ABSTRACT

Hepatotoxicity is one of the serious adverse effects of the drugs. The aim of this test is to know the hepatotoxic effect of the mixture from Sambiloto and Temu kunci in 1:1 ratio. Male white mice (Mus musculus) were treated with different doses of mixture ethanolic extract of Andrographidis herbs and ethanolic extract of Boesenbergiae rhizome in 1:1 ratio perorally for a period of 30 days. Serum glutamate oxaloacetate aminotransferase (SGOT) and serum glutamate pyruvate aminotransferase (SGPT) were checked after 30 days of treatment. Histological analysis was carried out to assess the liver. Data of SGOT and SGPT enzyme activity was analyze using ANAVA 95%. The change on the histopathology of the liver organ is recorded, scored and processed using the Kruskal-Wallis test.

The Sig. value of SGOT was lower than 0.05. It means that there were significant difference between groups. However, this parameter is not specifically give a sign for the liver damage. Then, the Sig. value of SGPT was lower than 0.05 too. It means that there were significant difference between groups. Though there were significant differences from SGPT value, but average value from treatment groups was under control group. The result of Kruskal-Wallis analysis for degeneration value showed that Asymp. Sig. was higher than 0.05. It means that there were no differences between control and treatment groups. While necrosis value also showed that Asymp.Sig. was higher than 0.05. It means that there were no differences between control and treatment groups.

From this test we may conclude that the mixture ethanolic extract of Andrographidis herbs and ethanolic extract of Boesenbergiae rhizome in 1:1 ratio with dose equivalent to 2.94 mg/20 g BW mice, 8.83 mg/20 g BW mice, and 14.70 mg/20 g BW mice have no hepatotoxic effect on mice liver.

Keyword: Sambiloto, Temu kunci, hepatotoxic effects, SGOT, SGPT