ANTIMICROBIAL RESISTANCE OF *Escherichia coli* ISOLATED OF CHICKENS (*Gallus gallus*), DUCK (*Cairina moschata*), TURKEY (*Meleagris pallopavo*) AND PIGEONS (*Columba livia*)

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Avian pathogenic *Escherichia coli* (APEC) is a heterogeneous group of strains with different virulence characteristics, related to economic impacts on poultry and antimicrobial multi-resistance. Thirty-three *E.coli* isolates from free-living birds, backyard chickens and poultry farming located in the state of Goiás, including ten of chickens, six of ducks, eight of turkeys and nine of pigeons, all clinically healthy, were submitted to antimicrobial susceptibility testing. The antimicrobials used were ampicillin, amikacin, doxycycline, enrofloxacin, norfloxacin, sulfamethazole, sulfonamide, tetracycline, nitrofurantoin, gentamicin and chloranfericol. The interpretation was according to CLSI (2017). Of the 33 samples, 54.54% (18/33) were sensitive, 30.3% (10/33) resistant and 15.1% (5/33) presented intermediate resistance. Chickens and turkeys *E.coli* were higher frequency in relation to the other origin species, 100% were resistant to at least one of the eleven antimicrobials used. Ducks *E.coli* showed lower resistance, 66.6% (4/6) of the samples were resistant to one or more antimicrobials, followed by those pigeons *E.coli* with 33.3% (3/9) of resistance. Chickens *E.coli* showed 80% (8/10) of multiresistance, which may be associated with the indiscriminate use of antimicrobials. *E.coli* isolates from turkeys also demonstrated 55.5% (5/9) of multiresistance. Turkeys are commonly raised with chickens, this proximity may favor bacterial exchange or even resistance plasmid genes. Ducks and pigeons *E.coli* showed low levels of multidrug resistance, 16.6% (1/6) and 11.1% (1/9), respectively. Higher resistance to doxycycline and tetracycline were observed. The higher percentages of antimicrobial resistance to the tetracyclines class indicates a possible existence of a common gene among the samples that make them resistant. Similar resistance levels to ampicillin and gentamicin were detected, which may be associated with common use in veterinary medicine. *E.coli* resistance to norfloxacin, amikacin nitrofurantoin was also elevated. In view of the results, can be concluded that *E.coli* isolates are resistant to majority of the antimicrobials tested, regardless of the origin species.

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