ABSTRAK

PENGARUH EKSTRAK ETANOL DAUN JAMBU BIJI (*Psidium guajava* L.) TERHADAP PENURUNAN KADAR KOLESTEROL TOTAL TIKUS PUTIH (*Rattus norvegicus*) JANTAN

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Indonesia memiliki banyak tumbuhan herbal, salah satunya jambu biji. Menurut Latief (2009) pada daun jambu biji terdapat kandungan flavonoid dan pektin yang mampu menurunkan kadar kolesterol dalam darah. Oleh karena itu dilakukan penelitian untuk mengetahui pengaruh ekstrak etanol daun jambu biji terhadap penurunan kadar kolesterol total tikus putih jantan, serta mengetahui dosis mana yang paling baik dan dapat menurunkan kadar kolesterol total tikus putih jantan.

Penelitian bersifat eksperimental laboratorium. Sampel yang digunakan dalam penelitian ini adalah daun jambu biji yang berwarna hijau dan diambil secara acak. Pengujian sampel dilakukan dengan memberikan ekstrak etanol daun jambu biji selama dua minggu pada tikus hiperkolesterolmia. Tikus dibagi dalam 5 kelompok dengan masing-masing 3 ulangan. Kelompok I diberi ekstrak 400 mg/kgBB, kelompok II 600 mg/kgBB, kelompok III 800 mg/kgBB, kontrol positif diberi simvastatin 0,1 mg/kgBB dan kontrol negatif diberi air RO 0,1 ml/kgBB. Darah tikus diambil menggunakan *microhaematocrit* pada sinus orbitalis mata. Pengukuran kadar kolesterol total tikus menggunakan *Easy Touch ® GCU Blood Cholesterol Monitoring System*. Data yang diperoleh dianalisis menggunakan uji statistik *Repeated Measured Anova* dan uji statistik Kruskal-Walis.

Ekstrak etanol daun jambu biji berpengaruh terhadap penurunan kadar kolesterol total tikus, namun secara statistik penurunan kadar kolesterol total belum bermakna dengan hasil p>0,05. Pada hari ke-21 hasil uji statistik adalah p 0,561>0,05, hari ke-28 adalah p 0,190>0,05, hari ke 35 adalah p 0,836>0,05. Pemberian ekstrak etanol daun jambu biji dengan dosis 600 mg/BB selama 2 minggu dapat menurunkan kadar kolesterol total tikus namun secara statistik belum bermakna karena p>0,05.

Kata kunci: hiperkolesterolemia, kolesterol, ekstrak etanol daun jambu biji (*Psidium guajava* L.)

ABSTRACT

EFFECT OF GUAVA (Psidium guajava* L.) *LEAF ETHANOLIC EXTRACT TO DECREASE TOTAL CHOLESTEROL LEVEL OF MALE WHITE RAT (Rattus norvegicus)

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Indonesia is a tropical area that is overgrown by many kinds of herbs, one of them is guava plants. According to Latief (2009) in guava leaves contain flavonoid and pectin that can be able to reduce cholesterol levels in blood. Because of that, the research to know for determine the effect of guava leaf ethanolic extract to decrease total cholesterol level of male white rat, and know which dose is the best and can reduce total cholesterol level of male white rat.

The study is an experimental laboratory. The sample used in this research was guava leaf wich was randomly picked both old and young. Tests were conducted by giving guava leaf ethanolic extract for two weaks in mice that are has been hypercholesterolemia. Mice were divided into 5 groups with 3 replicates each, they are treatment group I, II, III, positive control and negative control. Each was given an ethanolic extract of 400 mg/kgBW, 600 mg/kgBW, 800 mg/kgBW, simvastatin 0,1 mg/kgBW and 0,1 ml/kgBW RO water. Rat blood is taken using micohaematocrit from the eye orbital sinus. Measurements of total cholesterol of mice using Easy Touch ® GCU Blood Cholesterol Monitoring System. Data were analyzed using statistical test of Repeaded Measured Anova and Kruskal-Walis Statistic test.

Guava leaf ethanolic extract had an effect on decreasing total cholesterol level of mice, but statistically total cholesterol decrease was not significant with p>0,05. On the 21st day the result of statistical test is p 0,561>0,05, day 28 is p 0,190>0,05, day 35 is p 0,836>0,05. Giving of guava leaf ethanolic extract at a dose of 600 mg/BB for 2 weeks can reduce total cholesterol levels of mice but not statistically significant because of p>0.05.

Keywords: *hypercholesterolemia, cholesterol, guava leaf ethanolic extract (Psidium guajava* L.*)*