ANTIOXIDANT ACTIVITY FROM Achyrocline satureoides (MACELA)
AQUEOUS EXTRACT AND THIS ISOLATED MAJOR COMPOUNDS IN BRAIN OF RATS

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Introduction and objectives: Achyrocline satureioides (AS), is a sacred medicinal plant collected in the Good Friday. In Brazilian popular medicine, the inflorescences of this plant are used to treat several gastrointestinal disorders, presenting digestive and antispasmodics effects. Furthermore, antioxidant activity of this plant was previously related. Our study aimed to evaluate the phytochemical composition and the antioxidant activity of AS aqueous extract and your isolated major compounds in brain of rats. Materials and methods: Dried flowers of AS were placed in infusion in boiling water (80°C) to initial concentration of 1mg/mL. Phytochemical composition was determined by high performance liquid chromatography (HPLC-DAD) analyses. Antioxidant activity was evaluated by total antioxidant capacity (TAC) assay and lipid peroxidation assay. Lipid peroxidation was induced ex vivo in brain of rats by Fenton reaction. Results and conclusion: The HPLC profile of AS aqueous extract shown the presence of 12 peaks and the major compounds detected were isoquercetrin, quercetin and caffeic acid, respectively. The aqueous extract showed significant TAC from the concentration of 150 µg/mL. When tested at concentrations proportional to those found in the crude extract, the component that showed higher antioxidant activity was the caffeic acid. Taken together, our results indicate that AS presents an interesting TAC, and both AS extract or your major isolated compounds reduce oxidative damage induced by Fenton reaction in brain of rats. These data reinforce the importance of studies conducted to investigate protective effects of medicinal plants mostly used by population.

Key Words: Macela; Natural products; Antioxidants.

Acknowledgements: CAPES, Fapergs, CNPq, UNIPAMPA.