

Pengaruh Daun Simpurn (*Dillenia indica*) terhadap Perbaikan Kadar Lipid Darah pada Mencit (*Mus musculus*) Swiss Webster Jantan Hiperlipidemia

ABSTRAK

Hiperlipidemia merupakan suatu kondisi dimana kadar lipid yang tinggi dalam darah, ditandai dengan peningkatan kadar *Low Density Lipoprotein* (LDL) dan penurunan *High Density Lipoprotein* (HDL). Tingginya kadar lipid dalam darah diketahui menjadi penyebab terjadinya aterosklerosis dan penyakit jantung koroner (PJK). Daun simpurn (*Dillenia indica*) diketahui memiliki senyawa bioaktif yang dapat menurunkan kadar lipid darah. Penelitian ini bertujuan untuk mengetahui adanya pengaruh bubuk daun simpurn terhadap berat badan, perbaikan kadar lipid darah, dan kadar kolesterol hati mencit hiperlipidemia. Subjek penelitian adalah 30 mencit jantan, dibagi menjadi enam kelompok (kontrol negatif, kontrol positif, 4,2 mg/30 g BB/hari; 10,5 mg/30 g BB/hari; 21 mg/30 g BB/hari; 31,5 mg/30 g BB/hari). Mencit diberi perlakuan daun simpurn dengan cara *gavage* selama 21 hari setelah sebelumnya diaklimatisasi dan diberi pakan diet tinggi lemak selama 30 hari. Sampel darah diambil dari *vena caudalis* kemudian dilakukan pengujian kadar lipid darah menggunakan metode CHOD-PAP, GPO-PAP, dan Formula *Friedwald*. Data yang didapatkan dianalisis dengan *One way Anova*. Hasil penelitian menunjukkan bahwa pemberian daun simpurn selama 21 hari berpengaruh signifikan terhadap penurunan kadar kolesterol total dan LDL tetapi tidak berpengaruh signifikan terhadap berat badan, trigliserida, dan HDL.

Kata Kunci: Simpurn, Lipid darah, Hiperlipidemia, Mencit

***The Effect of Dillenia indica on Blood Lipid Level of Hyperlipidemia
Male Mice (Mus musculus) Swiss Webster***

ABSTRACT

Hiperlipidemia is a condition which blood lipid levels are increase which is characterized by increased levels of total Low Density Lipoprotein (LDL) and followed by decreased levels of High Density Lipoprotein (HDL). High blood lipid levels can cause atherosklerosis and coronary heart disease. Leaves of Dillenia indica known have bioactive compounds which is able to decrease blood lipid levels. The purpose of the study was to determine the effect of Dillenia indica to improve body weight, blood lipid level, and liver cholesterol in mice (Mus musculus) hyperlipidemia. Subject were 30 mice which were divide into 6 groups (negative control, positive control, 4,2 mg/30 g BB/hari; 10,5 mg/30 g bw/day; 21 mg/30 g bw/day; 31,5 mg/30 g bw/day). Mice were treated Dillenia indica by means of gavage for 21 days after acclimatization and 30 days given additional food high in fat. Blood samples were taken from vena caudalis and test using method CHOD-PAP, GPO-PAP, and Formula Friedwald for calculating LDL-cholesterol. The result have been analized with One way Anova. Daily oral administration Dillenia indica leaves for 21 days significantly influence the decrease total cholesterol levels and LDL. But, no significant effect on body weight, triglycerides, and HDL.

Keyword: Dillenia indica, Blood lipid, Hyperlipidemia, Mice