**Analyze phytochemical and antioxidant activity against the free radical DPPH in extracts of rose apple leaf (Syzygium jambos).**

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The rose apple is a good source of iron, protein and other minerals. The fruits feature 28.2% clamminess, 0.7% protein, 19.7% carbohydrate, containing among them vitamins A (beta carotene), B1 (thiamine), B2 (riboflavin), minerals such as iron and phosphor. The antioxidant activity of the extract can be verified by the presence of secondary metabolites, and is closely linked to the content of extract phenols. The aim of this study was to analyze which chemical components and antioxidant activity against the free radical DPPH (2,2-diphenyl-1-picrihidrazila) of hexane and ethanol extracts of rose apple leaves (*Syzygium iambs*). The phytochemical analysis was based on Matos methodology (2009) and the antioxidant activity according Costa (2010). Spectrophotometric determination of phenolic compounds was made according to the process described by Singleton & Slinkard (1977), using the Folin-Ciocalteu reagent. The calibration curve was obtained by making use of six gallic acid dilution (0-1000 mg/L). Hexane and ethanol extracts showed positive for phenols and flavonoids during the test. Quantification of phenols was 108 Eag-1 value according to literature. But the antioxidant test of both extracts showed satisfactory results at a concentration of 10,000 ppm, the sweep index (VI) was 65% in the hexane extract and 85% ethanol extract. Showing a IV50 5.88 micromol-1 for fraction hot (hexane) and 7.69 micromol-1 for fraction cold (ethanol), this variation is due to the heating of the extraction process hot, where some compounds volatilize. It was found that due to the presence of phenols, both extracts are potent natural antioxidants, using lower concentrations as seen in the results obtained.

Key words: jambo, phenols, antioxidant.