

Effect of aqueous bark extract of citruslimon (L.) on plasma glucose, total triacylglycerol concentrations and weight of normal albino rats

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Citrus limon is one of the major fruit trees that grows throughout the world and is known for its refreshing juice and health benefits. Numerous therapeutic properties have been attributed to Citrus limon such as anticancer, anti-tumor, anti-inflammatory and effects on capillary fragility as well as the ability to inhibit platelet aggregation. Lemon peels contain flavonoid, pectin and vitamin C. The study was aimed at determining the effects of aqueous bark extract of unripe Citrus limon on plasma glucose and total triacylglycerol in normal albino rats. Six male albino rats of an average body weight of 160g were randomly placed into two groups (test and control groups) of equal number. The test group was administered a dose of the extract twice daily while the control group was exposed to only growers' mash and clean water throughout the duration of the experiment. Result obtained, following the administration of Citrus limon to the experimental rats showed that the plasma glucose and total triacylglycerol concentrations decreased significantly ($p < 0.05$) when compared to the control. The histological report showed that the aqueous extract of Citrus limon was neither toxic to the heart, the liver nor the kidney. Aqueous bark extract of unripe Citrus limon can be clinically important for the reduction of high plasma glucose and triacylglycerol levels which characterize diabetes mellitus and may also be effective for rapid weight loss as may be necessary for stable health conditions.

Biography

Dr Augusta Inegbedion has completed her PhD in 2016 from University of Benin, Benin city. She is the Acting Head of Medical Biochemistry department, Ambrose Alli University, Ekpoma. She has published more than twenty-five papers in reputed journals.

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