



Phytochemicals aspects and pharmacological activities *Spondias purpurea* L.

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Spondias purpurea L. is a small tree of the family Anacardiaceae (Sapindales order), native to the tropical dry forests of Mexico and Central America, popularly known in Brazil as seriguela. It's kind little studied the chemical and pharmacological point of view. This study aims to analyze the chemical composition and evaluate the pharmacological properties of the leaves of *S. purpurea*. The phytochemical screening of the constituents present in the hydroalcoholic extract revealed the presence of several metabolites, including the presence of flavonoids, confirmed by the study of ethanol extract and its fractions by TLC using specific reagents. The phytochemical analysis of fractions obtained from the liquid-liquid partition of the ethanol extract of the leaves was carried out in order to isolate special metabolites that may compose the chemical profile of the species. The analysis of the hexane fraction showed a mixture of different compounds. Between these can be identified: ethyl palmitate, 9,12,15-Octadecatrien-1-ol and ethyl stearate. Through the study of the ethyl acetate fraction (SPEAc) countercurrent chromatography was possible to isolate a flavonoid glycoside, and rutin. This substance was identified based on spectroscopic analysis (NMR 1 H, 13 C NMR, UV and mass spectrometry). The study of the extract and the fractions Ethyl acetate and butanol allowed evaluate the antioxidant activity because it is known that the leaves are rich in flavonoids. The evaluation of the antifungal activity by the extract and fractions Ethyl acetate and butanol showed strong inhibition for all *Candida* species tested. The evaluation of the ethanol extract of the leaves in lethality test with *Artemia* saline showed low toxicity to this microcrustacean. The extract showed no cytotoxicity the spleen and stimulated the proliferation of these cells. It was possible to observe the hypoglycemic activity of the ethanol extract of the leaves of *S. purpurea* through his administration in diabetic mice induced by alloxan.

Key word: pharmacologically activity, Anacardiaceae, *spondias purpurea*, rutin

