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IN VIVO EVALUATION OF THE MUTAGENIC AND ANTIMUTAGENIC POTENTIAL OF THE EXTRACT OBTAINED FROM THE LEAVES OF *Schinopsis brasiliensis* ENGL. THROUGH THE MICRONUCLEUS TEST IN MICE

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The use of medicinal plants for healing and disease prevention is part of a millennial traditional practice. The *Schinopsis brasiliensis*, braúna, or baraúna how it is commonly known belongs to the family Anacardiaceae, it is a typical tree of the caatinga widely used for therapeutic purposes. It is indicated for the treatment of various diseases such as osteoporosis, flu, fever, sores, ringworms, impotence, anti-inflammatory and antiseptic. However, the disordered use of medicinal plants has led to adverse effects due to the potential of the active principles of the plant which they are capable of interacting with macromolecules such as DNA that may cause damages or not. This study was performed with the objective to evaluate the possible mutagenic and/or antimutagenic of ethanol leaf extract at doses of 2,000 mg, 1,000 mg and 500 mg through micronucleus test in peripheral blood of mice. The animals were distributed in groups (3 males and 3 females) to each treatment and received 0,1 mL/10 g of each of the doses of the extract. It has established a positive control group which were treated with cyclophosphamide (50 mg/kg b.w.) and one negative control group treated with a solution of distilled water and 5% DMSO. According to the statistical analysis for mutagenic and antimutagenic evaluations, there were no significant differences that indicated the mutagenic or antimutagenic effect of the *S. brasiliensis*. Additional studies are necessary in order to clarify what are the conditions of use that could offer the benefits of the therapeutic properties of this plant without putting into risk the health of users.

Keywords: *Schinopsis brasiliensis*, Mutagenic, Micronucleus.