

RESISTANCE TEST OF *Escherichia coli* FROM BROILER CHICKEN MEAT AT POULTRY SLAUGHTERHOUSE IN BLITAR REGENCY AGAINST SEVERAL ANTIBIOTICS

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ABSTRACT

Antibiotic resistance is a condition of the influence of anti-infective drugs on bacteria which results in reduced antibiotic work power. This study aims to investigate bacterial resistance *E.coli* from broiler chicken meat at a poultry slaughter house in Blitar Regency. The first step of this research is to prepare the isolation and identification of *E.coli*. Preparation of the isolation and identification was confirmed by Buffer Peptone Water 0,1% and Eosine Methylene Blue Agar and continued the IMViC test (Sulfide Indole Motility, Methyl Red-Voges Proskauer Broth, and Simmons Citrate Agar). *E.coli* isolates were tested using the test resistance to antibiotics by Kirby-Bauer method (with Mueller Hinton Agar) from Clinical Laboratory Standards Institute. The result showed that 24 samples positive *E.coli* from 46 sample. The highest results in the resistance test were 18 out of 24 samples (75%) resistant to Erythromycin. The second most is 12 samples (50%) resistant to Streptomycin. The third largest is 11 samples (45.8%) resistant to Trimethoprim. Eight of the 24 samples (33.3%) were resistant to Ampicillin. Ciprofloxacin showed a total resistance of 8 samples (33.3%) and 6 samples (25%) were resistant to Chloramphenicol. The last two antibiotics that showed the lowest resistance were Tetracycline 4 samples (16.7%) and Cephalotin 3 samples (12.5%). Based on these result, we can conclude that there are *E.coli* bacteria that are resistant to antibiotics Ampicillin, Cephalotin, Streptomycin, Ciprofloxacin, Erythromycin, Chloramphenicol, Trimethoprim and Tetracycline. This makes the use of antibiotics more careful in broiler farms.

Keywords : antibiotic resistance, broiler chicken meat, Erythromycin, *Escherichia coli*, Streptomycin.