

ASSESSMENT OF GENOTOXIC ACTIVITY OF THE BmoLL LECTIN OBTAINED AND PURIFIED FROM LEAVES OF *Bauhinia monandra*

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The BmoLL is a lectin obtained and purification from leaves of *Bauhinia monandra* that recent study of hypoglycemic activity demonstrated in rats the capacity to reduce the glucose level blood after its administration. Due the probable applicability of the BmoLL as anti-diabetic agent and the new Health Public Ministry regulation, improved efficacy and toxicity tests concerning new phytotherapies are necessary to be done prior commercialization. The present study was undertaken to verify the genotoxic activity from the lectin purified BmoLL through the accomplishment of the Plasmidial DNA Test to verify if these compounds are able to generate DNA strand breaks. In addition, treatment with exonuclease III was performed to detect abasic sites. The results have shown that BmoLL Lectin do not induce phosphodiester breaks. However, concerning the abasic sites, the lectin tested had generated beginning of breaking on DNA (only at the highest concentration). This observation is interesting regarding the pharmacological potential of this lectin, which could be, in the future, part of new medical formulation for diabetes treatment. Other tests, like Ames assay will be performed to better characterize the mutagenic activity of the BmoLL.

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