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AN INVESTIGATION OF THE ANTIBACTERIAL AND ANTIHISTAMINE ACTIVITY ON QUAIL’S EGGS (*Coturnix japonica*)

BY

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Abstract

Quail birds are currently being reared in Kenya for several aspects which accounts for the utility of the bird. It has gained economic importance as a husbandry bird for egg and meat production. It has low maintenance cost as it is small in size (80-300g) and has a short generation interval (3-4 generation per year). It is resistant to diseases and has a high production of eggs. Quails eggs are increasingly being consumed for treatment of many diseases which include asthma, skin disease, hypertension and allergy. The quail bird due to its low maintenance cost, short generation interval, resistance to diseases and high egg production is used as an excellent laboratory animal. In this research the susceptibility of Pseudomonas auroginosa, staphylococcus aureas and E. coli was tested and also the antihistamine activity on quail eggs. The susceptibility study of Pseudomonas auroginosa, staphylococcus aureas and E. coli was through disk diffusion test method where diameters of zones of inhibition were measured. Disk diffusion test method is an important task of the clinical microbiology in testing the performance of antimicrobial susceptibility tests for significant bacterial isolates. Standard commercial discs of definite potency were used as reference standard (Ciprofloxacin 30mcg/disc – SD142 – HiMedia laboratories Pvt Ltd. Mumbai) was used as positive control for all. Zones of inhibition diameter in millimeters (mm) were measured which were related to the susceptibility of the organism and the values transmitted to categories of susceptible or not susceptible using the latest tables published by the CLSI. CLSI publishes Acceptable Limits for Quality Control strains used to Monitor Accuracy of Disk Diffusion testing of Non fastidious Organisms (using Muller-Hinton medium without blood or other supplements) the antihistamine activity on quail eggs was tested on isolated guinea pig trachea. It was found that quail’s eggs have antibacterial activity but lacked antihistamine activity.