

EVALUATION GENOTOXIC AND CITOTOXIC POTENCIAL OF THE EXTRACT *Bauhinia monandra*.

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Bauhinia monandra is a plant utilized as hipoglicemiant by folk medicine. Due the applicability of the extract and the new Health Public Ministry regulamentation, comproved efficacy and toxicity tests concerning new phytoptherapics are necessary to be done prior commercialization. The present work aimed to verify the genotoxic potential from *Bauhinia monandra* total extract through the treatment of the plasmídeo pBC with the extract, to verify if these compounds are able to generate DNA strand breaks. In addition, treatment with exonuclease III was performed to detect abasic sites. Citotoxic potencial was evaluted through of the transformation of competent bacterium with pBC treated previously. Four concentrations had been tested: 0,8 µg/µL, 4,0 µg/µL, 20 µg/µL, 100 µg/µL of water extract, beyond the positive and negative control. The results have shown that total extract is able to induce phosphodiester breaks, being the extract also able to promote complete degradation at the two highest concentrations test. The exonuclease test have showed the presence of abasic sites. However, these alterations in the DNA had not been capable to promote citotoxicidade, after transformation. Other tests, like Ames assay will be performed to better characterize the mutagenic potential and guarantee the medicinal use of this product by diabetic.

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