

ABSTRACT

TEST OF INHIBITORY ACTIVITY ROOT EXTRACT OF RODENT TUBER (*Typhonium flagelliforme*) AGAINST THE GROWTH OF *Escherichia coli* BACTERIA

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Escherichia coli is a pathogenic bacterium that lives in the human digestive tract and infect the gastrointestinal tract (diarrhea). One way to treat infections is by using antibacterials derived from plants. Rodent Tuber is a taro plant that grows in the wild that is used in traditional medicine. The part of the plant used is the root. Rodent Tuber root contains as flavonoid and saponin that function as antibacterial.

The aim of this study was to determine the effect of giving the root extract of the mouse tuber plant as an antibacterial to the growth of *Escherichia coli* bacteria. The extraction method used was maceration with 96% ethanol. The test was carried out using the paper disc diffusion method with 6 concentrations namely 0, 20, 40, 60, 80 and 100 ppm. The analysis used to measure the diameter of the inhibitory zone in each concentration is to use oneway Anova.

The result of the obstruction diameter zone are known as follow in range of 20 ppm is 0,3 mm; 40 ppm is 0,5 mm; 60 ppm is 0,6 mm; 80 ppm is 0,7 mm and 100 ppm is 0,8 mm. From the result, it can be concluded that root extract of the mouse tuber plant has an anti-bacteria activity with obstruction power in weak category.

Keywords : Root of the mouse tuber plant (*Typhonium flagelliforme*),
Escherichia coli antibacterial agents