Abstrak

Hypercholesterolemia is a condition in which cholesterol levels in the blood are more than normal. Europe and America are the regions with the highest hypercholesterolemia in the world with prevalence values of 54% and 48%, respectively. Meanwhile, Africa and Southeast Asia are regions with the lowest prevalence of hypercholesterolemia with prevalence values of 23% and 30%, respectively. In Indonesia, the age group of 25 - 34 years has the highest rank with high cholesterol levels. The purpose of this study was to determine the effect of lowering total cholesterol in male white rats (Rattus norvegicus) induced with Propylthiouracil (PTU). In this study, we used 25 rats which were divided into 5 groups equally. The groups were a negative control group (Na-CMC), a positive control group (Simvastatin), and three extract groups with doses of 500 mg/kgBW, 750 mg/kgBW, and 900 mg/kgBW. We made the ethanol extract of the bark of the Mangkokan stem by maceration. We induced all mice used in the study orally using a high-fat diet and PTU. In this study, the parameters that we studied were total cholesterol levels before induction, after induction, and after treatment. From this study, we found that all groups showed significant changes in total cholesterol levels (P value = 0.000). The group that was given ethanol extract at doses of 500 and 750 mg/kgBW showed a significant difference between the negative control group and the positive control group. Only the 900 mg/kgBW dose group showed no significant difference in total cholesterol levels with the positive control group. Thus, we can conclude that the ethanolic extract of the bark of the Mangkokan stem has the potential to reduce total cholesterol levels but is not as good as the positive control.

Kata kunci : Kadar kolesterol total, Kulit batang mangkokan, PTU