

ABSTRAK

Garcinia mangostana L atau biasa dikenal dengan sebutan Manggis merupakan salah satu tanaman buah asli Indonesia. Masyarakat kebanyakan menganggap kulit manggis sebagai limbah, tapi bagi mereka yang sudah tahu, kulit manggis memiliki kandungan kimia antara lain xantone, mangostin, garsinon, flavonoid dan tanin. Senyawa tersebut didominasi oleh xanton yang terdapat di dalamnya. Berdasarkan hal tersebut diatas telah dilakukan penelitian mengenai kadar hambat minimum ekstrak kulit buah manggis terhadap pertumbuhan bakteri *Staphylococcus aureus* menggunakan metode dilusi cair.

Penelitian ini merupakan penelitian eksperimental menggunakan metode dilusi cair. Penggunaan sampel pada penelitian ini adalah ekstrak kulit buah manggis (*Garcinia mangostana L*) yang dilarutkan dengan etanol 96% dengan cara konsentrasi bertingkat 417,5 $\mu\text{g}/\text{ml}$, 208,75 $\mu\text{g}/\text{ml}$, 104,375 $\mu\text{g}/\text{ml}$, 52,187 $\mu\text{g}/\text{ml}$, 26,093 $\mu\text{g}/\text{ml}$, 13,046 $\mu\text{g}/\text{ml}$, 6,523 $\mu\text{g}/\text{ml}$, 3,261 $\mu\text{g}/\text{ml}$, 1,630 $\mu\text{g}/\text{ml}$, 0,815 $\mu\text{g}/\text{ml}$, 0,407 $\mu\text{g}/\text{ml}$, dan 0,203 $\mu\text{g}/\text{ml}$. Penelitian ini dilakukan di Laboratorium Mikrobiologi Universitas MH. Thamrin Jakarta.

Dari hasil penelitian, diketahui bahwa ekstrak kulit buah manggis mempunyai kadar hambat minimal terhadap bakteri *Staphylococcus aureus* pada konsentrasi 6,523 $\mu\text{g}/\text{ml}$. Ekstrak kulit buah manggis dapat digunakan sebagai salah satu pilihan untuk mengobati penyakit infeksi yang disebabkan oleh bakteri *Staphylococcus aureus* sebelum dilakukan pengobatan dengan obat-obat sintesis.

Kata kunci: *Garcinia mangostana L*, MRSA, daya hambat

Kepustakaan: 23

Tahun: 2014-2024

ABSTRACT

*Garcinia mangostana L or commonly known as Mangosteen is one of the fruit plants native to Indonesia. Most people consider mangosteen peel as waste, but for those who already know, mangosteen peel has chemical content including xantone, mangosteen, garsinon, flavonoids and tannins. The compound is dominated by xantones of xantones contained in it. Based on the above, a study has been conducted on the minimum inhibition level of mangosteen fruit peel extract against the growth of *Staphylococcus aureus* bacteria using the liquid dilution method. This study is an experimental study using the liquid dilution method.*

*The sample used in this study was mangosteen peel extract (*Garcinia mangostana L*) which was dissolved with 96% ethanol by means of graded concentrations of 417.5 $\mu\text{g/ml}$, 208.75 $\mu\text{g/ml}$, 104.375 $\mu\text{g/ml}$, 52.187 $\mu\text{g/ml}$, 26.093 $\mu\text{g/ml}$, 13.046 $\mu\text{g/ml}$, 6.523 $\mu\text{g/ml}$, 3.261 $\mu\text{g/ml}$, 1.630 $\mu\text{g/ml}$, 0.815 $\mu\text{g/ml}$, 0.407 $\mu\text{g/ml}$, and 0.203 $\mu\text{g/ml}$. This research was conducted at the Microbiology Laboratory of MH University. Thamrin Jakarta.*

*From the results of the study, it is known that mangosteen peel extract has a minimum inhibitory level against *Staphylococcus aureus* bacteria at a concentration of 6.523 $\mu\text{g/ml}$. Mangosteen peel extract can be used as one of the options to treat infectious diseases caused by *Staphylococcus aureus* bacteria before treatment with synthetic drugs.*

Keyword: *Garcinia mangostana L, MRSA, Inhibition*

Reference: 23

Year: 2014-2024