



ABSTRACT

The study was conducted to establish the potential of *Sechium edule* (Jacq) Sw. (Chayote) in lowering blood cholesterol level of albino rats. Ethanolic fruit crude extract of different concentrations (50%, 75%, 100%) were orally administered to the rats daily for four weeks. Eighteen albino rats were divided into three treatments namely; 50% fruit crude extract, 75% fruit crude extract and 100% fruit crude extract. Each treatment was done in duplicates. Rats were acclimatized for seven days. After which, high fat diet was introduced using 2-3 g melted margarine incorporated to the pellets for two weeks. Paired t-test was used to determine the significant increase ($p < 0.05$) of blood cholesterol level in rats after the high fat diet. Blood samples were obtained using vein tail method and analyse in Kernel Multi-check Blood Cholesterol Monitoring kit and cholesterol strips. Results showed that all treatments (50%, 75% and 100% fruit crude extract) are capable of significantly reducing ($p < 0.05$) the blood cholesterol level in rats. The statistical analysis showed that the plant parts efficacy does not have a significant difference ($p \geq 0.05$) in lowering blood cholesterol levels exhibiting 50%=75%=100%. The close similarity in the efficacy of the various concentrations of the chayote fruit extracts demonstrated that such parts have relatively similar amounts of phytosterols and phytophenols.

Key words: Sechium edule, Blood cholesterol level, Albino rats, hypercholesterolemia