

Evaluation of the Antioxidant Activity from Leaves of Insulina Vegetal in Oxidative Stress Diabetes Rats.

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Abstract

The insulina vegetal (*Cissus sicyoides* L.) belongs the Vitaceae family, and is a medicinal plant popularly used in Brazil in several diseases, such as epilepsy, inflammation and in the treatment of diabetes. Two fractions from the leaves of insulina vegetal (hidroalcoholic and etile acetate) were investigated about the polyphenolic compounds, radical scavenging of the stable free radical DPPH and lipoperoxidation induced-H₂O₂. The fraction acetate was tested in oxidative stress induced alloxan–diabetes rats. Both fractions were effective in inhibit the lipoperoxidation and scavenging the stable free radical DPPH. The IC₅₀ for leaves fractions (hidroalcoholic and acetate) from *Cissus sicyoides* (L.) in the DPPH experiment were 89.2 µg/mL and 44.5 µg/mL respectively. In rats diabetics, the acetate fraction of *Cissus sicyoides* reduced in 76% the concentration of thiobarbituric acid reactive substances (TBARS) in the serum and 54% in the liver when compared the control group (saline) with alloxan group. These results indicate that *Cissus sicyoides* (L.) is on natural products with strong antioxidant properties in oxidative stress induced alloxan–diabetes rats.

Keywords: *Cissus sicyoides*, diabetes and antioxidant.