

**ANTIBACTERIAL ACTIVITY OF KETAPANG LEAF EXTRACT
(*Terminalia catappa* L.) AGAINST *Avian Pathogenic
Escherichia coli* IN VITRO**

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ABSTRACT

Antibiotic therapy is still be the first choice for treating infectious disease, like an Avian colibacillosis caused by *Avian Pathogenic Escherichia coli*. Inappropriate use of antibiotics has consequences for the emergence of antibiotic resistance. Ketapang plants (*Terminalia catappa* L.) contains antibacterial compounds like alkaloid, terpenoid, flavonoid, saponin, tanin and fenol. The aims of this research was to know about the antibacterial activity of Ketapang (*Terminalia catappa* L.) leaf extract against *Avian Pathogenic Escherichia coli* bacteria in vitro and minimum concentration that showed antibacterial activity of Ketapang leaf extract against *Avian Pathogenic Escherichia coli* bacteria in vitro. This research was an experimental laboratory with the four repetitions, and consisted of six treatments with positive control of streptomycin disk 10 µg, the negative control of 1% CMC-Na solution and Ketapang leaf extract concentration of 100%, 50%, 25%, and 12,5%. The Kirby-Bauer method is used to determinate antibacterial activities by the clear zone formed. The result of this research shown that all concentration of Ketapang leaf extracts have an clear zone on *Mueller-Hinton Agar* media. Based on the result, it can be concluded that Ketapang leaf extract (*Terminalia catappa* L.) has an antibacterial activity against *Avian Pathogenic Escherichia coli* in vitro with the minimum concentration who has antibacterial activity on *Avian Pathogenic Escherichia coli* is 12,5%.

Key words: *Terminalia catappa* L., antibacterial, Kirby-Bauer, *Avian Pathogenic Escherichia coli*.