

ABSTRACT

Background : Andong is one of the Asparagaceae family which is widely used by the people of Indonesia as a medicinal plant. Andong leaves have activity as anti-inflammatory, accelerate wound closure topically, antimicrobial, anthelmintic and are used to increase the number of platelets in the blood. The purpose of this study was to determine the effect of giving Andong leaf extract at a certain dose and the effect of giving the extract on the values of SGPT and SGOT and to determine the effect of administration on the liver histology of mice.

Method : This study used a completely randomized design with 5 treatments, K as a control, P1 with a dose of 100mg/kgBW, P2 with a dose of 300mg/kgBW, P3 with a dose of 900mg/kgBW and P4 with a dose of 2700mg/kgBW. Each treatment consisted of 7 mice. The parameters observed in this study were symptoms of toxicity, SGPT, SGOT, liver weight ratio and liver histology examination of mice. SGPT data analysis and liver histology examination using One Way ANOVA test with Duncan's follow-up test.

Results : The results showed that the administration of ethanol extract of andong leaves caused death in test animals ranging from doses of 900mg/kgBW to 2700mg/kgBW so that the LD50 value obtained was 899.497 and included in the mild toxicity range. The effect of the ethanol extract of andong leaves on the liver of mice showed a significant difference seen from the results of the One Way ANOVA test. It is known that there is an increase in the SGPT and SGOT values of the blood serum of mice above normal and causes damage to the hepatocytes of the liver cells of mice.

Conclusion : Andong leaf ethanol extract showed liver damage at a dose of 900 mg/kgBW and a dose of 2,700 mg/kgBW. The LD50 value of the ethanol extract of andong leaves was 899.497 and classified as mild toxicity.

Keywords : Andong leaf, acute toxicity, delayed toxicity