CHEMICAL COMPOSITION AND ANTIOXIDANT ACTIVITY OF GENIPA AMERICANA L. (JENIPAPO) OF THE BRAZILIAN CERRADO.


The Jenipapo (Genipa Americana L.) is a native species quite common in much of Brazil, and found mainly in the cerrado. The fruit are edible and highly prized, characterized in literature by acid flavor and aroma frutal. This paper presents the chemical composition, total phenolic profile, flavonoids, anthocyanins and antioxidant activity of Genipa americana L. (jenipapo). The chemical composition was determined according to AOAC. Quantification of total phenolic was held in spectrophotometer with reagent Folin-Ciocalteu reagent and for preparation of extracts the solvents used were: water, ethanol, methanol and acetone. For extracting flavonoids used ethanol solution HCl 1,5N (85: 15 v/v). The contents of anthocyanins was determined by the pH difference method and the antioxidant atividade by DPPH system. The results indicate the following composition: moisture (75.00%), lipids (1.60%), proteins (0.67%), carbohydrates (20.50%) and ash (2.20%). The total phenolic content was 410.00 mgGAE/100g to the aqueous extract, 406.00 mgGAE/100g to the ethanolic extract and 857.10 mgGAE/100g to the methanolic/acetonic extract. Presented a high content of flavonoids (728.00 mg/100g) and low content of anthocyanins (46.00 mg cy-3-glu/100g). The methanolic/acetonic statement has better antioxidant activity with EC50 value of 606.70 µg/mL, needed to reduce in quantity to 50% initial concentration of free radical. This study highlights the potential of this fruit as an important source of both nutritional and bioactive compounds available in the native Brazilian flora.