

Evaluation of the Antitumoral Activity in Ehrlich Ascites Carcinoma in Mice Treated with Latex of *Croton celtidifolius* Baill

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*Croton celtidifolius* Baill (Euphorbiaceae) is a Brazilian popular plant known as “Sangue-de-Dragão” whose latex (L) has been used by people to treat several diseases, including cancer. This study aims to evaluate the antitumor effects and oxidative stress of a treatment with the latex of *C. celtidifolius* on the Ehrlich ascites carcinoma (EAC). The antitumoral activity of latex was investigated *in vivo* using the EAC in isogenic Balb/C male mice (~24g b.w.) that were administered intraperitoneally 6.25mg/kg body weight for nine days beginning 24 hours after tumor inoculation. In 10<sup>th</sup> day after tumor inoculation, were evaluated histomorphological parameters and oxidative effects. Results were expressed by means and standard deviation and they were analyzed using one-way ANOVA and Tukey-Kramer test. DMSO 10% was used as negative control (NC). Histomorphological evaluations indicated that the treatment with latex significantly reduced the tumor volume (L:8.0±2.8; NC:10.4±0.7mL), packed cell volume (L:1.5±0.5; NC:3.25±1.7mL), abdominal circumference (L:1.8±1.0; NC:3.1±0.37cm), body weight (L:7.2±2.4; NC:10.45±1.13g), viable cell count (L:0.1; NC:0.0085, proportion unviable/viable cells) and increased the life span (L:16; NC:14.5 days) when compared to negative control group. The treatment caused increased catalase (L:0.4080±0.055; NC:0.2878±0.093µL.min.mL), glutamyl-S-transferase activities (L:141.650±10.69; NC:120.506±29.68 µLmin.mL). Levels of GSH (L:5.811±1.18; NC:3,823±0,4mmol.mL) and lipid peroxidation (L:69.98±15.3; NC:33.75±8.81nmol.g<sup>-1</sup>) in the tumor were increased importantly. The results suggest that latex of *C. celtidifolius* has significant antitumor activity because it shows an important capacity to inhibit the EAC proliferative cells.

Palavras Chaves: *antitumor*, *Croton celtidifolius*, *oxidative stress*