

## عنوان مقاله:

Evaluating the Genotoxic and Proximate Analysis of Ethanolic Extract of *Lecaniodiscus cupanioides*

## محل انتشار:

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## خلاصه مقاله:

*Lecaniodiscus cupanioides* has been playing vital roles in traditional therapies in Nigeria towards management of several ailments. In the quest to investigating its genotoxicity, ۳۰ mice weighing between ۲۰ – ۲۵g were placed in three groups of ۱۰ mice each. Groups A and B, orally administered ۱۰۰ and ۴۰۰ mg kg<sup>-1</sup> of the extract respectively for ۴۹ days, group C received distilled water as control. At expiration of treatment the mice were sacrificed via jugular puncture. Femurs were removed to extract the bone marrow for genotoxic assay. Heavy metal and proximate analysis was investigated using Atomic Absorption Spectrophotometry. Bone marrow analysis revealed dose-related increase in the number of MN PCEs in treatments compared to control. A significant decrease in the number of Bud PCE was observed between treatment and control. Insignificant dose-dependent increase in MN NCE and significant dose related increase was observed in ۱۰۰ mg kg<sup>-1</sup> treatment, also extract did not affect PCE /PCE +NCE ratio. In the proximate analysis, carbohydrate was highest, followed by crude fiber, protein and ash respectively. From heavy metals evaluation, Zn was the highest, all metals observed were within permissible level. The insignificant result of PCE/PCE+NCE or MNE PCEs against control may infer that the extract is not aneugenic, clastogenic, cytotoxic or genotoxic to the bone marrow. Availability of Cu, Cr, Mn, Ni, and Cd at permissible level suggest the plant possess some health potentials. The extract can be affirmed to be devoid of genotoxicity within period, doses and battery of exposure.

## کلمات کلیدی:

Genotoxicity, proximate analysis, heavy metals, *L. cupanioides*

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