EVALUATION OF THERAPEUTIC OF *Copernicia cerifera* MART. LEAF POWDER EXTRACT IN THE TREATMENT OF DYSLIPIDEMIC MICE


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**Introduction:** Disease cure by plant is a practice used since early days of civilization. Among several substances, gamma-orizanol extracted from rice powder is said to have hypercholesterolaemic effect. In wax powder of carnauba (*Copernicia cerifera* Mart.), there is a gamma-orizanol similar substance. **Objective:** Evaluate therapeutical potential of esters of cinnamic acid extracted from carnauba wax powder (PCOC) on hypercholesterolaemic mice. **Methods:** The study was developed on mice groups that received a hypercholesterolaemic diet and were treated with PCOC (dose of 100mg/kg) and Sinvastatine (dose of 20mg/kg) as reference drug for 90 days. Along treatment protocol, blood samples were collected to lab exam determination (total cholesterol, triglycerides, high density lipoprotein (HDL-c) and glicose). In end of experiment, besides mentioned analyses, urea, creatinine, aspartate aminotransferase (AST) and alanine aminotransferase (ALT) were performed. Just after that, animals were killed by cervical dislocation to remove liver for oxidative stress evaluation. The experiment was approved by UFC Ethic Committee on Animal Research (CEPA) n°90/10. **Results:** The daily supplementation using esters of PCOC cinnamic acid lessen hypercholesterolaemic diet effect. It also reduced plasmatic triglyceride levels, it did not alter HDL-c concentrations, plasmatic glucose and malondialdehyde of hepatic tissue when compared to standard diet. It did not increase parameters of AST, urea, creatinine and, so, it did not present toxicity. **Conclusion:** The presented results on this study point to potential use of esters of carnauba wax powder cinnamic acid at a dose of 100 mg/Kg to decrease levels of cholesterol and plasmatic triglycerides, not showing toxic effect and therefore it presents itself as a promise to dyslipidaemic treatment and important cardio protector effect.

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**Keywords:** PCOC, hypercholesterolaemia, cholesterol.