Hepatoprotective potential of *Hedyotis diffusa* L. (Ulasimankalat) on acetaminophen-induced Hepatitis on male *Mus musculus* (Albino mice).

An Undergraduate Research Presented to the Faculty of the Biological Science Department College of Science De La Salle University-Dasmariñas

> In Partial Fulfillment of the Requirements for the Degree Bachelor of Science in Biology (Major in Human Biology)

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April 2010

ABSTRACT

The hepatoprotective property of Hedyotis diffusa on 500 mg/kg acetaminophen-induced hepatitis was determined. The experimental study used higher and lower concentrations (120 mg/kg and 240 mg/kg) of Hedyotis diffusa with three replicates. The mice were treated within five consecutive days with an interval of 12 hours per treatment. After this, the test organisms were then sacrificed after 48 hours of the last treatment. Liver weight of mice per treatment was obtained, and then liver tissues were subjected to histotechnique and histopathological analysis for observation of the appearance of sinusoids and hepatic veins and size of hepatocytes. Based on the results obtained, a single dose of 500 mg/kg Acetaminophen given orally can induce liver injury. On the other hand, mice treated with lower and higher concentration oh Hedyotis diffusa had normal liver weight and size of hepatocytes which significantly showed hepatoprotective property against acetaminophen. This study concludes that Hedyotis diffusa was efficient in hepatoprotection against acetaminophen-induced hepatitis on male albino mice. Moreover, high concentration of Hedyotis diffusa was found to be more efficient than lower concentration based on the results obtained.

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