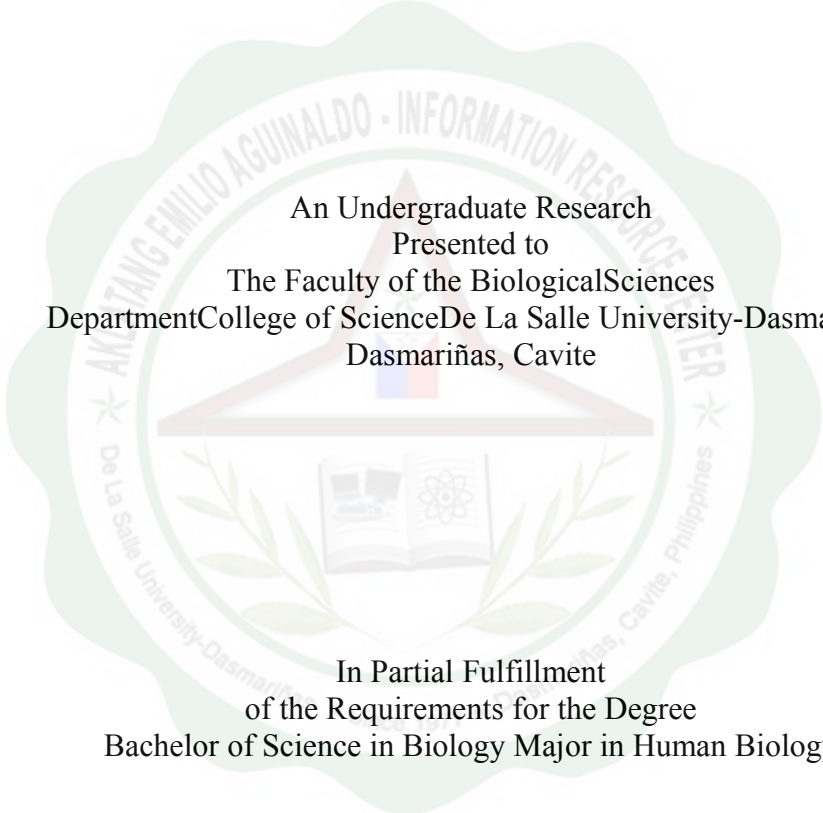


**HEPATOPROTECTIVE POTENTIAL OF TENDER COCONUT WATER
FROM FIVE-MONTH OLD COCONUT FRUIT AND SILYMARIN ON
METHOTREXATE-INDUCED LIVER DAMAGE ON
MALE *Mus musculus* (ALBINO MICE)**



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ABSTRACT

The study on the “Hepatoprotective Potential of Tender Coconut Water from Five-Month Old Coconut Fruit and Silymarin on Methotrexate-Induced Liver Damage on Male *Mus musculus* (Albino Mice)” examines the protective potential of the pretreatment of tender coconut water and silymarin against methotrexate hepatotoxicity by histopathological investigations. Forty ten-week old male albino mice were divided into four groups. Randomized complete block design was employed with the following treatments: T0= normal saline solution, T1= normal saline solution + methotrexate, T2= tender coconut water + methotrexate and T3= silymarin + methotrexate. Tender coconut water (0.01ml/g) and silymarin (0.1mg/g) were given orally for 5 consecutive days. On the next day, hepatotoxic intraperitoneal dose of methotrexate (0.035mg/g) was given for 5 consecutive days and 24 hours later, albino mice were sacrificed. In the liver sections of T1, necrotic figures and hepatocytes lesions on the form of swelling, pyknosis and vacuolar degeneration were observed. In liver sections of T2 and T3, observed changes in T1 were prevented by tender coconut water and silymarin, respectively. The results of the present study suggested that tender coconut water and silymarin produced significant decrease in necrotic figures and increase mitotic figures which showed hepatoprotective effect on the parenchymal architecture of the liver against methotrexate-induced hepatotoxicity in mice. The hepatoprotective potential of tender coconut water and silymarin exhibited no significant difference.