

EVALUATION OF THE EFFICACY OF *Pseuderanthemum palatiferum* ON TREATING DISEASE CAUSED BY *Escherichia coli* IN CHICKENS AND DUCKS

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Summary

To evaluate the efficacy of *Pseuderanthemum palatiferum* leaves (PL) on treating disease caused by *Escherichia coli*. The ethanol extract of PL (EPL) was administered orally to 270 chickens and 120 ducks infected *E. coli* at LD₅₀ in 5 days. To chickens, EPL was administered at doses of 0.1 (T1), 0.2 (T2) and 0.3 g/kg body weight (T3); the controls administered colistin at the dose of 0.143 g/kg BW, DMSO and NaCl 9‰. To ducks, EPL was administered at doses of 0.1 (DT1) and 0.2 g/kg BW (DT2); the controls administered 0.2 g Coli-norgent/kg BW and DMSO. The results showed that EPL had good efficacy on treating *E. coli* in chickens and ducks. To chickens, the cured rate in T1, T2 and T3 was 84.44%, 91.11% and 88.89% respectively and 95.56% in the control with colistin; while the recovered duration was shorter in T2 compared with that of colistin (2.26 and 2.32 days). To ducks, the cured rate in DT1, DT2 and the control administered Coli-norgent (colistin + gentamicin) was 80% and 96.7% and 100% respectively; as the experiment in chickens, the recovered duration in DT2 was shorter than that in Coli-norgent (2.17 and 2.27 days). Results from microsection proved that EPL could protect liver, kidney, spleen, intestine better than colistin or Coli-norgent. It is concluded that using EPL at the dose of 0.2 g/kg BW give the best results and has a high possibility to replace antibiotics colistin or Coli-norgent in treating disease caused by *E. coli*.

Keywords: *Chicken, duck, Escherichia coli, Pseuderanthemum palatiferum extract, treatment.*