Analysis of the Antioxidant Properties of Bauhinia forficata Tea in vitro

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An imbalance between the levels of reactive oxygen species (ROS) and the cellular antioxidant systems may lead to an oxidative stress state which is a common feature in many pathologic processes. Medicinal plants are usually used to treat many human diseases due to their recognized antioxidant properties. In Brazil, Bauhinia forficata, popularly known as pata de vaca, is widely used in popular medicine due to its well-known pharmacological actions. The aim of this study was to analyze the antioxidant properties of the Bauhinia forficata tea in vitro. The tea used was prepared with dried leaves, which were left in boiling water for twenty minutes. Before each analysis, a fresh tea was prepared. The levels of polyphenols and flavonoids as well as the free radical diphenylpicrylhydrazyl (DPPH•) reduction and the reduced iron interaction (Fe²⁺ chelating properties) of the tea were assessed. We observed a significant and progressive increase in the polyphenol and flavonoid contents in the tea. Furthermore, the DPPH• reduction as well as the Fe²⁺ interaction potential of the tea increased in line with the polyphenol and flavonoid contents. According to our results the Bauhinia forficata tea presented an interesting antioxidant potential which could be used as an initial point to justify its use in models of oxidative damage associated with hyperglycemic conditions.

Key Words: Bauhinia forficata, tea, antioxidant properties; Supported by: CAPES, FAPERGS;