

ABSTRAC
BAHASA INGGRIS

Rilla Rosaliana, 2020. Test the Effectiveness of Trengguli Stem Bark Extract in Hibiting the Growth of *Escherichia coli* bacteria. Guided by Dr. Yusuf Ibrahim, M.Pd., M.P. and Gurnita, S.Si., M.P.

*The trengguli tree (*Cassia fistula* L.) is one of the trees in Indonesia that has properties that make it an alternative medicine by some people. *Escherichia coli* bacteria is a bacterium that can infect humans, causing disease. This study aims to measure the effectiveness of trengguli stem bark extract which is made under certain supervision to inhibit the growth of *Escherichia coli* as antibacterial. The method used in this research is a quantitative laboratory with experimental disc testing, the most active extract is determined based on the inhibition zone formed around the paper disc. The research design used CRD (Completely Randomized Design) with trengguli stem bark extract treatment with a concentration of 10%, 20%, 30%, 40%, 50%, 60%, 70%, 80%, 90% and 100% and two controls with two repetitions. The test results showed that there was a hamabat zone around the disc paper of trengguli stem bark extract. Data based on the value of Minimum Inhibitory Concentration (MIC) of trengguli stem extract were at a concentration of 60% with an average zone of inhibition of 9.60 mm. The results of SPSS data analysis showed that the concentration of trengguli bark extract was 70% which was effective with an average inhibition zone of 13.25 mm.*

Key words: Trengguli bark extract, Escherichia coli bacteria, Antibacterial