ANTIBACTERIAL ACTIVITIES SKIN FRUIT EXTRACT MANGOSTEEN (Garcinia mangostana Linn) ON GROWTH Vibrio cholerae BACTERIA

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ABSTRACT

This study aimed to determine the effect of ethanol extract of mangosteen in inhibiting the growth of bacteria *Vibrio cholerae* and determine the effectiveness of each concentration. This study was conducted in April-June 2013 at the Farmakognosi Faculty of Pharmacy USU Laboratory and Health Laboratory of Medan.

Experimental design in this study is completely randomized design Non Factorial. The method used is the hole diffusion pitting. The parameters measured were the growth of *Vibrio cholerae* for 24 hours to measure the diameter/resistance zones are marked by a clear zone around the wells. Extract concentrations used were 50 mg/ml, 60 mg/ml, 70 mg/ml, 80 mg/ml, 90 mg/ml, 100 mg/ml, 200 mg/ml, 300 mg/ml, 400 mg/ml, 500 mg/ml, control (distilled water) and performed three repetitions. Data were analyzed by ANOVA followed by Least Significant Difference test (LSD).

The results showed that the ethanol extract of mangosteen is a very real influence ($\alpha > 0,01$). The lowest concentration that can inhibit the growth of bacteria *Vibrio cholerae* is 60 mg / ml with a mean of 13.33 mm zone of inhibition and increased along with the increasing concentration of the extract. Largest inhibition zone diameter that is at a concentration of 500 mg/ml with an average of 33.00 mm zone of inhibition.

Keywords: mangosteen extract, the bacteria Vibrio cholerae

