

**EFEK EKSTRAK ETANOL KULIT BAWANG MERAH (*Allium cepa*
G.Don) TERHADAP HISTOLOGIS HEPAR TIKUS (*Rattus norvegicus L.*)**

GALUR WISTAR JANTAN HIPERKOLESTEROLEMIA

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ABSTRAK

Hiperkolesterolemia diakibatkan oleh adanya penumpukan kolesterol, asam lemak, serta trigliserida pada darah. Kulit bawang merah berpotensi sebagai obat antikolesterol karena mengandung flavonoid yang berfungsi sebagai antioksidan. Tujuan penelitian untuk mengetahui potensi Ekstrak Etanol Kulit Bawang Merah (EEKBM) sebagai antikolesterol terhadap histologis hepar tikus galur Wistar jantan hiperkolesterolemia. Metode penelitian eksperimental dengan menggunakan Rancangan Acak Lengkap yang terdiri dari 5 perlakuan dengan 5 ulangan, induksi hiperkolesterolemia dilakukan pada seluruh perlakuan kecuali KN dengan cara diberi pakan HFD (*High Food Diet*) dan induktor hiperkolesterolemia. Susunan perlakuan sebagai berikut: KN (kontrol negatif), KP (kontrol positif), PB (simvastatin dosis 0,9 mg/kg BB), P1 (EEKBM dosis 600 mg/kg BB), dan P2 (EEKBM dosis 300 mg/kg BB). Pemberian perlakuan secara oral selama 14 hari. Parameter yang diamati adalah histologis hepar tikus meliputi diameter vena sentralis, kongesti sinusoid, dan nekrosis hepatosit. Data dianalisis menggunakan uji *one-way* ANOVA dengan taraf kepercayaan 95% dan dilanjutkan dengan uji Duncan menggunakan SPPS. Hasil penelitian menunjukkan pemberian EKBM berpengaruh signifikan terhadap diameter vena sentralis, kongesti sinusoid, dan nekrosis hepatosit tikus hiperkolesterolemia. Berdasarkan hasil penelitian disimpulkan bahwa EKBM dosis 600 mg/kg BB efektif dalam memperbaiki histologis hepar tikus hiperkolesterolemia.

Kata kunci: *ekstrak kulit bawang merah, hepar tikus, hiperkolesterolemia, histologis, simvastatin.*

**EFFECT OF ETHANOL EXTRACT OF GARLIC PEEL (*Allium cepa* G.Don)
ON HISTOLOGY OF LIVER IN HYPERCHOLESTEROLEMIA MALE
WISTAR RATS (*Rattus norvegicus* L.)**

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ABSTRACT

Hypercholesterolemia causes cholesterol, lipid, and triglycerides accumulate within bloods. Garlic peel has potential as anti-cholesterol drugs because it contains some flavonoids. This study aimed to know the potential of ethanol extract of garlic peel (EEKBM) on histology of liver in hypercholesterolemia rat. The experimental study used Completely Randomized Design (CRD) with 5 treatments and 5 repetitions, hypercholesterolemia induction was carried out in all treatments except KN by being fed HFD (High Food Diet) and hypercholesterolemia inductors, as follows: KN (negative control), KP (positive control), PB (0.9 mg/kg BW dose of simvastatin), P1 (600 mg/kg BW dose of EEKBM), and P2 (300 mg/kg BW dose of EEKBM). The treatments were given in an oral way for 14 days. Parameters were being observed by central vein diameter, sinusoidal congestion, and necrosis of hepatocyte. Obtained data were being analyzed with one-way ANOVA test and then a Duncan test is being conducted with SPSS. The results showed that EEKBM treatments were significantly different on central vein diameter, sinusoidal congestion, and necrosis of hepatocyte of hypercholesterolemia rats. Based on this study results, it was concluded that the administration of 600 mg/kg BW dose of EEKBM rats was an effective dose that be able to repair damage to the liver of rats modeled on hypercholesterolemia.

Key words: garlic peel, histology, hypercholesterolemia, rat's liver, simvastatin.