ABSTRAK

Penelitian ini dilakukan untuk menguji pengaruh pemberian ekstrak bunga pagoda (*clerodendum paniculatum*) terhadap penurunan kadar kolesterol dan gambaran histopatologi hati tikus putih galur wistar jantan yang mengalami obesitas. Penelitian ini menggunakan hewan coba tikus putih (Rattus norvegicus) galur wistar sebanyak 24 ekor tikus kedalam 4 kelompok yaitu K, P1, P2 dan P3 dengan perlakuan pemberian dosis yang berbeda. Hasil pengujian fitokima ekstrak bunga pagoda memiliki memiliki kandungan metabolit skunder seperti seperti alkaloid, flavonoid, saponin, dan tanin. Penelitian ini dilaksanakan dengan tahap awal pengujian diet tinggi lemak selama 14 hari. Hasilnya tikus mendapatkan nilai indeks Lee sebesar 0.31 pada kelompok perlakuan 1, 2 dan 3. Berdasarkan hasil yang diperoleh, terdapat penurunan kadar kolesterol total pada tikus. Hasilnya menunjukkan bahwa kelompok yang diberikan ekstrak bunga pagoda dengan dosis 150 mg/KgBB dan 200 mg/KgBB tidak lagi mengalami kadar kolesterol tinggi karena kadar kolesterolnya berada < 54mg/dl. Gambaran mikroskopik hati tikus kelompok perlakuan 3 denagn tikus yang diberi pakan tinggi lemak dan diberi dosis 200 mg/kgbb ekstrak bunga pagoda tampak normal tidak terlihat peradangan, sel sel mulai membaik, tidak tampak nekrosis dan perlemakan. Anailsa data menggunakan *Kolmogorov-smirnov test* Hasilnya data setiap kelompok berdistribusi normal nilai signifikansi p > 0,05 untuk uji homogenitas dengan hasil 0.361 seluruh kelompok homogen dan hasil one way ANOVA dengan hasil sig. 0.00 maka terdapat perbedaan antar kelompok.

Kata kunci : Bunga pagoda, Kolesterol, Hati, Obesitas

ABSTRACT

This research was conducted to examine the effect of administering pagoda flower extract (Clerodendrum paniculatum) on the reduction of cholesterol levels and the histopathological appearance of the livers of male Wistar strain white rats with obesity. This study used 24 Wistar strain white rats (Rattus norvegicus) as test animals, divided into 4 groups: K, P1, P2, and P3, with different dosage treatments. The results of the phytochemical testing of pagoda flower extract contain secondary metabolites such as alkaloids, flavonoids, saponins, and tannins. This research was conducted with an initial phase of testing a high-fat diet for 14 days. As a result, the mice obtained a Lee index value of 0.31 in treatment groups 1, 2, and 3. Based on the obtained results, there is a decrease in total cholesterol levels in the rats. The results show that the group given pagoda flower extract at doses of 150 mg/KgBW and 200 mg/KgBW no longer experienced high cholesterol levels because their cholesterol levels were < 54mg/dl. The microscopic appearance of the livers of the treatment group 3 rats, which were fed a high-fat diet and given a dose of 200 mg/KgBW of pagoda flower extract, appeared normal with no signs of inflammation, the cells began to improve, and there were no signs of necrosis or steatosis. Data analysis using the Kolmogorov-Smirnov test showed that the data from each group were normally distributed, with a significance value of p > 0.05 for the homogeneity test, resulting in 0.361, indicating that all groups were homogeneous. The one-way ANOVA results showed a significance value of 0.00, indicating that there were differences between the groups.

Keywords: *Pagoda flower, Cholesterol, Liver, Obesity*