

Krisnina Maharani, 2012. The Potensial Test Antibacterial Skin Fruit and Seed Extract Mangosteen (*Garcinia mangostana*) Causes of Acne Bacteria (*Staphylococcus epidermidis*) with Using Ethanol Solvents. This study written under the tutthorship of Drs. Agus Supriyanto, M. Kes and Tri Nurhariyati, S. Si, M. Kes. Biology Departement, Science and Technologi Faculty, Airlangga University, Surabaya.

ABSTRACT

This research was aimed to know determine the effects of the fruit skin and seed extracts concentration of mangosteen (*Garcinia mangostana*) as an antibacterial for bacteria that caused acne using ethanol solvent. This experimental study using the CRD (Completely Randomized Design) which consists of diffusion and dilution test. Diffusion test consist of 8 extracts concentration, that each consist of (0, 12,5, 25, 50, 100, 200, 500, dan 1.000 ppm). Dilution test consist of 12 extracts concentration, that each consist of (0, 12,5, 25, 50, 100, 200, 500, 1.000, 1.125, 1.250, 1.500 dan 2.000 ppm). The obtained parameters for the diffusion test was the diameter of the inhibition area (mm), each treatment consist of 3 replications. Dilution test is used to find the MIC and MBC value. The inhibition diameter data were analyzed used a statistical test of *Kruskal-Wallis* test followed *Mann-Whitney*, while the dilution test data were analyzed descriptively. The result of diffusion tests showed that the concentration of skin extract of the fruit and seeds of mangosteen (*Garcinia mangostana*) gives effect of bacterial growth. The highest value for the mangosteen rind extract at 1.000 ppm concentration (0.8192 ± 0.05) mm, and the mangosteen fruit seed extract at 1000 ppm concentration (0.7208 ± 0.05) mm. MIC values of fruit peel extract was at 1.000 ppm and MBC was at 1.125 ppm concentration, while the MIC values of fruit seed extracts was at 2000 ppm concentration and MBC could not be found, but it gave effect of bacteria growth.

Key word : *Garcinia mangostana*, *Staphylococcus epidermidis*, MIC MBC