



**HYPOCHOLESTEROLEMIC POTENTIAL OF ETHANOLIC
Saccharum spontaneum Linn. (TALAHIB) LEAF EXTRACT
IN MALE *Rattus albus* (ALBINO RATS)**

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ABSTRACT

The hypocholesterolemic potential of ethanolic *Saccharum spontaneum* Linn. (Talahib) leaf extracts and the difference in the effect of its different concentrations were determined in the study. Twenty-four albino rats were utilized in the experiment and were divided into three treatment groups: T₀ – Simvastatin, which served as the control group; T₁ – 100% concentration; and T₂ – 50% concentration of the extract. All of the groups were done with replicates. The albino rats were subjected to one week acclimatization. Thereafter, two weeks of high-fat diet were given to the albino rats to achieve hypercholesterolemia. Treatment was done orally for three weeks by gavage method continuing the high-fat diet. Cardiac blood extractions were done before high-fat diet, after high-fat diet, and after treatment, and were analyzed by Hi-Precisions Diagnostics Laboratory. With regard to obtained results, blood cholesterol levels before high-fat diet, after high-fat diet, and after treatment showed significant differences as evaluated using the paired *t*-test. Assessment of differences among treatments groups showed no significant differences using one-way ANOVA test. The study has proven that ethanolic *S. spontaneum* (Talahib) leaf extract was able to lower blood cholesterol of albino rats on both 100% and 50% concentrations, comparable with the effect of positive control. Clinical trial of the study with humans as subjects was recommended.

Keywords: *Saccharum spontaneum*, albino rats, hypocholesterolemic, hypercholesterolemia, extract concentration, high-fat diet