

ANTIBIOGRAM OF PRESUMPTIVE *Salmonella enterica* ISOLATES
IN THE FECES OF NATIVE CHICKENS (*Gallus gallus* L.) FROM
SELECTED BACKYARD FARMS IN UPLAND, CAVITE

THESIS

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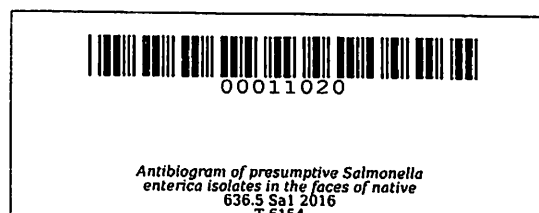
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✓ FECES OF NATIVE CHICKENS (*Gallus gallus* L.) FROM SELECTED
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Undergraduate Thesis
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VERLALAIN P. SACLOLO
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ABSTRACT

SACLOLO, VERLALAIN P. Antibigram of Presumptive *Salmonella enterica* Isolates in the Feces of Native Chickens (*Gallus L.*) from Selected Backyard Farms in Upland, Cavite.
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The study was conducted to determine the antibiotic resistance and susceptibility profile of the presumptive *Salmonella enterica* isolates in selected backyard farms in upland Cavite. A total of 102 samples were collected and were subjected to cultural and biochemical test. There were 6 out of 102 (5.88%) presumptive *Salmonella enterica* isolates. From the highest prevalence of 10% (2 out of 20) in Alfonso followed by 6% (3 out of 50), and 3.1% (1 out of 32) in Indang and Mendez respectively. The presumptive samples exhibited red colonies with black center on Xylose Lysine Deoxycholate (XLD) agar. Results on IMVC were -++ and showed negative on oxidase and urease test. All isolates were found to be motile on Sulfide Indole Motility (SIM) test and no host adapted *S. enterica* serovars Pullorum and Gallinarum were isolated. Antibiotic sensitivity testing showed that presumptive *S. enterica* isolates were susceptible to aminoglycoside drugs such as gentamicin, neomycin and spectinomycin which have the susceptibility of 83.33%, 50% and 33.33% respectively. Whereas the isolates were 100% resistant to bacitracin, erythromycin, trimethoprim-sulfamethoxazole, enrofloxacin, and penicillin. A prevalence rate of 5.88% was obtained from the fecal sample of native chickens collected from selected farms in upland Cavite.

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Verlalaine Paguio Saclolo

An undergraduate thesis manuscript submitted to the faculty of College of Veterinary Medicine and Biomedical Sciences, Cavite State University, Indang, Cavite, in partial fulfilment of the requirements for the degree of Doctor of Veterinary Medicine with contribution No. _____. Prepared under supervision of Dr. Ma. Cynthia R. dela Cruz

INTRODUCTION

Salmonella enterica are gram negative rods and a member of the Family Enterobacteriaceae. The organisms can reside as natural commensal of gastrointestinal system of animals and man or cause disease states that range from self-limited diarrhea to bacteremia with enteric fever or invasion of vascular structures, bone or other localized sites. It is known to be highly host adapted, where they infect only a limited number of species, or can be much more ubiquitous. Presence of *Salmonella* in poultry may become source of disease depending on the serovar present, the severity of the infection and the age of the chicken, younger birds are more susceptible to infection. *S. Pullorum* (pullorum disease) and *S. Gallinarum* (fowl typhoid) are poultry associated organisms (Ziprin & Hume, 2001).