

RESIDUES OF STREPTOMYCIN ANTIBIOTIC IN COMMERCIAL LAYERS IN ABEOLMTA AND IBADAN METROPOLIS

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Abstract

Old layers sold for human consumption in six open markets in Abeokuta and Ibadan metropolis of Ogun and Oyo States of Nigeria were analyzed for the presence of residues of streptomycin antibiotic. One hundred and twenty samples comprising of muscle (thigh and breast), liver and kidney tissues were subjected to microbiological assay technique for the detection of residues of the antibiotic. The assay was done on antibiotic medium 5 agar with *Bacillus subtilis* (ATCC 6633) organism. Results showed that 34.7% of the sampled birds were positive for the presence of streptomycin antibiotic. The concentration of the residues ranged between 0.18pg/g and 0.9/pg/g. The mean residue levels recorded among the organs are not significantly different ($P>0.05$). Some of the muscle samples recorded residue concentration levels higher than the W.H.O recommended maximum, residue level for streptomycin antibiotic in muscle tissue of food animals. In view of the importance of antibiotics in the treatment of bacterial diseases in both human and animals, it is advocated that the use of these drugs in food animals be done judiciously.

Keywords: Streptomycin, layers