



PARKINSONIA ACULEATA AS A POTENTIAL PHYTOTHERAPIC FACTOR IN THE INFLAMMATORY AND DYSLIPIDEMIC CONTROL OF WISTAR RATS

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ABSTRACT

Objective: The study evaluated the hypolipidemic and anti-inflammatory potential of the hydroalcoholic extract of *P. Aculeata* (HEPa/EtOAc) in Wistar rats fed with Westernized diet. **Methods:** The experiment was approved by the Ethics Committee (Federal University of Pernambuco-23076.027165 / 2010-21). The hydroalcoholic extract (HEPa/EtOAc) was obtained from the aerial parts of *P. Aculeata* and portioned by acetate/ethanol in different concentrations. 36 male Wistar rats were initially divided into two groups: Control (C, n = 6), fed a commercial diet (26g / 100g of protein; 63g / 100g of carbohydrates; 11g / 100g of lipids) and Westernized (W; n = 30) - fed an experimental diet (15g / 100g of protein; 51g / 100g of carbohydrates; 34 g/100g of lipids) receiving water ad libitum. After 4 months of diet, W group was arbitrarily redistributed into six subgroups according to water supplementation, or different extracts concentrations: (n = 6 animals/group): W- distilled water (1mL/kg; po); WG - genfibrozil (140 mg/kg; p.o.); W35- 35 mg/kg; W70 - 70 mg /kg; p.o. and W140- 140 mg/kg; p.o for 30 days. The lipid profile and pro-inflammatory cytokines were analyzed. **Results:** The westernized diet caused dyslipidemia and the treatment with HEPa-EtOAc (140mg / kg), promoted a significant reduction in the concentration of pro-inflammatory cytokines, in total cholesterol, in the LDLc and serum triglycerides. **Conclusion:** The reduction of dyslipidemia and pro-inflammatory cytokines from the of *P. Aculeata* extract corroborate the ethnopharmacological potential of the plant, already used by the population for hypoglycemic purposes.

Keywords: Anti-inflammatory. Dyslipidemia. *Parkinsonia aculeata*. Westernized diet. Rats.

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