabs for isolation of, *Campylobacter* and *E. coli* respectively.



Results

- The colonization of *E. coli* in cloacal swabs was **100%** (13/13)
- *Campylobacter* colonization was **8%** (1/13).
- Three farms out of 13 (**27%**) were positive for non-typhoidal *Salmonella*.





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Discussion

- Based on the results, village chickens are not free from tested pathogens.



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Recommendations

- Continuation of the study including a larger population may warrants drawing conclusions and comparisons with commercial chickens.
- Comparison with broiler colonization values obtained under the WP7 activity is appropriate as the sampled farms are located in the same geographical area and same protocols were utilized.

