**APPRAISAL FROM THE ANTIOXIDANT ACTIVITY OF THE OIL EXTRACTED FROM THE AMAZON FRUIT TUCUMAN (*Astrocaryum aculeatum* G. Mey)**

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The fruits from the Amazon region are knowed for their high nutritional value, among they we can highlight the tucuman (*Astrocaryum aculeatum* G. Mey), a palm from the *Arecaceae* family. This importance economic is based on the exploitation of fruit pulp to direct consumption, juice production, edible oils, animal feed, among others. It is rich in vitamin A, three times more than carrots, especially carotenoids, which gives it a high antioxidant potential. Antioxidants are substances such as vitamins, minerals, natural pigments, in addition to other plant compounds and enzymes, which block the damaging effects caused by free radicals and are found mainly in fruits, which when consumed, prevent the excessive oxidation produced by the body itself, in which produces free radicals that can cause cell damage, such as the development of chronic and degenerative diseases. In this study, the different extracts of the oil obtained from the pulp and almond of the tucuman were evaluated using the free radical sequestration method 2,2-diphenyl-1-picryl-hydrazil (DPPH). The ability to scavenge the free radical was expressed as a percentage of the scavenging capacity (*%CS*) and the *CS50*value was defined as the final concentration in μg.mL-1 of the extract/oil required to decrease the initial DPPH concentration by 50%. The *%CS* values were obtained for the different diluted solutions of the tucuman oil samples obtained from the almond, the pulp and the quercetin standard and a calibration curve was plotted with the different sample concentrations on the *x*-axis, and the average values of the *%CS* on the *y*-axis. In the *CS50* measure, the values obtained were 50.7 μg.mL-1 for almond oil and 33.6 μg.mL-1 for pulp oil, which means that these concentrations were necessary to reduce 50% of DPPH. Among the oils analyzed, the one obtained from the pulp of tucuman was the one with the highest antioxidant activity. Based on the statistical analysis of the results, the method used proved to be viable for determining the antioxidant activity of the oils evaluated. It is important to notice that tucuman oil is currently used only by regional populations and has little or commercial value, the analysis of this parameter may present an economically viable and environmentally correct application of this natural resource, since the search for natural antioxidants has increased much in recent years, mainly for application in the cosmetics and pharmaceutical sectors.

**Keywords:** antioxidant activity, DPPH method, tucuman, free radical.

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