ABSTRACT

HEPATOTOXIC TEST OF THE MIXTURE FROM DRY EXTRACT OF ORTHOSIPHONIS FOLIUM AND DRY EXTRACT OF ALII SATIVI BULBUS IN MICE

Tirza Puji Syukur

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 extract of java tea and garlic. The effect was observed by using two parameters. The first parameter was serum glutamate oxaloacetate aminotransferase (SGOT) and serum glutamate pyruvate aminotransferase (SGPT) activity. The second parameter was histopathology of the liver.

Male white mice (*Mus musculus* L.) were treated with different doses of mixture from dry extract of Orthosiphonis Folium and Alii sativi Bulbus in 1:1 ratio peroraly for a period of 28 days. SGOT and SGPT were checked after 28 days of treatment. Data of SGOT and SGPT activity were analyzed using ANOVA one-way 95%. The change of histopatology of the liver organ was recorded, scored, and processed using the Kruskal-Wallis test.

The result showed that both of the significance value of SGOT and SGPT were higher than 0,05. It means that there were no significant differences between control and treatment group. The result of Kruskal-Wallis analysis for degeneration value showed that asymptotic significance was higher than 0,05. While necrosys value also showed that asymptotic significance was higher than 0,05. It means that there were no differences histology of the liver between control and treatment group.

Based on those two parameters from the test, we may conclude that dry extract of Orthosiphonis Folium and Alii sativi Bulbus in 1:1 ratio with dose equivalent to 1,15 g; 3,45 g; and 5,75 g/ kg BW mice have no hepatotoxic effect on mice.

Keywords: *Orthosiphon stamineus* Benth., *Allium sativum* Linn., hepatotoxic effect, SGOT, SGPT, histophatology of liver.