



**EFFECT OF *Sechium edule* (Jacq.) Sw. (CHAYOTE) LEAF EXTRACT ON  
ALT AND AST LEVELS OF *Rattus norvegicus* (ALBINO RATS)**

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### ABSTRACT

This undergraduate study tested the effect of chayote (*Sechium edule*) leaf extract on ALT and AST levels of male albino rats (*Rattus norvegicus*). Twenty-four male albino rats were acquired for the RCBD research design. 10% concentration of ethanol was used to induce damage to the liver of the test organisms. The test organisms were divided into four groups, (T<sub>0</sub>) being the control group, serving as a cross reference to the other group, with only administration of ethanol and normal saline solution. The second group (T<sub>1</sub>) was given 50% of the chayote leaf extract and 10% ethanol, which was administered after an hour of administering the chayote leaf extract. The third group (T<sub>2</sub>) was given 75% chayote leaf extract and 10% ethanol while the fourth group (T<sub>3</sub>) was given 95% chayote leaf extract and 10% ethanol. The liver enzymes namely Alanine aminotransferase (ALT) and Aspartate aminotransferase (AST) were used as biochemical liver markers to determine the presence of liver damage. An increase in these enzymes would indicate liver damage, while a decrease would show possible hepatoprotection or prevention. Results show that chayote leaf extract exhibit possible hepatoprotective effect on the alcohol-induce male albino rats. T<sub>1</sub>, with 50% concentration and T<sub>2</sub>, with 75% concentration show a reduced and elevated state on either ALT or AST levels. T<sub>3</sub>, with 95% concentration was the most effective showing great decrease in both ALT and AST liver enzymes.