06.129

Antioxidant activity of *Richardia brasiliensis* Gomes

Pinto, D. S.[1]; Tomaz, A. C. A.[1]; NUNES, X. P.[2]; Mesquita, R. F.[2]; Almeida, J. R. G. S.[2]; Cavalcanti, L. S.[3]; Dias, C. S.[1]; Cunha, E. V. L.[1] - [1]Universidade Federal da Paraíba - UFPB - Laboratório de Tecnologia Farmacêutica - LTF; [2]Universidade Federal do Vale do São Francisco - UNIVASF - Colegiado de Medicina; [3]Universidade Federal do Vale do São Francisco - UNIVASF - Colegiado de Engenharia Agrícola e Ambiental

Introduction: *Richardia brasiliensis* is an herbal plant, belonging to the family Rubiaceae and popularly known as "poaia" (AGRA, et al. Braz. J. Pharmacog., v. 17, p. 15, 2007). Previous phytochemical investigation resulted in the isolation and structural identification of triterpenes, coumarin and flavonoid (PINTO, et al. I Simpósio de Plantas Medicinais do Vale do São Francisco, 2007), all of them isolated for the first time in the genus. Pharmacological research performed with its extracts reported antimicrobial activity (ADOLPHO, et al. XIV Jornada de Jovens Pesquisadores do AUGM, 2007). In this work, the antioxidant activity of the extracts of *R. brasiliensis* was evaluated.

Methods: The plant, collected in Santa Rita-PB, was dried, powdered and subjected to exhaustive maceration with 95 % ethanol. After evaporating the solvent, the crude ethanol extract (CEE) was obtained and then partitioned with organic solvents, yielding the hexane, chloroform and ethyl acetate extracts. The antioxidant capacity of those extracts was evaluated by the spectrophotometric assay with the DPPH free radical (2,2-diphenyl-1-picryl-hydrazyl). Concentrations ranged from 5 µg/mL to 250 µg/mL. 1 mL of the solution of DPPH was added to each 2.5 mL of the samples, remaining at rest for 15 minutes. 1 mL of DPPH and 2.5 mL of methanol were used as blank. Absorbances were read in spectrophotometer at 517 nm. Ascorbic acid was used as standard in the same concentrations of the samples.

Results and Discussion: The results, expressed in EC_{50}, were 115.8 µg/mL for the CEE, 22.37 µg/mL for the hexane extract, 34.57 µg/mL for the chloroform extract and 4.29 µg/mL for the ethyl acetate extract. The ascorbic acid presented EC_{50} of 3.081 µg/mL.

Conclusion: The results show higher antioxidant activity for the ethyl acetate extract, which is in agreement with the finding of flavonoid in this extract (ADOLPHO, et al. XIV *Jornada de Jovens Pesquisadores do AUGM*, 2006).

Richardia brasiliensis Gomes
Palavras-Chave: *Richardia brasiliensis* Gomes